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The Commission's report is in two volumes. **This volume 2 contains chapters 11 to 20, Appendix A and the References.** Volume 1 contains the Overview, the Recommendations and chapters 1 to 10. Appendices B to N will only be available on the Commission's web site (http://www.pc.gov.au). Below is the table of contents for both volumes.

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11 Disability within the Indigenous community

Key points

- After correcting for differences in age structure, Indigenous Australians have a profound or severe core activity limitation at around 2.2 times the rate of non-Indigenous Australians. In part, this is driven by socio-economic disadvantage and exposure to risk factors such as smoking, high body mass, physical inactivity, poor nutrition and substance abuse.
- There is some scope for the National Disability Insurance Agency, in cooperation with government agencies and local communities, to attempt to address the high rate of disability among Indigenous Australians through prevention measures and early intervention. However, addressing the socio-economic disadvantage that underlies the higher rate of disability among Indigenous Australians is an issue for all of Australian society and requires a long term whole-of-government approach.
- Indigenous Australians also face significant barriers to accessing disability support services. This occurs due to social marginalisation, concern about approaching government agencies, cultural attitudes towards disability and services that are not mindful of cultural differences.
- These barriers to service delivery access suggest that a purely market based service delivery system would not deliver adequate care and support to Indigenous people with a disability, particularly in remote communities. While Indigenous Australians will have access to individual support packages on the same basis as non-Indigenous Australians, it may also be necessary to block fund some service providers in order to overcome the additional barriers that Indigenous Australians face.
- A number of strategies can be used to improve accessibility of services for Indigenous people, including embedding services within local communities, employing Indigenous staff and developing the cultural competency of non-Indigenous staff.
- In remote communities, disability support services are practically non-existent (beyond basic HACC and limited mobile respite and allied health programs). Remoteness, poor infrastructure, lack of housing, and in some cases security issues will present a long term challenge for the NDIS — and improvement in service capability will depend in large part on broader government initiatives in this area. Even with considerable increases in resources, in some communities, progress will be slow. Flexibility, regionally based staff, locally determined strategy, and ongoing and open program evaluation will play an important role in improving the disability supports in remote communities.

Indigenous Australians have high rates of disability but access relatively few services or supports. The consequences of this are compounded by broad socio-economic disadvantage and the geographical isolation that many Indigenous Australians experience. This chapter highlights the importance of addressing Indigenous disability in a way that is respectful of Indigenous culture, tradition and contemporary circumstances. It provides a starting point for developing a strategy to best support Indigenous Australians under the National Disability Insurance Scheme (NDIS). It does so by examining

- the extent and nature of Indigenous disability (section 11.1)
- some factors underlying Indigenous rates of disability and preventing the uptake of existing supports (section 11.2)
- some of the options available to the National Disability Insurance Agency (NDIA) in response to this challenge (sections 11.3 to 11.5).

11.1 A snapshot of Indigenous disability

It is very difficult to provide an accurate depiction of disability within the Indigenous community. Prior to the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS), there were no national surveys of Indigenous disability. Two further data collections have occurred since this time, the 2006 Census and the 2008 NATSISS. However, there is reason to suggest that these surveys understate the extent of disability amongst Indigenous Australians.

First, surveys of Indigenous Australians are affected by higher rates of non-response. The estimated undercount (not responding to the Census at all) in the 2006 Census was 2.7 per cent for non-Indigenous Australians and 11.5 per cent for Indigenous Australians (ABS 2006a). In addition, the non-response rate for the question about the need for assistance was 2 per cent for non-Indigenous Australians and 7 per cent for Indigenous Australians (ABS and AIHW 2008). This reduces the general accuracy of the estimate of disability and can also introduce sample selection bias. For example, if Indigenous people with a disability are less likely to respond to a survey than those without a disability, then the overall disability rate will tend to be underestimated.

Second, some Indigenous Australians find the concept of disability hard to understand or irrelevant (this is discussed further below), reducing the likelihood that the surveys accurately recorded disability. For example, the First Peoples Disability Network suggested that ‘in traditional language there was no comparable

word to disability which suggests that disability may have been accepted as part of the human experience' (sub. 542, p. 8).[1]

While the existing data may tend to understate the problem, they still suggest that disability is a serious issue for Indigenous Australians. There are two main dimensions to this:

- the reported rate of disability is considerably higher for Indigenous Australians than non-Indigenous Australians
- Indigenous Australians face greater barriers to accessing disability supports than non-Indigenous Australians.

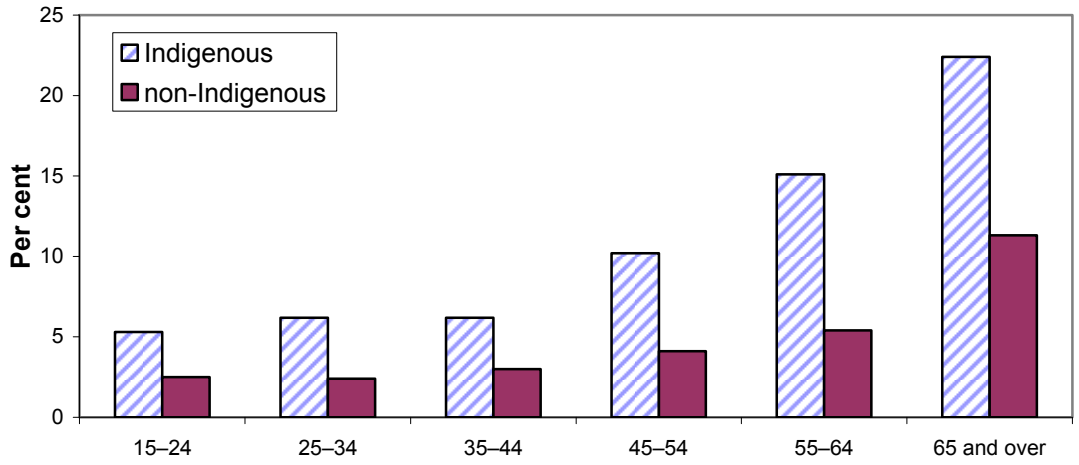
Disability amongst Indigenous Australians

It is estimated that there are around 26 000 Indigenous Australians with a profound or severe core activity limitation (ABS 2010d).[2] Indigenous Australians between the age of 15 and 24 require assistance with a core activity at around twice the rate of non-Indigenous Australians, and this gap tends to widen as they grow older (figure 11.1). After standardising for differences in age structure, estimates based on the 2008 NATSISS and the 2007-08 National Health Survey suggest that Indigenous Australians have a profound or severe core activity limitation at around 2.2 times the rate of non-Indigenous Australians (ABS 2010d).

1 Similarly Arioti (1999) finds that while there are Pitjantjatjara word for specific impairments, there is no traditional word for the general concept of disability.

2 Always or sometimes need assistance with at least one core activity of everyday living.

Figure 11.1 **Has a profound/severe core activity limitation by age, 2008**



Data source: ABS, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander People*, Cat. no. 4707.0, October 2010.

Indigenous Australians were more likely to require assistance with a core activity than non-Indigenous Australians in all states and at all levels of remoteness. The gap is greatest in the Northern Territory and Western Australia, and in remote and very remote areas (figure 11.2).

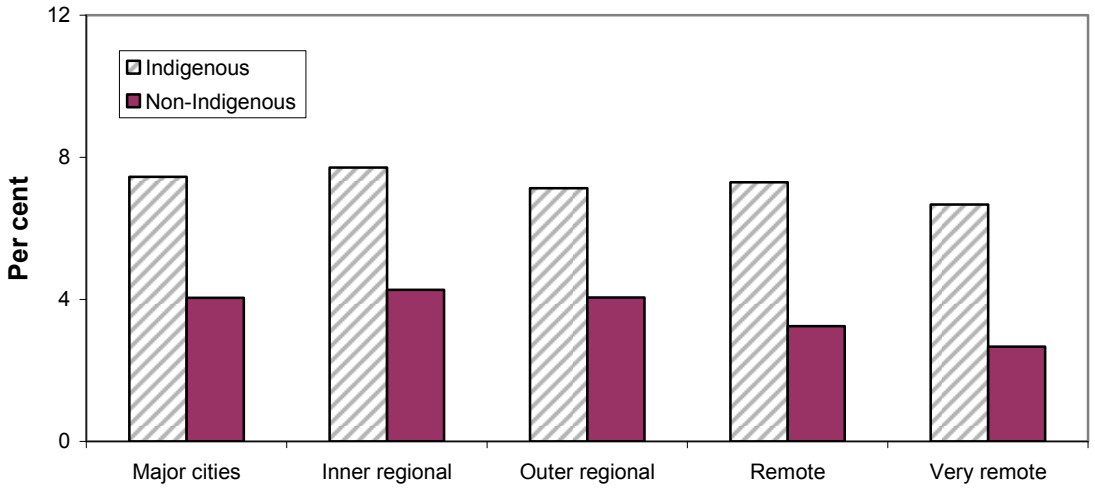
A range of health conditions and disabilities underlie the aggregate rate:

- Indigenous Australians in non-remote areas are around 50 per cent more likely to have a physical disability and three times as likely to have an intellectual disability (ABS 2010d)
- Despite comprising only 3.8 per cent of the Western Australian population, Aboriginal children make up 8.4 per cent of all children born there between 1980 and 1999 with cerebral palsy (sub. 290, p. 3)
- Indigenous children (under 15) are 3.8 times more likely to be deaf (SCRGSP 2009 - Table 5A 7.1). Over 70 per cent of Indigenous children in remote communities suffer from chronic otitis media that can cause permanent hearing loss and inhibit language and literacy development. (Department of Education and Training, WA 2006)
- In non-remote areas, Indigenous people are twice as likely to be obese as non-Indigenous people (SCRGSP 2009)
- Indigenous Australians are almost 12 times as likely to be hospitalised for care involving dialysis (SCRGSP 2009)
- 28.2 per cent of Indigenous Australians self-reported their health as fair/poor, as compared with 14.5 per cent of non-Indigenous Australia's (ABS 2008c).

Figure 11.2 **Needs assistance with a core activity, 2006**

By state

By remoteness



Data source: SCRGSP (2009).

Considerable resources are dedicated to supporting Indigenous Australians with a disability. In 2001-02 a total of $95.7 million was spent on Indigenous welfare services (CSTDA funded disability services and HACC). This represents 3 per cent of total expenditures and around 30 per cent more was spent on Indigenous Australians per person, than non-Indigenous (table 11.1). However, given the higher rate of disability and multiple disability, as well as the significantly higher costs involved in servicing remote Indigenous communities, it is likely that this level of expenditure is still associated with significant under-servicing.

Table 11.1 **Total recurrent expenditure on support services for people with a disability by Indigenous status, 2001-02**

	Expenditure ($m)			*Expenditure per person ($)*		
	Indigenous	Non-Indigenous	Indigenous Share	Indigenous	Non-Indigenous	Ratio
Total welfare services for people with a disability[a]	*95.7*	*3,013.90*	*3.1*	*208.66*	*159.01*	*1.31*
CSDA services						
Accommodation	37.2	1,374.80	2.6	81.22	72.53	1.12
Community support	16.9	282.2	5.6	36.76	14.89	2.47
Respite	9.1	142.4	6	19.84	7.51	2.64
Community access	6.7	292.3	2.3	14.72	15.42	0.95
Employment	5.1	256.2	2	11.11	13.51	0.82
Other	11.2	322.7	3.3	24.33	17.02	1.43
Other services						
HACC	8.7	208.9	4	18.93	11.02	1.72
Australian Government rehabilitation services	0.7	103.3	0.7	1.53	5.45	0.28
Low-level residential care	0.1	31	0.3	0.23	1.64	0.14
Health-related ACCHS services[b]	13.7	1.7	89.1	29.87	0.09	339.24

a Includes Australian Government administrative costs, excludes state and territory administrative costs, concession expenditure and services for older people. **b** Excludes state and territory government expenditure on Aboriginal Community Controlled Health Servicess.

Source: AIHW 2006, *Expenditures on health for Aboriginal and Torres Strait Islander peoples, 2001-02*.

Use of services

The main source of data on the use of disability support services is the Disability Services National Minimum Data Set (DS NMDS)[3]. The DS NMDS suggests that, given the underlying population with a disability, less Indigenous Australians with a disability use accommodation and community access services than non-Indigenous Australians.[4] However, the gap is relatively small (figure 11.3). Use of community

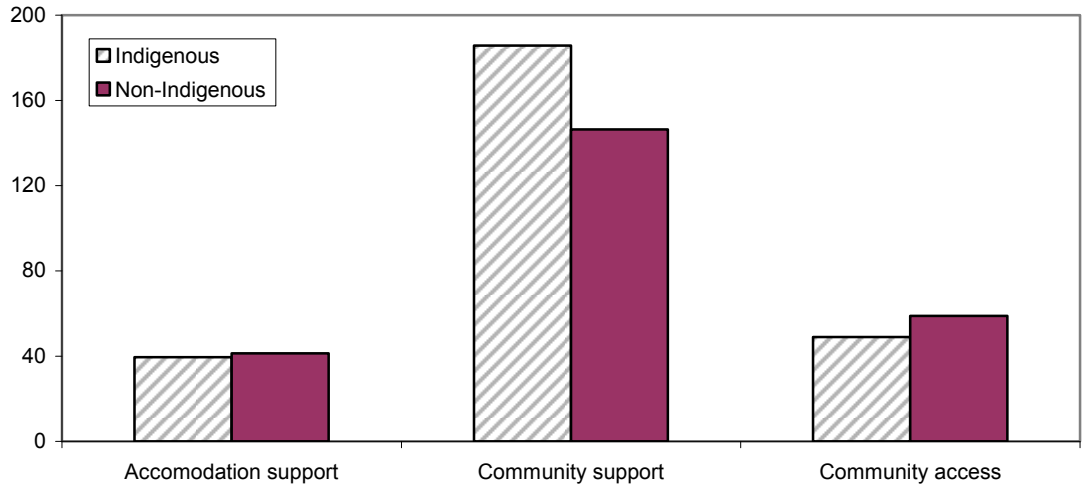
3 Previously known as the Commonwealth, State and Territory Disability Agreement NMDS.

4 As expected given the higher incidence of disability, Indigenous people access services at a considerably higher rate per 1000 population. If Indigenous people face additional barriers to

support services appears greater for Indigenous Australians than non-Indigenous Australians (SCRGSP 2011).

Figure 11.3 **Users of state and territory administered CSTDA funded services, 2008-09**

Users per 1000 potential population



Data source: (SCRGSP 2011).

This is somewhat at odds with the broad anecdotal evidence that Indigenous people with a disability face significant barriers when trying to access support (particularly in rural or remote settings) and are marginalised within the disability sector more generally (First Peoples Disability Network, sub. DR1047; p. 19, Ros Madden et. Al, sub. DR942, p. 14; Aboriginal Disability Network 2007; NSW Ombudsman 2010; Stopher and D'Antoine 2008,). This view was echoed in consultations between the Productivity Commission and State and Territory government agencies, as well as Indigenous-focused service providers.

The DS NDMS may inadequately reflect Indigenous Australians' access to disability services (or conceal the barriers that some Indigenous Australians face):

- as noted above, it is likely that the estimated number of Indigenous people with a disability significantly understates the real figure. If this is the case, the rate that Indigenous Australians access services will be overstated.

access, it would be expected that this gap would also be observed in terms of the estimated population of people with a disability — referred to as the *potential population*. The DS NMDS data suggest that per 1000 potential population fewer Indigenous people with a disability access accommodation support (39.5 service users versus 41.3 service users) and community access (49 service users versus 58.9 service users) (SCRGSP 2011).

- there are wide variations in Indigenous service use by state, suggesting that access may be more of an issues in some areas than others (notably access is relatively low in New South Wales and relatively high in Victoria).

11.2 Challenges to supporting Indigenous Australians with a disability

High level of Indigenous disadvantage

Indigenous disadvantage across a range of indicators is broad in scope, profound and entrenched. In addition to higher rates of disability and chronic disease described above, gaps persists between non-Indigenous and Indigenous Australians in terms of life expectancy, child mortality, education attainment, income, employment and interactions with the justice system. Socio-economic disadvantage interacts with disability in a circular fashion (SCRGSP 2009). On the one hand, socio-economic factors contribute to the higher incidence of disability in the same way as they do in other disadvantaged groups in society. For example, low education attainment is linked to a higher rate of smoking, excessive alcohol consumption and poor nutrition amongst Indigenous Australians (ABS and AIHW 2008). These risk factors increase the chance of acquiring a disability. On the other hand, disability entrenches socio-economic disadvantage. For example, Indigenous children with hearing loss suffer poorer education outcomes, which in turn limits their employment and income prospects.

Both socio-economic disadvantage, and higher levels of exposure to risk factors (such as tobacco, alcohol and violence) have been linked to the history of dispossession and marginalisation that has contributed to the breakdown of traditional family or societal structures, feelings of loss or despair and the social dysfunction that afflict some Indigenous communities (Salvatori 2010; Bostok 2004; First Peoples Disability Network, sub. 542, p. 7). Indigenous Australians are twice as likely (on average) to engage in or be exposed to a range of activities that that can lead to disability, including smoking, binge drinking, using illicit drugs, and being victims of violence. Indigenous Australians are also more likely to be physically inactive and subject to more than one of these risk factors (ABS and AIHW 2008).[5] These risk factors explain a large proportion of the difference in

[5] However, exposure to these risk factors is not spread evenly through the population of Indigenous Australians. For example, in 2008, the proportion of Indigenous Australians who had not consumed alcohol in the last 12 months was *higher* than the rate for the Non-Indigenous

health outcomes and rate of disability between Indigenous and non-Indigenous people (table 11.2).

Table 11.2 **Risk factors contributing to the difference in Disability Adjusted Life Years[a] between Indigenous and non-Indigenous Australians**

Risk Factor	*Percentage contribution to the gap in DALYs between Indigenous and non-Indigenous Australians*
Tobacco	17.4
High body mass	15.9
Physical inactivity	11.6
High blood cholesterol	7.1
Alcohol	6.8
High blood pressure	5.7
Low fruit and vegetable intake	5.1
Illicit drugs	3.8
Intimate partner violence	3.3
Child sexual abuse	1.5
Unsafe sex	1.6
11 Risk factors combined[b]	48.5

a Disability Adjusted Life Years are a measure of the burden of disease that takes into account the effect on life expectancy and the amount of time spent with a disability. **b** This estimate takes account of the combined causal pathways between many of these risks factors, and thus is lower than the sum of each effect considered in isolation.

Source: Calculations based on Vos et al. 2003.

Social marginalisation and mistrust of government agencies and service providers

Numerous participants in this inquiry noted that negative experiences within communities and with government agencies or service providers can make Indigenous Australians with a disability reluctant to seek support. As noted in the NSW Ombudsman's report:

> For Aboriginal people, a collective legacy of negative experiences with mainstream agencies and services has led to a significant degree of fear and mistrust. (2010, p. 27)

This issue was also noted at the first state conference of the Aboriginal Disability Network of New South Wales:

population. Also, the proportion of people who drank at *long-term* risky or high-risk levels was similar between Indigenous and non-Indigenous Australians (AIHW 2011b)

> Some Aboriginal people retain the fear that their children will be removed by government authorities. Furthermore that Aboriginal children remain over represented as wards of the state and that Aboriginal children with disability and Aboriginal parents with disability remain vulnerable to this fact. (Aboriginal Disability Network 2002, p. 8)

Even in the absence of specific negative experiences, Indigenous Australians may be reluctant to seek services because of a general sense of social exclusion, or a feeling that services are there for white people and not them. Hepburn (2005) relates the following view from a rural worker:

> Indigenous people in rural country areas don't feel they are part of, or are welcome, in the rural towns. They feel that mainstream services do not or are not willing or able to provide a service for them. If they need assistance or support they are afraid to ask for help or they feel that it would be a waste of time and effort. Many people have a defeatist attitude towards services. They are more likely to say things like 'They won't help me'. (p. 20)

Similarly, Stopher and D'Antoine (2008) quoted one participant in their study who stated 'Aboriginal people are reluctant to use services as they feel they are for whitefellas' (p. 13).

In other situations, some mainstream providers may be unwilling to take on Indigenous clients because they feel there are specialised services funded to do so (NSW Ombudsman 2010, p. 30).

Indigenous perceptions of disability

Some Indigenous Australians, particularly those living a more traditional way of life, have a different perception of disability to non-Indigenous Australians (First Peoples Disability Network, sub. 542, p. 8). Indigenous views on disability are diverse, matching the diversity of Indigenous cultures and beliefs, the diversity of individual lived experience with disability and individual's economic and social standing (Senior 2000). Nevertheless, two frequently cited generalisations about Indigenous perception of disability may be relevant to the delivery of disability support services in some areas:

- some Indigenous people may not have a general concept of disability, which can result in under-reporting (as noted above) and, potentially, under utilisation of the available supports from government or service providers
- some Indigenous communities view some types of disability (such as congenital disabilities) as a consequence of 'marrying wrong' (First Peoples Disability Network, sub. 542. p. 8), or attribute it to supernatural causes stemming from eating certain foods or doing certain activities while pregnant (Senior 2000).

> Where such views are prevalent, Indigenous Australians with a disability, or their carers, may be too ashamed to seek support and communities may be less cooperative with service providers generally.

Like many groups in Australia, Indigenous Australians have a strong cultural belief that it is the responsibility of family to provide care and support. As noted by O'Neill, Kirov and Thomson (2004), 'throughout Australia — in remote, rural and urban areas — most Indigenous people with a disability were, and are, cared for within their extended family'. This presents a particular challenge for supporting Indigenous Australians with a disability. On the one hand, a core component of a 'good' disability system is respecting the wishes of people with a disability and those who care for them — including the cultural beliefs about the appropriate role of family. On the other hand, there is a risk that assumptions about Indigenous family care could result in an excessive burden of caring, and/or inadequate levels of care. This is a particular issue when families' capacity to offer care and support is affected by socio-economic disadvantage (such as poverty), carers' own health problems, family breakdown or social dysfunction. The death of Kate Bugmy in 2007 presents a tragic example of this. As noted by State Coroner Mary Jerram (2010):

> The extreme disabilities with which Kate Bugmy was born required fulltime care, with which her family struggled to cope, staunchly resisting alternative, outside care. Although that resistance clearly arose from love, it came at a price and may not have been best for Kate, at least in her later years. (p. 11)

Cultural competence

The norms, beliefs and expectations embodied within a culture have value within their own right. They also make it easier for people within a cultural group to communicate, and for human interaction and ordinary social exchange to take place (including marketplace exchange). Conversely, people from different cultural backgrounds may find such interactions more difficult and miscommunication more frequent. Many Australians who identify as Aboriginal or Torres Straight Islander experience little difficulty in understanding or interacting with non-Indigenous Australians, including those providing disability support services. However, in some cases, differences in cultural background between service providers and Indigenous Australians can form an impediment to effective delivery of support services. Indigenous culture is diverse (meaning cultural competence within one area may not be relevant to another), but some commonly identified areas where cultural differences impact on the delivery of disability support services include:

- perception of disability (discussed above)

- relationship to traditional language
- triggers and responses to shame (O'Neill, Kirov and Thomson 2004; Jenkins and Seith 2004)
- rules governing the interactions between men and women, and within kinship systems (SNAICC 2010)
- styles of communication, including the use of eye contact, protocols around talking and listening, silence within conversations, and appropriate ways of requesting information (Pheonix consulting, sub. 311, p. 1; Jenkins and Seith 2004; McConnel 2010; SNAICC 2010).

Such cultural differences can result in service offerings that are not attractive to Indigenous Australians,[6] or misunderstandings that give Indigenous Australians a negative impression of disability support services. It can also make service providers tentative about proactively seeking Indigenous clients. As noted by Regan and Harriden (2008):

> In general, non-Aboriginal service providers appeared to be anxious about their ability to engage with Aboriginal people and services in a culturally appropriate manner. This idea is perhaps best summed up by a respondent who noted that the "fear of 'doing the wrong thing' by non- Aboriginal service staff" was one of the dominant issues limiting their work with Aboriginal communities. (p. 14)

Conversely, some Indigenous Australians who want to engage with the disability system may be constrained by a lack of knowledge about the necessary requirements (such as paper work and personal information), or lack confidence or understanding of their rights or entitlements.

Salvatori (2010), describes how the feeling of cultural misunderstanding, combined with broad disadvantage and negative past experiences can be a powerful deterrent to seeking support:

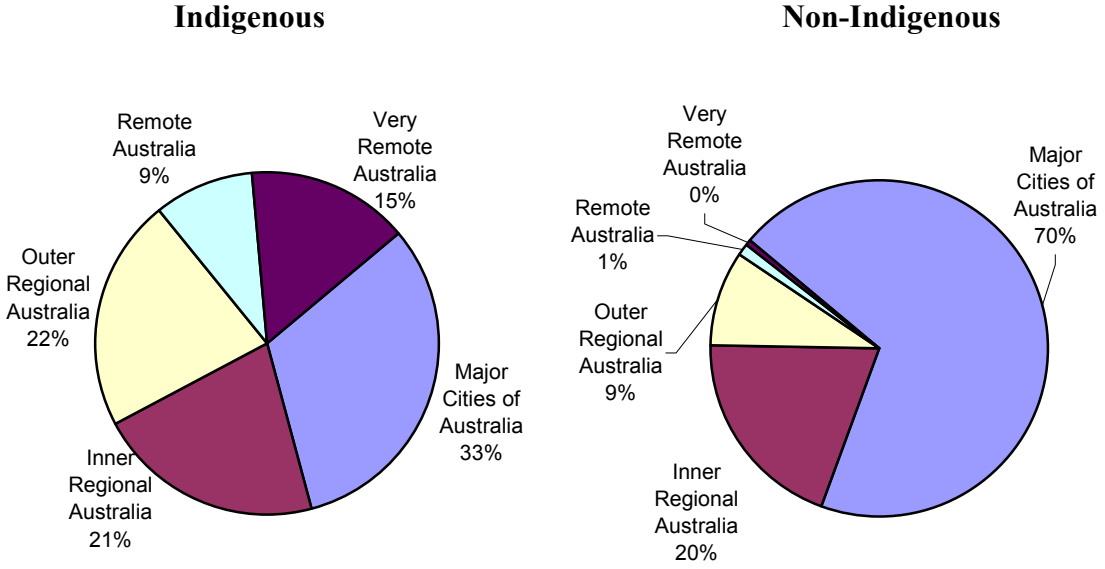
> When accessing mainstream services, the effects of trans-generational trauma can be evidenced when clients feel inferior, shamed, misunderstood, not educated enough and feel that they have no voice. Aboriginal people have different ways of communicating and thinking and feel that the Aboriginal 'way of being' is not understood. Feelings of intimidation, racism and fear due to past history often stand in the way and keep our clients from using mainstream services. Many do not feel safe.

6 For example, culturally inappropriate activities at day care centres (O'Neill, Kirov and Thomson 2004, p. 7).

Remoteness

In 2006, around a quarter of Indigenous Australians lived in remote or very remote areas, compared to around one per cent of non-Indigenous Australians (figure 11.4). There is significant variation across jurisdictions. For example, Victoria had a relatively urban Indigenous population, with 84 per cent living in a major city or inner regional area.[7] Conversely, around 80 per cent of Indigenous Australians in the Northern Territory and 42 per cent of in Western Australia, lived in remote or very remote areas – typically in discrete Indigenous communities. There were 1187 such communities in Australia and almost three quarters of these have a population of less than 50 people (only 17 communities have more than 1000 — ABS 2006c).

Figure 11.4 **Proportion of the population by remoteness area, 2006**



Data source: ABS, *Experimental Estimates of Aboriginal and Torres Strait Islander Australians*, Cat. no. 3238.0.55.001, 2009.

While improving in many areas, some communities (particularly smaller ones) lack basic services and infra-structure. For example, only 21 per cent had a primary school within the community, 23 per cent were connected to state and territory electricity grids, 28.4 per cent had organised rubbish collection and 53 per cent report had public access to a telephone (ABS 2006c).[8] This lack of infrastructure,

7 Interestingly, Victoria has a dramatically higher rate of usage of CSTDA-funded services by Indigenous Australians than other states and territories.

8 As infrastructure tends to less developed in smaller communities than larger ones, the actual population without access to basic services is less stark. For example, while only 23 per cent of communities have access to state and territory electricity grids, around 38 per cent of the total

along with key shortages in housing and the difficulty in attracting outside staff to work in remote locations presents a profound challenge for service delivery.

In effect, remoteness reduces the scope of the services that can be delivered, and dramatically increase their costs. In some communities, only basic HACC and visiting services are available (for example for respite or specialists). This approach cannot provide adequate support for people with a high level or complex needs on an ongoing basis and Indigenous Australians with disabilities will sometimes need to move to regional centres, or even major cities, to receive the supports they need. However, as many Indigenous Australians have a strong bond with both the land and their local community, they may be very reluctant to do so.

Language barriers

For many Indigenous Australians, particularly in remote areas and among older people, language can be a barrier to accessing services, or can lead to misunderstandings or ineffective service provision. For some Indigenous Australians, English was not the first language learnt, nor is it the main language used. In other areas, local varieties of English are spoken, which can also make communication difficult. The NATSISS (ABS 2008c) suggests that around 11 per cent of Indigenous Australians aged 15 and over speak an Aboriginal or Torres Straight Islander as their main language overall, and around 40 per cent in remote areas. Nevertheless, Census (ABS 2008e) data suggests that, of those who spoke an Indigenous language at home in 2006, most report being able to speak English well or very well (around 80 per cent).

11.3 Addressing the high rate of Indigenous disability

The most important issue surrounding Indigenous disability is its relatively high incidence compared with the non-Indigenous population. This gap is driven by complex combination of socio-economic disadvantage and exposure to a broad range of risk factors (such as smoking, binge drinking, obesity, substance abuse and violence). Addressing Indigenous disadvantage has been a longstanding (and so far largely unsuccessful) policy objective of a broad range of government initiatives. This effort was formalised in 2008, in the form of the COAG agreements that make up 'Closing the Gap' — a whole of government initiative. This commits governments to working toward reducing Indigenous disadvantage as revealed through a set of specified indicators. Closing the Gap is aimed at providing greater

population living in remote communities has state grids/transmitted supply as their main source of electricity.

transparency and accountability of government, greater coordination of effort, increased and more consistently maintained resources, and improving the knowledge base (box 11.1).

Box 11.1 **Closing the Gap**

The Closing the Gap initiative is a joint effort by all levels of government to reduce the disadvantage experienced by Indigenous Australians. It is underpinned by a set of agreements by the Council of Australian Governments (COAG) to work towards reducing the disparity revealed by a set of specific indicators within a nominated time frame. The National Indigenous Reform Agreement (NIRA) commits COAG to:

- closing the life-expectancy gap within a generation
- halving the gap in mortality rates for Indigenous children under five with a decade
- ensuring access to early childhood education for all Indigenous four year olds in remote communities within five years
- halving the gap in reading, writing and numeracy achievements for children within a decade
- halving the gap for Indigenous students in Year 12 (or equivalent) attainment rates by 2020
- halving the gap in employment outcomes between Indigenous and non-indigenous Australians within a decade.

NIRA also contains the over-arching framework for Closing the Gap, including the service delivery principles that should be adhered to and the basic 'building blocks' that governments should focus on in order to make progress on the Closing the Gap targets. These are early childhood, schooling, health, economic participation, healthy homes, safe communities and governance and leadership.

These objectives are pursued through a number of specific agreements that 'commits governments to a common framework of outcomes, progress measures and policy directions' and 'builds on current initiatives, address shortfalls and in many cases provide significant additional funds' (FaHCSIA 2011c). These agreements relate to health, housing, early childhood development, economic participations, remote service delivery, remote internet access, and closing the gap in the Northern Territory.

While this is a long-term initiative, there is early indications of improvement in some of the key targets. For example, high school retention rates have increased over the last 10 years, the proportion of Indigenous Australians aged 15-64 with a job has risen over the last 5 years and the gap in child mortality rates has been declining.

Source: (FaHCSIA 2011c).

This raises the question as to the appropriate role of the NDIS, given the whole-of-government approach of the Closing the Gap initiative. As noted by the First People's Disability Network (sub. DR1047, p. 22) Closing the Gap does not target

disability directly and many of its objectives are clearly beyond the scope of the NDIS. However, some health care and public health initiatives are complimentary to the objectives of the NDIS. Specifically, part of the function of the proposed NDIA is to fund early intervention and prevention approaches in areas where there is robust evidence of both effectiveness and cost effectiveness (chapter 13). The relatively high rate of disability, largely arising from identifiable (and avoidable) risk factors, suggests that the opportunities for early intervention and preventative measures that meet this criteria are likely to be more common among the Indigenous community.

Reducing the 'disability gap' over the long-term is in the financial interest of the NDIS, but, more importantly, would also dramatically improve the opportunities and quality of life for many Indigenous Australians. As expressed by the Australian Medical Association:

> The AMA considers many of the behavioural risks underlying serious acquired disability and congenital disabilities among Indigenous people to be amenable to individual health literacy education, and building community-level capacities to deal preventively with health and injury issues…. Given the burden of disability, the long term benefits of prevention are substantial, and should be viewed as a sound investment… (sub. DR875, p. 3)

While the NDIA would not be a frontline provider of programs to reduce the incidence of preventable disability, in cooperation with other government agencies (such as the Australian National Preventive Health Agency), there is merit in it strategically funding preventative measures with an Indigenous focus. This should be complemented with transparent evaluation of the success of funded programs. Similarly, there is also value in the NDIA funding or conducting research specifically directed towards the prevention or treatment of conditions that are pervasive in the Indigenous community and could potentially result in long term disability.[9]

For example, health initiatives targeting otitis media (which can lead to deafness) among Indigenous children could potentially decrease the rate of disability and have important socio-economic flow on effects (such as improved educational outcomes). The NDIA, in co-operation with Indigenous communities, state and territory health agencies and Australian Hearing, could expand initiatives aimed at reducing the incidence of otitis media in children through:

- Indigenous community led ear health education programs
- early intervention through mobile ear health clinics

9 For example, based on insights yielded from the NDIS database.

- other types of preventative interventions with demonstrated benefits, such as the provision of swimming pools in local schools and communities (SCRGSP 2009)
- conducting (or funding) and publishing research on the relative success of different approaches in improving ear health.

As with early intervention programs more generally (chapter 13), delineating responsibility and collaborating with health, education and other programs would be an ongoing challenge for the NDIA. The large number of Indigenous specific programs, and the political sensitivity they are sometimes associated with, magnifies the difficulty of effective coordination. It would obviously be undesirable for the NDIA to duplicate the efforts of existing agencies with greater expertise, or to run programs that are inconsistent or conflict with existing ones. Nevertheless, the magnitude of potential long-term benefits associated with reducing the rate of Indigenous disability warrant active targeting by the NDIA.

RECOMMENDATION 11.1

The NDIS should provide funding for implementation, research and transparent evaluation of early intervention initiatives

- ***but to avoid duplication, should cooperate with the wide range of agencies and programs already targeting the preventable risks that generate higher rates of disability among Indigenous Australians.***

11.4 Improving support to Indigenous people with a disability

While the obstacles to service delivery described in section 11.2 are frequently noted in the literature, there is no clear guide as to how prevalent or important they are in practice. For health services, it appears that scarcity and proximity are more important issues than mistrust or culturally inappropriate services (table 11.3).

To the extent that this holds true for disability services, the increased resources under the proposed NDIS, combined with support from local area coordinators (those in rural areas will be supported with regional NDIS offices) and advocacy groups, will bring about a dramatic increase in the supports they receive. The increased choice and flexibility of the proposed scheme will empower many to seek out the supports that best suit their individual situation (particularly in major cities or inner regional areas).

Table 11.3 **Types of problems faced by Indigenous Australians aged 15 years and over seeking health services, 2008**

	Non-Remote	*Remote*
	%	%
Waiting time too long/not available when needed	55.0	33.2
No services in the area	27.3	50.9
Not enough services in area	34.0	47.1
Transport/distance	24.7	45.8
Cost of service	37.5	16.5
Don't trust services	7.3	5.6
Services not culturally appropriate	5.5	4.7

Source: ABS and AIHW (2008).

Nevertheless, the cultural appropriateness of disability services and perceptions of government, service providers and the NDIA itself may become relatively more important as shortages in the disability sector are eased. It is not clear that the proposed consumer choice model would, on its own, adequately facilitate the delivery of such services. This will be particularly true in remote areas where the absence of service providers precludes meaningful choice. Beyond this, in both rural and urban settings, socio-economic disadvantage, marginalisation and a lack of culturally appropriate services are major barriers inhibiting many Indigenous Australians from accessing the services and supports available to them and exercising their consumer rights effectively.

For this reason, block funding the provision of disability support services specifically focussed on ensuring Indigenous people with a disability can access the supports they need, is likely to remain a feature of the disability system under the NDIS, at least over the short to medium term. However, this should not imply a *reduction* in choice for Indigenous Australia with a disability. Where non-blocked funded or mainstream disability support providers exist (i.e providers that are not specifically focussed on Indigenous clients), the NDIA will need to be mindful that Indigenous people are not be prevented from accessing them if they want to. (And conversely that non-block funded providers are not discouraged or disadvantaged in providing services to Indigenous Australians.)

In order to make good funding decisions and provide guidance for service providers, the NDIA will need to develop an understanding of the characteristics of effective service delivery to Indigenous Australians. While the experience of state and territory government agencies will be a valuable source of expertise, the Commission recognises the difficulty and complexity of this task. There are no easy or comprehensive answers. Moreover, it is often unclear how broadly the lessons

from local solutions can be applied — often solutions will be specific to the circumstances of individual communities and place based planning will be the appropriate approach.

Nevertheless, there is a small but growing literature describing the basic strategies that can assist in meeting the needs of Indigenous people, including: embedding services within the community; employing indigenous staff; and improving the attractiveness and appropriateness of services through cultural awareness training. These strategies will be important in both urban and rural settings and are discussed in the next section. While these strategies are also relevant to improving disability support in very remote communities, the challenges obstructing effective service provision are greatly magnified in these areas. As such some additional issues that should be considered in very remote communities are also discussed.

Embedding services within the community

The extent to which disability services are 'in and of' the Indigenous communities they serve is a critical factor to their acceptance and success. The capacity of not-for-profit providers to be representative of the communities they serve suggest they may have an advantage over government run services in this area (PC 2010a), particularly given the reservation that some indigenous people have about government run services. Acceptance is likely to be highest where service providers are effectively managed and staffed by the Indigenous community themselves.

There is no single formula for growing a successful community based organisation — in practice they tend to emerge organically and often serendipitously based on the efforts of talented and motivated individuals. Nevertheless The NDIA has a number of potential tools that it could use to assist existing organisations or promote new ones. Primarily, it can provide block funding to community run organisations (for example with a board comprised of or including local Indigenous people) that have a record of effective service delivery, and fulfil the requirements of entry onto the NDIA approved provider list (chapter 10). Similarly, new organisations that have sufficient managerial expertise and can satisfy probity and governance requirements could be listed and funded by the NDIA. Where there is community support but a lack of expertise, the NDIA could promote the development of such organisations through:

- direct training and capacity building
- funding for larger established providers to provide managerial oversight to community based operations (staffed by community members) with the

objective of building administrative and organisational capacity and governance structures over the long term

- funding for other successful indigenous run organisations (including outside of disability service provision) to mentor and oversee the emergence of local community based disability support organisations.

For other service providers, establishing trust and rapport with Indigenous communities will often be a long-term task involving integration into the social, political and economic activities of the community (NDS 2010; Gilroy 2008). While there is no one way to achieve this, some commonly identified strategies include:

- establishing relationships with other Indigenous services providers, schools, medical centres, regional advocacy organisations, aged care and HACC providers. In particular, in remote communities Aboriginal Medical Services[10] may be a hub of 'community activity, connection and organisation' – making them a useful contact point for newly established disability support service providers (SNAICC 2010, p. 41). However, an evaluation of coordinated care trials suggested that the effectiveness and community acceptance of these organisations themselves can be mixed (DoHA 2007)
- raising awareness of what the NDIS is, the supports service providers can offer (and the boundaries to these supports) and promoting a better understanding of disability within the indigenous community itself. The NDIA, service providers and advocacy groups such as the First Peoples Disability Network and their members will all have a role in this. This will be particularly important prior to the roll of the NDIS but will also need to be an ongoing effort (for example by service providers participating in local events and community meetings)
- using existing networks, getting referrals from trusted sources within the community and establishing a mechanism through which ongoing communication with key elders, community workers and other service providers can occur (Regan and Harriden 2008). For example, some states have Indigenous advocacy organisations comprised of networks of Indigenous people with disabilities and service providers that may be able to assist with this
- effective and authentic consultation with the community.[11] This includes listening and where possible basing the service offering on their expressed needs, rather than existing service models. For example, the First People's

10 Sometimes referred to as Aboriginal Community Controlled Health Organisations.

11 The NSW Ombudsman (2010) noted that a common criticism by Indigenous people is that communities are not consulted until after decisions are made about the development and implementation of programs (p. 7).

Disability Network points to a case where all one community wanted was a wheelchair accessible bus so some of its members could do shopping and attend doctors appointment in a regional town, but instead received HACC and range of other services (sub. 1047, p. 25). The Community Health Committees used in the Sunrise Health trial is a useful example of how community need was expressed to service providers on an ongoing basis (DoHA 2007)

- developing an understanding of local community. This includes community and family structure, the identification of influential community members and elders and an awareness of community politics and factions (NDS 2010).

Indigenous staff

The value of Indigenous staff to service providers and their clients is widely acknowledged (O'Neil, Kirov and Thomson 2004). Gilroy (2008) outlines a number of reported benefits to service providers from having Indigenous staff, including:

- increased-cross cultural awareness of the organisation
- greater awareness of local indigenous issues (both cultural and political)
- greater capacity to network with Aboriginal community services and develop programs that effectively target and cater for Indigenous clients.

While hiring Indigenous staff members may lead to complications arising from broader community tension in some areas (for example between kinship factions[12]), overall the presence of Indigenous staff appears to have a strong affect on use of services by Indigenous people (NDS 2010, p. 28). Similarly, the NSW Ombudsman (2010) states:

> While it is a myth that Aboriginal people will not utilise mainstream services simply because they do not employ Aboriginal staff, it is clear that employing Aboriginal workers is one of the most effective ways for organisations to demonstrate that they welcome Aboriginal clients and are capable of providing culturally responsive services. (p. 23)

For this reason, there is merit in both the NDIA (for example as local area coordinators attached to regional NDIS offices as well as assessors), and service providers in communities with substantial Indigenous populations, establishing

[12] The NDS (2010) suggested that in areas where kinship factions are prominent, employing an Indigenous Australian from one family group can reduce the prospect of recruiting from or delivering services to another. The NDS (2010) and Aboriginal Disability Network (2007) suggest that in some cases Indigenous run service providers face similar issues. Potential responses to this are deliberately hiring from multiple family groups, and involving elders in conflict resolution (Aboriginal Disability Network 2002).

dedicated positions for Indigenous people within their organisations. Indeed, many NGO service providers are actively seeking to increase their Indigenous workforce already – for example Life Without Barriers has independently set, and met, targets for Indigenous employment, which now makes up 3 per cent of their workforce (Life Without Barriers 2010).

Success in recruiting Indigenous staff is dependent on a number of factors, such as reputation in the community (NDS 2010) and whether there are already Indigenous staff within the organisation (Gilroy 2008). The NDS (2010) provided a number of recommendations to assist recruitment, including having Indigenous Australians on the recruitment panel, working with Aboriginal job network services and offering traineeships. Gilroy (2008) argued that a lack of skills or qualifications are common barriers to recruiting Indigenous Australians and suggested a greater role for government to assist service providers with the costs of training and development.

Working conditions can also be difficult for Indigenous staff, which can cause problems with staff retention. This has a number of facets:

- Indigenous staff being 'pigeon holed' into positions that solely deal with indigenous communities. This can reduce career opportunities and impact upon workplace satisfaction (NDS 2010).
- A shortage of Indigenous staff can result in them being overloaded with work, which, combined with cultural expectations, can lead to staff working significant unpaid overtime (Hepburn 2005).
- Indigenous staff may be caught between the conflicting demands of their employers and their community. For example, community members may ask Indigenous staff for things that agency policy forbids from providing, such as money, transportation or simply taking the time to visit elder groups and socialise with Aboriginal community members while at work (O'Neil, Kirov and Thomson 2004; NDS 2010). However, refusing such requests may undermine their standing in the community.
- Standard working conditions may be difficult to reconcile with personal cultural responsibilities (such as attending funerals). Conversely, Indigenous staff who can access more flexible working conditions may experience friction with non-Indigenous staff, who feel they receive preferential treatment (NDS 2010).

Appreciating the additional pressures that Indigenous staff may be facing will be an important factor in developing strategies for staff retention. Beyond this, the NDS (2010) also recommended building the capacity for non-Indigenous staff to serve the needs of the Indigenous community, thereby alleviating some of the demands made on Indigenous staff. This is reliant on non-Indigenous staff

developing a sufficient level of 'cultural 'competence' and understanding of the Indigenous community they serve. This is discussed in the following section.

Indigenous Cultural Awareness Training

Cultural competency arises from a number of sources, including

- individual staff experience with Indigenous communities
- the institutional knowledge base developed by providers as to what service delivery strategies are most effective and appropriate in meeting the needs of Indigenous clients in different situations (itself derived through organisational experience and consultation).

Beyond this, Indigenous Cultural Awareness Training (ICAT) is an important and widely used strategy for improving cultural competency in dealing with Indigenous clients or staff. It is offered within the mainstream education system (such as university and TAFE), by specialist training providers and sometimes 'in-house' by organisations themselves. In some cases, funding agreements between government agencies and disability service providers require a certain proportion of staff to have undertaken ICAT (Gilroy 2008). Courses tend to follow a short workshop format and aim to provide a better understanding of Indigenous culture and history, to develop skills and strategies for better service provision and to improve cross cultural communication skills.

Whilst an important strategy, a number of studies caution against assuming that ICAT can provide a stand alone solution to achieving cultural competency and that a tokenistic, 'rubber stamp' approach to ICAT is contrary to its stated objectives (NDS 2010; Gilroy 2008; Ros Madden et. al., sub. DR942, p. 12–13). Moreover, like other education and training services, the quality of ICAT providers, and the applicability of course content to disability support services providers, is likely to be varied. In particular, the NDS (2010) noted that courses with generalised (rather than specific to disability support services) and non-local content were less effective. In some instances, ICAT appeared to have been counter-productive:

> Many disability services reported that aboriginal cultural awareness training (ACAT) can make disability workers feel intimidated and apprehensive in working with Aboriginal people. The ARP received reports of disability service staff leaving ACAT feeling averse and disinclined to engage with the Aboriginal community for fear of insulting people. Some disability service staff reported that ACAT reinforces the perception that Aboriginal people are difficult service users. (NDS 2010, p. 18)

These issues highlight the point that the ICAT should be an output, rather than an input based exercise (that is, the goal should not be to 'tick the box' but rather to

develop cultural competence in a practical way that improves the service offering). Nevertheless, ICAT should remain a key tool to improving cultural competency, alongside an ongoing commitment by service providers to developing their own local knowledge base about cultural competent services practices that can be used as a guide by staff. Gilroy (2008) and the NDS (2010) suggest a number of features that are likely to increase the usefulness of ICAT to service providers, including:

- being locally focused
- being practical in nature and relating specifically to disability services
- involving the local community in training
- providing information about important people (such as elders) and organisations (such as other not-for-profit service providers or aboriginal-owned business) with whom to establish networks
- covering other relevant topics such as appropriate communication styles, appropriate topics for conversation, myths and misconceptions, cultural taboos or sensitivities, and gender roles (such as men's business and women's business).

Remote communities

The factors that confound improvement in the support provided to Indigenous Australians with a disability will tend to be greatest in remote communities (though with considerable variation from community to community), particularly in the Northern Territory, northern Queensland and the remote areas of Western Australia and South Australia. In some cases, basic needs for nutritious food, shelter and security will be more important for Indigenous people with a disability than specific disability support services.

These communities are spread over vast areas, and their circumstances and the specific issues they face are diverse. Nevertheless, the observations of participants during consultations by the Commission in the Northern Territory and elsewhere are likely to be indicative of the magnitude and type of problems experienced in remote communities more generally (box 11.2).

Given the responsibility of the NDIA to provide support for people whose needs qualify them for tier 3, it will need to develop over time, strategies for dealing with Indigenous Australians who currently live in remote communities. While work should begin immediately as the NDIS is rolled out in other areas, the significant amount of infrastructure, community engagement and capacity building that is required in many remote areas suggest a longer timeline may be needed to establish

functional services. In doing so the NDIA will need to determine what services it can realistically provide in a remote community, and how, given the practical difficulties it faces.

Box 11.2 Some common themes from consultation in the Northern Territory

During consultations with service providers, government, and advocacy groups in the Northern Territory, a number of themes emerged:

- *A high level of hidden disability*: It was widely thought that the level of disability in remote communities greatly exceeds official statistics. In particular, it was suggested that children with a disability are often not detected until late, and that families would be extremely uncomfortable with children being removed from communities in order to provide them with specialist therapies.
- *Fulfilling basic needs was seen as a higher priority than specific disability support.* While disability support services were very much needed in remote communities, these were seen as secondary to more basic need such as nutritious food, shelter and security.
- *It is extremely difficult to get outsiders to move to remote communities in order provide disability support services.* Difficult conditions, poor housing, remoteness and in some cases poor security, were cited as reasons for this.
- *A greater focus is needed on support for people with acquired brain injuries and challenging behaviour, and for those caring for them.* In particular, numerous participants pointed to the need for safe residential respite facilities for Indigenous people who had acquired brain injuries from head injuries or substance abuse. Similarly, several submissions also pointed to the tragic consequences of inadequate support given to carers of people in these circumstance (Central Australian Aboriginal Congress, sub. DR1018, p.18, Aboriginal Disability Network, sub. 1047, p. 16)
- *There is a need for coordinated and planned hospital discharge arrangements for Indigenous people with a disability*. Unmet need in terms of support for Indigenous people returning to their communities, and alerting the relevant community members and services providers following a hospitalisation, was commonly cited.

What support services?

Disability support services are practically non-existent in many remote communities – often limited to basic HACC services (such as meal preparation) and occasional visits by allied health professionals. However, as with non-Indigenous Australians living in remote areas, matching the range and quality of services provided in major cities is not realistic or appropriate. For people with ongoing need for intensive or

specialist care, therapy or rehabilitation, the NDIA should assist with relocation to urban centres where such support is available. In other cases, the NDIA will need to consider, on an individual and community basis, whether the assessed needs can be delivered within a community setting in a way that:

- is responsive to expressed community need and culture
- will deliver good outcomes for the person with a disability and their family
- is cost effective
- is realistic given the assets and infrastructure in the community, and the prospect of finding suitable staff
- does not subject the person with a disability, or those caring for them, to undue risk.

Given this criteria, a varied approach is appropriate, which will need to be monitored over time and respond to changing conditions. This may include support services such as:

- *low level attendant care:* As discussed below, using local people will often be a necessity in delivering attendant care (in addition to being desirable). In establishing these supports, there is merit in seeking out opportunities for cooperation with any existing organisations such as HACC, women's groups or other aged care facilities or services
- *mobile respite programs:* For example the Troopy Program run by Frontier Services is one example of an innovative mobile service
- *allied health professionals*: The extent to which services by specialists such as occupational therapists, speech therapist and physiotherapists are delivered by 'out-reach' (taking specialists to the community) or 'in-reach' (taking individuals to the specialist) will involve ongoing deliberation based on the costs, outcomes and effectiveness of both approaches. Out-reach programs will usually only be possible via visiting specialists. These should be coordinated with state and territory health programs and, where appropriate, should consider basic training for carers, as well as direct therapy for people with a disability. While telehealth is unlikely to be a viable option in the near future, over time technological advancements may increase the usefulness of this tool, even in remote communities
- *supported residential accommodation:* Purpose built and staffed residential and respite facilities will not usually be viable in remote communities (indeed in many remote communities there is overcrowding due to acute shortages in ordinary housing stock, let alone purpose built supported accommodation).

Nevertheless, supported accommodation may be a realistic option in some larger remote communities[13]

- *brokerage:* In some cases, organisations may exist that can offer a form of brokerage that matches people with disability with local community supports. Waltja in the Northern Territory provide one example of this[14]
- *discharge support services:* Several participants in this inquiry have described the need for people with a disability to be assisted in returning to the community after a medical incident (for example the First Peoples Disability Network, sub. DR1047, p. 22). In order to prevent people with a disability from remote communities effectively being discharged to the street the NDIA, potentially in cooperation with health authorities, should assist in organising transport and support plans for the transition from hospital back to their homes
- *appropriate aids and equipment:* It will be important for the NDIA to be mindful that the equipment provided to Indigenous Australians in remote community is appropriate given the tough physical environment in which they live.

How to do it

As mentioned above, Indigenous Australians should have access to self-directed funding on the same basis as non-Indigenous Australian (that is subject to their capability and probity checks). However, in remote communities the practical benefit of self-directed funding is likely to be limited by the absence of a competitive market for disability services (or any other kind of commercial services) and social pressures that may be applied to people with a disability who manage their own funds – either out of a sense of obligation to family members in need, or in some communities through coercion or humbuggery (NSW Aboriginal Community Care Gathering Committee, sub. DR983, p. 4, First Peoples Disability Network, sub. DR1047, p. 26). For these reason, it is highly unlikely that any disability services would exist in remote communities in the absence of block funding.

Finding workers to provide attendant care support will be a core challenge in remote communities. Whereas, employing indigenous staff is desirable for service providers operating in all Indigenous communities, in remote areas it will often be a necessity due to:

- the language barriers that exist in some remote communities

[13] For example, the Central Australian Aboriginal Congress describe a detailed proposal for such a facility in Ltyentye Apurte community in the Northern Territory.

[14] Details available at http://www.waltja.org.au/default/aged2.html

- the difficulty in attracting outsiders to remote communities, in particular due to housing shortages and difficult living conditions
- the reservation that some people in remote areas may feel about accepting care from outsiders.

In drawing upon local Indigenous people, the NDIA and service providers will need to be cognisant of:

- the necessity of providing appropriate training and support to Indigenous staff, and ways of working with staff that may have English as a second language, poor literacy and police records
- strategies to deal with the transience of staff. For example, cultural obligations (such as sorry business) may unpredictably make staff unavailable for work. Where such issues are common, multiple casual staff and flexible availability for shifts may be mutually beneficial, compared to permanent positions
- strategies to deal with cultural practices that may undermine supports for people with a disability. In particular:
  - care restriction based on gender and family groups are likely to be more strongly felt in remote communities
  - some communities adhere to systems of 'payback' whereby blame for tragedies, such as deaths in the community, is assigned (often with a supernatural interpretation) to particular individuals who may be subject to reprisals (Central Australian Aboriginal Congress, sub. 1018, pp. 2-3). In such communities, this can represent a significant risk for those undertaking caring roles (both informally and formally) and may discourage them from doing so.

The effectiveness of the regional local area coordinators assigned to Indigenous people in remote communities will be particularly important for the NDIS to achieve its objectives in these areas. It is likely that such positions will require special training and appropriate induction, and warrant additional remuneration. Their clients will be spread over large areas, requiring significant ongoing travel in order to monitor their wellbeing as well as to establish relationships with the local community and other local services or community organisations. These local area coordinators will also need a greater degree of flexibility and discretion in order to work effectively in the difficult conditions there are likely to encounter.

11.5 Conclusions

Supporting Indigenous Australians with a disability should be an important, specific goal of the NDIS. A key challenge to achieving this goal is overcoming the barriers to accessing services experienced by Indigenous people. The market based service delivery system underpinning the proposed NDIS will often not be the most appropriate funding method, at least for the medium term. In such cases, the NDIA should block fund suitable service providers to work with local communities to deliver disability supports to Indigenous Australians. This approach will be particularly necessary in remote areas. In doing so, it should work with existing government agencies, Indigenous advocacy groups and other funded service providers.

Indigenous people themselves are a key resource in addressing Indigenous disability. There are considerable advantages in employing Indigenous staff, and from fostering the development of not-for-profit service providers managed by Indigenous members of the local community. However, this can present governance and accountability challenges where the skills and experience necessary to run such organisations are limited. One potential response to this is to use a lead agency type model, whereby a larger experienced service provider supports smaller community based operations that engage local staff. Alternatively, the NDIA could fund established and successful community run organisations (for example, from other communities or other types of services) to mentor and advise new local operations. In either the case, the long-term objective should be building the administrative and organisational capability of local community based provider, with the intention of ultimately handing over control entirely.

While the proposed scheme will seek to dramatically improve the standard of living for Indigenous Australians with a disability, there are limits to what can realistically be expected to be achieved. Progress is likely to be uneven — particularly among remote communities. Some participants have suggested that support services could be readily developed and improved given appropriate funding (Novita, sub. DR936, p. 8-9). However, considerable time and effort will be required in areas where infrastructure, existing organisational capability and social capital are low.

Also, the diversity and level of care and support available in major cities cannot be replicated in very remote areas. In some cases, Indigenous Australians with complex needs will have to move to regional centres or major cities to receive appropriate care and support (as is also the case with non-Indigenous Australians). In other cases where community based care is preferable, there may be an absence of non-government organisations available to provide support services. In such cases government run disability support services may be the only practical option.

Similarly, in remote settings, sharing infrastructure (for example with health or aged care), while not ideal, may also be necessary.

While the NDIS is (by definition) primarily focused on offering support to people with a disability, it does not directly address the underlying issue of the relatively high rate of disability among Indigenous Australians. The causes of this lie in the socio-economic disadvantage and marginalisation experienced by many Indigenous Australians and the risk factors to which they are exposed. While the NDIS will have a role in funding early intervention and prevention approaches, it is not a panacea for broad Indigenous disadvantage. Addressing Indigenous disadvantage is an issue for all of Australian society and requires an ongoing cooperative approach from all levels of government and the Australian people (both Indigenous and non-Indigenous) more generally.

Finally, it is clear that there is a lot to learn in order for the NDIS to effectively deliver supports to Indigenous Australians. There is relatively little literature about this — as stated by the First People's Disability Network 'in many ways 'disability' is a new conversation in Aboriginal and Torres Strait Islander communities' (sub. 1047, p. 14).[15]

Encouraging new or innovative approaches, trials and local experimentation will be important in improving service delivery. Similarly, directed research, transparent evaluation, independent review and active dissemination of the knowledge base will also play a central role. At times, this may uncover failures or areas with a frustrating lack of progress. However, the commitment to honest appraisal of what works and what doesn't will critically determine the success of NDIS in providing a greater level of support to Indigenous people with a disability.

Systemic advocacy, such as Aboriginal Disability Networks in New South Wales, Queensland, Victoria, South Australia and Western Australia, will also play an important role in uncovering issues, suggesting solutions and working with service providers and the NDIA to improve the cultural appropriateness of disability services. The recent collaboration between the Aboriginal Disability Network in NSW and the NDS also provides a useful example how advocacy groups and service providers can work together to bring about greater understanding and systemic improvement (NDS 2010).

[15] More research has been done in other service areas (particularly health), however, translating the knowledge base in those areas into practical success on the ground has been highly varied, and the applicability to disability is often limited.

RECOMMENDATION 11.2

The Australian Government and state and territory governments should consider the feasibility of overcoming the barriers to service delivery in the NDIS for Indigenous people with a disability by:

- ***block funding suitable providers where services would not otherwise exist or would be inadequate***
- ***fostering smaller community-based operations that consult with local communities and engage local staff, with support from larger experienced service providers, in particular those with a high level of community ownership***
- ***employing and developing Indigenous staff***
- ***developing the cultural competency of non-Indigenous staff***
- ***encouraging innovative, flexible and local problem solving, as well as conducting and publishing evaluations of trials in order to better understand what works and why***
- ***developing an effective and cost-effective balance between bringing services to remote areas, and bringing people with a disability in remote areas to services***
- ***working with state and territory governments, indigenous advocacy groups and other community groups to develop and refine funding strategies, better understand local and systemic issues as well as successful (and unsuccessful) approaches and diffusing this knowledge to other service providers, researchers working in this field and the broader community.***

In its initiatives for delivering disability supports to Indigenous people, the NDIS should be mindful of the wider measures addressing Indigenous disadvantage being adopted throughout Australia.

12 Collecting and using data under the NDIS

Key points

- An effective evidence base under the National Disability Insurance Scheme (NDIS) will be critical to ensure the financial sustainability of the scheme, the provision of cost-effective services and interventions (that which yields the best outcomes for scheme participants at low cost), improved outcomes for scheme participants, and good performance from service providers.
- A crucial component of an effective evidence base will be extensive and robust data systems that:
  - are compatible across jurisdictions and within the disability system
  - supported by adequate information technology (IT) and administrative systems
  - include outcomes data
  - involve the creation of a longitudinal database of NDIS participants' information, which includes one time registration, clear rules on data entry (to ensure data integrity) and access (to ensure confidentiality and privacy for scheme participants).
- As well as good data and associated IT and administrative systems, an effective evidence base under the scheme will include:
  - a capacity for independent research
  - the application of appropriate methods of analysis
  - transparency of data and research findings, subject to meeting requirements for confidentiality and privacy, and for responsible and ethical research conduct
  - effective integration of data and research findings with decision making by scheme administrators, NDIS participants and service providers.
- Implementation of an effective evidence base under the NDIS will be a large and complex endeavour, requiring careful planning and sequencing as well as considerable consultation and cooperation among stakeholders within the disability system.
  - The National Disability Insurance Agency should drive implementation, which needs to commence as soon as possible after the Agency's establishment.

12.1 Introduction

An effective evidence base under the National Disability Insurance Scheme (NDIS) will be critical to ensure:

- the financial sustainability of the scheme
- the provision of cost-effective services and interventions — that is, supports that yield the best and most cost-effective outcomes for scheme participants — including:
  - when to make investments in aids, appliances, home and vehicle modifications, training or other non-recurrent expenditures to reduce future recurrent spending
  - monitoring outcomes for scheme participants
- good performance from service providers, while controlling costs, including:
  - the identification of over and under-servicing by service providers and assessors, and fraud more generally among all stakeholders.

Data are a key aspect of the evidence base of a good insurance scheme (and badly lacking in the current disability system). As one participant remarked to the Commission, data are the 'lubricant of a well-functioning system'. Its absence would undermine the efficiency and effectiveness of the NDIS and, in particular, pose a threat to the capacity of the scheme to remain financially sustainable. This reflects the fact that, by its nature, most people with disabilities receiving individualised packages under the scheme would require funded supports over their lifetime. A cost pressure today creates ripples throughout the future. Real-time monitoring of support utilisation patterns and cost pressures, and the likely long-term implications of these patterns for the scheme's future liabilities is essential to maintain the financial sustainability of the scheme. As the Victorian Government said, the financial dynamics of insurance schemes with liabilities of this type are complex:

> … the estimates of liabilities and required funding are highly uncertain, and the nature of what services are provided — and at what cost — evolves over time. … An understanding of the very long-term nature of the liabilities and the financial implications of strategies and decisions are essential if the scheme is to be sustainable. (sub. 537, p. 24)

The NDIS will need extensive and robust data systems that are consistent across jurisdictions and different parts of the disability system. Information technology (IT) and administrative systems will be needed to underpin data systems as well as to provide effective and secure communication channels between scheme

participants, scheme administrators, service providers, and agencies in the health sector.

As well as good data and associated IT and administrative systems, an effective evidence base under the NDIS will include:

- a capacity for independent research
- the application of appropriate methods of analysis
- transparency of data and research findings, subject to appropriate confidentiality and privacy safeguards as well as requirements on responsible and ethical conduct by researchers
- the effective integration of data and research findings with decision making by scheme administrators (as well as scheme participants and service providers).

The remainder of this chapter discusses in further detail, deficiencies in the existing evidence base of the disability system as well as the objectives, features and implementation of an effective evidence base under the NDIS.

Other aspects of the evidence base are discussed elsewhere in the report. Chapter 10 on delivering disability services looks at the need for a national internet database featuring information about service providers and indicators of service quality. Chapter 15 proposes research into the impacts of staff training. Chapter 18 considers the potential for the national coordination of research in relation to injury prevention and management under the National Injury Insurance Scheme as well as the potential for a single information database on injuries arising from medical treatment.

12.2 Deficiencies in the existing evidence base

There are isolated pockets within the disability system where the evidence base is currently of high quality. Indeed, high quality data, together with their analysis, are critical to the activities of commercial insurers and government agencies that administer accident compensation schemes such as compulsory third party and workers compensation schemes. Insurers and agencies in these schemes typically:

- centre on the scheme participant
- collect data to help them contain costs and improve outcomes
- accumulate evidence as to what works and what is less effective, allowing ongoing changes in the approaches taken to the scheme participant
- are informed and active purchasers, getting good deals from service providers

- more closely monitor the performance of their claims managers, assessors and contractors than might otherwise be possible
- apply information constantly throughout their organisations and encourage a culture of continuous learning and improvement (box 12.1).

Box 12.1 The Victorian TAC's approach to collecting and using data

In Victoria, the TAC makes use of data to monitor and manage scheme performance, ensure scheme viability, and to understand the needs and perceptions of its clients, employees, service providers and the community.

In measuring its overall performance and the scheme's, the TAC's senior management and board regularly consider data, which provide measures of client outcomes (for example, vocational outcomes); client experience (for example, annual and bi-monthly client feedback survey results, and dispute rates); scheme viability (for example, actuarial release, recovery, paramedical payments, independence support and attendant care payments); and 'enabling success' (for example, measured by an employee morale index and an employee engagement index).

For severely injured clients, the TAC regularly analyses:

- case management data and client goals (outstanding and achieved)
- accommodation status
- details of the attendant care program
- paramedical rehabilitation and equipment payments
- hospital data (discharge timelines)
- home and vehicle modification data.

Source: Victorian Government (sub. DR996, pp. 61–2).

There has also been growing recognition amongst Australian governments of the need for improving the evidence base of the current disability system (box 12.2). For example, the 2009 National Disability Agreement[1] identified the following as priority areas:

[1] This was largely in response to concerns expressed in recent reports on a national disability insurance scheme by the Disability Investment Group (DIG), which noted:

- a 'disturbing lack of useful data and low research on disability issues'
- that, although data are 'slowly improving', what are currently available and planned are 'still inadequate for robust policy analysis and development'
- that despite 'pockets of valuable research', overall, research appears 'scarce, limited in scope, not always identified as disability-related, uncoordinated and poorly disseminated'

- Better measurement of need, involving:
  - the development of a national model to estimate demand[2]
  - improvements in the data collected through the Survey of Disability, Ageing and Carers (SDAC) to provide a stronger basis for demand estimates
  - improvements in the quality of data reported under the National Minimum Data Set, and in jurisdiction-level unmet demand data.
- Population Benchmarking for Disability Services, involving the development of a National Population Framework and initial population benchmarking of disability services, based on information available, to improve the evidence base for policy, service and planning decisions.[3]

Also under the National Disability Agreement, governments agreed to contribute $10 million over five years for disability research, data and evaluation. The Disability Policy and Research Working Group will maintain overall responsibility for research, data and evaluation under the Agreement and will set the Research Agenda in line with the Agreement's reform priorities.

In the main, however, the quality of the existing evidence base is widely considered to be deficient. Flaws in the existing evidence base noted by participants in this inquiry (box 12.3), included that:

- there are inconsistent methods of, and systems for, data collection across the states and territories
- data that are collected are of poor quality
- there are gaps in data
- there is a lack of public access to data that are collected
- there is insufficient investment in disability research

- that, even if there were information available, there is no mechanism for reporting it or making the system accountable (2009a, p. 145; 2009b, p. 49).

2 In June 2010, Community and Disability Services Ministers endorsed the National Need and Supply Model, which is a means of estimating current service provision levels, the numbers receiving formal care, and the extent of need not met through formal care.

3 In December 2010, Community and Disability Services Ministers agreed to use the National Need and Supply Model to measure population benchmarks, including a respite benchmark to help carers of people with disability. Use of this model is intended to support better reporting on the provision of disability services and the need for these services as well as to provide greater transparency and better decision-making about disability service provision. A National Report on the National Need and Supply Model will be used to generate and publish national reports on disability services and demand for these services using different sources of data, including data from the 2009 ABS Survey of Disability Ageing and Carers.

- there is a lack of 'independent and expert' economic and clinical analysis
- there is a lack of clinical evidence on best practice pathways for rehabilitation and recovery for particular disabilities such as acquired brain injury
- particular disability services and policies do not have an evidence base, have an under-developed evidence base, or are not subject to independent analysis or evaluation
- there is little scope for NDIS participants to provide advice or feedback on disability services
- research is not integrated or 'translated' into disability policy or decision-making.

These existing deficiencies will need to be addressed in the NDIS.

Box 12.2 Participants views: the current evidence base is improving

National Disability Services:

> Recognition of the need for improved data is growing. The National Disability Agreement includes a commitment to improve data collection on the need for services and the development of population-based benchmarking. Work has progressed on both these commitments. In addition, for the first time, a national workforce census and survey of the community services workforce has been recently conducted. (sub. 454, p. 15)

New South Wales Government:

> As part of the NSW commitment to person-centred approaches, lifespan planning and better governance and reporting under Stronger Together 2, ADHC is enhancing its administrative systems used to collect and exchange data with the NGO sector.
>
> This enhancement in conjunction with recent investment in a new Funding Management System, is expected to deliver a robust platform for people with a disability (in conjunction) with service providers and the funding agency) to manage the entry and pathway of people receiving individualised support packages.
>
> The system will permit reporting at both an operational and strategic level and provide information to assess the short term, midterm and long term success and proposed interventions. (sub. DR922, p. 34)

Ros Madden et al:

> [Since the early 90s] there [was] a significant national effort to: create national data on disability services (there were none at all in the early 90s); make better use of the national disability survey; introduce disability modules into a wide range of social surveys. This has enabled a great deal of policy relevant analysis to be carried out and published. (sub. DR942, p. 18)

Box 12.3 **Participants views: deficiencies in the evidence base**

Anglicare Australia:

> … At present, there are notable gaps in the areas of data collection (focusing on client wellbeing), evaluations of best practice service delivery models, and in emphasising person-centred outcomes. (sub. 270, p. 22)

Australasian Society for Intellectual Disability:

> … what little research is conducted in Australia is generally driven by short-term agendas of state and territory jurisdictions, with a focus on evaluating existing services. Access to Commonwealth funding, and funding which allows for the proposal, development and trial of new and innovative approaches is limited by virtue of the position of disability research relative to competing national priorities. (sub. DR990, p. 5)

Autism Victoria:

> … CSTDA statistics are currently [of] no worthwhile use in relation to disability and unmet need for policy-makers Australia–wide and in certain States and Territories due to the poor data collect methods and inertia on the part of many service providers.
>
> … HACC data does not capture unmet need …
>
> … HACC files on individual community care recipients … [are] kept filed away with no analysis done of disability subsets and needs. Therefore policy making is hindered at local government level by the non-use of this data. …
>
> … [T]here is no National Autism Register. (sub. 468, pp. 2–3)

Australian Blindness Forum:

> No data on services which are unfunded or unmet need is collected. (sub. DR676, p. 9)

Australian Orthotic Prosthetic Association:

> Independent and expert economic and clinical analysis is urgently required, and benchmarks from nations who have best practice models in place need to be set in Australia. Unless realistic and independent analysis can be performed, we cannot move from the current adversarial position which exists between state health department funding bodies, amputees, and service providers. (sub. 237, p. 3)

Brain Injury Australia:

> … [There is] virtually no investment in disability-related research, including surveys of [acquired brain injury] prevalence, … (sub. 371, p. 8)

Carers Tasmania:

> Carer data will need to be better collected and reported. (sub. DR910, p. 18)

Insurance Council of Australia:

> … there is a lack of robust actuarial data in regards to the cost of care. There is also a lack of data concerning the prevalence of the various disabilities potentially covered by the scheme. (sub. 553, p. 15)

(Continued next page)

Box 12.3 **(continued)**

National Council on Intellectual Disability:

> Currently, each of the States and Territories in Australia are left to independently interpret and implement disability services policy under the Disability Agreement 2009. This leads to a lack of consistency in the scope and quality of services provided across the country. It also means that there is little in the way of any evaluation at the national level of what is being achieved and particularly what and where any quality outcomes may be. (sub. 571, attachment 1, p. 11)
>
> … there is no process in place for independent evaluation of the implementation of the policy and service delivery. There is no independent process for families to feed into the system to provide either advice or feedback on the implementation and outcomes of the policy. (sub. 571, attachment 1, p. 11)

National Ethnic Disability Alliance:

> There has been an inability and/or unwillingness by successive Governments and their respective Departments to improve the data collection, consistency and analysis on disability as it pertains to people from [non-English speaking backgrounds]. (sub. 434, p. 16)

Tech4life:

> The Australian disability research sector is littered with highly successful pilot projects and research work that is then wasted because no agency or system exists to consider adoption of the findings more widely. Consumers and professionals regularly complain that they give and give to surveys, researchers and others, yet rarely get feedback or a relevant report, let alone see changes in line with the recommendations or findings. The net result is researchers abandoning the sector (or doing it in their spare time through lack of ongoing funding), and consumers in particular, unwilling to participate in any further research activities. (sub. 261, p. 4).

12.3 Why an effective evidence base under the NDIS is needed?

Participants commented variously on the need for good data as well as research and analysis capability under the scheme (box 12.4). In essence, there are four main arguments:

- Facilitating the financial sustainability of the scheme.
- Ensuring cost-effective services and interventions — that is, yielding the best outcomes for NDIS participants at low cost.
- Monitoring outcomes for NDIS participants.
- Monitoring the performance of service providers.

Box 12.4 **Participants' views: the need for good evidence**

Data

Australian Blindness Forum:

> … Better data enables improved planning and efficient delivery of services where and when needed, reducing waste and improving outcomes for people with disability. … Efficient data systems keep compliance costs for service providers to a minimum and also feed information back to the sector to inform the development of good practice. (sub. 438, p. 21)

Australian Human Rights Commission:

> As noted by the Disability Investment Group report, collection of data and statistics as is required by article 31 is fundamental to the operation of social insurance schemes. This would assist in providing an evidence base for implementation actions and in monitoring progress achieved. (sub. 72, p. 40)

Municipal Association of Victoria:

> ... reliable data at a local government level will enable more effective local planning for local community service development initiatives and to support broader support access and inclusion initiatives for people with disabilities. (sub. 491, p. 3)

National Disability Services:

> … Data generated under the scheme should be used to build evidence on trends in service demand; which interventions provide the best outcomes for people with disability; benchmarking for service providers; as well as strategies to recruit, train and retain staff. (sub. 454, p. 15)
>
> … Improvements in available data — their relevance, quality, quantity and timeliness — are needed to support disability service planning, the development of quality improvement systems and workforce planning. (sub. 454, p. 21)

Suncorp:

> To monitor the financial viability of any proposed [national scheme], it is vital to establish a comprehensive database. A comprehensive database has the capacity to monitor and compare scheme performance over a period of time and against the results of other schemes, where appropriate … (sub. 592, p. 6)

Victorian Government:

> Data sets should be well-targeted to reduce duplication and keep reporting requirements to a minimum. The absence of such a database will, however, make unwieldy or impossible some of the key elements in delivering a viable national disability services scheme, including the ability to:
>
> - make sound, proactive, financial management/actuarial decisions, including the management of risk to the scheme;
> - make strategic decisions regarding service provision and interventions;
> - monitor the performance of service providers across Australia;
> - develop a comprehensive national longitudinal database;

(Continued next page)

Box 12.4 **(continued)**

- make relevant data, research and analysis publicly available where appropriate;
- understand stakeholder and community attitudes to an NDIS and its various elements; and
- ensure the delivery of timely and consistent supports to NDIS clients. (sub. DR996, p. 61)

Research

Anglicare Australia:

> Research contributes to the evidence base on which decisions should be made and tested. … Research and its translation for application can improve service delivery, thereby contributing to its efficiency and cost effectiveness. Furnishing all stakeholders — Government, service deliverers, informal support networks — with the relevant knowledge and ensuring that knowledge is accessible can, in the first instance, target services to those who will benefit most from them and second develop services which will return the greatest effect. It is reasonable to expect that in doing so the sector would engage in continuous improvement processes resulting in reductions in service usage and demand; not to mention other incidental efficiencies such as minimising duplication, increasing resource leverage, growing capacity for quality improvement including reporting and evaluation, and minimising unmet need. (sub. 594, p. 12)

Australian Blindness Forum:

> Investing in research and development capacity encourages the development of supports which maximise independence, realize individual potential and reduce demand for higher levels of care. …
>
> … [funding] is especially relevant for the issue of exploratory or 'blue sky' research — which is often needed to make significant leaps forward to improve long-term outcomes for people with disability. (sub. 438, p. 20)

Bedford:

> There is a need to ensure that relevant research and analysis of data and service delivery performance is undertaken, to inform the strategic direction of the system and provide the community and system users with information about the state of affairs.
>
> This will not only drive continuous performance and standards but also assist users in decision making about preferred service options. (sub. 287, p. 12)

Brain Injury Australia:

> … research is the only way that evidence-based policy and best practice can be developed leading to substantial cost savings for any proposed scheme. (sub. 371, p. 8)

Disability Advocacy Network Australia:

> Research funding needs to be allocated under the scheme to identify gaps, program failures and successes to inform progressive improvements in both structural reform and models for individualised support. (sub. 490, p. 12)

National Disability Services:

> … Improvements in research and its dissemination are needed to inform improvements to the delivery of support for people with disability — at a system-wide level and in relation to the efficacy of specific therapies, service models and interventions. (sub. 454, p. 21)

Facilitating financial sustainability

The NDIS would operate under a quite different management and funding arrangement to budget-based, pay-as-you-go disability and community services. In the latter cases, a budget is typically provided for a set period, claims are assessed and paid until the budget is exhausted, and the cycle begins afresh in the next budget period.

However, while not fully-funded, the Commission has recommended that the NDIS would effectively lock in tax revenue to meet its annual liabilities, without a yearly battle through the budget process to secure sufficient funding in competition with other government spending initiatives (chapter 14). In effect, the NDIS will be funded by a mandatory annual insurance premium. But no government would commit unconditionally to any premium level. That would provide an excuse for lax cost control and permissive benefit levels by the scheme. Any scheme that did not control premium pressures would not be sustainable or acceptable to governments and taxpayers.

In that context, good quality data and their analysis will be critical to maintaining a financial balance between costs and revenues over a long timeframe — this is why it is a major component of the governance of the scheme. Good data will permit, for example, more accurate estimation of likely long-term costs (including by allowing the accumulation of data on the typical lifetime[4] profile of costs for a particular disability). And greater accuracy in predicting costs can allow the scheme to function with less volatility in respect of revenue needs than might otherwise be the case. Indeed, the financial performance of commercial insurers and government agencies responsible for accident compensation schemes depends upon the quality of their data, and how well that data are analysed and integrated into day-to-day decision-making.

For the NDIS to achieve financial sustainability requires a thorough and ongoing understanding of the short- and long-term financial pressures and risks involved. It also needs comprehensive data collection and analysis systems to underpin that understanding, and to facilitate its incorporation into decision-making under the NDIS (including in the areas of administration, purchasing and contracting, investment management, as well as monitoring experience, utilisation and outcomes). As the Victorian Government said, the financial sustainability of a scheme can quickly be compromised by even a modest deviation in claims experience from the expected level.

4 Assuming that people choose to stay on in the NDIS after age 67.

> This is particularly true of a scheme focussed on individuals with severe disabilities and high cost needs, as the experience is volatile and the long-term costs are inherently difficult to estimate. (sub. 537, p. 22)

An effective evidence base consisting of good data and their analysis would permit the early identification of such developments.

Ensuring cost-effective supports and monitoring outcomes

An important use of quality data is to analyse the efficacy, effectiveness and cost-effectiveness of particular services and interventions. This might involve identifying better alternatives, facilitating innovation, allowing controlled experiments to be undertaken, and establishing (and revising) benchmarks for best practice. It might also involve identifying alternatives that reduce future scheme costs. (It also implies some form of research function for the NDIS, a matter that is discussed later.)

Such analyses can better inform decisions by people with disabilities, service providers and scheme administrators. It allows scheme administrators and service providers to fine-tune the mix of services offered to NDIS participants. It can also guide people's purchasing decisions. For example, People with Disability Australia emphasised the need for people who direct their own funding to have ready access to the kinds of information and support they need in order to take control of purchasing decisions:

> … People do not become empowered simply by knowing the cost of their support services. They need to be aware that they can make different choices, have the information to make the choices that suit them best, and be able to put those choices into action. (sub. 524, p. 20)

Analyses can provide evidence of the opportunities for better outcomes for NDIS participants from alternative services and interventions. For example, the greater use of machines to turn people in their beds can reduce the need to make calls on attendant carers for this purpose, or improved practices that reduce the incidence of pressure sores can reduce the incidence of hospitalisation.

Analyses might also better identify lower cost choices among equally effective services and interventions. This is important both for identifying better outcomes for NDIS participants, and for keeping control of scheme costs.

Analyses can also relate to the processes used by the NDIS, rather than to services and interventions per se. For example, do personal plans or paying family members achieve better outcomes or lower costs?

Monitoring the performance of service providers

Good quality data would allow more systematic and detailed analysis of the performance of different service providers. Do they deliver services cost-effectively and get good outcomes? Do they treat scheme participants with respect and do workers turn up on time? (Chapter 10 describes some aspects of analysing the performance of service providers.) Such analysis can also encompass monitoring adherence to national minimum standards. It would also underpin the National Disability Insurance Agency's (NDIA's) role as a purchaser of services under the scheme.

The evidence generated from performance monitoring may also suggest new approaches to service delivery as well as provide information on the use of services. For example, performance monitoring should pick up 'overuse' of particular services, or of services where the evidence as to their efficacy may be doubtful. It may also highlight if there are greater numbers of cases that require accompanying services from other parts of the health/community services sectors (for example, in respect of mental health services).

12.4 Data systems

Some important features of data systems to be established under the scheme are that they:

- are compatible across jurisdictions
- are supported by adequate IT and administrative systems
- include outcomes data
- involve the creation of a longitudinal database of scheme participants' information, which include clear rules on data access and use
- involve information about services providers (chapter 10)
- are transparent, but subject to satisfying privacy and confidential requirements (covered at the end of this chapter).

Compatible data systems

Data systems under the NDIS would need to involve compatible data standards, definitions and collection processes (such as data registers). This would need to be developed in consultation with stakeholders in the disability system and should be a priority task for the NDIA following its establishment.

Information technology and administrative systems

A significant task will be to implement changes to existing IT and administrative systems to ensure that they are capable of implementing compatible data systems across jurisdictions. Towards this end, standards for inter-connectedness of IT systems among the NDIA, other relevant government agencies (such as the National Injury Insurance Scheme and health agencies) and service providers will need to be developed by the NDIA in consultation with stakeholders in the disability system.

IT systems will also need to be able to deliver other administrative aspects of the NDIS, such as real-time updating and sharing of electronic records of scheme participants, and providing for the portability of entitlements between jurisdictions.

Outcomes data

An important component of the evidence base under the NDIS will be the systematic collection of data on outcomes of particular services or interventions for people with disabilities. Data on outcomes in employment, education, social participation, and capacity for self-care, and on the measures that contributed to those outcomes, would help to build an evidence base for analysing which interventions or forms of assistance are more effective, and why. Several participants noted the desirability of collecting such data (box 12.5).

Box 12.5 **Participants' views: outcomes data**

APC Prosthetics:

> … With an improved understanding of the outcomes [for amputees] there will be a greater ability to provide appropriate resource application & development. It would remove the uncertainty as to whether all clients are being referred appropriately — whether [for] rehabilitation with a prosthesis or without. It would also help remove the current uncertainty around who is accessing services. Is everyone being given the appropriate information around services that are provided for amputees? (sub. 241, p. 11)

Australian Physiotherapy Association:

> Embedding harmonised data collection systems and standardised measurement of process and outcomes in models of service will collect evidence that can be used to demonstrate efficacy and cost-effectiveness. (sub. 503, p. 15)

Cerebral Palsy League Queensland:

> [There should be] Built in and funded program logic evaluation research and personal outcome measures to systematically collect data related to outcomes and impacts and not only inputs and outputs. (sub. 505, p. 34)

(Continued next page)

Box 12.5 **(continued)**

Julia Farr Association:

> Outcomes appear to have been elusive in the disability support sector, as they often are in other areas of human services. Often other measures are used as proxies, and such measures are often output measures (for example how many day places, respite hours, accommodation places etc), process measures (for example how plans are written, how complaints are managed etc), or even input measures (for example what qualifications in what types of staff).
>
> …
>
> Therefore, it is of critical importance that the national scheme considers an authentic outcomes measurement framework that captures the degree of impact on disability funding in people's lives. (sub. 494, p. 55)

National Disability Services:

> Growing acceptance of the need to focus on outcomes for people with disability is a significant development within the sector, even though information about how to measure outcomes is quite limited. Together with the information we have about inputs and outputs, improved data on outcomes will provide a richer picture of the impact of disability (and other services) on the quality of service users' lives.
>
> It will, however, take time to build knowledge about outcomes and impacts. But they are worthy of significant attention—the importance of ensuring that people with disability who have difficulty articulating their opinions are provided with the supports they want in the manner they prefer is key to high quality service provision. (sub. 454, p. 21)

Prof. Christine Bigby and Dr Chris Fyffe:

> The scheme should ensure ongoing rigorous independent monitoring of individual outcomes against benchmarks of engagement, social inclusion and quality of life. These must be finely tuned for different consumer groups, to avoid the attitude often found among staff that some people are "too disabled to participate". (sub. DR933, p. 10)

National Council on Intellectual Disability:

> … there must be good evidence that shows that outcomes can be met in order for resources to be applied to that policy or service. The bigger question here is what are the outcomes and who decides what the outcomes are? (sub. DR1000, p. 13)

As KPMG observed, generating information that can lead to improved outcomes for people with a disability and their families through, for example, improvements in services and responses, or development of new models of support, is a component of all best practice service systems. But there is currently a gap in the extent of program evaluation that focuses on outcomes.

> This makes the development of evidence based interventions more difficult and limits the capacity of jurisdictions to share learning from particular programs. (2009, p. 19)

Within the disability system, many jurisdictions are undertaking reforms to improve their understanding of how to achieve better outcomes (KPMG 2009, pp. 2, 82–8). For instance, TAC indicated that, as part of a six year strategy, it wants to shift from

its current 'passive' approach to one where, for the first time, it systematically measures client outcomes:

> In the past, we have taken a more passive approach to supporting clients in achieving their goals — intervening at various points to review if treatment or service requests are appropriate, but otherwise performing as an arm's-length 'payer' of funded services. … For the first time the TAC will use standardised measuring tools to understand and predict what factors might hinder a client's ability to recover or get back to work. As a result, the TAC will be more proactive and intervene earlier than we ever have. (TAC 2009b, *TAC 2015*, p. 4)[5]

TAC said that this change reflects a trend overseas and locally by compensable scheme providers to play a more active part in setting, managing and achieving desired client outcomes (TAC 2009b, *TAC 2015*, p. 3).

A longitudinal database

There will be a need to establish a comprehensive national longitudinal database of NDIS participants' information. Such databases already exist within existing accident compensation schemes.

The database would contain such information as:

- details of a scheme participant's disabilities and capacities
- details of their personal plan
- the cost of their plan or their self-directed budget
- a history of transactions and payments made
- a history of the provision of services to them
- a record of outcomes
- relevant information about a scheme participant's natural supports (including availability)
- details of any review and entitlement assessments (DIG 2009a, p. 160).

Several participants noted the value of a longitudinal database (for example, Queensland Government, sub. DR1031, p. 20; the Royal Children's Hospital, sub. DR1048, p. 1). The Queensland Government said:

> … the capture of longitudinal unit data would allow for investigation of the use of disability supports and services, associated costs and the outcomes for people with a disability over their lifetime. (sub. DR1031, p. 20)

5 *TAC 2015* is a six-year strategy, approved by the TAC board in 2009, to improve all major aspects of the TAC's operations (www.tac.vic.gov.au).

The key elements of the database are briefly reviewed below. Further details are covered in chapter 10 on delivering disability services.

One-time registration only

The database should be organised so that it requires each scheme participant to be registered at one time only. (This would keep the regulatory burden on scheme participants, providers and suppliers to a necessary minimum.) After that, the system should allow the scheme participant's data records to be retrievable (and updateable) from anywhere within the NDIS, subject to clear rules about access and use (see next), and ideally be designed so as to be compatible with future eHealth developments. This would permit scheme participants to move in and out of the NDIS, and between it and the health sector, without needing to re-register all of their details each time.

Clear rules on data entry and access

Detailed rules would be needed to determine who, to what extent, and by what means health practitioners, service providers, scheme participants and others might be entitled to enter, access, and amend data on a scheme participant's electronic record.

These rules would need to ensure the integrity of the data as well as confidentiality and privacy for the scheme participant.

In particular, rules ensuring confidentiality and privacy for the scheme participant should be carefully articulated in consultation with Australian Privacy Commissioner. For example, service providers should not be able to access all of a scheme participant's electronic record, only those parts that are relevant and where they have permission to do so (chapter 10). The scheme participant should also be entitled to make complaints were their data to be used inappropriately (chapter 9). Ensuring confidentiality and privacy of data is further discussed at the end of this chapter.

Existing disability data systems

There are a number of existing data sources on disability, including the following.

- ABS data collections such as the SDAC, the Census of Population and Housing 2006, the Time Use Survey, the General Social Survey, and the Disability Module (ABS 2010e).

- The Household, Income and Labour Dynamics in Australia (HILDA) Survey.
- Data collections managed by the AIHW, including the Commonwealth State/Territory Disability Agreement (CSTDA) National Minimum Data Set (to be subsequently replaced by the Disability Services National Minimum Data Set), in relation to the Younger People with Disability in Residential Aged Care Program. (The AIHW also collects data on ageing and carers; risk factors, disease and deaths such as alcohol and drug use; housing and homelessness; services, workforce and spending; and families and children including child protection.)
- Data collected by individual state and territory government disability agencies not only for, but outside that required by, the CSTDA and the National Disability Agreement.
- Data collected by the Australian Government in relation to the Disability Support Pension and other income support payments.
- Australasian Rehabilitation Outcomes Centre data on rehabilitation outcomes for hospital patients.
- Data collected through state and territory cerebral palsy registers and the Australian Cerebral Palsy Register.
- Data collected through state and territory spinal cord injury units and the Australian Spinal Cord Injury Register.
- Data collected in trauma centres, rehabilitation hospitals and hospitals more generally.
- Data collected by medical indemnity insurers.
- Data collected by government and industry insurers as part of statutory accident compensation schemes.

Given there are number of existing data systems on disability, an issue is their relationship with the data systems to be established under the NDIS. Some participants considered there was a need to build on existing data systems (box 12.6). And some participants involved in data collection and research identified themselves as able to assist or offer advice to the NDIA in the establishment of the scheme's data systems (for example, AIHW, sub. DR743, p. 5; Royal Children's Hospital, sub. DR1048, p. 2; Institute for Safety, Compensation and Recovery Research, sub. DR802, p. 4; NSW Agency for Clinical Innovation, sub. DR958, p. 6).

Box 12.6 Participant's views: the need to build on existing data systems

Ros Madden et al:

> … data improvements should build on some unique strengths of the Australian system, such as the existing formal processes for creating, endorsing and implementing national data standards in the health and community services field. Continuity of key data series must be preserved. (sub. DR942, p. iii)
>
> …
>
> [Existing data collections could be improved in relation to the NDIS using the following principles]
>
> - Build on those good data that exist and preserve the ability to analyses key trends.
> - Follow existing national data standards the existing national data on support needs, conforming to [the WHO International Classification of Functioning, Disability and Health] and agreed national data standards, need to be continued into the future so that long terms trends, including the effects of major policy change, can be understood.
> - Establish new standards through the existing formal processes [National Community Services Information Agreement/National Health Information Agreement]
> - Provide comprehensive data from NDIS to AIHW for national publication
> - Augment the content of ABS and AIHW data collections and analyses rather than starting new collections
> - Provide funding to ABS to increase the frequency of the SDAC, both for the public good and to assess the impact of the NDIS on disability in Australia (sub. DR942, p. 19).

New South Wales Government:

> Work progressed … to establish data reporting standards should be closely aligned with the planned NMDS redevelopment which focuses on administrative data.
>
> Requirements for data to be used for improved actuarial modelling should be negotiated as part of the proposed enhancement to the SDAC. (sub. DR922, p. 35)

AIHW:

> The development and establishment of the NDIS would be aided by firstly using information from the current DS NMDS data collections and drawing on AIHW's expertise in the areas of disability and data management. (sub. 743, p. 5)

Queensland Government:

> [The development of a national system for a shared economic record] could be considered as part of the National Minimum Data Set (NMDS) redevelopment. (sub. DR1031, p. 20)

The Commission is of the view that the NDIS needs to establish and control its own database in order to better manage the financial sustainability of the scheme, achieve better outcomes for its scheme participants at minimum cost, monitor outcomes of scheme participants, and monitor the performance of service providers who engage with the scheme. It anticipates that existing data collection systems on disability would continue as before. However, it recognises that it is important for the NDIA to:

- consult with relevant stakeholders, including institutions such as the AIHW and the Royal Children's Hospital, and the Australasian Rehabilitation Outcomes Centre in respect of their data collection systems and expertise
- consider the potential for data matching between the NDIS database and other data collections such as FaHCSIA Disability Support Pension records, the ABS SDAC, and AIHW's data collections.

In regard to data matching, the Commission notes that, as an Australian Government agency, the NDIA will be affected by recent Australian Government initiatives in relation to statistical data integration. These initiatives encompass high level principles for data integration and associated governance and institutional arrangements (for example, the establishment of a high level Cross Portfolio Data Integration Oversight Board). The high level principles for data integration are as follows:

> Responsible agencies should treat data as a strategic resource and design and manage administrative data to support their wider and research use.
>
> Agencies responsible for source data used in statistical data integration remain individually accountable for their security and confidentiality.
>
> A responsible 'integrating authority' will be nominated for each statistical data integration proposal.
>
> Statistical integration should only occur where it provides significant overall benefit to the public.
>
> Statistical data integration must be used for statistical and research purposes only.
>
> Policies and procedures used in data integration must minimise any potential impact on privacy and confidentiality.
>
> Statistical data integration will be conducted in an open and accountable way. (Australian Government 2010c)

RECOMMENDATION 12.1

Prior to the implementation of the NDIS, the NDIA should design and establish extensive and robust data systems, underpinned by the associated information technology and administrative systems. The systems should be used to develop a central database that would:

- ***guide financial management of the scheme, and in particular, to continuously manage risks to scheme sustainability and to pinpoint areas of inefficiency***
- ***inform decisions about disability services and interventions***
- ***monitor and evaluate outcomes for people***
- ***enable performance monitoring of service providers.***

Disability support organisations, service providers and participants would be required to provide timely relevant data to the NDIA.

12.5 Research

Establishing a good data system under the NDIS would provide opportunities to undertake routine analysis as well as research into substantial matters. Many participants highlighted the latter function of research, which is the focus of this section. For example, the Institute of Safety, Compensation and Recovery Research said:

> Compensation systems are a potentially very important source of research data. While the primary purpose of such data will always be to manage the compensation scheme, an important and very valuable secondary purpose is to use the data for research. Such data can provide highly valuable information regarding the impact of disability on the individual, their community and society as well as assist with identifying and targeting preventative initiatives. (sub. DR802, p. 6)

Research can focus on such matters as data definition, methods of analysis as well as the efficacy, effectiveness and cost-effectiveness of particular disability services and interventions.

Research independence

An essential feature of an effective evidence base under the scheme is the independence of research. Given the need to make judgments about such matters as the choice of data, methods of analysis and assumptions, research is more likely to be credible, and seen to be so, if it is not subject to influence from particular sections within the community. This was stressed by a number of participants (for example, AIHW, sub. DR643, p. 4; Victorian Government, sub. DR996, p. 62; Prof. Christine Bigby and Dr Chris Fyffe, sub. DR933, p. 15).

The desirability of research independence will affect the choice of models for undertaking research under the scheme (next).

Who should undertake research?

How research is undertaken under the NDIS would be a matter for the NDIA to determine, following public consultation, including with people with disabilities, research institutions, disability service providers, and government agencies.

There are several models for undertaking research.

One model is centred on the creation of an in-house expert body to undertake effectiveness and economic analyses, as well as to provide advice to the administrators of the scheme and to people with disabilities. The 1974 National Committee of Inquiry into Compensation and Rehabilitation in Australia (Woodhouse Report) effectively supported this model.[6] Some participants supported this model (for example, Australian Physiotherapy Association, sub. 503, p. 15).

One advantage of this model is that an in-house body is able to apply a consistent approach or method to the analysis of different services or interventions, which enables comparisons across services or interventions. A further advantage is that the objectives of an in-house body are likely to be closely aligned with the overall scheme's objectives (such as ensuring financial sustainability and cost-effective services or interventions). Such an in-house body could collaborate with existing research institutions, where there were mutual benefits in doing so.

A second model is for the NDIA to commission effectiveness and economic analyses and other topics for research from experts within existing universities, hospitals, and centres of excellence, or otherwise collaborate with these institutions. Several participants supported this model (for example, People with Disability Australia, sub. 524, p. 44; Ros Madden et al., sub. DR942, p. ii; Victorian Government, sub. DR996, p. 63; AIHW, sub DR743, p. 4). Ros Madden et al. suggested that:

> … a strong, balanced hub and spoke model would work most effectively, with a small 'Institute' playing a coordinating role, fostering the development of centres of research excellence in the field (sub. DR942, p. 17).

This model could involve the NDIA harnessing a competitive funding mechanism, similar to that used by Australia's leading government research funding bodies — the Australian Research Council and the National Health and Medical Research Council. It could also involve setting such conditions as peer review and public dissemination.

6 The Woodhouse Report recommended the creation of Rehabilitation Division within the then Commonwealth Department of Social Welfare Policy and Planning, which would 'sponsor and conduct research'. The Division would 'systematically evaluate rehabilitation methods, procedures, programmes, new techniques, disability management and delivery of services and also the development of new types of artificial aids and appliances' (1974, vol. 2, p. 2). It also recommended that the Rehabilitation Division establish a 'sophisticated and substantial research centre' (p. 10).

An example of this model is the UK National Institute for Health Research (NIHR), which funds, commissions and coordinates National Health Service and 'social care'[7] research from a range of research institutions.

This model avoids the cost of establishing a new body. It also obviates the need for the NDIA to do all the research. However, without clear guidelines for research practices and reporting among contracted parties, it could lead to inconsistent methods for undertaking analyses, making it difficult to compare across services or interventions.

A third model is for the scheme to fund the establishment of an external independent research institute dedicated to undertaking disability research. In its report on a national disability insurance scheme, DIG recommended that governments should allocate funding for a National Disability Research Institute as a centre of excellence to promote disability research in Australia (2009b, p. 49). Many participants supported this model (for example, Australian Human Rights Commission, sub. 72, p. 4; Cerebral Palsy League Queensland, sub. 505, p. 24; Melbourne City Mission, sub. 283, p. 5; Multicultural Disability Advocacy Association of NSW, sub. 604, p. 16).

Examples of this model include the:

- UK School of Social Care Research, which is funded by the NIHR to increase the evidence base for adult social care practice
- Institute for Safety, Compensation and Recovery Research, which is a partnership between WorkSafe Victoria, the Transport Accident Commission and Monash University established in 2009. Its mission is to conduct research aligned to scheme issues and objectives that will lead to fewer and less severe occupational injuries and diseases and improved health, vocational and social outcomes (sub. DR802, p. 3).

However, there may be disadvantages with this model. The AIHW considered that:

> … the proposal to establish a special capability in a new body may be more problematic. Any new body may find it difficult to obtain and retain the necessary analytical capacity. Second, there is the real issue of duplication of infrastructure and expertise that is already held in existing institutions, including the AIHW, that could drive greater costs to governments and the community than would otherwise be necessary. (sub. DR743, p 4)

7 'Social care' includes disability care.

A fourth model is for service providers to submit efficacy, effectiveness and economic analyses as part of their application for including services or interventions under the scheme.

The advantages of this model are that the costs of undertaking the analyses are borne by the providers of the early intervention and that intelligence on prospective new interventions can come from outside the NDIS. However, such analyses may not be independent, which may reduce their credibility.

This model is similar to arrangements for the Australian Government's autism early intervention program, in which service providers must apply to FaHCSIA to seek membership of an Early Intervention Services Providers Panel and demonstrate that their services are value for money (chapter 13).

It is possible that the best approach to undertaking research under the NDIS would be a mix of these models above. This is something that garnered the support of many participants — example, New South Wales Government, sub. DR922, p. 35; Prof. Christine Bigby and Dr Chris Fyffe, sub. DR933, p. 15; Valued Independent People, sub. DR938, p. 8; Neurological Alliance of Australia, sub. DR938, pp. 8–9). The New Zealand Accident Compensation Corporation (ACC) has a research unit established within it that:

- commissions research from external researchers
- co-funds research projects of mutual interest to the ACC and other funding organisations
- undertakes research internally such as evidence-based healthcare reports (ACC 2010a).

Regardless of the source of research, it is critical that it is relevant to the objectives of the NDIS, and is directed by and conducted with the close engagement of the NDIA.

Research priorities

Specific areas for research would need to be identified and prioritised by the NDIA through a process of public consultation. Some areas identified by participants (box 12.7) relate to assistive technology, early intervention, the needs of people with disability from particular cultural backgrounds, particular disabilities such as acquired brain injury, and methods of measuring outcomes.

Box 12.7 **Participants' views: some areas for research**

- New and innovative equipment and therapeutic interventions (Association for Children with a Disability, sub. DR1022, p. 12).
- Best practice and prevention strategies that drive effectiveness, efficiency and reduce long term costs (Cerebral Palsy League Queensland, sub. 505, p. 34).
- Inter-sectoral (health, mental health, disability) best practice pathways to rehabilitation and recovery (Headwest Brain Injury Association of WA, sub. 448, p. 10).
- Research that determines strategy, shapes programs, assesses stakeholder views to assist in driving cultural change as well as financial sustainability, cost-effectiveness of service and interventions, and performance measurement of service providers (ISCRR, sub. DR802, p. 7).
- The development, identification and fine tuning of the assessment tool and in identification of best practice approaches to service delivery to snuer the cost benefit of early intervention (Leveda, sub. DR935, p. 4).
- Data collection methodologies, including minimum data set and census, to better capture the intersection of cultural diversity and disability (Multicultural Disability Advocacy Association of NSW, sub. 603, p. 16).
- A culturally competent disability assessment tool (Multicultural Disability Advocacy Association of NSW, sub. 604, p. 16).
- Innovation in assistive technology, particularly, computer-based technology (National Disability Services, sub. 454, p. 22).
- Development of NDIS assessment tools to determine eligibility (Royal Children's Hospital, sub. DR1048, p. 1).
- Evaluating outcomes for children and their families that utilise the NDIS (Royal Children's, Hospital, sub. DR1048, p. 1).
- Clinical practices, particularly those that help contain long term costs (SA Government, sub. 496, p. 20).
- The epidemiology of deafblind disabilities, and effective assessment, interventions and outcomes under the NDIS (Senses Foundation, sub. DR821, p. 9).
- The benefits of assistive technology for older people and people with disabilities (Tech4Life, sub. DR876, p. 4).
- Early intervention and prevention strategies (Victorian Government, sub. 537, pp. 18–19).

Particular areas that the Commission considers should be a priority for research relate to capacity building of the community, NDIS participants and providers; the use of technology; employment and social participation; and early intervention (chapter 13).

As these and other areas of research are not exclusive to the disability system, the commonality with similar work in the health and community services sectors would need to be coordinated.

The National Disability Research Agenda, noted earlier in section 12.2, could be the basis for the proposed research program of the NDIA.

RECOMMENDATION 12.2

The Australian Government should establish a national independent research capacity in the early stages of the implementation of the NDIS. The NDIA should determine how research is undertaken and the research agenda, following public consultation.

Access to data for research

Some participants emphasised the importance of being able to access data for research. For example, the Institute for Safety, Compensation and Recovery Research:

> Internationally, there are numerous examples of disability compensation schemes making their claims and administrative data available to academic researchers. For example, in British Columbia, Canada, the Worksafe BC claims data is linked to population health data via the unique Population Data BC collaboration based at the University of British Columbia. This data has been used to evaluate the effectiveness of programs initiated by the workers' compensation organisation and the public health system in that jurisdictions. Similarly, the Workplace Safety and Insurance Board of Ontario regularly provides its data to researchers. Within Australia, ISCRR has recently established a research database using TAC and WorkSafe claims and administrative data. (sub. DR802, p. 6)

Similarly, the actuarial analysis of Australian accident compensation schemes routinely involves consulting actuaries being able to access de-identified full unit record data sets, within contractual and confidentiality agreements.

Issues relating to the transparency, confidentiality and privacy of data and research findings are considered towards the end of this chapter.

Research for policy and decision making

An effective evidence base for the NDIS requires a process that is receptive to the evidence; a process that 'begins with a question rather than an answer' and that is capable of integrating evidence back into policy decision making. As the Institute for Safety, Compensation and Recovery Research noted:

There is a growing body of expertise regarding effective models of evidence translation between policy organisations and research groups. (sub. DR802, p. 5)

While we agree that it will be important for the NDIA to have a research capacity, we also recommend that the NDIA explicitly focus on developing processes and capacity for the utilisation of research, within its own organisation, and within its community of interest, as well as developing the capacity for commission research. (sub. DR802, p. 6)

12.6 Methods of analysis

Administrators of the scheme need to know what is safe, what works, for whom, when and how.[8] They need to establish whether costs and revenues are in tune and, if not, the best response. They need to know whether the benefits of given services and interventions are worth the costs. There are many methods to explore these issues:

- Financial (or actuarial) models measure any discrepancies between expected and actual costs and outcomes, and the adequacy of revenues to meet projected costs over the long-term. The models explain why such discrepancies may have occurred, and analyse their implications for the financial sustainability of the scheme and its objectives for achieving outcomes for people with disability (either in aggregate or in specific categories). They would be used to inform actions by the NDIS to seek premium increases, to control costs or over-servicing, to expand (or contract) interventions with good (poor) outcomes, and to analyse risks to the scheme rather than just expected outcomes. Such modelling is often performed by actuaries and generally occurs as part of monitoring the financial sustainability of the scheme but, like economic analyses (below), are used to identify services and interventions that are cost-effective.
- Studies about efficacy consider the extent to which a service or intervention under ideally controlled conditions has a beneficial effect on the course or outcome of disease or disability compared with no service or intervention, or with usual care.
- Effectiveness (or outcomes) studies consider the extent to which a service or intervention, when used under usual or everyday conditions, has a beneficial effect on the course or outcome of disease or disability compared with no service or intervention, or with usual care. As well as health or clinical outcomes, effectiveness studies may also consider other outcomes such as employment, educational, housing, income and other non-health/clinical outcomes.

[8] Most of these are probably obvious, with the exception of the 'how'. But knowing *how* a particular intervention works is useful because an understanding of the ways in which interventions work may open doors to new interventions.

Effectiveness studies can be an important input to economic and actuarial analyses.

- Economic analyses consider whether an intervention or service is value for money in that a service or intervention yields net benefits to the broader community compared with using resources in alternative ways.

This section considers actuarial modelling and economic analyses in further detail.

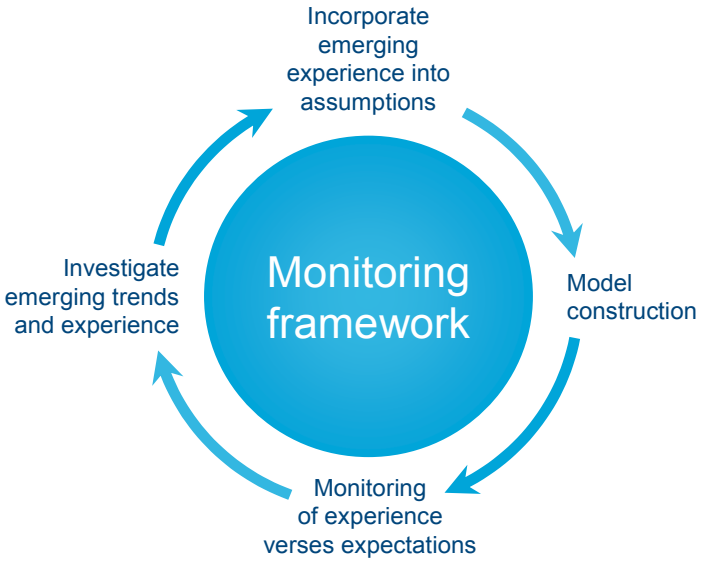
Actuarial modelling

As in insurance schemes generally, actuarial modelling would have an integral role in monitoring and evaluating the performance of the NDIS. Actuarial modelling covers a broad set of approaches, but it particularly aims to ensure that long-run scheme revenues (premium income) remain aligned with scheme costs (reflecting service utilisation and unit costs).

It does this by using data to estimate the future supports (and cost of these supports) required by groups of individuals over their lifetime. When these costs are added over all individuals, it provides an estimate of the annual costs of the scheme over future years. Consideration of the future lifetime cost for all people in a system is the notional liability of the system (essentially the future revenue requirement of the system to meet the needs of people at a point in time). Constant monitoring of experience is required in order to identify trends in incidence and support utilisation, and departures from projections. Comparison of actual costs compared with expected costs and the reasons for divergence are analysed. Emerging trends and experience are then incorporated into future assumptions where credible.

This constant monitoring and adjustment process — illustrated in figure 12.1 — allows increasing or decreasing costs to be identified (for example, increases in allied health service utilisation), unexpected and unreasonable growth in liabilities to be contained, and specific interventions to be evaluated (such as transition to work programs). It could lead to requirements for premium increases or indeed, dividend payouts to government.

Figure 12.1 **The actuarial monitoring framework**



More specifically, the 'cycle of governance' would broadly have the following five stages:

- *Estimate numbers of users*. As a starting point, projections of expected distributions of scheme participants by group (for example, age group, disability group, severity bands), over say a five year period, are determined. These projections reflect past experiences and projected relevant populations. For example, historical data might show that age-sex incidence rates for a particular disability of a particular severity were stable, as were mortality rates for people already with that disability. It would be possible to estimate the future number of people with that particular disability and with that degree of severity by applying those rates to population projections. This approach could be extended — to the extent that data were available — to all groups of people with disability.
- *Estimate expected costs and outcomes*. Past data and knowledge about key cost pressures (expected prices, trends in utilisation) would enable estimates of service 'quantities' (for example, hours of attendant care and numbers of vehicle modifications) and the average costs for the relevant population groups. In turn, that would provide an overall estimate of expected costs. Data could also be collected on some outcome indicators — for example, employment, hospitalisation rates, health outcomes, and community participation — which would give an indication of expected outcomes.
- *Find out actual users, costs and outcomes*. Data on system performance would be continually collected and recorded. The database should include both utilisation data (services, costs) and outcome data (health status, employment or community participation, satisfaction). Data should be collected on both scheme

participants and any external or environmental supports (including carers). This would provide a benchmark against which to analyse in an absolute sense whether people were achieving good outcomes and whether service provision was efficient (but it would also be used for comparative purposes).

- *Compare expected and actual outcomes.* The comparisons would be made for each population group based on the appropriate grouping (such as age, and severity). The reasons for any discrepancies would be examined, as would the implications of any differences on long-run liabilities.
- *Check the data*. A significant component of this analysis comprises data checking for integrity, cleansing where necessary, and mining to identify meaningful trends and opportunities for new or alternative grouping.

This approach would be repeated period by period, and would become more refined with collection of better data and with new analytical techniques.

Transition pathways

Actuarial modelling and analysis would also play an important role in evaluating specific services and interventions funded under the NDIS.

At the micro level, the life of someone with a disability (or indeed anyone) can be considered as a series of transition pathways — some more critical than others. For people with disabilities, key transition points include early childhood, starting school, finishing school, entering the workforce, leaving home, and ageing. Building appropriate supports at these transition points, for both the person with a disability and the family, can dramatically alter the future pathway and participation of that person and their family. How these pathways might be altered by various interventions and life events can have considerable impact on outcomes (including employment and social participation) and liability under the NDIS. Box 12.8 presents an evaluation of a hypothetical transition to work program as an illustration of actuarial modelling of interventions.

Box 12.8 **A hypothetical transition to work program**

Consider a hypothetical transition to work (TTW) program, which is an intensive program targeted at providing school leavers with appropriate skills to enter the workforce.

Actuarial modelling is used to determine whether a TTW program or other community participation (CP) programs (such as day programs) is suitable for school leavers.

The figure below compares the hypothetical total costs to the NDIS (or NIIS) from age 18 to 65 years based on different employment pathways.

The following assumptions were used:

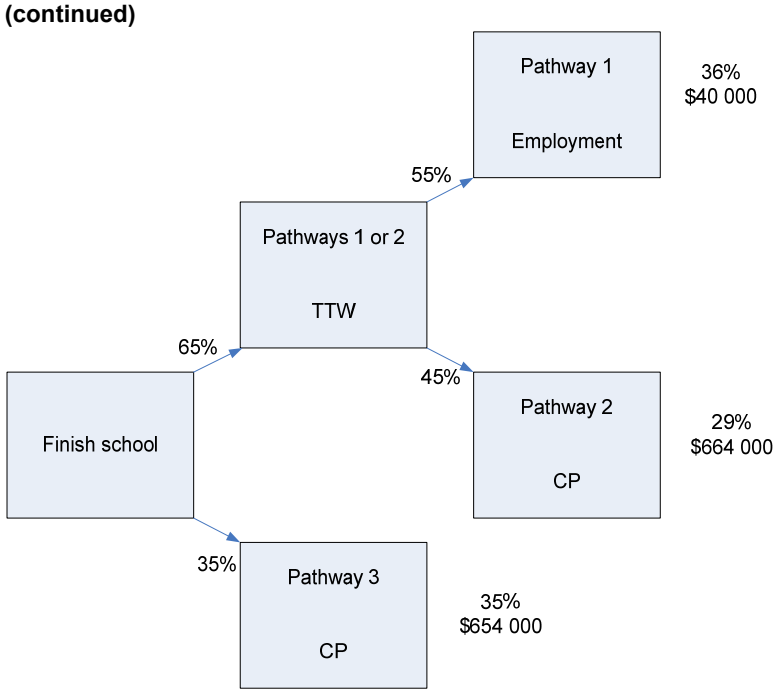
- The annual average cost of a TTW program is $20 000 (for two years) and the annual average cost of a CP program is $15 000 until age 65.
- People who enter employment do not require a CP program.
- 65 per cent of people eligible for post-school programs enter the TTW program and 35 per cent enter a CP program.
- 55 per cent of people who enter a TTW program exit to employment (or further education).
- All people who do not exit to employment enter a CP program.
- The life expectancy of a person with a disability was considered.
- No allowance for inflation or interest was incorporated.

The figure indicates that the cost to the NDIS (or NIIS) differs substantially if employment is achieved — $40 000 compared with $664 000–$654 000). It also indicates the proportion of people who complete each pathway — 36 per cent complete pathway one, 29 per cent complete pathway two , and 35 per cent pathway three. The average per person cost is, hence, about $436 000. For a cohort of 1000 school leavers this amounts to a liability of $436 million with respect to daytime support. Interventions aimed at increasing the proportion of people able to participate in a TTW program (for example, specific support whilst at school) and increasing the rate at which people can exit to employment (for example, more targeted support within a TTW program) will reduce the liability to the NDIS (or NIIS) for school leavers and increase employment rates for people with disabilities.

This simple analysis illustrates how individual interventions (specifically, their costs and outcomes) can be monitored within the context of broader scheme costs and outcomes. In practice, the modelling is more complex due to: people receiving a range of supports (for example, accommodation, attendant care and respite services); indirect benefits (for example, tax revenue, increased employment participation of informal carers); inflation and discounting of future cash flows; and multiple transition pathways.

(Continued next page)

Box 12.8 **(continued)**



Economic analysis[9]

There are many economic methods for evaluating health interventions that could be used for disability services and interventions (such as early intervention). These methods can help scheme administrators (and people with disabilities or their advocates) make informed decisions about particular types of services and interventions. However, all involve different challenges in their application, particularly in relation to obtaining data and applying monetary values to certain types of benefits and costs. Chapter 13 provides specific examples of the use of different economic methods in relation to reducing the risk and impact of disability such as through early intervention.

Benefit–cost analysis

This form of analysis identifies all the benefits and all the costs of a service or intervention, and measures them in monetary terms compared with the alternative, such as usual care or no service or intervention. It can be used to analyse most policies, programs or projects (particularly infrastructure projects).

9 This section draws on AHRQ (2005), Murray, et al. (2000), NICE (2008), PBAC (2006), SCRGSP (2011, chapter 14) and Weinstein et al. (1996).

It is rarely used in relation to health interventions — largely because of community concerns about placing dollar values on the health and well-being of a person. That said, the benefit-cost analysis framework enables identification of the types of benefits and costs that are relevant to services or interventions (such as the particular contribution to educational, employment, life quality and cost saving benefits).

Cost-effectiveness analysis

This focuses on the costs of achieving a particular type of benefit (or outcome) compared with an alternative service or intervention. Some government health agencies use cost-effectiveness analysis as their main method (for example, the Pharmaceutical Benefits Advisory Committee and the UK National Institute for Clinical Excellence). The NDIS could readily adopt this method for rigorously analysing alternative services or interventions. The actuarial modelling of the transition to work program described above is also a form of cost-effectiveness analysis.

A variant of cost-effectiveness analysis is cost utility analysis. For any given intervention, this measures the dollar costs of (compared with an alternative) achieving a quality of life year (QALY) or avoiding a disability-adjusted life year (DALY).

Other less data-intensive methods

There are several other methods that could be employed to analyse services or interventions that are relatively less data intensive than those above.

A common method (often used in the health area) is to measure the direct cost savings of an intervention. This method compares the financial costs (usually government outlays) of the intervention compared with an alternative (such as no intervention or treatment as usual).

The second method involves the use of performance indicators that capture the objectives of the service or intervention. Within the disability context, performance indicators could, for example, cover:

- usage or access — for example, measured by the number of users of a service or intervention as a proportion of the population of people with disability or by surveys of client satisfaction

- health and/or clinical outcomes — for example, by using measures of social functioning, specific behaviours, self-help or independence, physical ability, and verbal communication
- housing outcomes — for example, measured by the proportion of users living independently and those not living in hospital or residential aged care facilities
- educational outcomes — for example, measured by completion of primary, secondary or tertiary education
- employment outcomes — for example, measured by labour force participation rates, return to work rates, or work retention rates after one or five years
- quality — for example, measured by client, parent or employer satisfaction with the service or intervention
- cost — for example, measured by government expenditure on the service or intervention per user of the service or intervention.

The indicators can be used to measure how well a particular service or intervention is performing when compared with other services or interventions, or against a specific threshold or benchmark. For example, an injury prevention program to raise community awareness could be analysed by comparing the rate of injuries/claims for funding support both before and after the program was introduced.

A final more targeted approach is to identify low-cost services or interventions for a high prevalence disability group and then analyse them in terms of their effects on various outcomes and future costs. The service or intervention with the greatest improvement on outcomes or future costs can then be chosen.

Such a targeted analysis involves addressing the follow questions:

- Is the prevalence/incidence of the disability that the service or intervention is intended to assist high? A disability of relatively high prevalence/incidence indicates that the intervention could be used by, and benefit, a large number of people with the disability.
- Is the total financial cost (to government and to the person with the disability) of funding/accessing the service or intervention low (that is, below a certain threshold)? A low financial cost service or intervention indicates that the overall cost of the service or intervention could be relatively low.
- What are the main beneficial outcomes of the service or intervention for a person with disability? To what extent would the service or intervention improve upon these outcomes? A service or intervention that significantly increased the independence/self-help skills of a person would suggest that their future personal attendant care needs would be reduced.

- What types of future financial costs of disability care and support are likely to be lowered by the service or intervention? To what extent are these future costs lowered? If the service or intervention significantly lowers the future financial cost of providing personal attendants — a relatively high cost item of disability care and support — this would strongly suggest cost savings.

What standard of evidence?

Analyses of the efficacy or the effectiveness of services or interventions are an important input into economic (and actuarial) evaluation, but studies are not all equal in their credibility. The NHMRC (2009) issued an interim 'levels of evidence and grading system' for developers of health and medical guidelines. That system indicates that the evidentiary strength of efficacy/effectiveness studies can be seen in terms of a hierarchy — with systematic reviews of randomised controlled trials being at the top and representing the strongest evidence, randomised controlled trials being the next strongest, and case series (or case studies) being at the bottom of the hierarchy and representing the weakest evidence (NHMRC 2009, part A, p. 6).

The standard of effectiveness and economic evidence, as apparent from table 12.1, can range from a systematic review of randomised controlled trials on effectiveness combined with benefit–cost analysis, to a case study of effectiveness combined with a cost-savings study.

However, the most robust standard of evidence — a systematic review of randomised control trials combined with benefit–cost analysis — is likely to be the most costly and slow to obtain (except where existing international studies have already been undertaken). This is a concern if the initial outlay required for a service or intervention is relatively low or if there are large prospective benefits that may be lost by acting too slowly.

Several participants commented on the minimum evidentiary standard of evidence (box 12.9).

Accordingly, a selective evidence-based approach may be appropriate for deciding whether to fund a service or intervention (including early intervention) under the NDIS. This seeks to ensure there is sufficient evidence upon which to base a decision to fund a service or intervention, while reducing the risk of making costly errors.

Box 12.9 **Participants' views: minimum evidentiary standard**

Centre for Developmental Disability Health Victoria:

> People with disabilities and their families are vulnerable to those making claims that particular treatments or interventions will lead to miraculous improvement. Sometimes such practitioners are over enthusiastic or optimistic, sometimes they are 'snake oil salesmen' – exploiting people's vulnerability for their own gain. … New interventions should be proven to be effective before being funded by the public purse. (sub. DR901, p. 6)

Multiple Sclerosis Society of South Australia and Northern Territory:

> Evidence is not always available for all therapies and different professional groups view various therapies in differing ways depending on the research, or lack of research conducted.
>
> The Society recommends an approach that only excludes therapies known to cause harm and those that make extraordinary claims for cure and prevention be excluded [from funding under the NDIS], where possible. (sub. DR806, p. 4)

National Council on Intellectual Disability:

> There is a concern that the [focus] on cost-effectiveness as the main outcome rather than what people with disabilities want and need, although we would argue that more often than not the best outcomes for people with disabilities are the most cost-effective. (sub. DR1000, p. 14)

As a minimum, there should be good evidence of the efficacy and effectiveness of a service or intervention in achieving improved outcomes for persons with disabilities and addressing their expressed support needs. Efficacy and effectiveness goes to the heart of whether a service or intervention is safe and works, or not. Such evidence can protect people with disabilities from using unsafe or ineffective services or interventions. For the NDIS to fund a service or intervention whose clinical and other effects are unknown or ambiguous raises the risk that scheme money is wastefully expended. Moreover, it could undermine the public credibility of the NDIS.

Cost-effectiveness analysis is the economic method that should also be used for choosing among services or interventions. The ACC is required by legislation to focus its injury prevention investments on those activities expected to result in levy reductions (rather than on those that could also result in wider benefits). To meet this requirement, the ACC analyses the cost-effectiveness of its injury prevention activities by estimating a return on its investment based on the number of claims reduced, divided by the cost of programs and associated overheads (ACC 2010b, p. 35).

Table 12.1 **Different standards of evidence**

Type of effectiveness study	*Type of economic analysis*			
	Benefit-cost	*Cost-effectiveness*	*Cost-savings*	*Targeted*
	(high level evidence)	*(high level evidence)*	*(moderate level evidence)*	*(moderate level evidence)*
Systematic review of randomised control trials (high level evidence)	Very high	Very high	High	High
Randomised control trial (high level evidence)	Very high	Very high	High	High
Case study (very low level evidence)	Low	Low	Very low	Very low

The establishment of a longitudinal database under the NDIS presents a good opportunity for the NDIA to interrogate its own data and examine the cost-effectiveness of interventions and services that it already funds. (Accordingly, as part of planning the establishment of the database, a consideration should be its proposed use by the NDIA for analysing the cost-effectiveness of interventions and services.)

However, for proposed new services or interventions, a full cost-effectiveness analysis (using 'gold standard' randomised techniques) would be costly to undertake. The NDIA should instead undertake an initial appraisal of the likelihood of cost-effectiveness of a proposed new service or intervention. This would involve the NDIA addressing the following questions:

- Is the service or intervention consistent with the expressed support needs of people with disabilities
- What is the initial outlay required for the service or intervention?
- What is the prevalence of the relevant disability in the community?
- Is there sufficient evidence that the service or intervention would yield improved health and/or clinical outcomes for people with disability?
- Is the service or intervention likely to have benefits in the following four areas:
  - reduced future private and government expenditure on disability care and support?
  - productivity gains?

– reduced government expenditure on other services?
– meeting the expressed support needs of people with disabilities?

A judgment would then be made about the likelihood that the service or intervention was cost-effective, or if the information was insufficient to reach a conclusion. In the latter case, the NDIA would need to analyse the merits of collecting further evidence.

12.7 Other features of the evidence base under the NDIS

An effective evidence base under the NDIS will also need to cover transparency, confidentiality and privacy, responsible and ethical research conduct, and eHealth initiatives.

Transparency

An essential feature of an effective evidence base is transparency of data, research findings and methods.

Transparency would enable scheme administrators, people with disabilities, service providers and others to:

- make more informed choices about supports or interventions and policies
- provide feedback on the data, research findings and methods used, which in turn can be used to improve the quality of the evidence base.

It would also enable researchers outside the NDIS to analyse the data afresh, and to replicate and verify already published research findings.

Transparency of data, research findings and methods under the scheme can also benefit allied policy areas such as those administered by the health and community sectors.

There may be a need for governments to put in place similar agreements to those that currently existing in relation to the publication of data (NSW Government, sub. DR922, p. 35).

Confidentiality and privacy

Although transparency should be an important feature of an effective evidence base under the NDIS, there would also be a need to:

- preserve the confidentiality of specific data provided by scheme participants and service providers (for example, data of a personal or commercial nature)
- comply with privacy regulation, such as the Australian Government's *Privacy Act 1988,* which involves limits or conditions on the collection, storage, access, use and disclosure of personal information.

Confidentiality and privacy can be managed through:

- 'de-identification' of the data, including by removing data that can lead to identification of particular scheme participants and service providers and by aggregating data into larger groups, and
- imposing conditions on how data can be used by researchers — such as through enforceable undertakings, and
- requiring researchers to comply with principles on responsible and ethical research conduct — see next.

Responsible and ethical research conduct

Principles governing the responsible conduct of research and the ethical conduct of human research will need to apply to data collected and research undertaken under the scheme.

Two main sources of such principles are the:

- Australian Code for the Responsible Conduct of Research (Australian Government 2007a). The Code sets out principles on how to: manage code breaches and allegations of research misconduct; manage research data and material; publish and disseminate research findings; conduct effective peer review; and manage conflicts of interests.
- The National Statement on Ethical Conduct in Human Research (Australian Government 2007b). This sets out principles in relation to: risks and benefits from the research; obtaining consent from participants; databanks; interventions and therapies including clinical and non-clinical trials and innovations; research involving children and young people; research involving people highly dependent on medical care who may be unable to give consent; and research involving people with a cognitive impairment, an intellectual disability or a mental illness.

Links with the eHealth initiatives

The evidence base of the scheme should ideally mesh with eHealth initiatives (for example, the use of common personal identifiers) and interface effectively with the broader health sector. The latter would allow, for example, better information on those people who enter the disability system, but later withdraw. They may subsequently re-enter the mainstream health sector but, under current arrangements, their medical experiences and history can become 'lost' in a bureaucratic sense. This issue is examined in greater detail in chapter 10.

RECOMMENDATION 12.3

The NDIA should make relevant data, research and analysis publicly available, subject to confidentiality, privacy and ethical safeguards.

12.8 Implementation

As several participants have observed, setting up a good evidence base for the NDIS will be a large and complex endeavour. It will require careful planning and sequencing. It will also require considerable consultation with, and cooperation among government agencies, service providers and other stakeholders in the disability system.

The NDIA should drive this process and it needs to commence as soon as possible after the Agency's establishment.

The first step — plan what needs to be done

An early and initial task will be for the NDIA to plan what is needed. This will involve determining:

- what the objectives of data collected under the NDIS ought to be
- the types of data that should be collected to support these objectives
- data standards, definitions as well as collection processes (such as data registers)
- service provider reporting requirements
- standards for inter-connectedness of IT systems among the NDIA, other relevant government agencies and service providers
- rules for accessing data, including confidentiality and privacy safeguards, by health practitioners, local area coordinators, service providers, government agencies, people with disabilites, and others

- requirements governing the public reporting of data.

Consultation with stakeholders will be crucial during this step, particularly to ensure compatibility in data and IT systems across jurisdictions and different parts of the disability system.

The second step — implement compatible systems

A significant and lengthy task will be to implement compatible data and associated IT and administrative systems across jurisdictions as part of a major upgrade of existing systems. A key consideration will be that data reporting, processing and analysis will need to be continuous, with well-established channels for regular and meaningful reporting to various operating areas within the NDIS.

To achieve this will require:

- linking all relevant government agencies and service providers responsible for disability services in all jurisdictions by compatible IT systems (even if different from their own systems) – one way to do this is through a secure web-based system
- setting up data collection and reporting arrangements (including agreed service provider reporting)
- regularly reviewing how well implementation of upgraded data collection and associated IT systems is working.

The cooperation of government agencies, service providers and other stakeholders will be vital to the successful implementation of this step.

IT systems will also need to deliver on other administrative aspects of the NDIS, such as real-time updating and sharing of electronic scheme participants' records, and providing for the portability of entitlements across jurisdictions.

Implementation of compatible data collection and associated IT administrative systems may gain some guidance from the experience of other established networked systems such as the Job Network (now Job Services Australia). However, implementation is likely to be a difficult task, particularly where manual systems of data entry are currently used.

The third step — establish an analytical and research capability

A third and later task for the NDIA will be to establish arrangements for the routine analysis and research of the data collected. This will involve determining:

- what types of analysis and research are required
- how analysis and research are to be undertaken (for example, in relation to research, through the establishment of an in-house research body or from commissioning research from existing bodies)
- a research agenda
- how analysis and research are to be integrated in decision making under the scheme
- processes for the public reporting, or dissemination, of research findings.

RECOMMENDATION 12.4

In implementing recommendation 12.1, the NDIA should determine, after consultation with relevant stakeholders, including the Australian Privacy Commissioner:

- ***the key actuarial information needed to underpin sound scheme management***
- ***data standards, definitions, terminology and collection processes***
- ***data reporting standards, taking into account the Australian Government's initiatives for standard business reporting***
- ***arrangements for achieving inter-connectedness of information technology systems among the NDIA, other relevant government agencies and service providers***
- ***rules for accessing data, including confidentiality and privacy safeguards***
- ***arrangements for integrating data and associated information technology and administrative systems with eHealth initiatives.***

The NDIA should then establish data collection and associated IT and administrative systems that link all agencies and service providers within the disability system.

The Commission is conscious that the NDIS could not feasibly cover all people immediately at implementation (chapter 19). That means that during the implementation phase of the scheme, the amount of data (and to some degree, its quality) would be significantly lower than when a full scheme was operating. That said, the 'cycle of governance' described earlier would start with the available data and become more sophisticated as the scheme extended its intake into tier 3 (as described in chapters 3 and 19).

13 Early intervention

Key points

- Early intervention can potentially improve outcomes for people with disabilities as well as yield benefits for the National Disability Insurance Scheme (NDIS) and the wider community.
  - Early interventions seek to reduce the impact of disability for individuals and the wider community, for example, by mitigating or alleviating the impact of an existing disability, and/or preventing a deterioration in an existing disability. They may occur: as soon as the disability is first identified or appears, where there is a discrete change in the disability, or at particular lifetime transition points.
- Analyses of early interventions can provide valuable information to people with disability, the National Disability Insurance Agency (NDIA), and others about whether they are safe and lead to improved outcomes, and are 'value for money'. There is a particular need for undertaking cost-effectiveness analyses.
- Funding of early interventions under tier 3 of the NDIS should be based on good evidence of effectiveness and an initial analysis of likely cost-effectiveness. Absent such evidence and initial analysis, the NDIA should not fund the intervention.
- Where there is evidence to support funding of an early intervention approach, this funding should be in addition to funding provided for ongoing care and support and not be able to be 'cashed out' by people with self-directed care packages.
- The NDIA should commence building an evidence base on early intervention and develop linkages with relevant agencies responsible for other early interventions as well as interventions to reduce the risk of disability (such as injury and health prevention measures).

13.1 Introduction

An important deficiency of many Australian disability services is their predominantly static and crisis-driven approach to funding needs. This frustrates a longer-term approach to achieving beneficial outcomes for individuals and the community generally.

Australian governments have in recent years attempted to address this deficiency by seeking to incorporate 'early intervention' in their disability services. At the national level, governments have agreed to develop a framework for 'early intervention and prevention' within the context of disability services (National Disability Agreement 2009 and CDSMC 2010). Governments have also agreed to a

five year program that, among other things, seeks to divert younger people with disability who are at risk of admission to residential aged care into more appropriate forms of accommodation (COAG 2006a).[1] Many individual governments have also funded early interventions in their disability services, including those targeting children with disability and their families (box 13.1).

Box 13.1 **Some recent government early intervention initiatives**

- Australian Government initiatives include: the Better Start — Early Intervention for Children with Disability initiative, Helping Children with Autism Program (including the establishment of an early intervention service provider panel); the establishment of six autism-specific early learning and care centres; and the Outside School Hours Care for Teenagers with Disability Program.
- The NSW Government's Stronger Together: a New Direction for Disability Services in NSW 2006–2016 sought to increase (among other things): intensive, innovative and flexible support packages for children and young people with disability and their families; therapy places for children with disability; respite places for children and young people with disability. Associated funding programs include the NSW Intensive Family Support Program, Families First Program, Family Assistance Fund, Family Solutions Pilot Program and Early Childhood Intervention Coordination Program.
- The Queensland Government's Growing Stronger: Investing in a Better Disability Service System, 2007–2011 and Disability Services Queensland Strategic Plan 2008–2012 committed the Government to pursuing early intervention. For example, there has been: more funding support for people at key lifetime transition points of an individual's life — by expanding accommodation support, family support, post-school services, support to young adults leaving State care, and respite and day services; more funding support for children with a disability (through Building Bright Futures Action Plan for Children with Disability 2010–2013 and the Early Intervention Initiative) through education and information services for families, exercise programs, social skills programs, therapy services and programs, and support to access local play groups and other education and care services; and support for autism early intervention in regional Queensland. Associated funding programs include the Family and Early Childhood Services Program, Family Support Program, and the Autism Early Intervention Initiative.

Sources: FaCHSIA (2010d); NSW Government (2006; sub. 536); Queensland Government (2010a, b, c, d, e; 2007).

[1] In addition to these examples is COAG's 2008 National Partnership on Preventive Health. This agreement seeks to address the rising prevalence of lifestyle-related chronic diseases through social marketing efforts and the national roll out of programs supporting healthy lifestyles, and 'enabling infrastructure for evidence-based policy design and coordinated implementation.' An element of the agreement is the Australian National Preventive Health Agency, which was subsequently established in November 2010.

In this inquiry, many participants have noted the benefits of 'early intervention' and called for its incorporation in a new national scheme (for example, Anglicare Australia, sub. 594, p. 20; Down Syndrome Victoria, sub. 492, p. 6; National Disability Services, sub. 454, p. 13; Victorian Government, sub. 537, p. 18). The NSW Government said:

> A national disability service system should have an early intervention and prevention focus. Research highlights the importance of early intervention and prevention in preventing problems escalating, for the person with a disability and families. The outcome for individuals can be seen in a reduction in the impact of disability and improved transitions through life stages. (sub. 536, p. 76)

The Commission has proposed that people with a disability that is, or is likely to be, permanent who are in an early intervention group would be able to receive individualised funded support under tier 3 of the National Disability Insurance Scheme (NDIS) (chapter 3).

This chapter considers further:

- the nature and benefits of early intervention
- how it might be possible to identify and target beneficial early interventions for individualised funding, including how such funding would 'sit' with individualised funding for ongoing care and support.

Many early interventions (and, indeed, interventions to reduce the risk of disability — such as health and injury prevention measures) are the responsibility of agencies outside of the disability services sector. For example, there are established bodies within the mental health sector (for example, early psychosis prevention and intervention centres) that specialise in the provision of early interventions that are typically clinical in nature. The Commission does not see the NDIS as being the primary funder or coordinator of such interventions. Nonetheless, as considered at the end of this chapter, there is potential for forming linkages between the National Disability Insurance Agency (NDIA) and other agencies responsible for such interventions.

Early intervention is just one aspect of the care and support provided to people with disability. In taking such a focus, the Commission wants to emphasise that ongoing care and support for people with disability is also crucial (and dealt with in other chapters). As Brain Injury Australia observed:

> … whilst early intervention does bring measurable gains, recovery from a "severe" or "profound" ABI [acquired brain injury] may take considerable time and service support needs will be long-term. This is particularly the case with those who experience an ABI early in life: a study [Tate et. al 2003] has shown that service use is high even 20–26 years post-injury, with 85% having used at least one service, such as financial,

> transport, home support in the previous 12 months. Therefore, a potential limitation to the emphasis on "early intervention" in the Commission's thinking could be that the episodic and lifelong needs of people with an ABI will be forgotten. For some people with an ABI, no amount of early intervention will alter those service requirements. (sub. 371, p. 18)

In one sense, tiers 1 and 2 functions of the NDIS — such as the tier 1 function of promoting opportunities for people with disabilities and the tier 2 function of referring people with disabilities to relevant agencies for support — can be viewed as early intervention. For example, KPMG said of tier 2 activities:

> … while some early intervention will be provided within the NDIS for some specific disabilities, there will also be intervention that sits outside the scope of Tier 3. ... Early intervention will affect (and perhaps limit) Tier 2 participants transitioning into Tier 3 as their disability progresses. This will have a direct impact on costs. Whether or not sufficient early intervention is being provided outside of Tier 3, may well impact the sustainability of the NDIS. (sub. DR973, p. 2)

This point is covered further in chapter 4 on the role of the community in relation to the NDIS.

Throughout this chapter, the Commission has used examples of early interventions provided by participants to illustrate particular points — such as the nature of early intervention or how a particular method can be used to assess a particular intervention. While the Commission has endeavoured to verify with participants that the examples provided have been subject to an analysis or evaluation, this has been difficult to do in every case. That the examples are given should thus not be seen as representing the Commission's endorsement of their effectiveness or cost-effectiveness.

13.2 Nature and scope of early intervention

It became evident to the Commission from participants' comments and from government policy documents and reports that 'early intervention' is not easy to define precisely in relation to disability care and support.

The Commission found it helpful to 'unpack' the meaning of early intervention by addressing the following questions. Figure 13.1 captures the Commission's view.

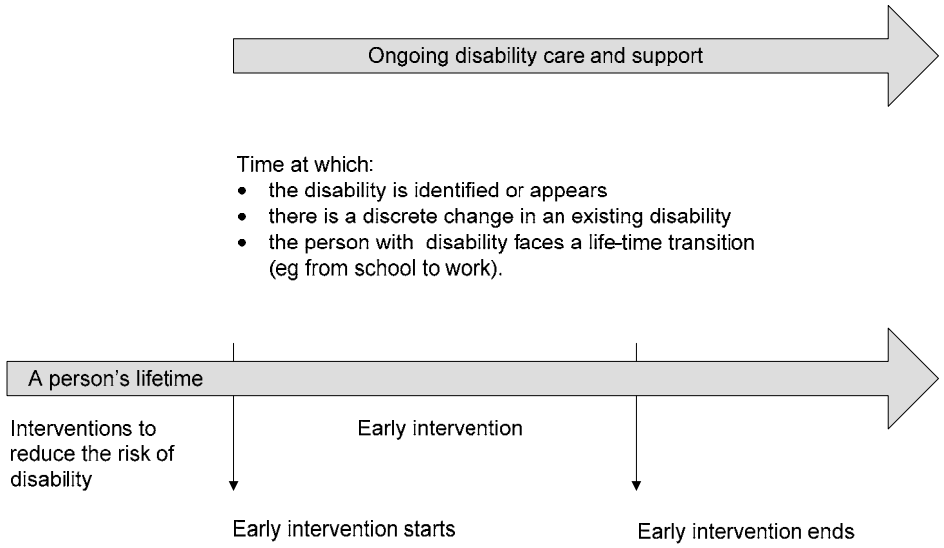
What does early intervention seek to do?

In general, the overarching objective of early intervention is to incur expenditure on a particular intervention today that, not only improves individual outcomes beyond that which would occur in the absence of the intervention, but lowers the costs and

impacts associated with the disability for individuals and the wider community over the longer-term.

This is an objective that should apply to all care and support for people with disability. It should not be restricted to specific interventions just because they occur at a certain time relative to (say) the identification or appearance of a disability.

Figure 13.1 **A depiction of early intervention**



More fundamentally, early intervention seeks to reduce the impact of disability for individuals and the wider community — for example, by:

- mitigating or alleviating the impact of a newly acquired, newly diagnosed or an existing disability, and/or
- preventing a deterioration in an existing disability.

Early intervention may also be seen as including interventions to reduce the risk of a new or secondary disability. For example, providing advice to pregnant women to avoid alcohol can reduce the risk of their babies suffering from foetal alcohol syndrome, and early diagnosis of foetal alcohol syndrome in their babies can reduce the risk of secondary disabilities down the track such as mental health problems (Disability Information and Resource Centre 2008). However, in this chapter, the Commission has mainly considered those interventions that seek to reduce the impact of a new or existing disability, rather than seek to reduce the risk of a new disability.

What types of services would early intervention cover?

Early intervention within the NDIS would encompass the full range of disability services and supports funded under the scheme (described in chapter 5), including: accommodation support; aids and appliances; behaviour and specialist interventions; and case management, local coordination and development; and home and transport modifications.

Early intervention could be provided as a package of these services and in a range of settings including in hospitals, residential care facilities, community health centres, and in a person's home, school and workplace.

Some examples of early intervention approaches are given in box 13.2.

What should be the timing and duration of early intervention?

The precise timing and duration of early intervention will need to be informed by good evidence, such as from studies on efficacy and effectiveness (section 13.3). Moreover, it will depend on a range of factors including the particular disability, the type of intervention and the individual's particular circumstances.

For example, the Victorian Coalition of Acquired Brain Injury Service Providers and Victorian Brain Injury Recovery Association said:

> There are several aspects to the timing and nature of rehabilitation and disability support [for people with acquired brain injury]:
>
> - People who are poorly managed in the beginning of care and support can require increased costs and experience poorer outcomes. This is particularly so with people with severe physical impairments who, if they do not have access to treatment and therapy shortly after their injuries are more likely to develop severe contractures of their limbs – which results in increased care needs, equipment needs and them experiencing pain.
> - It is important not to reduce support too early as this may also prevent maximum recovery. (sub. 320, p. 11)
>
> … It is also clear that every individual's recovery process is unique and is built upon a whole range of pre-injury skills, connections, family supports (or lack of them), and is highly aligned to the age when the injury was received (paediatric, juvenile, and adult injuries are very different in the way they effect recovery patterns). (sub. 320, p. 32)

Box 13.2 **Examples of early intervention approaches**

Autism Behavioural Intervention (NSW) — Footprints Program

The Footprints Program is a home-based early intervention program for families with autistic children, covering a 20 week period. It provides training for families and any other person that a child may interact with, the development of an individualised assessment and behaviour plan, and the implementation of that plan to achieve the family and child's goals. Individualised assessment and planning are done in collaboration with the child's family and may cover such target areas as: challenging behaviour, communication skills, attention, school skills, play schools, socialisation and relationship building, gross and fine motor skills, self help/independent living skills and community access skills. The Program has been subject to a service review in 2007. A longitudinal study of the Program funded by the NSW Department of Ageing, Disability and Home Care is expected to commence in 2011.

Brightwater Care Group — Oats Street Program

The Brightwater Care Group provides residential, rehabilitation and respite accommodation services for people with predominantly neurological disabilities between the ages of 18 and 60 in Western Australia. Its Oats Street Program is a 27-place rehabilitation facility for people aged 16 and over with an acquired disability as well as cognitive impairment, which aims to facilitate return to community living, with an environment suitable to each client's needs. Clients are expected to participate in the Program for a period of one to two years with a short end phase of community integration. This Program has been subject to an evaluation of its benefits and costs (box 13.8).

New South Wales Brain Injury Rehabilitation Program

This Program (BIRP) was established by the NSW Department of Health and the Motor Accidents Authority in 1990 as a specialist network of agencies that provide services to people suffering from traumatic brain injury and to fill gaps left by general rehabilitation services. Services provided include inpatient treatment, community outreach support and a transition living program. The BIRP has early intervention 'as a key principle to maximise spontaneous recovery and the multi-intra disciplinary approach to the client, their family and environment reduces activity limitations and achieves social participation' (sub. 93, p. 6). The BIRP also operates as a continuum of care model for community resettlement and ongoing support. There has been no evaluation of the early intervention component of the BIRP. However, there are, or will be, projects on particular aspects of the BIRP — for example, a scoping project has been commissioned by the Lifetime Care and Support Authority to assess the fees charged to it by NSW Health for services, including BIRP services; an evaluation of the Transitional Living Program under the BIRP will commence in mid-2011; and a report on rural and remote rehabilitation service delivery is expected in early 2011.

(Continued next page)

Box 13.2 **(continued)**

New Zealand Burwood Hospital Spinal Unit — Kaleidoscope Program

The Spinal Unit implements the Kaleidoscope Program, which is a vocational rehabilitation program of which an element is to make initial contact with people with spinal cord injuries within a week of acute hospital admission to identify their future employment and other expectations. The rationale of this approach is that without this, the client has no framework or target through which to judge and engage with services or interventions that were offered (or just applied to them). There is no published evaluation of the Program. However, Dickson et al. (2010) said that their findings on the employment experience of people following spinal cord injury, including return to work outcomes, endorsed the Program's 'founding principle', which is to 'foster hope that employment is both realistic and likely' following spinal cord injury (p. 2).

Novita Children's Services — early childhood services

Novita Children's Services provides a wide range of services to children and young people with disabilities in South Australia. Its early childhood services, for example, involves a Welcome Program (which provides information about services to parents, links to other families through a parent-to-parent initiative, and the establishment of goals and intervention programs with families). Dependent on the family need, a case manager or contact person is allocated to the family. The family is then also allocated a therapy team and services ranging from home and school visits, and group programs, to referral to specialist service teams where complex equipment or post medical intervention follow up is required.

Victorian Transport Accident Commission (TAC) — claims management

Over the past fifteen years, TAC has instituted changes in the management of its claims from clients with severe injuries from road traffic accidents. In 2009, TAC announced TAC 2015, which included an 'independence' initiative relating to claims management for seriously injured clients. This initiative seeks to help seriously injured clients achieve individual goals and independence. Characteristics of this initiative include the development of a single 'one plan model' and of a 'claims practice framework' that features 'early, proactive interventions' in the initial post-accident period. TAC considered that this initiative will enable decisions to be made in consultation with the hospital and improve discharge processes. The Institute for Safety and Compensation and Recovery Research is currently undertaking an evaluation of the TAC's 2015 new claims model.

Sources: Autism Behavioural Intervention NSW (sub. 331; pers. comm.); Brightwater Care Group (sub. 398; pers. comm.); ISCRR (2010b); Kaleidoscope Consulting International (pers. comm.); Novita Children's Services (sub. 560); Agency for Clinical Innovation (NSW) (sub. 93; pers. comm.); TAC (pers. comm.); Tech4Life (sub. 261).

CASA said:

> Early interventions should be provided as soon as possible after diagnosis or acquired brain injury, in order to secure the best outcomes and should be continued as long as

> the intervention is deemed helpful, not cut off at a certain age, no matter what the person's ability or progress. For example, the school leaver age is nonsensical for people with intellectual disabilities, as they continue to learn slowly, and often, at the time they are required to leave, are just starting to mature and pick up on language and other skills. As there is nowhere else for them to go, and work is not usually an option, remaining in a school or learning environment is sensible, would provide structure and purpose, and allow the person to continue to develop life skills. To cease therapy at a particular age, with no regard for the individual's circumstances, is also nonsensical and continued therapy could often lead to maintaining mobility, for example, thus keeping the person with a disability out of a hospital or a more intensive care facility. (sub. 54, pp. 3–4)

Thus, it is not possible for the Commission to be prescriptive about the timing and duration of early intervention for particular types of disability — even though some participants (for example, Autism Victoria, sub. DR624, p. 2) sought further detail.

That said, there are several broad aspects about the timing of early intervention that need clarification.

Early in life or early relative to the identification or appearance of a disability?

In relation to early intervention, 'early' can broadly be understood in two ways — namely, early in the life of a person (for example, newborns, children and youth – sometimes also described as early childhood intervention or support for children) or early relative to the identification or appearance of the disability.

The main implication of defining early intervention as early in life is that the duration of the intervention could be fairly lengthy and potentially last from birth to age 18 years.

A large number of participants emphasised the importance of focusing on early in life intervention (such as Anglicare Sydney, sub. DR700, pp. 19–20; Association for Children with a Disability Victoria, sub. DR1022, p. 4; Cerebral Palsy League Queensland, sub. DR809, pp. 3–4; Early Childhood Intervention Australia, sub. 450, p. 2 and sub. DR840, pp. 1–2; Friends of Brain Injured Children ACT, sub. DR810, p. 2; Guide Dogs NSW/ACT and Guide Dogs Australia, sub. DR828, p. 6; Jackson Ryan Partners, sub. DR717, p. 7; Lifestart Cooperative, sub. DR1037, p. 4; Montrose Access, sub. DR684, p. 2; National Disability Services, sub. DR836, p. 26–7; Novita Children's Services, sub. 560, p. 25; Technical Aid to the Disabled ACT, sub. DR706, p. 1; Yooralla, sub. 433, pp. 69–70 — see box 13.3).

Box 13.3 Participants views: the need to focus on early in life intervention

Cerebral Palsy League Queensland:

> … you need to think about children totally differently and have a separate strategy for children, because it links in with the early intervention that comes through so strongly in the [draft] report, as well as that investment strategy. We believe that the investment will ensure that these children will grow up into adults that will be able to be in the best position to maximise their independence and, in a very real sense, create the highest possible effectiveness of that three tiered system that is proposed. (trans., p. 435)

Early Childhood Intervention Australia:

> The provision of appropriate supports and services for young children with disabilities and their families has personal benefits and potential longer term savings from improved educational outcomes, better labour market participation, reduced dependence on public assistance and lower levels of criminal activity.
>
> Access to timely and adequate early childhood intervention … has been demonstrated to improve outcomes for children with developmental delays and disabilities and their families. (sub. 450, p. 2)

Lifestart Cooperative:

> Evidence based research in the early childhood intervention sector has clearly demonstrated the value and cost effectiveness of high quality early intervention and demonstrates clear sustainable outcomes for many children, their families and carers. Early childhood intervention services already provide both national and international strong evidence based research through interventions and models for service delivery for infants and children can be determined. (sub. DR1037, p. 4)

MontroseAccess:

> Many of the children supported by MontroseAccess have degenerative conditions or disabilities that significantly impact their physical, social and emotional functioning. Early diagnosis, referral and intervention are critical to prevent or reduce physical deformity, loss of function and psychological harm. Failure to intervene early is likely to lead to increased care requirements and reliance on the service system in the future and a reduction in the potential for people to live economically and socially independent lives. … Evidence demonstrates the benefits of early intervention in literacy and language skills and preparation for families abut the progression of the condition. (sub. DR684, p. 2)

Their views were generally founded on studies into the factors affecting child development and wellbeing, as well as benefit-cost and cost-effectiveness studies into specific interventions in respect of children and their families.[2]

[2] These are principally studies from the United States into models of early education and care, including the Perry Preschool project, the Caroline Abecedarian project and Chicago Child Parent Centres — see Hilferty et al. (2010) and Katz and Valentine (2007) for reviews of these and other studies.

These studies suggest that early intervention applied in many different service sectors — family and community services, health care, the justice system, education services as well as disability services — and potentially involved the coordination of all of them. This raises the question of the specific role for the NDIS in this area.

The Commission considers that early intervention under the NDIS should generally encompasses interventions occurring early relative to the identification or appearance of a disability rather than only early in life. For children with disability, this, in effect, means early in life. In any event, funding under the NDIS of either types of these interventions should be evidence-based.

When there is a discrete change in the disability

Some disabilities such as multiple sclerosis, Parkinson's disease, motor neurone disease or muscular dystrophy involve a progressive deterioration in the person. There might also be a discrete change in a person's condition — such as a sudden deterioration or change in mobility, vision or brain acuity. In these cases, early intervention can occur not only after the disability is identified or appears, but soon after there is discrete change.

An example of early intervention of this kind is the Continuous Care Pilot run by MS Australia and Calvary Health Care Bethleham (2009) (box 13.4). This program sought to 're-route' the pathway into aged care for young people with progressive conditions through a set of interventions. An evaluation of the program suggests that it has led to benefits for participants — for example, the program 'almost certainly' prevented between two and five admissions to aged care.

Early intervention might not necessarily be one-off, but periodic or episodic (for example, the Association for the Blind WA, sub. DR703, p. 4; National Disability Services, sub. DR836, pp. 26–7; the Royal Blind Society, sub. DR826, p. 9). The Association for the Blind WA said:

> Typically … someone with a vision impairment will require relatively short-term assistance, for example, the provision of a particular aid or item of equipment or training in the acquisition of a new skill. These short-term interventions are directed towards successfully enabling a person to live independently and continue his/her participation in community life. The episodic nature of such services mean that people with vision loss only seek the intervention required when their vision or circumstances change or when they have a need for something different. This might be: the uptake of a new piece of equipment or a software upgrade requiring further training; or moving house requiring orientation and mobility training in a different environment. (sub. DR703, p. 4)

What about lifetime transition points?

As advocated by several participants (for example, Anglicare Australia, sub. 594, p. 20; Disability Council of NSW, sub. 489, p. 16; Life Without Barriers, sub. 512, p. 7; Uniting Care Queensland, sub. DR776, p. 24), the Commission considers that early intervention should also encompass interventions to help people with disability to transition to typical lifetime milestones — such as beginning school, leaving education and entering the workforce, retiring and ageing.

Box 13.4 **The Continuous Care Pilot**

The objective of this program is to 're-route the pathway into aged care for young people with progressive conditions through the implementation of a comprehensive set of interventions' (MS Australia and Calvary Health Care Bethleham 2009, p. 2).

There were 19 participants in the program, under 50 years of age, who had a diagnosis of a progressive neurological condition (such as spino-cerebellar ataxia, cerebral palsy/cervical dystonia, and multiple sclerosis) and who lived in Victoria.

The program had six steps: transition to the program, specialist health and social assessment, information sharing and knowledge transfer, decision making and implementation of plans, planning to meet contingencies (including the provision of brokerage funds); and monitoring and review.

The step covering transition to the program involved:

- defining criteria for different diagnostic groups to identify the point at which a person with a chronic neurological condition should be offered a continuous care program
- identifying 'red flags' for this 'at risk' group and educate health and community providers to recognise risks
- informing public and consumers (including consumer groups).

An evaluation of the program (Batterham 2009) found, among other things, that the program:

- 'almost certainly' prevented between two and five admissions to residential aged care during its period of operation
- achieved 'other substantial benefits' for a number of participants including resolving problems with service providers, accessing additional or more appropriate services, accessing larger and more adequate funding packages, identifying and resolving outstanding equipment issues, establishing more acceptable respite arrangements (pp. ii–iii).

Sources: MS Australia and Calvary Health Care Bethleham (2009); Batterham (2009); Calvary Health Care Bethleham (sub. 436).

13.3 The benefits of early intervention

Many participants emphasised the benefits of early intervention, and considered these to include:

- reduced public expenditure on the lifetime costs of care and support for people with disability (for example, Australian Rehabilitation Providers Association, sub. 523; Down Syndrome Victoria, sub. 492; Melbourne City Mission, sub. 283; Rehabilitation Counselling Association of Australasia, sub. DR737; Scope, sub. 432; Victorian Government, sub. 537)
- reduced public expenditure on welfare, health services and other programs outside of the disability services sector (for example, Cerebral Palsy League Queensland, sub. 505; NSW Government, sub. 536)
- greater independence for the individual with disability (for example, Centacare Townsville, sub. 485; MND Australia sub. 264; Rehabilitation Counselling Association of Australia, sub. DR737; Vision Australia, sub. 352)
- improved quality of life (for example, MND Australia sub. 264; Melbourne City Mission, sub. 283; Rehabilitation Counselling Association of Australia, sub. DR737)
- improved health outcomes (for example, Insurance Council of Australia, sub. 553; Rehabilitation Counselling Association of Australasia, sub. DR737)
- reduced impairment, secondary disablement and risk of injury (for example, Queenslanders with Disability Network, sub. 166; Scope, sub. 432; Melbourne City Mission, sub. 283; Rehabilitation Counselling Association of Australasia, sub. DR737)
- improved rehabilitation outcomes (for example, Insurance Council of Australia, sub. 553; Rehabilitation Counselling Association of Australasia, sub. DR737)
- improved school or educational performance (for example, NSW Government, sub. 536; Novita Children's Services, sub. 560)
- better employment outcomes, such as higher employment and skill levels (for example, Australian Rehabilitation Providers Association, sub. 523; Brain Injury Australia, sub. 371; Cerebral Palsy League Queensland, sub. 505; Queenslanders With Disability Network, sub. 166; Rehabilitation Counselling Association of Australasia, sub. DR737)
- greater community participation, reduced community exclusion and reduced loss of established networks (for example, Cerebral Palsy League Queensland, sub. 505; Down Syndrome Victoria, sub. 492; Queenslanders with Disability

Network, sub. 166; Vision Australia, sub. 352; Rehabilitation Counselling Association of Australasia, sub. DR737)

- lower criminality rates, reduced child abuse and neglect notifications (for example, NSW Government, sub. 536)
- reduced breakdown in family relationships (for example, Rehabilitation Counselling Association of Australasia, sub. DR737; Scope, sub. 432).

These and other participants provided the Commission with examples of their own experiences, or of particular studies, as evidence of the benefits (box 13.5).

Box 13.5 **Participants' views: benefits of early intervention**

Slow stream rehabilitation for people with acquired brain injury

> … We have a documented model of practice entitled the Community Approach to Participation (CAP). Three articles on the CAP provide both case study and group data evidence regarding the potential of people with severe to catastrophic brain injury to benefit from community based, slow stream rehabilitation, both in terms of reducing long term care and support and increasing participation and community living skills [Sloan et al. 2009a, b; Sloan et al. 2004]. In contrast, for people who do not receive this targeted rehabilitation, we found that, over an eight-year period, hours of support remained the same. However, there was a shift from paid care to gratuitous support, with associated increasing caregiver burden [Sloan et al. 2007]. (Callaway, Sloan and Winkler, sub. 526, p. 9)

Transition planning

> Paediatrics is well supported until the young person reaches adolescence. The problem really start once they leave paediatric care. Transition planning is increasingly being shown to provide long term solutions for young people with chronic illnesses. Transition clinics for conditions such as diabetes, spina bifida, cerebral palsy improve health and social outcomes. … [The] State-wide Spina Bifida Adult Resource Team … (210K/annum) … has in one year of operation connected 185 young people to adult services who had not previously been connected or who have fallen through the gaps. This early intervention approach potentially saves hundreds of thousands per year in preventable admissions through early detection and treatment of shunt problems, renal complications and pressure areas. (Agency of Clinical Innovation (NSW), sub. 93, p. 6)

Early provision of assistive technologies

> …. Independent Living Centre of Western Australia … put forward a submission [to the Western Australian Government] to trial early provision of AT [assistive technologies] based on predictive prescription to prevent hospitalisation and reduce carer burden. This is based upon evidence that AT devices such as the introduction of mobile hoists can impact significantly on the ongoing health of the carer and to prevent breakdown of the [carers]. (Occupational Therapy Australia, sub. 510, p. 7)

The method used matters

In examining evidence from participants and other sources on the benefits of early intervention, it is necessary to distinguish among the different methods of analysis. As noted in chapter 12, there are many possible methods, depending on the particular issue being addressed. Analyses based on these methods can provide valuable information to persons with disability, the NDIA and others about whether a particular intervention is safe, works, or represents 'value for money'.

Financial (or actuarial) modelling measures any discrepancies between expected and actual costs, and the adequacy of revenues to meet expected costs over the long-term. Such modelling generally occurs as part of monitoring the financial sustainability of the scheme but can be used to identify interventions that are low cost and yield beneficial outcomes for people with disability. Box 13.6 presents an example of financial modelling of the 1999 changes to the NSW Compulsory Third Party (CTP) scheme to the handling of whiplash claims, which included early intervention approaches. The modelling found that the changes led to lower claims costs (as expected) as well as improved outcomes for claimants.

Box 13.6 Actuarial modelling of changes to the handling of whiplash claims under the NSW CTP scheme

Walsh et al. (2007) assessed the impacts of changes in 1999 to the NSW compulsory third party (CTP) scheme on long-term health outcomes and on the cost for claimants with whiplash from motor vehicle accidents.

The main changes to the scheme were: the removal of payment for non-economic loss for claims; the introduction of clinical practice guidelines for whiplash treatment; earlier acceptance of claims; and earlier access to treatment for all types of injury.

The analysis was based on claims data as well as on data collected from telephone interviews with claimants (on their health outcomes). Three independent groups of claimants were compared in 1999 (before the changes took place), 2001 and 2003.

The primary measure of health outcomes used was the Functional Rating Index (FRI), which has 10 items that measure disability due to neck and back pain. A FRI score of 25 or less indicates recovery. Two secondary health outcome measures used were the Medical Outcomes Study Short Form (SF) 36, which measures physical and mental health status, and the Core Whiplash Outcome Measure (CWOM), which measures symptom 'bothersomeness', interference with normal work, attitude if injury lasted for life, normal activities cut down, and work absence.

(Continued next page)

Box 13.6 **(continued)**

Walsh et al.'s findings included the following:

Long-term health outcomes

- Using FRI, at 2 years after injury, there were improvements in recovery from whiplash and reductions in disability due to whiplash for the 2001 and 2003 groups compared with the 1999 group.
- After adjusting for age, the physical component scores of the SF 36 for the 2001 and 2003 groups were significantly higher than for the 1999 group, but there was no significant difference in the mental component scores.
- There were significant improvements in the CWOM item measuring global perceived change in whiplash symptoms in the 2003 and 2001 groups at 2 years after injury compared with the 1999 group. There were significantly more favourable outcomes in 4 of the 5 items of the CWOM for the 2001 and 2003 groups compared with the 1999 group.
- At least half of the claimants in the 2001 and 2003 groups were not recovered at 2 years after injury. The main predictor of non-recovery for this group was high initial disability. Psychological factors or claim-related factors were not as relevant. Thus 'greater emphasis should be placed on assessing disability soon after whiplash and, if high, directing resources to these patients' (2007, p. 25).

Cost outcomes

- Estimated average claim size on all claims (using case estimates) declined by 40 per cent from $47 768 in 1999 to $28 824 in 2001.
- The pattern of costs changed, reflecting the changes to the scheme, namely earlier access to treatment, reduced legal fees and reduced non-economic loss payments.
- Small claims finalised faster after the changes. For example, 12 months after injury, 17 per cent of 1999 claims were finalised compared with 43 per cent of 2001 claims, and 44 per cent of 2003 claims.
- The changes were 'effective' in reducing the average size of the smaller claims that finalised relatively quickly, yielding 'substantial savings' to the scheme due to their high frequency.
- For large slow to finalise claims, there were higher medical and economic loss payments after the changes.

Effectiveness (or outcomes) studies consider the extent to which intervention, when used under usual or every day conditions, has a beneficial effect on the course or outcome of a disease or disability compared with an alternative. Box 13.7 presents an example of an effectiveness study in 2010 of the Western Australian Government's early intervention services for children with intellectual disability

and their families. The study concluded that the services met families needs to at least a moderate extent for most 'measures of process care'.

Box 13.7 **Evaluation of the effectiveness of the Western Australian Government's early intervention services**

Wilkins et al. (2010) examined the quality of Western Australian Government early intervention services for young children with intellectual disability (including Down syndrome and autism), which are based on a 'family-centred care model'.

The specific objectives of Wilkins et al.'s study were to evaluate parental perceptions of the processes of family-centred care for children aged 0 to 6 years who were registered with the Western Australian Disability Services Commission because of the presence of, or potential for, intellectual disability. The study aimed to describe the pattern of service utilisation and compare differences in the results of evaluation between groups defined by the type and frequency of service provided.

The results of the study were based on the responses of 165 families to a postal survey. The survey questions covered the frequency and type of services received as well as perceptions of services using a 'Measure of Processes of Care (MPOC) questionnaire (which looks at five areas of care — 'enabling and partnership', providing general information, providing specific information, coordinate and comprehensive care, and respectively and supportive care). MPOC scores range from 1 to 7, with 1 indicating the family's needs are never met, 4 indicating that the family's needs are only sometimes met, and 7 indicating that the family's needs are met to a great extent.

The main results were the following:

- Contact with disability professionals. Over two thirds of families had contact with both speech pathology and occupational therapy at least once per month, while under half had contact with a physiotherapist at least once a month. Contact with other health professionals (medical doctors, clinical psychologists and dentists) were less frequent. Just over 15 per cent of families had contact with their local area coordinator at least once a month.
- Measure of processes of care scores. Mean scores for the five MPOC areas were 3.97 for the provision of general information, 5.20 for provision of specific information, 5.28 for coordinated and comprehensive care, 5.44 for enabling and partnership, 5.76 for respective and supportive care.

Wilkins et al. concluded that early intervention services for young children with intellectual disability in Western Australia are implementing family-centred care to a standard that meets families' needs to at least a moderate extent for most aspects of care. They said that the 'perceptions of families receiving family centred care are generally positive and provide an argument for retaining and strengthening family-centred practice' (2010, p. 716).

Economic analyses consider whether an intervention is value for money. There are different types of these analyses.

Benefit–cost analysis identifies all the benefits and all the costs of an intervention, and measures them in monetary terms compared with the alternative. Box 13.8 presents a benefit–cost analysis of Brightwater Care Group's Oat Street program in 2010. The analysis estimated a benefit–cost ratio for the program of around 4:1.

Cost-effectiveness analysis focuses on the costs of achieving a particular type of benefit (or outcome) through an intervention compared with an alternative. Box 13.9 presents a variant of cost-effectiveness analysis — cost utility analysis — in 2010 of an early intervention program in Zambia for young children at risk of neuro-developmental disability. The analysis estimated an incremental cost of around $8.50 per DALY (avoiding a disability-adjusted life year) for the program.

Cost savings analysis compares the financial costs (usually government outlays) of a service or intervention compared with an alternative. (An example of such an analysis is given later in box 13.10 of a rugby injury prevention program.)

Box 13.8 Benefit-cost analysis of a rehabilitation program for people with acquired brain injury

Brightwater Care Group, a Western Australian service provider, commissioned a benefit-cost analysis (ACIL Tasman 2010) of expanding its Oats Street program (described in box 13.2). The expansion would involve the construction of a new 43 bed residential facility to house a cohort of 20 clients with acquired brain injury over one year. (Currently the program houses around 20 clients over two years.)

Key assumptions of the analysis were: 20 new clients a year, the counterfactual being either no rehabilitation or rehabilitation as in an outpatient setting, an hourly cost of care of $33.50, a value of statistical life year at $166 603, a reduction in disability burden as a result of rehabilitation of 10 per cent, a real discount rate of 7 per cent, and a daily cost of rehabilitation per client of $400.

The client base was divided into five types and the outcomes from the program for each type were examined using case studies.

The analysis found that the:

- net present value of benefits for a cohort under the program was estimated at $25.67 million, comprising of a reduction in costs of care, improvements in employment opportunities and improvements in the quality of life of clients.
- net present value of costs was estimated at about $6.2 million (assuming a daily cost of rehabilitation of $400 per client).
- benefit cost ratio was around 4:1.

Box 13.9 **Cost-effectiveness of an early intervention program for young children at risk of neuro-developmental disability**

Wallander et al. (2010) undertook a block-randomised controlled trial — the *Brain Research to Ameliorate Impaired Neurodevelopment — Home-based Intervention Trial* — to evaluate the effects of an early developmental intervention program on young children in low- and low-middle income countries (India, Pakistan and Zambia) who were at risk for neuro-developmental disability because of birth asphyxia.

Birth asphyxia is a leading specific cause of neonatal mortality in low and low-middle income countries and the main cause of neonatal and long-term morbidity, including mental retardation, cerebral palsy and other neuro-developmental disorders.

The early developmental intervention program was delivered in home visits every two weeks by parent trainers from two weeks after birth until age 36 months. The primary outcome of the trial was cognitive development, and secondary outcomes included socio-emotional and motor development. These outcomes were measured at child ages of 12, 24 and 36 months.

The trial enrolled 174 children with birth asphyxia and 257 without peri-natal complications. The control group received health and safety counselling only.

The authors compared the incremental cost of sustaining a home-based early intervention program with the willingness to pay for a disability adjusted life year (DALY). The authors noted that maintenance of a home-based intervention program had a relatively low incremental cost. The incremental cost per year once the program was established consisted of the salary of a full time trainer, training equipment, transportation and supplies. For example, the research data for Lusaka, Zambia showed that, if the rate of mental disability index less than 70 due to birth asphyxia was reduced from 7 to 3.5 per cent, the incremental cost of the early intervention program would be around $8.50 per DALY — consisting of $22 000 divided by 2590 (3.5/100 absolute risk reduction x 2000 survivors of asphyxia enrolled per year x 37 years life expectancy). The authors considered that this cost compared favourably with that of other medical procedures.

Performance indicators measure how well an intervention is performing against a specific benchmark. The Victorian Transport Accident Commission uses client satisfaction and 'actuarial release'[3] as performance indicators for the management of its claims by persons with serious injury. The Australian Government's Early Intervention Services Provider Panel also uses performance indicators in assessing outcomes for children with a diagnosis of autism spectrum disorder (box 13.9 later).

3 The difference between the actuarial projected claims incurred and the actual claims incurred.

What does the economic evidence say?

The Commission's internet-based searches of websites such as PubMed, BioMedCentral, Social Care Online, NHS Evidence and NHS Economic Evaluation Database revealed what appears to be a large number of efficacy/effectiveness studies of a wide range of interventions to reduce the impact and risk of disability for many different types of disabilities.

However, the Commission found much fewer economic analyses of early intervention, particularly in Australia.[4] (The results of some recent economic analyses of interventions relevant to disability are summarised in table 13.1.)

Those that it uncovered involved different types of interventions for different disabilities using different methods of analysis. This makes it difficult to reach any general conclusions about whether an early intervention constitutes value for money.

That there is a poor evidence base of economic analyses of early intervention in particular, was corroborated by the views of some participants and by a 2006 report on early intervention in autism. The Victorian Government said:

> Early intervention is a relative new focus in health care, and the evidence of what is effective and yields a return on investment is still under-developed. (sub. 537, p. 18)

A report commissioned by the Australian Government Department of Health and Ageing on early intervention in autism noted:

> To date, no studies have examined the cost-effectiveness of treatment programs provided in Australia. Consequently, there is no evidence to suggest that one program is more effective than another based on cost versus benefit … (Roberts and Prior 2006, p. 79)[5]

Given the potential for early intervention to yield beneficial outcomes not just for persons with disability but also yield cost-savings for the NDIS, the Commission considers that establishing an evidence base that encompasses economic analyses should be a matter of priority for the NDIA. How this could be done is considered next.

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4 Rehabilitation Counselling Association of Australasia drew attention to research on Australian workers' compensation schemes that, although limited as a source of evidence, indicated that early intervention and early return to work result in lower overall claims costs (sub. DR737, p. 4).

5 Also noted in a later article on early intervention in relation to autism by Roberts et al. (2011, p. 2).

Table 13.1 **Some recent economic analyses**

Study (date, country)	*Type of intervention*	*Economic method/s used*	*Alternative/s*	*Economic analysis of intervention*
Access Economics (2008a, Australia)	Early intervention for people with psychotic illness (involving low-dose atypical antipsychotics, CBT, programs for vocational recovery, continuing care, relapse prevention and substance misuse harm reduction, family based intervention services, and services to families).	Cost utility analysis and cost savings analysis (with data from 3 Randomised Control Trials — RCTs).	Treatment as usual.	Cost savings over 5 years of $39 934 per patient. Cost savings over five years of $212.5 m ($82.5 m in financial savings and $130 m reduced disease burden).
ACIL Tasman (2010, Australia)	Expansion of Brightwater Care Group's Oats Street Program (involving residential and rehabilitation services for people with mainly neurological disabilities in Western Australia) to accommodate 20 new clients a year	Benefit–cost analysis.	No expansion — accommodate 20 new clients over two years.	Net present value of benefits of $25.6 million. Net present value of costs of $6.2 million. Benefit-cost ratio of 4 to 1.
Chasson et al. (2007, Texas, US)	Early intensive behavioural intervention for children with autism.	Cost savings analysis.	18 years of special education.	Cost savings of $US208 500 per child Cost savings of more than $US2 billion.
McDermott et al. (2010, Australia)	NSW Integrated Services (Pilot) Project for Clients with Challenging Behaviour (eg people with intellectual disabilities, mental health problems and other disabilities who have accommodation and criminal justice problems). Support is for 18 months.	Form of cost effectiveness analysis.		Recurrent cost per client of $207 000 that achieved improved outcomes for clients (eg reduced challenging behaviours and reduced hospital use and costs).
Roberts et al. (2011, Australia)	Early intervention delivered to preschool children with an Autism Spectrum Disorder — Aspect's Building Blocks Program. The Program draws on a variety of approaches, including naturalistic play-based intervention, behavioural and developmental theory, structured teaching, the development of functional communication skills, positive behaviour support, assessment of sensory processing issues, and extensive use of visual supports.	Primarily and outcomes comparison as well as cost-effectiveness analysis.	Two variations of the Program are considered: a home-based service (involving 1:1 work with child and parent) and a centre-based small group centre based service (involving 5 to 6 children and two staff and a parent group). Both variations of the Program involved 2 hours of direct service per week over 40 weeks.	Staff cost per child was estimated at $6383 regardless of Program variation.

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Table 13.1 **(continued)**

Study (date, country)	*Type of intervention*	*Economic method/s used*	*Alternative/s*	*Economic analysis of intervention*
Romeo et al. (2009, UK)	Health check intervention for people with intellectual disabilities, involving a nurse reviewing a patient's GP records against a semi-structured form, discussing findings with specialist GP, then issuing report with recommendations to patient's GP.	Cost savings analysis.	Standard care.	Cost of care savings was £37 569 per annum.
Wallander et al. (2010, US)	BRAIN-HIT. Early intervention program for children at risk of neuro-developmental disability because of birth asphyxia. Program delivered in home visits every 2 weeks by parent trainers from 2 weeks after birth until age 36 months.	Cost utility analysis (with RCT).	Control group received health and safety counselling only.	For a site in Zambia, $US8.50 per DALY.

13.4 Targeting beneficial early interventions under the NDIS

The NDIS as proposed by the Commission will have many features that are likely to be conducive to improved early intervention.

- A more thorough, consistent and timely needs-based assessment (chapter 7) would include an analysis of the scope for early intervention. In effect, the NDIS would search for cost-effective interventions across all people with disability, regardless of their age or severity of condition. Many participants pointed out the importance of interventions over the whole life of a person where they produced good outcomes (Anglicare Australia, sub. 594, p. 20; Life Without Barriers, sub. 512, p. 7).
- Individualised support packages and greater self-direction over care funding (chapter 8) would enable individuals themselves to have greater control in initiating interventions suited to their own specific needs. In the United Kingdom, for example, a woman with a disability was able to use her funds to buy an air conditioner, which reduced her subsequent hospitalisation rates and quality of life (Leadbetter et al. 2008, p. 39).
- The public reporting and modelling of future expected liabilities as a key performance indicator, rather than just of current claims (chapter 14) would allow decision-makers to estimate the effects of early investments on future liabilities.
- Systematic data collection on outcomes for people with disability (such as employment, education, and self-care capabilities) and on the inputs and processes that may have led to these (such as aids and appliances, self-directed

support, particular programs, and case management approaches) (chapter 12) would help build up an evidence base for assessing which particular interventions work well, as a basis for their greater diffusion or withdrawal.

- The replacement of fault-based injury insurance arrangements with no-fault systems would encourage improved rehabilitation outcomes (chapters 17 and 18).

A particular challenge for the NDIA (and for people with disability) is how to choose or target early interventions that should be funded or purchased under tier 3 of the NDIS. Undertaking analyses based on the methods described in section 13.3 would in principle indicate those interventions that are safe and work, and that are most likely to yield the highest benefits or lowest costs for people with disabilities and the wider community.

However, from a pragmatic perspective, there are the following inter-related issues.

- What standard of evidence is required in deciding whether or not to fund or purchase a particular intervention?
- How should the evidence be obtained?
- How would the funding of proven interventions sit with the funding of other disability supports?

What standard of evidence?

Some participants expressed a range of views about the standard of evidence necessary to support the funding of early intervention (box 13.10).

The most robust standard of evidence — a combination of a systematic review of randomised controlled trials on effectiveness and benefit-cost analysis — is likely to be the most costly and slow to obtain (apart from where there are already international studies) (chapter 12, table 12.1).

Accordingly, the Commission considers a selective evidence-based approach is appropriate for deciding whether or not to fund or purchase a particular early intervention under the NDIS. This approach would consist of the following.

- As a minimum, there should be good evidence of the effectiveness of the intervention — that is, the intervention is safe and achieves improved outcomes for people with disability. Without such evidence, there should be no funding of the intervention.

Box 13.10 **Participants' views: what should be the standard of evidence for early intervention?**

Association for Children with a Disability (Victoria):

> … it will be important that assessments for the NDIS does not get bogged down in securing diagnostic evidence, whilst the 'clock is ticking' and opportunities to benefit from early intervention are quickly fading. (sub. DR1022, p. 4)
>
> Our Association is concerned with the … inference that 'early intervention' should be assessed on the 'likelihood of cost-effectiveness' will compromise access to evidence-based effective therapeutic interventions. … ... some therapies are expensive and highly intensive, however, their proven effectiveness should be the basis for their inclusive in the NDIS or NIIS. (sub. DR1022, pp. 12–13)

Anglicare Sydney:

> Rigorous assessment of early interventions (as with all approaches) needs to establish the efficacy and cost effectiveness of these programs. (sub. DR799, pp. 19–20)

Australian Federation of Disability Organisations:

> The … proposal for early intervention services to be funded on the basis of their 'cost-effectiveness' is potentially at odds with the CRPD obligation for States parties to 'reasonably accommodation' supports that will enable full inclusion and participation for people with disability on an equal basis with others. (sub. DR982, p. 8)
>
> … cost utility on its own is an inadequate rationale for the funding of disability supports with respect to CRPD obligations. (sub. DR982, p. 9)

DANA:

> Early intervention approaches should be funded by the NDIA if they are likely to yield a benefit to the person with disability in terms of their desired outcomes and well-being. Cost effectiveness is too limited a criteria on which to base a determination about eligibility because it will always fail to appropriately take into account the indirect costs to the person, their families, the government (for example, through additional health costs) and the community (in terms of lost participation and contribution) of failing to provide the intervention. (sub. DR1010, p. 35)

Friends of Brain Injured Children:

> Because the science [in relation to neuroplasticity and children with brain injury] is young, conclusive evidence for the efficacy of particular therapies in this area is incomplete, but growing. …
>
> We … recognise the validity of the … caution that funding must not turn into a free-for-all, and that ineffective therapies must not end up funded by the scheme, … (sub. DR810, pp. 2–4)

Lifestart Cooperative:

> Lifestart supports the NDIS in the need to fund early childhood interventions which are based on good evidence of effectiveness and an initial assessment of cost-effectiveness. (sub. DR1037, p. 4)

(Continued next page)

Box 13.10 **(continued)**

Rehabilitation Counselling Association of Australasia:

> RCAA agrees that more Australian research to establish the efficacy and cost benefit of early intervention for the NDIS client population is required. With regard to developing the evidence base for the range of possible interventions, the Commission should consider the value of a broader range of types of evidence commonly generated in different areas of research. For instances, research by Rehabilitation Counsellors is often qualitative and can be applied directly to practice. … Often such qualitative research has the capacity to identify those questions which most benefit from quantitative research. (sub. DR737, pp. 4–5)

Valued Independent People:

> We would hate to see early intervention denied simply due to lack of evidence of future cost-effectiveness. On-going assessment of the client before, during and at the end of the intervention is not only essential for the client but would also help to build the necessary data base for the effectiveness of particular early intervention strategies. (sub. DR932, p. 19)

Victorian Government:

> Further consideration [is needed] of how best to balance the desirability of funding only evidence-based early interventions against the need to promote innovation and build the evidence base for safe, effective and cost-effective early interventions. (sub. DR996, p. 29)

- The NDIA would interrogate its own data — available from the electronic database that the Commission proposes in chapter 12 — to examine the cost-effectiveness of interventions that it already funds.
- In relation to new interventions, there should be an initial appraisal by the NDIA of the likelihood of cost-effectiveness of the intervention. This initial appraisal would follow the steps set out in chapter 12 (section 12.6). Where the NDIA found that the intervention was likely to be cost-effective, that would be enough justification to fund the measure, knowing that there was a reasonable low risk of decision error. Subsequent evaluation would determine whether the initial analysis was well founded. On the other hand, where the NDIA assessed the intervention as unlikely to be cost-effective, it should not fund that without further evidence.

How to obtain the evidence?

Chapter 12 canvassed a broad range of matters relevant to the building of an evidence base under the NDIS.

In respect of early intervention, there are at least three ways of building the evidence base.

- As noted, the NDIA interrogates its own data to search out cost-effective interventions.

- The NDIA commissions or undertakes research on specific interventions. This research could involve systematic reviews of the evidence on existing interventions, or pilots of promising new interventions.
- Service providers apply for funding of an intervention under the scheme and, as part of that application, submit efficacy, effectiveness, and economic analyses to the NDIA. This is similar to arrangements for the Australian Government's Helping Children with Autism early intervention program, in which service providers must apply to FaHCSIA to seek membership of an Early Intervention Services Providers Panel and demonstrate that their services are 'value for money' (box 13.11).[6] There would be a need for the NDIA to independently vet the quality of the analyses.

Regardless of what combination of these ways is used, after its establishment, the NDIA should start building an evidence base. It could be guided in identifying suitable interventions for research by considering such factors as the prevalence of the disability that the intervention is intended to assist, the extent of potential improvements in outcomes for people with disability, and the type of future cost that the approach has the potential to alleviate. Consultations with stakeholders would help the NDIA identify suitable interventions for research.

An established evidence base on early intervention could then lead to the development of guidelines to assist the NDIA in its decision making in relation to whether people with disability obtain early intervention support under tier 3 of the NDIS.

Funding a proven early intervention approach

Where the NDIA is satisfied that there is good evidence that a particular intervention is safe and leads to beneficial outcomes for people with a disability, and has assessed the intervention to be likely to be cost-effective, the NDIA should allocate funding to it.

Such funding would:

- be additional to that allocated to people with disability for their ongoing care and support under needs-based assessment
- not be able to be cashed out by people with self-directed care packages (as discussed in further detail in chapter 8).

6 Similar arrangements have been established in respect of the Australian Government's Better Start for Children with Disability initiative, which commenced from 1 July 2011 (FaHCSIA 2011a).

Box 13.11 **The (autism) Early Intervention Services Providers Panel**

The Australian Government Helping Children with Autism package includes funding for early intervention services for children aged 0 to 6 with an autism spectrum disorder of up to $12 000 (which can be used until the child's seventh birthday to a maximum of $6000 a financial year).

Early intervention services that are eligible for funding are defined according to Roberts and Prior (2006) as: behavioural interventions; development and social learning interventions; therapy-based interventions; and family-based interventions.

In order to access funding, families must first contact an Autism Advisor in their state or territory for information about their eligibility. Eligibility criteria include the age of the child, the availability of a diagnosis and meeting residency requirements. Eligible families can then access service providers from an Early Intervention Services Providers Panel.

Services providers seeking membership of the Panel must submit an application to FaCHSIA. Their applications will be accepted if the provider meets certain eligibility criteria, which include meeting best practice guidelines on the following:

- demonstrating that its services are 'value for money'
- conducting assessments of the child before, during and at the end of the intervention to determine the effectiveness of the intervention and to inform the decisions made by the family or carer about those interventions that might best suit their child and family
- meeting reporting requirements against performance standards and specified outcomes of the early intervention service including — wait lists, time to receive services, unmet needs, cost of providing services; complaints; staffing; barriers to service delivery; workforce capacity issues; and performance against the purpose and planned outcomes of the strategy
- collecting performance indicator data through client surveys on increased access to early intervention for children aged zero to six years diagnosed with an autism spectrum disorder; improved overall well-being of eligible children; improved strategies and skills of parents and carers to meet the needs of eligible children; and improved capability of eligible children to attend full time formal school and participate in everyday life.
- FaHCSIA has commissioned a review by the Australian Autism Research Collaboration of autism interventions funded under the Helping Children with Autism package. The review seeks to: provide a comprehensive list of autism interventions based on the latest evidence based research; provide a basis for appropriate assessment by FaHCSIA of provider applications; not concerns raised by families and practitioners, based on feedback from peak bodies, about current practices and ineligible interventions; develop a process for FaHCSIA to ensure that children are receiving effective evidence-based interventions and that families are able to make more informed decisions about available interventions.

Sources: FaHCSIA (2010a, b, c); NSW Government (sub. DR922, pp. 14–15).

RECOMMENDATION 13.1

Early intervention approaches used by the NDIA should draw on evidence of their impacts and be based on an analysis of the likelihood of cost-effective outcomes. NDIS funding for early intervention should be additional to that allocated to people in the scheme for their ongoing care and support and should not be able to be cashed out under self-directed care packages.

RECOMMENDATION 13.2

The NDIA should build an evidence base on early intervention. It should commence this task by identifying, in consultation with stakeholders, existing or potentially promising approaches for further research.

13.5 Interventions outside the NDIS

Many early interventions and interventions to reduce the risk of disability would continue to be under the control of agencies outside the NDIS. These include agencies responsible for health, mental health, education, early childhood intervention, child protection, housing and criminal justice services, the newly established Australian National Preventive Health Agency,[7] as well as agencies responsible for accident insurance arrangements.

Interventions to reduce the risk of disability cover a wider range:

- Community awareness campaigns associated with the risk of injury and accidents (like safer sports and driving practices). In some cases, these may be targeted at particularly vulnerable populations (such as Indigenous programs addressing petrol sniffing and foetal alcohol syndrome).
- Regulations prohibiting, or setting standards for, activities associated with significant risks of injury and disability. While many of these are obvious, such as motor vehicle standards and driving laws, and occupational health and safety regulations, some, like mandatory fortification of foods, are less so.
- Regulators taking a precautionary approach to the approval of new products involving potentially high risks and where the effects may take some time to appear (for example, requirements for analysis of the safety of new drugs).

7 See footnote 1.

- Public funding or provision of services — such as better roads, health services or child protection services — that help to avoid or screen for the risk of disability.[8]

Participants identified a variety of potentially beneficial interventions in these areas, including:

- increased investment in effective prevention, early intervention and support services for people with mental illness to reduce the disabling impacts of mental illness (Mental Health Coalition SA, sub. 513, pp. 4, 5)
- priority to oral health care [of special needs' groups], to ensure effective preventative care and early intervention (Australian Dental Association sub. 552, p. 10)
- awareness of macular degeneration risk factors, such as smoking, maintaining a healthy weight, protecting eyes from sunlight, fitness and blood pressure to reduce the risk or slow progression of the disease (Macular Degeneration Foundation, sub. 77, p. 11)
- interventions in the education system (Australian Blindness Forum, sub. 438, p. 19)
- early childhood education interventions (Early Childhood Intervention Australia, sub. DR840, pp. 1–2)
- public awareness campaigns to decrease the possibility of people acquiring brain injury (Headwest Brain Injury Association of WA, sub. DR798, p. 4)
- the timely provision of appropriate accommodation for people with disability, which could lessen the time spent by persons with disability in hospitals and residential aged care facilities and enable families who would otherwise care for them to obtain employment (CASA, sub. 54, pp. 1–2).

Economic analyses of such interventions can also illuminate these benefits. For example, box 13.12 presents a cost savings analysis in 2007 of a New Zealand program to prevent rugby injuries. This analysis estimates (actual) cost savings of up to $NZ700 000 and a return on each dollar invested of around $NZ12.70 for the program.

There are many other prospective gains to the NDIS from interventions occurring outside the scheme, some of them not immediately obvious. For instance, child

[8] Some participants considered that premium-setting and the availability of common law redress for negligence necessary to create incentives for employers and motorists to modify their behaviour to mitigate disability risks (for example, Maurice Blackburn Lawyers & Slater and Gordon, sub. 409 and the Victorian Government, sub. 537). This is discussed in chapter 17.

protection agencies could provide services that target vulnerable families where there is a risk of children acquiring inflicted traumatic brain injury or other disabilities due to physical abuse, such as shaken baby syndrome (BIA 2010).

Box 13.12 Cost savings from a concussion management education program in rugby

Gianotti and Hume (2007) assessed the impacts of a concussion management education program in rugby in reducing the number and cost of moderate to serious concussion/brain injury claims to the New Zealand Accident Compensation Corporation (ACC). The program consisted of a RugbySmart educational video and a sideline concussion check tool developed by the ACC. The tool was designed to be small enough to be carried in the coaches', referees' or match officials' pockets and to be waterproof.

To evaluate the effectiveness of the program, moderate to serious claims for rugby concussion/brain injury in 2004 and 2005 were compared with claims in 2003. A comparison was also made for other groups of moderate to serious claims for concussion/brain injury from 1999 to 2005.

Over the two year period of implementation of the concussion management education program, the authors found that:

- new rugby moderate to serious claims for concussion/brain injury reduced by 11 per cent (actual). Rugby player numbers increased by 14 per cent over this time
- new sport moderate to serious claims for concussion/brain injury reduced by 4 per cent (actual)
- non-sport moderate to serious claims for concussion/brain injury increased by 17 per cent (actual)
- the median number of days between a concussion/brain injury and the player seeking medical treatment decreased from 6 to 4 days.

Gianotti and Hume also undertook an investment and cost-savings analysis of the program. They estimated that the:

- cost savings after the program was implemented were $NZ690 690 (actual)
- the two year cost of the program was $NZ54 810, returning $NZ12.70 (actual) for every $NZ1 invested.

It is likely to be impractical for the NDIS to fund or coordinate many of the above interventions. This is mainly because many of them often have purposes other than addressing the impact or risk of disability (as in child protection), or the agencies responsible for them already have well-developed expertise (such as health agencies in respect of early and preventative interventions for people with mental illness). Indeed, the Commission considers that early interventions in respect of mental

health conditions would remain the responsibility of relevant agencies outside of the NDIS (box 13.13, chapters 3 and 18).

Box 13.13 Why early interventions in relation to mental health conditions should stay outside of the NDIS

Mental health conditions cover a spectrum of disorders including substance abuse disorders, anxiety disorders, depression and related affective disorders, bipolar disorders and schizophrenia.

Early interventions occur when a person is first diagnosed with a mental health condition, and are designed to prevent further episodes. They can include: pharmacological treatment; cognitive behavioural therapy; family-based supports; substance misuse harm reduction; and vocational support. For example, the early psychosis prevention and intervention centre (EPPIC) program in Melbourne is targeted at people with psychosis and uses cognitively-oriented psychotherapy as well as family therapy.

As part of its national mental health reform initiatives in the 2011-2012 Budget, the Australian Government proposed additional funding for early intervention and prevention and mental health services for children and young people. These consisted of an additional 90 headspace sites, 12 EPPICs and 40 family mental health support services.

Evidence of the cost-effectiveness of early intervention services in managing the critical phase of psychosis is accumulating (Singh 2010; Yap 2010).

There was some divisiveness in the views of participants as to whether the NDIS should fund early intervention for mental health conditions (with some participants such as Valued Independent People, sub. DR932 and AMA, sub. DR875 considering that early intervention should be funded by the mental health system, whereas others such as VICSERV, sub. DR921 considering it should be funded within the NDIS).

The Commission is of the view that the NDIS should not fund early intervention for mental health conditions for the following reasons:

- Interventions are largely clinical in nature (involving therapy or pharmacological treatment) and they would thus be reasonably provided for in the mental health system.
- Where a person with disability also has a mental health condition, that person would be referred to the mental health system under tier 2 of the NDIS.
- There would be potentially a very large population of people who would be eligible for early intervention for a mental health condition and who would thus place financial pressures on the NDIS.

The problem of delineating the responsibilities of the various agencies for early interventions and interventions to reduce the risk of disability is not a new one. It is

notable that the Queensland Early Intervention Initiative, aimed at funding new services or the expansion of existing services for families with children with a disability, expressly excluded the use of the funds for medication, rehabilitation, school and education support and other services (Queensland Government 2007, p. 14).

That said, there are strong grounds for defined linkages between the NDIS and other agencies in undertaking early interventions and interventions to reduce the risk of disability. The linkages might involve consultation in the funding and design of programs (for example, in relation to inflicted acquired brain injury in children, sporting injuries, early childhood intervention services, and preventative health), the provision by the NDIA of data as appropriate, and the referral of people with disability in tier 2 to relevant government agencies and not-for-profit organisations. As an example, people with disability receiving individualised funded support under tier 3 of the NDIS who suffer from co-morbidities such as depression might also be referred to relevant agencies in the mental health sector for early intervention. Such an approach would require the formalisation of links between the NDIS and health, education and other relevant agencies and organisations.

14 Where should the money come from? Financing the NDIS

Key points

While private insurance policies can provide useful cover for income loss for people experiencing disability, they are not suited to universal coverage of the population against the potential costs of long-term care and support associated with disability.

People with disability need much more certainty about getting reasonable supports over their lifetime and governments need a sustainable revenue source to achieve that. That fact, combined with the need for a stable funding source to underpin a proper governance arrangement for the NDIS, means that funding for the NDIS should not be subject to the annual budgetary review process. It should be hypothecated from a new or existing tax or, better still, from consolidated revenue using a specific formula.

Most tax bases are ill-suited to hypothecation because they are either too small relative to the demands of the NDIS or involve significant inefficiencies. The Commission has ruled out all state and territory government taxes for this purpose. At the Australian Government level, only personal income tax or consumption taxes would be suitable.

However, better still, the Commission favours an arrangement in which the Australian Government should finance the costs of the NDIS by directing payments from consolidated revenue into a 'National Disability Insurance Premium Fund', using an agreed formula entrenched in legislation. This approach means that the Australian Government can use whatever is the most efficient tax financing arrangement at the time, or fund the NDIS from savings in spending elsewhere.

Given the necessity for certainty of future funding for both people with disabilities and to underpin appropriate governance arrangements, the Commission proposes that the Australian Government would be responsible for financing *all* of the costs of the NDIS (and extracting some relief for taxpayers through changes in federal financial relations or national tax reform).

A less preferred option is that all governments could pool funding, subject to a long-run arrangement based on the above formula, and with pre-specified funding shares. This would need to be closely monitored by transparent accounting and penalties for failure to meet commitments.

The Commission prefers a largely pay-as-you-go scheme with a reserve fund to smooth out fluctuations and uncertainty, rather than one that funds the expected lifetime costs of each participant of the scheme as they enter it (a 'fully-funded' scheme). The latter would involve too high an initial cost for the budget, while the former still has the advantage of building up reserves for prudential reasons.

The Commission has proposed sweeping changes to current arrangements for disability services. While many of these changes are to the way the system operates, nevertheless one of the most important changes in a national disability scheme is much more public funding. (How much more is the subject of chapter 16.)

This chapter focuses on how to create a sufficient pool of money for the NDIS — and the options for bringing together 'old' money already allocated to disability care and support by the Australian and state and territory governments, with 'new' money financed in any number of ways.

Section 14.1 discusses the various possible sources of funding for the NDIS, including private insurance. Section 14.2 considers the tax design criteria unique to collecting revenue for the NDIS, while section 14.3 explores the realistic options for collecting revenue. Section 14.4 considers how to achieve greater certainty about long-term support for people with disability, exploring the advantages and disadvantages of hypothecation, and how sustainable revenues might be achieved. Section 14.5 examines whether the NDIS should be funded on a pay-as-you-go basis, partially funded or fully funded. Sections 14.6 to 14.8 discusses how financing arrangements would occur when the most important current financers are state and territory governments, while section 14.9 considers the related question of how to take into account the significant variations in existing state allocations of resources to people with a disability. Finally, section 14.10 considers the feasibility of funding the NDIS given the scale of the commitments.

A warning for readers

This chapter uses a net funding requirement for $6.5 billion and a gross funding requirement of around $13.6 billion as the basis for its calculations (chapter 16). However, the ultimate determination of monetary flows between the Australian Government and state and territory governments will occur some years from now. Those flows will reflect the need by state and territory governments to raise their disability spending efforts, even in the absence of the NDIS, to stabilise rising unmet needs.

In addition, over the longer-run, other fiscal impacts come into play. One source of this will be the steady rollout of the parallel catastrophic injury scheme (the NIIS), which would be funded separately. Currently, many people with disabilities acquired from catastrophic accidents have their needs met by taxpayer-funded disability services. The costs of new cases will ultimately be met by various premium income streams (chapter 18), reducing the cost load for the NDIS of disabilities resulting from catastrophic injuries.

Spending on early intervention is effectively an investment, and would be designed to produce savings in future care and support costs, providing a second source of longer run savings for the NDIS (chapters 13 and 16). A 'snapshot' captures the investment cost, but does not count the later returns.

14.1 The money can only come from several sources

What about private funding?

Some might argue that disability care and support should be funded privately. Most things can be insured. People insure their lives, their capacity to pay mortgages, their travel and their possessions.

People insure against disability too. There are a host of Australian insurers offering insurance payouts for total and permanent disability (including superannuation schemes). These mostly emphasise income replacement, but they also can fund limited care and support. The policies typically relate to disability arising from injury or illness in later life, and to that extent resemble life insurance products. However, some do provide insurance cover for disability at birth. The Commission is aware of one product that provides a lump sum payment of $50 000 in the event of the birth of a child with a congenital abnormality.[1] This amount would be a very small fraction of the extra costs of care and support for a child with a significant disability.

It is important to understand how such insurance products work in order to assess the extent to which they could be potential substitutes for (or complements to) a taxpayer-funded scheme.

These insurance policies are all 'risk-rated' — attempting to set premium levels for groups of people with similar risk profiles. Careful risk rating is required because setting the same premium for a group of people with very different risk levels would mean that insurance would be most attractive to people with the highest risks of disability, while deterring low risks (so-called 'adverse selection'). This problem affected voluntary community-rated (non-risk rated) health insurance in Australia prior to the implementation of lifetime rating (PC 1997).[2] In the previous system, older, higher-risk people were being subsidised by young low risk people. The young stopped buying health insurance, the diminishing pool of insured people was increasingly sick, and premiums were rising as the average risk increased. Therefore, any voluntary insurance policy *must* use risk rating to be commercially viable.

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1 The Baby Care Option provided under its OneCare Child Cover by OnePath Insurance (see product disclosure statement at www.onepath.com.au/personal/insurance/onecare-child-cover.aspx#overview).

2 And it also affected similar arrangements in other countries, such as the community-rated New Jersey Individual Health Coverage Program.

Risk rating takes account of any factor objectively observable by the insurer that affects the risk of a claim. These include lifestyle factors under the control of the person (like smoking or risk-taking activities like scuba diving), but they also take account of factors that are not, like age, sex and pre-existing conditions. Premiums tend to rise steeply with age, or any other factor predisposing a person to a higher claim risk. For example, where parents are seeking cover for disability or ill health of a yet-to-be-born child, the insurer may request information about past cases of birth defects, hereditary medical conditions or any other aspect of the family that may lead to greater risks.

Moreover, while private insurance can cover some risks, it is notable that:

- coverage for some severe disabilities is very modest. For example, a baby with a very severe disability may need lifetime supports exceeding many millions, but coverage would usually be a small fraction of this (for example, the $50 000 dollars cited above)
- children are not in the position to make decisions about whether to insure at all, but rely on the imperfect decisions of their parents
- some risk factors are not observable by insurers, but are known to the person seeking insurance. Insurers know they don't know some things that lead to higher risks for their clients. They respond to this by (a) introducing co-payments to discourage behaviour that may lead to higher risk taking and (b) increase premiums to reflect the higher costs of imperfect risk rating. The latter drives some people with lower risks from insuring. (In other words, even in the absence of laws limiting risk rating, adverse selection still occurs.)

Viable commercial insurance products will be costly for people with high risks, even if those risks are beyond their control (or effectively so). Many people in high-risk groups could not afford to insure. High risk often also coincides with low income, as is the case with many Indigenous or other disadvantaged groups. So risk rating will leave large gaps in coverage among those people most exposed to risks — the price is too high at the point that the risks are apparent. There are several aspects to community norms relevant in these cases. In the main, the community would see the consequences of the fact that some people cannot afford insurance as unacceptable:

- participants in this inquiry — governments, service providers, and people in the community strongly argued that people with a disability should be supported adequately. This is consistent with Australian social norms about giving all people — not just those with a disability — rights and opportunities. Notably, the federal Treasury has adopted a wellbeing framework as its foundation for

public policy analysis, with the most important aspect being that 'society should aspire to provide all individuals with the capabilities necessary to be able to choose a life they have reason to value'(McDonald and Gorecki 2010), a concept drawing on Amartya Sen's work. Against a backdrop of such values, the community would be unlikely to tolerate low quality care were relatives unable to provide it, or to accept that parents and others should be solely responsible for providing support for someone with a disability

- in the absence of a workable private insurance market for many people, the community has a role in pooling risks through the government.

Moreover, some people who *could* afford private insurance will not do so or tend to underinsure (due to poor judgments about risks, or simply consumer miscalculation). Were the insurance for a personal possession — a car for example — then the community would generally be reluctant to act as insurers of last resort for a person failing to take out a policy. However, few in the community would accept leaving a person without supports because they failed to take out disability insurance when they could have.

The implications of the above is that once taxpayer-funded insurance exists as a fall-back (for which there are strong grounds), people have weakened incentives to insure privately, even if they value insurance highly. In effect, the availability of government insurance crowds out private insurance.

Against all of the above considerations, there are grounds for some form of mandatory insurance. That could take several forms. People could:

- pay for a universal system through their general taxes. This is what happens for Medicare in Australia[3] and for the National Health System in the United Kingdom
- contribute through European-style social insurance arrangements. Social insurance is financed typically by employer contributions based on payrolls and by employees through a share of their wages (sometimes with concessions at lower wage levels and with contributions sometimes limited by a ceiling). Regardless of the actual point of collection, wages are the ultimate source of revenue. People who are unemployed or pensioners also pay contributions in some European countries. Governments may provide taxpayer-funded contributions to the insurance pool on behalf of some people (such as those without any means). The funds are pooled and then meet disability supports on a needs basis across the whole population. Contributions are collected separately

3 As discussed later, the Medicare levy only partly meets the costs the health care system.

from taxes, are not described as taxes, and are intended to separate revenue streams from the usual political debates surrounding other budgetary items

- be required to take out insurance with community-rated premiums and minimum coverage requirements. People could purchase policies from insurers offering the lowest premiums and the best services. The government may assist people with low means to purchase insurance.

There are also hybrids of such systems. For instance, where people do not have sufficient means to make premium payments under the third option above, the government might set up a separate public insurer — like Medicaid in the United States. Or people may choose to add to 'basic' supports by taking out additional voluntary private insurance. (This is the main role of private health insurance in Australia.)

However, all of these schemes have a common thread — they all involve *compulsion* to contribute and at a rate that is not related to the expected level of individual risk. All essentially act as 'taxes' (while sometimes being explicitly distinguished from them), because they are mandatory monetary contributions underpinned by government legislation.

In summary, voluntary private disability insurance may well serve a valuable role for people — especially in providing reasonable income streams after the onset of disability. (The Australian Government only provides safety net protection through Centrelink for income loss from disability.) However, voluntary insurance has several weaknesses that make it unsuitable as the sole financing method for disability care and support. That leads to the desirability of government financing.

How could governments finance disability care and support?

Ultimately, governments can only provide new funding for disability by increasing taxes, borrowing, or by cutting some other area of spending. Of these, borrowing is not a realistic long-run option. This is because the NDIS is not a conventional investment that produces a financial return to cover the initial investment — but rather an expense incurred year after year. Borrowing for such spending is equivalent to either taxing people in the future or withholding other services from them at that time. For that reason, government could not sustain this strategy as a permanent financing strategy. (Borrowing could have a role over short-run periods where there was insufficient revenue to meet the commitments of the NDIS.)

That leaves financing from taxes and from reducing government spending in unrelated areas.

The idea of cuts to other areas of spending has some attractions. Were governments to be starting with a blank slate in determining its funding priorities, there would be a strong rationale for provision of disability services to be one of its highest priorities. That reflects:

- the strong ethical and wellbeing underpinnings of policy in this area, and the genuinely low capacity of people to self-fund their support needs in the bulk of cases. While often not cast this way, the value of insurance offered by the NDIS and the wellbeing effects it bestows can be conceptualised as economic benefits — a matter we explore further in chapter 20.
- that funding of the NDIS could also be expected to generate economic benefits of a more conventional kind. Inadequate and poorly structured funding of disability supports can have adverse economic impacts, for example, by undermining the informal system of care that underpins much of the affordable provision of support to people with a disability (chapter 2). The NDIS would address that. Moreover, tiers 2 and 3 of the NDIS, complemented by other measures (such as reforms to the Disability Support Pension and employment services), would be likely to raise labour market participation rates by people with disabilities and carers with some fiscal savings. (Those savings are not factored into the estimated costs of the NDIS in this chapter or chapter 16, but are discussed further in chapter 20).

The essential message is that a well-rounded assessment of the net benefits of a properly structured and funded disability system would place it ahead of many other spending areas. To that extent, savings in other spending should be seen as a viable financing option and not just tax increases.

14.2 Tax design criteria

There are many criteria for determining the appropriate tax financing method — sustainability, certainty (for government, people with disabilities and taxpayers), simplicity, administrative and compliance costs, equity, economic efficiency, community acceptance, and a capacity to avoid unintended consequences. In general, these criteria apply to *any* tax, regardless of where government spends the money. However, there are two aspects of the NIIS and NDIS that have special implications for tax.

In the case of the NIIS, there are grounds for the taxes imposed on people and institutions to take account of their choices about risk (such as buying a motorcycle rather than a car). That suggests that a mandatory insurance premium would be an appropriate ‘tax’ in that context (chapter 18).

In the case of the NDIS — the focus of this chapter — there are several particularly important aspects that affect the desirable form of taxation.

The importance of certainty for people

There are strong arguments for a *certain and sufficient* source of future revenue. People with disability usually know with certainty that they will need care and support for the rest of their lives. What they are uncertain about is whether they will get the support they need — and indeed, currently they can almost be certain that they will not. That reflects the fact that public funding has not been historically adequate (chapter 16) or stable (figure 14.1). It is implausible that these variations reflect changing patterns of demand for services for what are often stable requirements for support. (The extent of uncertainty appears to be significantly greater than for health care services.)

These aggregate variations in funded spending reflect the fact that:

- governments develop new initiatives in disability periodically, which have significant effects on growth rates for the life of the initiatives. Sometimes the effects of these initiatives have significant impacts on growth in a particular jurisdiction (such as in the NSW Government's *Stronger Together* initiative). (See section 14.7 for more information about patterns of spending by different jurisdictions.)
- governments with low initial average spending tend to make additional efforts to increase
- decisions about how to allocate overall government budgets reflect a battle of competing interests, and from time to time extra packages are announced. As one participant commented: 'shortfalls in disability funding are also determined by political priorities' (National Federation of Parents, Families and Carers, sub. 28, p. 3)
- revenues vary depending on the growth rate of the economy. Governments borrow during downturns in the economy, and build up surpluses during the good times
- there is no buffer of funds that allow disability spending to smooth variations in funding from government. The only 'buffer' is further informal (unpaid) support.

Moreover, variations are even greater at the local level, where what people get is a lottery depending on the availability of local resources and the origin of their disability.

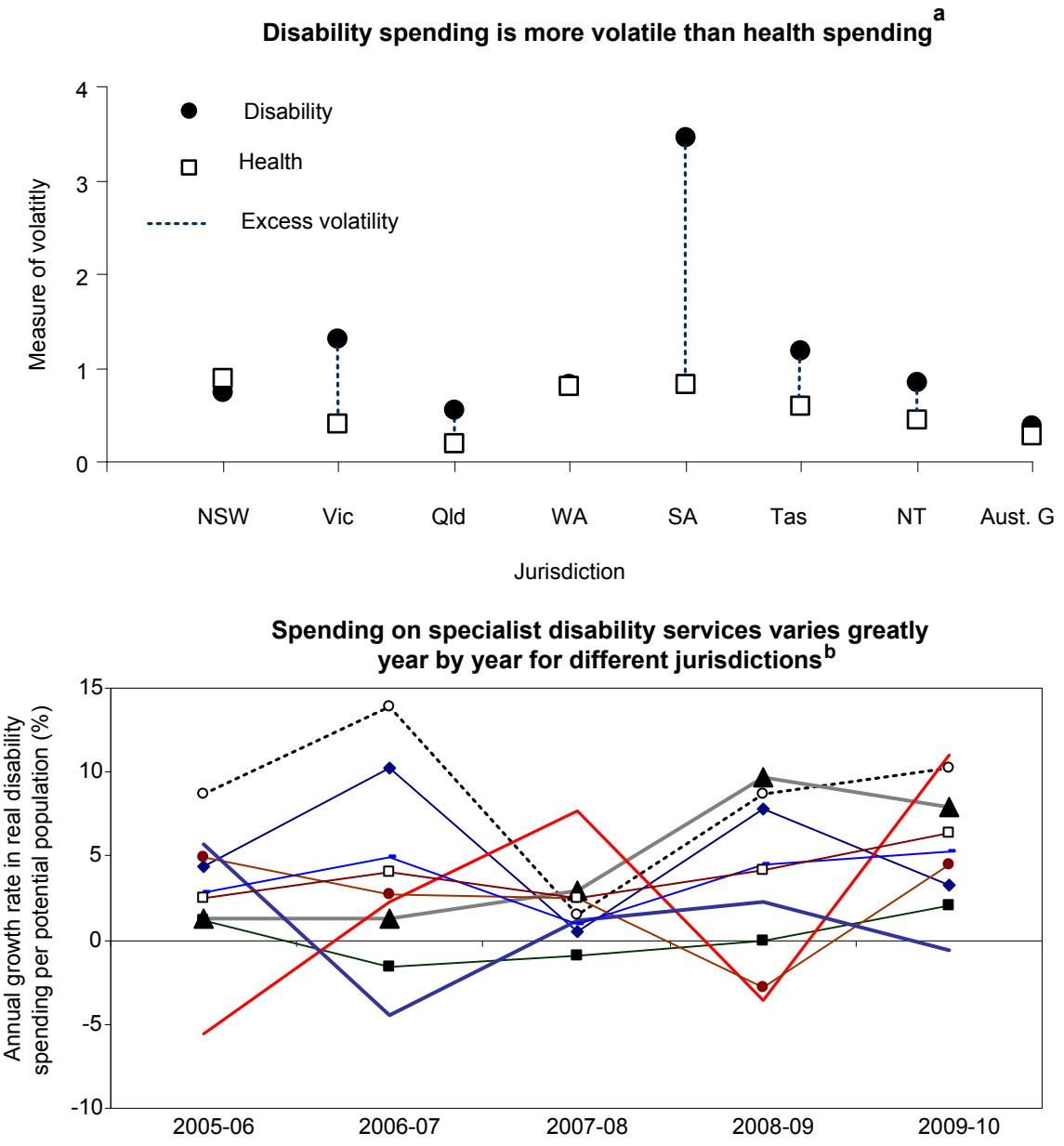
In many other (though not all) critical government expenditure areas, people can be guaranteed to get benefits that do not vary significantly depending on where they live. The age pension, family tax benefits, the disability support pension and other government income support arrangements are paid at the same rates (with a few exceptions) wherever people are in Australia. These payments do not change suddenly from year to year and they are not budget-capped (that is, if more people become unemployed, they will still be able to get unemployment benefits at the same rate as others).

During the global financial crisis, there was an increase in the number of age pensioners (as investment returns and other income fell). The Australian Government did not respond by cutting back on the age pension, and nor did it create an age pension waiting list or limit the age pension to those who applied before a certain date when the 'specified' funding ran out — all features present in the current disability system. The Commission is proposing that, like the age pension, the NDIS should be seen as core government business.

The lack of certainty about future disability funding imposes significant costs on people. The size of that effect is hard to measure, but it is worth considering examples in everyday life to illustrate how much people value certainty in many lesser circumstances:

- people are willing to pay a premium for fixed versus variable mortgage rates
- people rank job security as one of the most important aspects of their job, and are willing to accept less income to achieve higher security (for example, for a recent survey see the Society for Human Resource Management 2010)
- people insure against risks, even ones that represent small shares of their lifetime expected income (for example, holiday insurance).

Figure 14.1 **An illustration of uncertainty**



[a] The measure of variability is the coefficient of variation of (the standard deviation of a series of data divided by the mean of that series) the annual growth rates of real spending per potential service user. Disability spending is by all governments on specialist disability services per person with a profound or severe disability. Health care spending is from all funding sources and is per person in the Australian population. The data used to calculate the variability measures are from 2004-05 to 2008-09 (given that the latest AIHW data for health spending is for 2008-09). The measure of uncertainty only relates to the aggregate volatility of resources for taxpayer-funded disability supports, and does not pick up the fact that there are many other sources of uncertainty at the individual level (such as when someone applies for funding or where they live). [b] Data on yearly growth rates on disability services relate only to specialist services covered under the National Disability Agreement for the period from 2005-06 to 2009-10. Individual jurisdictions are not identified since the purpose is to show variability as simply as possible. The Northern Territory is excluded from the graph, because there was a very large (unprecedented) growth in spending in 2009-10 that masked the patterns for other jurisdictions.

Data sources: AIHW (2010a, p. 20) and SCRGSP (2011, Excel attachment for chapter 14).

Notably, most of the above strong preferences for greater certainty relate to relatively short horizons. For many people with disability, the horizon is to death. In addition, the consequences of insufficient future benefits are worse than in many other cases where people seek assurance — uncertainty about the timely replacement of an ageing and increasingly worn-out wheelchair; unmanageable carer pressures; and the fear of inadequate or low quality care without respect or dignity for a partner or a child. Accordingly, while people value the supports they might get today, they value highly the guarantee that they will get adequate supports tomorrow too. This implies that a properly designed NDIS must reflect those preferences.

A long-run approach to managing costs and outcomes

One of the key elements of the Commission's proposed NDIA is that it looks forward, and ensures that it systematically manages *unwarranted* demand and price pressures on an ongoing basis (for example, over-servicing, weaknesses in assessment methods and assessor practices) to ensure that overall costs are reasonable and efficient. Those reasonable and efficient costs, combined with the reality that reserves will be necessary to address uncertainty, are the basis for setting 'premiums'. In effect, the process of managing costs and revenues is like a dance of a pair of ballroom dancers — they are not always in the same position, but the pattern of their movements are orderly and they always remain linked.

This approach to the scheme has other forward-looking aspects, such as discovering those interventions that lead to good outcomes, and the scope to assess where initial investments might reduce future liabilities (for example, a modified vehicle that saves on future attendant care and taxi costs).

These forward-looking approaches are not fully (or in some cases, at all) feasible where future revenue sources are subject to the fickle processes of annual budgets. For example, long-run revenues may fall below expected efficient levels during (potentially long) periods of budget austerity, or when there are changes in budget priorities. In that case:

- the incentives to create a well run *system* for continuous cost management — a considerable managerial investment — are weakened if the results of that system are often undermined by effectively whimsical determinations of revenues bearing no systematic relationship to efficient costs. Indeed, it may lead to perverse cost minimisation behaviours. In a planned and coherent scheme, good cost management can add to the funding reserve, providing additional protection for a later 'rainy day'. However, if the scheme anticipates that government will

automatically take back any surplus, then it reduces the NDIA's incentives for ongoing cost minimisation

- the scheme would need to cut spending in ways that would deny people appropriate assessed supports for indeterminate periods — re-introducing the significant rationing that is one of the persistent flawed features of the current arrangements. Uncertain funding at the individual level also re-creates many of the structural problems of the current scheme, such as incentives in tightly rationed state schemes to overdramatise problems in order to get a 'fair' amount of the diminished pool (the 'misery' Olympics as one participant put it)
- the motivation in a disability scheme to make tradeoffs between investments now and savings later could also be undermined if there is too much uncertainty about future revenue. As an illustration, say that a vehicle modification costs $25 000 and would save $35 000 in present value terms in future transport subsidies in a system in which people get their assessed needs met. However, if in fact, future revenue may not be sufficient to actually fund those long run assessed needs and could only fund $23 000 in present value terms, it would not make sense to make the vehicle modification from a fiscal savings perspective
- it could weaken the capacity for making effective therapeutic interventions. Such interventions may require sustained funding over several years — for example, in addressing learning problems by someone with an intellectual disability. Erratic future funding may mean that insufficient resources are available to maintain the intervention at the right intensity to maximise its effect. As an analogy, this would be like varying the dose of a drug from the clinically recommended amount because the clinician did not have access to enough money to fund the appropriate drug regimen.

Implications

People with disability need a financing source with several characteristics:

It needs to be sufficient

The tax revenue must be high enough to meet people's reasonable year-to-year needs, as assessed using the tools described in chapter 7. This means that the tax rate must be high enough and that the tax base is growing at the same long-run rate as the costs of the NDIS.

It needs to be predictable

Given the concerns raised above, the revenue must not vary substantially from year to year or be subject to significant risks that future governments will cut it as part of changing budget circumstances. That implies the need for governments to make a binding commitment that makes it very difficult for them to divert the funding subsequently to other areas of spending. Where a specific tax is used to achieve the commitment, this is called 'hypothecation' — specifying the way that revenue from a given source is spent. The Councils of Social Services in Australia (sub. 369, p. 11) noted that 'there must be a clear "fund" specifically for the proposed disability scheme'.

Treasury departments and tax economists often question the appropriateness of hypothecated taxes. In responding to proposals for taxes to be earmarked for environmental purposes, the Henry Tax Review remarked:

> While [hypothecation] may promote public acceptance of a tax, it constrains the ways in which the government can allocate limited revenue between competing priorities. It can result in revenue being spent on hypothecated programs when it could have delivered greater social benefit if directed elsewhere, including through lowering existing taxes. (2010, vol. 2, p. 355)

This argument is often appropriate, but it needs to be balanced against the historically fragile nature of public funding for disability supports (despite the strong permanent rationale for those supports) and the economic and social value of greater certainty of funding. For example, Barr observed that it was hard for social expenditures outside of health to command as much public attention as healthcare:

> Health care is better placed in this context, since many of its users are articulate and well-connected. It is no accident that social care, not health care, is sometimes described as the 'Cinderella service'. (2010, p. 369)

To put hypothecation in perspective, while governments often allocate budgets for a short period, sometimes they engage in medium-term earmarking of revenue. For instance, the Australian Government has committed funds over four years to the Aboriginal and Torres Strait Islander Education Action Plan.[4] A former government made a ten-year commitment to fund a 'hardened and networked army'. While governments may revoke such spending commitments, the fact that they make them at all is a reflection of a basic principle: There can be efficiency and other gains

[4] Indeed, the Australian Government made a five year commitment of funds under the National Disability Agreement (though that commitment cannot provide certainty of funding across disability services because the Australian Government is only a part funder of the system). Of course, for parents of a child with lifelong disabilities a five year commitment is of limited comfort.

from a predictable set of outlays over more than the current budget year. Accordingly, the issue at stake is not earmarking per se, but its duration and the degree to which it is ironclad. Given the characteristics of disability system, that principle justifies earmarked funding of disability supports without a time limit, and with a greater degree of certainty than the (revocable) commitments governments sometimes make over medium terms periods under current budget processes.

The need for a stable revenue source also suggests that a funding buffer is required, since there will be annual fluctuations on the cost side. In those periods, the NDIS would need to run down a funding 'buffer' to meet those needs, while it would need to build up the reserve level at other times. (It would be prudent to accumulate reserves in the early stages of the implementation of the NDIS, when the outgoings would be limited.)

Quite apart from the need to offset volatility in tax revenues, the tax rate should be set to take account of downside risks, noting that it would be harder to change tax rates flexibly from year to year compared with commercial insurance. These risks arise from uncertainty about the actual costs of the NDIS when it commences, particularly stemming from uncertainties about the utilisation rates of services, future cost pressures and the actual uptake of services by people with disability. For instance, it would be difficult to know with precision what reasonable assessed needs would be (at least in the start-up phase of the scheme).

An implication of the need for a buffer is that there will need to be an investment fund for the reserve, overseen by the NDIA and by government (a matter addressed in chapter 9).

14.3 Tax and revenue options

Where is tax policy going?

The NDIS will be an enduring scheme. The tax landscape of Australia is not likely to remain fixed, and the likely policy directions should at least be considered in choosing an appropriate financing method. While most of the review's recommendations may not be implemented soon (or ever), the recent Henry Tax Review (2010, Overview, p. xvii) has outlined the desirable direction of tax policy. It argued that governments should concentrate revenue raising on four 'robust and efficient' tax bases:

- personal income, assessed on a more comprehensive base
- business income, with more growth-oriented rates and base

- private consumption, through broad, simple taxes
- economic rents from natural resources and land, on comprehensive bases.

The review also recommended the ultimate removal of a host of taxes, such as transfer taxes (like stamp duty), payroll taxes, and fuel and registration taxes. The Henry Tax Review also recommended that the Medicare levy should be removed as a separate component of the income tax system, and the revenue it raised collected as part of standard income tax (2010, vol. 2, p. 32). It indicated that:

> … the levy does not apply to all taxpayers and it interacts with the marginal tax rates in complex ways, creating high effective tax rates at some income levels. (2010, vol. 2, p. 30)

More generally, the review proposed simplification of income tax, with the recommended removal of a host of tax offsets. This suggests that any new hypothecated tax would be swimming against the tide of the review's proposed tax policy. That need not matter if there is a special case — but the expert views need to be considered.

What did participants think?

In contrast to the general thrust of the Henry tax review, many participants in the early stage of this inquiry proposed either supplementing the existing Medicare levy or creating a new levy as a dedicated funding source for the NDIS (box 14.1). However, after release of the Commission's draft report, there was also strong support for a hypothecated fund financed through consolidated revenue.[5]

What are the options?

There are several broad ways of ensuring that the NDIS is properly funded.

A hypothecated tax

The first is to introduce a single hypothecated tax, using an existing tax base, like income tax (model 1 in figure 14.2). The Medicare levy is an example — of sorts. It is an addition to income tax, with some concessions for some taxpayers. However, since this levy does not come close to funding health care, it is not a genuine example of hypothecation. That said, the Medicare levy could be supplemented to (fully) fund the NDIS.

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5 For example, the Business Council of Australia (sub. DR1015, p. 1), Perth Home Care Services (sub. DR906, p. 2); CORDS (sub. DR749, p. 19), the Centre for Cerebral Palsy (sub. DR680, p. 2); and DANA (sub. DR1010, p. 36).

Box 14.1 **Participants' views about financing**

There are two obvious options: 1. through a specific purpose tax/levy as with Medicare, our allegedly universal health system 2. from general revenue as for our allegedly universal education system. The level of funding required is probably beyond what could be raised through lottery profits. (Bob Buckley, sub. 111, p. 17)

But it mustn't be funded through yet another levy, which is simply a flatrate tax and therefore inequitable - poor people pay a greater proportion of their income than rich people. Funding should come from general taxation revenue - if we need to increase tax, then do it as part of the stepped-rate income tax, not the flat-rate Medicare levy. (contributor to Australians as Mad as Hell, sub. 153, p. 14)

[Funding should be through] (i) a separate levy similar to Medicare or (ii) an increased Medicare levy which would be set aside for people with a disability and their carers and targeted only at people with a disability and their carers. (City of Kingston, sub. 177, p. 8)

We believe that it should be similar to the Medicare levy – imposed by a similar taxation method. It must be seen as being different to and separate from the Medicare levy. We believe that it must be independent of the Medicare levy. (Valued Independent People sub. 201, p. 7)

There should be a clear and transparent method of funding the SCHEME through treasury with the funding being sourced via a levy, such as a Medicare levy, that could be imposed on all working Australians. (Spinal Cord Injuries Australia, sub. 214, p. 11)

I think a levy similar to the Medicare levy is the only way to go. (Sally Richards, sub. 26, p. 6)

For congenital conditions, ANGLICARE supports incorporating a scheme as part of the Medicare levy so that it is equitably shared across the community. (Anglicare, sub. 270, p. 24)

In relation to the funding source for the national disability insurance scheme the ANF agrees that income tax is the most appropriate for spreading the load proportionately across the income levels. Were the option of adding to the Medicare levy to be chosen the ANF does not consider that a name change would be appropriate as suggested – Medicare and Disability Levy – as this would contribute to the marginalisation of disabled people and reduce the sense of integration into mainstream activities and services. (Australian Nursing Federation, sub. 335, p. 2)

We also note the Commission's leaning to the funding of this scheme through direct payments from consolidated revenue into a "National Disability Insurance Premium Fund" vs the implementation of a tax levy as a second option. The Association would support the scheme being funded directly from consolidated revenue, given recent community backlash over the implementation of a flood levy and carbon tax. (Nulson Association, sub. DR829, p. 3)

The Council supports the Commission's proposal to pursue a system funded by general revenue rather than a levy. (National People with Disabilities and Carer Council, sub. DR1026, p. 7)

(Continued next page)

Box 14.1 **(continued)**

We believe this scheme should be funded from consolidated revenue, not a levy or new tax. (Del and Kevin Smith, sub. DR882, p. 1)

Participants were divided as to whether they would prefer a contribution of those who are in the workforce and should pay a levy like the Medicare levy or whether they prefer that everybody pays through the GST. That way the NDIS would not be based on a charity principle, because everybody, including people with disabilities in receipt of the NDIS, would make a contribution to it. The other advantage of a GST like contribution would be that the burden of financing this scheme would not fall on those of working age. In view of a hugely increasing aged population it may be very important to distribute that burden more evenly. (Dignity for Disability, sub. 360, p. 9)

We have advocated a taxpayer contribution to the costs of health, ageing and disability though a Medicare-style health and disability services levy that rises slowly as the population ages. The levy would increase automatically as the percentage of mature age people in the community rises, with contributions coming straight off their gross incomes. (Councils of Social Service in Australia, sub. 369, p. 10–11)

Such a scheme could be based on a 'surplus', levied against tax payers in a similar fashion to the Medicare levy surplus, or funded from income tax revenue generally. (Law Council of Australia sub. 375, p. 5). Because disability can affect anyone at anytime, the most equitable way is based on a form of social insurance. This would be most readily achieved by adding a disability surcharge to the Medicare levy or from general revenue. (Yooralla, sub. 433, p. 11)

Australian society should pay directly for disability support through a specific tax like the Medicare levy. Set at between 1% and 1.5% of income (excluding the Medicare surcharge), the Medicare levy brought in $8.2 billion in 2009-10 , a figure projected to rise to $8.47 billion in 2010-11 and $10.5 billion by the 2013-14 financial year. (Australian Federation of Disability Organisations, sub. 495, p. 39)

The National Disability Insurance Scheme be funded by additional amount attached to the existing Medicare levy. (Physical Disability Australia sub. 543, p. 8)

Occupational Therapy Australia support the notion of a national disability funding scheme, funded via an increase to the Medicare levy, to improve disability care and support in Australia. (Occupational Therapy Australia, sub. 510, p. 19)

My concern is only increased when you suggest that there might be mandatory contributions similar to superannuation, or a Medicare-style levy … In proceeding down such a path of using the tax and transfer system, the Commission will invariably create anomalies and injustices [citing high marginal and effective tax rates for low income people in the Medicare levy because of its exemptions]. (Adam Johnston, sub. 55, p. 8)

Northcott supports that the financing system for this scheme must be a national system, and not just a Council of Australian Governments (COAG) agreement or initiative. To contain costs and ensure sustainability, the scheme should have fixed parameters, and there should be periodical assessment as to changing needs and level of funding. (Northcott Disability Services, sub. 376, p. 21)

Notably, the Treasury raised the possibility of effective hypothecation to health, so the principle could be extended to disability:

> However, to increase the transparency of the costs of health, a share of revenue raised from personal income tax could be allocated to health expenditure. This allocation could be made whether or not the funds were hypothecated formally to health. (Henry Tax Review 2010, vol. 1, p. 31)

While income tax is one base for a new hypothecated tax, there are many other possible candidates. However, many of these would not be appropriate.

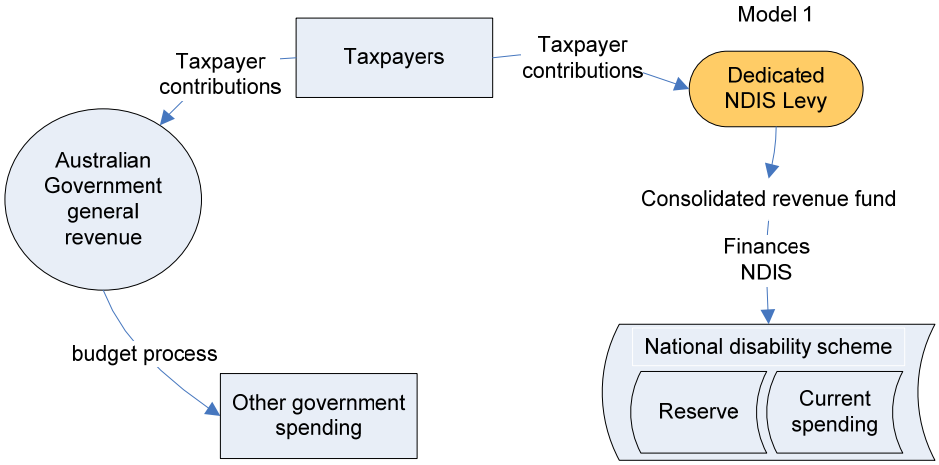
A $13.6 billion gross NDIS cost implies that the corporate tax rate would rise from its current 30 per cent to around 36 per cent.[6] This is problematic because it is contrary to current policy directions for lower capital taxes, which are particularly inefficient given high levels of capital mobility. This is shown by the evidence that for every dollar of revenue raised by an increase in the corporate tax rate, around 40 cents is lost through inefficiency (table 14.1). The 40 cent estimate relates to a small increase in the tax rate. Large tax increases of the magnitude shown above would entail losses of more than 40 cents in the dollar.

Other Australian Government taxes — taxes on non-residents, taxes on imports and various excise taxes — would have to increase dramatically to fund the NDIS. For example, income tax rates on non-residents would need to be increase by seven-fold. This calculation abstracts from any effect of the increased tax rate on taxable income, which can be substantial. For some tax categories, there may be no feasible tax rate that could raise $13.6 billion dollars, simply because tax revenue may start to fall past some tax rate.

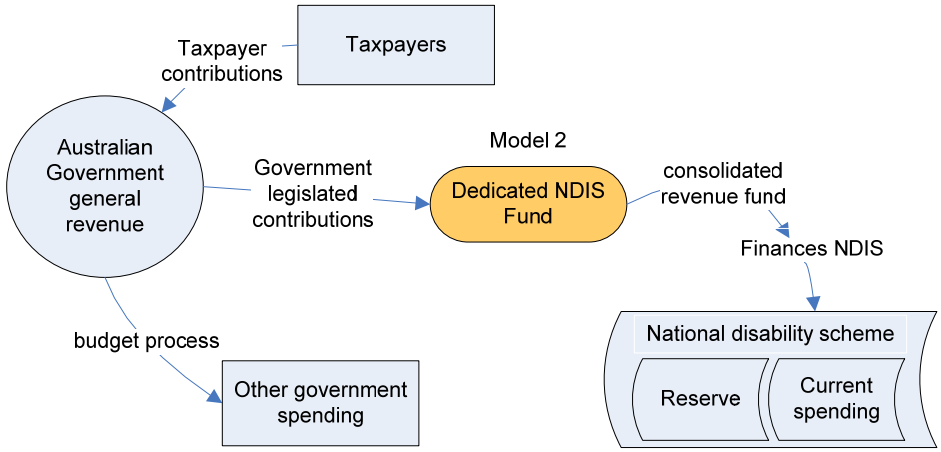
6 We have used the gross rather than the net cost of the NDIS estimated in chapter 16 as the base for these calculations, since the Commission is recommending that the Australian Government fund the full costs of the scheme, obtaining offsets elsewhere.

Figure 14.2 **Two broad government earmarking approaches**

Model 1: Hypothecated levy



Model 2: Earmarked fund from consolidated revenue



Similarly, state and territory governments have relatively limited tax options for raising any significant additional revenue (table 14.2). This is why state and territory governments receive most of their finances through distribution of the GST through the Commonwealth Grants Commission process or through special purpose payments made by the Australian Government. Funding of the NDIS would require large increases in the existing state and territory taxes. With the exception of land taxes and municipal rates, such increases would be highly inefficient. Moreover, different states and territories have varying capacities to increase tax rates, which would make it difficult to coordinate the collection of the very significant amounts needed.

Table 14.1 **How do Australian Government taxes fare?**

Tax	*Trend growth rate 2000-01 to 2009-10*[a]	*Revenue raised in 2008-09*[b]	*Increase if $13.6 billion additional revenue needed*[c]	*Measure of inefficiency of tax (MEB)*[d]
	%	$m	%	%
Personal income tax	5.3	123,943	11.0	24
Company income tax	8.3	62,784	21.7	40
Income tax paid by superannuation funds	10.4	9,201	147.8	24
Total income taxes levied on non-residents	6.4	1,860	731.2	..
Goods and services tax (GST)	7.0	42,626	31.9	8
Total excises and levies	2.7	25,137	54.1	..
Taxes on international trade[e]	2.2	6,289	216.3	-3
Total	5.8	278,002	4.9	..

[a] This is the trend rate based on regressing the logged values of the taxes against a time trend. [b] Data for 2009-10 are now available, but given that the cost estimates for the NDIS are for 2009 (in line with the ABS SDAC), the revenue estimate for 2008-09 is used. [c] This is the percentage increase in tax revenues were an additional $13 billion of revenue required (roughly the gross revenue requirement of the NDIS). [d] This is the 'marginal excess burden' of a tax. It is the loss to the economy in cents for every additional dollar of revenue raised. So, as an example, a value of 8 means that for an additional dollar of revenue, 8 cents is lost through inefficiency. The loss from large changes will be more than the MEB. [e] The MEB for international taxes is low when the tax increase is 5 per cent — reflecting the fact that the current tariff rate is below the modelled optimal tariff rate. However, the optimal tariff rate ignores the potential for trade retaliation, and the fact that the increase required to finance the NDIS would require tariffs to be more than doubled. MEBs roughly rise disproportionately with increases in the tax rate.

Sources: Commission calculations; KPMG Econtech (2010), ABS 2010, *Taxation Revenue, Australia, 2009-10*, Cat. No. 5506.0.

Given the limitations of the above tax bases, realistically there are only several possible tax bases for a standard hypothecated tax. As noted above, the most straightforward is to use personal income tax as the base. The Australian Government would create a disability care and support premium — as a hypothecated contribution to the NDIS. In effect, this would be like the Medicare levy, but with its marginal tax rates 'aligned' so that an increment would be added to the existing marginal income tax rates (rather than with the current complex exemptions) and with enough revenue to meet the full needs of the NDIS. The increment to meet the *gross* costs of the scheme would be relatively significant, which is another reason why the Commission favours the other option discussed below. (The Business Council of Australia also expressed concern about using a hypothecated tax — sub. DR1015, p. 2.)

We provide an illustration of how a hypothecated tax could work in figure 14.3, using the Henry Tax Review's preferred structure for personal income tax as the starting point. (A variant on this model could add a supplement to the existing Medicare levy, recognising that wide ranging tax reform has not yet been implemented along the Henry Tax Review lines. However, that would entail more significant inefficiencies.)

Table 14.2 **How do state, territory and local government taxes fare?**

Tax	*Trend growth rate 2000-01 to 2008-09*	*Revenue raised in 2008-09*	*Increase if $13.6 billion additional revenue needed*	*Measure of inefficiency of tax (MEB)*
	%	$m	%	%
Employers payroll taxes	7.4	16 922	80.4	41
Land taxes	11.8	5 565	244.4	8
Stamp duties on conveyances	7.7	9 526	142.8	34
Gambling taxes[a]	4.2	5 028	270.5	92
Taxes on insurance	6.6	4 505	301.9	67
Stamp duty on vehicle registration	4.5	2 026	671.3	38
Municipal rates	6.7	10 938	124.3	2
Local government and other state & territory taxes	3.8	17 804	76.4	..
Total[b]	6.2	61 376	22.2	..

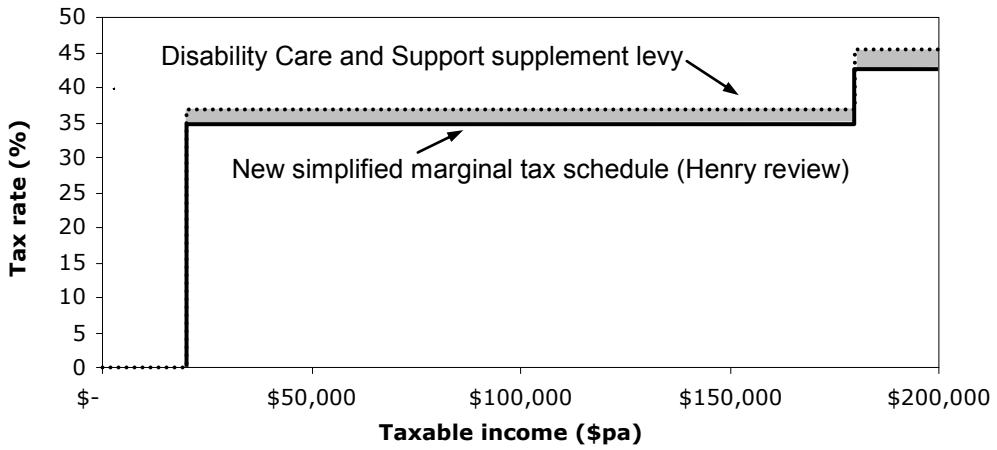
[a] As noted by KPMG Econtech, the excess burden estimates for gambling taxes are likely to be overestimates given the negative impacts of gambling on some people. [b] Excludes taxes on other levels of government and on public corporations.

Sources: Commission calculations; KPMG Econtech (2010), ABS 2011, *Taxation Revenue, Australia, 2009-10*, Cat. No. 5506.0.

Another option suggested by some is to use consumption spending as the tax base. In theory, this could be achieved by creating a broad-based cash flow tax as raised by the Henry Tax Review (2010, vol. 1, p. 276), changing the present GST rate, or eliminating some of the exemptions applied to the GST, and again set aside the additional income as a hypothecated amount for the NDIS. Such consumption taxes are generally efficient, and the Australian consumption tax rate is set at a low level compared with other countries that use value-added taxes. However, existing consumption tax arrangements are entrenched and are unlikely to be changed in the near future. Realistically, a hypothecated tax would probably relate to taxable personal income.

Regardless, under section 81 of the Australian Constitution, any revenue collected by a levy would have to enter the consolidated revenue fund (CRF), but would then be earmarked for disability supports.

Figure 14.3 **How an income tax levy might work**



Data source: Adapted from Henry Tax Review (2010, p. 30).

Commitment of consolidated revenue

Beyond the two tax bases described above, there are few tax bases big and efficient enough to support a new hypothecated tax sufficient to finance the NDIS. However, an alternative strategy is not to specify any specific tax base, but leave it to the Australian Government to divert a specific funding amount from consolidated revenue into an earmarked fund for the NDIS (model 2 in figure 14.2).

This has several major advantages from funding the NDIS through a special account from consolidated revenue:

- it can take account of any efficiency improvements in the tax system over time. For instance, if the tax system moves in the directions suggested by the Henry Tax Review then many taxes would be removed, and revenue would be mainly collected through revised corporate and personal income taxes, a broad-based consumption tax, and resource rent taxes. All of these would be more efficient than current taxes. Given the possibility for future tax reform, there could be substantial gains from not locking in a particular tax base as the source of revenue for the NDIS
- it leaves it open for government to fund the NDIS by cutting what it sees as wasteful or less necessary expenditures, without any tax increase at all. The Business Council of Australia favoured using existing revenue sources from all Australian government, natural growth in tax revenues and, if necessary, cutting

> ‘other lower-priority expenditures and poorly performing programs’ (sub. DR1015, p. 2)

Given the size of Australian Government expenditure (around $340 billion in 2009-10 and projected to be $415 billion in 2014-15), there is merit in considering re-prioritisation of existing spending in preference to higher taxes as a way of financing the NDIS.

It is well known from the various Treasury Intergenerational reports that the Australian Government will come under increasing fiscal pressure as a result of an ageing population (Treasury 2010 and earlier Intergenerational Reports), and the arrangements for financing the NDIS would need to be considered against that background.

However, the earmarked funding approach leads to a quandary. A genuinely hypothecated tax can be a way of increasing certainty that government would provide adequate funding in the future, a point emphasised by several participants (box 14.1 and Les Cope, DR846, p. 1). Just identifying the tax as something like a ‘National Disability Insurance Premium’ would make it hard to eliminate the tax or to divert it to other purposes, since most would accept the legitimacy of dedicated public funding in this area.

Could government achieve certainty of adequate insurance coverage without a hypothecated tax?

One option would be for the Australian Government to specify in legislation a special account — the ‘national disability insurance fund’ that would earmark consolidated revenue to the NDIS. Such special accounts are already a customary feature of Australian Government budget processes, and the determination of the amount can be based on a variety of criteria, including methods for calculating the amount to be spent, often triggered by eligibility criteria (as is the case for social security payments). Special Accounts can be established under an Act of Parliament or by a written determination of the Finance Minister. Given the need to lock in funding as much as possible, the former would be used for the NDIS.

The Commission proposes that the legislative provision would require the Australian Government to earmark funds according to the prescribed formula. The elements of this approach that ensure a stable revenue stream are its legislated basis and that the amount earmarked for the fund would not be an absolute amount of dollars, but act effectively as a rate applied to a growing income base. Without the latter, the amount of revenue would fall relative to the costs of the NDIS, and making up the shortfall would require new legislation — leaving too much scope for future governments to renege on a stable source of revenue. As much as

possible, the formula should be as simple as possible and transparent (a point made by the Business Council of Australia, sub. DR1015, p. 2).

Labels can matter

Labels can sometimes be important in public policy. Some participants did not want to label the revenue source as specifically for people with disability; and others did not like the idea of insurance because it might stigmatise disability. However, in a European context, the idea of insurance for costly life events is now customary and widely defended (Danzon 2004, p. xiii). In that context, there is some value in using the word 'premium' instead of tax or levy because it would make it clear that every taxpayer is getting a service — namely an insurance product, that provides him or her with disability supports if they are required. The fact that there are costs associated with meeting people's support needs does not make any judgment about the value of people with disability.

The label 'premium' is most obviously suited to model 1 above. Nevertheless, the concept of insurance and premiums could still feature in the second model, by naming the fund something like 'National Disability Insurance Premium Fund', with the Australian Government's transfers from consolidated revenue being explicitly framed as premium contributions on behalf of all Australians. A key advantage of a hypothecated gross financing arrangement underpinned by legislation and branded as a secure funding source is that it makes it difficult for subsequent Australian Governments to renege on that funding (an issue discussed later).

Does the Australian Government have the power to raise hypothecated revenue for disability care and support?

The Commission understands that the Commonwealth would have the power to collect a hypothecated tax using its taxation powers, would be able to provide disability benefits (with benefits interpreted as either money or goods and services), and would face no restriction on its capacity to make payments from the Consolidated Revenue Fund to the NDIS.[7]

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7 While the High Court's recent decision in *Pape v Federal Commissioner of Taxation (2009) 238 CLR 1* did not restrict the Commonwealth's power to spend, it requires that the spending be supported by the Commonwealth's legislative powers or its executive power, rather than by what was previously thought to be an unrestricted 'appropriation' power in s 81. That said, various legislative powers would support spending on disability related matters, as would the executive power in certain circumstances. Under s. 51(xxiiiA) of the Australian Constitution, the Commonwealth may make laws providing for, amongst other things, 'sickness and hospital

14.4 Ensuring sustainable returns

The NDIA's main financial responsibility is to manage the costs of the scheme. The Australian Government's main responsibility is fiscal — to collect the required revenue of the scheme. This means that unlike private insurers, the capacity to raise 'premium' rates (in the NDIS, effectively higher tax rates or permanent cuts in other spending) would be a matter for government (though it would take advice from the NDIA).

Were the Australian Government to commit to meeting the annual (efficient) costs of the scheme, regardless of whether this required a tax rate increase, then the fiscal problems for the scheme would be resolved. (Whether such an approach would be desirable from a public policy point of view is another matter. We touch on some of these problems when considering the desirability of fully-funding of the scheme in section 14.5.)

However, there are compliance and administrative costs in changing tax rates, and political costs in increasing them. Moreover, in reality, an easy mechanism for changing revenue annually might encourage less than diligent oversight of costs. And past tax policy reveals that successive Australian Governments tend to prefer stable or decreasing tax *rates*.[8] Accordingly, the NDIA cannot rely on governments to fund reasonable costs in the future if these entail significant hikes in tax rates. In any case, there will be other calls for more general tax rate rises to fund the substantially increased health costs associated with ageing. Achieving tax rate increases for disability might be hard in such a fiscal environment.

In that context, it may be necessary for any scheme to limit tax rate increases over a reasonable future period. Assuming the desirability of a stable tax rate, then that rate applied against some tax base must:

- ensure tax revenue that is enough to fund the expected present value of the payments of the scheme over a reasonable time horizon
- build in reserves to take account of various risks, arising from:

benefits, medical and dental services … , benefits to students and family allowances'. While specialist disability services are not listed in the Constitution, by inference they share qualities with the other categories, and would be covered. The Commonwealth can set the qualifications and disqualifications for the receipt of such benefits or services. The notion of 'benefits' is a very broad one and is not confined to providing money; it may encompass the provision of a service or services, as well as goods.

8 For example, the first two marginal tax rates for personal income tax were 15 and 30 per cent from 2005-06 to 2009-10 (and this will continue through to 2010-11). And, where there have been movements in personal and corporate tax rates, they have generally been downwards.

(i) variations in annual revenue needs because of temporary cost and utilisation pressures (for example, the actual incidence of disability may vary randomly from year to year around an average)

(ii) unanticipated permanent shocks (such as cost pressures, changes in prevalence rates and long-term changes in the capacity for people to provide informal support as family structures and preferences change)

(iii) incorrect assumptions about people's real needs, so that there needs to be a special reserve for cases that legitimately lie outside the benchmark range.

The information to do this would be the same that the scheme's actuaries would use in managing costs (discussed in chapters 9 and 12), except that they would have to do it correctly in the first year in which the tax rate was determined (assuming again that a fixed tax rate is being set). That is a hard task because the scheme would need funding prior to the time when the information for making good projections would be available. Even setting a large provision for reserves might not adequately address the uncertainty.

As a result, it may be necessary for the government to fund the scheme through general revenue in the initial few years, with an agreement by government to shift to a sustainable tax arrangement by a specified date. One of the primary values of the Commission's proposal to launch the NDIS in some regions in the first year of its operation (chapter 19) is that this should allow more accurate calibration of the appropriate rate of contribution into the national disability insurance fund.[9]

An illustration of sustainable returns using different funding formula

It is possible to illustrate the implications for revenue flows and potential fiscal gaps from using different funding formulas. The analysis below is based on funding the NDIS using a hypothecated levy based on personal income or consumption. However, the analysis is just as relevant to a legislative requirement to transfer funding *equivalent* to some share of personal income or consumption from consolidated revenue to the National Disability Insurance Premium Fund, even if the Australian Government levied no actual hypothecated tax. The calculations are stylised, rather than attempts to model exactly the fiscal gaps — but they

9 The Queensland Government (sub. DR1031, pp. 13–14) raised the question of how the scheme might respond to unanticipated demand. An earmarked amount from consolidated revenue would assist in that regard, but the trials in several regions would also allow more reliable cost estimates to underpin any formula.

approximate some possible scenarios.[10] The calculations (initially) assume a pay-as-you-go scheme.

The first simulation examines the gap between NDIS revenue and outlays if the consumption and income tax rates were set at the rates that provide just enough revenue to meet costs in each year, and then compare the rates in 2050 with 2010.[11] If the tax base grows sufficiently with NDIS costs, then the differences between the 2050 and 2010 rates should be small.

The assumptions underlying the calculations are set out in box 14.2. They use the underlying methodology of the Australian Government Treasury's Intergenerational Report (IGR), supplemented by some additional assumptions about factors relevant to disability. The model is relatively simple and not comprehensive,[12] with its goal to show some of the issues that government and the scheme actuaries will need to address in devising the appropriate tax rate.

[10] For example, the analysis ignores some future anticipated fiscal savings associated with the growing role of the NIIS in funding catastrophic injury cases (which initially would be covered by the NDIS), and the longer-run returns from early interventions (chapter 16).

[11] It should be emphasised that the choice of end date is illustrative. The assumption in the bottom two rows in table 14.3 is that tax rates would be fixed to 2050. This end date is consistent with the Intergenerational Report, which is the source of many of the assumptions of the model. Of course, the tax rates could be reviewed and recalibrated more regularly than this assumption implies. However, the qualitative results would be similar were a shorter time horizon to be used in the illustration.

[12] Some of the simplifying features of the approach we illustrate here are that it (a) uses only approximate tax bases (b) uses just one overall prevalence measure, with no account for changing prevalence rates for different types of disabilities (c) assumes relatively smooth long run paths to the long-run (usually following wither exponential or logistic growth curves) (d) ignores more complex stochastic features that would be relevant to a proper risk model. For example, some series may follow a local linear trend (Harvey 1990), in which random errors affect the trend growth rate as well as the level of any relevant variable. There may also be correlations between errors in one period with others, and between errors affecting one variable and those affecting others. For instance, on the latter score, if unemployment rates were to rise, then labour force participation might also fall due to the 'discouraged worker' effect. While there are limits to what can be modelled, reserves are intended to cover all of these stochastic elements.

Box 14.2 **Illustrating fiscal gaps with fixed tax rates**

The basic projection methodology is similar to that of the IGR.

The tax bases used for estimating the GST revenue and personal income tax are approximated using ABS National Accounts data. The personal income tax base is estimated as National Accounts household income comprising wages and supplements, interest, dividends, and social assistance (but excluding imputed rental income, which is not taxed). All data are in constant 2010 prices. Actual tax bases will vary from these, with the implication that the tax rate increases needed to fund the NDIS would vary from those shown. The point of this analysis is not the actual tax rates required, but a qualitative illustration of the impacts of various scenarios associated with the financing of the NDIS.

It is assumed that the consumption and household income ratios remain as a constant share of gross domestic product (GDP) over the long run. The long-run shares are estimated as the average of the ratios from 2000-01 to 2009-10. Real GDP was estimated by assuming:

- long-run populations from the ABS series B population projections. This involves growth of 1.1 per cent trend growth per annum, only slightly below the IGR 2010 estimate of 1.2 per cent per annum
- a change in the ratio of the working age population (those aged 15 years and over) to the total population (from 80.9 per cent to 83.3 per cent), based on the ABS series B population projections (and close to the IGR 2010 estimates)
- a shift in the participation rate from 65.3 per cent to 61 per cent from 2010 to 2050 (based on ABS Labour Force estimates and Treasury 2010, p. 11). (The participation rate is the ratio of labour force to working age population — those aged 15 years and over.)
- a shift in the unemployment rate from 5.47 per cent to 5 per cent from 2010 to 2050 (based on ABS Labour Force data and Treasury 2010, p. 2)
- a shift in average hours per worker from 34.1 to 33.6 hours from 2010 to 2050 (Treasury 2010, p. 13)
- labour productivity growth in the economy as a whole of 1.6 per cent per annum (Treasury 2010, p. 13).

The model allows the average care and support costs for people with disability to differ across age groups, but in the scenarios shown below, it was assumed that the costs did not alter over age.

The model incorporated some general cost pressures due to:

- long-run economy-wide real wage growth, which in itself was equal to long-run labour productivity of 1.6 per cent. The usual Treasury assumption is that in services, such as aged and disability services, wages follow the national productivity growth rate (in order to keep labour in the sector), but that these wage pressures are not significantly offset by productivity growth in the service sectors concerned. The model allows this assumption to be varied

(Continued next page)

Box 14.2 **(continued)**

- the withdrawal of informal carer supports as family structures and expectations change. The annual percentage effect of this, V, is:

$$V_t = 100 \times \left(\frac{1-\lambda(1+\delta)^t}{1-\lambda(1+\delta)^{t-1}} - 1\right)$$

  where λ is the share of total hours of support provided by informal carers, and δ is the annual growth rate in average unpaid carer hours per person with a disability (assumed to be negative), with the assumption that any shortfall in informal hours must be made up by paid support. In this model, it is assumed that λ = 0.75 and δ = -0.002 (that is -0.2 per cent), but clearly alternatives could be used. It should be noted that the withdrawal rates of informal care under the NDIS is assumed to be lower than the high rates present in the current under-funded system. That reflects the fact that informal carers will be much better supported in the NDIS

- the impact of other cost pressures, such as rising expectations of standards of support and above economy-wide average wage increases as labour shortages bite. In this illustrative model, we have assumed a cost pressure rate of 0 per cent per year in the base case, but describe what might happen under an alternative scenario.

The numbers of people with disability were estimated by applying the age-specific disability rates from the 2009 ABS SDAC to the ABS series B population projections. It was assumed that age-specific disability rates remained fixed over time. However, population ageing means that the prevalence of disability among people aged less than 65 years increases (slightly) based on the B series. The model allows a general trend factor to moderate up or down the age-specific rates (but this is zero in the base case). The overall severe and profound disability population numbers are multiplied by a fixed adjustment rate of around 0.6, as a simple proxy for the relevant measure of disability discussed in chapter 3, and indicating 410 000 eligible people in 2010. (As in other aspects of the model, we have used rounded estimates that are reasonable but also easy to use as a metric against which to measure change easily.)

It is then possible to calculate the notional personal income and consumption tax bases, and for any assumed tax rates, the amounts of revenues and how these compare with NDIS outlays.

Were an income tax levy to be used to finance the NDIS, the actual rates faced by individual taxpayers could be lower or higher than those shown, depending on their income. If the shape of the existing marginal rate schedule was maintained under the NDIS (as in figure 14.3), then some people would pay no tax because they would be under the tax free threshold.

The earnings associated with reserves assume that a real rate of return of 3.5 per cent is used, based on the rate used in the IGR 2010 model and the long term cost report on Commonwealth superannuation.

In the case of a hypothecated levy on personal income, the average pay-as-you-go rate required for budget neutrality climbs from around 1.74 per cent to 1.97 per cent. For a hypothecated consumption tax, the rate for budget neutrality rises from 2.68 per cent to3.04 per cent. Were the government to not change the tax levies over time, but stay with the 2010 rates, there would be increasingly substantial fiscal gaps in later years and a cumulative debt in 2050 of $113 billion (in constant 2010 prices) or a debt of around $3300 for each Australian at that time (and 3 per cent of GDP).

However, a small addition to the initial tax creates a reserve, which then accumulates with later surpluses and with earnings on the balance. This can then be run down in later years as demographic pressures erode the tax bases and pressures (beyond normal wage increases) raise costs. For example, given the parameters in box 14.2, changing the income tax levy to 1.97 per cent or the consumption tax to 3.04 per cent would mean that the cumulative debt in 2050 would be zero (table 14.3). (Of course, ultimately the effects of population ageing on GDP growth will decrease, as will some of the pressures on disability costs. So, in the longer run, it would be possible to have a stable reserve relative to annual scheme costs.)

The implication of this analysis is that adding a suitable margin to the initial tax rate can address long-run sustainability. That margin would be somewhat more than that given in the base case example above because there are various risks to the scheme — (i) to (iii) discussed above. As an illustration, were there to be a genuine risk of additional unanticipated (but legitimate) cost pressures of one per cent per annum, then the constant income tax rate needed to ensure no scheme debt in 2050 would be 2.09 per cent. That is around 15 per cent higher than the rate (1.84 per cent) under the base case.

If subsequent information emerged that suggested that this risk was lower than thought, then the scheme could run down its reserves through dividends to government or by lowering the tax rate. (Getting agreement for *lower* tax rates would probably not be difficult.)

Alternatively, if independent actuarial assessments indicated that, even with risk reserves, the scheme was not sustainable in the long run, and that costs were *efficient and reasonable*, then the NDIA could seek a premium rate increase.

It is also worth spelling out the very substantial fiscal dangers of not controlling costs diligently. Suppose that cost pressures in excess of inflation were 2 per cent per annum and could *not* be justified as efficient and reasonable. If all other settings remained as in the base scenario, and the government did not change rates over time, but stayed with the 2010 rate of 1.74 per cent of personal income, there would

be increasingly substantial fiscal gaps in later years and a cumulative debt in 2050 of $717 billion (in constant 2010 prices) or a debt of more than $21 000 for each Australian in 2010 prices at that time (and around 20 per cent of GDP). That would be untenable fiscally. This is why the Commission has proposed a raft of measures to ensure scheme sustainability.

Table 14.3 **Some illustrations of fiscal consequences under different scenarios**

	Base case	*1% per annum additional cost pressure*	*Participation rate falls to 57%*	*Reduction in age-sex prevalence rates of 0.2% pa*	*No trend decline in informal care rates*
PAYG: Where tax rates are set to equal costs in each year[a]					
2010					
Income tax rate (%)	1.74	1.74	1.74	1.74	1.74
Consumption tax rate (%)	2.68	2.68	2.68	2.68	2.68
2050					
Income tax rate (%)	1.97	2.40	2.11	1.84	1.69
Consumption tax rate (%)	3.04	3.71	3.25	2.84	2.61
If 2010 tax rate is used for all years [b]					
Debt in 2050 ($billion)	113	392	196	42.4	-52
Debt to GDP ratio (%)	3.1	10.9	5.8	1.2	-1.4
Where a common tax rate is used for each year to achieve no long-run debt[c]					
Income tax rate (%)	1.84	2.09	1.92	1.77	1.69
Consumption tax rate (%)	2.84	3.23	2.97	2.74	2.61

[a] These values given the tax rates for 2010 and 2050 that are enough to exactly meet estimated costs in those years. Accordingly, the income tax rate under the base case would need to rise from 1.74 to 1.97 per cent in order to ensure costs were met under a PAYG system. [b] This gives the debt in billions of dollars in 2010 constant prices if the personal income or consumption tax rates for any given scenario are kept fixed at their 2010 rate. For example, under the base case, keeping the income tax rate at 1.74 per cent for all years would lead to a debt equal to $113 billion by 2050 (or 3.1 per cent of GDP at that time). [c] These are the tax rates that were they applied for all of the years between 2010 and 2050 would mean that the net debt of the scheme was zero. In effect, it means that the scheme would be a hybrid of a fully-funded scheme and a PAYG, in that while different generations pay more than each other, their tax rates do not change. For instance, under the base case, setting the rate at 1.84 per cent of personal income means zero debt. That means the rate is 0.1 percentage points higher than the PAYG tax rate in 2010, and in the year 2050, the rate is 0.13 percentage points lower than the PAYG rate that would have applied in 2050.

Source: Commission calculations.

Sustainable returns using an earmarked fund

The above approach applies readily to hypothecated taxes. How would it work for an earmarked fund? There could be several approaches, both underpinned by legislation specifying the exact method, and similar in nature to that described above.

Method 1

The easiest method would be simply to act *as if* the earmarked fund was collected as income or consumption tax and work out the amount to put into the fund annually using the approach described above.

Method 2

While there is a virtue in government committing to a fixed hypothecated tax rate, as discussed above, it presents a problem for the actuaries and treasury officials advising the government because the decision about that tax rate must be made at a single point in time early in the scheme's life. A year or two later, those advisers may be saying that a different tax rate would be better, and a year or two after that, another rate. That flexibility is a feature of commercial insurance products, but it is a problem for governments reluctant to increase tax rates visible to the public. That is why the government would need to build a big margin of error into any scheme whose funding source was a fixed rate tax.

An earmarked fund may allow more flexibility because it might be easier to achieve changes in effective tax rates because the flow into the fund need not be represented as a tax *rate*. It is simply an amount, based on a legislatively specified approach. This approach could permit the use of new information to update the right amount — say on the application of a particular method by the Australian Government Actuary (or overseen by that office). The capacity to use new information in such an approach *must* reduce uncertainty and therefore should reduce the reserves required, and accordingly lower the average implicit tax rate. Moreover, were it deemed desirable, this approach would allow the introduction of full funding for a share of the new incidence of cases in the NDIS along the lines discussed in the DIG report.

An important element in any such updating process would be to avoid incentives for the scheme to cost pad because government was perceived as accommodating. That might arise from soft assessment by assessors or the NDIA, and from excessive wage demands. That is less likely to happen under method 1 above or through fixed hypothecated taxes because, by definition, the tax rate cannot readily be changed, and because reserves would suddenly start collapsing below predicted levels, providing a very visible indicator of a scheme in trouble.

Accordingly, there is a tradeoff in method 2 between its capacity to provide and use better intelligence about the scheme, and its potential vulnerability to manipulation.

14.5 Fully-funded, pay-as-you-go or a hybrid?

Fully-funded schemes allocate to a fund the estimated long-term liabilities associated with care and support for members at entry to the scheme. This is the approach used in the NSW Lifetime Care and Support Scheme for catastrophic motor vehicle accidents. In any pay-as-you-go (PAYG) government scheme, the current group of taxpayers meet the current obligations of the scheme.

Deciding between PAYG and fully-funded schemes (and hybrids of the two) has to balance several factors.

Lowering the risk of insolvency and increasing certainty for current users

Fully-funded schemes do not rely on future premium contributions to fund existing claimants. Accordingly, subject to good management and appropriate determination of premium levels, people using the scheme can be assured that their long-term needs will be met. This approach also compels scheme managers to look forward when managing the scheme to ensure its solvency.

In contrast, if a PAYG scheme has large contingent liabilities, scheme managers would focus on the next 12 months and then the next three years, and not beyond that. Moreover, there is a risk the scheme would make increasingly large claims on the Australian Government's budget. Those claims would be ultimately politically vulnerable, as would be the scheme for coming generations.

Scheme managers can overcome this problem in less than fully-funded schemes, but it requires appropriate governance arrangements, including careful data collection and analysis. The Commission discusses how this would be achieved in detail in chapters 9 and 12. This would be a crucial component of a sustainable scheme.

Fairness for different generations – 'intergenerational equity'?

In any given year, most taxpayers were born more than three decades earlier (simply because workforce participation rates are zero or low for the young). Under PAYG arrangements for the NDIS, people born in later years (younger 'cohorts') would tend to make greater lifetime tax contributions for the same benefits than do older cohorts. That means there are transfers between successive generations. This cannot happen to any degree in private insurance schemes because younger cohorts cannot be compelled to pay for older cohorts.

There are several pressures that can lead to transfers between the generations, but in contemporary Australia, the most important is population ageing. The age distribution of the population is changing, and a much greater proportion of people will be old in future years. They will no longer be in the workforce, and while still receiving some private income, their tax contributions will be less than their claims on government — particularly through the health and aged care system if the current arrangements remain in place (Treasury 2010).

On the face of it, any such transfers — whatever their origin — do not seem 'fair'. Fully-funded schemes overcome this because — so long as scheme managers maintain a solvent scheme from year to year — there is no rump of debt for later generations to meet. For example, the Australian Government's Future Fund is intended to avoid large budget pressures associated with future obligations to meet public sector pensions.

However, from an economic welfare viewpoint, the desirability of spreading tax obligations across generations is not straightforward. At least historically, the lifetime earnings of new generations has significantly exceeded that of older generations. That reflects productivity growth and the increasing levels of age-specific female workforce participation rates. A strong principle of tax policy is that people with higher incomes should pay increasingly higher tax contributions ('progressivity') to improve fairness (so-called vertical equity). The consistent use of that principle would apply to both a population of taxpayers at a given time and to populations of taxpayers at different times. So, in fact, it might be fair for newer richer generations to make contributions to the NDIS at higher tax rates than older generations. As it happens, the pressures of population ageing on the NDIS appear to be small because high age-specific disability rates mainly occur among people aged over the pension age, and the NDIS would not *fund* care and support for these people (chapter 3). The major demographic pressure on the NDIS is the withdrawal of informal unpaid care — with its disproportionate impact on the need for paid formal care (chapter 2). That is one of the reasons why it is critical for the NDIS to support informal carers in their role.

Moreover, the situation is far more complex than this. From a policy perspective, *all* transfers between generations (such as all social welfare transfers, changes in technology, changes in the environment, and private bequests) are relevant to a judgment about whether there is fairness between successive generations. As Doran (2008) has noted:

> To pose the question of intergenerational equity is necessarily to pose a question that cannot be answered meaningfully without considering the entire distribution of benefits and burdens among generations. (p. 23)

So whether it is fair or not to fully-fund the NDIS cannot be determined by looking at the NDIS in isolation. No one has undertaken a comprehensive analysis of intergenerational equity in Australia, so we do not know whether fully-funded or PAYG schemes, or a hybrid of these, would be fair or not.

Efficient taxes

Taxes can reduce efficiency because they affect people's investment, consumption and employment incentives. The Commission has mooted several relatively efficient tax bases. Even so, the inefficiency of taxes can rise more than proportionately with increases in tax rates. This implies that shifting obligations to later years through PAYG arrangements and funding these from higher tax rates would adversely affect economic efficiency — at least one consideration in deciding how much to smooth tax obligations over time (Davis and Fabling 2002). That would justify setting relatively stable taxes over the longer horizon — and that would then entail building up early reserves and running them down later.

However, as shown above, the degree of tax rate variation to finance a scheme is relatively modest, say compared with health care, and there are methods, other than fully funding, that can smooth tax rates.[13]

Planning over a lifetime

One way of thinking about fully-funded schemes is to see how they could operate at the individual level. In effect, people have a notional savings account intended to meet their reasonable long-term support needs. Just as with normal savings accounts, various expenditures can be brought forward (or deferred) as people's life plans change, without that affecting long-run scheme liabilities. In that sense, fully-funded schemes appear to be more conducive for lifetime planning than PAYG schemes.

However, a less than fully-funded scheme could still promote lifetime planning by having sufficient reserves to allow shifts in spending from one period to another. Under this approach, it would be critical for scheme managers to estimate that reserve reasonably well, and to ensure that bringing forward spending by groups of individuals had a quid pro quo of subsequently reducing average spending by those

[13] Moreover, the literature on tax smoothing is contested, with concerns, for example, about the effects of large accumulation of reserves on rates of return, though that is likely to be less important for the NDIS, which builds up relatively small reserves from an economy-wide perspective (Sadka and Tanzi 1998).

groups. This is not a comparative weakness of partially funded schemes over fully-funded schemes, because the same imperative for careful management equally applies to a fully-funded scheme.

This is because a fully-funded scheme would include risk pooling, with accounts only *notionally* allocated to the person (unlike Medical Savings Accounts without risk pooling). So, someone might have an expected long-term liability of $5 million, but with changes in his or her life circumstances might only need $4 million. This person would not get to pocket the saved $1 million. Instead, the money would enter a risk pool to cover the costs of people whose lifetime circumstances meant they needed higher supports than anticipated. Accordingly, the incentives for individuals to be prudent in bringing forward expenditure are as weak as they are in a partially funded scheme. As one insurer told the Commission, managers must administer their schemes with an 'eagle eye'.

Feasibility of a fully-funded scheme

The NDIS will provide supports to hundreds of thousands of people, many of whom receive inadequate resources. A fully-funded scheme would meet the remaining long-term liabilities of these people. In the Commission's proposed design, that would be small for those people approaching the pension age. But for many, such as a five year old with cerebral palsy, fully-funding of long-term liabilities would be very high. Given its costs, a fully funded scheme would only be tenable for new entrants to a scheme — the approach taken in the NSW Lifetime Care and Support Scheme. It would take decades to cover a significant share of people with disability. In this context, the DIG report noted:

> On costing, the resulting Scheme (of new incidences of disability and pre-existing disability) on a fully-funded basis was seen to be both beyond an affordable level of acceptability at the present time (as discussed with the DIG), and also probably not necessary to achieve the objectives of the Scheme. (2009a, p. 7)

As a result, a *pure* fully-funded model cannot realistically be implemented. Its existence is not essential to achieving the goals of the NDIS so long as the scheme has an appropriate governance structure and a capacity for partial funding of future liabilities to build up reserves and to smooth tax rates. There are several ways of achieving sustainable partial funding of future liabilities:

- The DIG report investigated partially-funded coverage of a share of new incidence, while also collecting enough revenue to meet the reasonable needs of the stock of people with disability on a year by year basis. This form of partial funding would depend on the pattern of new incidence.

- An alternative partial funding arrangement would be based on the actuarial and economic determination of optimal reserves, which may not be related to the pattern of new incidence.

On balance, the Commission favours the latter because it explicitly attempts to achieve optimal reserves.

14.6 Federal or Australian Government financing of the NDIS?

The discussion and illustrative modelling above is based on the assumption that the Australian Government would finance the full (or gross) costs of the NDIS, rather than blending its own earmarked funding arrangements with revenue gathered by state and territory governments from their annual Australian appropriations.[14]

It is useful to consider the scope of the funding and spending issues at stake by comparing current commitments to the relevant disability supports with the estimated future ones. The comparison is illustrative rather than precise for the reasons discussed in box 14.3.

The overall spending on disability services and supports relevant to the NDIS was around $7.1 billion in 2009-10, of which the states *spent* around $5.6 billion (table 14.4). State and territory governments *funded* around $4.7 billion of the total current expenditure, while the Australian Government funded around $2.3 billion. Of this, $900 million were transfers to the states and territories through a special purpose payment (SPP).

[14] The main difference between these estimates and those in the draft report is the coverage of Australian Disability Enterprises and some community mental health spending.

Box 14.3 Point in time estimates of budgetary savings from displacing existing programs can be misleading

For practical reasons, the Commission's detailed estimate of the gross costs of the NDIS discussed in chapter 16 relate to one year (2009), yet information about various governments' budgetary spending that is displaced by the NDIA is best examined by considering the forward estimates for disability packages.

In many cases, funding for these packages starts at low levels and ramps up in the following few years. For example, the Australian Government's National Disability SPP funding commenced at $430 million in 2008-09 and is projected to be $1.4 billion by 2014-15.[15] Similar patterns of rapid growth in program spending are apparent for some states (for instance, phase II of the NSW Stronger Together package).

Using a snapshot year for direct fiscal savings from displacing such packages can accordingly hide the substantial resources *about* to be committed (or their reductions, when packages wind down). Given this, the Commission has taken some account of the NDIS's displacement of significant impending budget measures. As an illustration, coverage by the NDIS of significant and enduring psychiatric disability will displace recently announced initiatives for community support in this area. The Australian Government's additional funding for community mental health services is projected to rise eightfold from 2011-12 to 2014-15. The Commission has used the average level of spending over the life of the package, rather than the starting year, as the fiscal offset to recognise the growing scale of commitments in this area.

In theory, the Commission could have produced a comprehensive set of forward estimates that took account of impending program spending displaced by the NDIS, but the available data for all packages at the detail required are not available. In any case, such estimates would suggest a spurious level of accuracy and would fail to clearly communicate the net magnitude of resources required for the NDIS.

The estimate of the gross amount required to meet people's reasonable needs in 2009-10 ranges around $13.6 billion (chapter 16), requiring an additional funding amount of $6.5 billion, roughly twice the actual resources currently committed. Under a shared funding approach, the Australian Government would collect the additional $6.5 billion using the hypothecated tax or the earmarked fund discussed earlier. It would add the new revenue to the existing funding from its special purpose payments and its current funding of its own spending on relevant disability supports and services. The overall funding contribution by the Australian Government would then be $8.8 billion. State and territory governments would be responsible for the remaining $4.7 billion. The Australian Government share of relevant disability funding would rise from 33 per cent to 65 per cent.

15 These estimates are based on successive issues of annual budget papers prepared by the Australian Government (Budget paper No. 3, *Australia's Federal Relations*).

Table 14.4 **Current funding and spending on relevant disability supports** [a]

Level of government	*Spending and funding amounts*
	$ million
Spending[b]	
State and territory governments	5 648
Australian Government (excluding income support and open employment)	1 416
Total	7 064
Funding	
Australian Government transfers to states under SPPs	904
Australian Government funding of own direct spending on disability supports	1 416
Total Australian Government funding	2 320
State and territory governments	4 744
Total	7 064

a The purpose of this table is to indicate the current level of spending on disability services and supports that would be covered under the NDIS, since these are an important offset to the NDIS. In most instances, the data relate to 2009-10. However, box 14.3 indicates why a 'pure' snapshot is not appropriate in this context. Accordingly, in the case of funding set aside for community mental health initiatives by the Australian Government, the Commission has averaged the budget amounts over the forward projections, rather than using the smaller initial instalments. In a similar vein, expenditures that are being phased out, such as the Young People in Residential Aged Care program — are not included. (Chapter 16 provides more details about the difficulties of measuring offsets appropriately and the sources of information for the data above.) The numbers *exclude* various income support and other payments made by the Australian Government, such as the Disability Support Pension, Carer Payments, Carer Allowances, Mobility Allowance and some other payments. It also excludes open employment services. The Australian Government spent $630 million on employment services in 2009-10 (SCRGSP 2011), much of which would be outside the NDIS. However, Australian Government spending in the table includes around $200 million for Australian Disability Employment Enterprises, which will be part of the NDIS. **b** Other than spending covered by the National Disability Agreement, disability spending include relevant community mental health supports, the Autism early intervention program, HACC services for the non-old, taxi vouchers and aids and appliances. Some of these disability costs are not precisely estimated because of (i) difficulties in separating the roles of the Australian Government and state and territory governments (ii) splitting funding between those over and under 65 years, and (iii) removing some spending for lower-level disability supports that would lie outside the NDIS. Some low-level HACC services fall into the latter category.

Were the Australian Government to take ultimate responsibility for the entire costs of the NDIS, then it would need to also collect the additional $4.7 billion formerly funded by state and territory governments (and potentially extract some relief for its responsibilities through changes in federal financial relations or tax reform). The funding pools would be the same regardless of whether the Australian Government shared funding responsibilities with state and territory governments or assumed exclusive financing responsibility.

There are differences and similarities between the two financing responsibilities, and their practical implementation, which involve a raft of issues, including:

- the respective capacities for pre-commitment under a single funder versus multiple funders — the basis for certainty of funding

- the role of intergovernmental financing arrangements
- the relative efficiency of tax collection for state and territory governments and the Australian Government
- which levels of government wield power.

State governments had varying views on these matters, from acceptance to the need for a reliable Commonwealth funding source to rejection or concern about transferring any existing funding from the states to the Australian Government (box 14.4). However, none made detailed comments about financing approaches.

The capacity for pre-commitment

There are strong grounds to 'lock in' future revenue to provide stable funding for the NDIS. A key question is whether governments have a legal capacity to guarantee such certainty.

Intergovernmental agreements for shared funding are non-enforceable

It might seem that the difficulty of obtaining pre-commitment for a shared funding arrangement might be resolved through an intergovernmental agreement. On the face of it, that course of action looks promising. For example, the memorandum of understanding for the recent the *Federal Financial Relations Amendment (National Health and Hospitals Network) Bill 2010*, noted that

> To provide the States with certainty and security about future funding arrangements relating to the GST, the NHHN Agreement requires the Commonwealth to exercise its best endeavours to put in place legislation to prevent it from making any further changes to: the provision of GST revenue to States as untied general revenue assistance; and the amount of GST to be dedicated to health care. (p. 11)

However, expert assessment suggested this would not be a legally binding arrangement (and in fact, new federal arrangements for health care have since been announced):

> However, [the above provision] should be seen as a statement of intent. The provision has no legally binding force because a parliament cannot bind a future parliament. It is likely that that debates about health funding arrangements will remain an ongoing issue. Section 1.3 of A New Tax System (Goods and Services) Act 1999 contained a similar provision. (de Boer and Webb 2010)

Box 14.4 **Views about financing by state and territory governments**

An important consideration for the Queensland Government is that the state should not be worse off fiscally through the funding of an NDIS. … the funding of an NDIS should be based on current state funding contributions and not based on concepts linked to an average national funding contribution. (Queensland Government, sub. DR1031, p. 15)

In advice to the Tasmanian Government, the community members of PDAC assert that the Commonwealth Government should support this recommendation [of a new dedicated source of funds for disability supports from the Australian Government] and guarantee that the additional funding will be recurrent and not subject to reductions over time. Instead, steps should be implemented to ensure that funding will increase as the population of people with disability, the demand for services, and the costs for those providing services, increases. (Tasmanian Government, sub. DR1032, pp. 15-16)

In favouring a model in which the Commonwealth has legislative control of service delivery, the Commission appears to assume that, given the estimated cost of the proposed scheme and the Commonwealth Government's 'capacity for raising efficient and sustainable taxes', the Commonwealth should take full responsibility for funding and managing the scheme. The Commission should [provide greater] consideration of alternative approaches [to funding the NDIS, other than giving the Commonwealth full responsibility for funding]. (Victorian Government, sub. DR996, p. 70).

The Australian Government is best placed to provide the required funding base for the NDIS. … State Governments need to retain access to growing and stable revenue sources, including the capacity to raise additional revenue at the margin. NSW capacity to agree to any transfer of revenue or reduction in taxes or alternative offset arrangements will need to be carefully considered. … NSW agrees that, given the significant level of funding for disability services by NSW, the proposed funding mechanisms will need to ensure the NDIS does not reward states which have previously underfunded disability services. (NSW Government, sub. DR922, pp. 37-38)

While only the Commonwealth has the financial capacity to fund the significant expansion proposed in the draft report and options for Commonwealth funding are a Commonwealth matter, Western Australia does not support funding options that involve a reduction in state taxation or hypothecation of Goods and Services Tax revenue. Western Australia is also opposed to levies on personal income to fund a national scheme. Consideration should be given to additional funding being provided through National Partnership arrangements that set out national goals and an agreed reform program for expanding disability services. (Western Australian Government, sub. DR683, p. 3)

The South Australian Government position is that the next highest priority use of any savings should be a matter for each jurisdictional Government to decide, and will be a matter for negotiation with the Commonwealth should they seek to implement the NDIS following the Commission's final report. In doing so, governments should take into account the merits of removing inefficient taxes. (South Australian Government, sub. DR861, p. 6)

More generally, there is a common general view that intergovernmental agreements are policy instruments not intended to have legal effect or be enforceable by a court (Leane, Myers and Potter 1997). As one commentator pointed out in relation to one major intergovernmental agreement (the Intergovernmental Agreement on the Environment), the heads of power are 'political and moral' (cited in above).

A current government cannot remove the capacity for budgetary decision-making by future governments

More broadly, a government of the day cannot make spending and funding commitments that future governments would be required to meet. The consensus is that they could not do so, barring constitutional change (Williams 1999).

To achieve certainty, that means crafting laws, agreements or arrangements that, while not legally binding, are likely to secure ongoing commitments by successive governments. This must occur regardless of whether financiers are state and territory governments, the Australian Government or a mixture of the two. The question is what arrangement would best do that, and how it would manage the financing responsibilities that it entailed.

14.7 The Australian Government as the exclusive financier for the NDIS

Having the Australian Government as the single financier would:

- provide much greater certainty given the difficulties of coordinating the ongoing financing efforts of eight different governments. Intergovernmental agreements are more fragile than financing arrangements organised by one level of government. Certainty is the prerequisite for a coherent disability system since people with disabilities can then know they will get adequate future supports and it underpins a proper set of governance arrangements
- establish clear lines of funding responsibility. Having one party responsible for financing the NDIS overcomes the inefficiencies of the Commonwealth-State 'blame game' that afflicts shared funding arrangements generally between these levels of governments
- reflect the Australian Government's unique capacity to raise efficient and sustainable taxes of the magnitude required (as discussed above)
- have clear transparency and accountability. People would see the real cost of providing disability supports, and that would provide an additional impetus for proper governance.

In that light, the Commission recommends that the Australian Government would take responsibility for meeting the entire funding needs of the NDIS through the National Disability Insurance Premium Fund discussed earlier. The advantages of this approach would be reinforced if all levels and political persuasions of governments committed consensually to change, creating a new federal social and economic institution (the NDIA). This would establish a brand recognition that would make it subsequently hard to eliminate. That status currently belongs to institutions like Medicare. That and similarly important institutions are creatures of legislation and, while theoretically susceptible to elimination, that prospect is improbable, bar grave maladministration.

While this model would require exclusive ultimate financing responsibility by the Australian Government, that does not rule out changes in federal financial relations that would reduce the costs of introducing the NDIS for the Australian Government, and most importantly, for Australian taxpayers.

Option 1: the 'free ride' option

The Australian Government would create a 'National Disability Insurance Premium Fund', with the Government obligated under new legislation to make premium contributions on behalf of all Australians to that fund from consolidated revenue, with the funding amounts determined by a pre-specified approach, as discussed earlier.

The Australian Government would fully finance the $13.6 billion needed in the NDIS premium fund. They would do this by withdrawing the NDA SPP ($0.9 billion) and their former appropriation to disability spending ($1.4 billion), and use a mixture of tax increases and cuts in non-disability expenditure to fund the residual $11.2 billion.

State and territory governments would no longer need to spend anything on disability services and supports, and would no longer receive the NDA SPP. Without any change in their income, this would allow them to either have a surplus or allow them to spend an additional $4.7 billion on some other state priority.

Assuming that the Australian Government funding source was a new tax entirely, then there would be a significant Australia-wide increase in taxation of Australians (shown in the third last row of table 14.5). It is unlikely that the Australian Government would agree to the resulting increase in overall Australian taxes or cuts in its own spending elsewhere of the magnitude implied. This is especially so given that there are going to be mounting pressures on Australia-wide taxes and spending from population ageing. This option is probably untenable.

Option 2: Giving up some GST money

This is similar to that above, except that the Australian Government would seek to recover the money formerly spent by state and territory governments on disability by no longer paying the NDA SPP and through GST relinquishment, as in the original National Health and Hospitals Network Agreement.

In other words, state and territory governments would lose the $0.9 billion of SPPs and $4.7 billion from their current GST entitlements (or around 10 per cent of the $47.9 billion of GST payments made to state and territory governments in 2009-10).[16] A 10 per cent permanent forfeiture of GST revenue would provide a reasonably predictable source of revenue for the NDIS.

This option has considerable attractions. However, given recent experience with this approach, it is improbable that a new arrangement based on this method would attract consensus.

Option 3: A 'cheque' from state and territory governments

This option is similar to that above, with the exception that state and territory governments would lose their NDA SPP and agree to contribute $4.7 billion to the NDIS premium fund. However, any such contribution would need to be permanent and would need to grow at a rate faster than GDP growth (given the negative effect of ageing on GDP growth and the cost pressure of rising wages). As discussed above, state and territory tax bases are not generally big or efficient enough to act as an ideal source of ongoing NDIS disability funding. Moreover, an intergovernmental agreement for a regular 'cheque' from state and territory governments may be more fragile than other such agreements.

16 Australian Government, Budget Paper No. 3, 2009-10 Budget (p. 111).

Table 14.5 Illustrative impacts of various funding options on governments' budget positions[a]

Spending and income category	*Current*	*Option 1 Free ride*	*Option 2 Give up GST*	*Option 3 A cheque to the Cwlth.*	*Option 4 Cutting SPPs*	*Option 5 Tax swap*
	$m	$m	$m	$m	$m	$m
State and territory budget						
Total outlays (incl. transfers)	165 000	164 100	159 350	164 100	159 350	159 350
Disability spending	5 650	0	0	0	0	0
Other Spending	159 350	164 100	159 350	159 350	159 350	159 350
Transfers to Australian Govt.	0	0	0	4 750	0	0
Income	165 000	164 100	159 350	164 100	159 350	159 350
NDA SPP	900	0	0	0	0	0
Other SPPs	59 100	59 100	59 100	59 100	54 350	59 100
Own Taxes	60 000	60 000	60 000	60 000	60 000	55 250
GST	45 000	45 000	40 250	45 000	45 000	45 000
Budget position	0	0	0	0	0	0
Australian Government budget						
Total outlays (incl. transfers)	280 000	291 240	286 490	291 240	286 490	291 240
NDIS Premium fund	0	13 560	13 560	13 560	13 560	13 560
Disability Own spending	1 420	0	0	0	0	0
NDA SPP to states	900	0	0	0	0	0
Other SPPs	59 100	59 100	59 100	59 100	54 350	59 100
GST to states	45 000	45 000	40 250	45 000	45 000	45 000
Other Aust. Govt. spending	173 580	173 580	173 580	173 580	173 580	173 580
Income	280 000	291 240	286 490	291 240	286 490	291 240
Old revenue (including GST)	280 000	280 000	280 000	280 000	280 000	280 000
New tax revenue	0	11 240	6 490	6 490	6 490	11 240
Transfers from states	0	0	0	4 750	0	0
Budget position	0	0	0	0	0	0
Combined governments' budget position						
Disability spending	7 070	13 560	13 560	13 560	13 560	13 560
Other spending	332 930	337 680	332 930	332 930	332 930	332 930
Total spending	340 000	351 240	346 490	346 490	346 490	346 490
Total taxes	340 000	351 240	346 490	346 490	346 490	346 490
Budget position	0	0	0	0	0	0
Aust. Govt. share of taxes (%)	82.35	82.92	82.68	82.68	82.68	84.05

a Estimates are rounded. It is assumed that governments balance their budgets to make the illustration clearer, and the magnitude of taxes, transfers and spending are also simplified for this reason. The shaded boxes show the spending/funding categories that are show up most clearly the differences between the various options.

Source: Commission calculations.

Option 4: Cutting other transfers to state and territory governments

Under this option, the Australian Government would not attempt to reach any intergovernmental agreement and instead would withdraw SPPs in other areas, with a value equivalent to $4.7 billion. In 2009-10, the Australian Government made payments for specific purposes of just over $60 billion, so the SPP funding pool would certainly be sufficiently large to fund the required state and territory contribution to the NDIS premium fund. State and territory governments would then commit the funds they previously provided to disability to the areas that previously were funded by Australian Government SPPs — a governmental form of musical chairs — but one that would achieve the goal of funding the NDIS through just one level of government.

In theory, if a longer-run perspective is taken, the Australian Government would not need to actually reduce SPPs below current levels. Demographic change means that SPPs will need to increase well above real per capita economic growth to meet growing service needs (Treasury 2010, p. 678). This would give scope for the Australian Government to partly finance the NDIS by not increasing SPPs in line with state and territory governments' future service needs.

However, this approach could prove to be adversarial, whereas the intention of the Commission's approach is to create an institution (the NDIA) and system (the NDIS) in which all levels of government have a stake. Moreover, there would no guarantee that state and territory governments would in fact divert funds to the areas of need originally funded by SPPs. The Australian Government would therefore lose some control over their capacity to ensure other Australia-wide spending priorities were met.

Option 5: A tax swap

Under this option, state and territory governments would reduce inefficient taxes equivalent to their current funding of disability supports ($4.7 billion). In turn, the Australian Government would agree to fully fund the NDIS, doing so by displacing the least justified spending and/or raising new or existing efficient taxes.

To achieve this, state and territory governments and the Australian Government would sign an intergovernmental agreement:

- It would 'commit' the Australian Government to collect the gross amount discussed above, and would place similar obstacles to unilateral action by the Australian Government as those included in the original GST agreement. These obstacles would not be legally binding, but they would still be powerful.

- It would commit state and territory governments to remove one or more of their most inefficient existing taxes, financed by the revenue they would have otherwise directed at disability services. For example, a state or territory government could remove taxes on insurance, remove stamp duties on motor vehicles or a significantly reduce stamp duties on conveyancing.

Option 5 involves lower Australia-wide taxes than option 1 (table 14.5). While option 5 involves the same Australia-wide tax collection as options 2 to 4, it shifts tax burdens from state and territory governments to the Australian Government, which has better scope to levy efficient growth taxes. And, ideally, part of the funding for the NDIS would come from less high priority areas of spending, further reducing any additional taxes on Australians.

Implementing this option would create both a more efficient national economy and a new social institution. Moreover, the reform process would be hard to reverse. State and territory governments want a reputation for good economic management, so reversing decisions about removing or lowering tax rates would serve them poorly (and would be unpopular with their citizens). State and territory government taxes abolished as part of the GST tax reforms, such as the BAD tax and the FID tax, have not been reinstated. Similarly, any future Australian Government would find it hard to undermine the hypothecated disability insurance fund because it would be a very visible arrangement to Australian taxpayers, underpinned by legislation and subject to an intergovernmental agreement.

In summary

Of the five options consistent with the Commonwealth exercising exclusive funding responsibility for the NDIS, the Commission believes that option 5 has the greatest merit. It leads to:

- a more efficient way of financing the NDIS
- a robust revenue base with greater certainty of long-run funding
- a fair scheme with national entitlements, without unfair variations between the states and territories
- no greater a level of Australia-wide taxes than other options. It would also be easier to police and, compared with most of the alternatives, have a lower risk that jurisdictions would not meet their ongoing commitments.

14.8 A pooled funding approach is a weaker alternative

An alternative but weaker (and therefore less preferred) funding option would rely on ongoing contributions from both state and territory governments and the Australian Government. This would still involve the creation of a National Disability Insurance Premium Fund with a legislated formula for determining contributions to the fund. The only difference would be that each year, state and territory governments would need to contribute a clearly formulated and agreed amount to the premium fund. The Australian Government would fund the remaining share. This formula-based approach would provide clarity about the long-run obligations of both levels of government (unlike some other agreements between governments).

This approach would need to be policed by transparent accounting and clear indications to state and territory governments that if they reneged on their commitments, they would face reduced future transfers or other financial penalties. An intergovernmental agreement would spell out the obligations of all jurisdictions.

Regardless of the choice of financing model, it would be critical that the revenue requirements of the National Disability Insurance Premium Fund were fully met.

14.9 Achieving a fair effort by all jurisdictions

State and territory governments make varying contributions to disability services in their jurisdictions from their own funds (table 14.6). In theory, some of the differences could reflect differing levels of effectiveness of state and territories in achieving outcomes for people with a disability, or differing unit costs. Accordingly, a state might spend less per person because they can achieve the same or better outcomes as some other jurisdiction at a lower cost. Apart from the Northern Territory, where unit costs of delivering supports appear to be significantly higher than elsewhere given its significant indigenous population (AIHW 2002, p. 62), neither different efficiency or unit costs have a *major* role in explaining the overall variations in spending between jurisdictions. (The variations in coverage ratios discussed below are a far more significant factor.)

Table 14.6 **Providing specialised supports for people with disability**

State-funded spending under the National Disability Agreement[a]

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*
Own state funded $ per user[a]	32 610	18 437	32 416	27 273	13 896	22 648	15 784	26 526
Coverage (2008-09)[b]	19.0	39.2	15.2	24.6	40.4	20.6	43.5	26.9
Own $ per potential population (2009-10)[c]	6 200	7 232	4 911	6 703	5 617	4 667	6 861	7 146
Spending share less population share (2009-10)[d]	0.8	3.1	-3.3	-0.3	-0.5	0.2	-0.2	0.2
Trend growth rate in real spending from 2004-05 to 2009-10 (%)[e]	6.4	0.9	11.7	6.8	3.3	2.5	1.3	7.0

[a] This uses the 2008-09 user population and 2009-10 own state *funding* of disability supports and services under the NDA (and so does not include the value of transfers from the Australian Government). It includes administrative costs and payroll taxes. Funding of non-NDA disability supports and services by state and territory governments (such as HACC services, community mental health and taxi vouchers) is not included. This is because consistent and accurate data on such funding by each state and territory are not readily available. Since jurisdictions may spend more or less than the average in this area, this would alter the above numbers — but in all likelihood not to a qualitatively different degree. [b] Coverage is the number of users in 2008-09 as a percentage share of the number of people with severe or profound disability aged 0–64 years from the 2009 SDAC. [c] This is own-state spending in 2009-10 per person with a severe or profound disability aged 0–64 years in 2009. [d] Calculated as the difference between a jurisdiction's share of total state and territory expenditure (own-state only) and its share of the Australia-wide population of people with a severe or profound disability aged 0–64 years. Accordingly, a positive number means that a jurisdiction is spending more than its disability population share, and is relatively more generous than the average. [e] This is the trend growth rate estimated by fitting the log of real expenditure (2009-10 prices) using ordinary least squares from 2004-05 to 2009-10.

Sources: Calculations based on SCRGSP (2011) and analysis of unpublished ABS 2009 SDAC unit record data.

Several patterns are apparent in the data. Some jurisdictions serve a much higher share of the potential population of service users. For example, the share is high in Victoria while Queensland has a much lower share.

Typically, those jurisdictions that cover relatively small shares of the potential population spend relatively highly on those they do support. So Queensland spends around $32 000 per service user, whereas Victoria spends around $18 000 per user. The most likely reason for this pattern is that states like Victoria also provide supports for people who are not in crisis, and who need lesser amounts. This brings down their average spending.

There are two useful overall measures of the priority different jurisdictions give to supporting people with disability. First, the average spend per potential user shows that Queensland and Tasmania provided significantly less than many other states, and Victoria, ACT and Western Australia more (not counting the Northern Territory

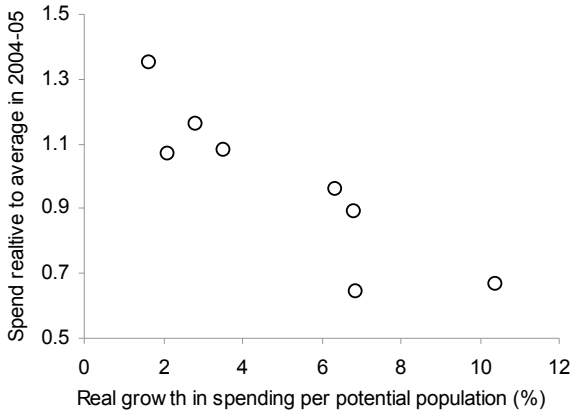
given their higher unit costs). Another way of looking at this is to compare the difference between a state's spending share of total (own-state) spending and its share of the population of people with a disability. Where a state makes a contribution that is out of kilter with its population share, then the value is positive for 'generous' states (like Victoria) and negative for less 'generous' states (with Queensland standing out).

Patterns are changing over time, for example with increasing effort by Queensland. Over the five years from 2004-05 to 2009-10, Queensland has rapidly increased its real spending by nearly 12 per cent per annum,[17] compared with Victoria, where spending has risen more slowly. However, a significant gap still remains. That pattern of catch-up in effort is still occurring more generally (figure 14.4).

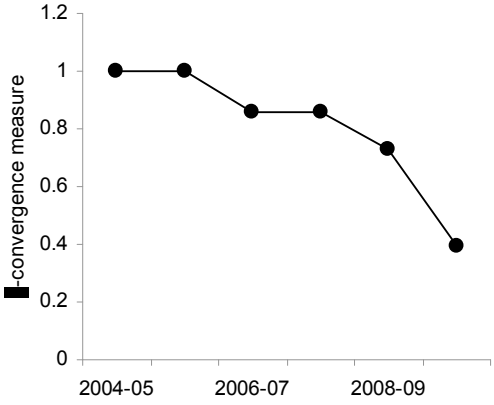
Figure 14.4 **State efforts seem to be converging**

2004-05 to 2009-10

States with originally low spending have experienced the fastest real growth in disability spending[a]



Convergence is genuine[b]



a This shows that the jurisdictions with spending well below the average in 2004-05, showed the greatest trend growth rate in spending from 2004-05 to 2009-10. Spending is measured as real spending on specialist disability services under the NDA per potential population. Sometimes this method for showing convergence can be an artifice (reflecting statistical reversion to mean) rather than indicating a deliberate policy of catching up (Friedman 1992). **b** However, measures of so-called σ-convergence rigorously test whether convergence is present. σ-convergence occurs when the coefficient of variation between states declines over time, as is the case above:

$$\sigma = \left(\frac{\text{var}(S_t) / average(S_t)}{\text{var}(S_0) / average(S_0)} \right)$$, where S is the spending measure defined above.

Data source: SCRGSP (2011).

17 While part of that is population growth, much of it reflects a significant increase in real spending for those needing support.

Notwithstanding the shifting degree of effort by state and territory governments on funding disability support, some jurisdictions would have to increase disability funding a lot more to reach the average level of funding per person provided by jurisdictions as a group (box 14.5). For example, Queensland would have needed to fund around $180 million more in 2009-10 to have parity with the average. These calculations do not account for any variations in unit costs or efficiencies.

Box 14.5 What is the level of unequal effort?

An indication of the degree to which states and territories make differential contributions to funding disability supports can be calculated as follows:

- examine the actual own-state funded budgets to disability, excluding all Australian Government transfers (the state contribution S_i)
- calculate the ratio of total spending by state and territory governments on specialist disability services to the total population of people in the potential population (severe and profound in the illustrative example shown below). This is the weighted average of each jurisdiction's per person spending (ω)
- multiply that average (ω) times the potential population in each jurisdiction. This gives the amount of spending ($\widetilde{S}_i$) each state would provide to disability services if they made the same efforts, but ensuring that the aggregate budget outlays of state and territory governments remained the same.

The value of $(S_i - \widetilde{S}_i)$ indicates the funding deficit or surplus associated with equal effort.

	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*S/Ts*
Actual state funded spending $m S_i	1385	1166	705	414	280	103	62	43	4158
Potential population (P_i) ('000)	223.3	161.2	143.6	61.8	49.8	22.1	9.0	6.1	677.0
Same effort spending $m $\widetilde{S}_i$	1372	990	882	379	306	136	55	37	4158
Difference (net budgetary impact) $m $(S_i - \widetilde{S}_i)$	13	176	-177	35	-26	-33	6	6	0

The calculations are based on the 2009-10 own funding by state and territory governments on specialist disability services (including administrative costs and payroll taxes) under the NDA. The average Australia-wide spending per potential population is:

$$\omega = 1000 \times (\sum_{i=1}^{8} S_i) / (\sum_{i=1}^{8} P_i) = 1000 \times \$4{,}158 / 677 = \$6{,}143$$

The fair allocation can then be calculated as $\widetilde{S}_i = P_i \times \omega$

Sources: Commission calculations, SCRGSP (2011) and analysis of the ABS 2009 SDAC unit record data.

To ensure that all Australians get equal access to disability supports and services under the NDIS, the increment of spending in jurisdictions like Queensland would have to be more than jurisdictions like Victoria. However, it would be problematic if the funding arrangements for the NDIS (based on any of the financing models discussed above) rewarded jurisdictions that have made historically lower funding commitments to disability supports.

Australia has highly developed arrangements for evening out the *capacity* of state and territory governments to provide comparable levels of services. The Commonwealth Grants Commission (CGC) tries to achieve 'fiscal equalisation' by providing state and territory governments with funding from the GST revenue, such that,

> … after allowing for material factors affecting revenues and expenditures, each would have the fiscal capacity to provide services and the associated infrastructure at the same standard, if each made the same effort to raise revenue from its own sources and operated at the same level of efficiency.

Ultimately, there are several mechanisms by which the CGC and the Australian Government can achieve the desired level of contributions by state and territory governments to disability funding.[18] For example, in the pooled funding option discussed above (and recommendation 14.4), one means for achieving outcomes consistent with the equalisation principle would be to:

- calculate the overall amount of funding needed now to provide reasonable supports to people on an entitlement basis (effectively the Commission's estimate of the gross cost of the NDIS in chapter 16)
- calculate the current (share X%) of state and territory government funding of the above amount. X% would be around 35 per cent (that is around $4.7 billion of the required $13.6 billion).
- set an aggregate formula that would ensure ongoing funding of the NDIS on an entitlement basis (as would be used were the Australian Government the exclusive funder, as discussed above)
- applying X% to the funding requirement derived from the above formula as the aggregate state and territory government funding amount (T), which would grow as the revenue needs of the NDIS increased over time
- setting each state and territories' share of the aggregate (T) at its historical share of state and territory funding for people with a disability. For instance, that would mean that, Queensland's share of T would be lower than Victoria.

[18] Noting also that the Australian Government can instruct the CGC to ignore certain payments from the Commonwealth in its determination of the distribution of the GST.

On the face of it, the latter appears to entrench the underperformance of some state and territory governments in this area. This apparent problem would be averted if the Australian Government instructed the CGC to treat state contributions to the fund as the expenses they need to incur under the average policy of the states and territories. This would result in a GST distribution still consistent with the goals of equalisation described earlier, and would not reward underperformers. In effect, apparent over performers would get a greater slice of the GST distribution to spend in other areas, while underperformers would get a lower share than if they had actually made the average contribution. The contribution to the fund, plus or minus the GST adjustment, would result in each state bearing its population share of T.

The same approach could be adopted were a state or territory to opt out of the NDIS funding arrangements.

The CGC took this approach in considering the GST implications of the initial agreement in April 2010 by all governments, bar Western Australia, for new funding arrangements for health and aged care National Health and Hospitals Network.[19] The CGC noted:

> A number of States were concerned that if payments under the agreement were allowed to impact on the relativities, Western Australia would be compensated because its non-receipt of payments would result in an increased GST payment. They said it would be unfair for a State to receive a financial benefit when it had made a conscious policy decision not to sign and, therefore, was not required to meet the accountability, monitoring and reporting requirements of the participating States. … The Commission believes that the treatment of non-signatory States is guided by its average policy principle. Average State policy was to accept the new conditions and the resultant Commonwealth funding. As a result, the Commission has decided that it will treat Western Australia as if it had adopted the average policy of the States, a treatment consistent with the assessment principles used by the Commission. (2011, p. 47)

The process underlying these re-distributive arrangements are complex, but the ultimate point is that there are ways in which to achieve a fair distribution of NDIS gross funds to state and territory governments.

14.10 The funding of the scheme is feasible and manageable

The Commission considers that the funding of the scheme along the above lines would be feasible and manageable, taking into account that:

[19] A new agreement involving all states has now been reached.

- Australia is a wealthy and large economy. In 2009-10, Australians held $7700 billion of net wealth and gross domestic output was $1300 billion. Long-run growth prospects are strong
- Australian taxpayers only need to finance the additional amount of resources needed to fund a proper disability system. And, some of this financing may take the form of displacing less important government spending, without any effect on people's wallets
- the full fiscal implications of the scheme would only be felt by 2018, reflecting the need for a careful transition (chapter 19). The slow start would also allow some 'pre-funding'. The scheme should collect revenue in excess of its immediate needs to build up a significant buffer. Over the longer run, there would also be some downward pressures on the scheme's costs as the NIIS assumed a bigger role for funding of catastrophic injuries and from the effects of past early interventions.

RECOMMENDATION 14.1

The costs of supporting people with a significant disability from year to year through the NDIS should be viewed as a core funding responsibility of government and met from claims on general government revenue (a 'pay as you go' scheme):

- ***but would be subject to the strong disciplines for certainty of funding specified in recommendation 14.2***
- ***supplemented by payments from government to create reserve funds.***

However, the scheme should be managed and reported as if it were a 'fully-funded' scheme in which each year's funding is considered in the context of the scheme's expected future liabilities.

RECOMMENDATION 14.2

The Australian Government should be the single funder of the NDIS. It should direct payments from consolidated revenue into a National Disability Insurance Premium Fund, using an agreed formula entrenched in legislation that:

- ***provides stable revenue to meet the independent actuarially-assessed reasonable needs of the NDIS***
- ***includes funding for adequate reserves.***

If the Australian Government does not adopt that option, it should:

- ***legislate for a levy on personal income (the National Disability Insurance Premium), with an increment added to the existing marginal income tax rates, and hypothecated to the full revenue needs of the NDIS***
- ***set a tax rate for the premium that takes sufficient account of the pressures of demographic change on the tax base and that creates a sufficient reserve for prudential reasons.***

RECOMMENDATION 14.3

The Australian Government should seek offsets for the Australia-wide fiscal implications of the transfer of responsibility from state and territory governments by:

- ***making no further special purpose payments to state and territory governments for disability supports, AND***
- ***signing an intergovernmental agreement with participating state and territory governments that:***
  - ***(a) reduces state and territory stamp duties by the amount of own-state revenue they used to provide to disability and relevant community mental health services OR***
  - ***(b) transfers existing state and territory spending in these areas to the Australian Government.***

RECOMMENDATION 14.4

If the Australian Government does not accept that it should be the sole funder of the NDIS, then it should sign an intergovernmental agreement with state and territory governments that creates a pooled funding arrangement that:

- ***provides a transparent and accountable basis for contributions by each jurisdiction***
- ***uses the aggregate formula entrenched in legislation as spelt out in recommendation 14.2 to ensure the total pool size is sufficient to meet people's entitlements***
- ***ensures that state and territory governments that provide less own-state funding for disability supports than the average should not be rewarded for doing so.***

RECOMMENDATION 14.5

The Australian Government should not provide additional funding to jurisdictions that do not participate in one of the arrangements spelt out in recommendations 14.3 and 14.4.

15 Workforce issues

Key points

- The formal disability services workforce currently employs a wide range of people, including direct support workers, nurses, allied health professionals and case managers. The precise number of workers in the sector is not known. The most reliable estimate is around 70 000 employees (and around 34 000 full-time equivalents). Some other estimates suggest double the number of full-time equivalent employees.
- There is mixed evidence about the current severity of shortages in support workers, but in the future, there is the potential for severe shortages as the disability sector expands and with pressures from population ageing.
- One factor alleviating pressure is that a significant number in the workforce would like to work more hours if these were available.
- Strategies to draw more staff into the sector include:
  - paying higher wages, especially given evidence that current wages are low
  - strengthening career paths and improving the public perception of the industry by promoting disability jobs at the time the government implements the NDIS and by subsidising training
  - promoting better working conditions including more favourable shift lengths
- While a major goal of the NDIS is to relieve the excessive stress on informal carers, such carers are still a critical aspect of the supply of support to people with a disability. There should be greater support for (unpaid) carers through properly funded training and counselling services. Barriers to caring by employees should be reduced by allowing more freedom under the National Employment Standards for people to get flexible leave when they provide care to a person with a disability.
- Professional development in the disability services industry involves experience as well as formal training. While formal training plays an important role in developing a skilled workforce, this should not be compulsory for all employees.
- Screening the criminal history of new employees is an important mechanism in ensuring the safety of a vulnerable group of people. These systems should be strengthened to resemble the working with children requirements, but only apply in situations where a person is vulnerable and the risk associated with service delivery is high.
- There is a danger that a rapid increase in demand for support staff will result in staff shortages as well as wage inflation. A staged implementation and the process through which the NDIA sets the prices of vouchers will help to manage these problems.

Some jurisdictions were candid about the shortcomings of present workforce development plans. For example, the South Australian Government noted:

> … it is known that the disability sector in South Australia faces challenges in workforce development. The sector is characterised by fragmentation with no sector wide strategy for workforce development. (sub. 496, p. 21)

Those shortcomings could be much greater under an NDIS. Addressing current levels of unmet need will require a significant expansion of the disability sector. Given much of this sector is service-based and labour intensive, this entails a corresponding increase in the disability workforce. While attracting and retaining staff is an issue for all industries, the degree of expansion required in the disability sector, along with several other structural factors (such as population growth and competition from other growing industries drawing from similar labour markets) mean labour constraints could potentially undermine the core objectives of the proposed NDIS.

As well as increasing the size of the workforce, meeting people's support needs also requires staff that are suitably trained and experienced to perform the roles required. This chapter examines the issues surrounding attracting sufficient numbers of appropriately skilled staff. It begins with a snapshot of current disability sector workforce (section 15.1). Next, we discuss emerging labour supply issues (section 15.2), suggest some potential remedies (section 15.3 and 15.4) and sum up the likely difficulties of engaging a larger workforce (section 15.5). Finally, we consider problems with staff education, skills and training (section 15.6).

While the disability sector includes a range of different types of professions and services, the focus of this chapter is on non-professional caring and supporting staff, which comprise the majority of the paid workforce. However, the key themes regarding attracting and retaining staff apply equally to specialist services. Specialist staff are briefly discussed at the end of this chapter.

15.1 A snapshot of the disability workforce

Size and composition of the formal disability workforce

The most recent survey of the specialist disability sector found that around 68 700 people directly provide disability services or manage those who do so (this survey is

described in box 15.2).[1] Many of these employees work part-time, so the raw number of people can give a misleading picture of the overall amount of hours worked by people in paid work in this sector. Considering this effect, there are around 34 000 full time equivalent (FTE) positions. However, while these estimates may be the most reliable, other figures suggest that the sector may employ many more people (box 15.1).

Box 15.1 **Employment estimates for specialist disability workers**

It is unclear exactly how many people work in the disability services sector. The best available estimate (estimate 1) is 34 000 FTE staff, which is taken from the SCS (described in box 15.2). The Commission has used a number of alternative measures to test the accuracy of this number.

	Estimate 1	*Estimate 2*	*Estimate 3*	*Estimate 4*	*Estimate 5*
	NILS	Cost-based method a	Cost-based method b	Cost-based method c	Adjusted NSW
Full-time employment equivalents	34 000	72 000	56 000 to 71 000	78 000	36 000

Estimate 2 is produced using total cost estimates for the sector, excluding payroll and administrative costs (SCRGSP 2011). It was then assumed that 75 per of the costs reflected labour costs, that wages were $23 per hour (Australian Government 2010b), full-time hours were 35 hours a week, 52 weeks year, superannuation costs were 9 per cent, and other on-costs were 5 per cent (excluding payroll).

Estimate 3 is a variant on method two. It is based on the full business costs of providing services equal to $36–$45 per hour (as is used in the costings in chapter 16). It was also assumed that full-time hours are around 1800 hours a year.

Estimate 4 uses the same total labour sector costs as method 2 and divides by the average full-time equivalent wage cost from Fisher et al. (2009).

Estimate 5 is based on adjusting the number of people directly employed by DADHC in NSW. As they provide services to about half the population receiving disability services in NSW, this number was doubled. This was then inflated based on the ratio of the population of NSW and Australia (3.1:1).

The ABS Census of Population and Housing could, in theory, be used to derive employment estimates, but ambiguity about some of the job classification categories means that it is probably too unreliable.

[1] Outlets providing disability services also employed other workers who administered the organisations or provided other services. Martin and Healy (2010) estimate that if these workers were included, the outlets providing disability services employed a total of about 97 000 people.

Box 15.2 **The survey of community services (SCS)**

Most of the statistics cited in this chapter are from a recently published survey of the community services sector (SCS) by the National Institute of Labour Studies (Martin and Healy 2010). The SCS provides detailed and previously unavailable data on workers in the disability sector, separate from employees in other parts of the community services sector. The SCS is based on a sample of 397 service providers and 1507 workers. It disaggregates workers into the following categories:

- *Non-professionals:* Personal carers, home care workers, community care workers and Disability or residential support workers
- *Professionals:* Allied health workers and social workers and disability case managers.
- *Managers and Administrators*: Service and program administrators, managers and coordinators.

The SCS overcomes many of the major deficiencies in past data on the disability workforce, which were hamstrung by ambiguities about the term 'disability worker' and failed to distinguish adequately between people employed in the disability area from the community service sector in general.

Nevertheless, like all surveys, the SCS can be affected by non-sampling and sampling errors, which should be borne in mind when interpreting the statistics in this chapter. The survey sampled around 760 of about 3200 disability service outlets, and achieved a 52 per cent response rate (397 providers) — a high response rate compared with most surveys. That said, there is some risk of non-response error because the number of employees may influence the probability of responding to the survey (that is, larger organisations may have administrative staff better able to respond to survey questions). In addition, there is no clearly accepted listing of disability agencies (an observation made by people with a disability when trying to find one suitable to their needs). That could bias results if the number of employees in an agency influences the probability of that agency being discovered for inclusion in the sample frame (that is, it may be easier to find 'big' well-known organisations than small ones). However, Martin and Healy used a very thorough search method to construct the sample frame, so this risk is probably low.

Overall, the SCS yields the best available evidence describing the disability workforce. However, as is the case with all surveys, data about aggregates such as the total number of workers in the industry (table 15.1) will be less reliable than data describing the characteristics of workers. Data at the jurisdictional level are also less reliable, and have generally not been used for that reason.

Source: Martin and Healy 2010

For every person employed on an FTE basis, there were just over 20 people in the potential population of people with a disability (based on the survey of community services — Martin and Healy 2010). However, the actual number of people with a

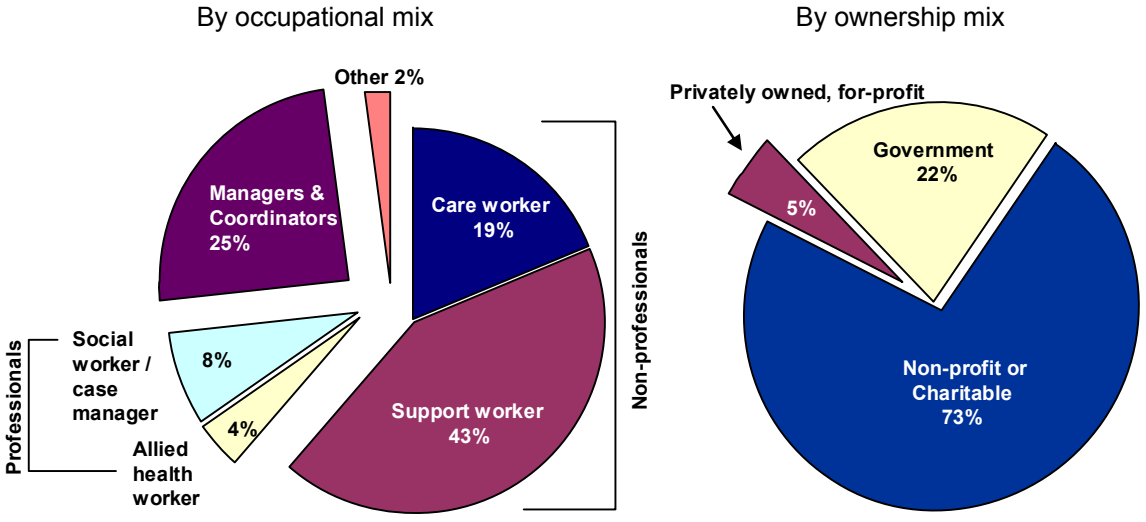
disability receiving services is only a share of the potential population. When that is considered, on average there were around five people with a disability per person employed on a full-time equivalent basis in the disability sector. Of course, not all people in the disability sector deal directly with people with a disability. The largest employment category is non-professional workers (62 per cent) followed by managers and coordinators (25 per cent), and professional staff (12 per cent). On face value this appears to be a high proportion of staff acting in managerial roles (particularly as social workers and case managers are counted as professional staff) although some caution must be applied as some managerial staff may also be involved with direct service provision.

Moreover, the ratio is an average. Some people with a disability require 24 hour support, and in that instance will require many workers. Others may need only limited support and the caseload per worker would be high for these categories.

Around three quarters of staff work for not-for-profit service providers, while government-run and private for-profit agencies employ the remainder (figure 15.1). The for-profit sector currently plays a particularly small role in the disability sector.

Figure 15.1 **Structure of employment in the disability sector**

Full time equivalent positions[a]



[a] The data includes workers in disability agencies who administered the organisations or provided services other than for disability.

Data source: Martin and Healy (2010, pp. 111–112).

There is inadequate time-series data about the size and characteristics of the disability workforce. However, due to its labour intensity, it is likely that the increases in spending in the disability sector have been associated with a

considerable expansion of the workforce. Between 2004-05 and 2009-10, spending on specialist disability services rose by 30 per cent in real terms (SCRGSP 2011, attached tables). An analysis of the broader Social and Community Services (SACS) workforce found that in the decade to 2006 the SACS workforce increased 66.2 per cent while the economy wide workforce increased 19.2 per cent (Meagher and Cortis 2010). This rate of growth is not sustainable in the long term and may be the cause of some of the problems, such as the difficulty of finding staff, that are discussed later in this chapter.

An older and female-dominated sector

Irrespective of their job category, females make up around 80 per cent of the disability workforce (Martin and Healy 2010, p. 115). This is broadly consistent with other studies, which found that females made up 85 per cent, and 69 per cent of the Western Australian (CCI 2006) and Victorian workforces (Victorian Government 2005) respectively. Similarly, for the wider community services sector, females made up 76.2 per cent of employment in May 2010 (Australian Government 2010b, p. 68). It also matches the role of females in informal care. 68 per cent of unpaid primary carers are female.[2]

The disability workforce has relatively few young workers and a more middle-aged profile than does the Australian female workforce overall.

- There is a much lower share of disability workforce aged less than 30 years old (figure 15.2).
- There is a 'middle aged bulge', with the share aged between 40 and 59 years around one third higher than the female workforce generally, and 50 per cent higher than the female population as a whole. This pattern is most obvious among managers and administrators.
- There are roughly equal shares of people aged 60 years and over among the disability and general workforces. The low share of people aged over 60 years old reflects the much lower employment rate of women generally in this age group.

[2] Based on ABS 2010c, *Survey of Disability, Ageing and Carers, Australia, Summary of Findings*, cat. no. 4430.0.

Wages appear low

Notwithstanding some complexities in calculating wage rates,[3] the evidence suggests that employees in the disability sector receive relatively low pay rates compared with employees outside the community services sector:

- The SCS found that the mean hourly wage rate in the Australian disability sector was 13 per cent less than the average for all female employees (Martin and Healey 2010, p. 119). Workers in the government sector earned significantly more than workers in the non-government sector, with 65 per cent of government employees earning more than $25 an hour compared with only 35 per cent of non-government employees.
- A study of the Queensland disability services sector in 2007 found that 55 per cent are paid award wages (NDS 2007).
- Compared with the Australian workforce as a whole, a smaller share of people in the community services sector tended to work overtime and of those who did, a smaller share were paid at overtime rates (Australian Government 2010b, p. 75). Further, it appears that the low wages of the sector also reflect a combination of below average bargaining power and a reliance on award rates. It is more generally symptomatic of wage outcomes for other industries dominated by female employees (pp. 10–11). At the wider community services level, the sector contributes 4.4 per cent of Australian employment, but 3.2 per cent of wages (p. 65), suggesting a wage differential of just over 25 per cent. However, after adjusting for the greater likelihood of people working part-time in the community services sector, the wage differential falls to around 13 per cent.[4]

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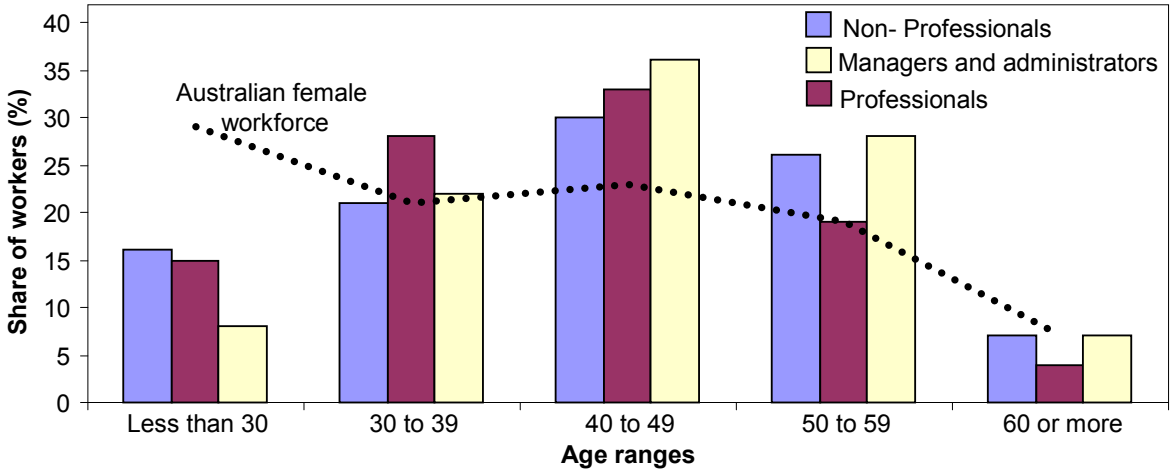
3 The complexities arise because workers in the not-for-profit sector of disability services are eligible for fringe benefits tax concessions. These allow them to salary sacrifice a certain amount of income for any purpose, thus lowering their tax liability and effectively increasing their wage in after-tax terms. The Australian Government (2010b, p. 11) notes that almost one third of the overall community services sector use salary sacrifice arrangements, and argued that this should be considered when determining appropriate remuneration by Fair Work Australia in the equal remuneration wage case for community service workers.

4 This was estimated by noting that in the 2006 ABS Population Census data the ratio of FTE to employment in the economy was 91.1 per cent, while it was 76.5 per cent in the community services sector. Assuming that these ratios have remained stable over time suggests that the community services sector accounts for around 3.7 per cent of full-time equivalent employment (cf 3.2 per cent). That means that the real wage differential is approximately 3.2:3.7 implying a percentage difference of around 13 per cent (after removing rounding errors).

Figure 15.2 **A feminised and older workforce**



Data source: Martin and Healy (2010, p. 116).

Working conditions

Full-time employment is relatively uncommon in the non-professional sector (15 per cent), with around 85 per cent of respondents working in casual or part-time jobs compared to 50.4 per cent of the total Australian female workforce. This difference was less pronounced among professional, manager and administrator categories (52 per cent in the disability sector compared with 68 per cent more generally).

This picture is complicated by the fact that disability support workers are more likely to work in more than one job. Some 24 per cent of non-professional workers in the disability sector worked more than one job (Martin and Healy 2010, p. 121) compared to 6 per cent of employed Australians overall (ABS 4102.0). Of those disability workers with a second job, around half were employed in the disability sector for both positions.

Nevertheless, a large proportion of non-professional workers indicated they wanted to increase their working hours (26 per cent), with around half of these looking for more than ten additional hours per week. (Martin and Healy 2010, p 146). Similarly, while 31 per cent of non-professional staff were casual, this was the preferred option for only 16 per cent, indicating a considerable number seeking more permanent arrangements (p. 145). This suggests that there is a potentially untapped workforce, which will help meet demand after the start of the NDIS.

The nature of disability services means that support may be needed at any time of day, which results in less routine working hours. Often support workers are required

to work multiple short jobs during a shift or work during the night. Within the ACT in 2004, 35 per cent of support staff expected to work at any time during the day or night in a typical work week (Disability ACT 2004).

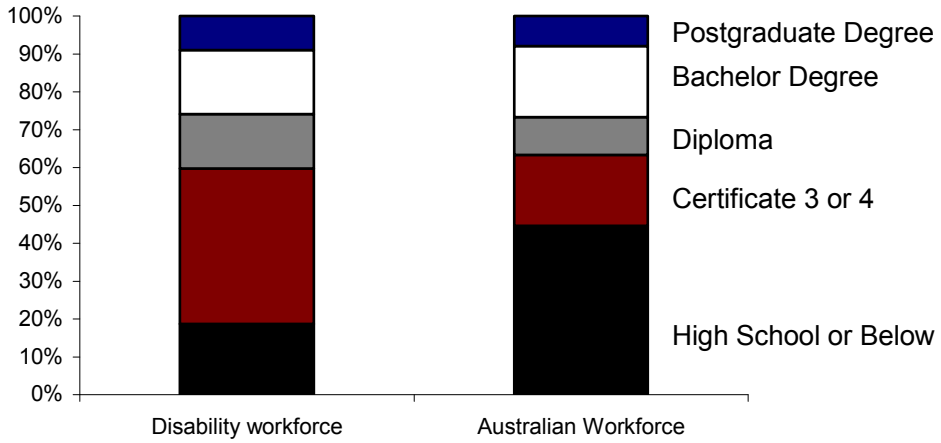
Training

Most of the non-professional disability workforce (79 per cent) had some form of post school qualification, typically certificates three or four. Reflecting that the main tasks involved care and support, relatively few had degrees compared with the Australian workforce as a whole (Martin and Healy 2010, pp. 126–127).

Training appears to have grown in importance:

- The number of people completing VET courses in disability has increased in recent years from 2553 in 2005 to 3785 in 2008.[5]
- The majority of government funded training occurs through TAFE (about 60 per cent) while the remainder occurs in private providers, which includes adult and community education. The proportion delivered by private providers has increased in the last year.

Figure 15.3 **Highest level of qualification of the disability workforce**[a]



a This may include people who have qualifications that aren't relevant to their work

Data source: Martin and Healy - p. 127, (2010).

5 A VET course in disability was one in which the label 'disability' was part of the course title, which may miss some relevant courses. There is currently only information available on the VET training sector when the government subsidises (either partially or fully) the costs of the training. We therefore miss any information on VET training delivered by private providers and funded using fee for service. The data were provided by NCVER.

Why do people work in the sector?

Across the job categories, most disability workers said they worked in the sector because they wanted to help others (76 per cent) and to do something worthwhile (68 per cent) (Martin and Healy 2010, p. 133–134). Beyond this, people also valued variety (45 per cent); the potential for learning and training (45 per cent); and independence, autonomy and responsibility (39 per cent). These results are consistent with the 2008 Disability Support Worker Survey (Shaddock and Rose 2009) that found that the 'opportunity to be of service to people' was the highest rated response.

The main reasons that people had left their previous jobs within the industry (p. 153) were relocation (26 per cent), finding more satisfying work (21 per cent) and looking for better shifts or hours (11 per cent). Of those that thought they might leave their current job, the main rationale was to seek work outside the sector (23 per cent) although stress (13 per cent) and family reasons (8 per cent) were also important (p. 148).

By most measures, wages do not appear to be an important motivating factor for working in the industry.

- Pay was ranked last in a list of reasons why respondents were attracted to work in the disability sector (17 per cent for non-professional and 15 per cent for professionals as well as managers and administrators, p. 135).
- Improved pay was rarely listed as the main reason respondents left their last job (4 per cent for non-professionals and 7 per cent for professionals as well as managers and administrators — p. 153). [6]
- Relatively few non-professionals cited financial reasons as a main reason they may leave their employer within the next 12 months (p. 148).

An exception to this is in terms of stated satisfaction with total pay, which was lower for the disability sector than for the Australian female workforce generally. Disability workers gave an average score of 5.5 on scale between 0 (totally dissatisfied) and 10 (totally satisfied), compared with 7 for female employees generally.

Moreover, another survey by the Australian Services Union (ASU 2007) of the non-government social and community sector found that 40 per cent of workers

6 It should be noted that this question suffers from sample selection bias in that the survey was given to people within the industry, so only people who left their job and stayed within the industry could answer this question. Others who left their job for work in another industry may have considered pay a more important issue.

intending to leave the sector gave low wages as the reason. In that survey, most managers thought it was the biggest barrier to recruitment. The differences between the results of this survey and the SCS may partly reflect scope and timing of the different surveys, as well as differences in their design.

High staff turnover

Despite generally positive attitudes to working in the sector, staff turnover rates are relatively high. Staff turnover in the disability sector has been estimated to be 21 per cent in Queensland in 2007 (NDS 2007) and turnover in social services more broadly has been estimated to be 29 per cent (Australian Community Sector Survey), which is high relative to other industries. This could imply scope to alleviate any pressures on the labour force through better wages, conditions, career options or other measures.

However, high turnover could also reflect innate features of the job itself, such as the emotional and physical demands it places on staff. Equally, turnover could be partly driven by the presence of workers who only intend to work in the industry for a relatively short period (such as university students, or people who enter the industry towards the end of their working life).[7]

The SCS suggests that of those who plan to possibly leave their current job, 15 per cent are doing so due to stress or burnout and a further 10 per cent are doing so for financial reasons. Only 20 per cent plan to leave for a new job within the disability sector.

15.2 Are there, and will there be, labour shortages?

Any sustained shortages of disability workers would undermine the goal of the NDIS and NIIS to deliver more supports to people with a disability. Some consider that significant shortages are already present. For example, the Law Council of Australia noted that there are:

> … already reports of shortages of trained and skilled carers. If the [new scheme] is going to be serious about providing much higher levels of paid care across the board, then there is going to be a vast increase in the demand for carers. Given the supply of trained and skilled carers is already under strain, serious consideration must be given to how this will be managed if there is any move to nationalise care and support arrangements. (sub. 375, p. 17)

[7] Such workers would not comprise a significant share of the total disability workforce, but can still influence turnover if their average work duration is short.

The Attendant Care Industry Association of NSW (sub. 268, p. 9) said that the current shortages were already 'chronic', while the National Ethnic Disability Alliance argued there were particular difficulties in getting workers who were culturally aware and respectful or from a non-English speaking background, let alone from specific language or ethnicities within that group (sub. 434, p. 36). A study of the Queensland disability workforce found that only 2.5 per cent of organisations rarely or never have difficulty recruiting appropriately trained and skilled staff (NDS 2007).

However, other evidence for current shortages is less clear-cut:

- contrary to the above NDS findings for Queensland, the SCS found that vacancies for non-professional disability workers across Australia were filled relatively quickly — with 71 per cent of non-professional jobs being filled within four weeks (Martin and Healy 2010, p. 142)
- as noted above, many people would like to work more hours — which is not consistent with systemic shortages of workers.

People have identified many possible contributors to *future* labour shortages. On the supply side, the concerns are a high labour turnover rate, an ageing workforce, and the impacts of regulations. On the demand side, there are competing pressures from the future demands associated with aged care and the large demands associated with the creation of the NDIS and the NIIS. Some of these concerns are well founded, but others are not.

The supply side

The capacity of the informal sector to supply labour

Informal care, usually provided by family members, is the main source of support for people with disabilities. While this informal support will continue to be fundamental to the disability system in the future, one of the key goals of the NDIS is to relieve the excessive stress that is currently felt by some carers.

While removing excessive demands on informal carers may help sustain the informal workforce, there are other pressures that may weaken its capacity to provide supports. Traditionally, women in the direct or extended family have been the major source of informal care. Several society-wide trends (ABS 2010b), including the greater prevalence of two-income households and smaller household sizes mean that the pool of family members available to provide informal help is likely to diminish.

Given that the informal sector is much larger than the formal sector, a small change in informal support will require a large proportional expansion in the provision of formal disability services. In 2009, there were 2.63 million carers providing an estimated 680 000 full time equivalent carer positions for people with a disability, whether young or old.[8] To give some perspective on these informal carer numbers, in 2007, there were around 210 000 workers providing direct aged care services or 125 000 equivalent full time employees (Martin and King 2008, p. xix, p. 63). In 2009, there were an estimated 68 700 disability workers directly providing services or 34 000 equivalent full time employees (Martin and Healy 2010, p. 6). While the dates of the surveys vary, the estimates suggest that around a 10 per cent reduction in informal carers supporting all people with a disability — a cut of around 65 000 equivalent workers — would require a 40 per cent increase in equivalent full time formal care employees.[9]

Against that backdrop, measures to support carers will be critical (section 15.4).

An ageing workforce?

Some suggest that the population wide trend towards an ageing workforce is particularly pronounced in the disability workforce (NDA 2006, p. 7). If this were true and were to persist, it could create significant labour shortages, presenting a problem for the long-run sustainability of the NIIS and NDIS.

An ageing workforce could occur for a number of different reasons, some of which would create labour shortages were the trends to continue. Ageing could reflect:

- less recruitment of young staff and a reliance on the stock of current staff, which will inevitably reach retirement age
- the effect of the past bulge in births (the 'baby boom'), which then creates a corresponding, but temporary, bulge in the age distribution of workers at a later time
- a trend towards entry into the workforce later in life, spurred on by an underlying trend of higher workforce participation for older women (Gilfillan and Andrews 2010). The 'middle aged bulge' in the workforce noted above could simply be a reflection of recruitment outcomes.

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8 The estimate of 2.63 million is from the 2009 ABS Survey of Disability, Ageing and Carers (SDAC). The Disability Investment Group (2009a, p. 1) estimated that the ratio of full-time equivalent employment to total employment numbers for carers was 26 per cent. This ratio was applied to the SDAC estimates.

9 This is equivalent to saying that the FTE informal care workforce (680 000) is approximately four times as large as the formal workforce (34 000 + 125 000).

Of these causes, the first would create the most sustained pressures on the disability workforce, while the others would create temporary or no pressures. There is no longitudinal data to determine decisively which matters most. However, there is some evidence (figure 15.4).

Figure 15.4 **An ageing workforce?**[a]

a The aged and disability carer category was chosen as it allows for comparable data across multiple censuses. The net entry rate is defined as ($N_{a,2006}$ /$N_{a\text{-}5,2001}$), where a are the ages of people in 2006, and are in five year age groups. For example, there were 10 151 workers in the disability and aged care sector aged 40-44 years in 2006 and 5481 people aged 35–39 years in 2001. The ratio is therefore 1.9. While some people aged 35–39 will almost certainly have left the sector between 2001 and 2006, those exits were more than made up by new entries of people who were not in the sector in 2001.

Data source: ABS 6105.0, and other population census data provided on request.

The SCS suggests that 63 per cent of disability workers entered the sector at age 30 years or older (Martin and Healy 2010, p. 150), a pattern similar to the aged care sector (Martin and King 2008, p. 28). Analysis by the Commission of successive waves of the ABS population census[10] also suggests an increasing tendency for people to enter the disability and aged care industry at later ages. There has been a

10 The Australian and New Zealand Standard Classification of Occupations (ANZSCO) used in the census data does not separately identify disability workers, but rather the broader category of aged and disability workers. This category does not capture all those who work in the disability sector as other ANZSCO categories such as nursing support and personal care workers or special care workers would likely include some disability workers.

dramatic increase in the number of people working in this industry and the increase has been concentrated among people aged between 40 and 65 years. This is more pronounced in the aged and disability sector than in the female workforce generally, as shown by the higher net entry rate in figure 15.4.

Younger cohorts have also increased in number, but not at the same rate as older workers. This suggests that the increase in recruitment of older staff has driven the ageing of the disability sector, rather than a decline in the recruitment of younger staff. Nevertheless, all other things being equal, some (probably minor) pressures can be expected as the baby boomer generation retires.

OH&S requirements

Occupational health and safety regulations are intended to ensure safe workplaces. Nevertheless, some have suggested that these regulations can sometimes lower labour productivity and, in turn, aggravate labour shortages, without gains in safety. This could happen in several ways.

- The paperwork and other burdens associated with OH&S could divert time away from providing actual support services, meaning that the number of staff needed to provide required supports must be higher than otherwise. For instance, one participant cited unnecessary OH&S assessments, which used up the time of a highly qualified professional (Adam Johnston, sub. 55, p. 4). OH&S compliance burdens might also add to stresses of families providing informal care. For some families, this could be the 'straw that breaks the camel's back', reducing the sustainability of their unpaid care, with longer run greater calls on paid care. For instance, one submission noted that there were 'copious OH&S notes written up to cover service fears' (name withheld, sub. 100, p. 2). Another family noted how funding, training, OH&S and liability issues faced by respite agencies meant that the responsibility of caring for their children was too difficult for many respite agencies, meaning that the family's needs were often left unmet, adding to the pressures they experienced (Melinda McFadden, sub. 247, p. 1).
- More than one worker may be needed to perform a task because of excessive concerns about safety. For example, one participant said that that an inexperienced or overly cautious occupational therapist required two workers to perform tasks that could be 'safely done by one competent care-worker' (name withheld, sub. 242, p. 4).
- OH&S rules may limit the type of worker entitled to supply a service. That can create bottlenecks, it can eliminate some of the efficiencies of one worker performing a range of tasks, or it may result in a service not being provided at all, with a need for greater support costs at a later time. For instance, one

participant argued that OH&S restrictions for teachers led to poor health outcomes for students at a special school, with greater care needs at a later time, including unnecessary hospitalisation (Gillian Pearson, sub. 313, p. 3).

- Services can be delayed while waiting for an OH&S assessment to be performed. For instance, the Home Modification Information Clearinghouse (sub. DR 770, p.10) described a situation where simple homes modifications, such as installing grab rails, could not be made until an assessment was completed.
- There is the potential for OH&S requirements to limit the flexibility of services offered to people with disabilities (suggested by sub. DR711, name withheld). This is at odds with the model of personal choice that is fundamental to the NDIS.

That said, it is not clear how often OH&S regulations do have any significant adverse effects on labour productivity or the sustainability of informal care arrangements. In many instances, OH&S standards are likely to *increase* productivity (reducing injury rates for workers and providing better care for people with a disability). However, the capacity for OH&S regulations to minimise risks to staff and clients need to be balanced against the cost they imply — in terms of their impact on quality of care, additional financial cost as well as the additional pressure they place on scarce labour resources. One of the goals of the NDIA would be to monitor the efficiency in the supply of services and to assess the origin of inefficiencies. Where these arose from inappropriate OH&S guidelines, the NDIA could feed that information to the appropriate government regulator.

The demand side

The biggest pressures on the disability workforce are due to increasing demand.

Expansion of disability services

In recent years, the disability sector has expanded in response to a growing awareness among state and territory governments of the level of unmet need. Several governments have substantially increased funding to the disability sector, leading to an associated increase in demand for the labour required to deliver disability services.

Nevertheless, the current system is still characterised by a high level of unmet demand with many people with a disability unable to get adequate access to specialised disability supports. The introduction of the NDIS and NIIS to address

this unmet need will require a large increase in the supply of disability workers. While these pressures would largely relate to traditional attendant care and support staff, they would also apply to managers, administrators and allied health professionals.

Pressure from a growing aged care sector

The personal attributes suited to caring and supporting people are largely the same in the aged care and disability sectors. Their employees also often have similar skills and qualifications. There are strong emerging pressures on the aged care sector, which will draw workers from the labour pool that is also the source of disability workers. The effect is potentially large. The share of Australians aged 75 years and over is expected to grow from around 6.3 per cent of the population to 12.3 per cent from 2010 to 2050 — an increase in this group of about 2.8 million people.[11] This age group has particularly high care and support needs. Many will need some in-home attendant care services and, given current usage rates, around one in ten will be in residential aged care (AIHW 2009a, p. 23). The Commission's parallel inquiry into aged care estimated that the formal care workforce would need to increase in size from 212 000 in 2010 to 317 000 in 2020 and 459 000 in 2030 (PC 2011a).

15.3 Attracting more workers to the disability services industry

Attracting staff to work in disability services will be a shared effort between several players. The NDIA will be responsible for overarching planning, marketing the industry and offering scholarships in some areas. They will also be responsible for ensuring funding is adequate to cover the full cost of operations of service providers. Some decisions will be beyond NDIA control, such as those regarding immigration. As such, the broader government will have some responsibility in this area. However, as with other industries, the responsibility of attracting and retaining staff lies mainly with service providers. They can offer staff better working conditions, improved career prospects, more flexible hours and greater employee control over their jobs. For example, they could address some of the problems associated with rotating shiftwork.

11 Series B from ABS 2008, *Population Projections, Australia*, cat. no. 3222.0.

Paying higher wages as a strategy to address impending shortages

Disability workers' wages appear low (section 15.1). Wages act as a direct financial incentive, as well as a signal that the work itself is valued. Many in the industry suggest that paying higher wages would be necessary to attract more people into the disability workforce (LHMU, sub. 449; ACTU, sub. 417; Just Better Care, sub. 157; ASU 2007, NDS 2009).

However, as discussed above, workers ranked pay last in a list of reasons why they were attracted to work in the disability sector. That might reflect that:

- working with people with disabilities attracts people for whom money is a low priority compared to the other benefits inherent in the work
- anyone who wanted or needed high levels of remuneration tend to leave the industry (contributing to the labour turnover patterns described above).

It is likely that both are true.

However, an increase in wages would still be likely to attract people for whom wages are of greater importance than those already in the industry. For instance, those who left the industry because the wages were low might be drawn back if the wages were higher, or it might mean that people do not leave the industry in the first place. Furthermore, an increased wage would make disability services more attractive to young people when choosing between a number of career options.

While it is difficult to determine empirically the overall link between wages and labour supply, several factors suggest workers in the disability sector will be relatively responsive:

- there are relatively low barriers to entry compared to other occupations given generally low educational requirements for non-professional staff
- women comprise a large share of employment in the industry. The supply of female labour tends to be more responsive to wage increases than men (that is, a higher 'labour supply elasticity' — Gilfillan and Andrews 2010 and Birch 2005)
- many staff in disability services choose between work in the disability sector and not entering the labour force. People in this situation tend to be more responsive to wages than if they are choosing between two jobs (Evers et al. 2008).

Periodic changes to minimum and award wages by Fair Work Australia could be expected to partly address low wages. Within the current disability services system, award wages play an important role in determining remuneration levels of staff. This reflects the characteristics of the industry:

- union bargaining in non-government providers appears to be weak
- the way government contracts are organised makes it very difficult to pay staff more than the award wage.

Of particular interest, is the current case being heard by Fair Work Australia (FWA). Earlier this year, FWA ruled that it would be able to make a pay order based on gender equity in the community services sector. It is now determining the increase. The results of this case could have significant financial implications for the scheme if the wage ruling is significant,[12] but would also tend to encourage greater numbers of people to enter the industry. The case follows a similar case in Queensland in which disability workers were awarded pay increases between 18 per cent and 37 per cent. The resulting funding situation (box 15.3) has some valuable lessons for managing the transition following a large legislated wage rise.

The role of NDIA price negotiations in setting wages

Within the current disability support and services system, governments exercise significant market power as the dominant purchasers of disability services. This is particularly evident where services are block funded.[13] While exercising this power can be used to contain costs, it may also have effects on providers' capacity to recruit workers or to pay extra for more experienced or trained employees. For instance, funding for a person might only cover care from a worker at a particular pay level. Providers may then find it difficult to pay even existing market wages, as well as administration and overhead costs.

The Commission's report into the not-for-profit sector (PC 2010a, p. 280) found that the majority of service providers did not think that government funding covered the full cost of providing services. In addition, several government agencies admitted to 'making a contribution' rather than fully funding services. The Commission estimated that the overall proportion of costs met by government funding for contracted services was around 70 per cent, while the level of fees and charges varied. In a survey of service providers, only 40 per cent reported that they mostly (34 per cent) or always (6 per cent) got sufficient funding to cover the services that government required them to deliver (Allen Consulting Group 2008, p. 9). The Commission's inquiry into aged care has also found that government sets prices that do not reflect the cost of delivering services, with consequences for efficient delivery of services.

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12 The cost estimates for the NDIS in chapter 16 take into account some movements in wage rates.

13 A point emphasised by the Australian Services Union (sub. DR 954, p.7).

Box 15.3 **Experiences in Queensland following the pay rise**

In May 2009, the Queensland Industrial Relations Council awarded a pay rise of between 18 and 37 per cent to workers in the social and community service industry with a subsequent case extending similar increases to disability support workers. Following this, the Queensland government allocated $414 million in the 2009-10 budget for disability services. This increase was in response to a range of rising costs, including wages, but was not large enough to cover the wage increases fully.

The funding was allocated on a priority basis and was based on estimates of the increased cost of wages. The highest priority was to maintain the level of services for people who were fully supported and dependent on services. In this category, providers were allocated the full estimated cost of wage increases. The second priority was to maximise, given the available resources, services to people with a disability who are assisted and vulnerable. Funding for clients in this group was adjusted to compensate for the full estimated impact in the first year and a smaller proportion in the subsequent years. The government allocated no supplementary funding where no direct services to clients or only generic services were delivered.

In cases where providers thought that this formula threatened their operations, the government considered the situation and, if necessary, adjusted service contracts with affected providers. The government also implemented measures to reduce administrative costs, aimed at enabling organisations to use more of their funding for direct service delivery.

Participants identified several problems with the funding allocation process. First, there was limited transparency, which meant that service providers did not know how much additional funding they were going to receive until it arrived. Also, when calculating the level of additional funding, funds were notionally attached to service recipients based on the hours of care and other services that person received. However, this information was not provided to service providers. Rather they received a sum that covered their entire operation. This meant that if a client chose to change service providers during a funding period (a not uncommon event), the provider would have to refund the funds attached to this client, including the supplementary funds, even though until this point they were unaware of this amount.

Second, some providers who were required under the relevant award to pay the higher wage costs were given no funding supplementation, as they did not provide direct client services. While they may have been in a lower funding tier, this still adversely affected their operations and meant an effective service reduction in these areas.

The situation was made more complicated because agencies employed staff on a variety of awards and enterprise bargaining agreements so the wage decision affected some staff but not others. In addition, this process coincided with the gradual introduction of a national award. These factors combined to create a complicated industrial relations framework that needed to be negotiated by service providers. This was particularly problematic for small providers who may not have employed experts in these matters.

Lessons to be learnt

- Funding provided directly to people with a disability (either in cash or in support packages) based on an objective assessment process and adequate scheme funding would mean that prescriptive rules about what services would be fully funded would no longer be relevant.
- Where block funding is continued:
  - funding formulas should be transparent and good information provided to suppliers
  - funding processes should be simple, to avoid excessive transaction costs payments, and should be based on the requirement to ensure delivery of necessary services, rather than be subject to artificial constraints — which is one reason why the NDIS should not be subject to uncertain funding through the usual budget process.

While the NDIA would generally not block fund services, at least initially it would play a major role in regulating prices, since it would reimburse service providers for items covered by people's packages (under the choice of provider option). This would constrain wages given that labour costs represent a large share of total service delivery costs. It is important that the NDIS avoid the problems that currently affect the community sector. Whether services are delivered through vouchers or self-directed funding, service providers should be reimbursed at a price that supports an efficient and sustainable service sector (including funding for training which is discussed later in this chapter). That, in turn, will support wages that are sufficient to attract workers into the sector.

On the other hand, the NDIS will need to avoid paying excessive prices and wages as the disability system expands. It will take some time for supply to respond and in the short run, wages could be pushed up substantially, particularly if shortages occur in some areas. Wages tend to be more flexible upwards than downwards (so-called 'sticky' wages), so that any short-term shortage that occurs as the disability sector expands under the new system could result in long-term wage inflation, undermining the financial viability of the scheme.

This highlights the importance of the gradual implementation of the scheme, as well as suggesting a role for government or the NDIA, in alleviating short-term labour force pressure through other means. These are discussed later in the chapter.

Wage growth and the implications for costing a scheme

Wages in the disability sector will probably rise at least in line with average weekly earnings over the longer run. Otherwise, large wage disparities would occur and it would be hard to attract or retain workers. The Australian Treasury has projected long-run nominal wage growth of 4 per cent per annum (Treasury 2010, p. 18). However, given the current low level of wages and the need to attract significant numbers of people into the disability sector, in the short to medium term, wage growth will probably exceed the economy-wide average. That will need to be considered when costing the future liabilities of the NDIS.

A greater role for flexible wages in the future?

As the scheme evolves and people with a disability adapt to an entirely new system, the NDIA may be able to give up price controls for the competitive segments of the specialised disability services sector (giving people with a disability a budget rather than vouchers to acquire their supports from such specialist agencies). That would allow providers to adopt recruitment strategies akin to those commonly used in

other enterprises. It would also give people with a disability the scope to flexibly trade off aspects of their packages, such as paying more for hours delivered at the preferred time, even if that involves a reduced entitlement to hours overall.[14]

Even over the short run, there would be some scope for people using self-directed funding to negotiate flexible wages. For example, people using self-directed funding might be willing to pay more for workers that have greater experience or training. Equally they might be happy to pay lower wages for a worker with no training or limited experience, provided that they have the appropriate personal skills — thereby getting a few more hours of care. This form of wage flexibility also gives incentives for more experienced staff to remain in the industry. Ultimately, the extent to which this occurs would depend on the take up rate of self-directed funding, which is likely to be low initially.

Improving working conditions

Working hours

The working hours required for some positions in the disability sector represent another potential obstacle to attracting and retaining staff. There are periods of peak demand in the morning and evening, and some people with a disability require assistance throughout the night. Employees may get shifts that have several one or two hour long breaks between clients to fit with complicated timetabling arrangements. This is particularly common in community care and home based respite. The desire for better shifts or hours was the third highest ranked motivating factor for people leaving their jobs (Martin and Healy 2010, p. 153).

The length and variability of shifts

Under the proposed NDIS, people will have more control over when they receive services, and the type of services they receive. Given the existing difficulties people face in getting services at peak times, this will increase the demands on staff to work irregular hours.

[14] In the mean time, where people do not use self-directed funding, the vouchers for hours that form part of people's support packages may need to place constraints on the terms and conditions associated with their use. For example, an entitlement to six hours of respite care a week would involve a much greater cost to the NDIA when the hours were used on a weekend than a weekday.

However, other factors may make working conditions in the sector more attractive, such as:

- many staff would currently prefer to be working more shifts. The expansion of services delivered under the proposed scheme is likely to better accommodate this
- in some cases, undesirably short shifts are a result of rationed services. Again, as rationing decreases, staff may be allocated to longer shifts
- it may become possible to have job sharing, flexitime, split shifts and more frequent shifts
- the direct employment of staff by participants in the NDIS will result in more local employment and hence less travel time

Offering attractive shifts to staff is an ongoing challenge for service providers, just as it is in most industries. For instance, one service provider found that:

> … changes to the Award requiring direct care workers to have a 10 hour break between shifts and complete their hours for a broken shift within a 12 hour span have presented a real challenge. (The Disability Trust, sub. 230, p. 8)

As such, the benefits of attractive shifts (such as improved recruitment and retention of staff) must be weighed against the timetabling difficulties that they imply.

It is also possible that improving work flexibility to meet the needs of workers can constrain flexibility for users of the services, which would undermine one of the major goals of the NDIS. The importance of flexibility in receiving support services is highlighted by one participant in the inquiry:

> Heaven forbid I should have an early meeting because my carers don't arrive before 7am. And how would I get to bed past 10pm without my Mum?" (Disability Connections Victoria, sub. 246, p. 5)

It is evident that there are potentially conflicting needs between staff who wish to work regular hours, service providers who are trying to manage complicated timetables and clients who rely on the flexibility of services to allow them to manage their lives. To some degree, this conflict can be resolved by appropriately pricing the required flexibility.

In the early phase of the NDIS, the NDIA will have a role in negotiating contracts with service providers. During this period, it would be important for the NDIA to consider the desirability of shifts when setting prices. For example, a midnight service should cost the NDIA more to purchase than one in regular working hours. Similarly, a one-hour long shift should attract a higher per hour price than a longer

shift to account for travel time and the timetabling difficulty of fitting that service into the shift of a worker.

In the longer term, it is envisaged that prices would be more flexible and negotiated directly between the service provider and consumer. In this setting, flexible shifts will attract a price premium meaning that people will have to pay more for flexibility and staff will be rewarded financially for working less desirable shifts.

Other changes to conditions

Working conditions would also be improved by addressing the rationing in the system. This is likely to reduce stress for overworked employees and give them the capacity to provide higher quality care and support to people — with the greater job satisfaction that produces. Moreover, a better-funded system means that essential equipment and modifications — hoists, home modifications, aids and appliances — are appropriately funded, allowing the efficient use of carers' time, and greater safety for them.

Encouraging career paths in the disability services industry

Numerous participants have highlighted the importance of an established and clearly articulated career path in order to attract and retain staff.[15] The promotion of career paths may also occur naturally with more consumer choice and a less bureaucratic service system. That said, while it is not usually the role of government to influence career progression outside of the services it directly provides, there may be some merit in governments:

- marketing the benefits of a career in the disability sector and the value the community places on such jobs
- promoting (though not requiring) certification in order to signal that it is a profession with the potential for career progression
- improving recruitment services.

An advertising campaign for the disability services sector

As a major policy initiative, the introduction of a new disability insurance scheme would require a media campaign that explained the changes to the system, what it meant for different people and how to use the new system generally. This campaign

[15] For example, MND Australian, sub. 264, p. 17; Scope, sub. 432, p. 7; and ACTU, sub. 417, p. 9; Health and Community Services Union, sub. DR1036, p. 9; DisAbility Connections, sub. DR702, p. 10 among others.

could also raise the profile of the disability sector and improve community perceptions about working in this sector. The idea of advertising the sector has a recent precedent in the Carecareers campaign run in NSW.[16] Northcott Disability Services suggested that this initiative has:

> … enabled the general public to see through the misconceptions and understand the benefits of working in the sector' (sub. 376, p. 22).

National Disability Services argued that:

> The recruitment, retention and training of workers require investment. Boosting the recruitment of people to work in the sector is an immediate need and would benefit from the development of a national online, centralised recruitment portal to facilitate ease of entry into the disability service sector. Extension of the NSW recruitment program carecareers (www.carecareers.com.au) (or similar) across Australia is urgently required. (sub. DR836, p. 27)

As well as improving the general perception of the industry, the NDIA could use a media campaign to recruit specific groups, such as:

- university students. University students are good candidates for short-term work as they are more likely to be able to cope with irregular working hours (and their hours worked may sometimes be recognised as part of their degrees — such as in nursing and counselling)
- newly retired people who may find part time work a meaningful experience and a way to ease into retirement
- high school graduates, who are currently under-represented in the disability workforce.

There is a need for care in any targeting arrangement. In some countries, unemployed people and others with weak job prospects have been targeted in recruitment drives (Stone and Weiner 2001). However, it is important to emphasise the right personal and other skills for care and support jobs, rather than trying to recruit people with few alternative labour market prospects. That approach would severely undervalue the role of care and support workers, and people with a disability generally. One possible exception to this may be to recruit some people currently on (or about to enter) the Disability Support Pension. Government policy is increasingly aiming to re-connect pension recipients to the labour market (an issue discussed in detail in chapter 6). The disability sector has some advantages in that respect:

[16] Carecareers is more than an advertising campaign. It also involves information provision to potential carers, a recruitment advisory service, employer directories and some other features. It is funded by the NSW Government, but delivered by National Disability Services.

- DSP beneficiaries are aware of disability from their own lived experiences
- many jobs do not require extensive formal qualifications. This may suit many DSP beneficiaries, who may have aptitude in this area, but not many formal credentials
- there is a lot of flexibility in when and how many hours are worked
- the demand for disability service jobs occurs in all locations, so many of the problems of mismatch between the location of jobs and job seekers do not affect this sector.

In making the transition from the DSP to paid employment, the Commission recognises the need for support and training.

Promoting certification through training and education subsidies

Another way to encourage people to enter or remain in the disability sector is through supporting the acquisition of the skills required to excel in the industry. This could include the free provision of training and stipends to targeted groups, such as school leavers or people considering returning to the labour market after a period of absence. It could also include relief from some of the obligations of the Higher Education Loan Program (formerly HECS) for some students entering the sector after graduation.

Subsidising training will represent a significant investment for the NDIS in the development of staff. It is important to direct this investment to areas that give the best returns. At present there is very little evidence surrounding the effect of training on productivity, work safety, job satisfaction and staff tenure, in the area of disability service provision. The NDIA should undertake research to examine how training affects these outcomes and use the results to direct investment in training.

One risk of using subsidies to attract staff is that large amounts could be spent on people who would have entered the disability sector in the absence of any subsidy or in areas that achieve no benefit in terms of service outcomes. For that reason, this strategy probably would not be cost effective as an industry-wide measure. However, it may be useful in alleviating specific shortages, such as professional services in rural areas or in specific skill sets. Training will be discussed further in section 15.6.

Improved recruitment services

Disability service providers predominantly attract staff using traditional methods, such as newspaper advertisements and online bulletin boards (NDS 2007, Martin

and Healy 2010 p. 141). The process of finding new staff is costly and time consuming and, for many service providers, is an ongoing process. As the NDIA would already provide online information to producers and consumers, there is also the potential for it to ease the costs of employers and employees finding each other. In particular, it would be relatively straightforward to extend the national database of service providers (discussed in chapter 10) such that it also offers a 'job search' facility. Alternatively, state-based online facilities such as the Carecareers website in NSW could be offered in each jurisdiction (as recommended by the NDS, sub. DR836, p. 27).

Immigration

Several countries, particularly in Europe, have used immigration to ease shortages for long-term care workers, drawing on agreements between European Union countries that allow free movement of labour (Rostgaard et al. 2011). Canada has a specific program aimed at attracting foreign workers in the disability sector (box 15.4). In Australia, using foreign workers to fill labour shortages is relatively uncommon, although it does occur in some geographic areas of the Northern Territory where labour shortages are particularly severe. Using foreign workers may sometimes also assist in reducing shortages of carers for people from non-English speaking background or from different cultural backgrounds (NEDA, sub. DR645).

There are several obstacles to the use of foreign workers in the disability sector. While Australia's skilled migration program allows relatively easy entry for some workers, such as nurses and allied health professionals, the South Australian Government commented on the barriers to entry to these groups posed by accreditation of overseas qualifications (sub. 496). In other employment categories (such as carers), workers would need to be sponsored by an employer, as well having at least a diploma from a VET institution (a condition of 457 visas).[17] Valued Independent People (sub. DR932, p. 21) stated:

> 457 visa wage requirements and conditions make our staff ineligible. Working holiday visas restrict people who could provide a valuable workforce from longer term employment.

Others see the use of immigration as unnecessary and potentially undermining long-term investment in skill development and labour supply the industry. For instance, the Health Services Union East (sub. DR 950, p. 8) argued that:

[17] People from a select number of countries could also work for up to one year in Australia as part of the holiday working visa (a 417 visa).

We do not support the Commission's draft recommendation for immigration of support workers. Despite the recommendation's qualification of it being in the event of acute and persistent shortages, we believe that this approach will be seen as the easy way out, and the recommendation will act as a strong disincentive for the sector to address the real issue of appropriate wages and conditions.

Overall, the role of immigration as a source of labour must balance the impacts on wages and other strategies for eliciting domestic supply of workers, and the reality that significant labour shortages are still likely, especially during the rapid growth in disability supports during the establishment phase of the NDIS. In that vein, immigration should mainly address acute and persistent shortages. The experience of the Canadian Caregiver program would provide a useful lesson for Australia in implementing any similar program to encourage supply of foreign workers in the sector.

Box 15.4 **The Canadian Live-In Caregiver Program**

The Canadian Live-In Caregiver Program allows entry by foreign workers to provide care and support for children, the aged, and people with a disability. People who meet certain criteria (hours worked and duration of work) can apply for permanent residency. (The latest government report available suggests that the Canadian Government expected to grant residency to around 10 700 to 11 400 foreign workers in 2010.) To be eligible for participation in the program, a person must have completed high school, have experience or training in care giving, and be able to speak English or French. The bulk of caregivers have been Filipinos.

While it has its risks and there have been concerns about the abuse of some caregivers, overall the program has been regarded as a successful way of overcoming significant shortages of caregivers in Canada. A recent report has identified ways to address the flaws in the program (Standing Committee on Citizenship and Immigration 2009).

RECOMMENDATION 15.1

The NDIA should work with providers to identify likely areas of workforce shortages, and strategies to address them.

RECOMMENDATION 15.2

The Australian Government should attract further workers into disability support:

- ***by marketing the role and value of disability workers as part of the media campaign launching the creation of the NDIS***

- ***promoting careers in disability support in career advice to school leavers and job seekers***
- ***by providing subsidies for the training of disability workers***
- ***by encouraging the take-up of self-directed funding arrangements involving the flexible employment of people in the community, and not just people affiliated with specialised providers***
- ***making people aware of the potential to use mainstream services as substitutes for specialised services***
- ***through immigration of support workers, but only in the event that acute and persistent shortages occur, and drawing on the lessons from the Canadian Live-In Caregiver program and other similar programs.***

Maintain low barriers to working in the sector

There are many roles that require formal training within the disability sector. These include specialists, such as occupational therapists and physiotherapists. It also includes some staff who work with higher-level cases, such as people with challenging behaviours. However, there are many employees who need relatively simple or no formal qualifications. In some supporting roles, the most important skills are informal — a capacity for empathy, an interest in working with people, flexibility and personal experience — skills that are less readily taught or testable in educational institutions. In these jobs, on-the-job training and experience play a relatively greater role than credentials. Too great a requirement for certification or credentials could frustrate the entry of people with the necessary intangible skills (including by people from non-English speaking backgrounds or those with a disability themselves). As such, the benefits of measures that encourage high levels of training and certification (which can be beneficial) need to be weighed against the barriers they may create for other suitable workers (an issue examined further in section 15.6).

Maintaining the appropriate 'scope of practice'

Sometimes consumers lack information about the quality or appropriateness of sophisticated services (like the best therapies for autism or acquired brain injury). Equally, in some jobs, there are risks of malpractice where people do not have adequate training. Regulations sometimes deal with these concerns by mandating what a particular worker can do — their 'scope of practice'. For instance, the title and practice of physiotherapy is restricted by statute to those registered to practice within a particular jurisdiction (Bundy et al. 2008, p. 12).

In many instances, the defined scope of practice is appropriate. However, as noted in the Commission's parallel inquiry into aged care (PC 2011a), the scope of practice for non-nursing staff has been widened — for example, in management of medication. That can cut the costs of services, increase the skills and satisfaction of support workers, and address shortages in particular areas. It is not clear whether there are more opportunities to widen the scope of practice.

One participant in this inquiry argued that restrictions on the scope of practice still posed some problems. She said that she was forced to rely more heavily on her parents to perform relatively simple tasks (such as giving medication or changing dressings) because rules prevented the care workers from doing these things, even though in the past they had done them without issue (Jess Evans, sub. 585, p. 3).

The NDIA should continually review any opportunities for the relaxation of restrictions on the scope of practice, especially where new technologies allow it (such as electronic adherence monitoring and electronic medication reminders — Marek and Antle 2008). Any changes would have to involve low risks for people with a disability and for the workers concerned.

Screening of workers should be well targeted

People with a disability are often vulnerable to physical or emotional abuse and to theft or other crimes. This reflects the fact that services are often provided in the home and are not easily observed by other parties, may involve personally intimate care (such as bathing or dressing), and may involve people with a limited capacity to tell others what has happened to them. Screening potential disability workers for past criminal behaviours through police checks is a critical way of addressing this risk, and appears to be a relatively low cost measure.[18]

The current system of criminal history checks varies greatly between states and territories, although requiring some form of police check is the minimum standard across Australia.[19] New South Wales and South Australia have a point-in-time check. Western Australia, Northern Territory, Queensland and Victoria have a register that allows a person to work for a certain period without needing to reapply (this period ranges from two to five years). Different jurisdictions also use police

[18] Costs vary by state but are generally about $40 for paid staff and less (sometimes free) for volunteers. This is generally subsidised by government – the Tasmanian Government has estimated that the full cost of processing a check is about $100 (Department of Health and Human Services Tasmania 2010).

[19] The only state that has a statutory requirement for a police check is Queensland, although other jurisdictions achieve the same result by making such checks compulsory through funding arrangements.

checks of varying scope. In some places, such as Victoria and NSW, governments require only the basic Australia-wide police check. Others, such as the ACT and Queensland, require a check that includes 'spent convictions' (as explained below) and information on repeated accusations of serious crimes.

Working with all children, including children with disabilities, is covered by Working with Children Checks. While the details vary between states, these checks can cover all criminal convictions, juvenile records and criminal charges. The ACT is in the process of implementing a similar system that will extend these provisions to cover all vulnerable people; including children, people with disabilities and the frail aged. Tasmania is also considering a similar system.

Screening the criminal history of staff raise some vexing issues. Requiring criminal history checks for *all* staff providing disability services may limit the flexibility of disability services and the capacity to recruit workers. While service providers are not necessarily obligated to reject applications from people with some kind of criminal history, the mere requirement for disclosure may well deter people from applying, even if the crime was old and minor, and they are now safe and responsible people. In general, minor distant convictions are not included in police checks under so-called 'spent convictions' legislation. However, there are sometimes exclusions, which mean that the police report given to a disability agency would include records of distant minor crimes — such as shoplifting committed by a person 40 years previously.[20] For example, s. 19 of the *Spent Convictions Act 2000 (ACT)* specifies an exclusion for people working in disability services.

When designing a system of criminal history checks, the key design questions are:

- Who would need to have a criminal history check? This includes whether mainstream workers providing home-based services — cleaners and gardeners, for example — would be included in the process. Arguably, governments should require background checks only for staff providing traditional disability services (such as personal care and organising finance). This means that people providing mainstream services to people with a disability, such as mowing the lawn, would be able to work without a police check. In these cases, the person is acting more like a consumer of mainstream services and less like a recipient of care.
- Would a police check be required in circumstances where the person with a disability was not likely to be vulnerable? In principle, vulnerability should be the key criterion for the necessity for a police check. Many people with physical

[20] Serious crimes, such as sexual offences or those for which you would receive more than 6 months jail as a sentence can not become spent.

disabilities are able to complain if they are subject to any harm, just like people generally. Vulnerability is potentially much higher among people with an intellectual or mental health disability. To include all people with a disability as implicitly vulnerable could well be seen as stereotyping disability. In that case, one approach would be to assess a person's vulnerability through the NDIS process, and where they are not vulnerable, allow them to determine whether they want a police check undertaken.

- Would the police check be a point-in-time clearance for a particular job or a register that allowed people to work for a certain period? Arguably, the latter is more efficient and reduces the costs of additional checks, especially for people engaging in short-term working arrangements and those working for multiple employers.
- Should family members providing paid care be required to have a police check? On the one hand, governments have no such requirements for informal carers, for parents of children without disability, or for those receiving carer payments (de facto 'paid' workers). Such checks would not be regarded as appropriate by the community, and given the numbers of people involved, would be unlikely to be cost effective. However, the context for paying family members under self-directed funding would be different. Such families would already have to jump through some administrative hoops to be eligible for such direct payments (chapter 6), and it would not be costly to include a police check for serious crime as an element of that scrutiny. Moreover, even though the likelihood of abuse appears low (based on the evidence discussed in chapter 8), even rare instances might turn public opinion away from a capacity to self-direct in this way. The Commission considers that governments should require family members to obtain a criminal history check if they are working as formal carers. The proposed trial of paying family members (recommendation 8.5) would also be useful in addressing the risks in this area.

RECOMMENDATION 15.3

Drawing on the system currently in place for working with children, Australian governments should ensure that police checks and other safeguards should be implemented that target the risk of abuse of vulnerable people with disabilities, and cover those relevant workers for a given period, rather than for a particular job.

15.4 Alternatives to increasing the formal workforce

There are several other ways to alleviate pressure in the formal labour market beyond expanding the supply of the formal disability workforce.

Supporting the informal workforce

Many people want to provide care and support to family members with disability, but may need support to sustain their caring role (or to relieve the isolation and stress that often comes with that role — chapter 2). For example, bed blocking in respite care facilities — a costly outcome — can be a symptom of inadequate support for family carers. Chapter 2 and section 15.2 also shows that a failure to support the informal workforce can be a source of substantial later costs for government, as those informal carers unable to cope shift all of the caring responsibilities to government. In that sense, there is a strong economic as well as social basis for providing support for informal carers.

One aspect of this support is that the NDIS will lead to greater provision of quality respite services and accommodation options than under current arrangements. However, there are other important aspects of support to sustain the informal workforce.

Counselling services for carers serve an important role, and to some extent, the National Carers Counselling Program addresses this function. The NDIS assessment process should refer carers to that program where it is needed. (The Australian Government should not fold this program into the NDIS because it caters for carers in the aged care as well as the disability system.) However, as discussed below in respect of training, the NDIS could also set aside funds so that carers and people with a disability can have some choice about counselling beyond those provided by the National Carers Counselling Program.

Several other strategies could also be important.

Paying family members

First, paying family members may sometimes be an appropriate way to maintain family care, although there are several complex issues and risks from doing this (as found by Kerr et al. 2009, when looking at paying family members funded by Victoria's Transport Accident Commission). We deal with this issue in chapter 8 and appendix E in greater detail. The Commission proposes a trial given the complexities and risks.

Training for carers

Second, there are grounds for providing training to informal carers, and not just to the formal workforce. Sue Aiesi from Carer's Australia noted:

> We believe carers need education and training and they need access to appropriate education and training right throughout the caring role. It could be at the beginning of a diagnosis, the birth of a child, it can be throughout when conditions change, but that's a really important part for carers. It's more than just supporting carers to do that. We believe strongly there's savings associated to the government with having carers trained properly. For example, even something like manual lifting, if carers hurt themselves, the person they are caring for is likely to end up in hospital, the carer could end up in hospital, so there's a double whammy. (trans., p. 399)

Care and support for people with a disability require new skills and knowledge that many people do not know because it is not a customary experience of their friends or family. For example, the skills may relate to safe lifting, mobility training, or dealing with challenging behaviours (Carers NSW, sub. 244, p. 9). Peak bodies often provide some assistance, as do informal support groups. However, there are strong grounds for the NDIS to provide and fund training to interested carers across Australia in a coherent way (chapter 5). Disability Support Organisations may also play a role in this area. There is sound evidence for carer interventions (box 15.5), which would inform the nature of training and other assistance to carers. The NDIS website could provide some training remotely.

The inquiry by the House of Representatives Standing Committee on Family, Community, Housing and Youth recommended a national strategy to address the training and skills development needs of carers (SCFCHY 2009 p. xxiii). The Australian Government agreed with this recommendation, but proposed that it would 'build on existing' training and skills programs' provided through Respite and Carelink Centres (Australian Government 2009c, p. 12). In its draft report, the Commission's parallel inquiry into aged care recommended a somewhat different approach in which carers would be referred to 'Carer Support Centres' (PC 2011a). The Commission recommends that the NDIA would also refer carers to these centres where that was appropriate.

However, as discussed above in relation to counselling, there are grounds for the NDIS to provide some additional funding for training of carers. Carer centres may be only one way of meeting the training needs of carers. By providing an additional source of funding, the NDIS and carers could determine where training would best meet people's training needs.

Furthermore, as part of its research and data collection function, the NDIS should assess the best training options for carers of people with a disability. (These

approaches may sometimes diverge from those best meeting the needs of carers of older people.)

Box 15.5 **Support and training for carers**

It is now widely recognised that support and training of carers can improve outcomes for carers and for people with a disability.

A meta analysis of 78 caregiver intervention studies for six outcome variables and six types of interventions found significant benefits for caregiver 'burden', depression, subjective well-being, perceived caregiver satisfaction, ability/knowledge, and for the person with a disability. Intervention effects were larger for increasing caregivers' ability/knowledge than for caregiver burden and depression. The effects were smaller where dementia was involved (Sorensen et al. 2002).

Another review of the effectiveness of caregiver interventions found that (a) information provision alone did not have any significant benefits (b) individual rather than group interventions had better outcomes (c) case management and care coordination appears to be beneficial (d) counselling and psychosocial interventions are usually beneficial (though having no effect in some studies) as are educational and psycho-educational interventions and family support interventions (Eagar et al. 2007).

In a meta-analysis of carers of people with dementia, Brodaty et al. (2003) found that carer interventions improved caregiver knowledge, main caregiver outcomes, the mood of the person with a disability (but did not reduce the care requirements of the carer). Some interventions delayed entry to residential care.

In another meta-analysis involving carers of people suffering dementia, researchers found robust evidence for the benefits of six or more sessions of individual behavioural management therapy. Teaching caregivers coping strategies either individually or in a group also appeared effective in improving caregiver psychological health both immediately and for some months afterwards. Group interventions were less effective than individual interventions. Education about dementia by itself, group behavioural therapy and supportive therapy were not effective (Selwood et al. 2007).

Even brief interventions have been shown to have some beneficial effects, such as the trial of an individualized problem-solving intervention for family with caregivers of persons with recent-onset spinal cord injury (Elliott and Berry 2009).

Psychosocial interventions for the carers closest to a person with a disability associated with chronic disease reduced care giving 'burden', depression, and anxiety. These effects were strongest for non-dementia cases and for interventions that targeted only the family member and that addressed relationship issues (Martire et al. 2004). In this case, the overall effects were small.

The Australian Government is pursuing a national carer strategy. Some parts of that strategy would lie mainly outside the NDIS — such as better recognition of carers — but others would be at least partly met by the NDIS itself (for instance access to

respite care and, as noted above, training and counselling services). The strategy will need to recognise the role of the NDIS in supporting carers.

RECOMMENDATION 15.4

In order to sustain informal care and support, the NDIS should:

- ***assess carer needs as well as those of people with disabilities (recommendation 7.6) and, where needed, use the assessment results to:***
  - ***refer people to specialist carer support services including the 'Carer Support Centres' recommended in the Commission's parallel inquiry into aged care and to the National Carers Counselling Program***
  - ***include the capacity for accessing counselling and support services for carers as part of the individual support packages provided to people with a disability***
- ***assess the best training and counselling options for carers of people with disabilities as part of the NDIS research and data collection function.***

Thirdly, there are grounds to increase the ability of family carers to work flexible hours. Under the National Employment Standards (NES), people are entitled to request flexible work hours if they have a child with a disability aged under 18 years (s. 65(1) of the *Fair Work Act 2009*). The caring responsibilities of a parent of a child with a disability extend beyond the time their child turns 18 years. In fact, the responsibilities often increase when children with disability leave school, as school provides a de facto form of respite. Accordingly, the rationale for flexible working hours is stronger where a person is caring for a child with disability.

However, the Australian Government has recently rejected an inquiry's recommendation to expand coverage to children aged over 18 years (Australian Government 2009c, pp. 46–47 in response to the House of Representatives inquiry into better support for carers). The main grounds for the rejection were that, under the NES, people could get access to ten days of paid carer's leave a year, two days of unpaid leave and the capacity to reach an agreement about any work arrangements if the employer consents to it. However, were those grounds compelling, they would apply equally (if not more) to the care of children with a disability, and would make it hard to justify s. 65(1). On the face of it, the existing rights under the NES do not meet the legitimate needs for greater flexibility for parents with caring roles for children aged over 18 years old. It should be emphasised that the inclusion of this group in s. 65(1) would still only entail the right to *request* flexible arrangements from an employer, not the guarantee that the employer would grant it.

There could be one possible unintended impact of widening the scope of s. 65(1). Given disability is not always well defined, it is possible some parents might use the Act to request flexible arrangements for their own purposes, when the degree of disability is relatively low and where they do not undertake any significant caring role. One way of addressing that possible problem is to tie the right to request flexible leave to a certain level of assessed need — which is objectively determined in the NDIS.

While parents are the focus of the current arrangements under the NES, there are also grounds to extend flexibility to employees caring for people other than children. The Commission considers that the Australian Government examine this following the outcomes of the amendment to the *Fair Work Act 2009* in recommendation 15.5.

Increased flexibility generally has the advantage of reducing stresses on carers, but also of encouraging their workforce participation.

RECOMMENDATION 15.5

- ***The Australian Government should amend s. 65(1) of the Fair Work Act 2009 to permit parents to request flexible leave from their employer if their child is over 18 years old, but subject to an NDIS assessment indicating that parents are providing a high level of care.***
- ***After monitoring the impacts of this legislative change, the Australian Government should assess whether it should make further changes to the Act to include employees caring for people other than children.***

Productivity increases

Labour productivity measures how much can be produced with a given amount of labour. In disability support:

- 'how much' refers to the number of people served or care tasks performed, and importantly, the quality of disability services delivered
- labour is the time spent by care and support workers, administrators and supervisors.

While most attention on labour productivity relates to formal (paid) disability workers, it can also relate to informal (unpaid) carers. Gains in productivity for the latter can reduce the requirements for support through the formal disability sector, or increase the long-run sustainability of unpaid care.

Productivity improvement may alleviate the potential shortages of labour in several ways:

- more efficient use of existing resources (for example, by reducing underutilisation of some services or by addressing costly bottlenecks in the system)
- more intensive use of capital (existing aids, appliances, and vehicle and home modifications)
- innovation through new forms of capital and improved knowledge about how to get better or less costly outcomes. For example, new knowledge about how to reduce bedsores or to maintain bladder control can avoid costly subsequent interventions, as well as enhancing the quality of life of people with a disability. Encouraging the use of mainstream rather than specialist services can be very cost-effective. So one of the benefits of self-directed funding, an innovation in how disability systems are run, is that people can choose mainstream services that employ workers outside the disability sector, such as gyms and recreational activities.

Many tasks performed by carers cannot be easily substituted with aids and appliances, and so the scope for dramatic increases in productivity from more intensive use of capital and technological innovation cannot be expected over the short term. In a report entitled 'How many wheelchairs can you push at once?', Allen Consulting (2008, p. v) argued that there was poor scope for short-run productivity improvement in Victorian social services:

> … further productivity gains are unlikely in the sector without jeopardising service delivery outcomes … Unlike productivity gains in the rest of the economy, productivity gains in the community services sector are difficult to achieve given the labour intensive, people-oriented nature of the service.

The wheelchair example oversimplifies the scope for productivity gains over the longer run. The history of the wheelchair illustrates the progress of technology for people with a disability. Prior to the Second World War people with a disability only could get heavy manual wheelchairs, which would often have required the aid of a support person. However, with the invention of the motorised wheelchair during WWII (Bourgeois-Doyle 2004), people have had access to increasingly sophisticated and lighter wheelchairs over which they have complete control.

Equally, modification of motor vehicles and driver training has allowed some people with a disability to be mobile without having to use specialist disability transport services. Moreover, increased mobility can enhance labour market and social participation, which in turn can have wellbeing effects (and greater income) that reduces the need for formal support services.

Over the long term, productivity improvement is likely to play a bigger role:

- should labour shortages cause wages to rise, more capital intensive or technology based alternatives will become viable. In a review of long-term care arrangements in OECD countries, Colombo et al. (2011, pp. 306ff) identified several initiatives that had improved productivity. For example, hydraulic lifts reduce the time and effort required to transfer a person with a disability from bed to a chair, with one study finding that the use of such technology reduced personal care needs by four hours a week
- higher wages may increase staff morale, and reduce absenteeism and staff turnover, providing a direct offset to additional labour costs
- some forms of assistive technology that improve quality of life, productivity and participation already exist, but their adoption is limited through rationing, which should be relieved significantly with the establishment of the NDIS. The Australian Orthotic Prosthetic Association (sub. DR970, p. 11) gave an example of access to stance control knee ankle foot orthosis in one group of people experiencing insured catastrophic accidents, and capped access to others with the same impairment. Access Innovation Media (sub. DR661) indicated the difficulties in funding new communications technologies, despite apparently positive trials. In a survey of people with disabilities, one study considered the views of respondents who used assistive technologies. While based on subjective assessments by respondents, rather than actual experiences, the results were nevertheless interesting: 'Survey respondents forecast that the provision of assistive technology improvements would lessen difficulty across life domains by around 19 per cent. In addition, the eight case participants identified that difficulty levels may decrease between 4 per cent and 20 per cent, with an average reduction of 14 per cent in the level of difficulty, resulting from optimal assistive technology provision' (Layton et al. 2008)
- the greater scope for competitive pressures under the NDIS will tend to shift people from less productive agencies to more productive (noting that productivity includes the quality of outcomes). There may be further shifts away from government-owned services, which appear to operate at lower productivity (Allen Consulting 2008, p. 4)
- after their initial introduction, manufactured aids and appliances tend to decrease in price over time, encouraging their wider adoption. This process may be enhanced by bulk purchasing or other procurement strategies used by the NDIA or DSOs
- as part of the NDIS, significant investment into IT infrastructure is being proposed, which could reduce administrative costs and encourage more efficient use of existing resources

- in the past, decisions about expensive one-off capital investments have often not given sufficient weight to their effect on lifetime costs, or on the potential to make significant improvements to peoples lives. The capacity to do this will be much greater under the NDIS
- the research conducted by NDIA itself and the money made available to others in the sector for research and innovation will also facilitate growth in productivity
- by simplifying the system of assessment for disability services, service providers and in particular allied health professionals, will be able to spend more time with people and less time completing paperwork
- innovation will come from people with a disability as users of generic technologies. The internet and Short Message Services (SMS) on mobile phones have allowed easier communication for deaf people. Skype and other video technologies can enable people to interact with others more readily (and was indeed used by one participant in the Commission's hearings). Able Australia (sub. DR791, p. 8) noted that the deaf community have been able to adapt mainstream technology for their benefit (for example, ACE Video Relay Service uses Skype)
- from a wider perspective, risk reduction strategies, such as safer motor vehicles, can reduce the prevalence of catastrophic accidents and severe disability.

Overall, technological developments have many potential benefits for people with a disability, and for labour productivity. For example, information and communications technology may reduce travelling time for care coordinators and allied health professionals, while maintaining the quality of their services (for example, telehealth and telecare are emerging areas of interest — see below and Colombo 2011, p. 307).

Moreover, substitutes to human services will be attractive to many people with disabilities as it enhances their independence (so uptake is likely if such alternatives are offered at cost-effective prices). Among many other technological developments, personal emergency response systems, refreshable Braille displays, Cochlear implants, computer eye trackers, automatic turning beds, and text-to-speech software have given people with a disability a much greater capacity for participation in society and reduced dependence on others. Many other technologies are likely to develop — for example, in areas like assistive robot technology. The Australian Orthotic Prosthetic Association (sub. DR970, appendix 3) has highlighted to the Commission various recent developments in neurotronics and other technologies, while the Medical Technology Association of Australia has reported on a range of existing and emerging technologies (sub. 790).

Technological aids will also make it easier for a broader range of workers to support people with a disability. Lifting aids have become more sophisticated over time, and developments in robotics may offer additional scope to assist with lifting and other tasks

One participant saw the imaginative development of technology as a test of the NDIS:

> The scheme will work if there is room for creativity and advances in technology. If, for example, a robot vacuum cleaner would vacuum a room effectively, wouldn't it be smarter to allocate some cleaning support hours somewhere else and invest in the technology? (Bolshy Divas, sub. DR1003, p. 9)

We discuss the capacity to make (some) innovative improvements in the disability sector in other chapters in this report. That said, the overall impact of such prospective changes on labour productivity is not clear. In most areas of human activity, predictions about future technologies have been overly optimistic or pessimistic. For example, in 1965, Herbert Simon of Carnegie Mellon University, a founder of the field of artificial intelligence, indicated that by 1985, 'machines will be capable of doing any work man can do', while the US postmaster general said in 1959 that 'we stand on the threshold of rocket mail'. Other commentators have been unduly pessimistic.

The Commission has recommended the creation of an 'innovation fund' for service providers to encourage productivity in the disability sector.

Volunteers as a source of support

Volunteers often provide support to people with a disability. In 2006 there were 5.2 million people volunteering in Australia. Of these, 1.1 million volunteered their time and effort to the area of community welfare. Social services tend to attract older volunteers, while younger people tend to volunteer their time to areas such as sport and emergency services (ABS 2007).

In its previous work on the implications of population ageing, the Commission predicted that national volunteering rates in the area of social services would increase in years to come due to demographic effects associating with the baby boomers retiring and newly retired people having a high propensity to volunteer in this area (PC 2005a, p. 383).

While this increase would alleviate labour shortages in some areas, it would be less influential in others, as volunteers cannot perform all the roles of paid staff. In the disability sector, volunteers tend to be better suited to supporting roles such as

transportation, assisting with household chores, shopping and companionship. However, jobs that have higher demands in terms of education and training, difficulty or unpleasantness are unlikely to be bolstered significantly by volunteers.

It is likely that some volunteers would be willing to move into paid employment in the sector — taking on additional hours, responsibilities and training — if funding was available to do so. The SCS estimated that 20 per cent of current staff have, at some point, worked in an unpaid role within the sector. As such, volunteers themselves represent a potential source of additional formal labour to the disability sector. Conversely, some participants have suggested that the 'commercialisation' of the disability sector may undermine its capacity to attract volunteers in the first place (Northcott Disability Services, sub. 376, p. 23; South Australian Government, sub. 496, p. 17). This may occur to some extent, although NGOs in a wide variety of sectors commonly employ a mix of a paid and unpaid staff. (In many cases, volunteer work is used as a stepping stone to paid employment.)

And while by itself the NDIS cannot stimulate volunteering, it can make volunteering attractive and easier by:

- promoting volunteering opportunities through marketing campaigns
- reducing search costs by fulfilling a matching function between volunteers and service providers (but only to the extent that there are any gaps in existing state infrastructure, which already perform this task reasonably well)
- reducing burdens to entry
- more broadly encouraging engagement of the community and people with disability — using the strategies outlined in chapter 4. For example, one feature of these strategies would be a proposed 'compact' between the NDIA and the not-for-profit sector to continue to mobilise volunteers (recommendation 4.4).

The net impacts of these kinds of initiatives are uncertain, but at least a major goal would be achieved if they sustained the current efforts by service providers to attract and integrate volunteers into their organisations.

Self-directed funding may recruit new people

While its role should not be overstated, self-directed funding may allow people to hire friends or neighbours as support workers — recruiting a new group into the labour market. Importantly, these employment options would be available in situations where, due to isolation or strong demand for staff from other sectors (such as in mining areas), there may not be a well operating formal care market.

Furthermore, self-directed funding would somewhat reduce the impact of excess demand for workers in the disability sector because people could switch to mainstream services that may be more readily available, offer better value or simply be a more attractive alternative than specialist disability services.

The Commission has also proposed that payment of family members be trialled as part of self-directed funding. This may be successful in solving some labour shortages, with this being the experience in the United States (appendix G). On the other hand, there are risks it may aggravate labour shortages by displacing informal supports and by overusing complementary labour. These were concerns of a study into payment of family members by the Victorian Transport Commission (Kerr et al. 2009). The Commission has proposed a trial of paying family members, which can test its effects on the net availability of labour (as well as its other impacts).

15.5 Are labour supply concerns surmountable?

Finding enough labour to meet the expected growth of the disability sector is one of the key challenges for the NDIS and NIIS. In order to minimise the problems that will occur and the potential for excessive wage pressures, it is important that the NDIS has effective management processes in place and that the implementation of the NDIS is not too rapid.

Increased funding of the sector, the shift away from block funding, greater consumer choice, together with low barriers of entry to the workforce, will facilitate a much more responsive labour market than is currently the case. In particular, current and emerging shortages are likely to be replaced by upward pressure on wages. While this presents a financial risk to the scheme, it is both necessary and desirable to attract more workers to an underpaid and understaffed industry. The gradual implementation of the proposed scheme and the price controls maintained through the voucher system should reduce the likelihood of wage 'overshooting'.

Also, as previously discussed above, the current workforce is sometimes underutilised. In that context, Martin and Healy (2010, p. 146) concluded:

> … there is significant scope for disability providers to increase the working hours of their current non-professional workers, without facing the high costs of recruiting new workers.

Beyond this, there are several supporting measures that can ease labour supply constraints including supporting the informal workforce and volunteers, and programs aimed at assisting training and education, recruitment and perceptions of

the industry. Immigration and employment of international workers are likely to be a particularly effective instrument, should acute shortages emerge.

15.6 Qualifications, working knowledge and career paths

The attributes of staff — their training, experience, abilities and personality — largely determine the quality of care in the disability sector. This section examines how workers acquire these attributes and how to deliver an appropriately skilled workforce.

What skills are needed?

Staff in the disability sector require a diverse range of skills, knowledge and personal attributes, with tiered degrees of specialisation.

One segment of the sector involves people with professional credentials and requirements for tertiary training and accreditation (such as occupational therapists). These areas are discussed briefly at the end of this section.

However, for many employees, their skills often involve the combination of practical generic skills (such as cooking, cleaning, driving, and general communication skills) with critical intangible skills, such as the capacity to treat people with dignity, respect, compassion and patience.

In other cases, the skill set will be more specific to the disability sector, such as:

- lifting safely
- bathing
- protocols for providing care in different settings (such as in home care, residential care)
- supporting people who have challenging behaviours, such as self-harm
- providing disability support appropriate for specific groups, such as Indigenous people or those from cultural and ethnic backgrounds with different social attitudes to disability.

Beyond this, attendant carers and support workers need to acquire more specialised expertise about specific conditions to understand their client's care needs better and the most effective way to support them.

However, a large part of working in the disability sector (particularly as a support worker) involves knowledge and skills that are specific to a single client. This reflects:

- the diverse life circumstances of their clients
- how their personality and preferences influence their care and support needs
- the unique ways in which disability manifests itself
- the fact that many conditions underlying disability are rare, so that particular knowledge learned with one client may never be used again
- the service-based nature of the industry that, like all services, should be as responsive to the individual needs of clients as possible.

With such a wide variety of skills within the sector, the challenge is to ensure training, and associated funding is available to those who need it, while not forcing people to undertake training when it is not required.

Familiarisation with a new system

The NDIS is a new system underpinned by different ways of funding and overseeing disability supports, greater devolution of power to people with a disability, and new sets of rules and procedures. These differences mean that in the transition to a new system, existing workers will need to know how the new system will work, their roles in it, and the changes it implies for their everyday practice. Accordingly, there will be some training requirements associated with the shift to the NDIS. This should be supported through web resources (a part of the tier 2 function of the NDIS — chapter 3), as well as through direct training and awareness arrangements. While the NDIA may provide some of this information themselves, it is envisaged that service providers and DSO's will play a major role in explaining and promoting the new system.

How does the workforce attain the skills they need?

While personal traits, such as empathy, patience and good communication skills are highly important, disability workers must also acquire other practical skills. This mainly occurs through on-the-job experience, which embodies several different types of learning:

- *learning by doing*. Staff will naturally progress over time as they learn from the situations and challenges they encounter. The skill of adapting to individual people's needs can also be developed alongside a flexible range of strategies to

address them. Together, this allows experienced staff to take on clients with more complex needs, be capable of working in more challenging environments and have the confidence to deal with emergencies or unexpected situations

- *learning from clients and their family.* The person with a disability and their families are often the most informed about their disability and the appropriate support needs (a fact that participants in this inquiry demonstrated). Similarly, family members of people with an intellectual or psychiatric disability will often have the crucial knowledge about how to gain trust, to communicate and productively interact with each person
- *learning from experienced staff members*. This can occur formally, such as through supervisors, mentors or 'buddy' shifts. If staff members have difficulty in dealing with a complex situation, they can ask a more senior staff member for help. Alternatively, this can occur through informal workplace exchanges and advice. This type of skill acquisition is not applicable in all settings, as staff often work with a single person, or outside an organisation's structure. Nor would it be appropriate in areas where specialised training is necessary (such as in addressing challenging behaviours).

In large part, this type of learning occurs organically. However, governments can also influence the minimum quality of a workforce through encouraging formal training, the subject of the next few sections.

Learning through formal training

Formal training programs can occur through disability service providers or through the Vocational Education and Training (VET) sector.[21]

Training delivered at work

Most service providers incorporate some form of training into their induction process for new staff, as well as providing training for the purpose of ongoing professional development. This varies greatly between organisations, but may include areas such as safety issues, communication techniques and complaints mechanisms. This type of training is likely to be effective because:

- it can be effectively targeted at the work that will be performed

[21] Although this distinction is not always clear, as some large service providers are also operating as registered training organisations delivering VET courses.

- the service providers have incentives to provide effective training, as they will be the ones who have to deal with any potential problems that occur due to unprepared staff
- it will help open lines of communication between junior and senior staff within an organisation. This ongoing dialogue can be very useful for dealing with unexpected difficulties that may arise.

While this form of training should be encouraged, making it mandatory may be problematic. The value of training provided by a service provider is that it can focus on the knowledge and skills needed for the particular job requirements. If courses were standardised and made compulsory, then this individuality and flexibility could be lost. Moreover, some support tasks may require little training, and compulsion to provide it may raise costs without a commensurate benefit (and may exclude some potential workers altogether).

An important way of encouraging training by service providers is to ensure efficient pricing for the purchase of supports, which would need to cover staff induction training.

VET Training

There are several formal VET training programs designed to prepare people for the disability workforce. These include certificates I–IV, diplomas and advanced diplomas. These must conform to the Australian Quality Training Framework and are regulated by the National Quality Council to maintain standards. The diversity of the tasks performed in the industry is reflected in the topics covered, including: practical skills about personal care needs (such as bathing and lifting), behaviour support, individual health and emotional wellbeing, occupational health and safety, empowerment of people with disabilities and community participation and inclusion (TAFE NSW 2011).

VET training may enhance the quality of care in several ways. Formally trained staff may be more proficient in performing caring tasks, and may have a greater sensitivity and awareness in how they interact with people with a disability. Formally trained staff can also be a source of information to service providers about emerging best practice, and how current organisational processes could be improved. Training may contribute to better service. The Commission has proposed a shift towards a person-centred model of support services and for people to choose their providers (or to manage their funds by themselves). Training may help change the ethos of the disability workforce, not all of whom understand the importance of self-determination for people with a disability.

VET training may also reduce the risks to clients and staff (for example, safety risks arising from poor lifting techniques). It also potentially reduces risks to service providers and funding bodies, which may be held accountable when incidents occur.

Some participants have pointed to other benefits of formal training and credentials in changing perceptions and worker aspirations. Training may improve community perceptions about the professionalism of the sector and increase the career prospects for those entering it (Blue Mountains Working Party, sub. 142, p. 8; Attendant Care Industry Association, sub. 268, p. 12; Lesley Baker, sub. 188, p. 15; Liquor, Hospitality and Miscellaneous Union, trans., p. 809).

Despite these benefits, some participants expressed the view that formal qualification fell well short of providing 'work ready' applicants. For example:

> ACiA conducted a survey of its members last year on the issue of training and qualifications. Most providers stated that they generally employed people with a Certificate III. However, this appeared to not be because of the skills or knowledge that workers had obtained, but because it demonstrated some level of commitment to the work to be undertaken. They therefore mostly felt that they still had to train staff 'from scratch'. (Attendant Care Industry Association, sub. 268, p. 11)

Some service users, went further and suggested that in some cases formal training could be counter productive:

> My preference is to get people who have not had this training with other people as there is often a lot of unlearning needed to make it work for me (Dr Phillip Deschamp, sub. 136, p. 2)
>
> My experience with 'trained' staff is that there is an overly medicalised relationship, which results in a 'worker knows best' power structure instead of a mutually satisfactory and equal relationship between workers and the person with a disability. (Ben Lawson, sub. 103, p. 6)
>
> It is the experience of most people with disabilities and their families who have achieved the right to select and appoint their own support staff, that workers drawn from outside the disability sector, with no disability training, who do not think in terms of 'disability' are invariably preferred as personal support staff. This suggests that a 'de-industrialisation' of disability staffing is needed, so that support roles more closely resemble community-based neighbour and peer relationships rather than industry relationships. (National Federation of Parents, Families and Carers, sub. 28, p. 6)
>
> I never ask anybody I employ if they have got any training in disability because it doesn't matter to me. I'm one of the people who talk to the person; it's their attitude. Do they speak to my son? Do they acknowledge he exists? Do they have the right sense of social justice? That comes first. I can teach them how to work with Jackson. I can do that, and everybody — this whole individual thing, you know, it doesn't matter if you get somebody with 15 certificates in disability, you still have to teach them about your person, because they all have their idiosyncrasies. (Sally Richards, trans., p. 402)

While formal training does not appear to be a substitute for on-the-job training and experience, it is likely that it delivers some benefits to staff and clients.

These benefits have led some participants in this inquiry to suggest there should be a minimum qualification required for people to work in the disability sector — usually certificate III (Trevor Robinson, sub. 127, p. 6; Northcott Disability Services, sub. 376, p. 23; Disability Professionals Victoria, sub. DR866, p.4;). Already, several service providers will only employ staff with a basic qualification (for instance, CARA, sub. DR778). So far, no jurisdiction has made certification compulsory for all support staff. That said, governments have indicated that it would be desirable that all new staff achieve at least a certificate three level qualification either before starting work or soon after (NDA 2006, p. 37).

In responding to the Commission's draft report view that formal training should not be mandated for all employees, some participants considered that this would lead to adverse outcomes for people with disabilities and its absence would devalue the work that is undertaken (for example, Macarther Disability Services, sub. DR813, p. 10; Leveda, sub. DR935, p.3; Cerebral Palsy Alliance, sub DR682, p. 5).

However, the benefits associated with mandatory qualifications need to be assessed against the costs and risks.

- The overall costs of the qualification itself can be high. The direct *costs* are relatively small in monetary terms,[22] and is usually subsidised by government or a service provider. Nevertheless, it still involves time spent on training rather than doing other tasks — which can be a much bigger cost. The period of study at TAFE for a certificate III in disability work is 565 hours, or roughly 20 weeks full time (TAFE NSW 2011). For those only seeking to work in the industry for a short period (for example while they are at university, or people re-entering the labour force late in their working lives), such costs are potentially prohibitive if certification is made mandatory.
- Mandatory certification may constrain the choices available to people with a disability, if applied to all potential uses of their entitlement. For example, requiring that staff of a local yard maintenance business obtain a certificate III in disability work would be unlikely to improve service quality, but would increase costs. Similarly, requiring certification would also undermine the capacity of people with a disability to hire friends and family to assist in their care needs, reducing the flexibility of the self-directed funding model considerably. In both

[22] We examined the course costs from a number of TAFEs and private providers. These showed that a course from TAFE NSW cost $352 in 2011. A number of private providers offered courses at a cost of around $2000.

cases, mandating certification of staff also reduces the competition faced by specialist disability providers — to the potential detriment of consumers.

- As noted above by ACiA (sub. 268), one of the benefits of the current voluntary system is that certification provides a signal to service providers about the commitment and career intentions of staff. Under a mandatory system, this signalling function is lost.
- It may serve as a barrier to entry by competing service providers, increasing costs and reducing choice, a point made by one participant (name withheld, sub. DR716).
- Finally, while many people prefer qualified staff, some attach little significance to qualifications. Indeed, as noted above, some participants in the inquiry saw formal qualifications as undesirable. Mandatory certification effectively compels the latter group to pay for something they do not actually want.

Combined with the varied and practical nature of skill acquisition in the disability sector, the potential to worsen labour shortages and the problems it might pose for choice by people with a disability, the costs associated with *mandatory* staff certification for *all* support workers are likely to exceed the benefits.

As such, the Commission does not recommend that certificate III (or any other qualification) be a pre-requisite for non-professional workers in the disability sector, but rather that a 'horses for courses' approach should be adopted. Where a worker needed to perform manual handling, specialised communication or administer medicine, it would be important for the worker to be trained in these tasks. Similarly, there are areas of disability support, absent the right skills and experience, could be dangerous for the support workers and people with disability. For instance, this would include using restrictive practises or addressing the needs of people with challenging behaviours.

Outside the specific areas where staff would *require* training, there would be some scope within the NDIS for people to choose their support worker either by managing their funding directly, using a DSO, or by going to a service provider that offers trained staff. Information on staff qualifications made available on the information portal discussed in chapter 10 would assist this process.

Moreover, there are ways in which government can assist formal training in ways that avoid the problems of compulsion. For example, the current subsidies provided

to those attending TAFE institutions or other education providers should continue under the proposed disability scheme.[23]

VET training needs to be of high quality

The government could also encourage skill development by ensuring that all VET training in disability related areas is of a high standard. This would provide confidence to those undertaking training that their investment of time and money would be worthwhile. It would also increase the confidence of service providers and users of disability services that a person acquiring certification would be well trained and competent. Unfortunately, the Australian VET sector does not always produce graduates with the skills necessary to work in the sector, which can undermine this confidence. This concern was raised during this inquiry, for example:

> … the reality of a service provider like my own organisation - and we have 1000 people working for us - is they come with their certificate but actually don't know how to do anything (Barbara Merran - Attendant Care Industry Association, trans., p. 632)

It was also listed as the 'single biggest issue' in a recent report into the VET sector (Skills Australia, 2011, p. 78).

In light of the concerns raised about the quality of VET training in this inquiry and in other recent inquiries (Productivity Commission reports into Aged Care, PC 2011a; the Early Childhood Development Workforce, PC 2011b; and the VET Workforce, PC 2011c) it will be important that the newly established Australian Skills Quality Authority and the remaining state regulators addresses quickly what appears to be signs of systemic weaknesses in the present arrangements. Providers and consumers should be actively invited to report sham qualifications to the Australian Skills Quality Authority and any remaining state regulators and the NDIA should work with the regulators to ensure that the quality of disability support training provided by all RTOs meets a consistently satisfactory standard.

Specialist staff

While the bulk of this chapter focuses on (relatively lower-skilled) disability support workers, several professions — doctors, nurses, occupational and speech

[23] It is difficult to estimate precisely the proportion of courses that governments subsidise because fee-for-service courses provided by private institutions are not recorded in the relevant statistics. However, it appears that the majority of people undertaking formal training receive some form of government subsidy, either by attending a TAFE or through the Productivity Places Program, which has subsidised private providers.

therapists and other allied health professionals — also provide services for people with a disability. These professions generally require university degrees and have professional bodies that govern entry and maintain standards.

There is an ongoing shortage in some of these professions. Health Workforce Australia pointed to the:

> … significant challenges that workforce shortages present to the quality and sustainability of Australian health care. (HWA 2010, p. 5)

For many of these specialist staff, working with people with disabilities is only a small share of their responsibilities. For example, while nursing services are important to some people with disabilities, nursing is mainly a role of the health care sector. Accordingly, it is beyond the scope of this inquiry and the NDIA to try to resolve broad workforce issues in this area.

There are, however, several specialist occupations that have a larger role in the disability sector, such as mental health and disability practitioners (box 15.6), occupational therapists, clinicians trained in certain early interventions. In these areas, the NDIA should be more directly involved with workforce development, as it would be with the general carer workforce.

This will involve monitoring staffing levels so that it knows in advance when a shortage will become severe and reacting as necessary to attract and retain staff. This may involve strategies such as increasing university places in particular courses or helping professionals from overseas become accredited in Australia (as was suggested by the Cerebral Palsy Alliance, sub 682, p.6). The NDIA may wish to use Health Workforce Australia to assist with workforce planning.

Local area coordinators

Local area coordinators — a type of case manager, but with broader responsibilities and having a different philosophy when interacting with people with disabilities — would play an integral role within the NDIS. They would be the main contact point between the system and people with disabilities. Given the diversity of people within the NDIS, the work (and caseloads) of local area coordinators will vary greatly. For example, the Transport Accident Commission and the New Zealand Accident Compensation Corporation employ some specialised case managers. These managers have relatively low client numbers and cater for complex cases or people with unstable conditions.

Box 15.6 **The community based mental health workforce**

Both COAG and the Australian Senate have recognised that there are significant workforce shortages across all mental health professional groups (COAG 2006 and SCCA 2008). These shortages are particularly pronounced for non-clinical supports. Service providers, who currently offer a range of community-based supports for people with psychiatric disability, note ongoing difficulty in attracting and retaining a suitably qualified workforce (FaCHSIA, 2011, p. 53).

Attracting and retaining staff in this area presents a particular challenge. Firstly, the skill set for workers providing supports for those with psychiatric disability is typically more specialised than for disability workers generally. A recent review found that 45% of mental health staff providing non-clinical community-based supports held a tertiary degree, with 49% holding a VET qualification (only 6% held no formal qualification). In addition, a variety of in-house training is generally provided to staff (ibid).

Secondly, given the relatively small share of resources currently directed to non-clinical mental health supports, the introduction of the NDIS will represent a significant increase in staffing levels.

But ultimately, attracting and retaining an appropriate workforce to support the needs of people with psychiatric disability will require the same responses already outlined in this chapter, such as wages, conditions, career paths and job satisfaction. For example, including psychiatric disability supports within the NDIS might help attract and retain workers — since the NDIS is likely to value more highly the role of community support workers. The role of these community support workers is poorly understood, and hence undervalued, by the traditional mental health sector. This lack of understanding was evident in a review of the Personal Helpers and Mentors initiative (PHaMs):

> Many services interviewed reported that developing relationships with mental health services and with the health sector generally had been difficult, although the situation is gradually improving. The causes for this difficulty are many but the main one is lack of understanding of psychosocial recovery … Sometimes GPs, psychologists and psychiatrists, seem to have little knowledge of individual psychosocial rehabilitation. They are unaware of evidence that demonstrates the enormous benefits for clients …PHaMs services also report that the differences in beliefs about treatment approaches … Lack of familiarity with approaches to psychosocial rehabilitation and a lack of respect for community-based services in their ability to take care of clients were common issues cited by PHaMs services… Some clinical services do not value the work or opinion on PHaMs staff believing them, falsely, to be unqualified. (p. 120)

In a system as large as the NDIS, there would be greater scope (and grounds) for specialisation, at least in major urban areas. For example, local area coordinators might deal with specific types of disability (like acquired brain injury or other cognitive disabilities), differing levels of functional impairment (for example, people with limited mobility), specific types of support needs (for example, people whose only support needs are community participation); different cultural groups

(such as people from the Vietnamese community with disabilities) and different backgrounds (for example, ex-prisoners with disabilities). The scope for specialisation would necessarily be less in some regional parts of Australia.

Regardless, the diversity of people with a disability (and the environments in which they live) suggest that local area coordinators would be drawn from a variety of different fields and require training relevant to any specialised function they perform. The fields would include allied health professionals, such as occupational therapists and physiotherapists, counsellors, nurses or experienced support staff (who may or may not have any formal qualifications). Agencies like the TAC have processes for training case managers, which could be scaled up for the NDIS. There is also a range of accredited courses in case management, such as the Diploma in Community Services, but these may need to be amended to recognise the broader functions and skill sets of local area coordinators.

Assessors

The NDIA would also need to employ, either directly or through a contracting arrangement, a number of assessors to determine people's support needs and tailor a care package to them. The Commission envisages that this group would be experienced allied health professionals and would receive additional training in the assessment tool described in chapter 7.

16 The costs of the NDIS

Key points

- The initial cost of the National Disability Insurance Scheme (NDIS) would be very modest, reflecting the Commission's recommendation that the scheme be gradually rolled out over several years following intensive work on implementation by a high level taskforce.
- The Commission estimates that, after gradual implementation of the scheme, its *net* cost would be around **$6.5 billion** in 2018-19.
  - The annual *gross* cost of the NDIS in 2018-19 is estimated at $13.6 billion, comprising $11.8 billion in care and support (accommodation support, attendant care, day programs, respite, therapy and other supports), $580 million in aids and appliances, $120 million in home modifications, $80 million in transport and other costs (including tier 1 and tier 2 functions, disability support organisations, assessors and local area co-ordinators).
  - The direct offset to this gross cost in 2018-19 is estimated at $7.1 billion. This takes into account the current spending on people aged less than 65 years (comprising spending from the National Disability Agreement, Home and Community Care, residential and community aged care, aids and appliance schemes, transport taxi subsidy schemes and psychiatric disability community supports).
- The annual cost of the scheme in 2011-12, 2012-13 and 2013-14 is estimated to be $10 million, $50 million and 550 million respectively, with service delivery commencing in 2014-15 at a *net* cost of $890 million. The net costs then increase over time to $6.5 billion in 2018-19.
- When the NDIS matures (say in 2050), the *net* cost is estimated to be $4.4 billion. There will be savings in care and support through early interventions and community capacity building (for example, more people with a disability able to live in the community with intensive supports rather than in supported accommodation). A further offset is when the National Injury Insurance Scheme matures.
- A variety of data sources were used to derive the NDIS cost estimate, including the 2009 Survey of Disability, Ageing and Carers.
- There are uncertainties about the cost estimates because of the nature and quality of the data. Data uncertainties are common in designing new insurance products and schemes. Similar data uncertainties were faced by the NSW Government when it agreed to implement the Lifetime Care and Support Scheme.
- An estimated 411 000 people in 2018-19 under the age of 65 years would access NDIS-funded, individualised supports (tier 3 of the scheme). Of these, approximately:
  - 329 000 would have significantly reduced functioning in self care, mobility, communication and/or self-management.
  - 82 000 people would be supported by early intervention.

16.1 Introduction

This chapter discusses the costs of the National Disability Insurance Scheme (NDIS). The cost estimates take into account who the NDIS is for (chapter 3) and the types and level of formal supports required (chapter 5). Specifically, this chapter outlines:

- the data available to undertake the costing
- the estimated number of people in 2018-19 who would access NDIS-funded, individualised supports (tier 3 of the NDIS)
- the cost of the NDIS in 2018-19, considering the types and levels of support for people in tier 3
- the 2018-19 offsets to the gross cost of the NDIS — that is, current government funding of people likely to be in tier 3 of the NDIS
- variations to the base case (scenario analysis)
- annual costs from 2011-12 to 2018-19 as the scheme builds up to its full operating level and annual costs when the NDIS is a mature scheme (say 2050).

A 'bottoms-up' method is used to estimate scheme costs. It divides eligible people into groups with similar support needs and estimates the average per person cost of support in each group. By multiplying the average per person cost by the estimated number of people in each group, an estimate of the annual cost for each group is obtained. The total scheme cost is then the sum of the cost of each group.

There are three sources of uncertainty in the costings, the:

- estimated number of people likely to be in tier 3
- appropriate nature and level of supports (including wage rates) to assign to people in tier 3.
- average per person costs of these supports.

As no data source contains the exact information required to cost the NDIS, a range of data sources are used. The main data source used to estimate the number of people in tier 3 is the 2009 ABS Survey of Disability, Ageing and Carers (SDAC) Confidentialised Unit Record File (CURF) and Master Unit Record File (MURF).

The 2009 SDAC CURF was not available for the draft report. The CURF has allowed more detailed modelling to be undertaken for the final report and some changes to the cost estimates. Further, people with significant and enduring psychiatric disability were more comprehensively included in tier 3.

The 2018-19 costs presented assume that the scheme is fully operational. The scheme is expected to be fully operation in 2018-19 with a gradual implementation phase from 2011-12 to 2018-19. The annual costs from 2011-12 to 2018-19 are discussed in section 6.6.

16.2 Data

Accurate cost estimates for the NDIS could be prepared if a longitudinal database existed that included information on individuals functional support needs, health conditions and use of formal and informal support. The current absence of such a database hampers the ability to prepare cost estimates of the NDIS. Greater investment in such data management and reporting would assist in preparing more accurate cost assessments in the future (as recommended in chapter 12).

The 2009 SDAC (progressively released from December 2010) is the most up-to-date information on the level of disability within the Australian population. Specifically, the 2009 SDAC includes:

- demographic and socioeconomic wellbeing information on people with disabilities and their carers
- detailed information on activity limitations (for example, self-care, mobility and communication)
- information on main disabling conditions and the functional support needs associated with these main disabling conditions.

The sample size of the 2009 SDAC was increased to almost double that of the 2003 SDAC to improve the quality of the estimates at both national and state and territory levels. The 2003 SDAC was approximately a one in 400 household sample. Despite the increase in the sample size of 2009 SDAC, considerable uncertainty remains due to the small number of people with some less common disabilities. Where relevant, the relative standard errors of estimates are included.

The 2003 SDAC (adjusted for the population in 2009) and underlying information from the burden of disease data on the prevalence of certain health conditions were used to further understand the possible range of people likely to be included in tier 3 of the NDIS (section 16.3). However, these sources were not used to estimate the number of people with significant and enduring psychiatric disability. Extensive modelling has already been undertaken by the Australian Government on the size of this group and this modelling was used in the analysis.

A variety of sources were analysed to estimate average per person costs for different types of supports and severity levels, including:

- information on the unit costs of disability supports provided under the National Disability Agreement — specifically, accommodation support, community support, community access and respite
- information on the annual cost of attendant care, supported accommodation, equipment, home modifications and transport of people in the:
  - NSW Lifetime Care and Support Scheme
  - serious injury division of the New Zealand Accident Compensation Corporation
  - major injury division of the Victorian Transport Accident Corporation
- the Multiple Sclerosis Longitudinal Study
- taxi subsidy schemes in NSW and Victoria for people with disabilities
- a number of community mental health programs including the NSW Housing and Accommodation Support Initiative (HASI) and the Victorian home-based outreach initiative.

The estimated average per person costs are set out in section 16.4.

16.3 Estimated number of people in tier 3

Numbers of people in tier 3 by age group and criterion

As outlined in chapter 3, a person in need of tier 3 support would have to meet at least one of the following conditions:

- have significantly reduced functioning in self-care, communication, mobility or self-management[1] and require significant ongoing support. For example, this would include people who need support in toileting, significant support for mobility and/or communication or supports in self-management and planning to live successfully in the community (such as those with intellectual disabilities or those with significant and enduring psychiatric disability), and/or

[1] Self-management includes being in control of one's behaviour, insight, memory and decision making. For example, the ability to independently make decisions, including decisions with medium to long-term implications or to make long-term plans (chapter 3).

- be in an early intervention group. This would encompass people for whom there was good evidence that the intervention would be safe, significantly improve outcomes and would be cost-effective. It would mainly comprise two groups. One group would be those for whom there was a reasonable potential for early interventions that would improve their level of functioning (as in autism, acquired brain injury and sensory impairments). The other would be those with newly diagnosed degenerative diseases, such as multiple sclerosis and Parkinson's disease, for whom early intervention would enhance their lives. For instance, assisting in retaining bladder control can assist people with worsening multiple sclerosis.

The interaction of the NDIS with other government support schemes is also discussed in chapter 3. The Commission recommends that memoranda of understanding be established with relevant agencies (including those responsible for aged care, health, acute mental health, education, housing, transport and palliative care services) so that people access the most suitable supports and expertise. Further, the Commission proposes that upon reaching the pension age (and at any time thereafter), the person with the disability could elect to stay with the NDIS or move to the aged care system (but would be funded by the Australian Government). Hence, only people aged less that 65 years were included in the analysis (appendix C).

A combination of functional support need and main disabling condition was used to estimate the number of people in tier 3 (table 16.1). A more detailed breakdown of the main disabling conditions included is provided in appendix H.

It is important to note that, while a combination of functional support need and main disabling conditions was used to proxy tier 3, it is not proposed that any person be excluded on the basis of condition. However, it is likely that people with certain conditions (such as cancer and other chronic health conditions) will have their needs best met by another system (such as the health and the palliative care system). Hence, in proxying the tier 3 population it assumed that people with certain conditions were most likely in or most likely out and hence either included or excluded. For example, people with cancer most likely will not need care and support for a prolonged period of time (say more than five years) and hence people with cancer were excluded from the costings. People with acquired brain injury, more often than not, will need ongoing care and support and hence were included in the costings. In practice it is unlikely that 100 per cent of people with an acquired brain injury need ongoing long-term care and support and 0 per cent of people with cancer require ongoing long-term care and support.

Table 16.1 **Parameters used to estimate the number of people in tier 3**

Criterion	*Functional support need*	*Health conditions included*	*Health conditions excluded*
Significant limitations with self-care, communication, mobility and self-management – core activity component	A person needs assistance with at least one core activity at least once a day	Intellectual disability, congenital malformations, deformations and chromosomal abnormalities Nervous system disorders (including multiple sclerosis, cerebral palsy and Parkinson's disease) Sensory conditions (including hearing, vision and speech) Musculoskeletal disorders (including arthritis and back problems) Injury (including head injury and amputations) Autism and autism related disorders (including Rett's syndrome and Asperger's syndrome) Dementia and Alzheimer's disease Stroke People with significant and enduring mental health condition	Respiratory conditions (including asthma and emphysema) Diseases of the digestive system Diseases of the skin and subcutaneous tissue Diseases of the genitourinary system Neoplasms (including breast cancer and prostate cancer) Diseases of the blood and blood forming organs (including haemophilia) Diabetes Obesity Mental health conditions which are not significant and enduring Diseases of the circulatory system
Significant limitations with self-care, communication, mobility and self-management – self-management component (Note: this excludes people already captured in the core activity component)	People with a profound, severe, moderate or mild core activity limitation People with a disability who are not restricted in core activities but have schooling/ employment restrictions	Intellectual disability, congenital malformations, deformations and chromosomal abnormalities	All that were excluded from the 'significant limitations with self-care, communication, mobility and self-management – core activity component' Nervous system disorders Autism and autism related disorders Acquired brain injury Stroke Paralysis Dementia and Alzheimer's disease

(Continued next page)

Table 16.1 **(continued)**

Criterion	*Functional support need*	*Health conditions included*	*Health conditions excluded*
Early intervention (not already captured in 'significant limitations with self-care, communication, mobility and self-management' — both the core activity component and the self-management component)	People with a profound, severe, moderate or mild core activity limitation People with a disability who are not restricted in core activities but have schooling/ employment restrictions	Nervous system disorders (including multiple sclerosis, cerebral palsy and Parkinson's disease) Autism and autism related disorders (including Rett's syndrome and Asperger's syndrome) Acquired brain injury Stroke Paralysis Dementia and Alzheimer's disease	All that were excluded from the 'significant limitations with self-care, communication, mobility and self-management' group Mental health conditions which are not significant and enduring Musculoskeletal disorders

Discussions with clinicians assisted in understanding which health conditions are most likely to require long-term care and support. Clinicians informed the Commission that respiratory conditions (such as chronic obstructive pulmonary disease and asthma), cancers, diabetes (without associated blindness or amputation) and cardiovascular conditions (except stroke) do not require long-term care and support outside of the health system in the vast majority of cases. Clinicians also informed the Commission that certain conditions are likely to result in ongoing care and support such as intellectual disability, degenerative neurological conditions, spinal cord injury and acquired brain injury.

A further consideration in the costing was the adequacy of the 2009 SDAC in identifying people who need assistance daily with self-management. It was not easy to ascertain which particular questions best identified self-management. Self-management tends to be associated with health conditions such as intellectual disability, acquired brain injury and psychiatric disability.

Intellectual disability was used to proxy the self-management group (who do not have daily needs with *core* activities). People with acquired brain injury (who do not have daily needs with core activities) were included in the early intervention group and people with a significant and enduring psychiatric disability were not estimated using the 2009 SDAC.

Different levels of functional support need were used for different criteria:

- People requiring at least *daily* assistance with core activities (self-care, communication and mobility) was used to estimate people in the core activity component of the significant reduced functioning group.

- The ABS functional definition of people with a disability[2] was used to estimate the self-management component of the significantly reduced functioning (along with a main disabling condition of intellectual disability). This broader definition was used as there are no direct questions on self-management in the 2009 SDAC.
- The ABS functional definition of people with a disability was also used to estimate the number of people who may require early intervention. The early intervention group was assumed to include people who are likely to require ongoing low-level support, as well as people who need episodic support. For example, an early intervention for behavioural support may be time-limited, whereas an early intervention for a person with multiple sclerosis may be ongoing. In the latter case, the person with multiple sclerosis may not be at a stage where they require daily support. However, low-level support would assist with managing the condition in the immediate future.

It is estimated that 411 250 people (or 2.2 per cent of the population under the age of 65 years) would be in tier 3 of the NDIS in 2009 (table 16.2). Of these, 329 510 people would have significantly reduced functioning:

- 222 310 require daily assistance with core activities
- 50 320 with self-management limitations (but not daily needs with core activities)
- 56 880 with significant and enduring psychiatric disability.

In addition to those with significantly reduced functioning, a further 81 740 would receive early intervention support.

Consultations with experts who have previously examined the prevalence of enduring psychiatric disability for the Australian Government suggest that around 0.4 per cent of the adult population (or 12 per cent of those adults with severe mental disorders) would have 'severe, persistent and complex' psychiatric needs (around 57 000 people). This closely approximates the criteria for identifying people likely to require individualised supports under tier 3 of the NDIS. These are individual who:

- have a severe and enduring mental illness (usually psychosis)
- have significant impairments in social, personal and occupational functioning that require intensive, ongoing support

[2] Specifically, people with a disability who are not restricted in core activities but have schooling/employment restrictions and people with either a profound, severe, moderate or mild core activity limitation were used in the modelling.

- require extensive health and community supports to maintain their lives outside of institutional care.

Table 16.2 **Estimated number of people in tier 3**[a]

Criteria	*0–14 years*	*14–49 years*	*50–64 years*	*Total*
2009 SDAC				
Significantly reduced functioning				
People with daily needs in self-care, communication and/or mobility	77 320 (8.2%)	80 490 (6.7%)	64 500 (6.8%)	222 310 (4.3%)
People with self-management limitations (without daily needs in core activities)	23 850 (16.8%)	20 900 (19.8%)	5 570 (27.8%)	50 320 (12.1%)
Psychiatric disability[b]		56 880		56 880
Early intervention	19 790 (17.5%)	38 480 (13.1%)	23 470 (13.6%)	81 740 (8.0%)
Total tier 3	**120 960**	**196 750**	**93 540**	**411 250**
Total population	4 145 000	10 838 000	3 883 000	18 866 000
% of total population	**2.9**	**1.8**	**2.4**	**2.2**

[a] Relative standard errors of estimate in brackets where available. [b] The specific age breakdown for psychiatric disability was not provided beyond 15–64 years.

Sources: Commission calculations based on ABS (unpublished); unpublished research for psychiatric disability.

As a means of independently verifying that the projected tier 3 use is a reasonable approximation, the same criteria were applied to the 2003 SDAC CURF (to the extent possible given data limitations — the significant and enduring psychiatric disability numbers were not compared). The estimates were adjusted to reflect the population and demographic profile of Australians in 2009 using ABS population estimates (ABS 2008d). The aggregate estimates of the number of people eligible for tier 3 in the proposed NDIS are very similar (345 460 in the 2003 SDAC compared with 354 370 in the 2009 SDAC — table 16.3). However, there are differences in the estimates by different criteria and ages. In particular, the estimates based on the two datasets diverge in terms of the self-management group (without daily needs with core activities) and for the 50–64 year age group. This may reflect overlapping classifications and co-morbidity. Nevertheless, the similarities of the aggregates suggest reasonable reliability of the overall estimate of the number of people in tier 3.

Table 16.3 **2009 and 2003 SDAC tier 3 comparison**

Criteria	*0–14 years*	*14–49 years*	*50–64 years*	*Total*
2009 SDAC				
People with daily needs in self-care, communication and/or mobility	77 320	80 490	64 500	222 310
People with self-management limitations (without daily needs in core activities)	23 850	20 900	5 570	50 320
Early intervention	19 790	38 480	23 470	81 740
Total tier 3	**120 960**	**139 870**	**93 540**	**354 370**
Total population	4 145 000	10 838 000	3 883 000	18 866 000
% of total population	**2.9**	**1.3**	**2.4**	**1.9**
2003 SDAC converted to 2009 estimates				
People with daily needs in self-care, communication and/or mobility	82 520	72 370	55 230	210 120
People with self-management limitations (without daily needs in core activities)	27 220	39 460	6 130	72 810
Early intervention	11 740	31 630	19 150	62 520
Total tier 3	**121 490**	**143 450**	**80 520**	**345 460**
Total population	4 145 000	10 838 000	3 883 000	18 866 000
% of total population	**2.9**	**1.3**	**2.1**	**1.8**

Source: Commission calculations based on ABS (2004, 2008d, unpublished).

Epidemiological data compared with 2009 SDAC data

In order to further test the robustness of the results, the estimates were checked against the 2003 Australian Burden of Disease (BoD) data (Begg et al. 2007) which included estimates of the prevalence of health conditions (table 16.4).

The BoD study analyses levels of death and disability from a comprehensive set of diseases, injuries and risks, which are combined to form an estimate of the total health 'burden'. The classification of diseases is based on the International Classification of Disease — Version 10. The BoD study includes an extensive review of available data and literature, and has information on the incidence, prevalence, duration and relative risk of mortality for major diseases by age and sex.

However, while these data may present a more accurate estimate of the number of people with each health condition than the 2009 SDAC, they do not include any information on functional limitations for each condition, or on co-morbidity. This means that while useful as a cross-check, the BoD data cannot itself be used to cost the NDIS.

In order to make consistent comparisons between the BoD and 2009 SDAC, it was necessary to include all people in the 2009 SDAC aged under 65 years who reported having a condition — not just those with or who have functional support need. As such, the 2009 SDAC data in table 16.4 is higher than those in tables 16.2 and 16.3.

Table 16.4 **Comparison of 2009 SDAC and BoD data[a]**

Condition	*2009 SDAC*	*BoD (adjusted to 2009 population)*	*Ratio of BoD estimate to 2009 SDAC estimate (%)*
Intellectual disability	206 720	249 100	121
Schizophrenia	51 770	82 030	158
Multiple sclerosis	20 530	12 570	61
Dementia	4 100	9 570	233
Epilepsy	89 480	46 430	52
Parkinson's disease	4 210	5 780	137
Cerebral palsy	21 810	40 080	184
Stroke	113 240	71 380	63
Autism/Asperger's	56 700	75 260	133

a Totals are not comparable because BoD counts multiple health conditions for individuals.

Sources: ABS (2008d, 2010d); AIHW (Begg et al. 2007 unpublished data).

There are differences between the BoD data and the 2009 SDAC data, with the latter providing lower estimates. The main reason for this is that random variations are likely to be high in the 2009 SDAC due to the small sample size.

The literature review undertaken for the BoD study indicates that the incidence of intellectual disability is approximately 16.3 per 1000 live births. This is based on data from the Western Australia IDEA (Intellectual Disability Exploring Answers) database 1983–1996. However, not everyone with intellectual disability is likely to require assistance with activities of daily living and instrumental activities of daily living. Hence, the 249 100 presented in the table is likely to overstate the number of people with intellectual disability needing to access tier 3 supports. The cost implications of the alternative estimates are explored in section 16.5.

Severity hierarchy within tier 3

People within tier 3 have varying levels of need. Hence people were divided into different groups based on the frequency with which they indicated that they needed assistance with activities of daily living. The severity hierarchies were created for people:

- who need at least daily assistance with at least one core activity

- who require assistance with self-management (but who do not have a daily need with core activities)
- in the early intervention group (but who do not need daily assistance with core activities).

People who need at least daily assistance with at least one core activity

In the 2009 SDAC people report on the frequency with which they need assistance with the core activities of self-care, mobility and communication. People needing daily assistance report one of the following frequencies:

- more than six times a day
- three to five times a day
- twice a day
- once a day

Some examples include a person who needs assistance with:

- self-care more than six times a day, mobility more than six times a day and communication more than six times a day (person 1)
- self-care three to five times a day but does not need daily assistance with either mobility or communication (person 2)
- mobility once a day but does not need daily assistance with self-care or communication (person 3).

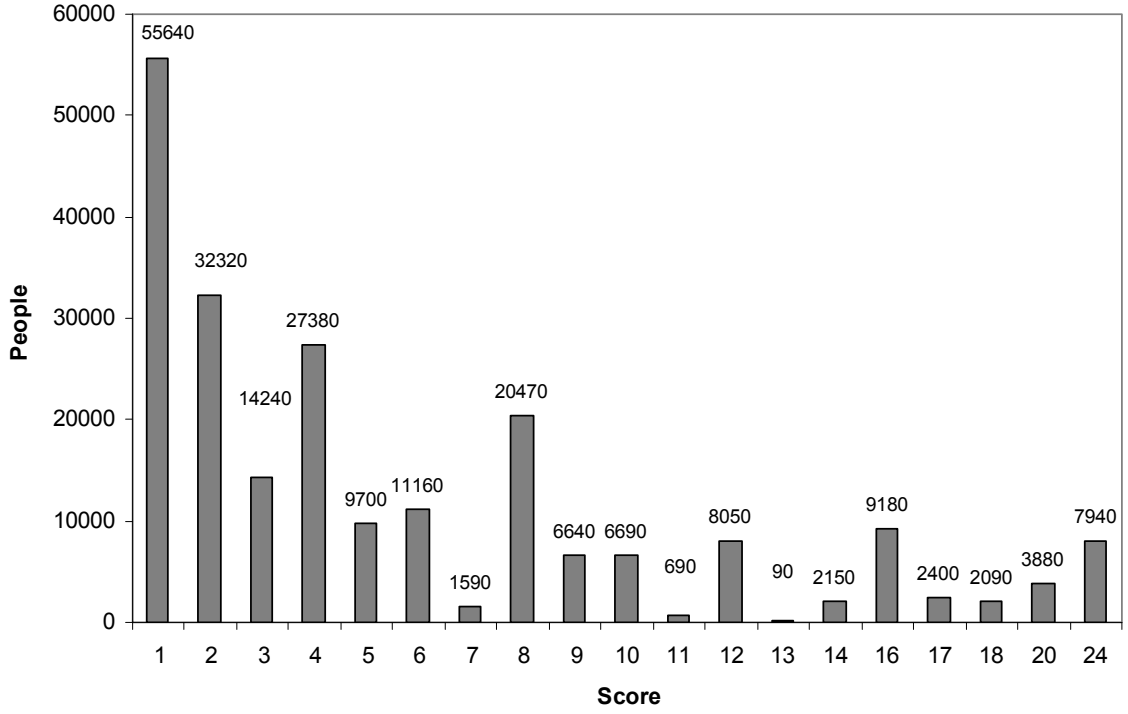
Overall, there are multiple combinations of frequencies and core activities (around 111). Hence, a scoring system was devised for grouping purpose, based on the sum of daily care needs across the self care, mobility and communication domains. The scoring system is as follows:

- more than six times a day: a score of 8
- three to five times a day: a score of 4
- twice a day: a score of 2
- once a day: a score of 1.

In the above examples, person 1 would score 24, person 2 would score 4 and person 3 would score 1.

The distribution of scores within this group is skewed (figure 16.1) — only a few people need very high-level support and several people need low-level support.

Figure 16.1 **Distribution of severity — daily needs group**



Data source: Commission calculations based on ABS (2010d, unpublished).

To understand the reasonableness of the above model, comparisons with current disability service provision were made. Current National Disability Agreement/Home and Community Care (HACC) service provision for people under the age of 65 years in 2007-08 was as follows[3]:

- 6 500 people in residential aged care and a further 2 100 people receiving community aged care
- 15 700 people were in either group homes, large or small residences
- 17 060 people received in-home support, the attendant care program, alternative family placement or more than one hour per day of HACC support
- 28 940 people received community access
- 19 950 people received respite
- 73 040 people received community support

3 People can receive more than one support type — for example, live in a group home and receive community access supports. These people were not counted twice; rather they were included in the more intensive support group. In this example it would be the group home.

- 160 920 people received less than one hour per day of HACC support (commonly an hour or two per fortnight) or meals or transport only.

The model used to cost tier 3 does not replicate current service provision but some reasonableness checks are possible:

- 25 490 people scored between 16 and 24 of which 15 880 were aged between 15–64 years. Considering there are 15 700 supported accommodation places at present and a further 6 500 people in residential aged care this number does not seem high enough.
- 24 310 people scored between 9 and 15 and a further 9 600 people aged 0 to 14 years scored between 16 and 24. These scores are likely to represent intensive support in the community (such as in-home support) — about double the current stock of intensive support in the community.
- 172 500 people scored between a 1 and 8 and this is likely to represent the lower intensive community supports such as community access, respite and community support — about 41 per cent higher than the current stock of these places.
- A large number of people also received a small amount of HACC assistance — it is likely that these people will receive more support under the tier 3 arrangement — packages more in line with the current respite/community support packages.

In conclusion it appears that the projected assumed levels of support do not include enough supported accommodation but includes a large amount of intensive community support. An adjustment is made in the costing to effectively count some intensive community support places as supported accommodation places. This will allow the stock of supported accommodation to increase by 12 000 places if required. This is a 25 per cent increase in the current stock (including people in residential aged care). The 25 per cent was derived from consultations with state disability systems on waiting lists for supported accommodation. The 25 per cent[4] estimate is based on two jurisdictions that could provide data (other jurisdictions were unable to provide waiting list data due to inadequacies in their information systems).

It is plausible that in the long-run with appropriate community capacity building and daily supports the model will more resemble reality with more people with a disability having the skills to remain in the community. If this is not the case, more supported accommodation places would need to be funded by the NDIS based on reasonable need.

4 Victoria indicated a 30 per cent increase was required in supported accommodation (chapter 2).

People with significant and enduring psychiatric disability

Based on discussions with experts[5] and state and territory agencies, the Commission has assumed the following distribution of support needs for people with significant and enduring psychiatric disability:

- Around 10 per cent of the individuals identified (almost 6 000 people) have 'intensive' support needs. These individuals require intensive assistance with activities and instrumental activities of daily living such as maintaining personal hygiene, dressing, cooking, laundry and shopping. These individuals also require accommodation-based supports. In the past, these individuals may have been long-term hospital patients or in institutional settings.
- Around 25 per cent (14 000 people) have 'high' support needs. These individuals may have histories of long-term hospitalisation and tenancy instability. They often have limited familial and social networks and experience very low levels of community participation. Absent these supports individuals struggle to live in the community and are at high risk of becoming homeless or requiring hospitalisation.
- Around 10 per cent (close to 6 000 people) have 'medium' support needs. These individuals would require assistance with living skills such as cooking, cleaning, shopping, laundry and budgeting, as well as accessing community services.
- The majority of individuals, around 55 per cent (around 31 000 people) have low support needs.[6] These are people for whom a small level of weekly support enables them to live successfully in the community. These individuals might require assistance with such things as accessing community activities, budgeting or a weekly shopping trip. The support provided by the NDIS would form part of a broader package, which would include ongoing clinical care provided by the mental health sector. These individuals have needs similar to others with cognitive impairments, such as milder intellectual disability.

5 The Commission has been guided by discussions with a range of experts, including Bill Buckingham and Professor Harvey Whiteford and we are most grateful for their valuable advice.

6 The share of individuals with low support needs is consistent with the share of HASI users on a low level support package (56 per cent). In Victoria, a much larger share of individuals receive the lowest support package.

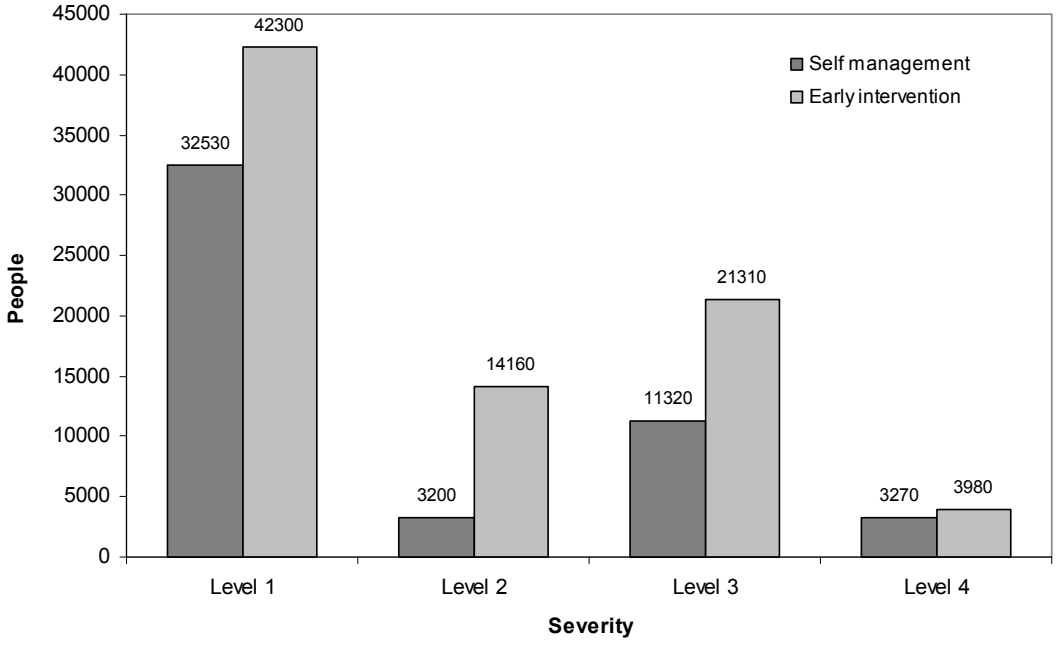
People in the self-management and early intervention groups who do not have daily needs with core activities

A severity distribution was also devised for the self-management and early intervention groups who do not require daily assistance with core activities. Severity was based on the ABS definition of disability status and is as follows:

- Level 4: people with a profound core activity limitation (but do not require daily assistance with core activities)
- Level 3: people with a severe core activity limitation (but do not require daily assistance with core activities)
- Level 2: people with a moderate core activity limitation (but do not require daily assistance with core activities)
- Level 1: people with a mild core activity limitation and all other disability (but do not require daily assistance with core activities).

As some people in the self-management group and health conditions included in the early intervention group are already counted in the 'daily needs' group, the distribution is not skewed like the 'daily needs' group (figure 16.2).

Figure 16.2 **Distribution of severity — self-management and early intervention (without a daily need with core activities)**

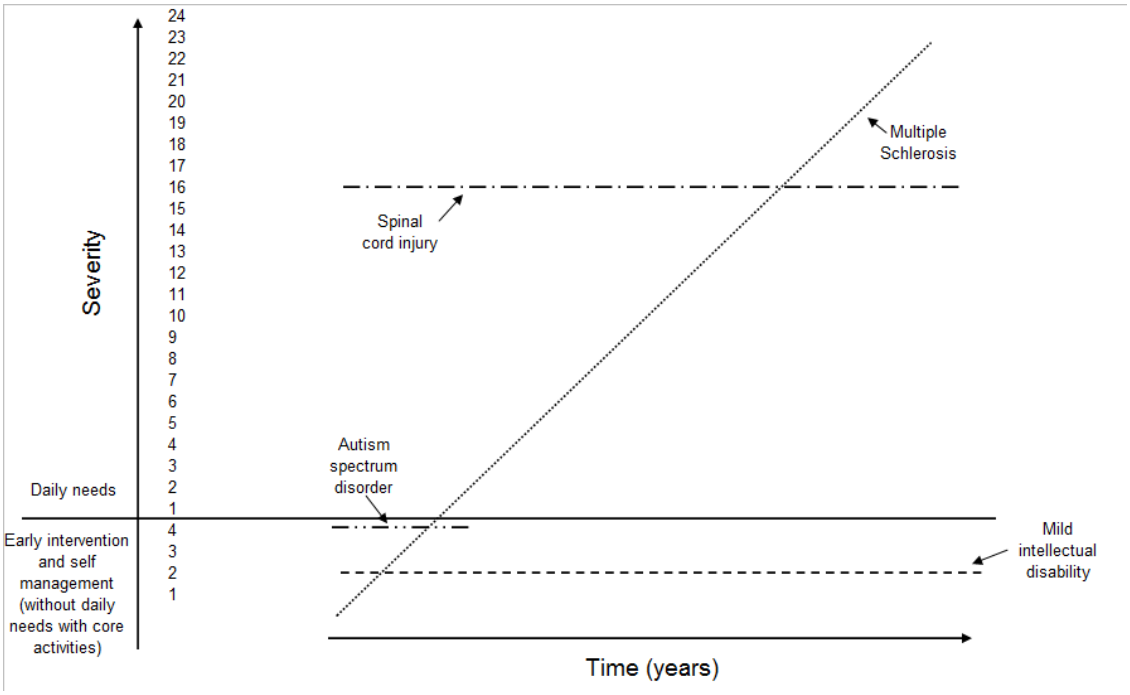


Data source: Commission calculations based on ABS (2010d, unpublished).

The 2009 SDAC provides a snapshot of the population at a point in time. The purpose of the NDIS is to provide care and support to people over their lifetime. Depending on the condition, people may progress through different severity levels or remain at the same severity level for several years. For example (figure 16.3):

- a person with multiple sclerosis is likely to enter the scheme when they are first diagnosed. A very low level of support will be required initially (putting them in the early intervention group as they will not need daily support but early intervention is important to improved wellbeing). Over time the support need will increase until daily support is required and then this daily need will also increase over time
- a person with an autism spectrum disorder may require an early intervention which only lasts a few years and then they might no longer require tier 3 supports
- a person with spinal cord injury is likely to require daily support from injury and this daily support is likely to reman fairly constant over time and then rise as the person ages
- lastly some people with significant self-management limitations (such as someone with intellectual disability and significant and enduring psychiatric disability) may require a little bit of support (not daily) on an ongoing basis, such as assistance with planning and personal finances.

Figure 16.3 **Illustrative care and support trajectories for different health conditions**



16.4 Costs of the scheme in 2018-19

The annual costs of supports for people in tier 3 in 2018-19 are made up of the following four categories:

- care and support
- aids and appliances
- home modifications
- transport.

Care and support

Care and support covers a range of formal services, including attendant care, accommodation support, nursing care, day programs, therapy, domestic assistance and meal preparation. These supports are not costed separately. Rather, different average annual costs are assumed for different severity levels, from which a package of care and support would be developed for the individual.

Within tier 3, a severity distribution of need was developed based on 2009 SDAC respondents on the frequency of need for assistance with core activities (section 16.3). Unfortunately, there is no direct mapping from these responses to hours of care and support needed per day. The average per person costs which have been developed are based on known reasonable formal support packages for people with certain levels of need. The average per person costs implicitly assume a level of natural supports which is difficult to quantify. The average per person costs (table 16.5 and figure 16.4) are average costs for each severity group. Some people will receive more than this average cost and others less, depending on their assessed need. It is also important to note that attendant care accounts for about 80 per cent of the total cost of comparable schemes. Hence, wage rates are the principal driver of total cost. The costings make an allowance for variations in wage rates of +/- 10 per cent.

The following should be noted with regard to the annual per person cost of care and support.

- For people in the highest severity level (score 24) who need assistance more than six times a day with all three domains of self-care, communication and mobility, the average annual cost is assumed to be approximately $280 000 reflecting ‘high-end’ supported accommodation within accident compensation schemes.
- For people with a severity score of 16 (likely to be comprised of people needing assistance more than six times a day with two of the three core activities, or

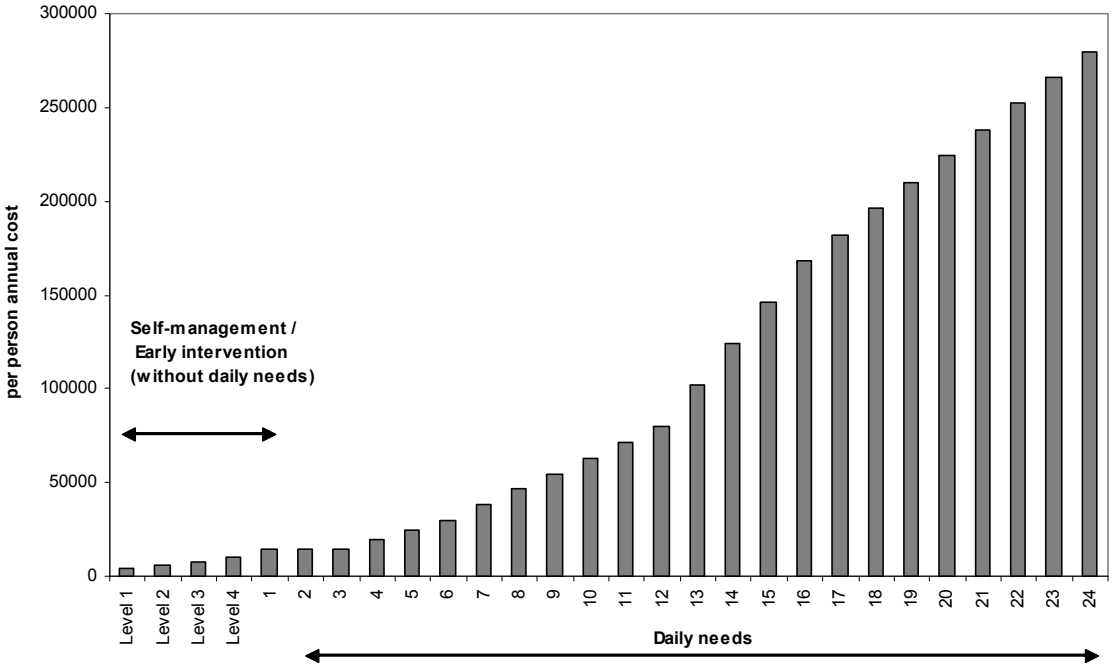
people who need assistance three to five times a day with the three core activities) an average per person cost of $168 000 was assumed. This is reflective of 24-hour supported accommodation options (often with behavioural support) within state jurisdictional disability systems.

Table 16.5 **Annual per person cost of care and support, $**

	0–14 years	*15–64 years*
Significantly reduced functioning (with daily needs))		
1	4 425	14 750
2	4 425	14 750
3	**4 425**	**14 750**
4	5 910	19 700
5	7 395	24 650
6	**8 880**	**29 600**
7	11 400	38 000
8	13 920	46 400
9	16 440	54 800
10	18 960	63 200
11	21 480	71 600
12	**24 000**	**80 000**
13	30 600	102 000
14	37 200	124 000
15	43 800	146 000
16	**50 400**	**168 000**
17	54 600	182 000
18	58 800	196 000
19	63 000	210 000
20	67 200	224 000
21	71 400	238 000
22	75 600	252 000
23	79 000	266 000
24	**84 000**	**280 000**
Self-management (without daily needs)		
Level 1	4 000	4 000
Level 2	4 000	6 000
Level 3	4 000	8 000
Level 4	4 000	10 000
Early intervention (without daily needs)		
Level 1	4 000	4 000
Level 2	6 000	6 000
Level 3	8 000	8 000
Level 4	10 000	10 000

Sources: Commission calculations based on ABS (2010d); unpublished data from accident compensation schemes and state disability systems.

Figure 16.4 **Annual average per person cost of care and support, $** [a]



[a] Annual average per person costs of care and support for people aged 15–64 years

Data sources: Commission calculations based on ABS (2010d); unpublished data from accident compensation schemes and state disability systems.

- For people with a severity score of 12 (likely to be comprised of people needing assistance with one of the core activities more than six times a day and another three to five times a day) an average per person cost of $80 000 was assumed. This is reflective of attendant care packages within state jurisdictional disability systems and accident compensation schemes.
- For people with a severity score of 6 (likely to be comprised of people needing assistance twice a day with all three core activities or people who need assistance twice a day with one core activity and three to five times a day with another) an average per person cost of almost $30 000 was assumed. This is reflective of a day program, transition to work, respite combined package within state jurisdictional disability systems. Assuming an hourly rate of $40 this package reflects approximately two hours care and support per day.
- For people with a severity score of 3 or less (comprised mainly of people who need a small amount of daily support) an average per person cost of almost $15 000 was assumed. This is reflective of a respite/community support package within state jurisdictional disability systems and reflects approximately one hour of care and support per day. For people with a score of 1, 2 or 3 an average per person cost of $14 750 was assumed. This is essentially a ‘floor’ in the average

per person cost for people needing daily support. This floor recognises that there are also costs associated with people organising supports.

- Per person costs between the discussed benchmark per person costs were derived by linear interpolation.
- For people in the self-management and early intervention groups (without daily needs with core activities), often less support is required and this is reflected in the per person annual costs. Some intensive behavioural therapy may be relatively more expensive, whereas educating a person about their newly diagnosed condition may be far less costly. There is also no necessary time limit on the early intervention. The average per person costs equate to:
  - Level 4: approximately five hours of support per week
  - Level 3: approximately four hours of support per week
  - Level 2: approximately three hours of support per week
  - Level 1: approximately two hours of support per week

  Importantly these levels do not represents 'caps' — rather they reflect an average. Further, people can enter and exit.
- The average hourly rate of $40 is consistent with data from accident compensation schemes. A range of +/- 10 per cent is presented to allow for wage variation.
- A 12 per cent user cost of capital is incorporated into the average per person costs of people with a score of 16 or more. This 12 per cent is consistent with unpublished data on the capital costs of group homes. It is likely that people in this category are particularly likely to require accommodation support, and hence the hourly rate was increased to include a cost of capital.
- For people aged 0–14 years, 30 per cent of the average per person cost was assumed to be met by the NDIS. The assumption here is that families provide most care to children between the ages of 0–14 years, regardless of disability, and that care should be provided predominantly to support parents in their role of caring for a child with a disability. It is also assumed that the education system is responsible for providing some supports to children with disabilities. It is assumed that the scheme will meet the full cost of early intervention for the 0 to 14 year age group. Early interventions in this age group are likely to be as costly as for other age groups.
- It is assumed that the support system strikes a balance between formal (paid) individual supports and the unpaid supports provided by family members and the community. That is, the scheme does not seek to totally replace informal care —

to do so would be unlikely to reflect the wishes of people with a disability or their carers, and would also imply a far more expensive scheme design.

Based on discussions with experts involved in undertaking the Australian Government modelling and current state arrangements, the Commission has assumed the following per person costs for people with significant and enduring psychiatric disability by support need group:

- For people with 'intensive' support needs, an average per person cost of $120 000 per annum was assumed. This is broadly comparable to the cost of a group home place.
- For people with 'high' support needs, an average per person cost of $50 000 per annum was assumed, consistent with the value of a 'high' package under the NSW HASI.
- For people with 'medium' support needs, an average per person cost of $25 000 was assumed. Both NSW (under HASI) and Victoria (through their home-based outreach initiative) offer 'moderate' support packages to those with psychiatric disability. The value of the former is $35 000, while the value of the latter is $14 000. Hence, $25 000 per annum appears reasonable.
- For people with low support needs, an average per person cost of $7500 per annum was assumed. This estimate is comparable to the value of a 'standard' home-based outreach package in Victoria for people with psychiatric disability (the lowest level package).

Estimated annual cost in 2018-19 of care an support

Combining the assumed average per person costs (table 16.5), the estimated number of people eligible for tier 3 supports (figures 16.1 and 16.2) and the psychiatric disability cohort information, a total cost of $11.8 billion per annum is estimated for care and support (table 16.6). Allowing for some variability in wage rates, the total cost is likely to range from $10.7 billion per annum to $13.0 billion per annum (a range of +/- 10 per cent). Comparison of these care and support costs with the Disability Investment Group analysis is included in box 16.1.

Table 16.6 **Annual cost of care and support, $ million**

Significantly reduced functioning				
Daily needs with a core activity	1 290	3 650	2 970	7 910
Self-management (without daily needs with core activities)	100	110	30	240
Psychiatric disability				1 855
Total	1 390	3 760	3 000	10 005
Early intervention	160	290–380	190	650
Total	1 550	4 060	3 190	10 655
Additional accommodation				1 190
Total				**11 840**

Source: Commission calculations based on data in figure 16.1 and table 16.5.

Box 16.1 **Comparison with the DIG report findings**

- The Disability Investment Group (DIG) report estimated the cost of care and support to be $9.5 billion. While the DIG report included a greater number of people in the target population, the cost per hour was assumed to be $30. Further, more than 50 per cent of people in this group were assumed to have an annual per person cost of $1000. Further, the per person costs for the higher severity groups were lower than the per person costs used in the current analysis. The current analysis uses data from accident compensation schemes on hourly costs of care, and also includes per person costs for early intervention strategies and people with self-management limitations. The DIG report only included people with a self-management limitation who also had a severe or profound core activity limitation.
- The target group for the DIG estimates was people with a severe or profound core activity limitation regardless of health condition. This constituted approximately 578 000 people in 2009 under the age of 65 years, comprising:
  - constant support needs (40 000 or 6.9 per cent)
  - frequent support needs (104 000 or 18.0 per cent)
  - regular support needs (32 000 or 5.5 per cent)
  - grade B lower support needs (86 000 or 14.9 per cent)
  - grade C lower support needs (316 000 or 54.7 per cent)
- The annual costs of care and support were $100 000 for constant support needs, $50 000 for frequent support needs, $25 000 for regular support needs, $10 000 for grade B support needs and $1 000 for grade C support needs.
- The proportion of people in the target group using aids and appliances was 58 per cent and the annual cost per person was $240 per annum.
- The proportion of people in the target group who had their dwelling modified was 15 per cent and the annual cost per person was $2 000 per annum.

(Continued next page)

Box 16.1 **(continued)**

- The proportion of people in the target group who needed assistance with transport was 44 per cent and the annual cost per person was $320 per annum.
- The annual cost of the DIG's proposed scheme in 2009 was estimated to be $10.8 billion comprising:
  - $9.5 billion in care and support
  - $129 million for aids and appliances
  - $159 million for home modifications
  - $90 million for transport
  - a 10 per cent administration fee.
- Excluding chronic diseases (cancer, diabetes, circulatory — except stroke, respiratory, inflammatory bowel disease and genitourinary diseases) reduced the annual estimate from $10.8 billion to $8.2 billion.

Source: DIG (2009a).

Aids and appliances

In order to estimate the cost of aids and appliances, the proportion and number of people in tier 3 of the NDIS needing aids and appliances (regardless of use) was estimated using the 2009 SDAC (tables 16.7 and 16.8), and annual average per person costs (table 16.9) were assumed for each category using accident compensation scheme information and the Multiple Sclerosis Longitudinal Study.

The proportion of people requiring aids and appliances, home modifications and transport was broadly consistent with 2003 SDAC estimates bringing further support to the numbers. Once again, comparison with the Disability Investment Group report findings has been provided in box 16.2.

As expected, a higher proportion of people who require daily assistance with core activities require aids and appliances than people in the early intervention group.

Table 16.7 **Proportion of people needing aids and appliances**

	0–14 years	*14–49 years*	*50–64 years*
Significantly reduced functioning (excluding people with a psychiatric disability)	35	57	73
Early intervention	4	38	33

Source: ABS (unpublished).

Applying the proportion of those needing aids and appliances (table 16.7) to the estimate of the total number of people in tier 3 (table 16.2), suggests that there are approximately 170 330 people who need aids and appliances (table 16.8).

Box 16.2 Comparison with the DIG report findings — aids and appliances, home modifications and transport

Aids and appliances: The estimate in this report is significantly higher than the estimate of $240 million presented in the DIG report. The DIG estimate was based on information from a review of the NSW Program of Appliances for Disabled People (PADP) (PWC 2006). However, the annual costs derived in the current analysis is based on more comprehensive information from accident compensation schemes and the Multiple Sclerosis Longitudinal Study, and is likely to be more robust. That said, the estimates appear high compared with the NSW PADP scheme. Accordingly, the $331 million (the lower bound) is likely to be more realistic.

Home modifications: The DIG report estimated an annual cost of $159 million for home modifications, which falls towards the upper bound of the range in this report. The DIG report used an annual average per person cost estimate similar to that in this report, but assumed that a higher number of people had their dwelling modified.

Transport: The overall estimates in this report are similar to the DIG estimate of $90 million (although the numbers used to arrive at this varied). The DIG analysed the number of people who need assistance with transport compared to the number of people who cannot use transport at all, resulting in a larger number of people accessing transport support. Also, the annual cost used in the DIG report was based on the average annual cost of the NSW taxi subsidy scheme only, and hence was lower than the estimates used in this analysis. The overall figures are similar, as the higher number of people (in the DIG report), but lower cost, balance out.

Source: DIG (2009a).

Table 16.8 Number of people needing aids and appliances

	0–14 years	*14–49 years*	*50–64 years*	*Total*
Significantly reduced functioning (excluding people with a psychiatric disability)	35 790	60 530	50 820	147 140
Early intervention	800	14 560	7 830	23 190
Total	**36 590**	**75 090**	**58 650**	**170 330**

Source: Commission calculations based on data in tables 16.7 and 16.2.

Several data sources were used to generate a range of annual per person costs of aids and appliances (table 16.9). Aids and appliances cover a range of items which vary substantially in cost (for example, wheelchairs, continence aids, prostheses, communication items and lifters). A wheelchair can cost between $1000 and

$30 000, and continence aids can cost between $1 and $400.[7] Aids and appliances also have varying lives. For example, a continence aid may only be used once, whereas a wheelchair can last several years. It is important to note that the average per person costs represent an annual average, taking into account that some items are more expensive, but last several years, and other items are less costly, and may only be used once.

Table 16.9 **Annual per person cost of aids and appliances, $**

	0–14 years	*14–49 years*	*50–64 years*
Significantly reduced functioning (excluding people with a psychiatric disability)[8]	2 000–5 000	2 000–5 000	2 000–5 000
Early intervention	2 000–5 000	2 000–5 000	2 000–5 000

Sources: Private correspondence with NZ ACC, NSW LTCSA and the MS Society of Australia.

Combining the per person costs (table 16.9) with the total number of people in each category (table 16.8) generates an estimated cost of aids and appliances that ranges between $331 million and $824 million (table 16.10).

Table 16.10 **Annual cost of aids and appliances, $ million**

	0–14 years	*14–49 years*	*50–64 years*	*Total*
Significantly reduced functioning (excluding people with a psychiatric disability)	68–169	116–285	101–254	285–708
Early intervention	2–4	29–73	16–39	46–116
Total	**70–173**	**144–358**	**117–292**	**331–824**

Source: Commission calculations based on data in tables 16.8 and 16.9.

Home modifications

The cost of home modifications was estimated by using the 2009 SDAC to calculate the proportion and number of people in tier 3 of the NDIS who had ever had their dwelling modified (tables 16.11 and 16.12), and multiplying this by the assumed annual per person costs based on information from accident compensation schemes and the Multiple Sclerosis Longitudinal Study (table 16.13).

7 Private correspondence, Review of NSW Health PADP program.

8 People in the self-management group (who do not have daily needs with core activities) were assumed to have a lower annual per person cost than other people in the significantly reduced functioning group.

Table 16.11 **Proportion of people who have had their dwelling modified**

	0–14 years	*14–49 years*	*50–64 years*
Significantly reduced functioning (excluding people with a psychiatric disability)	9	19	18
Early intervention	0	7	24

Source: Commission calculations based on ABS (unpublished).

Applying the above proportions to the total number of people in tier 3 (table 16.2), provides an estimate of the number of people in tier 3 who have had their dwelling modified. Overall, it is estimated that approximately 58 930 people in tier 3 have had their dwelling modified (table 16.12).

Table 16.12 **Number of people who have had their dwelling modified**

	0–14 years	*14–49 years*	*50–64 years*	*Total*
Significantly reduced functioning (excluding people with a psychiatric disability)	9 460	20 580	20 540	50 580
Early intervention	0	2 700	5 650	8 350
Total people	**9 460**	**23 280**	**26 190**	**58 930**

Source: Commission calculations based on data in tables 16.11 and 16.2.

As with aids and appliances, the annual per person cost of home modification was based on a number of different data sources. In the year that people have their homes modified, the actual cost is high — on average between $10 000 and $30 000. However, this does not occur on an annual basis. It was assumed that the investments have a ten year economic life, so that the per person annualised cost varies between $1000 and $3000 (table 16.13).

Table 16.13 **Annual per person cost of home modifications, $**

	0–14 years	*14–49 years*	*50–64 years*
Significantly reduced functioning (excluding people with a psychiatric disability)	1 000–3 000	1 000–3 000	1 000–3 000
Early intervention	1 000–3 000	1 000–3 000	1 000–3 000

Source: Private correspondence with NZ ACC, NSW LTCSA and the MS Society of Australia.

Combining the per person costs (table 16.13) with the total number of people in each category (table 16.12) generates an annual cost of between $59 million and $177 million (table 16.14).

Table 16.14 **Annual cost of home modifications, $ million**

	0–14 years	*14–49 years*	*50–64 years*	*Total*
Significantly reduced functioning (excluding people with a psychiatric disability)	9–28	21–62	21–62	51–152
Early intervention	0	3–8	6–17	8–25
Total	**9–28**	**23–70**	**26–79**	**59–177**

Source: Commission calculations based on data in tables 16.12 and 16.13.

Transport

In order to estimate the annual cost of transport, the proportion and number of people in tier 3 of the NDIS who need assistance with transport was estimated using the 2009 SDAC (tables 16.15 and 16.16) and annual costs (table 16.17) were assumed for each category, using accident compensation scheme information and the Multiple Sclerosis Longitudinal Study.

Overall, approximately 25 per cent of people with significantly reduced functioning cannot use public transport at all, compared to 12 per cent in the early intervention group.

Table 16.15 **Proportion of people who cannot use public transport at all**

	0–14 years	*14–49 years*	*50–64 years*
Significantly reduced functioning (excluding people with a psychiatric disability)	20	30	25
Early intervention	8	11	18

Source: Commission calculations based on ABS (unpublished).

Given the above proportions and the overall tier 3 population (table 16.2), it is estimated that 73 600 people in tier 3 cannot use public transport (table 16.16). In comparison, the NSW Taxi Transport Subsidy Scheme has 76 000 eligible participants at 30 June 2010 (Transport NSW 2010) and the Victorian Multi Purpose Taxi Program had 155 000 eligible participants at 30 June 2010 (Victorian Department of Transport 2010). These numbers include people aged over 65 years. As approximately 25 per cent of participants in NSW are under 65 years old[9], the 73 600 estimate looks reasonable.

9 Private correspondence with the NSW Transport Taxi Subsidy Scheme.

Table 16.16 **Number of people who cannot use public transport**

	0–14 years	*14–49 years*	*50–64 years*	*Total*
Significantly reduced functioning (excluding people with a psychiatric disability)	19 820	31 330	17 330	68 480
Early intervention	1 790	2 320	1 010	5 120
Total people	21 610	33 650	18 340	73 600

Source: Commission calculations using data contained in tables 16.15 and 16.2.

The annual average per person costs of transport used in the modelling are based on accident compensation scheme data and annual per person costs in taxi subsidy schemes in NSW and Victoria (table 16.17). The average per person cost in the NSW scheme is approximately $320 per annum, and the average per person cost in the Victorian scheme is approximately $290 per annum. These numbers are low when compared to accident compensation data, and hence the numbers used in this analysis are higher than the average costs in taxi subsidy schemes. Constant per person costs are assumed across age groups and categories within tier 3. A cost of $750 per annum equates to roughly one trip a fortnight at an average cost of $30 per trip, and $1500 per annum roughly equates to approximately one trip per week at an average cost of $30.

Table 16.17 **Annual per person cost of transport, $**

	0–14 years	*14–49 years*	*50–64 years*
Significantly reduced functioning (excluding people with a psychiatric disability)	750–1 500	750–1 500	750–1 500
Early intervention	750–1 500	750–1 500	750–1 500

Source: Private correspondence with NZ ACC and NSW LTCSA.

Combining per person costs (table 16.17) with the total number of people in each category (table 16.16) generates an estimate of the total annual cost of transport that ranges between $55 million and $110 million (table 16.18).

Table 16.18 **Annual cost of transport, $ million**

	0–14 years	*14–49 years*	*50–64 years*	*Total*
Significantly reduced functioning (excluding people with a psychiatric disability)	15–30	23–47	13–26	51–103
Early intervention	1–3	2–3	1–2	4–8
Total	**16–32**	**25–50**	**14–28**	**55–110**

Source: Commission calculations based on data in tables 16.16 and 16.17.

Summary of the annual gross cost in 2018-19 of tier 3 individual supports

It is estimated that after the gradual introduction of the scheme over several years, the annual gross cost of tier 3 individual supports (which covers around 411 250 people) in 2018-19 would be between $11.1 billion and $14.1 billion ($12.6 billion on average), with care and support being the largest component of costs. Two additional adjustments were made to the annual gross cost:

- Australian Disability Enterprises were included (and also included as a direct offset) — $205 million
- People expected to be receiving benefits through current accident compensation arrangements and the NIIS were removed — this was estimated to be $326 million in 2018-19.

After these two adjustments the *gross* cost in 2018-19 is estimated to be $12.5 billion.

Other costs

In addition to individual tier 3 supports, other costs were identified in running the scheme. At full operation in 2018-19, these other costs are estimated to be approximately $1.1 billion, comprising around:

- $300 million for management and staff (finance, human resources, legal, program management, analysts, researchers, data minors, auditors, monitoring and compliance), assessors, call centres, office space and IT (including an electronic record for people with a disability)[10]
- $550 million for local area coordinators[11]
- $13 million for dispute resolution[12]
- $3 million for advertising campaigns[13]

10 This number was derived from detailed conversations with a number of government delivery agencies using a workload approach.

11 This assumes on average a caseload for each local area coordinator of 60 cases. However, some local area coordinators will have smaller case loads reflecting more intensive coordination needs and a proportion of tier 3 people will not require much local area coordinator support after they become accustomed to the new arrangements.

12 Derived from the TAC appeal rate and the cost per finalised case of appeal tribunals.

13 Derived from discussions with a number of government delivery agencies.

- $200 million for capacity building including funding for tier 1 and tier 2, funding for disability support organisations, funding for assisting service providers in transitioning to the new system, an innovation fund, small payments to service providers for handling added referrals from people with disabilities stemming from the NDIS, and funding for an emergency response.

These other costs increase the *gross* cost by 9 per cent to $13.6 billion. Most accident compensation schemes have a higher loading for other costs and, hence, this is possibly an underestimate. The proposed regional launch sites will assist in understanding both tier 3 individualised supports and other scheme costs in more detail.

Offsets

There is already expenditure on a range of services for people with a disability. As such, the net additional cost of the proposed scheme will be lower than the gross cost. These current expenditure items can be considered offsets against the cost of the NDIS. While some information is publicly available on these offsets, many expenditure items are a component of existing government programs (at Australian Government or state/territory level) where separate published data are not available. The Commission has worked closely with agencies delivering disability policies in order to develop realistic assumptions about the magnitude of these offsets. The projected current offsets to the gross cost of the NDIS in 2018-19 are as follows.

- Many people with a catastrophic injury are covered by accident compensation schemes under a no-fault arrangement (no lump-sum) including people in Victoria under the Transport Accident Commission, people in Tasmania under the Motor Accidents Insurance Board, people in NSW under Lifetime Care and Support Authority and people in worker's compensation schemes. This is estimated to be $408 million of which approximately 80 per cent is spent on people under the age of 65 years (DIG 2009a). This was removed from the *gross* cost of the scheme in 2018-19 as these people would be included in the NIIS. The NIIS will cover people over the age of 65 years. The NIIS is funded by the state and territories and hence the Australian Government is not required to fund the care and support for these people. However, while not relevant as an offset to the NDIS, funding by the NIIS of catastrophic injuries for people aged 65 years and over will relieve fiscal pressures on the Australian Government arising out of the National Health and Hospital Network Agreement.
- The National Disability Agreement (excluding Australian Government employment services), which includes expenditure of $5.21 billion in 2009-10 (SCRGSP 2011). It is acknowledged that a small proportion of people over the

age of 65 years receive National Disability Agreement supports and this would not be an offset to the scheme. It is not possible to estimate this proportion with the data available and hence all of the National Disability Agreement was included as an offset.

- Approximately 30 per cent of HACC expenditure provided to people under the age of 65 years, which represented $583 million in 2009-10 (SCRGSP 2011). It is noted that some people receiving HACC supports may have moderate disability associated with chronic disease and may not be included in tier 3 of the NDIS. It is not possible to quantify this number, however, it is not thought to be large for the under 65 year cohort. Hence, all estimated expenditure on under 65 year olds in the HACC program was included as an offset.
- Approximately 6 500 people under the age of 65 years are in residential aged care (AIHW 2010b), which represented approximately $270 million.[14]
- A further 2 130 people under the age of 65 years are in community aged care (AIHW 2010c), which represented approximately $36 million.[15]
- $130 million is spent on aids and appliances across Australia. Half of this, $65 million, is attributed to people under the age of 65 years.
- $24.3 million is spent on the NSW Taxi Transport Subsidy Scheme and $49.4 million is spent on the Victoria Multi Purpose Taxi Scheme. Taking into account the proportion of people under the age of 65 years (approximately 25 per cent) and extrapolating these values to all of Australia results in an approximate offset of $36 million.
- Community supports are provided to people with significant and enduring psychiatric disability. These offsets are estimated to be $616 million. The $616 million includes expenditure on Australian Government programs such as the Support for Day to Day Living in the Community program and the Personal Helpers and Mentors service as well as recent budget initiatives for coordinated care. Offsets also encompass state and territory funded supports delivered by the not-for-profit sector.
- The Australian Government currently provides early intervention funding to children with autism. This package (Helping Children with Autism Early Intervention) cost $43.62 million in 2011-12 (FaHCSIA budget statements).

[14] The average per person Australian Government cost of young people in nursing homes was based on private correspondence with NSW Ageing, Disability and Home Care.

[15] The average per person Australian Government cost of people under the age of 65 years receiving community aged care packages was based on private correspondence with NSW Ageing, Disability and Home Care.

Overall, the *direct* offset based on the above calculations is approximately $7.1 billion in 2018-19 (table 16.19).

Table 16.19 **Summary of direct offsets**

Direct offsets	*$m*
National Disability Agreement	5 210
Home and Community Care	583
Residential aged care	270
Community aged care	36
Aids and appliances	65
Taxi subsidy schemes	36
Helping Children with Autism Early Intervention	43
Psychiatric disability community supports	616
Australian Disability Enterprises	205
Total direct offsets	**7 064**

Sources: AIHW (2010b, c); DoHA (2009); DIG (2009a); FaHCSIA budget statements (2011); ITSRR (2010); private correspondence with NSW Ageing, Disability and Home Care; SCRGSP (2011).

Given these direct offsets and the estimated gross costs of the NDIS, the *net* cost of the scheme lies between $5.0 billion and $8.0 billion, with a midpoint of $6.5 billion (table 16.20).

Table 16.20 **Summary of the annual net cost of the NDIS**

	$m
Care and support	10 660–13 030
Aids and appliances	331–824
Home modifications	59–177
Transport	55–110
Australian Disability Enterprises	205
Less accident compensation scheme coverage	(326)
Total tier 3 individual supports	*10 980–14 020*
Other costs	1 060
Total gross cost	*12 040–15 080*
Direct offsets	*7 060*
Total net cost including administration	**4 980–8 010**

Source: Commission calculations based on data in tables 16.6, 16.10, 16.14, 16.18 and 16.19.

In the long-term it is expected that there will be significant other *direct* offsets:

- Early intervention by definition should result in cost-effective treatment which reduces costs in the long-term. Hence the $650 million in early intervention will reduce care and support requirements over the long-term. It is estimated that this reduction would be approximately $324 million.

- The NIIS — over time the NIIS will cover all injury on a no-fault basis. The estimated cost of the NIIS is $1.8 billion (on a fully-funded basis). When the scheme is mature, say in 40–50 years[16], the annual payments on people under the age of 65 years are likely to be approximately $720 million (and $180 million on over 65 year olds). This is substantially larger than the $326 million currently assumed to be covered by accident compensation schemes.
- Additional costs of $1.2 billion were added to the care and support costs to allow for adequate expansion of supported accommodation places if required. Over time through adequate capacity building it is plausible that more people will be able to live independently in the community with intensive community support rather than in supported accommodation.

Considering these three significant direct offsets, the *net* cost of the mature scheme (say in 2050) would be $4.4 billion (table 16.21).

Table 16.21 **Summary of the annual net cost of the NDIS in 2050**

	$m
Care and support	9 300–11 360
Aids and appliances	331–824
Home modifications	59–177
Transport	55–110
Australian Disability Enterprises	205
Less accident compensation scheme coverage	(720)
Total tier 3 individual supports	*9 230–11 960*
Other costs	910
Total gross cost	*10 140–12 870*
Direct offsets	*7 060*
Total net cost including administration	**3 080–5 810**

In addition to the direct offsets, indirect offsets are likely.

- There is significant potential for the NDIS to improve employment outcomes for people with disabilities and their carers. That would reduce the costs of the Disability Support Pension (along the lines discussed in chapter 6 and chapter 20) and support and allowances paid to carers, while also contributing to taxation revenue and productivity.
- Expanding available community support may reduce unnecessary and costly hospitalisations.

16 See, for example, Walsh et al. (2002).

- People with intellectual disability, acquired brain injury and mental illness are over-represented among the homeless, imprisoned and among drug and alcohol service users. There is significant scope to reduce the numbers in this position through the community support funded by the NDIS.
- There are efficiency gains from having a coherent assessment process and resource allocation system rather than a plethora of programs each with their own criteria, rationing mechanisms and gatekeepers.
- There are long-term gains from investing in early interventions, which are aimed at reducing high-cost crises evident in the current state-based disability schemes. This is discussed in more detail in chapter 13.

The gross cost of the NDIS is estimated to be around 4 per cent of existing tax revenue for all levels of government, while the net cost (the additional resource requirements for the NDIS) represents 1.95 per cent (table 16.22). The net cost of the NDIS would amount to around an annual $295 premium per Australian for comprehensive insurance coverage of a person's long-term care and support needs if he or she or a loved one acquired a significant disability.

Table 16.22 **The proportion of gross and net costs of tax revenue[a]**

Gross cost	$ billion	13.6
as a % of total tax revenue	%	4.07
Net cost	$ billion	6.5
as a % of total tax revenue	%	1.95

a Total tax revenue includes Australian Government and local and state taxes, but excludes taxes on public corporations or taxes imposed on other levels of government.

Sources: ABS (2011, *Taxation Revenue, Australia, 2009-10,* Cat. no. 55060DO001_200910) and Commission calculations.

Are these reasonable estimates of the costs?

The above analysis indicates that the current system is under-funded. The Commission estimates that a further $6.5 billion is required in addition to the $7.1 billion already spent on people with a disability — a 90 per cent increase. In presenting these estimates it is acknowledged that the data underlying them were not designed to cost a disability scheme (but is the best available). The Commission has attempted to verify the projected costs with alternative information.

Significant and enduring psychiatric disability

The total cost of meeting the personal support needs of this group is around $1.7 billion (excluding capital costs). The Commission considers that this order of magnitude is about right. As a comparator:

- New Zealand is widely recognised as having a better developed and resourced community mental health sector. Extrapolating New Zealand's per capita expenditure on community mental health to the relevant Australian population yields an estimate of approximately $1.8 billion.
- While the current level of HASI funding is not enough by any means to support the 56 880 people with significant and enduring psychiatric disability, discussions with planning experts, suggest that distribution of individuals across the different support packages (that is, intensive, high, medium and low) is appropriate. Extrapolating the share of individuals in each of the different support groups under HASI to the target group of 56 880 yields a cost estimate of $1 6 billion.

Levels of unmet need

On a per head of potential population basis, spending differs between the states and territories (chapter 14). The state and territory with the highest spend per head of potential population is Victoria. Discussions with the Victoria Government indicate levels of unmet need — in particular waiting lists for accommodation support and community access. Taking into account:

- the current expenditure in Victoria per head of potential population
- the increase in expenditure per head of population if supports were supplied to people on the waiting list
- assuming that each jurisdiction was funded to this same level (per head of population)

results in an increase in expenditure of between 35 and 40 per cent. This is likely to be the minimum requirement. The Victoria Government acknowledges it has an underfunded scheme and only expressed unmet need was accounted for in this analysis. In particular, no 'under-met' need was taken into account.

International comparisons

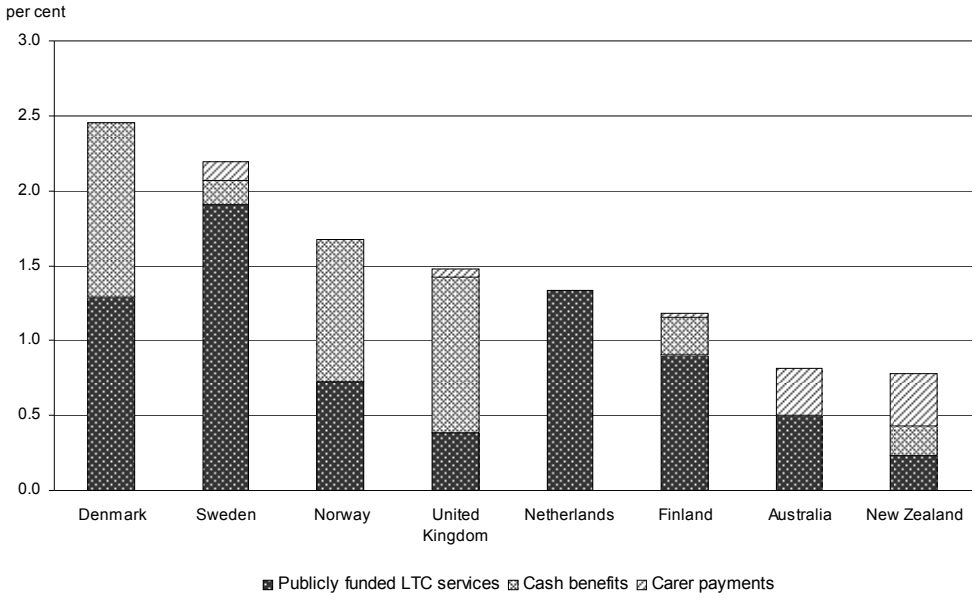
An international comparison of expenditure (to the extent that this is possible) indicates that, compared with other countries, Australia has a lower level of

spending as a share of GDP on long term care for people under the age of 65 years. Expenditure is more than double in the Scandinavian countries of Denmark, Sweden and Norway, and slightly less than double in the United Kingdom when compared with Australia (figure 16.5).[17]

Even when disability income payments are included, it appears that Australia spends relatively less than other countries (figure 16.6).

Figure 16.5 **Expenditures on long-term care, 2007**[a, b, c]

For people under 65, percentage of GDP



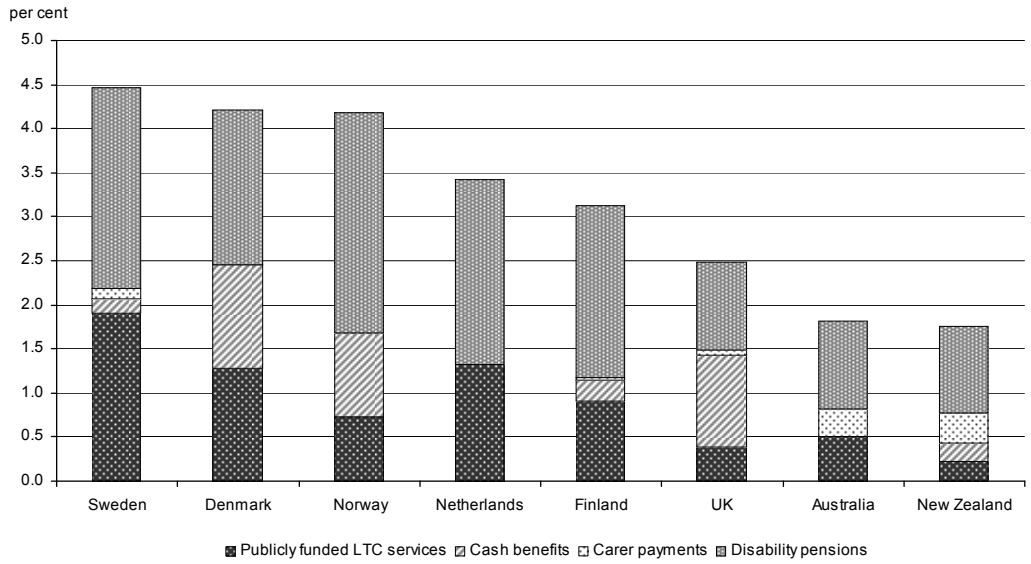
[a] Except for Australia, the Netherlands and New Zealand, the data are from Eurostat (table C2.2, Detailed Breakdown of Social Benefits for the Function: Disability). [b] The Australian data are from the Report on Government Services and are for 2007-08. [c] The Netherlands data are primarily Algemene Wet Bijzondere Ziektekosten (AWBZ, the Exceptional Medical Expenses Act) and Wet Maatschappelijke Ondersteuning (the Social Support Act), long term care expenditures for people with disabilities (AWBZ expenditures reported in Mot (2010); other expenditures are from Eurostat). [d] The New Zealand data are from: the Ministry of Health's Annual Report for 2008; the ACC's 2008 Annual Report; the Ministry of Social Development's 2008-09 Annual Report; a personal communication from the ACC giving the number of long-term care claimants — used for pro-rata carer payments (received October 2010); and data on carer payments from the Ministry of Social Development.

Data sources: ACC (2008); ACC, Special request concerning the number of long-term care claimants, received October 2010; Eurostat (2010); Mot (2010), NZ Ministry of Health (2008); NZ Ministry of Social Development (2009, 2010); SCRGSP (2010).

17 Income support payments are not included, with the exception of carer payments, as cash benefits in some countries are used to pay informal carers. Hence, it was comparable to include carer payments in Australia and New Zealand.

Figure 16.6 **Payments for people with disabilities, carers payments and disability pensions**

For people under 65, percentage of GDP



Data sources: ACC (2008); ACC, Special request concerning the number of long-term care claimants, received October 2010; Eurostat (2010); Mot (2010); NZ Ministry of Health (2008); NZ Ministry of Social Development (2009, 2010); SCRGSP (2010).

Summary

The Commission estimates that a further $6.5 billion is required in addition to the $7.1 billion already spent on people with a disability appears to be robust. All data sources indicate the existence of unmet need. Comparison with international sources indicates that Australia is only spending half that of developed European countries.

16.5 Scenarios

This section presents alternative scenarios to the base case estimates of the NDIS. The key impacts on the headline numbers for each scenario are discussed and compared with the base case estimates. In almost all instances the scenarios indicate higher scheme costs. The scenarios are:

- Scenario 1 — assumes a higher number of people with intellectual disability use tier 3 supports (this scenario is based on information from section 16.3).
- Scenario 2 — relaxes the criterion on 'main disabling condition' for people eligible for tier 3 supports, so that anyone with a daily need for assistance with at least one of the core activities is included. (The base case assumed that some

people who have daily core activity support needs would find more appropriate support in other systems such as the health and palliative care systems.)

- Scenario 3 — includes people with at least one core activity limitation who get support at least once a week

Scenario 1 — a higher number of people with intellectual disability use supports

This scenario assumes that the number of people with an intellectual disability using tier 3 supports is more in line with epidemiological data. Of the 107 340 people with intellectual disability in the 2009 SDAC, 48 per cent are captured in the daily need for assistance group and a further 47 per cent are captured in the intellectual disability group (that is, people with intellectual disability who do not have a daily need for assistance with core activities but have a disability and are restricted in schooling/employment). The scenario analysis in section 16.6 assumes that the number of people in the intellectual disability group is 197 640 people (people with intellectual disability from BoD, less those with daily needs with core activities) rather than the 50 320 people captured in the 2009 SDAC.[18]

The annual gross cost of including these additional people is approximately $960 million in care and support costs alone. Overall, it is estimated that the annual cost would be between $13.0 billion and $16.0 billion. This represents an increase of approximately 7 per cent over the base case estimate.

Scenario 2 — include all people requiring daily assistance with at least one core activity regardless of main disabling condition

Scenario 2 assumes that all people requiring daily assistance with at least one core activity receive tier 3 support regardless of their main disabling condition. The base case assumes people with some main disabling conditions would be better supported by the health and palliative care systems and hence are excluded from costings. The health conditions included in the criterion are listed in appendix H.

Under this scenario an additional 50 380 people would be included in the significantly reduced functioning group. This increases the tier 3 population to 461 630 people. The cost of care and support alone would increase the gross cost by

[18] The estimate of the number of people with intellectual disability in the BoD study is 249 100. The estimate of the number of people in intellectual disability group using the 2009 SDAC is 50 320 (based on *main* condition). However, 51 460 people with an intellectual disability were captured in the 'daily need for assistance with core activity group'. Hence, the 249 100 BoD estimate was reduced by 51 460 (to 197 640) so there was no double-counting.

$1.35 billion. The annual cost would be between $13.5 billion and $16.5 billion. This represents an increase of approximately 11 per cent.

Scenario 3 — include people who need assistance with at least one core activity at least weekly

Scenario 3 includes people who need assistance with at least one core activity at least weekly rather than daily. The same health conditions listed in table 14.1 are used in this scenario. The number of people who need assistance with at least one core activity two to six times a week is 72 340 and the number of people who need assistance weekly with at least one core activity is 46 900. This increases the total number of people estimated to be in tier 3 to 530 490. The annual cost for people who need assistance two to six times a week (half an hour of care per day) is assumed to be between $4500 and $5500 per person.

Under this scenario, the cost of care and support increases by between $537 million and $656 million. Overall it is estimated that the annual cost would be between $12.6 billion and $15.7 billion. This represents an increase of approximately 4 per cent.

Summary

All of these three scenarios result in higher scheme costs than the base case. The increase in costs ranges from 4 per cent to 11 per cent. In scenarios one and three, the number of people in tier 3 increases by substantially more than the gross costs (between 36 per cent and 49 per cent). This is because in these scenarios it was assumed that on average these people had a lower per person cost than those already included in tier 3. The number of people increases in line with costs in scenario two.

16.6 Cost of the NDIS — 2011-12 to 2018-19

There will be an implementation phase before the scheme reaches its full operating level (chapter 19). The Commission proposes that, rather than a full injection of additional funding in the first year, funding would build up to the full net cost of $6.5 billion in 2018-19. Indicative costs are presented below.

In 2011-12, a taskforce will be established to draft the inter-governmental agreement. A project office will be created to undertake targeted consultation, and to commence work on the key operational arrangements of the scheme including the

assessment tools, risk management, and the transition arrangements resulting in costs of approximately $10 million.

In 2012-13, testing of the assessment tools, legislation and manuals need to be written, memoranda of understanding with government agencies need to be established, data collection protocols established, research into appropriate IT (including the electronic record for people with a disability) and recruitment, pricing arrangements, a workforce strategy, drawing up of tenders, the development of a communication strategy to keep the community and the sector informed, detailed planning for the regional launch sites and training of staff will commence resulting in costs of approximately $50 million.[19]

In 2013-14, staffing levels of the NDIA are increasing (including the recruitment of regional managers) and IT infrastructure is bought. Capacity building commences including assistance to service providers in preparation for moving away from block-funding. Local area coordinators are recruited and trained in anticipation of the upcoming regional launches. Advertising and public information campaigns also begin for the scheme (for extra workers in the sector and in the regional launch sites on the scheme itself). The NDIA will also call for interest and pre-registration for participants in the launch sites.

In 2014-15, the first regional launch sites commence and hence service delivery begins. The regional launch sites will provide more information on the costs of the scheme and it will be important to incorporate this information into future costings. Local area coordinators are recruited and trained in advance of people entering the scheme.

The scheme then ramps up to a full-operating level in 2018-19 (table 16.23).

[19] Based on consultation with government delivery agencies on taskforce costs.

Table 16.23 **Annual costs 2011-12 to 2018-19 and 2050[a]**

	2011-12	*2012-13*	*2013-14*	*2014-15*	*2015-16*	*2016-17*	*2017-18*	*2018-19*	*2050*
People in tier 3	**0**	**0**	**0**	**20 000**	**117 813**	**215 630**	**313 440**	**411 250**	**411 250**
Tier 3 costs ($m)									
Tier 3 individual support				$600	$3 656	$6 712	$9 768	$12 824	$11 313
NIIS offset				$266	$281	$296	$311	$326	$720
Tier 3 individual support less NIIS				$600	$3 656	$6 712	$9 768	$12 497	$10 593
Direct offset				$331	$2 014	$3 697	$5 381	$7 064	$7 064
Net cost				$269	$1 642	$3 014	$4 387	$5 433	$3 529
Other costs ($m)									
Operations (including compliance and monitoring)	$10	$50	$466	$313	$318	$318	$300	$300	$300
Local area co-ordinators			$27	$92	$222	$353	$483	$548	$548
Disputes				$1	$4	$7	$10	$13	$13
Advertising campaigns			$5	$18	$17	$17	$9	$3	$3
Capacity building (including tier 1 and tier 2 and DSO funding)			$50	$200	$200	$200	$200	$200	$50
Total other costs	$10	$50	$534	$559	$695	$834	$937	$1 064	$914
Total net cost	**$10**	**$50**	**$548**	**$893**	**$2 402**	**$3 914**	**$5 389**	**$6 497**	**$4 443**

[a] NIIS offsets are assumed to be realised in 2018-19.

Sources: Consultations with government delivery agencies, accident compensation schemes and Commission calculations.

17 Insurance arrangements for injury

Key points

- There are a range of state and territory arrangements for insuring people for catastrophic injury, with coverage varying depending on the type of accident, its location and exact circumstances. There is little rationale for the striking differences across schemes.
  - Only about half of people injured catastrophically will have access to some form of insurance — usually compulsory third party motor vehicle cover.
  - The other half rely on generally inadequate taxpayer-funded health and disability services — in most cases, for the rest of their life.
- Existing fault-based insurance arrangements for catastrophic injury do not meet people's care costs efficiently. Legal costs can be substantial, and for the fraction of claims compensable through insurance, monies recovered often fall well short of meeting people's lifetime needs. Fault-based systems are also problematic because:
  - court outcomes are uncertain, people's future needs are unpredictable and poorly captured by a once-and-for-all lump sum, compensation is often delayed, and there is a risk that lump sums are mismanaged
  - adversarial processes and delay may hamper effective recovery and health outcomes
  - in the presence of insurance, especially with little focus on risk-rating for some causes of injury, the common law does not provide incentives for prudent behaviour by motorists and other parties.
- While no-fault arrangements reduce people's freedom to the extent (some) common law rights are removed, they are likely to produce generally superior outcomes compared with fault-based common law systems. They:
  - provide consistent coverage across injured parties according to injury related needs
  - provide much more predictable and coordinated care and support over a person's lifetime
  - do not adversely affect people's incentives to improve their functioning following an injury
  - are likely to be more efficient
  - currently perform no worse at deterring excessively risky behaviour, as despite the appearance of the common law, it is the insurer that pays. And although no-fault arrangements would probably not meet all people's desire for 'punishment' of an at-fault party, there is no clear evidence that the common law achieves this either.

17.1 Introduction

There are many accidents resulting in injury each year in Australia, with over 50 000 for transport accidents alone (Henley and Harrison 2009, p. 2). Some injuries are 'catastrophic', resulting in substantial and permanent disability. For example, this could include delayed diagnosis of meningitis resulting in severe brain damage, quadriplegia from falling off a ladder, and an acquired brain injury from a motor vehicle accident or criminal assault.

Various inconsistent and ostensibly arbitrarily different arrangements have evolved in each state and territory to provide insurance cover for people catastrophically injured. Systems broadly align with the cause of injury and, in terms of long term support for people with catastrophic injury, include:

- workers' compensation schemes throughout Australia
- no-fault third-party motor vehicle insurance arrangements in the Northern Territory, Victoria, Tasmania and New South Wales and fault-based arrangements in other states[1] and the ACT
- limited provision for people suffering disability because of violent crime (a rising source of catastrophic injury)
- fault-based medical indemnity and public liability insurance.

There is little rationale for the striking differences between schemes. The practical consequence for people acquiring disability is that the amount, nature and timeliness of support depends on the type of accident, its exact circumstances and location. This can have very lasting impacts for people with catastrophic injury.

- In many cases, people rely on the common law to claim compensation, which will only succeed if they can identify a negligent and solvent first party as the cause of the accident ('fault-based' arrangements). How much compensation they get depends on the presence of insurance, the circumstances of the accident, the quality and cost of their legal representation, judicial interpretation of liability, the brinkmanship of the out of court settlement process, and the process for assessing damages. If a person is unable to pursue a common law claim, they must rely on publicly-funded health and disability services, which are often comparatively inadequate.

1 All of these except the Northern Territory provide no-fault benefits alongside access to limited common law damages.

- However, in some instances, no-fault insurance is available to cover at least their lifetime care and support needs, regardless of whether they can identify an at-fault first party (defendant) as responsible for causing the accident and, hence, liable to pay. Table 17.1 sets out the key characteristics of fault versus no-fault arrangements.
- Sometimes there are hybrid systems, in which people obtain the benefits of no-fault insurance for one type of claim (long-term care costs), but can pursue other types of claims (income loss and compensation for 'pain and suffering') through the common law where an at-fault first party is involved.

As an illustration of the inconsistencies across the state schemes, a person catastrophically injured in a car accident on the southern side of Boundary Street in Tweed Heads (NSW) would be guaranteed high quality lifetime support, regardless of whether there was an at-fault first party. Had the accident occurred on the same road just a few metres to the north (Queensland) then, in the absence of an at-fault first party, the person would have to rely on often inadequate publicly-funded services. The difference reflects that NSW has a no-fault motor vehicle accident scheme and Queensland a fault-based arrangement.

Fault-based systems only apply where there is an identifiable solvent party that can be found liable.[2] Improving support for people with no legal recourse will inevitably require an extension in coverage through some form of no-fault scheme — whether that be the social welfare system, as a de-facto no-fault system, or a specifically legislated no-fault scheme. The choice, therefore, is not necessarily whether to maintain the fault-based common law *or* supplant it with a pure no-fault approach, although at one extreme there would be the option of replacing the common law entirely. Rather, at this stage, it is likely the more relevant question for policy is how both fault and no-fault arrangements would best fit together.

This chapter considers the strengths and weaknesses of common law versus no-fault insurance arrangements, particularly in relation to catastrophic injuries. Chapter 18 looks at the actual design and implementation of more coherent insurance arrangements for people catastrophically injured in accidents.

This chapter does not address the policy responses to injuries or other harms from product failure (product liability). The body of law in this area is different from accidents covered in this chapter, in that strict liability is the usual standard for liability, claims are infrequent, actions often take the form of class actions, there are often very complex facts that need to be contested, and the defendant parties are typically corporations (sometimes domiciled abroad).

2 Although, some statutory CTP schemes have a nominal defendant 'insurer' to cover accidents where the party at-fault is uninsured or unidentifiable.

Table 17.1 **Fault versus no-fault schemes**

Fault based systems (common law)	*No-fault systems*
Eligibility	
Based on the tort law of negligence, determines whether or not the defendant first party is liable to pay. This requires that the defendant owed the injured party (plaintiff) a duty of care, that the injury arose from a breach of the duty of care and that the injury is sufficiently proximate to the breach. Contributory negligence by the plaintiff will reduce the amount of damages awarded.	100 per cent coverage of catastrophically injured parties within causes of injury covered by a scheme (eg motor vehicle accidents, workers' compensation, potentially expanding out to all causes of injury) Achieve broader coverage by restricting the ability of an injured person to engage civil court action. This limits legal process costs.
How is the level of need determined?	
Claims are assessed against heads of damage in an adversarial setting. Medico-legal reports and expert opinion help to inform the reasonableness of claims, but there is no structured process or consistency across individuals. Settlements amounts take into account the probability of success, hence reducing the likelihood of full compensation.	Administrative processes implemented through an objective and consistent assessment tool to identify functional needs and supports.
What is the form or nature of compensation?	
Fixed lump sum payment or the option of a structured settlement, though structured settlements are almost never taken-up voluntarily. In some instances, a court appoints a trustee to administer funds. This occurs for children beneficiaries or those with a 'legal' disability such that decisions about the use of funds are subject to oversight to ensure use of funds is reasonable and affordable.	Legislation and policy guidelines determine: ▪ service needs as they arise (medical, social and vocational rehabilitation; personal care; assistive technologies and early interventions) ▪ periodical payment of income benefits (usually based on a percentage of pre-accident earnings subject to caps) ▪ statutory lump sum for permanent impairment.
Who bears the risk of future uncertainty?	
The injured party bears the risk that a once-and-for-all (discounted) lump sum will meet injury-related needs for their lifetime. If funds are insufficient or mismanaged, social welfare and health and disability services are relied on.	The scheme bears the risk, taking responsibility to meet all injury-related needs (subject to legislated conditions) for the life of the injured person, which is held as a contingent liability.

Options for scheme design are plentiful

In designing injury insurance schemes, governments can choose between mixtures of:

- fault-based arrangements, no-fault insurance and public provision of supports (and whether these operate exclusively or allow hybrids)
- coverage across the various 'heads of damage', predominantly long term care and support needs, income support, and pain and suffering
- coverage of catastrophic versus less severe injuries.

Existing schemes involve varying combinations of the above features. For example, in NSW, third-party motor vehicle insurance covers lifetime care and support for catastrophic injuries, replacing common law claims for damages covering these costs, but retains the right for people with catastrophic injuries to pursue other heads of damage (for income and pain and suffering). In contrast, in Victoria, insurance arrangements cover all severities of motor vehicle injuries (not just catastrophic ones) providing no-fault lifetime care and support, income support and a statutory lump sum based on the level of permanent impairment; but also permits people to pursue the possibility of extra compensation through common law avenues.[3]

While injury insurance arrangements are of policy relevance in their own right, they can also provide lessons for the NDIS more broadly — and most particularly about governance. Those lessons are mainly addressed in chapter 9.

17.2 What is catastrophic injury?

A key focus of insurance for personal injury is on people who face particularly high and enduring costs from an accident. There are over 20 000 people with a 'catastrophic-level' injury in Australia, with up to 1 000 being injured each year. These injuries are mostly experienced by young men aged less than 30 years old,[4] and usually entails a period of initial acute care and intensive medical and social rehabilitation to return to some level of independence. In most cases, the consequences of the injury will have a broader and permanent impact on a person's life and functioning, and typically affect their family.

The fullness of recovery and scope for effective medical treatments varies across individuals, injury types and over time as more advanced treatments develop. While there is a concentration of costs and an emphasis on hospital and rehabilitation services during the initial recovery period, the principal ongoing service need is for lifetime care and support, mainly personal care services (figure 17.1).

Around half of all catastrophic injuries are the result of motor vehicle accidents, 8 per cent are work related, 11 per cent arise from medical incidents, with the remaining 32 per cent classed as general injuries, typically associated with sport and recreation activities, criminal assault and catastrophic falls (Walsh et al. 2005). While falls, sport and recreation activities account for a significant number of injury

3 The preservation of common law rights was not the intention of the original proposal, but a result of compromise amendments made to the Act in the Victorian upper house (Field 2008, p. 92)

4 For example, around 44 per cent of participants in the NSW LTCS scheme were injured between age 16 and 30 years, and 72 per cent of adult participants are male (NSW LTCSA 2009, pp. 12,14).

statistics, these do not usually cause major trauma.[5] Criminal injuries are an increasing source of serious and catastrophic injury in Australia.

There are complex boundaries in the classification and definition of catastrophic injury, as compared with disease. While 'disease' is generally differentiated from injury (Langley and Brenner 2004), workcover schemes will include some occupational diseases, such as malignant mesothelioma related to workplace contact with asbestos. For the purposes of this chapter, a 'catastrophic' injury refers to a level of personal injury broadly consistent with existing definitions and assessments used by the Victorian Transport Accident Commission (TAC) major injury unit, the NSW Lifetime Care and Support Authority (LTCSA) and the New Zealand Accident Compensation Corporation's (ACC) National Serious Injury Service.[6]

In particular, as the criteria for eligibility, a catastrophic injury would need to be defined according to the type and severity of injury.

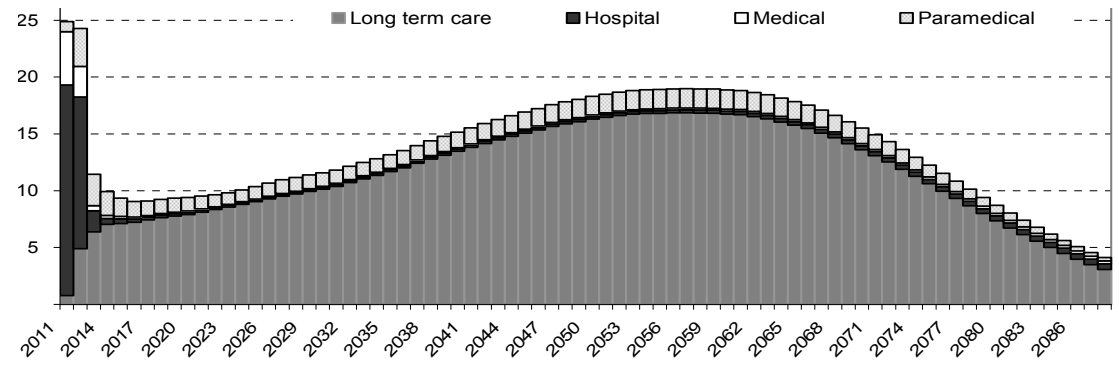
- Severe brain injury and spinal cord injury are the most common types of serious or catastrophic injury, but multiple amputations, severe burns and permanent blindness can also be 'catastrophic' and give rise to a similar need for treatment, rehabilitation and lifetime care and support.
- The severity of the injury would be based on a range of relevant clinically-verified measures, such as:
  - length of Post Traumatic Amnesia (for example, greater than seven days)
  - Neurological Spinal Chord Injury level or score on the ASIA impairment scale
  - amputations of the upper and/or lower extremities at or above the fingers and or adjacent to or above the knees
  - full thickness burns to greater than 40 per cent of the body, or full thickness burns to the hand, face or genital area, or inhalation burns causing long term respiratory impairment
  - legal blindness — field of vision less than 20 degrees in diameter
  - Functional Index Measure (for example, 5 or less, or 2 less than the age norm).

5 Exceptions are falls by old people, which sometimes involve serious disability. These would typically be covered by the aged care system since the risks of such falls often reflect the natural process of ageing.

6 The Tasmanian Motor Accidents Insurance Board (MAIB) distinguishes catastrophic injury based on a 'requirement for daily care', in which case, disability and medical benefits are not subject to a limit of $400,000, but should not exceed expenses for attendant care and other services otherwise incurred within purpose-built group accommodation (Schedule 1, Motor Accidents (Liabilities and Compensation) Regulations 2010). Catastrophic injuries with daily care liabilities account for around two-thirds of total claim provisions (MAIB 2009).

Figure 17.1 **How do lifetime care and support costs accrue?**

Projected community support payments for major injury TAC clients, 2011 accident year, $ million



Data source: TAC estimates.

On average, a successful award under the common law for the lifetime care associated with a catastrophic level injury is around $1 to $2 million. Amounts tend to vary across claim types — averaging $1.1 million for a successful motor vehicle claim, $1.67 million for a medical negligence claim and $1.4 million for a general injury claim (Walsh et al. 2005). (To reflect current values, and adjusting for wage inflation in awards and superimposed inflation, it would be realistic to inflate these awards by around 30 per cent.) These common law awards are upper estimates of the funds that actually go to injured parties, as certain legal charges not recoverable from the defendant party are taken out of the final award. As discussed in section 17.10, these can be significant.

Average participant lifetime care and support expenses (including attendant care, hospital, medical and social rehabilitation, home and vehicle modifications and equipment) under the no-fault Lifetime Care and Support scheme covering catastrophic transport accidents in NSW is projected to be around $1.41 million (derived from LTCSA 2009a). Under the Victorian TAC scheme, the average lifetime care cost for major injury clients (equivalent to catastrophic) is around $1 million.

The value of benefits provided will be significantly higher than this in many cases, principally reflecting the costs of personal care projected over a lifetime. Some of the more expensive common law claims occur for severe birth injury, with liability estimates of such cases as high as $20 million under a no-fault system (including payments for income and level of permanent impairment; ACC 2009, p. 32). For high level quadriplegia, the average lifetime care cost of TAC clients is around $5.6 million, whereas the equivalent cost for paraplegia is $870,000.

17.3 Criteria to assess injury insurance arrangements

There are many possible criteria against which to judge no-fault versus fault-based insurance arrangements for addressing catastrophic injury across Australia:

i. the certainty, timeliness and quality of care and support throughout a person's life (section 17.4)

ii. coverage of people acquiring a disability through a catastrophic injury (section 17.5)

iii. recovery and health outcomes (section 17.6)

iv. the freedom of parties to choose whether they want to litigate and, if successful, how to spend the proceeds (section 17.7)

v. people's desire to achieve justice when someone caused them a loss (section 17.8)

vi. the impact on people's incentives to take care to avoid injuring others (section 17.9)

vii. costs and the efficiency of achieving objectives (section 17.10)

viii. the desire by people to get compensation for loss of earnings and pain and suffering (chapter 18; appendix I).

There are inevitably tradeoffs between these criteria. Consequently, no insurance arrangement is perfect, and choosing the 'best' requires some judgment as to the appropriate balance. In addition, as a practical reality, litigation arrangements for compensation are often subject to statutory limits and other rules (with such constraints growing after 2002 to secure the affordability of insurance systems — see box 17.1).

Unless governments were to wind back these constraints, the comparison between alternatives is therefore between no-fault regimes and constrained common law arrangements. As Field (2008, p. 97) observed, the common law is 'a pale imitation of its former self', and hence, the goals of affordability and cost effectiveness apply to common law regimes as equally as they do to no-fault systems.

The subsequent sections weigh up how various insurance options fare against the above criteria. The particular issue of insurance benefits for loss of earnings and pain and suffering is addressed in chapter 18 (and appendix I).

Box 17.1 **2002 reforms to tort liability insurance laws in Australia**

Since early 2002, Australian state and territory governments undertook a process of reform to instil greater predictability, manage cost increases and secure the availability of various classes of insurance. The context for these reforms was influenced by:

- a hardening (increase in the price) of premiums
- the collapse of HIH (from insufficient attention to pricing risk and the full and relative costs of capital), and the near collapse of Australia's largest medical defence organisation (UMP/AMIL)
- a range of international and domestic factors affecting returns to investment and the cost of re-insurance
- an increase in compensation payments for personal injury (awards for personal injury had increased at an average rate of 10 per cent per annum, well outstripping inflation which averaged 2.5 per cent over the same period)
- changes in the courts willingness to extend liability for negligence
- increasingly litigious community attitudes

Insurance products affected included public liability insurance and professional and medical indemnity insurance.

Complementary tort law reforms were enacted by state, territory and Australian governments to reflect constitutional division of powers. State and territory governments hold constitutional power over the law of negligence, administration of the courts system, and for insurance that does not cross state boundaries. The Australian Government has powers to protect consumers and give effect to prudential standards.

Tort law reforms broadly included those relating to:

- establishing liability, contributory negligence, foreseeability, causation and remoteness of damage, standard of care for professionals, and mental harm (must be a recognised psychiatric illness and harm must be foreseeable to a normal person)
- thresholds and caps on damages, to remove smaller claims (mainly for general damages) from the legal system and set limits on particular heads of damages on larger claims. There were also concerns in some states and territories about the proportion of payouts absorbed in legal costs, and some measures were applied to improve disclosure and ensure a larger portion of recovered damages went to the injured parties
- claim procedures, through time limits, methods for making and resolving claims (including pre-litigation procedures, advertising, court procedures and legal costs).

Source: Australian Government (2004).

17.4 Certainty, timeliness and quality of lifetime care and support

As noted earlier, most catastrophic injuries involve lifelong disability, and hence, the need for lifelong care and support. In some cases, the common law can deliver adequate payouts that cover all of these costs. However, compensation outcomes from litigation typically fall well short of meeting people's lifetime needs. This reflects that:

- court outcomes are uncertain and, by far, most people settle out of court
- people's future needs are unpredictable, so that damages awarded at a given time may underestimate or overestimate people's future needs
- compensation is often delayed and, particularly if liability is disputed, access to early treatments and appropriate discharge from hospital to medical and social rehabilitation can be delayed and poorly coordinated
- assumptions about discount rates play an important role in determining lump sum compensation, especially for payouts intended to last many decades, and while it is generally agreed that rates applied are too high, agreement is lacking about the 'right' discount rate
- lump sums may not be managed appropriately to meet long term needs, and there are inherent difficulties in managing preclusion periods for access to safety-net services, especially when it may be unrealistic to refuse essential care and support needs.

Court outcomes are uncertain

Judicial interpretation of liability, particularly judicial assessment and application of the principles of contributory negligence, proximity, causality and foreseeable risk, is unpredictable. Many see the 'lottery' nature of the common law as one of its key weaknesses, generating dissatisfaction among both claimants and defendants (sub. 1; sub. 3; sub. 605; sub. DR958; sub. DR767; sub. DR997; sub. DR728). The high rate of out-of-court settlements, in part, indicates an aversion of both sides to the inherent risks of going to trial, with settlement amounts broadly approximating the expected risks and benefits of a court hearing.

Inconsistencies in judicial reasoning and interpretation of the individual circumstances of a case are frequently made evident through appeal processes, in which decisions are overturned between different levels of the judicial hierarchy based on different reasoning and interpretations of how legal precedent should be applied (box 17.2). Though, in part, variations in judicial reasoning, especially by

judges at different levels, can reflect test cases or areas where the common law is not settled.[7]

Box 17.2 **A case of inconsistent judicial reasoning**

Nagle v Rottnest Island Authority [1993]

In 1977, a man became a quadriplegic after diving from a partially submerged ledge striking his head against a fully submerged rock. He sought damages from the Authority on the basis that it should have warned people not to dive from what seemed an obvious diving platform. In this case, the judicial reasoning behind the decisions of the trial judge, full court appeal judges and high court judges was inconsistent. In particular:

- There was inconsistent opinion about whether or not a duty of care was owed by the defendant, including whether or not the submerged rocks were a hidden or obvious risk.
- There were inconsistent views about the scope of the duty of care, and hence, whether or not there was a breach. In particular, the various views about the standard of care expected reflected different interpretations about the foreseeability of the accident and its circumstances and the proximity of the relationship between the defendant and the plaintiff.
- There was disagreement as to what extent the defendant failed to warn of the danger. (Would a general sign, a more specific sign or a fence have met the standard of care expected? To what extent did no history of accidents shape the standard of care expected?).
- Following the different interpretations of the expected standard of care, there were also inconsistent views about whether the defendant's failure to provide a suitable standard of care (e.g. warning signs or a fence) constituted causation, and hence whether the existence of such precautions would have prevented the injury. While the plaintiff was aware of the presence of rocks, there was a difference of opinion between judges about whether a warning would have added to his state of knowledge and prevented the plaintiff's actions.

Ultimately, the High Court determined that a warning sign should have been erected and found in favour of the plaintiff (some 16 years after the accident).

Source: http://www.austlii.edu.au/au/cases/cth/high_ct/1993/76.html.

7 This is an important feature of the common law, adding to its value and flexibility to remain relevant over time. Moreover, there is the similar argument that legislation is not always certain, with the design of statutes subject to change in parliament and administrative decisions applying the legislation subject to appeal.

The calculation of damages also lacks clarity in some areas, such as accounting for gratuitous care, with the law in Australia not settled about the way particular heads of damages are quantified, with different case histories and methodological approaches holding precedent across jurisdictions.

These judicial risks are a key motivation behind the use of mediation between the injured party and insurers to reach early settlement and avoid a court hearing.

Assessing damages is an exercise in predicting the future

Common law damages for personal injury are based on an estimate of incurred and predicted future costs directly related to the injury. Damages are assessed at a single point in time and, with few exceptions, the amount awarded is unable to be altered regardless of how wrong a prediction may prove to be. Even the best efforts of legal practitioners and the use of experts will involve errors due to the inherent uncertainties in predicting future outcomes and the cost of meeting needs related to an injury. As a result, it is likely that damages based on 'sophisticated guesses' by the courts and negotiating parties will prove inadequate to cover the full costs of injury. Alternatively, it might transpire that the damages awarded are surplus to actual injury related expenses and losses. Either way, such inaccuracies incur a cost.

As critiqued in the influential High Court decision of *Todorovic v Waller [1981]*, in cases where:

> … the medical prognosis is that the full manifestations of a plaintiff's injury will not be apparent for some years after trial. The once-and-for-all lump sum award is in those situations a seemingly inadequate form of compensation, because the task of translating the assumptions as to the future into the money figure to be awarded to a plaintiff as a single sum, is incapable of being performed with accuracy. (Aicken J, 150 CLR 403 at 457, in NSW Law Reform Commission 1992)

In particular, reflecting that damages are only recoverable for the additional costs associated with an injury, various assumptions are required about the situation of a person had they not been injured, compared with the situation of the person following the injury. This involves considerable speculation and potential inaccuracy about:

- the extent of recovery and resulting disability after the injury has stabilised
- life expectancy
- the availability of gratuitous care
- formal care needs and associated cost over the lifetime of the injured party
- the impact of the disability on the person's lifetime earning capacity

- the future risk of a complication related to the injury (for example, the risk of epilepsy following brain damage)
- future advancements in medical science, surgeries and assistive technologies.

To take account of these risks and uncertainties, in practice, damages are calculated by weighting the sum of money payable in the event that a risk materialises by the probability of that risk occurring — an expected value. For some general risks there is an adjustment (usually a reduction) for 'contingencies', such as to account for the possibility of future unemployment, sickness or death.

To some extent, postponing the trial, settlement or final assessment of damages until more facts emerge, increases the capacity to predict future outcomes and reduces potential errors. However, delaying legal proceedings is one of the primary sources of dissatisfaction from the public and professionals with the tort system (and a major source of legal costs). It can hamper incentives to rehabilitate (appendix J) and can limit early access to treatments, slow-stream rehabilitation and a transition to independence. (Arrangements such as signed agreements with government departments responsible for disability services or disbursement funding through law firms or the first party's insurer can mitigate some of the delays in access to rehabilitation and other disability-related services, with costs reimbursed once settlement is reached or a judgment made. However, people whose claim for common law damages has unresolved liability issues will generally not have access to appropriate care and support beyond the initial acute care setting).

Some scope to vary damages awarded after trial can occur in a very small proportion of cases through appeal mechanisms. However, the facts covered at the date of the appeal must be relevant to the appeal, and the legal costs of revisiting a case can be high, hence eroding the potential gains from correcting damages.

In addition, there are instances where the uncertainties associated with the calculation of damages can be reduced through the subsequent adjustment of damages years after liability and an initial determination was awarded. This can occur only under restricted circumstances and these provisions are rarely used in practice. As an illustration, under section 30B of the *South Australian Supreme Court Act 1935*, a court has the power to make an interim assessment of damages (excluding non-economic loss, unless the plaintiff's contributory negligence prevents recovery of the full amount of their economic loss) and adjourn the final assessment until the medical condition of a plaintiff has stabilized, or four years has expired since declaratory judgment was entered. The interim order may be varied on the application of either party.

In summary, common law regimes are not always effective at assessing the lifetime care and support needs of people with catastrophic injury, as compensation is determined at a snapshot in time even though needs (and costs) span many years or even decades into the future. No-fault schemes have greater flexibility to respond to changes in participants' needs, as well as the availability of new technologies and relative price changes that affect cost-benefit decisions about the type of care and supports that it would be reasonable to fund. In contrast, assumptions about the cost of meeting future needs, including predictions about the availability and cost of future technologies and supports, are embedded in common law damages. This issue has been raised by lawyer groups arguing for an extension of no-fault coverage under the NSW LTCS scheme:

> … lump sum compensation for future medical expenses is a poor mechanism for meeting future treatment needs of amputees. Expansion of the LTCS scheme to cover above knee and dominant hand amputees would enhance the future functionality of a small yet badly injured set of accident victims. (Australian Lawyers Alliance 2011, p. 2)

Delays

Early resolution of successful claims and rejection of those lacking merit has been a central focus of reforms to legal processes and claims management. Avoiding reliance on courts (as a generally acknowledged slow, complex and costly way of dealing with disputes (box 17.3)) has seen a policy focus on 'pre-action protocols'. Specific reforms have led to requirements for pre-litigation disclosure, case conferencing prior to the commencement of proceedings, exchange of offers, active use of cost orders to encourage early acceptance of reasonable offers and use of scale or fixed cost models for charging. The most obvious benefits of early resolution and reduced delays include:

- increased efficiency through a reduction in legal transactions costs
- shorter and less stressful litigation process for claimants and earlier attempts to mitigate permanent injury and other injury-related losses.
- early investigation of the facts (mutual evidence disclosure and third-party subpoenas), before recollections become 'murky'.

The main mechanism for early resolution of claims is out-of-court settlement. While not disputing the range of benefits listed above, several problems remain with settlement processes. In particular, faults in negotiation processes and the lack of a structured process for systematically assessing liability and damages mean that full compensation is unlikely to be achieved in most circumstances.

Box 17.3 **Some examples of litigation delay**

- A plaintiff was injured in a motor vehicle accident while on a working holiday in South Australia and suffered severe brain damage. He received a 30 per cent reduction in damages due to contributory negligence. The court assessed damages at $761 022, 14 years after the accident. A subsequent appeal led to an increase in damages to $856 922, though representation of the plaintiff by the Public Trustee was taxed at $361 000. Disputes continued through the courts regarding these costs and interest awarded. Twenty three years after the accident, the case was still not resolved, with collective costs most likely far exceeding the damages (Luntz 2007).
- *Agar v Hyde [2000]*: Two men were injured playing rugby in 1986 and 1987, aged 19 and 18 respectively. The judgement was handed down against the plaintiffs 13 and 14 years after the date of their injuries.
- *Vairy v Wyong Shire Council [2005]*: Over 12 years elapsed between the accident in 1993 and a final decision being made against the plaintiff on appeal to the High Court of Australia in 2005. The quantum of damages was agreed between the parties prior to 2002 when the case was first heard in the NSW Supreme Court, but resolution of the case required the courts to assess liability.
- Medical indemnity claims can be particularly difficult to resolve, with nearly 60 percent of claims not finalised 2 years from the date of claim commencement, and 15 per cent of claims still not finalised more than 5 years after the claim was initiated (ACCC 2009b). These delays are in addition to the time that elapses between the date of the medical incident and when a claim is commenced — frequently over a decade. The Productivity Commission has heard many examples of protracted claims, especially for birth related injuries, such as a claim not being commenced until 20 years after the birth and the case then continuing for several years on issues including the life expectancy and future care needs of the now adult concerned.

It has been suggested by some participants that removing the common law cause of action associated with future care, and instead providing benefits in a statutory no-fault setting, would have the important benefit of reducing litigation delays. The basis for this argument is that although liability is determined relatively quickly in a proportion of cases, assessing the quantum of damages is held-up because of uncertainties associated with calculating a person's future care needs. Medical and rehabilitation costs already incurred, lost income and future capacity for paid employment are all suggested to be more readily identifiable at an early stage. For example, Avant Mutual Group, Australia's largest medical indemnity insurer, suggested that in their experience of litigating major civil claims:

> … the most significant head of damage is future care costs. By eliminating this head of damage we would expect major civil claims litigation to be resolved more quickly, less expensively and with less stress for those involved. (sub. 550, p. 2)

On average, over the four year period from 2006-07 to 2010-11, the time between a motor vehicle accident occurring to the resolution of a common law claim for compensation under section 93 of the Victorian Transport Accident Compensation Act was 4 years and 4 months. Many TAC claims take significantly longer to resolve, with the top 10 percentile of claims averaging around 7.5 years following the date of the accident. Based on beneficiaries whose funds are administered by Victoria's Senior Masters' Office, the time between the accident and resolution of the claims was 6 years on average, and nearly 9 years for medical negligence claims.

A significant period of time generally elapses between the date of the accident to when the application to commence a common law claim is received — on average, around 2.5 years for TAC claims. This initial delay, at least in part, reflects the unavoidable problem of medical stabilisation, particularly in cases of brain injury where a person's injuries and extent of recovery can take years to become apparent. But, in some instances, the length of time before a writ is issued may also reflect a departure between a medical practitioner's and solicitor's opinion about how long it takes for an injury to stabilise. As stated by plaintiff lawyer, Burt:

> Some lawyers adopt a wait and see approach by advising new clients that "nothing can be done until the eighteen month anniversary". …in cases involving relatively minor injuries or injuries that you recognise as being unlikely to produce any significant disability, this may be an appropriate course to adopt. However, over the years in my own practice, I have acted for numerous people with "winning cases" who have come to me after receiving this type of advice. (2002, p. 1.1)

If it is true that many solicitors overestimate the time taken for the seriousness of an injury to be established (Luntz 2002, p. 23), to the extent that this prolongs the time before compensation is received, this could be of concern. Medical reports can help to crystallise knowledge about the state of an injured person's condition, but these are also attributed as a source of delay, with a general reluctance of medical practitioners to participate, hence giving rise to a specific medico-legal industry with links to insurers and law firms. Moreover, there may be reasons why lawyers deliberately delay obtaining advice from medical experts:

> It is important that medical experts not be retained until all of the information has been gathered for the simple reason that the history provided by your client to that doctor would appear in the medical report. If the history is inaccurate then this will in itself be sufficient to raise credit as an issue at trial. … supporting documents given to the doctor might have to be provided to TAC. (Burt 2002, p. 1.6)

To reduce the delay between when an accident occurs and when legal proceedings are initiated, many schemes variously impose statutory limitation periods, after which a common law claim is ineligible except in a small range of circumstances. A statutory limitation period is not applied under the Victorian TAC scheme, which

may account for the significant time period before a common law claim is commenced following an accident.

The Claims Assessment and Resolution Service (CARS) in NSW seeks to address legal delays by providing a structured, early opportunity for resolution. Other than in special circumstances, there is no access to courts until the matter has first been to CARS — a process which some lawyer groups have criticised as being 'extremely cumbersome, bureaucratic and slow' (Goudkamp 2005). In general, frustrations with such pre-litigation requirements are confined to complex cases that are unlikely to reach early settlement through procedures lacking the full force of a court's authority.

Even so, the introduction of CARS and a range of other changes (including removal of damages for pain and suffering for whiplash injury and implementation of clinical practice guidelines for injury management), has reduced NSW legal and investigation costs as a proportion of claims. In particular, the Cabinet Office of NSW claimed that following the reforms:

- legal costs fell by around two-thirds
- investigations costs approximately halved
- the proportion of total payments actually paid to claimants increased from 80 to 86 per cent, though return to the claimant is only 61 per cent of total premiums. (2005, p. 32).

The outcomes from CARS highlights that it may be possible to address drawbacks of standard common law processes through specific intervention. However, alternative measures for redress and care and support of injured people would intrinsically avoid such delays and inefficiencies.

Application of a discount rate

Injured people often need care and support over many subsequent years (and in cases of catastrophic injury, for the rest of a person's life). The typical practice of courts awarding damages is to do so by providing a once-only lump sum. This includes damages for a range of losses, including losses expected to accrue into the future, such as the costs of care for the rest of a person's life. To account for the financial return a lump sum can yield to a beneficiary from receiving the money in advance of when many expenses are actually incurred, courts apply a 'discount' rate to the stream of expected future costs. Apart from an assumed rate of investment return, the discount rate applied also takes account of expected inflation and tax provisions.

The discount rate is a key driver of the adequacy of a lump sum, and indeed, whether or not the principle of indemnity — the payment of a benefit not greater or less than, but equivalent to the value of the losses actually suffered — is achieved. In the event that the discount rate applied is based on incorrect assumptions and set too high, the practical consequences for the ability of a beneficiary to fund even just their lifetime care costs depends on:

- the amount of damages awarded for other heads of damages (income and pain and suffering) and whether there is scope to 'redirect' these damages towards meeting future care costs
- whether there is a reduction for contributory negligence, such that the total amount of the lump sum may not be sufficient to meet lifetime care costs, and especially if the reduction for contributory negligence is high
- the period over which the discount rate is applied, with a discount rate applied over a large number of years having a marked effect on the amount the lump sum is reduced (table I.2). Catastrophic injuries are generally permanent and care and support needs long lived, hence people with these injuries are generally most affected.

Not surprisingly, significant contention surrounds what rate is appropriate, and some prominent High Court decisions have influenced the rate applied and basis for application. The High Court established a discount rate of three per cent in *Todorovic v Waller [1981]*, arguing that such a rate allows for inflation, wages, prices and taxes on the invested sum awarded. Despite this decision, there is considerable variability in the discount rate applied to lump sum damages, both across jurisdictions and individual schemes (table 17.2). Although the 'correct' discount rate varies over time, the fact that real discount rates vary so markedly, both by jurisdiction and the cause of accident, means that an equivalent future stream of care and support costs will generate quite different lump sum compensation amounts (appendix I).

The Law Council of Australia commented that discount rates applied to compensation awards should be lower, mainly to enable people that opt to receive a lump sum payment to buy-in to a scheme if they wish to (sub. DR948, p. 22). The issue of a discount rate that is set 'too high' is uniquely a feature of lump sum damages. While it can significantly affect the prospects of a person being able to finance their lifetime care costs, it is not a feature of no-fault systems as such investment risks are borne by the scheme itself.

Table 17.2 **Statutory discount rates**

Before and after reforms to civil liability insurance laws in each jurisdiction

Jurisdiction	*Professional and public liability under civil liability laws*		*Workers' compensation*	*Transport accidents*
	before	*after*		
New South Wales	3	5	5	5
Victoria	3	5	6	6
Queensland	3	5	5	5
Western Australia	6	6	6	6
South Australia	3	5	n.a	5
Tasmania	7	5	3	5
Australian Capital Territory	3	3	3	3[a]
Northern Territory	5	5	n.a	6

n.a NT does not have common law settlement for workers' compensation **a** a rate of 5 per cent is under consideration by the Legislative Assembly, as proposed in the Road Transport (Third Party Insurance) Amendment Bill 2011, presented 17-02-11.

Source: Australian Government (2004, p. 93); Cumpston (2008); Plover and Sarjeant (2010. p. 3).

Management of fixed lump sums by beneficiaries

Lump sum payments have the advantage that a recipient can make their own choices about investment strategies and the desired liquidity of the funds. Beneficiaries taking responsibility for managing their lump sums themselves can also avoid some of the difficulties in getting cost-effective annuities (Cameron 2007).

More importantly, a recipient has the flexibility to consume their money in a way that best meets their preferences. Arguments underpinning this principle align with the value of self-directed funding (chapter 6). However, there are some important differences, including:

- the difficulty that many people may have in managing large amounts of money. Most recipients of lump sum damages lack experience in managing such large sums of money, and while financial advice can assist decisions, it is not a requirement. As stated by Luntz (2002), the dissipation of awards is not always because the recipient chooses to spend it unwisely, but because they are inadequately equipped to invest it safely, or they are unlucky, often due to the financial climate and especially in the early years if capital growth is minimal (pp. 25–6)
- exposure by vulnerable people to fraud by others, which may completely exhaust their lifetime disability funding. Cumpston (2002) describes the case of Tomislav Papic, who lost $5 million of a $6 million settlement to theft
- people may face pressures to give money to relatives or make short-sighted decisions, such as gambling the money away. For example:

  - in *Cockburn & ORS v GIO Finance Ltd*, the father took control of his quadriplegic son's settlement of $1.49 million and dissipated it in his own failed business ventures ([2001] NSWCA 177)
  - decisions of the Administrative Appeals Tribunal of Australia relating to the enforcement of a preclusion period for access to social security pensions benefits and allowances, found that misuse of lump sum compensation for personal injury was frequently linked to gambling and drinking problems and illicit drug use, taking extensive holidays; and payments and repayments to friends and family (O'Neill, AATA 619, 21 August 2009; Page, AATA 370, 21 May 2009)
  - previous surveys of how plaintiffs spend their money have revealed that lump sums are commonly spent quickly, discharging debts that have accumulated between the accident and the resolution of the claim on purchases of motor vehicles and household appliances, and occasionally paying the mortgage on a house (NSW Law Reform Commission 1984). While not all are necessarily inappropriate expenditures, it does mean that the capital sum remaining to generate a return and draw-on for ongoing expenses is less likely to be sufficient.
- in the same way that assessing damages under the common law is an exercise in predicting the future, so is an injured person's predicament in choosing how to responsibly spend their lump sum for the duration of their remaining life. Even trustees of people with disability, who must scrutinise expenditures not knowing exactly how long the money must last or what a person's future health status might be, struggle with this predicament
- the concern that people have weakened incentives for prudent financial management given a capacity for recourse to publicly-funded care and support.

The consequence of these problems (compounded by the difficulties in predicting the costs of lifetime care, and statutory limits on damages and discount rates) mean that lump sum amounts are often not adequate to meet long-term care and support costs. The report by the NSW Law Reform Commission found that:

> … in some cases the compensation was dissipated within three years of the award. These studies also found inaccuracy in the lump sum award where inadequate allowance was made for the effects of inflation on the cost of items and services including wheelchairs, pharmaceuticals and home nursing. Other inaccuracies were found in the failure to assess accurately the physical capabilities of the victim and his or her likely lifestyle and employment prospects. (1992, chapter 2.6)

Some participants have similarly recognised problems with the management of lump sums. For instance, the Tasmanian Government said:

> There is also justified concern that large lump sum settlements are often misused or are grossly inadequate for long term support. (sub. 600, p. 6)

Similarly, the Australian Orthotic Prosthetic Association observed:

> This lump sum settlement in many instances is used not for ongoing lifetime prosthetic care. Often amputees mismanage these funds and then become reliant upon the government community programs for their long-term care. Victoria and NT have systems by which settlements do not include major lump sum payments for lifetime care, but instead provide ongoing lifetime care, support and funding. This model appears to make a great deal of sense. (sub. 237, p. 3)

In many ways, lump sums are a peculiarity of history (Veitch 1982). One of the major historical motivations for their existence was a concern that the defendant might become insolvent if they had an ongoing liability. But this is now unlikely given that regulated insurers are typically the source of the financing, and lifetime care schemes are typically government guaranteed. It is somewhat odd that losses, such as monthly wage and costs of care that regularly have to be met, are compensated through one large payment intended to last an indefinite lifetime.

Structured settlements have not been taken up

While structured settlements suffer many of the same problems associated with lump sums, they have the important benefit of reducing:

- mismanagement of lump sum amounts and encouraging the spending of damages for the purposes intended in the settlement. This, in turn, reduces the risk that an injured person will have to later rely on taxpayer funded services.[8]
- risks to the injured party from uncertainty over life expectancy (life insurance companies are better able to handle this risk).

Since legislative amendments to remove tax impediments and facilitate court-ordered structured settlements, there appears to be only one instance of these tax-exempted, CPI-indexed lifetime annuities being taken up in Australia.[9] The main difficulty

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8 While structured settlements primarily provide periodical payments for life, they can also be 'structured' to individual needs to provide an upfront lump sum, such as to enable career and lifestyle changes, and preserve a contingency lump sum to meet unexpected future needs, such as from the loss of a gratuitous carer or change in health status. To the extent that previous structured settlements in the UK capture people's preferences, on average, only about half of the award was used to arrange a periodic payment, with the remainder used for interim payments, discharging debts, paying for immediate purchases and towards a contingency fund (Lewis 2006, p. 427).

9 The Commission understands that there has previously been an instance of the NSW government offering structured settlements, though this only operated from the mid-1980's and ceased for any new participants in 1992. For people catastrophically injured through no-fault of

appears to be that the prices of annuities are unattractive for insurance companies to purchase on behalf of beneficiaries, especially in the context of the currently high[10] discount rates used to determine lump sums (Cameron 2007). To this end, a lower discount rate in the UK is consistent with a much higher rate of structured settlements than Australia, but there are a range of other factors that, ultimately, result in low rates of take-up both in Australia and the UK[11]. Apart from the high cost of purchasing annuities, other factors affecting the true costs of defendant insurers providing structured settlements include interactions with re-insurance and difficulties in setting reserves and complying with regulations to ensure solvency.

- The market is thin and there is little competition in the market for providing annuities for tort claimants. Although the US has in excess of 15 annuity providers, outside of the US, the demand from insurers for such annuity products is weak. As such, the life market is suggested to be volatile and have a high rate of churn in market participants (Lewis 2006). A thin insurance market is inherently problematic, due to the limited ability to pool the risks associated with inevitable differences between the actual and predicted life expectancies and total claim cost.
- It is suggested that insurers hold insufficient information about the impact of injury on life expectancy, which results in the use of conservative estimates and, in turn, less competitive annuities.
- Given necessary prudential requirements, public bodies are better placed than private insurers to self-fund annuities or periodical payments. Moreover, public bodies are generally not subject to the same financial services regulations that raise the cost of providing annuities. For example, in the UK, providers of annuities are required to closely match their assets with the index-linked nature of their liabilities, which inevitably requires relatively high priced, index-linked government issued gilts to be purchased.

Although accepting a greater risk, people holding lump sums could usually get a better financial return in the absence of structured payments. Cameron (2007) gives an example where despite the tax exemption available for structured settlements, a stream of annuity payments was estimated to total $2.9 million, while a conventional investment (with a 7.3 per cent return and annual withdrawals equal to the annuity and indexed at 3 per cent) was estimated to reach a capital value of

their own, this scheme provided an advance lump sum payment and a guarantee to pay lifetime care and support expenses upon receipt of invoices (including for domestic and nursing care, reasonable hospital and medical costs and necessary equipment).

10 The 'correct' discount rate will vary over time with changes in inflation and investment returns.

11 In the UK, less than 10 per cent of 500 claims exceeding £100 000 involved a structured settlement (Lord Chancellor's Department, Courts Bill: RIS (November 2002) Table 1).

$4.8 million. The difference between the two sources of income reflects the sensitivity to the investment rate of return, as the guaranteed (risk-free) stream of income provided through the purchased annuity generally assumes a lower average return than may be achievable in practice through conventional investments.

Reflecting these issues, and a general desire to expand the use of structured settlements (and more recently in the UK periodical payment orders), there have been calls, especially in the UK, for governments to intervene (Association of Personal Injury Lawyers 2004). In the context of this inquiry, however, many of the issues around structured settlements would be resolved by no-fault arrangements.

Avoiding double compensation is difficult and costly to administer

Double compensation can occur in any instance when a person has access to a lump sum payment to cover some or all of their care and support costs and might also seek to access taxpayer-funded services. The need for processes to avoid this situation were widely acknowledged by lawyers. For example, KM Splatt and Associates suggested that compensation recovery 'remits millions to government coffers':

> Under the common law, the taxpayer is recompensed by the torfeasor's insurer thus saving the Australian taxpayer huge amounts of money. The Productivity Commission was very remiss in not analyzing this very important fact. (sub. DR 647, p. 3)

There should be no delusion, however, that recovery of compensation for taxpayer-funded care and support services provided for 'compensable injury' represents a gift or subsidy to Australian taxpayers. Rather, in the absence of recovering such costs, taxpayers would be billed twice, since insurance for catastrophic injury is mostly made compulsory and funded by the broader public through various public insurance frameworks.[12]

State and territory governments variously impose measures to avoid double compensation — typically, lump sum preclusion periods and compensation recovery arrangements. These measures aim to prevent the costs of compensable injury from being shifted to taxpayers and, in turn, restrict an injured person from accessing both financial compensation *and* social welfare services and supports without contributing towards the value of these services. Rather than precluding people who obtain compensation altogether, such arrangements exist because a lump sum compensation payout, which is most frequently obtained as a negotiated settlement, typically:

[12] To this end, funds for compensation are akin to tax and the issue becomes the efficiency of alternative funding sources (including the effectiveness of risk rating insurance).

> …does not specify what has been awarded or the amount awarded may not seem sufficient to support the person. In addition, the individual may be in need of urgent services even though it may be some years before their compensation claim can be resolved. (DHS Victoria 2000, p. 2)

In practice, however, there are inherent difficulties in managing preclusion periods for access to safety-net services, especially when it may be unrealistic to refuse essential care and support needs in the not uncommon event that a person's lump sum was insufficient or prematurely exhausted. This complicates attempts by government agencies and service providers to ensure consistent application of rules and guidelines affecting compensable parties who seek taxpayer-funded services and supports. In most jurisdictions, the Commission has been told there is significant need for discretion and fine judgement in the application of the rules.

To the extent that consistent, fair and appropriate outcomes are pursued, considerable administrative effort and costs are incurred. Participants raised this concern, including Professor Richard Madden, who cited the substantial administration costs, doubt and worry that surrounds existing arrangements for recovering the cost of Medicare services as a reason not to fund compensation of Medicare services at all (sub. DR997, p. 5).[13]

Specific problems include:

- the administrative cost of recovering money (on a full cost recovery basis) for the services consumed
- the administrative burden of assessing compensable status and determining the amount of compensation provided for specific uses and allowing for contributory negligence (which, by definition, will mean that full compensation is not received and limits the capacity of a person to self-fund their treatment, care and support needs)
  - most compensation is received through settlement, which frustrates attempts to calculate the amount that a compensated client should reasonably be expected to pay for the taxpayer-funded services and supports they seek to access. In particular, unless there is a court judgement or another form of independent assessment, such as by a tribunal or arbitrator, there is unlikely to be sufficient information to know how much money was awarded under each

[13] In the context of fault-based arrangements, this proposal may have practical merit, but it is relevant that funding of health and rehabilitation services in no-fault systems can play an important role in encouraging investment in these facilities that may otherwise be underfunded. Moreover, funding such health system expenses from premiums reflects the full 'external costs' of accidents and encourages efficient levels of risk reduction.

head of damage — for example, compensation for medical treatment and future care and support costs, as compared to income losses and pain and suffering

- recovering the cost of taxpayer-funded services generally requires the terms of the out-of-court settlement to state that at least some of the settlement is to be used for care and support. If, for example, attendant care costs are not specifically documented in the settlement, there is no basis to recover the value of taxpayer-funded services consumed for this purpose. To this end, there may be some strategic incentives for a settlement to not itemise costs covered by the settlement
- various assumptions are made to get around this paucity of information, such as the 50 per cent rule applied by the Commonwealth Government, but the inaccuracy of 'rules of thumb' may result in unfairness, undue hardship, or in some instances, over or double compensation. To some extent, this is remedied through appeals processes to review administrative decisions where special circumstances might be evident to warrant an exemption from the usual rules[14].

An underlying premise of the approach suggested by the Law Council of Australia (sub. DR948, p. 14-15) and the Australian Lawyers Alliance (sub. DR843) and Law Institute of Victoria (sub. DR1024, p. 1) is that lump sum preclusion and compensation recovery provides an effective and efficient means of avoiding double compensation. In particular, if lump sum compensation is to be made available as an opt-in arrangement alongside significantly improved access to services and supports under a new no-fault lifetime care arrangement (as has been advocated by the above groups), preclusion arrangements and compensation recovery would have to provide a reasonably workable, fair and efficient process.

But, comments from the Law Council of Australia about the process to recover the cost of Medicare services consumed by compensable parties, are less than encouraging:

> The Law Council remains concerned at the relatively high recovery cost under the scheme. It is noted that the last time the efficiency of the scheme was reviewed in 2001, it was reported that Medicare Australia expended nearly 50 per cent of amounts recovered administering the scheme each year. (Submission to the Community Affairs Legislation Committee, Inquiry into the Health and Other Services (Compensation) Amendment Bill 2006).

[14] Special circumstances might include unexpected and unforseen medical expenses, with the prospect of financial hardship in the near future and the absence of any other avenues for support (including from friends or family); clinical evidence of an addiction or other condition outside of the person's control; incorrect or insufficient advice about the duration and operation of a person's preclusion period; expenditure of compensation funds due to fraud by another person; or evidence of excessive legal costs, such that the *gross* amount of the lump sum significantly misrepresents the amount of compensation actually available to the injured person.

The Commission has been unable to establish the exact costs of compensation recovery systems, including at the state level. That said, parties involved in the process (and from a variety of jurisdictions) have informed us that there are significant, unavoidable administrative complexities and high costs associated with case-by-case decisions about access to taxpayer-funded disability services. This reflects the paucity of information about the types of costs that the compensation amount was negotiated to cover and the need to take into account the individuals circumstances.

The experience of the Victorian Senior Master's Office in seeking to secure adequate care and support for their 'compensated' clients has required their intensive involvement to advocate for their clients' needs. This has sometimes also required the involvement of the Office of the Public Advocate and various case managers. Senior officers from the department responsible for making decisions about the compensable status of clients are also required. This level of involvement results in a heavily bureaucratic process

In the Commission's assessment, there is no obvious way to achieve significantly more efficient and effective management of a compensable person's access to taxpayer-funded services and supports. This does not mean that some improvements could not be made — for example, it may be possible to pursue greater consistency between the principles and processes that determine damages for compensation and those determining needs-based access to taxpayer-funded systems. However, there are inherent obstacles to securing a sufficiently robust and operable system that reconciles the amount of compensation awarded with the level of need for care and supports. Moreover, to the extent that this could cost effectively be achieved, such as by a court specifying a complex 'budget for life' and the insurer providing periodical payments, the compensation system would, in effect, resemble a periodic payment scheme, most of which are no-fault.

How do no-fault systems fare?

Whether or not no-fault systems meet a person's lifetime needs better than common law damages depends on their generosity, the assessment arrangements used and case management of injured people.

Under Australasian no-fault systems for compensation, rehabilitation and lifetime care and support, an insurer holds a 'claim' to ongoing care and support and other benefits as a contingent liability. This means that a catastrophically-injured person will generally have lifelong contact with the scheme and, to the extent possible, a particular person or group of people coordinating a variety of support needs. In

addition, the risks associated with unforeseen costs that arise into the future in relation to an injury is managed by the scheme, rather than being borne by the individual (that is, no-fault insurance schemes provide intertemporal insurance).

The schemes manage the provision of supports through an objective assessment process, in accordance with the relevant legislation and policy guidelines governing access to benefits and the levels of support available. Even if the actual function is contracted out, the scheme will generally oversee claims management and various assessment-related functions; determination of claims for medical treatment rehabilitation services (including social and vocational rehabilitation services) lifetime care and support; home modifications; aids and appliances; and any other supports enabled under the legislation. Overlaying this is an appeals process for reviewing the way in which a scheme meets the care and support needs of individuals with catastrophic injuries.

In theory, the problem of managing a lump sum under fault-based insurance arrangements is replicated in a fully-funded lifetime scheme. That is, a person's annual support needs must be sustainably financed from returns on a portfolio of assets — the pool of funds put aside to meet each participant's estimated (net present value of) lifetime liabilities. However, pooled funding, a strong governance and prudential framework, including full funding of liabilities, supervision of investments and (bounded) discretion to set premium levies addresses many of the problems besetting fault-based systems, including:

- uncertain court outcomes ('the lottery') and future care needs
- delays and lost opportunities for early interventions
- the impact of any errors in the discount rate
- lump sum mismanagement and problems in managing a compensable person's access to taxpayer-funded services and supports.

While lump sums might once have had the practical advantage of managing the insolvency risk of the insurer or party liable to pay damages, Australia's no-fault systems are typically government underwritten, so insolvency is not a genuine concern.

In addition, lifetime care schemes can encourage the development of a service network, including systems to provide best practice models of rehabilitation. For catastrophic injury, initial acute and sub-acute care is not significantly different across compensated and non-compensated clients. However, the difference can be pronounced for the transition to rehabilitation, access to specialist rehabilitation units and transitioning back into the community. When the Victorian TAC commenced operation in 1987, the TAC responded to the severe shortage of

rehabilitation facilities by building and operating their own facility for many years. This is no longer required, as sufficient capacity now exists due to the increased number of clients and attached funds (TAC funds 80 per cent of clients using the main brain injury rehabilitation unit in Victoria).

Despite the range of advantages associated with no-fault systems discussed above, some participants have criticised the financial sustainability of no-fault systems, including the associated consequences for guaranteeing participants' continuing care needs (subs. 375, 392 and 409). In particular, the previous unsustainable growth in liabilities of the New Zealand accident compensation scheme is sometimes held up as a characteristic of no-fault systems more generally. As stated by Mark Blumer:

> The most significant feature of the ACC's situation at the end of 2008-09 is that its financial position has become unsustainable … If this is allowed to continue the Scheme's very existence could be under threat. … Those who depend on the scheme may find the supply of their care needs cut back, or whoever is funding the scheme may have to put in extra money. I would not trade a right to care for that situation. (2010)

Similarly, Maurice Blackburn, Slater and Gordon and Shine Lawyers cite the affordability of no-fault approaches as a concern, drawing on the New Zealand scheme as an example of:

> … a system that is perceived to be equitable at conception, but comes at a high cost, [and hence] may quickly develop inequities through reductions in rights and benefits aimed at mitigating costs … (sub. 392, p. i).

These claims, however, appear overstated to the extent that they fail to recognise the underlying reasons why problems in the New Zealand scheme emerged, which can, in fact, equally be applied to both fault and no-fault schemes. (For example, concern over financial sustainability motivated the suite of tort law reforms in Australia, which limited access to damages.) Moreover, the New Zealand ACC has undergone recent changes that have substantially reduced unfunded liabilities. In addition, various reviews of the scheme have shown the scheme operates with lower costs than most fault-based systems and is generally associated with better outcomes (PwC 2008). The Victorian TAC, another long established scheme, does not appear to have financial problems.

To the extent that the financial state of the New Zealand scheme, as made public following the change of Government in 2008, illustrates a potential vulnerability of no-fault systems, the unfunded growth in liabilities only affirms the need for a sound governance framework. It does not specifically demonstrate financial sustainability as an inherent weakness of no-fault systems. While mainly in relation to the NDIS but also relevant to no-fault systems for accidental injury, chapter 9 presents a

framework for good scheme governance which is informed by the New Zealand experience, including the need for appropriate and clear:

- limits on political interference that might otherwise jeopardise a scheme's integrity
- legislation defining scheme boundaries, reducing any unfunded creep in scheme coverage or inconsistent decisions about the reasonableness of benefits
- performance metrics to provide a discipline on costs, administration expenses and drive efficiencies in delivery of care and support
- effective monitoring by a government department concerned about the financial sustainability of the scheme.

Associated with these potential, albeit avoidable, concerns about the desirability of no-fault systems is the tension that Australian governments have been seen to impose legislative restrictions on the ability to obtain compensation through the common law, and yet might soon seek to take legal rights away more completely. On the one hand, statutory limitations on the common law have been motivated to ensure that compensation remains comprehensive and prioritised to those most in need, particularly those with catastrophic injuries and lifelong needs for care and support. On the other hand, people whose injuries fall below the set thresholds have undoubtedly lost.

The removal of, at least some, common law rights within a no-fault system is offset to the extent that injured people are instead promised access to lifetime care and support (and perhaps other forms of assistance also, depending on the scope of the scheme and the extent that common law rights are removed). An important distinction, however, is that a statutory no-fault system manages access to benefits through a statutory authority rather than judicial processes. The Commission has heard three main concerns about the role of a statutory body and the administration of statutory benefit rules in no-fault systems:

- while a no-fault system overcomes the 'lottery' nature of the common law damages, a proportion of those successful in obtaining compensation under the fault based compensation system would fare worse under a no-fault system
- more so than under a fault-based system that has fewer levers available to governments to intervene in the way benefits are allocated, administrators of a no-fault system may be perceived as susceptible to direction from government to either restrict benefits or alter scheme coverage
- there is a belief that no-fault schemes inevitably grow into a fully fledged bureaucracy, with high costs and low productivity. Albeit that the experience of no-fault schemes has usually been lower claim management expenses and a relatively higher proportion of premiums paid as claimant benefits (PwC 2008), any scheme should strive to avoid potential inefficiencies and a lumbering

bureaucratic structure. This highlights the importance of sound governance and accountability, including robust cost controls and performance metrics.

Another concern raised by some participants about no-fault systems is the failure of such regimes to consider the individual situation of the person with a disability. For example, Maurice Blackburn, Slater and Gordon and Shine Lawyers said that an important function of the common law is that it:

> … provides flexibility in delivering alternative compensation levels to people with different impacts from the same disability, and can therefore address heterogeneous needs and preferences. (sub. 392, p. ii)

They went on to cite the specific example of dealing with cases of disfigurement, suggesting that statutory benefits under no-fault regimes are too inflexible to adequately deal with instances where the type of impairment and the associated loss experienced does not necessarily align with functional impairment loss (as is typically used to determine the amount of compensation under a no-fault system) (sub. 392, p. 16).

The Commission agrees that addressing individual circumstances is important to achieving good outcomes for people with disability; indeed, a statutory scheme that is too rigid could result in perverse outcomes. For example, a person whose face is disfigured might benefit from plastic surgery, especially if the absence of such an intervention would prevent them from having the confidence to leave their home and participate in the community, including in gainful employment. Similarly, the psychological effects of a physical injury, which can be devastating to a person's life and identity, should be addressed in complement to other treatments and interventions. To this end, existing no-fault systems attempt to take account of an individual's situation through:

- needs assessment, which can be undertaken as individual circumstances change (chapter 7)
- identifying features central to the person's pre-accident lifestyle, including by tailoring supports to former participation goals. As occurs under the Victorian TAC, this might include, for example, the provision of a more highly specialised wheelchair to enable sport to be played by a former athlete who had experienced a spinal injury
- the establishment and enhancement of mechanisms to enable greater control by individuals as to how resources could best meet their participation goals, health and wellbeing, including through self-directed funding approaches, client satisfaction surveys and monitoring of client outcomes.

The Commission has been careful in this report to design an NDIS that supports the practical realisation of self-directed funding approaches (chapter 8). In coordination

with the experiences of the NDIS, there is also a role for self-directed funding models in lifetime care schemes for accidental injury, as has been a central theme of many participants' advice. For example, as stated by Maurice and Blackburn, Slater and Gordon and Shine Lawyers who emphasised the importance of choice:

> People with a disability should have the option to receive care through a consumer directed care model *and* the option to relinquish care responsibility to a designated case manager. (sub. 392, p. ii)

The practical task to allay concerns about removing common law rights for long term care and support among some groups within the community should not be underestimated. Despite numerable past official inquiries and reviews investigating the issue and broadly reaching similar conclusions about a no-fault system of statutory benefits as the best way to proceed[15], governments have shied from implementing such changes on most occasions. Incremental change may address this to some extent, and may also be appropriate to ensure that any new system is up and running before taking on functions broader than the important task of ensuring comprehensive lifetime care and support for the most severely injured is realistically considered. These issues are explored in chapter 18.

17.5 Coverage of people acquiring a disability through a catastrophic injury

By definition, full common law compensation for the losses associated with catastrophic injury only applies where an at-fault (provably negligent) first party (defendant) can be identified, damages are assessed accurately and there is no contributory negligence to reduce the amount of compensation the defendant is liable to pay.[16]

A person acquiring a catastrophic injury but unable to establish another solvent party's legal liability for the injury would generally[17] not gain access to compensation under a fault-based common law system. This includes cases where:

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15 Official inquiries include: the 1967 New Zealand Royal Commission of Inquiry into Compensation for Personal Injury; the 1974 Australian National Rehabilitation and Compensation Committee of Inquiry; the 1981 New South Wales Law Reform Commission Inquiry into Compensation for Personal Injury and Death from Motor Vehicle Accidents; the 1986 Victorian Government Statement on Transport Accident Reform; and the 2004 Productivity Commission report on National Workers' Compensation and Occupational Health and Safety Frameworks.

16 Contributory negligence is the failure of the injured person to take reasonable care for their own safety, with a per cent reduction based on the relative contribution the plaintiff made to their own injury.

17 There are some statutory exceptions, which provide access to common law damages in circumstances where a legally not at-fault first party is defined as at-fault for the purposes of ensuring insurance cover for the injured third party. For example, in NSW, the *Motor Accidents*

- the accident was purely a matter of chance without any other party's involvement. For example, a driver, their passengers or a pedestrian might sustain motor vehicle injuries from chance or blameless events outside the control of the driver — a car tyre blowing out, the driver suffering a heart attack or stroke, an oil slick on the road, an unexplained mechanical failure or an unavoidable collision with an animal darting across the vehicle's path. In accidents more generally, a person may fall off a ladder after a strong unexpected gust of wind, or a swimmer may acquire a brain injury when submerged by a freak wave. Bad luck is common
- a person may make a mistake that anyone might make, but which results in their own catastrophic injury
- another person causes the accident but has nevertheless taken 'reasonable' care. For example, someone causing an accident that was blameless or inevitable (such as because they sneezed, had a heart attack or were bitten by an insect whilst driving) would be unlikely to be found negligent[18]
- the injury arose out of a single vehicle accident and the injured driver was themself at fault, or alternatively, an accident took place in a person's own home or private property, such as from falling off a ladder, falling from a horse, or rolling a four-wheel motor bike on a rural property.[19]

Consequently, the scope of cases that are non-compensable under the common law is very wide. Australia-wide, only about half of catastrophic injuries are compensated through insurance, with the supports required for the remainder covered through (generally inadequate) taxpayer-funded health and disability services. The proportion varies significantly across jurisdictions and depends crucially on whether a fault or no-fault insurance system is in place.

Compensation Amendment Act 2006 extended no-fault cover to pedestrians and passengers who were injured as a result of 'blameless or inevitable' accidents. Such accidents seeking common law damages are now processed in the same way as fault-based claims, although the driver of the vehicle (still technically defined as at-fault) will remain ineligible to claim. The legislative amendment also provided no-fault cover of children's medical expenses and rehabilitation costs, and since April 2010, 'at-fault' motor vehicle injuries are entitled to a maximum of $5,000 for reasonable and necessary medical expenses and/or lost earnings.

18 A recent case decided by the High Court epitomises the limits to negligence. *Sydney Water Corporation v Maria Turano & Anor* [2009] HCA 42 concerned a claim against Sydney Water for the death of a driver and injury of other occupants of a car that was hit by a tree during a storm. The plaintiff's case rested on the argument that Sydney Water was negligent because a leaking water main (laid in 1981, ten years prior to the accident) had damaged the tree's roots, making it susceptible to collapse. The High Court dismissed any liability because Sydney Water could not have reasonably foreseen the risk of an accident.

19 The Victorian TAC covers accidents involving off-road vehicles on a no-fault basis, which are also required to purchase insurance.

Motor vehicle accidents

Across Australia, it has been estimated that compulsory third party (CTP) insurance arrangements cover around two-thirds of motor vehicle accidents resulting in a catastrophic injury (Walsh et al. 2005). However, since then, NSW has established a no-fault lifetime care scheme for catastrophic motor vehicle injuries, which would mean that closer to 80 per cent of such injuries would now be covered. No-fault cover (which extends to 100 per cent of these injuries) is available in NSW, Victoria, Tasmania, and to a more limited extent in the Northern Territory. Coverage is patchy in other jurisdictions, due to fault-based access to benefits and the potential for damages to be reduced through contributory negligence. Limited cover for at-fault drivers (in the form of a lump sum payment) can be purchased from some insurers as an additional feature of CTP cover, but these are subject to caps and various other restrictions and exclude cover for motor bikes.

Workplace accidents

Workers compensation arrangements provide no-fault cover in all Australian jurisdictions, and hence, extend at least some no-fault benefits to 100 per cent of injured parties, but in some jurisdictions, care and support costs are not adequately provided for catastrophic injuries (chapter 18). Residual common law rights for some heads of damage are available in all jurisdictions, except South Australia and the Northern Territory.

Medical accidents

Estimates show that catastrophic medical incidents attract some form of compensation in about 50 per cent of cases across Australia (based on a comparison with New Zealand that operates a no-fault system for covering these injures) (Walsh et al. 2005). Access to benefits is managed entirely through litigation, though most claims are settled out of court. Cases are often not finalised for many years following the incident, or the initial discovery, that gave rise to the initiation of a claim.

General accidents in the community or at home

Cover for general injury, through either public liability insurance or private legal liability insurance (as tends to be included in home and contents general insurance policies), provides access to compensation for about 20 per cent of general injury claims. These claims are managed through the adversarial system, though recent tort law changes have limited the extent that people with less serious injuries can claim and the level of damages available.

Criminal injuries

Each jurisdiction has a taxpayer-funded criminal injury compensation scheme, recognising that the offender may not always be (sufficiently) solvent to pay damages, such as can be accessed under the crimes act in various jurisdictions.[20] These are usually last resort schemes however, and albeit that they ensure broad coverage across affected individuals, they do not provide adequate levels of compensation for severe physical injury, including permanent disfigurement and loss of function experienced from violent crime. Rather, as stated by the Victorian Victims of Crime Assistance Act 1996, for example, the purpose of providing financial assistance to victims of crime is:

> … as a symbolic expression by the State of the community's sympathy and condolence for, and recognition of, significant adverse effects experienced or suffered by them as victims of crime … (section 1.2. b)

Across jurisdictions, caps on the total amount of compensation are applied between $25 000 to $75 000, though the availability of this level of financial assistance would require evidence of significant costs incurred related to the injury.[21] This means that for catastrophic injury, victims of crime are not covered for their future (most likely lifelong) care needs. This can negatively affect the extent of rehabilitation and recovery and long term prosects for community participation. As recounted by one participant whose daughter was brutally injured in 2002:

> … when she was bashed by her then ex boy friend. She was left with a severe brain injury, and we were told that she would not improve and the only option offered to us, which we believe was due to the fact that Anj was a victim of crime with no compensation, was an aged nursing home in Benalla. The physios in intensive care said she needed botox and plastering, this was not done. The lack of these procedures has had a enormous effect on her wellbeing and rehabilitation. If these things had been done early Anj would not have had to suffer years of pain and suffering as she has had to due to the fact she didn't have the funding. (sub. 535, p.1)

Similarly, the Commission has heard of an instance of a person now in their twenties residing in a nursing home having been physically abused and severely brain damaged by their parents as a 6-week-old child. But apart from a trivial amount of compensation awarded through victims of crime assistance, this person relies on evidently inadequate support from the disability and health systems.

[20] Or in some instances from a government department if it is proven the department breached their duty of care.

[21] Within these limits, benefits claimable span across medical expenses, loss of amenities and expectation of life, physical injury, mental and nervous shock, and loss of income.

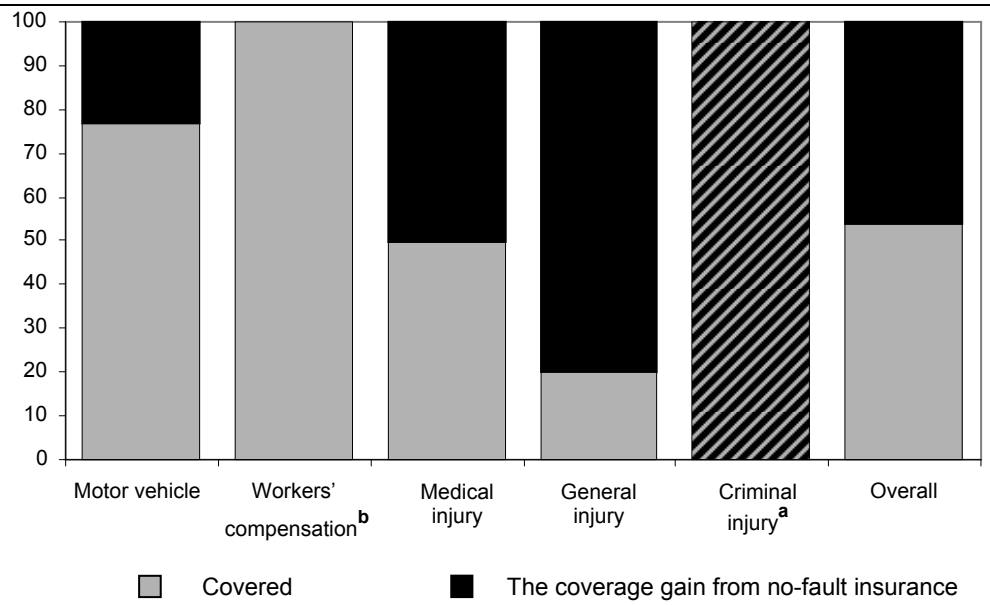
In summary

Current coverage across the broad range of circumstances in which catastrophic accidents occur — from motor vehicle use, playing sport and various recreational activities, medical treatment and criminal assault — is patently inadequate. A person could acquire an identical disability from an accident in any of these contexts, and as such, there is a good rationale for equal insurance and access to care and supports.

The introduction of universal no-fault arrangements for catastrophic injury, by definition, would provide complete coverage, with the minimum gains shown in figure 17.2. (They are a minimum because some schemes offering 100 per cent coverage provide significantly capped benefits, such as for criminal injury.)

Figure 17.2 **Deficiencies in cover by source of injury**

Per cent of people whose lifetime care and support needs are (not) covered



[a] Although a 'symbolic' level of cover extends to 100 per cent of catastrophic criminal injuries, cover for this category is represented differently to show the potential for significantly improved *depth* of cover under a new no-fault arrangement. [b] Although 100 per cent cover is shown for workers' compensation, in some jurisdictions this is not the case, with only fault based benefits available beyond a certain period and reduction of the lump sum for contributory negligence.

Data source: Walsh et al. (2005), updated.

17.6 Impacts on recovery and health outcomes

A key goal of all insurance systems (common law, no-fault or social insurance) is to improve a person's health and functioning following an injury.

There are several conceptual grounds where adversarial fault-based systems could reduce the scope for such improvements (and might sometimes exacerbate problems):

- the size of a person's award for compensation (and that of his or her lawyer) under the common law is dependent on the severity of the injury. The usual strong incentives for people to maximise recovery is undermined by an awareness that the greater the recovery, the lower the potential level of compensation. In effect, the prospect of injury-related compensation is like a tax on recovery. It would not be surprising for such a tax to have an effect. This interpretation does not require the person to 'manufacture' their disability (though that will sometimes happen)
- litigation processes take time, are stressful, and accentuate a person's preoccupation with the disabling aspects of an injury (psychosocial factors play a significant role in recovery.)
- no-fault insurance schemes directly seek to achieve better health and functioning by explicitly managing cases and consumption of services and supports to get better outcomes as fast as possible. At a broader level, no-fault schemes regularly survey their clients, are developing tools to measure and better understand how to improve client outcomes and progress. These are not the priority concerns of fault-based systems.

Generally, these theoretical concerns are supported by empirical evidence. A recent review undertaken for the Australian Centre for Military and Veteran's Health (Pietrzak et al. 2009) concluded that:

> The search of literature showed that evidence associating compensation with a worse disability outcome appears irrefutable. Hundreds of papers included in three meta-analyses and all the individual papers from the updated search showed adverse effect of compensation on health and RTW outcomes. (p. 6)

The Australasian Faculty of Occupational Medicine and The Royal Australasian College of Physicians (2001) also concluded:

> Although most people who have compensable injuries recover well, a greater percentage of these people have poorer health outcomes than do those with similar but non-compensable injuries. There is sufficient good quality evidence to show this to be true, and significant agreement among practitioners in all relevant fields (medical, legal, insurance, government oversight bodies) to support the evidence and to suggest that a complex interaction of factors is responsible for this.

Professor Richard Madden suggests that common law processes for medical injury has the perverse effect of preventing disclosure of errors and risks in the health system, hindering efforts to improve safety and quality (sub. 466, p. 2). Similarly, a key objective of the 2005 legislation establishing a no-fault system for medical injury in New Zealand was to move away from reporting medical error decisions to foster instead improved quality, safety and learning initiatives, including through:

> … sharing information on issues where there is a risk of harm to the public. … disclosure of harm as a first step in facilitating claims, strategies to reduce barriers to claims… [and] addressing competence and performance issues as internal organisational responsibilities. (Malcolm and Barnett 2004, p. 21)

Not all agree about the potential for common law processes to lead to adverse health outcomes. In particular, one up-to-date 'review of reviews' does not support the above contentions (Spearing and Connelly 2010). This study was also raised by the Law Council of Australia as the basis for their claim that:

> … arguments that litigation impedes recovery are not supported by any conclusive evidence. (sub. 375, p. 12)

Given the apparent meticulous approach of the Spearing and Connelly study, it should be considered carefully in the debate. The authors sifted through the various systematic reviews in the compensation literature. Many reviews were eliminated from consideration on the grounds of their coverage.[22] Of the remaining 11 systematic reviews, 9 of them concluded that access to compensation had negative impacts on health outcomes (compared to the counterfactual). One study made no judgment either way because of the nature of the studies it considered. The remaining study (Scholten-Peeters et al. 2003 referred to as SP from now on) found no robust negative effect of litigation on health outcomes (following whiplash injuries). Spearing and Connelly eliminated all bar the latter study because of various defects in the quality of the other reviews, and on the basis of that study, concluded that:

> Until consistent, high quality evidence is available, calls to change scheme design or to otherwise alter the balance between the cost and availability of injury compensation on the basis that compensation is 'bad for health', should be viewed with caution. (p. 9)

[22] Spearing and Connelly did not include in their meta study reviews examining compensation effects for some groups relevant to the Commission's analysis, including reviews that considered effects on children, professional negligence or where the injury was from an unknown cause. Reviews not in the English language were also omitted.

However:

- it is not clear why the penalty for a defect in quality is a weight of zero when making judgments about impacts. Therefore the other reviews arguably also have *some* relevance to judgments about the impacts of compensation
- a more recent study into whiplash (Centre for Automotive Safety Research (CASR) 2006, p. 10) considered that SP had not given credence to an important study finding a robust link between litigation and adverse outcomes. Moreover CASR's own research on South Australian whiplash injuries did find such a link (p. 74)
- the burden of proof used by SP (and also adopted by Spearing and Connelly) was a requirement to prove beyond reasonable doubt that litigation arrangements were bad for health. For example, using SP's criteria, a study suggesting that litigation had 1.9 times the likelihood of retarding recovery, but which was not statistically significant at the 0.05 level would be seen as strong evidence of no impact. However, in many other contexts where a risk of harm is present on conceptual grounds, the onus of proof is reversed. In that case, the requirement would be to demonstrate that litigation had no adverse effect, especially in the light of the subjective concerns raised by many clinicians.
  - The heart of the issue is that the *policy* interpretation of impacts and their statistical significance should be against the background of the implications of false positives and negatives, rather than focusing alone on reducing the likelihood of false positives (McCloskey 1985; McCloskey and Ziliak 1996).

As discussed in appendix J, the evidence on the impacts of litigation on health and wellbeing outcomes of those experiencing major injury is weakened by methodological limitations. However, the weight of the evidence suggests adverse impacts of litigation. Certainly, there is no evidence that litigation produces *better* health and functioning outcomes than no-fault schemes, despite being more expensive on a case-by-case basis (as discussed below).

As an addendum, a related question is the net wellbeing impacts of common law versus no-fault systems for people other than the injured parties. There is little evidence on this score, but if litigation is stressful for the person with an injury, it is likely also to be so for their support network. Equally, in some cases, the defendant may also suffer significantly from an adversarial approach — even if ultimately found not to have been at fault (for example, as shown by the testimony of a general practitioner facing a writ for case of cerebral palsy for a birth that occurred 20 years previously — Kerr 2004).

17.7 People's freedom

No-fault systems usually extinguish people's common law rights for at least one head of damage (predominantly lifetime care and support). In Australasia, New Zealand is unique in extinguishing virtually all common law rights for all accidents. Where a scheme extinguishes common law rights, it means that third party insurers (such as the NSW LTCS Authority or the Victorian TAC) determine the amounts and nature of supports. In contrast, access to the (unconstrained) common law allows people to:

- attempt to get larger compensation payouts
- obtain a lump sum payment, which they can choose to spend as they wish. Lump sum payments are the ultimate form of 'self-directed funding' (see chapter 6). However, it should be noted that lump sum settlements and court awards may be held by a third party in trust (for children and some adults with diminished decision making abilities).

Accordingly, extinguishing common law claims diminishes freedom of choice, which is often highly valued by people and can enable them to allocate resources to the spending areas that match their preferences and heterogeneous needs (Maurice Blackburn, Slater and Gordon and Shine lawyers, sub. 392, p. ii). The Law Council of Australia was very concerned by any move to constrain common law rights:

> It is also not appropriate to deprive disabled people of choice, by compulsorily requiring them to enter into a prescriptive scheme for life, where all decisions are subject to the approval of the scheme's managing authority (as is the case under the NSW Lifetime Care and Support Scheme …). (sub. 375, p. 5)

Similarly, personal injury lawyer, Mark Blumer, recently commented in a public presentation about the proposal for an NDIS that because no-fault compensation systems take away people's enforceable (common law) rights, they must include a review mechanism that maintains practically enforceable rights regarding whether or not a particular treatment, rehabilitation or type of care is needed. Similarly, the Australian Lawyers Alliance suggested that the review mechanism under the NSW LTCS scheme suffered a 'natural justice problem' and that:

> Any scheme introduced as a result of this [Productivity Commission] inquiry should allow for an appropriate and properly funded way for decisions of the care-funding authority to be tested in a transparent way. (sub. 305, p. 10)

The tendency of individuals to object to what may be viewed as paternalistic features of no-fault systems will vary, often depending on the particular event that gave rise to their injuries. For example, the psychological trauma (pain and suffering) faced by victims of criminal violence or assault may call for an appropriate balance between:

- a victim spending their compensation in a way that is meaningful and enables them to 'feel' compensated and empowered. As summarised in Hull's reading speech about the purpose of special financial assistance to Victorian victims of crime as to:

  > …acknowledge a victim's suffering — not dictate to victims how they should spend their award. The victim is in the best position to decide for themselves how best to use their money. If they see fit to spend it on paying off their mortgage or gas and electricity bills, going on a family holiday, buying a red coat, or even setting up a fund to assist in the search for an alleged offender, then it is a matter for them and not government. (Victorian Hansard, 26 May 2000, p. 1912)

- allocating it in a way that encourages it to last over time (which could continue to remind them of the traumatic event) or be put towards more sensible, albeit less meaningful, uses. (This issue is taken up in chapter 18 and appendix I.)

There are a number of counterarguments to the issues raised about the reduced freedom implied by the removal of common law rights. First, while freedom of choice has value, it has to be weighed up against any costs of fault-based systems and any advantages for the wellbeing of people through alternative insurance arrangements.[23] Freedom of choice per se, is not a sufficient basis for maintaining all common law rights.

Second, the Commission envisages a greater role for self-directed funding in the proposed new arrangements for the disability system and injury schemes, so the capacity to choose among supports need not be missing in a no-fault system.

Finally, as already discussed, it is not practical to remove a person's right to taxpayer-funded supports if a person has exhausted their lump sum secured through litigation. In that case, successful litigants can free-ride on taxpayer-funded supports. Taxes are coercive mechanisms — people cannot choose to be taxed or not. So the freedom of choice exercised through the common law can entail loss of freedom for other people forced to subsidise it.

Consequently, from a practical perspective, it is difficult to support the notion that fault-based systems provide people with more meaningful or widened choices compared with no-fault systems.

[23] Notably, compulsory third party insurance (which underpins both fault and no-fault systems) also reduces freedom, as people cannot elect to self-insure. That reduction in freedom is justified by the fact that many people negligently harmed by a self-insured party would not get adequate compensation because the defendant's liability would be limited through bankruptcy provisions.

17.8 The value of 'justice'

Is it 'just' to compensate victims only?

Many in the community might regard the common law as appropriately one-sided in its compensation arrangements, with justice being served by no compensation for the at-fault driver.

However, consider the most negligent of cases, say a highly intoxicated young man, driving an unregistered vehicle at speed who severely injures both himself and the innocent party. Most people would regard it as repugnant to leave the at-fault young man without any support (surgery, rehabilitation, a wheelchair), accepting the legitimacy of meeting some basic level of need for services. Under current fault based arrangements, a generally inadequate level of support would be provided through the general disability system and the social welfare system, with the gap in injury-related needs filled by family, charity and other informal arrangements. So ultimately, the at-fault party would 'get by', albeit mainly relying on taxpayer-funded health and disability services and transferring a significant proportion of their injury-related costs to other parties providing informal supports.[24]

No-fault arrangement could have provision to differentiate between people's access to scheme benefits in a way that could incorporate some common law attributes (if judged appropriate). For example:

- on the one hand, access to a particular scheme benefit could be limited to only those people whose injury was caused by the clear culpability or egregious actions of another person
- on the other hand, access to some benefits could be denied if there is evidence of deliberate recklessness in causing your own injury.

That said, it is reasonable to expect the community would have limited appetite to restrict access to benefits for many instances of catastrophic injury — perhaps, only to restrict benefits made available in lieu of a person's 'pain and suffering'. Nevertheless, the relevant point is that the common law would not be the only way of achieving such an end, *if* it were regarded as desirable.

[24] No-fault motor vehicle accident schemes variously exclude or reduce payments (for impairment and income benefits) and restrict access to some services to drivers who are convicted of culpable driving under the relevant legislation, were driving under the influence of alcohol or other drugs, were uninsured, or not in possession of a licence.

The principle of collective responsibility for the costs of injury has a long pedigree in attempts to integrate personal injury law with social welfare principles, and was strongly advocated in the Woodhouse Report (1967). This report continues to guide the remit and operating principles of the Accident Compensation Corporation in New Zealand, and recognised that injuries caused by accidents are often the result of a complex series of events, involving multiple causes and agents, and that personal choices are socially embedded. In particular, Woodhouse argued a parallel responsibility for accidents is shared between:

> … groups, networks, organisations, corporations and government agencies ... Their success depends on social coordination, not just assertions of personal choices. (Report of the royal Commission of Inquiry [Woodhouse report] 1967)

This recognises, for example, that a person may make a small 'mistake' that anyone might make (say a momentary slip in attention), but which results in the injury of another party. International empirical evidence suggests that it is common for 'good' drivers to make such mistakes, with the most common cause of accidents being carelessness and lack of attention, rather than reckless or deliberately aggressive driving (Pearson Royal Commission Report 1978). And such accidents are common, with nearly one in five individuals reporting having been involved in a road crash in some capacity over the last three years (DITR 2010, p. 81).

Accordingly, looked at more closely, the common law does not appear to generally achieve a just discrimination between an at-fault and innocent party, in many cases because 'fault' lacks a moral dimension. That is, many injuries caused by a person deemed to be negligent (under the common law) are not always easily categorised into the 'victim/perpetrator' model.

The 'retributive' function of the common law

People suffering negligent injury from another party often want to punish that party through financial penalties — 'making them pay'. In *theory*, the common law provides one avenue to do that by imposing a financial penalty on that party. As stated by the Australian Lawyers Alliance:

> If tort law becomes incapable of recognising important wrongs, and hence incapable of righting them, victims will be left with a sense of grievance and the public will be left with a feeling that justice is not what it should be.' (sub. 305, p. 16) … It is considered apt that a wrong doer be liable to "correct the wrong" and not the public purse. (sub. DR843, p. 4)

In practice, however, the capacity of the common law to 'right wrongs' is limited because of the role of the insurer. Indeed, the factors that generally reduce the capacity of the common law to create incentives for care also undermine the

capacity of the common law to provide an avenue for retribution. And, the mechanisms that could effectively be used for retribution — criminal charges, de-registration of professionals, loss of licence — are available whether or not a common law fault–based system is in place. Moreover, as noted above, many cases involving common law negligence are the result of everyday common mistakes that anyone can make.

It appears the Law Council of Australia also acknowledge the limitations of the common law for this purpose. They even contest that the retributive function of the common law is relevant to its modern justification at all, stating that it is:

> … incorrect to identify 'retribution' as a central justification for the common law. … the focus, therefore, is on what is required to restore the plaintiff to their pre accident disposition, rather than what reparations would amount to an appropriate punishment for the defendant. (sub. DR948, p. 19)

On the other side of the coin, however, some cases of negligence cross criminal boundaries, and this is where victims' and society's desire for compensation as a form of retributive justice are likely to be greatest. To address this, some no-fault systems retain exemplary damages — intended to punish the defendant by requiring them to pay compensation to the plaintiff over and above the amount of compensation necessary. For example, these are available alongside New Zealand's no-fault accident scheme. However, exemplary and aggravated damages (collectively termed punitive damages) are no longer universally available in Australia following the suite of reforms commenced in 2002 to abolish these damages in personal injury cases (Australian Government 2004, p. 97).

In summary, neither fault-based or no-fault systems address people's desire for retributive justice, and so this cannot be used as a criterion for weighing up alternative insurance arrangements.

17.9 Providing incentives for people to avoid injuries

While many injuries are the result of pure accident, many could be prevented if people changed their behaviours. Poor occupational and health standards, substance abuse, dangerous driving, weak adherence to professional standards, faulty products and generally engaging in risky behaviours can cause injury to a person and to others. To the extent that a risk is observable and able to be changed, the goal of policy is to reduce the costs of people's risky behaviours. For instance, although age and gender are statistical risk factors in causing road accidents, people cannot alter these specific characteristics. Even still, it may be possible to modify behaviour, such as decisions about vehicle type, including by discouraging the use of high

powered motorbikes and heavily modified performance vehicles, having zero tolerance of alcohol consumption and requiring appropriate training.

People are less likely to take account of the full costs of their risky behaviour when they are unaware or misinformed about the capacity to cause injury, and especially if the costs of injury are borne by others. Policy attempts to correct people's incentives to take care, avoid risks and hence reduce injury. What level of policy intervention is appropriate however, depends on how direct costs and benefits accrue from incremental changes in levels of safety, vis-à-vis the costs and benefits of some risk taking. (Achieving zero risk would be very costly and undesirable.)

There are many policy approaches to increasing safety and reducing the likelihood of accidents, such as regulation; guidelines, protocols and standards; raising awareness; changing technologies; 'naming and shaming'; fines, criminal prosecutions for breaches of laws and — relevant to this chapter — the deterrent effects of civil litigation. In that vein, the Law Council of Australia has emphasised the importance of civil litigation as a deterrent:

> … common law compensation systems perform an important regulatory role, deterring or discouraging negligent behaviour by requiring responsibility and restitution. (sub. 375, p. 11)

The deterrent effects of litigation may arise in several ways.

The direct monetary effect

People causing injury to others may have to pay compensation — creating direct monetary incentives to avoid negligence. However, this argument has little relevance to common law cases involving serious injuries, since in most instances the party at fault is covered by insurance.

In theory, strong monetary deterrence against negligence would apply to cases in which an at-fault party is not insured. In that instance, the person would be liable to pay compensation personally. For example, this would arise in cases involving criminal injury or a negligent party driving an unregistered vehicle. (In the latter case, such people have significantly higher odds of being in an accident resulting in injury). However, in most instances of injury caused by a person (as compared with a corporation), such people have no capacity to pay compensation anyway ('judgment proof'), and so the apparent deterrence effect is absent.[25]

[25] As an illustration, the Queensland Nominal Defendant provides personal injury insurance to people injured by uninsured (or unidentified) drivers. In 2009–10, the value of such claims and associated settlement costs were nearly $30 million, of which it recovered around $650,000

The reality is that the effective capacity to seek common law damages in personal injury goes hand in hand with the existence of insurance (Justice Kirby 2000), which in turn, blunts the deterrence effects claimed for the common law (especially when there is limited application of experience rating — see below (Harris 1991).

The insured still have some incentives to be careful

Even where people insure against the majority of the monetary risks of civil litigation, insurers structure their policies to address moral hazard and ensure parties still have (at least some) incentives to take due care. In particular, insurers have strong fiscal incentives to manage moral hazard to protect their financial viability from growth in claims and costs.

In the event of an accident in which a policyholder is at-fault and a common law claim against them is successful, they:

- may have to do certain things such as put in place risk mitigation strategies before being able to get insurance cover (for instance, workers' compensation insurance goes hand-in-hand with compliance with OHS standards; and medical indemnity insurers finance clinical risk management programs).
- will still have to pay a front-end deductible to their insurer
- may face higher risk-rated premiums in the future if they fall into a higher risk category (experience rating). In some cases, no insurer will cover them, and where insurance is mandatory (workers compensation, CTP and in some jurisdictions medical indemnity), this will often disqualify them from legally undertaking the activity that leads to the risks. For instance, a high-risk medical practitioner may not be covered to perform certain procedures, usually triggered by an unusually high number of claims against a practitioner.

Of these, experience rating, and risk rating more generally, has the potential to have a significant effect on excessively risk-taking behaviours. As stated by one participant about insurance for WorkCover and public liability:

> Tortfeasors have significantly higher premiums for years to come. This is very effective in helping to ensure a safer public and work environments as there are consequences for negligent tortfeasors. (KM Splatt and Associates DR647, p. 3)

Some have criticised no-fault systems for paying weak attention to moral hazard. For example, Howell et al. (2002) argued that New Zealand's no-fault accident compensation scheme has resulted in higher than optimal levels of workplace

from the uninsured parties, or around 2 per cent of the total costs (Motor Accident Insurance Commission 2010, pp. 6, 59).

accidents than in systems where common law rights persist. The evidence for that contention is not strong, but to the extent it may be true, their argument primarily rests on the deficiencies of risk rating of the workers compensation fund, and not an intrinsic deficiency in no-fault schemes. No-fault schemes can apply risk rating, and they typically do so to some extent, or at least equivalently to fault based regimes.

A *potentially* important difference relevant to experience rating between common law and no-fault systems is the nature of the information insurers are able to access about the inherent riskiness of a particular driver (or class of drivers). Under fault-based systems, court judgments or settlements reveal the extent of negligence and its costs for the injured party. No-fault arrangements make no judgment about culpability for the purpose of meeting people's care and support needs, but nothing would prevent them from doing so in setting CTP premiums. In that instance, they would need to rely on information from police reports about the extent of fault, and the number and severity of past accident claims. Dionne (2001) describes how experience rating has successfully been applied in Quebec's no-fault motor vehicle accident scheme.

If fault based systems were better able to determine accurately the relative riskiness of drivers than any process that a no-fault system *could* use, then risk rating would be more effective at deterrence under a common law than a no-fault system. However, as discussed above, courts and settlements (which reflect the expected probability of success in the negotiated lump sum) are not a reliable basis for determining the appropriate level of compensation and the extent of fault. As such, it is doubtful, even in this theoretical world, that the common law would possess superior information for setting risk rated premiums.

In any case, there are several practical reasons, some of them regulatory, why the impact of risk rating on moral hazard should not be exaggerated, regardless of whether a common law or no-fault system is present.

- In many instances, risk rating reflects the higher probabilities of accidents for broad groups of people with characteristics that they cannot change (like their age or gender). Deterrence primarily only works if it relates to a risky trait that people can change, although it may work to the extent that it eliminates supply or consumption of a target group. For example, if a fully risk rated premium were applied to young male drivers, it is possible this group would defer the purchase of a vehicle or switch to a safer, lower performance vehicle to the extent that this would lower their CTP premium.
- There are transaction costs of setting risk-rated premiums that limit their effectiveness in reducing negligent behaviours. Many individual characteristics that might be highly relevant to risk are often not observable ex ante (such as drink or aggressive driving, or passive adherence to OHS standards in a workplace).

- Government often place statutory limits on the potential for premiums to vary in accordance with efficient risk-rating — especially if there is a negative impact on low income groups or the supply of certain activities (box 17.4). In the case of medical indemnity, the Australian Government subsidises the insurance system to ensure premiums are not too high for certain groups of clinicians. Given these regulatory and budget measures, insurers do not set fully risk-rated premiums.[26] In particular, the capacity for an insurer to deter reckless driving through a bonus/malus[27] is typically bounded.
- In the motor vehicle area, the price effects of risk-rating and the imperfect monitoring of unregistered vehicles encourages the riskiest people with the most limited resources to (illegally) opt out of compulsory third party insurance.

This does not mean that risk rating is unworkable. There may well be advantages in some forms of experience rating (such as higher premiums and larger excesses for drivers with past costly claims for which they were at fault), and relaxation of some of the government rules that limit the potential to vary premiums accordingly.

However, as already alluded, experience rating need not be the exclusive domain of common law insurance systems (administrative processes already in place mean that no-fault insurance systems have a similar capacity to apply experience rating if sought). Potentially, this is a useful feature of no-fault systems, especially given the significant costs of establishing a person's culpability for causing an accident under the common law.

Given the above arguments, it is unlikely that fault-based systems address ex ante moral hazard better than no-fault systems. In some ways fault-based systems may even perform worse, such as in the presence of the high discount rates in some jurisdictions, which systematically reduces the likelihood of full compensation and efficient risk-rating by insurers. Moreover, given the lump sum nature of compensation paid out to injured people under the common law, it is possible that there is a higher risk that people seeking common law compensation exaggerate the severity of their injuries, with the costs that imposes (a form of 'ex post moral hazard').

[26] In New Zealand, the situation is even more striking than in Australia. Even after partial adjustments for risk, premiums for the highest engine capacity motorcycles are only around one tenth of the actuarially fair amount (Office of the Minister for the ACC 2010).

[27] A bonus is a reduction in the premium otherwise payable to reflect good driving behaviour and claims history, whereas a malus imposes a penalty, or higher premium, for evidence of bad behaviour.

Box 17.4 **Risk rating in compulsory third party insurance**

Reviews of CTP premiums and compensation schemes frequently state the importance of capacity to pay when setting premiums. As a result, the flexibility of insurers offering CTP motor insurance is tightly controlled. Insurers' discretion to adjust premiums by offering a bonus or imposing a malus is limited in some jurisdictions according to specific regulations creating a maximum premium[28], or by prohibiting zone or age differentiation, such as in Queensland.

Although the compensation models adopted across jurisdictions range across modified common law schemes to government monopoly no-fault cover, premium charges are quite similar across jurisdictions when expressed as a percentage of AWE. If annual premiums start to track above 40 to 50 per cent of average weekly earnings, governments typically respond by placing additional restrictions on judicial access (through civil liability laws or other statutory provisions) or reducing entitlements (Cutter 2007). As stated in a comparison of CTP schemes across Australia:

> Clearly the compensation model in each jurisdiction is tailored to achieve an affordable CTP premium. In some cases clear interventions (eg. MACA 1999) have been introduced in order to achieve this. (Cutter 2007)

The main implication of governments seeking to create affordable and stable premiums is that insurers are unable to charge an actuarially-based 'fully funded' premium. Despite insurers' attempts to sort risk types according to a number of categories (age, experience, driving and accident record and vehicle type), this is only partially successful at sorting drivers into homogenous groups. Consequently, insurers take care to market strategically and price relative to their competitors in such a way that reduces bad risks and attracts good risks:

> The bonus/malus limitations mean that insurers are not able to charge 'sound' rates for every risk. Better risks are written via a mixture of pricing and marketing strategies, and ensuring that prices relative to competitors are where they need to be, i.e. higher than competitors for the worst risks and lower than competitors for the best risks. … The interaction with competitors is more important than technical rating …(Konstantinidis et al. 2007).

The key underwriting risk factor used by CTP motor insurers is age, and in particular, drivers under 25 years, who on average, generate a loss in excess of 100 per cent, even at the maximum allowable malus (Konstantinidis et al. 2007). Hence, CTP insurers seek to avoid such risks by charging a price for young drivers that is higher than competitors. In a non-market situation, where there is a monopoly provider (such as the government), there is no discretion to sort risks and deter less profitable drivers, but this is overcome to the extent that the single provider can deliver better risk-returns on other drivers.

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28 For example, in NSW, if an insurer's filed base premium is set close to the reference base rate, there is greater scope to impose a penalty for malus. A premium discount is limited to 15 per cent, or 25 per cent for over 55 year olds (the MAA Premiums Determination Guidelines, Section 24 of the *Motor Accidents Compensation Act 1999).*

Other measures are more likely to provide effective deterrence

In summary, there are three main reasons why fault-based systems are unlikely to strongly deter negligence compared with no-fault systems:

- people at fault who are not covered by insurance rarely have a capacity to pay compensation, significantly weakening any deterrent effects of the common law in personal injury for such people (who often tend to have the highest risks)
- by pooling risks, insurance reduces the extent to which an at-fault party bears the financial consequences of his or her action
- risk-rated insurance (including the use of experience rating) could theoretically provide incentives for care, but risk rating tends to be blunt and could, in any case, be applied in no-fault systems.

Moreover, as noted earlier, the common law is only one tool in the armoury of policy measures that can encourage better injury mitigation, with the other tools being generally more efficient (as the Commission noted in its review of workers' compensation and occupational health and safety arrangements in Australia — PC 2004).

Recognising the muted capacity of common law deterrence in the context of compulsory third party insurance, some have suggested that the common law is not well equipped to deal with the broader concept of 'accident prevention', which requires:

> …careful attention to environmental design, public education, group interaction, organisational cultures and political coordination. Any modern policy of accident prevention that does not consider these strategies will miss the important health and safety challenges of the coming century. (Gaskins 2000)

That said, the common law is likely to have some deterrence effects in some cases. As Justice Kirby (2000) has noted in respect of medical malpractice suits:

> The allegation of professional negligence is not only potentially costly. It is also personally insulting. It is emotionally hurtful. It tends to attract media coverage. It gets known around the profession. It is damaging to one's ego and practice. Defending it is distracting and time-consuming.

The question is whether the size of that effect is sufficient to outweigh the costs of the common law fault-based systems. Given the costs described later (section 17.10), and the prospect of relatively weak deterrent effects, the answer is probably no. This was also the conclusion of Cane:

> There is a significant body of empirical research about the deterrent efficacy of the tort system, which can perhaps be summarised by saying that tort law has more deterrent effect in some contexts than others, but in no context does it deter as effectively as economic theory of tort law would suggest. … because there is considerable doubt about the deterrent efficacy of tort law, and given the availability of much cheaper

> compensation mechanisms, the conclusion that tort law is not worth what it costs is an attractive one … (2007, pp. 55–56, 69)

Given such doubts about the deterrent effect of fault-based compensation systems, the Australian Medical Association (sub. 568, p. 10) argues against the use of high premiums and claim costs as a discipline on practitioners. They cite a range of professional safeguards (including the national registration mandatory reporting regime and the health complaints system) as superior alternatives.

In any case, the policy choice is not only between two options — common law rights on the one hand, and a no-fault system with no common law rights on the other. In the Australasian context, only New Zealand has completely barred the gate to common law rights in injury cases. Most Australian insurance systems are hybrids.

17.10 Efficiency and costs

All insurance systems entail costs beyond those of providing care and support and other forms of compensation to the injured party. In no-fault systems, claim numbers are higher because people at fault (or unable to find the fault of another party) also make claims, and staff also perform roles, such as coordinating care and support, not usually undertaken by insurers in (pure) fault-based systems. On the other hand, in fault-based systems, the insurers must meet the usual costs of any insurance business (claims management, financial management and so on), but also face costs associated with their own legal expenses (and any obligations to pay external legal costs).

Such costs are not necessarily wasteful, as at least some administrative 'inputs' are required to secure care and support for an injured person. However, an important policy question is the competing cost-effectiveness of fault-based versus no-fault systems. If one system can deliver equal or better services at lower costs, then the increment in costs in the other scheme *can* be seen as 'waste' in the sense that it diverts resources that could be used to help injured parties better (or to lower insurance imposts on people).

These issues are discussed below.

Administrative costs

The available evidence from no-fault systems suggests relatively low administrative costs. For example, the ratio of administrative costs to premium income in NSW Lifetime Care and Support scheme was around 3 per cent in 2009-10 (LTCSA NSW

2010b, p. 22).[29] It was significantly higher for the Victorian TAC scheme, which covers all types of motor vehicle accidents and some residual common law rights, at 14.1 per cent of TAC premium income in 2007-08 (TAC 2009a p. 45).[30] Administrative costs were 9.9 per cent of premium income in the New Zealand scheme (ACC 2010d, pp. 18, 47). In the Tasmanian CTP scheme, general and administrative expenses were around 4 per cent of net premium income (MAIB 2010, p. 22, p. 26).[31]

The various components of administration expense items should be interpreted carefully, however, as higher 'costs' may not necessarily represent wastage depending on what the expense is incurred for and whether the outcome is achieved. For example, while no-fault systems administering long-term weekly payments face an additional administrative burden above fault-based systems that mainly pay lump sums, weekly payment of benefits has the advantage of preventing mismanagement of lump sums. Similarly, sometimes injury management and return to work research is included in scheme administration expenses.

A further cost pressure on fault-based systems are reinsurance costs and costs of capital. Under (pure) no-fault systems, there are more claims, but these are more predictable than the fewer but sometimes larger claims under common law fault-based arrangements (for example, see Walsh et al. 2005, p. 39).

There is some evidence that fault-based systems have somewhat higher ratios of administrative costs to premiums, *before* counting any costs associated with explicit and implicit claims for legal and other litigation costs (Cutter 2007; WRMC 2009, p. 33). That raises the question of the size of those litigation costs since they are instrumental in determining the relative cost-effectiveness of the competing schemes.

What affects the size of litigation costs?

The magnitude of litigation costs reflects many influences, including:

- the role of mediation, which reduces costs compared to a court hearing, since the major influence on total costs is the stage of settlement

[29] Administrative costs include all personnel costs, operating expenses, consultancy, depreciation and various other costs. The low proportion of administration expenses in premium income reflects the immaturity of the scheme, with many participants not yet living in the community and requiring coordination services.

[30] The ratio is higher in 2008-09, but affected by the one-off costs of the re-location of the TAC, and therefore not representative.

[31] additional costs were associated with accident prevention, but these are not intrinsic to the normal insurance function of the Board.

- the duration of litigation. Some cases take several decades to resolve. Given that billable hour is the dominant method for charging, each additional six months a case takes to resolve was estimated to raise costs by 7 per cent (Williams and Williams 1994)
- the complexity, novelty or difficulty of cases, which often need expert testimony); facts and expert evidence are often relied upon heavily to establish the circumstances of an accident and the legal liability of another party
- statutory limits on litigation (or its costs). Civil liability laws were changed in each jurisdiction in 2002, which among other changes, limited access to damages and the amount of damages awarded (Chu 2007). These changes are likely to have increased the costs of navigating a successful case through the now tighter legal structure:

  > … what the statistics [on the number and value of claims] do not show is whether the costs of each litigated claim has increased through more rigorous preparation — my sense is legal costs have increased. (Chambers 2007)

- the negotiating muscle of the consumer, and in particular, differences between the plaintiff who consumes personal injury legal services at most once in their life, compared with the insurer (defendant), who repeatedly consumes these services and usually maintains in-house expertise.
  - Plaintiff law firms often engage a cost consultant with specialist expertise in providing costing advice and preparing an itemised bill of costs for the law firm. Estimates available to the Commission indicate that the use of cost consultants is highest for medical negligence claims (80 per cent of claims) versus only about 50 per cent for non-medical negligence claims.
  - The Senior Masters' Office in Victoria negotiates solicitor-client costs to achieve sizable savings for their client beneficiaries in most instances. Information available to the Commission shows a 15.5 per saving on these costs is achieved on average. This reflects the extensive experience of the Senior Masters' Office in dealing with plaintiff lawyers on behalf of their trustees and a detailed understanding of what constitutes reasonable fees and charges.

Some estimates of legal costs

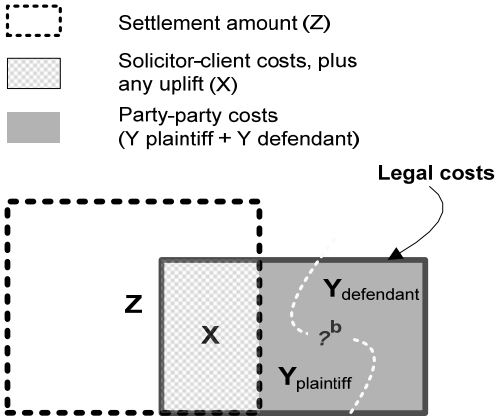
While it is straightforward to identify the factors influencing litigation costs (including fees, disbursements and charges), enumeration of them is hamstrung by a paucity of systematic, publicly available information on legal fees and charges.

Given the distribution of who ultimately bears legal costs — between plaintiffs and their solicitors, insurers (defendants) and, in turn, premium payers — the visibility of legal process costs varies but is generally poor.

Figure 17.3 is a stylised representation of how common law insurance allocates resources between the settlement awarded to a successful plaintiff ('Z') and legal processes including:

- party-party costs 'Y' (box 17.5), which are incurred separately by the defendant's insurer and the plaintiff
  - if a plaintiff is successful, they do not generally bear any party-party costs, with these costs ultimately borne by premium payers (which, if lower, could otherwise enable reduced premiums or increased benefits to injured parties)
  - if a plaintiff is not successful, they may be liable to pay the defendant's costs *and* some of their own disbursements.
- solicitor-client costs 'X' (box 17.6), including any uplift. These costs are taken directly from the plaintiff's settlement.[32]

Figure 17.3 **How do 'legal costs' relate to the settlement amount?**[a]



[a] This is a stylised representation informed by personal communication with the Victorian Senior Masters' Office. [b] The split between plaintiff:defendant party-party costs varies. For motor vehicle cases, estimates of the average ratio range from 80:20 to 60:40. For medical negligence, it is understood a defendant's party-party costs often exceed those of the plaintiff.

[32] Although the Commission understands that if a matter reaches court, or if there is a request to have costs assessed by the court, the plaintiff may be able to recover uplift fees from the other side. This relies on the presence of a contractual agreement about uplift between a plaintiff and their legal representation.

Box 17.5 **Party-party costs**

Party-party costs are the costs of litigation that a court can order to be paid by one party to the other party. Party-party costs are sometimes calculated on the basis of the Supreme Court Scale, or a fixed costs model and may be subject to scrutiny if reviewed by a taxing officer of the District Court or a Supreme Court Cost Assessor.

Whether legal fees and charges are claimable as party-party costs generally depends on the cost item being assessed as 'necessary' and 'proper' to attain justice — reasonable charges for work reasonably undertaken. This will vary depending on the circumstances of the proceeding, and a cost may be dismissed if the legal practitioner has not used the most economic alternative (not necessarily the most convenient) to attain justice under the circumstances. As the stage of litigation proceeds, costs allowable generally increase.

In the event that a plaintiff is not successful, or an Offer of Compromise is refused and at the resolution of the case it transpires that such an offer was reasonable, there is the prospect that the plaintiff (or in some instances, the plaintiff lawyer) may have to pay (at least a portion of) the defendant's costs. Similarly, if compensation is not awarded to the injured party, it is likely the plaintiff lawyer will be 'out-of-pocket' by a significant portion of their fees otherwise payable in the event of a successful resolution. In the long term, such losses are recouped through the profits from litigating successful cases.

In attempting to evaluate the size and nature of solicitor-client fees and charges, the Commission was presented with numerous informed judgements but, in general, estimates were not substantiated by rigorous evidence. Overseas estimates can be informative, but are not necessarily detailed to inform policy judgements in an Australian setting (box 17.7). The Commission was able to source some detailed estimates drawn from around 130 cases settled over the period 2009 to 2010 (see table 17.3).

While not necessarily providing numerical estimates, some participants argued that the costs of litigation were very significant. For example, commenting on the inefficiency of the common law in managing access to benefits, the Medical Indemnity Protection Society suggests that the requirement to find legal negligence involves:

> … an inefficient and time consuming process that dissipates resources which in our view could be better applied to outcomes rather than process. (sub. 282, p. 3)

While this view is intuitively reasonable, it is important to assess the actual evidence about the magnitude of the inefficiency. There is some evidence on the issue, but estimates of litigation costs are generally partial in nature. For instance:

- Avant Mutual (sub no. 550) suggested that the party-party legal costs in a cerebral palsy claim would lie between $625 000 and $800 000 out of compensation package lying between $8.9 and $12.3 million, depending on the circumstances of the case. This is around 7 per cent of the compensation amount but this ignores solicitor-client costs (including any uplift fees).

- In Queensland, legal and investigation costs of plaintiffs and defendants for CTP insurance amounted to between 15 and 18 per cent of the claim payments on finalised claims on motor vehicle accidents from 2002—2010 (Motor Accident Insurance Commission, 2010, p. 28).[33] In the ACT, legal costs are slightly higher than Queensland, and equivalent to 19 per cent of premium revenues.
- The ABS estimated that legal fees for personal injuries in Australia were around $1.2 billion in 2007-08, comprising around $410 million for motor vehicle injuries, $350 million for workers' compensation and $450 million for other injury claims (ABS 2009). Fees associated with 'no-win, no-fee' arrangements accounted for about 50 per cent of the total personal injury fees (assuming that 'no-win, no-fee' arrangements predominantly relate to personal injury litigation). These estimates relate only to legal fees from businesses whose activity is mainly legal services. It would ignore legal costs in insurers or other businesses whose major function was not legal.

Box 17.6 **Solicitor-client costs and uplift fees**

Solicitor-client costs are payed to the plaintiff lawyer out of the award or settlement amount. Overall, there is almost no up-to-date and systematic knowledge in the public domain about these fees and charges. This is because in Australia, cost agreements (which also outline 'no-win no-fee' arrangements and 'uplift' amounts) are generally not disclosed outside of the confidential client-lawyers relationship, except if they are assessed by the court, or in the event of a dispute about costs, such as to the Office of the Legal Services Commissioner.

It is common in personal injury matters for the plaintiff to retain a lawyer on a no-win, no-fee basis, which in the event of a loss, waives considerable fees. A written 'conditional cost agreement' outlines how costs are to be re-paid, which may or may not include 'uplift' — success-based fee arrangements charged as a percentage of the total legal costs (see appendix I).

Based on anecdotal information, the Commission understands that somewhere between 30 to 70 per cent of personal injury claims have a no-win, no-fee agreement associated with the claim, which are believed to generate between 15 and 50 per cent of the legal costs associated with a case. From the more comprehensive information the Commission was able to access however, it appears that around 70 per cent of cases have an 'uplift' applied, and given that not all conditional fee agreements will include an uplift, this suggests the prevalence of no-win, no-fee exceeds the upper end of most participant's expectations. In addition, the Commission found that, on average, across all claims (including those with and without an uplift applied), around 28 per cent of solicitor-client costs are accounted for by uplift fees.

[33] Finalised claims covered a range of heads of damage (economic loss, general damages, and care and support). Claims for care, aids and appliances, and home and vehicle modifications were about 9 per cent of the total costs — or 40 to 50 per cent less than total litigation costs.

As mentioned, the Commission was able to obtain comprehensive detail on average solicitor-client costs and (the plaintiff's) party-party legal costs from the Victorian Senior Masters' Office (SMO). This source of evidence covered all common law systems for securing compensation in Victoria — TAC motor accident claims, workers' compensation claims, medical negligence claims and public liability (general injury) cases. The client group of the Senior Master's Office that legal cost information were derived from (table 17.3) predominantly have catastrophic-level injuries[34], and while the estimates appear broadly consistent with a priori assumptions, information on defendant legal costs were not included in the dataset. For this reason, estimates of total legal costs assume the party-party costs of the plaintiff and defendant insurer are approximately equal. Based on other evidence available to the Commission, this appears to be a sufficiently robust assumption.

Table 17.3 **Estimates of legal costs**[a]
Based on 2009 and 2010 settlements

	Solicitor-client costs	*Party-party costs (plaintiff only)*	*Settlement amount awarded*	*Ratio of solicitor-client costs*	*Total legal costs as a per cent of*	
	(X)	*(Y_p)*	*(Z)*	*X/Y_p*[b]	*the plaintiff's net payment $(X+2Y_p)/(Z-X)$*[c]	*total claim cost $(X+2Y_p)/(Z+2Y_p)$*[d]
Compensation	*$ average*	*$ average*	*$ average*	*ratio*	*per cent*	*per cent*
0-250k	24020	34939	145023	0.69	77.60	43.69
>250k-500k	41656	44643	380357	0.93	38.66	27.88
>500k-750k	32048	36938	610682	0.87	18.31	15.47
>750k-1m	73989	96159	918418	0.77	31.54	23.98
>1m	151705	184384	3035502	0.82	18.05	15.29
Cause of injury						
Med. negligence	142224	177348	2614805	0.80	20.10	16.73
Motor	32664	40317	424465	0.81	28.92	22.43
Work	56961	46264	359445	1.23	49.42	33.07
General	52688	83454	568312	0.63	42.59	29.87
TOTAL	56916	70718	839325	0.80	25.35	20.22

a To calculate total legal costs, we have assumed the party-party costs of the plaintiff and defendant are approximately similar. Estimates do not include legal costs associated with 'unsuccessful' cases. **b** ratio of solicitor-client costs to a plaintiff's party-party costs. **c** total legal costs as a per cent of 'in-the-hand' compensation available to the plaintiff to meet injury related losses. **d** total legal costs as a per cent of the 'claim costs' drawn from insurance premiums.

Source: Senior Masters' Office of Victoria.

34 Even though some settlements may appear low (less than $250 000), this is likely to reflect a person's age rather than a less serious injury. The data were de-identified and provided to the Commission as totals and averages for different groups of clients.

Perhaps a more salient finding underlying the estimate in table 17.3 that legal costs comprise about 20 per cent of claims costs is:

- the extent to which legal costs comprise a larger proportion of the claimant's in-hand settlement when compensation is relatively low (over 75 per cent) or, alternatively, the extent to which legal costs are less significant for above average settlement amounts (18 per cent for settlements over $1 million)
- the very wide distribution in how plaintiffs fare, as measured by the spread in solicitor fees and charges paid by individuals in obtaining compensation.

In particular, looking at the proportion of solicitor-client costs taken out of each beneficiary's award, the coefficient of variation — or degree of dispersion from the average — is very large. The large spread in individual outcomes is observed even when calculated within different bands of compensation, and further supports the notion that common law compensation processes can be something of a 'lottery'. For example:

- for settlements of less than $250 000, the standard deviation was over 70 per cent of the average proportion (17 per cent) that solicitor-client costs compose of the injured person's in-hand settlement
- for settlements of greater than $1 million, the standard deviation was 57 per cent of the average proportion (5.2 per cent) that solicitor-client costs compose of the injured person's in-hand settlement
- overall, the standard deviation was 91 per cent of the average proportion (11 per cent) that solicitor-client costs compose of the injured person's in-hand settlement.

These estimates suggest a very wide variation in how individuals fare in terms of the performance and remuneration of their legal representation. To some extent, this may reflect differences in liability risks (and the associated cost of 'success-based fees' (box 17.6)). However, the size of legal costs are just one uncertainty at the end of a line of uncertainties (including the initial uncertainty about whether or not another party can be liable, and hence, whether compensation is payable at all) that individuals face when the risk of acquiring a catastrophic injury is realised.

Box 17.7 **Some overseas estimates of legal costs**

Overseas studies provide some evidence about the magnitude of litigation costs. These are potentially relevant to the Australian context, though estimates can be sensitive to the nature of the tort system in a country.

- In the United Kingdom, the Jackson review of civil litigation costs (2004) found that medico-legal costs represent a very high share of total costs in some classes of personal injury. For example, data provided by the Medical Protection Society (MPS) indicated that the ratio of legal and medical costs to overall costs (which includes payouts to plaintiffs) varied from around 50-66 per cent depending on the size of the claims (appendix 22 of the review). Notably claims dealt with by the MPS outside the UK showed a nearly identical cost structure, suggesting these data may be relevant to Australia.
- In the United States, there is (dated) evidence that only 50 percent of total malpractice costs go to patients (Thorpe 2004) and that average litigation expenses associated with aircraft accidents were just under 30 per cent of total payouts (Luu 1995).
- Data from the United States suggests tort costs in 2008 were US$255 billion or 1.8 per cent of GDP (Towers Perrin 2009). Of this, personal tort cases (mainly motor vehicle injuries) represented US $94 billion. Medical malpractice was a major component of the remaining tort costs. These tort costs included legal costs, administrative expenditures of insurers, and benefits paid to plaintiffs. Administrative costs are features of any insurance system, not just ones relating to the liabilities of common law actions. Moreover, benefits paid to plaintiffs are not litigation costs, but transfers from one party to another. In past studies, these benefits accounted for about 45 per cent of the total costs (Chimerine and Eisenbrey 2005). In that case, litigation costs would be around 30 per cent of the total tort 'costs' identified by Towers Perrin.

The implications of costs

Putting aside other heads of damage, insurance premiums to finance claims for lifetime care and support must cover four basic costs:

(i) the costs of lifetime supports for an injured person. Two influences affect the relative size of these costs in a fault versus no-fault system. The most important is coverage. For any given insured population, the total value of these costs is lower in a fault-based system than a no-fault one, simply because far fewer people are able to make claims in the former. A second influence is the average claim, which will depend on the distribution of injury costs for at-fault and 'innocent' injured parties, and the extent of scheme generosity for a person with a given injury rating

(ii) any costs associated with coordination of care and support. These costs will typically be zero for a fault-based system, but may partly be picked up as costs in the health care and disability sector more generally

(iii) the standard administrative costs of any insurer (including reinsurance, claims management, depreciation and so on). These costs are similar for both fault and no-fault systems.

(iv) any litigation costs (whether explicit in party-party form or implicit as a share of the compensation payouts). These are zero in pure no-fault systems and significant in fault-based systems.

Table 17.4 sets out the implications for efficiency of a fault-based system that has low coverage, some legal process costs, but no care coordination costs compared with a no-fault system that covers all claims and has some coordination costs, but that has no litigation costs.

The table is illustrative, but the parameters underlying it are consistent with some of the estimates of costs provided to the Commission. There are several ways of conceptualising the inefficiency in this illustration:

- The first is the total cost per claimant associated with providing identical lifetime supports (item 14/item 2). Using this metric, the no-fault system can provide the same support and care services for 19 per cent lower costs than a fault system (item 19). This is an underestimate of the real cost differential between the two systems since the impact of the same value of support and care expenses on the quality of life of the injured person is likely to be greater under the no-fault option given that it allocates resources to coordination (item 10).
- The second is the reduction in support and care services under a fault-based system (item 20) that would lead to a cost per claimant identical to the no-fault system. The no-fault system can deliver nearly 33 per cent more services than the fault-based system for the same price (item 21). (And for the same reasons given above, this will underestimate the real service advantage of the no-fault system.)

While table 17.4 uses indicative numbers, even significant departures from the key underlying assumptions still suggest that a no-fault system is likely to be more efficient than a common law fault-based system.

Table 17.4 **Illustration of the impacts of legal process costs on efficiency**

N	*Cost category*		*At fault*	*No-fault*
(1)	Costs of lifetime care and supports per injured person ($m)[a]		2.0	2.0
(2)	People claiming (number)		200.0	400.0
(3)	Total lifetime support costs ($m)	(1)*(2)	400.0	800.0
(4)	Solicitor-client fees as a share of settlement/judgment amount (%)[b]		11.0	-
(5)	Solicitor-client fees, including any uplift ($m)	(4)/(100-(4))*(3)	49.4	-
(6)	Total value of settlement/damages award ($m)	(3)+(5)	449.4	800.0
(7)	Ratio of party-party costs to value of awards[b]		0.17	-
(8)	Party-party costs $m	(6)*(7)	76.4	-
(9)	Ratio of care coordination costs to support costs		-	0.05
(10)	Care coordination ($m)	(3)*(9)	-	40.0
(11)	Ratio of administrative/operating costs to value of claims		0.12	0.12
(12)	Administration and operating costs ($m)	(11)*(6)	53.9	96.0
(13)	Total legal process costs ($m)	(5)+(8)	125.8	-
(14)	Total costs ($m)	(3)+(10)+(12)+(13)	579.8	936.0
(15)	Legal/medico costs as a share of total costs (%)	(13)/(14)*100	21.7	-
(16)	Insurance policies (million)		14.0	14.0
(17)	Premium needed to recover costs ($)	(14)/(16)	41.4	66.9
(18)	Total costs per claimant ($m)	(14)/(2)	2.90	2.34
(19)	Premium cost advantage (%)		..	19.3
(20)	Support provision associated with same premiums ($m)		1.51	2.0
(21)	Service level gain (%)		..	32.7

[a] In order to make 'like for like' comparisons, it has been assumed that the average injury costs of a person that cannot ascribe fault to a third party are identical to the average for a person that can identify an at-fault party. [b] based on SMO data as used in table 17.3.

Source: Commission calculations.

17.11 The performance of common law systems of fault-based compensation

The Commission identified a range of criteria against which to judge the performance of fault-based versus no-fault systems. Information about some aspects of the two systems is incomplete (especially in relation to costs). However, a no-fault system:

- provides much more predictable care and support over a person's lifetime, especially for people needing such supports over the longer run. In particular, no-fault insurance schemes explicitly focus on the health, functioning and participation outcomes of their clients on a life-time basis, including through care coordination, ongoing case management and monitoring client outcomes through systematic information management
- provides consistent coverage of all parties acquiring a disability through an injury, regardless of the circumstances of how the accident occurred, and

recognises that most apparently at-fault parties have merely made commonplace miscalculations, rather than acted maliciously. In the event of clear recklessness, a series of disciplinary mechanisms exist, or could be augmented, to punish perpetrators, potentially extending to punitive court actions or even criminal sanctions

- does not adversely affect people's incentives to improve their functioning following an injury
- does entail reduced capacity for choice to the extent that the right to common law actions are extinguished, though it would be possible for some common law rights to co-exist with a no-fault system
- will probably not meet all people's desire for 'punishment' of an at-fault party. However, the common law does not achieve a different outcome because at-fault parties are insured, and as noted above, much apparent negligence has no moral aspect. (While the potential for reputational damage from allegations of professional negligence would provide some deterrence, as noted by Kirby (2000), in practice, it is not clear that this increases broader safety due to poor disclosure of errors to enable future prevention and systemic changes.) Even still, there are still other avenues, including police charges, loss of licence, complaints about professionals and registering of professions, such as occurs for health practitioners
- probably has an equivalent capacity to deter excessive risk by using risk (and experience) rating in providing insurance cover (and neither system is a particularly powerful force for reducing injury rates against a background of insurance, other policies addressing excessive risk taking and people's own desire to avoid injury to others)
- is likely to be more efficient (that is, more care and support for each premium dollar).

Overall, no-fault systems are likely to produce generally superior outcomes compared with fault-based systems. This assessment is consistent with the findings and recommendations of past official inquiries and reports that have investigated the matter. These include: the 1967 New Zealand Royal Commission of Inquiry into Compensation for Personal Injury; the 1974 Australian National Rehabilitation and Compensation Committee of Inquiry; the 1981 New South Wales Law Reform Commission Inquiry into Compensation for Personal Injury and Death from Motor Vehicle Accidents; the 1986 Victorian Government Statement on Transport Accident Reform; and the 2004 Productivity Commission report on National Workers' Compensation and Occupational Health and Safety Frameworks

That said, there are many questions about how to design a no-fault injury scheme and to determine its exact boundaries and pathway to implementation. Those are the concerns of the next chapter. The design of any new no-fault arrangement, including its interaction with residual common law entitlements, will be key, not only to ensure complete coverage, but also to ensure improved participant outcomes.

18 A national injury insurance scheme

Key points

- A priority for reform is the establishment of no-fault lifetime care and support for *all* catastrophic injuries. The scheme established for this purpose, the National Injury Insurance Scheme (NIIS), should:
  - provide an all encompassing system for managing the care and support needs of all people experiencing catastrophic injury
  - primarily be funded from insurance premiums and, where appropriate, include experience and risk-rating to help prevent injury
  - be structured as a federation of separate, state-based schemes.
- To coordinate the federation of individual schemes, jurisdictions will need to establish a small full-time secretariat that:
  - ensures consistency in eligibility, definitions and assessment
  - reports on services relative to the minimum benchmark of care and support services
  - manages a comprehensive database, facilitates sharing of data and ensures consistent monitoring of performance, including actuarial valuations and client outcomes
  - works to eliminate any unwarranted variations in scheme design.
- There would be merit in state and territory governments contracting out the above secretariat functions. The National Disability Insurance Agency could play an important role in this respect. It could act as a host for cooperation, assist in, and publish, benchmarking information and encourage diffusion of best practice.
- Special arrangements are proposed for cerebral palsy. For this condition, it is suggested that the NDIS have full responsibility for funding care and support. This reflects that, by far, most cases of cerebral palsy cannot be avoided through clinical practices. Moreover, it is particularly hard to reliably determine whether clinical care was the cause in any individual case.
- An independent review of the NIIS should occur in 2020. Apart from evaluating ways the performance of the NIIS might be improved, it should consider the case to expand the NIIS. This might include widening NIIS coverage to include other heads of damages and significant, but non-catastrophic, injuries. The case for merging the NIIS and NDIS should also be evaluated.

18.1 A national injury insurance scheme is needed

The previous chapter identified many flaws in the current, predominantly common law (or fault-based) arrangements for providing care, support and other assistance to people injured in accidents. It identified the general superiority of no-fault insurance arrangements to fund, manage and coordinate the lifetime care and support needs of all people acquiring a catastrophic injury at some point in their lives.

The Commission considers that, to avoid the many deficiencies of common law compensation systems, and improve outcomes for people with catastrophic injuries, governments should create a no-fault system of nationally consistent care and support arrangements for people with catastrophic injuries (a National Injury Insurance Scheme, or NIIS).

In the Commission's assessment, the priority for reform is the establishment of no-fault lifetime care and support for *all* newly acquired catastrophic injuries. (The care and support needs of people with existing catastrophic injuries, and not covered under any of the present no-fault arrangements, would be met through the National Disability Insurance Scheme — the NDIS.)

There are many choices about the scope and design of the NIIS, involving questions about:

- the severity of injuries to be covered (all, serious, catastrophic?)
- how common law arrangements might coexist with a no-fault scheme and, in turn, the various heads of damage that the NIIS should cover (lifetime care and support, economic loss, pain and suffering?)
- the interaction and interface between the NIIS and the much broader NDIS
- scheme governance and coordination across the states and territories to ensure consistency in eligibility, assessment and a minimum benchmarked level of care and support
- the timing of implementation and other transitional issues
- appropriate sources of funding, particularly those that provide efficient incentives for risk management and prevention of avoidable risks.

Given the findings of chapter 17, perhaps the least contentious issue is in relation to lifetime care and support for people experiencing catastrophic injury. This is where many of the flaws in common law, fault-based arrangements are experienced most acutely — inequity, delay, uncertainty, poorer outcomes and inefficiency. Moreover, catastrophic injuries largely affect young people, with around 60 per cent of those affected being under 30 years old, so the effects on their lives are prolonged, as well as extreme. The average

duration of a major injury claimant in the Victorian Transport Accident Commission (TAC) is projected to be around 30 years.

The Commission proposes that lifetime care and support under the NIIS would meet all of a person's injury-related needs (excluding income payments, which would sit outside of the scheme). It would fund all reasonable and necessary clinical health services, medical and social rehabilitation, early interventions, therapies, care, and home and vehicle modifications. Opportunities for self-directed funding (chapter 8) would be part of scheme design to enable greater flexibility, where that is appropriate and consistent with the scheme's objectives and improves outcomes for participants.

The NIIS would also need to involve the following:

- Transitions through the health system would need to be as seamless as possible, and care and supports coordinated over a person's duration of need. Rehabilitation and early interventions should be appropriately timed (informed by rigorous data analysis) and, where necessary, supported by clinicians and allied health professionals.
- The stream of funding provided would also help develop specialist health services necessary for rehabilitation, which tend to be under-developed and under-funded in the health system (such as specialised brain injury centres).
- Key life transition points would be anticipated and planned for, to facilitate independence and participation goals — including, where appropriate, by connecting with community groups (as under the NDIS (chapter 4)).

Such developments should facilitate the continuity and coordination of care and supports, leading to better health and participation outcomes over the course of an injured person's life. These are important benefits, even for those who may otherwise have been able to obtain a significant lump sum payment for their long term care and related costs. (Indeed, as noted in chapter 17, the lengthy process of obtaining common law lump sum damages frequently delays recovery and optimal early interventions, and generally provides a poor mechanism to manage uncertainty over future needs, health status, life expectancy and other life circumstances.)

In addition, the policy changes proposed by this chapter should:

- reduce reliance on social welfare services and supports that, given the complex and particular care needs of people with catastrophic injuries, are likely to result in inadequate long-term care and support, and lost opportunities for forward-looking injury management

- remove much of the focus on litigation as the mechanism for seeking compensation, and improve health outcomes and recovery
- provide more certain outcomes and greater fairness for all people newly affected by such life-changing injuries (as currently, only around half of people catastrophically injured obtain some compensation to fund lifetime care and support needs).

In addition to providing lifetime care and support for people with catastrophic injuries, there are various other ways that the scope of cover provided by the NIIS could be extended. The Commission has not made specific recommendations about these matters, in view of the need to ensure that the NIIS is up and running and its performance better known before additional changes are made. That said, various policy options to extend the scope and functions of the NIIS are summarised in this chapter and appendix I. In addition, to facilitate improvements to the NIIS over time, including evaluating the case for extending its coverage, an independent review is proposed for 2020 (recommendation 18.7).

18.2 Implementing a no-fault approach for lifetime care and support of all catastrophic injuries

Under the model proposed by the Commission, scheme management, operation and financing would be jurisdictionally-based. A coordinated federated approach would be critical, however, to ensure that the level of benefits and the standard of care provided by individual schemes were subject to minimum reasonable benchmarks.

State-based schemes should draw on the best arrangements already in place around Australia, and extend their scope so that all catastrophic injuries are insured. This would include motor vehicle accidents, medical treatment, criminal injury and general accidents occurring within the community or at home. A person could acquire an identical disability from an accident in any of these contexts, and as such, there is a good rationale for equal insurance and access to care and supports.

Existing institutions like the Victorian TAC and NSW Lifetime Care and Support Authority (LTCSA) should expand to include the management of other catastrophic injuries in those jurisdictions. Tasmania and the Northern Territory could also build on their existing no-fault structures for motor vehicle accidents. As a small jurisdiction — with few and unpredictable numbers of catastrophic injuries — the Australian Capital Territory could consider contracting out the management of catastrophic injuries to another serious injury scheme, using premium income as the funding source. Queensland, Western Australia and South Australia would need to either establish a

new body to administer their scheme or significantly expand the role and functions of an existing structure, such as the Motor Accidents Insurance Commission in Queensland.

Although already providing no-fault benefits, Tasmania's Motor Accident Insurance Board was particularly vexed about the prospect of expanding their 'insurance model' to a broader range of catastrophic accident risks (sub. DR687). These concerns are summarised in box 18.1 below and include several reasonable anxieties given the uncertainty of an NIIS for their well-established scheme. That said, their reservations are generally speculative, or could be adequately addressed through sensible implementation, sound scheme governance and cooperation with other NIIS schemes.

Box 18.1 Tasmania was particularly concerned about the uncertainty of an NIIS

The Tasmanian Motor Accidents Insurance Board (MAIB) expressed a number of concerns about an NIIS, believing that it would not be viable as an insurance model and would risk the financial position of their current no-fault arrangement for motor vehicle injury (sub. DR687). We have attempted to briefly address some specific concerns below.

- NIIS cover of motorists convicted of serious traffic offences need not compromise the insurance model of the MAIB (or, indeed, the NIIS) as such costs would be reflected in risk-rated premiums. Moreover, criminal sanctions would continue to deter such behaviour, and monitoring and enforcement capacity is rapidly expanding through technology solutions (see later).
- Concerns about cover for general injuries appear to mainly reflect the view that costs for this class of injury were underestimated in the draft report. The Commission has updated estimates to reflect new data, inflation and population changes, but recognises the uncertainty around these estimates. That said, the level of uncertainty would be unlikely to require revenue contributions from ratepayers to be 'rapidly' increased, as was the suggestion. Furthermore, the option to partially up-front fund general injuries may be desirable (see later).
- The prospect that state governments could be 'forced' into providing budget support in lieu of council contributions is entirely a matter to be decided by state governments. The Commission has identified the advantages of pursuing a levy on local council rates — as an efficient source of revenue and to help manage the risks of injury — but also notes reasons why state governments could share this responsibility.
- Concerns about reinsurance cover could largely be addressed within the federated structure of the NIIS through pooled reinsurance arrangements (see later).
- The risks posed by extreme sports may well be valid, but would largely be an empirical question that information is currently unavailable to adequately analyse. If risks materialise, these could promptly be responded to through specific regulation and risk management activity or, as a last resort, changes to scheme legislation.

While it is proposed that existing workcover schemes would stay in place, state and territory governments could consider transferring the management of the small number of people with catastrophic injuries in their schemes to their NIIS scheme — in effect, contracting these cases to the NIIS. Existing workcover schemes have performed well at preventing such injuries and would continue to have that responsibility, but they are not well geared to provide coordinated lifetime care and support for catastrophic cases.

No-fault insurance for catastrophic injury would mean that common law actions for damages associated with lifetime care and support would be extinguished. The premise for this is that the goal of a no-fault scheme is to provide high quality care and supports, making redundant the uncertain and costly process of accessing any additional supports through the common law. This is separate to whether or not the right to sue for economic losses, such as income, and non-economic losses, such as pain and suffering, should be retained — a matter taken up in section 18.5 and appendix I.

Various lawyer representatives and associations expressed concern about the removal of common law rights to sue for lifetime care and associated damages. They consider that individuals should have the right to choose whether to participate in the NIIS, or to 'opt-out' to pursue a common law claim for their care and support costs, thereby maintaining their individual autonomy (sub. DR774; sub. DR948; sub. DR713; sub. DR843). The Commission appreciates the value of choice, and agrees that people's preferences should be accommodated wherever possible unless the costs and risks of doing so are unwarranted. Chapter 17 discusses the disadvantages of common law compensation in some detail, and finds that care and support costs would be more effectively and efficiently met through a no-fault lifetime care and support scheme. On the question of an individual's choice and flexibility:

- Comprehensive needs assessment under the NIIS would take account of a person's individual circumstances and changed needs over time, providing the flexibility to accommodate individual circumstances.
- The NIIS would include a greater role for self-directed funding and self-determination of care and support to facilitate increased autonomy and choice where that would deliver better outcomes for participants.
- The legal costs of pursuing common law damages can be very substantial and are ultimately borne by society, given funding from compulsory insurance.

One participant raised the possibility that some people may seek to insure themselves for *additional* lifetime care and associated support cover in the event of an accident (Richard Tooth, sub. DR833). To the extent that supplementing cover would be an optional, private arrangement and would enable greater individual choice and flexibility, there would be no reason to preclude such an offering being available to the community

to purchase. Its existence, however, would not be a substitute for or displace the availability of comprehensive lifetime care and support under the NIIS.

Structuring no-fault catastrophic schemes under the NIIS

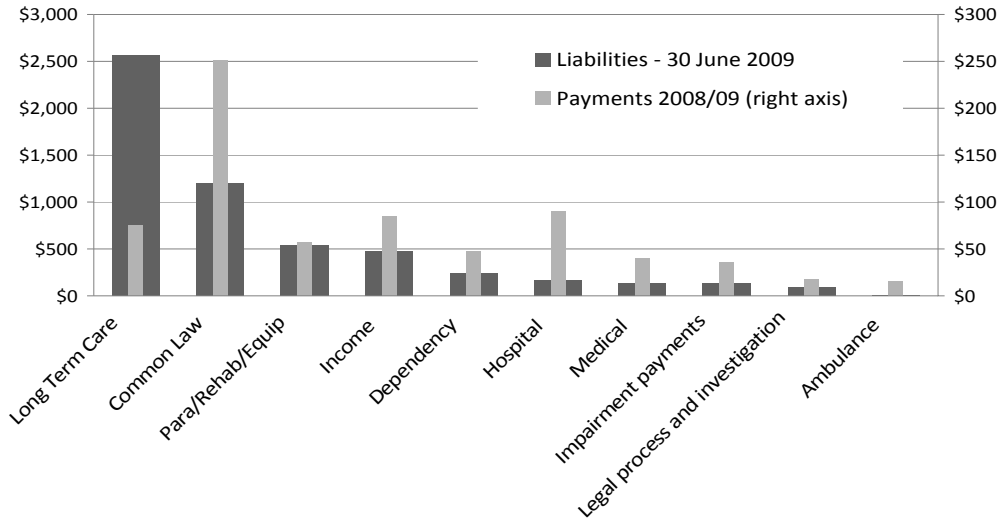
The creation of an NIIS should provide an all-encompassing system for managing the care and support needs of all new cases of people experiencing catastrophic injury. The structure of the NIIS, and the way it operates and interacts with its participants, will be especially significant in the context that people's care and support needs will typically be lifelong. Well-based relationships and strong governance will be decisive in realising the scheme's objectives over the long term. In particular, the NIIS should use a governance structure and case management system that:

- provides coordinated services to people and creates specialist centres of excellence that are otherwise lacking (for example, trauma centres)
- focuses on the long-term liabilities of care and support, rather than costs or payments applying to any given period (as occurs in the broader disability and health systems). As discussed in chapter 9, a longer-term focus has the advantage of encouraging scheme managers to be less tolerant of unwarranted cost pressures. While a cost shock might seem to be small at the time it appears, a long-term actuarial model can reveal the high cumulative effects that it can have on liabilities.[1] Figure 18.1 shows how the contribution to a scheme's future liabilities differs from the spending on such benefits in a given year. Long-term care is the main source of Victorian TAC future liabilities, even though other benefit types are more 'expensive' in the short term, such as one-off common law damages
- is data-rich, allowing more evidence-based judgments about the best way to improve services and outcomes for participants; and in discovering opportunities for early intervention and injury prevention. Since data are continually collected, monitoring of cost pressures and outcomes can be done in real time. Similarly, no-fault schemes acquire expertise in proactively managing care and support needs, including by predicting the potential seriousness of an injury within days of an accident, and instituting early interventions where appropriate.

[1] Suppose that a cost of a scheme is around $500 million each year, and that costs are expected to grow by 6 per cent in nominal terms each year forever. Suppose that the discount rate is 7 per cent. In that case the present value of the liabilities can be shown to be 107×500 = $53.5 billion. Now suppose that a small (but permanent) cost pressure of 1 per cent occurs in year 1. In the year in which it occurs, it costs $5 million — not a lot relative to the overall scheme cost in that year, and easily overlooked by a manager with an eye on current performance. However, a permanent shock of this magnitude means that the present value of the stream of future costs is now $535 million more. So the present value of that 'small' cost pressure is equivalent to more than the entire cost in the year in which it first occurred.

Figure 18.1 **Liabilities are mostly long term care**

$ million



Data source: TAC estimates.

Moreover, there are significant advantages in having accident insurance schemes that are fully-funded. In such schemes, an amount equal to the present value of the expected future liabilities that relate to a newly injured person is transferred to the scheme fund. This issue is discussed more fully in the later section on financing NIIS claims (section 18.3).

Risk rating

Risk rating is an important aspect of insurance products, including for mandatory products. By reflecting higher risk in higher premiums, the consumer receives an important price signal that may affect their purchasing choices and their behaviour (Dionne 2001, Henry Tax Review (Treasury 2010a)). The capacity to risk- and experience-rate insurance to reduce accidents is a key rationale behind the mostly premium-based funding sources of the NIIS.

Existing motor accident schemes apply risk ratings to the determination of premiums, although for some classes of risk this is muted, in part, by the need to address social and economic impacts. For example, pure risk-rated premiums for young male drivers would be so high as to be prohibitive for many (affecting employment and imposing wider social and economic costs). Similarly, pure risk rating in some jurisdictions is not applied to car owners in rural areas, as this would require premiums to be significantly higher, reflecting in part the greater time spent in the car and the greater risk of serious accidents. The benefits of risk rating have to be sensibly weighed against other objectives.

However, at the margins there may be opportunities for higher risks to be reflected in higher premiums, for example with high powered motorcycles. In New Zealand, the ACC recently increased some classes of motorcycle premiums a little more than two-fold.[2] This reflected a desire to send a strong market signal to owners and would-be purchasers about the higher risks of driving high-powered motor bikes. In fact, if premiums were fully risk rated, they would have increased eight times.

Clearly there are limits on the capacity of risk rating because of the social and economic costs and because some drivers would avoid paying premiums by driving uninsured vehicles without altering their risk status. On the latter point, technologies are changing to allow easier detection of uninsured vehicles (sub. DR833). For example:

- Victoria and ACT police use mobile automatic number plate recognition systems systems, with the ACT RAPID technology leading to the issuing of over 1800 infringement notices during a six-month trial, and prompting the Government to invest around $4 million in the new technology over four years, including two additional cars and six dedicated police officers.
- Some overseas insurers are adopting new technologies to enable drivers to opt-in to monitoring devices that can measure driver habits and individual risks associated with distances travelled, acceleration, braking, speed and GPS location. Evidence of lower risks can be rewarded by premium discounts. The price of installing such technologies has fallen dramatically in recent years (from up to $1 000 to now less than $200 per vehicle).

Such new technologies can also work in tandem with other road safety measures to enable more effective monitoring and enforcement, and help prevent accidents.

For sources of catastrophic injury more generally, the Commission has been mindful of the feasibility of risk rating in its analysis of potential funding sources for NIIS claims (section 18.3). The optimal design of risk rating for the purpose of reducing catastrophic injury is both an empirical issue and one requiring fine

[2] On average, the ACC receives 3.4 times more motorcycle claims per 10 000 vehicles than for cars, and the cost of an average claim is 2.6 times more expensive. The relativity factor of a 601+cc motorcycle (compared to passenger vehicles) is 1205 per cent, but was previously set at 150 per cent, giving rise to significant cross-subsidisation between vehicle types. Even with the significant increases proposed to the rates payable on 601+cc motorcycles (from $252.69 to $623.91 proposed by the ACC), all other car drivers would continue to subsidise motorcycle drivers and pillion passengers, adding an estimated $77 to each premium for 2010-11 (www.acc.co.nz/news/PRD_CTRB118214). For this class of motor cycle, a premium of $426.92 was subsequently approved by the Minister and, though significantly less than that proposed by the ACC, unsurprisingly, there was a hostile response from riders.

judgments about the wider impacts. In the NIIS this would be a matter for the individual schemes and state governments.

A federated approach

One way of realising an NIIS would be for each jurisdiction to set up a scheme that provides equivalent lifetime care and support for catastrophic injury as is currently available through the Victorian TAC, the NSW LTCS scheme or Tasmania's MAIB, but to otherwise go it alone. That would produce large gains, but it would also forgo some benefits from cooperation.

The Victorian Government suggested that an effective step forward would be to increase the coverage of no-fault insurance arrangements across jurisdictions, and the consistency of support provided under existing schemes. It considered that a new national partnership, possibly under the National Disability Agreement, could be the best way to encourage this:

> [It] would reward the establishment of consistent no-fault insurance schemes for transport related injuries (including for jurisdictions that already have some schemes in place, in line with the current policy approach). … Over time, this will build expertise and service capacity, in turn increasing benefits for the wider population of people with a disability. (sub. 537, p. 29)

The Commission proposes that the NIIS be structured as a federation of separate, state-based no-fault schemes. Individual jurisdictions would control the implementation and development of their own schemes, including, for example:

- funding options
- pricing of premiums, including risk rating
- investment of scheme assets
- set up of legislative infrastructure
- the level of support provided above the minimum benchmark
- oversight of service delivery, assessment and dispute management
- the balance between internal or external care coordination and case management services.

The purpose of federation membership, and the establishment of a small full-time NIIS secretariat as a national coordinating capability, would be to:

- provide an independent advisory and monitoring capability

- ensure consistency in eligibility, definitions and assessment. The fact that an accident occurs in one jurisdiction or another should not reveal gaps in coverage and other problems symptomatic of the current arrangements, particularly evident for motor vehicle injuries
- provide certainty around a minimum benchmark of services, care and supports, though benchmarking would need to be transparent and agreed
- share data (and maintain a central database), undertake cooperative trials, research studies, reporting (including actuarial valuations) and benchmarking of performance (including measures of client outcomes)
- reap economies by pooling risks where appropriate, including through a federated reinsurance pool
- eliminate other unwarranted variations in scheme design.

On the latter point, the Victorian Government acknowledged that under a national approach to injury insurance, existing no-fault schemes would 'also require refinement to achieve more consistency' (sub. 537, pp. 28–29). Jurisdictions should set premiums sufficient to meet the minimum benchmark of services, care and support. Moreover, within the federated membership structure of the NIIS, transparency of financial performance and approaches to underwriting across individual NIIS schemes would be necessary.

This implies some mechanism for cooperation — such as a memorandum of understanding or even statutory provisions that provide a framework for cooperation and joint activities. Over time, separate state and territory schemes might well coalesce to form a single Australian system. However, agreements about the extent and nature of cooperation should not jeopardise a timely transition to no-fault schemes at the state and territory level. Indeed, implementation may well need to occur in a staged fashion, jurisdiction-by-jurisdiction.

There would be merit in the states and territories contracting out the secretariat functions listed above. The NDIA (recommendation 9.1) could play an important role in this respect. (Indeed, while the NDIA itself would be a Commonwealth statutory body, all participating Australian governments would be involved in how it would be established and governed.) It could act as a host for cooperation, assist in and publish benchmarking information (for both the NIIS and NDIS) and encourage diffusion of best practice.

As already mentioned, to reduce the fixed costs of operating their own schemes, smaller jurisdictions could choose to sub-contract scheme management to another state. (It may also be possible to contract NIIS cases to a private sector insurer operating across jurisdictions or to the NDIS.)

The Australian Government's role

Some jurisdictions have suggested that the Australian Government should have full responsibility for an NIIS, particularly to ensure consistency in eligibility, assessment and care and support. Moreover, the terms of reference to this inquiry, explicitly asked the Commission to evaluate the legislative basis for a new scheme, including consideration of head of power.

The Commission has investigated the potential for a nationally legislated and governed NIIS, but foresees a number of problems. In particular, although the Australian Government could use the referral power,[3] this would require all states to agree. For example, the states agreed in 2003-04 to create a consistent public liability insurance regime, which included changes to the common law suit of negligence. While *some* jurisdictions may be willing to refer their constitutional powers to the Commonwealth, others would be far more resistant to do so.

In addition, the capacity of the Australian Government to intervene in state insurance matters is expressly prohibited under the Australian Constitution (s. 51 (xiv)), except where state insurance crosses borders. This is a general restriction — that is, the Commonwealth cannot regulate state insurance under any power.[4] For example, the corporations power could not be used even if state insurance companies were corporations.

Moreover, there does not appear to be any power under which the Commonwealth could legislate to extinguish the common law right to sue under negligence, contract or statute to recover damages for accidental injury.

- The corporations power would not permit it, because a car accident, for example, is generally between individuals.
- The external affairs power seems, at first inspection, too remote, unless Australia were to sign a treaty about no-fault accident insurance (akin to the UN Convention on the Rights of Persons with Disabilities). That said, the Commission notes previous 'remote uses' of this power to give effect to conventions and provide a basis for the Australian Government to legislate in areas of state control, including management of the Murray-Darling basin under the Federal Water Act.
- Accidents are not usually 'in trade and commerce'.

3 S. 51 (xxxvii), along with the territories power, s. 122.

4 For example, *Victorian WorkCover Authority v Andrews [2005]* FCA 94, at 53.

- The welfare power could be used to provide benefits to injured parties but not to stop them from suing, because it is a power to make laws with respect to the provision of allowances, not the power to make laws about claims in negligence.

As a consequence, the Australian Government would be a less important party in the NIIS than state and territory governments (that is, beyond its involvement in subsidising medical indemnity insurance, its proposed role in financing catastrophic aviation injuries, its role as a stakeholder in the NDIA and its role to contribute towards premiums in the Northern Territory where the injury risks are higher (see later)). The Australian Government's primary role would be to encourage a cooperative solution, and to assist in the creation of an NIIS that included data sharing and other common features (while not eliminating the scope for some experimental variation).

The Australian Government could also reach an agreement with the states and territories that the creation of the NIIS would be the quid pro quo for the Australian Government's substantial injection of funds into the general disability system through the NDIS (chapter 14).

Implementation could be rapid

Implementation of an NIIS should be faster than the full rollout of the NDIS. As noted above, this is because there are well-established schemes in place that could form the blueprint for the design of schemes in other jurisdictions. Moreover, while the severity of the injuries means that the costs are significant, the numbers of people affected are relatively small (around 1000 a year). Accordingly, the organisations that coordinate services would not need to be very large — and would not be likely to place excessive pressures on an already strained labour market in disability services.

While it would take some time to introduce no-fault arrangements for all catastrophic injuries, fast progress could be made in some areas. The priority for jurisdictions without a lifetime care and support scheme already in place would be to initially establish no-fault arrangements for (new cases of) catastrophic motor vehicle accidents, and expand coverage to other sources of injury within two years. Existing schemes would provide a template to make a rapid pace of implementation possible. The Commission suggests that:

- state and territory governments would establish no-fault catastrophic injury schemes for motor vehicle accidents by the end of 2013. This would be the starting point for an NIIS that ultimately covers all sources of catastrophic injury

- all catastrophic injuries would be covered by 2015, but funding for the scheme should commence in 2014 to establish a funding pool prior to any claims.

The Commission has also outlined the potential for broader changes to the common law and the coverage of the NIIS (see section 18.5 and appendix I). Realistically, such reforms are more radical and would take a longer time to implement. Moreover, they should not divert attention from the core task of establishing no-fault lifetime care and support for all people catastrophically injured. In the Commission's view, the practicability of implementing wider reforms and expanding the remit of the NIIS should be carefully tested in the independent review proposed for 2020 (recommendation 18.7).

In the longer run, there would be some logic in bringing the NIIS into the NDIS, to create one Australia-wide scheme addressing the consequences of disability and major injury. However, beyond the in-principle attractions to merging schemes, the practical case for making such a change would be a matter for an independent review to comprehensively assess the associated benefits and risks. This issue is discussed below.

Why not just use the NDIS?

The Commission's recommendation to create a new national disability insurance scheme (NDIS) that would provide high quality care and support for all people with significant disability invites the question of why an NIIS is needed at all. In theory, all compulsory insurance products providing third party cover could be removed, with all people's needs funded and met through the NDIS.

The Queensland and Tasmanian governments questioned the rationale for two separate schemes (sub. DR1031; sub. DR1032), as did a number of other participants including the Alliance of Spinal Injury Organisations (sub. DR919). The South Australian Government acknowledged the rationale for a separate NIIS scheme rather than relying on pay-as-you-go funding, but it saw the Australian Government as legislating and paying for any expanded injury scheme, rather than relying on a federated approach:

> … a no fault scheme for catastrophic injuries should be nationally legislated and funded, retaining and utilising existing State based institutional arrangements and expertise in case management and service delivery where appropriate. National legislation would ensure ongoing consistency between States and alignment with NDIS (sub. DR861, p. 2)

There are several reasons why a separate funding stream and system for managing participants' needs is appropriate. These mainly relate to the scope for accident prevention and the long-term benefits of early and proactive engagement with the

broader health and rehabilitation systems to reduce permanent disability, injury complications and scheme liabilities. In addition, there are a number of practical realities given some well-performing examples within present fabric of accident schemes, but which could not easily be replicated within the 'broken' disability system. The key arguments are summarised below.

Premium funding and accident prevention

A key goal of the NIIS will be to deter high-risk behaviour and reduce local risks that can contribute to accidents. One of the reasons for using sources of funding (premiums and state and territory funding) different from the NDIS is that these send price signals that encourage greater incentives for safety.

- As noted above, amendments to risk rating provides the opportunity for deterring accidents, whereas there would be no easy mechanism to address moral hazard through prices in an NDIS.
- Third party premiums reflect the external costs of consuming a product — that is, the likely costs of an individual causing an injury. If premiums force a driver to take greater account of the costs associated with their unsafe driving, choice of vehicle type, or other aspects of transport use that are within an individual's control, injuries can be reduced (Edlin and Karaca-Mandic 2006).
- Premiums for the NIIS would be collected at the geographic level where governments have the greatest capacity to reduce risks. Accordingly, state governments have the capacity to improve policing and the justice system to improve transport safety through laws, regulation, advertising, training, and infrastructure (thereby reducing CTP premiums); and with local government, reducing the risks of general accidents.

Moreover, if designed carefully, risk-based premium funding can also be efficient purely from a financing perspective (by minimising welfare losses associated with altered consumption and supply decisions). The Commission's evaluation of risk-based financing options, simultaneously took account of the efficiency loss of each option (section 18.3).

The value of 'fully funding' lifetime liabilities

The NIIS would primarily be 'a fully funded' scheme, drawing on its revenue sources to cover the expected lifetime liabilities of new cases. This would provide strong incentives to manage costs over time, and would provide certainty about the capacity of the fund to meet a person's future liabilities. (Such arrangements would need to include a buffer against year-to-year variations in costs and premiums (see later)).

The NIIS would establish best practice clinical treatment and rehabilitation protocols

Unlike the NDIS, the NIIS would cover a variety of health costs associated with catastrophic accidents, such as acute care and rehabilitation services. A major rationale for this is that when setting premiums or determining optimum injury prevention approaches, it is important to take into account the *full* 'external costs' of catastrophic injuries, and not only those associated with lifetime care and support.

This rationale is not (generally) present for the NDIS, especially given that another body, the Australian National Preventative Health Agency, will take the lead in trying to prevent disability from non-accidents. Moreover, it would not be feasible (practically or financially) for the NDIS to finance and coordinate all health services associated with all forms of disability.

That said, the NIIS would offer lessons for the NDIS about coordinated provision of disability support and health care. The experience of jurisdictions with no-fault accident schemes has been that coordinating optimal transitions through the health system and the availability of high quality rehabilitation facilities enhances participant outcomes and reduces the lifetime cost of injury. The NIIS should continue to be a test-bed for the coordination of care and support and, in some instances, the creation of specialist centres.

The NDIS can benefit from the NIIS experiences in determining the way it coordinates its activities with the health sector. For example, the lessons from appropriate rehabilitation for acquired brain injuries from motor vehicle accidents would be relevant to people experiencing major strokes. The MOU between the NDIS and the health system would need to reflect the importance of coordination between the two systems, and incorporate best practice knowledge from the NIIS. The NDIS would monitor the degree to which the disability and health systems interact, with NIIS arrangements providing a useful benchmark for comparison.

In the proposed 2020 review, health and participation outcomes of NIIS participants could be reviewed against NDIS participants with sufficiently similar non-traumatic injuries (matched for age and severity). The results of such analysis would help to inform the relative advantages of an NIIS, and guide areas for improvement within the NDIS.

The existence of the well-functioning structures already in place

A nucleus of existing, well-functioning no-fault schemes already exists in some jurisdictions, like those run by the Tasmanian Motor Accident Insurance Board, the

Transport Accident Commission and the NSW Lifetime Care and Support Authority. These can provide a valuable platform for learning and dissemination of skills and expertise in other jurisdictions. Such schemes and expertise can help to guide early determination of an appropriate minimum benchmark of care and support across jurisdictions. Similarly, established legislation and guidelines can be drawn on to achieve timely implementation of schemes in other jurisdictions.

The potential for later review and merging with the NDIS if appropriate

As mentioned, the South Australian Government raised several legitimate concerns about why a nationally legislated and funded NIIS approach may be preferred, including to guarantee consistency in scheme design and eligibility criteria, assessment tools, service definitions and research and data management (sub. DR861). To the extent that national consistency may not be sufficiently realised under a federated structure, the proposed 2020 review (recommendation 18.7), which recommends evaluating options for merging the NIIS into the broader NDIS, would arrest the progression of scheme 'breakouts' or unwarranted inconsistency.

There would, however, be significant legislative change required to wrap such accident schemes into a giant NDIS, and the resulting 'neatness' may not be worth the gains. When this issue is revisited in 2020, consideration should be given to:

- any imperative to pursue a more national approach due to 'breakouts' or a lack of consistency across separate state-based NIIS schemes
- the time path for achieving greater consistency if that is desired
- the transactions costs of merging schemes and potentially disrupting the continuity and quality of participants' care and support
- the distinct and complex care and support needs of people with catastrophic injuries and the performance of the NIIS in meeting those needs
- the extent that the benefit structure and standard of benefits might change under any merged arrangement, especially when the NIIS would have a separate source of funding (premiums) and be a fully funded scheme.

In summary

While there might be a case to eventually merge the NIIS and the NDIS, there are large differences in the schemes that affect whether that would be worthwhile. The gains from a merger might not be worth the costs of bringing quite different arrangements together. That question should be put off until the Commission's proposed review of the NIIS in 2020.

Nevertheless, even as separate schemes, and regardless of whether or not a merger takes place, there are clear reasons for schemes to coordinate and work towards consistency across scheme features including:

- many aspects of scheme governance
- data collection, and measurement and evaluation of outcomes
- sharing of capital infrastructure
- assessment tools.

18.3 How should NIIS claims be financed?

The NIIS should be funded from a variety of sources, but mainly from existing insurance premium income sources.

The appropriate funding sources would broadly depend on the causes of accidents. This would enable risk rating of the insurance premium, if appropriate, and can provide efficient incentives for safety and injury prevention. As discussed in chapter 17, in principle, a risk-rated premium makes adjustments for the different risk profiles of groups of individuals to reflect their expected contribution to the costs of injury.

Full upfront funding of the NIIS from insurance premiums also has the advantage of providing a sustainable and targeted funding source.

Apart from financing NIIS claims through the existing compulsory insurance in each state and territory (and a federated reinsurance pool), funding of any residual claims not specifically covered by a premium income source would need to rely on new sources of income. While this would entail additional contributions from state and territory governments, including for scheme establishment, this sits within the broader context of the Australian Government's role in funding the significant additional resources required for disability services under the NDIS. To this end, the additional funds required for injuries are a relatively lesser burden on state and territory budgets.

For all causes of injury, a significant source of revenue would be savings and offsets from the introduction of the NIIS, including:

- savings in legal costs (which account for a significant component of premiums in fault-based systems — chapter 17)
- reduced incentives for many individuals to litigate under the other heads of damage (for income losses and pain and suffering), especially for medical negligence claims where the evidentiary burden to establish liability can be significant

- other offsets, such as reduced reliance on social welfare services and reduced reinsurance and capital costs (however, the extent of savings in social welfare services and improvements in community wellbeing has not been quantified, because of the extended time period over which budget savings will be realised, and the inherent difficulties in estimating the value of many intangible benefits associated with the NIIS).

As individual jurisdictions would be responsible for underwriting their own scheme, it would be a matter for each to choose between alternative sources of financing NIIS claims, including any other specific sources appropriate within their jurisdiction.[5] Nevertheless, this chapter suggests a range of financing options for each cause of catastrophic injury — transport, medical treatment, occupational and general injuries (including criminal injury).

Transport accidents

Motor vehicle accidents

Motor vehicle claims under the NIIS should be funded from existing insurance products that are mandatory for owners of motor vehicles (namely, compulsory third party motor vehicle insurance). Jurisdictions would select their preferred mechanism for funding. For example, in NSW a levy is imposed on the CTP premium collected by the seven private insurers operating in the market, whereas in Victoria, the entire premium is levied by the TAC as the single statutory insurer.

The potential to phase-in greater risk- and experience-rating of premiums (as discussed earlier) and prevention activity more broadly is also relevant. In addition, it is expected that the rate of catastrophic motor vehicle accidents will continue to fall over time because of improved safety and prevention strategies, with most CTP schemes achieving sustained reductions in claim frequencies. This will help to offset the increase in funds required to cover no-fault claims.

Another issue concerns whether cover (and funding) should be widened. Chapter 17 provides examples of where access to some benefits could potentially be denied if there is evidence of deliberate recklessness by a person, causing their own injury. However, it was also noted that for cases of catastrophic injury, the community may have limited appetite to restrict access to benefits, as services and supports would have to be provided in any case by family, charity and other informal arrangements.

5 For medical injuries, however, the Australian Government is a key stakeholder.

Motor vehicle accidents on private property usually involve unregistered and uninsured vehicles. These 'off-road' accidents are usually excluded from existing schemes, but the use of such vehicles, including dirt bikes and quad bikes, is said to be rising in popularity. From a community responsibility perspective it is reasonable that these accidents be covered, and the NIIS could explore ways to obtain premium income for these claims, including by making insurance mandatory. However, any decision to pursue a specific premium income source should take account of the likely high costs of enforcement. The Commission understands that covering the cost of these injuries in New South Wales, Victoria and Tasmania could be somewhere in the order of an additional $10 million per annum, increasing CTP premiums by around $2-3 per vehicle (Martin Fry, trans., p. 195).

Bicycle accidents

Some participants have questioned how catastrophic bicycle accidents would be funded under the NIIS (for example, the MUA, sub. DR733). If bicycles were subject to an annual registration process (similar to cars), it would be a simple task to add a levy to the registration fee to help fund the NIIS (although, it is not clear what an appropriate fee would be). However, this is not the case.

Conceptually, it would be possible to set up a registration process for bicycles in order to levy a fee for the NIIS. Given that cycling is a popular fitness activity (particularly among children), there are probably sound reasons for governments to be encouraging increased participation in cycling. As most cyclists are not currently charged for registering themselves as cyclists, any levy to help fund the NIIS would act as a disincentive to participate in this form of exercise. As such, it is likely that the socially optimal level of such a levy would be low (or could even be negative).

In addition, the cost of establishing and running such a registration process are likely to be large. Given that a socially optimal levy would be unlikely to raise significant funds, it is unlikely that a registration process for bicycles would be sensible to establish — even if there would not be substantial difficulties in enforcing the registration process.

Some cyclists are already indirectly registered. Those who participate in organised races and rides are normally required to purchase insurance or membership of a club (which, in turn, provides general and public liability insurance cover under the National Program, in addition to specific accident insurance providing very limited benefits). The NIIS could explore ways of levying such insurance, but should be careful to avoid perverse outcomes (noting that insurance is a generally inefficient source of revenue when the underlying premium aligns poorly with the accident risk). In addition, most cyclists are not members of those groups.

Moreover, most cyclists own motor vehicles and pay a CTP premium, which could provide a more administratively efficient way of collecting funds to cover the relatively small number of catastrophic cycling accidents

Alternatively, another option would be to include bicycle injuries under the 'general accidents' category. This would be consistent with the recreational use of a dedicated cycle path, which would usually be maintained by local councils.

Water, rail and aviation accidents

The Commission proposes that catastrophic transport accidents more generally should be covered under the NIIS, including those relating to air, rail and water modes of transport. A variety of options is available to fund these accidents.

Funding should take account of the administrative cost of alternative approaches, the impact on efficiency of imposing a levy, and the potential to reduce the risks of accidents. For example, tracing a source of funding on an individual accident basis (within the context of current fault-based liability insurance products) would be complex and costly to administer. Imposing an ad valorem levy on an already risk rated insurance premium, on the other hand, is likely to be more straightforward, and would incorporate the risk of an accident. Other options include levying passenger tickets and registrations. In general:

- a levy on the price of each passenger ticket has the advantage of aligning usage and exposure to risk
- a levy on personal injury liability insurance would not necessarily cover non-fee-paying passenger carrying modes of transport (as regulations generally do not make insurance compulsory). However, it would broadly reflect the risk of injury
- a levy on registration would have broad coverage, but would be unlikely to reflect the individual risks of catastrophic personal injury, since risks usually reflect use and user characteristics not captured in registration. (Although, registration can support various safety regulations and revenue may sometimes help to fund and maintain a safe and efficient infrastructure network.)

Reflecting these broad considerations, the Commission proposes:

- a small surcharge on the passenger ticket price of all rail travel regulated under the co-regulatory framework administered by rail safety regulators in each state and the Northern Territory
- a modest levy (perhaps scaled on vessel size or tonnage) on domestically registered passenger vessels regulated under Australian Maritime Safety Authority (as the proposed new national safety regulator for all commercial

shipping in Australian waters by 2013). Another option would be to impose a small surcharge on the passenger ticket price on all domestically registered ferries (and other passenger carrying watercraft). For privately owned 'pleasure' vessels, a small levy on existing state-based registration would be appropriate.

As a general proposition, some governments may prefer to self-insure the risks associated with their public transport operations, but any decision to do so should be supported by an adequate level of reinsurance cover. This would be consistent with the generally low probability of catastrophic accidents from public transport operations (albeit very substantial costs in the event that a large number of catastrophic injuries occurred in a single event). Alternatively, state and territory governments could set aside or accumulate a pool of funds from the funding options proposed above, which should be at least sufficient to cover the actuarial risks.

The Commission has not specifically recommended a premium (or risk-based) funding source for catastrophic aviation injuries. This does not mean that specific sources of funding related to accident risks are unavailable, but we understand it would be extremely complex to achieve. Lifetime care and support needs of aviation injuries should, nevertheless, be covered by the NIIS, but at least in the interim, the funding of these injuries should be met by the Commonwealth. Importantly, this would:

- be consistent with the Commonwealth's breadth of responsibilities and the *potential* regulatory reach of the Civil Aviation Safety Authority
- provide an incentive for the Australian Government to examine sources of funding that could meet the NIIS liabilities associated with such accidents.[6] Moreover, for the 'general aviation' category (that is, non-carriers), such an arrangement would provide stronger incentives to moderate the risks of accidents. This could link to an NIIS funding source, such as a levy on liability insurance, registration or pilots' licences (where this could be shown to relate to accident risks).[7]

The extent that risk-based funding sources should be pursued to fund aviation accidents would depend on the costs and benefits of various alternatives. This should take account of the high costs of catastrophic injury and the value of aviation safety, but equally, the legislative compliance, monitoring and enforcement costs of changes should also be included.

The arguments behind this proposal are discussed below.

6 Some injuries may already be covered under existing workcover schemes.

7 A levy on registration and licences should be considered within the context of avoiding any 'crowding out' of private incentives to insure against personal injury liability.

Accidents involving international and domestic carriers

Requirements for domestic and international air passenger carriers to hold insurance (and the compensation that is provided through such insurance) are outlined in box 18.2. These are extremely complex arrangements, which would be difficult and potentially risky to unravel. This is especially true for international carriers, which face different liability exposure depending on the particular treaty and amendments that are common to both the departure and destination country. In some cases, liability would be unlimited and compensation would reflect the full amount of damages, but there could also be cases where compensation would be capped between $10 000 and $200 000. There is no guarantee that compensation would be even near adequate to cover lifetime care needs for catastrophic injury.

For domestic carriers, legislation caps the total amount of damages payable at $500 000. The strict liability regime and non-voidable insurance requirements means that all injured passengers would be covered in the event of an accident. However, the level of cover would, again, be highly inadequate for the lifetime care and support costs of most catastrophic injuries. Some countries have removed the limits on liability for domestic travel, but this is often associated with a shift to a negligence rule (rather than strict liability) for any compensation above the capped level. For a carrier to avoid liability for full damages, proof that they did not breach a duty of care to their passengers is required.

In principle, there is merit in removing the current cap on liability for domestic travel, but this is a complicated decision that should be supported by a thorough examination, which is beyond the terms of this inquiry. Any change in caps, the liability regime that applies (strict liability or a negligence rule) or levy on insurance would inevitably affect the cost structure for carriers. However, whether that effect would be large or a policy concern is not clear:

- there is evidence that aviation insurance costs as a proportion of aircraft value have decreased over time (Department of Infrastructure 2009, p. 15)
- the ratification of the new Montreal Convention (which increased the liability exposure of international carriers) was not expected to increase travel or insurance costs, since many international airlines had already voluntarily begun operating under more generous liability arrangements to cope with the 'grossly inadequate liability limits' under the previous international arrangements (Albanese 2008). This is consistent with the commercial incentives of most carriers to guarantee the safety and quality of their operations.

Box 18.2 **Aviation carriers' insurance is extremely complex**

International liability insurance

For all domestic and foreign carriers who transport passengers either to or from Australia, liability insurance for personal injury is already compulsory. The 1929 Warsaw Convention was the original treaty that gave effect to the liability arrangements of international air carriers, and still applies (with various amendments by more recent protocols) to carriers in countries that have not ratified the 1999 multi-national Montreal Convention. The Montreal Convention was ratified by Australian in early 2009, at which point, over 90 countries had ratified the agreement, including most of Australia's major aviation markets. Around 152 parties adopted the terms of the Warsaw Convention.

In the event of an accident, the amount of compensation payable is subject to caps. The amount of the cap depends upon the specific cap applying under whichever Convention (and amending protocol) both the departing and destination country are a party to. Under the old Warsaw Convention, compensation has not been adjusted for inflation and is capped in the order of $10 to 20 000, which is available irrespective of the carriers fault (strict liability regime). A major change under the Montreal Convention is that a carrier *could* be required to compensate passengers for all proven damages. The cap on liability is removed entirely for personal injury, unless the airline is able to prove the damage was not caused by negligence (in which case, a 'no-fault' compensation limit applies, which is currently set at approximately $180 000).

To the extent that an accident involves a carrier from a country that has not ratified the Montreal Convention, or the carrier is not negligent, compensation would not be near enough to fund the lifetime care costs of catastrophic injury, let alone income losses.

Domestic liability insurance

Domestic travel is regulated under the *Civil Aviation (Carriers' Liability) Act 1959* for all interstate travel (with complementary legislation enacted by each state to cover intrastate travel). The Civil Aviation Safety Authority (CASA) administers insurance requirements under this Act, but also relies on other legislation to enforce an 'acceptable contract of insurance' as part of their management of safety issues through the Air Operators Certificate (AOC) process. Without an AOC, a carrier has no authority to carry fee-paying passengers.

The insurance cover is non-voidable and liability does not require any notion of negligence or that a standard of care was breached by the carrier — it is a strict liability regime. To this end, all passengers are covered in the event of an accident. The major issue is that the level of cover is currently capped (under the legislation) at $500 000 — well below what would be required to meet lifetime care needs for catastrophic injury. Many overseas countries do not apply such caps and provide unlimited liability to domestic travel as well as international travel.

Third parties on the ground are covered by the *Damage by Aircraft Act 1999*, which imposes strict and unlimited liability on carriers, but does not mandate insurance (although it is a commercial and reputational imperative for most major airlines).

Source: http://www.comlaw.gov.au/Details/C2008B00098; Department of Infrastructure 2009.

To this end, the Commission recommends that the Australian Government should investigate options for funding NIIS claims from accidents involving air passenger carriers through a levy on domestic carriers' liability insurance, including evaluating the appropriateness of the current limits on (caps on damages).[8] In the interim, it is reasonable that the Australian Government fund, at least, the 'gap' required to cover NIIS liabilities (the amount that would be necessary to fund lifetime care and support in excess of the compensation received). To the extent that the amount of compensation under the cap might be only comparable to damages for income losses, there may be an argument for the Australian Government to fund the full NIIS liability for lifetime care and support costs, and not seek to recover compensation from the injured party.

Accidents involving general aviation (non-carriers)

Liability insurance for non-carriers is not mandatory, despite evidence that fixed wing general aviation has a significantly higher relative risk than other aviation (or indeed other transport modes). This potentially leaves the pilot (or aircraft owner), their (non-fee paying) passenger(s) and any on-the-ground third parties very vulnerable in the event of an accident causing personal injury. Although either the owner of the aircraft or the pilot is legally liable under the legislation, it does not necessarily mean that they will hold any or adequate insurance to cover their strict and unlimited liability. While accurate information about the extent of insurance is not collected, the Commission understands that a proportion of the general (non-carrier) aviation sector is not insured to cover their personal injury liabilities, particularly at the smaller end of the industry. For example, 'crop-dusters' and other aircraft for agricultural uses are a particular concern, with injury rates per million hours that are more than double that of general aviation generally (ATSB 2010).

These arrangements have recently been reviewed by the Australian Government, which has given in-principle support for mandatory third-party insurance cover for people 'on the ground' who are injured by an aircraft. However, concerns about monitoring and enforcement, and the specific party that should be required to purchase the insurance (for example, the pilot or the owner of the aircraft) has stymied progress.

8 Funding should cover all aviation accidents to passengers and third parties. To this end, it may be appropriate to also investigate levying liability insurance associated with air infrastructure, including from the negligence of airports and air traffic controllers. There is some contention about 'war-risks' and the degree to which such insurance is not covered in standard aviation clauses, or may be voided if carriers expose themselves. This would have to be clarified when determining any levy on liability insurance.

No pending arrangements exist for no-fault insurance cover for pilots or any passengers injured in general aviation aircraft accidents. On this front, the Australian Government has limited its endeavours to exploring an 'informed consent' model to protect passengers.

Although insurance is not mandatory, general aviation craft (such as for sports aviation, private business, flying training, fire control, search and rescue, mustering and agriculture uses) are required to be registered by CASA.[9] But registration does not relate to any specific safety requirements or the risk of an accident. Some registered aircraft are not used at all (mothballed by collectors or for museum pieces), and other than a voluntary survey undertaken by the Australian Transport Safety Bureau, there is no mandatory reporting of hours flown or other characteristics of use.

Air worthiness and various safety requirements to reduce the risk of accidents are mainly managed through controls on the responsibilities of pilots and engineering organisations undertaking and approving maintenance. It may be possible to link a NIIS levy to the licensing of pilots, with potentially different risk-based levy rates related to those responsibilities. However, it is unclear that there would be enough information to observe risk ex ante, or to gauge the overall premium income required to meet catastrophic general aviation accidents in any rigorous fashion. (Notably, over the period from 1999 to 2008, there were only 180 serious injuries in general aviation, of which the number that were catastrophic is unknown (ATSB 2010).) Nor is it clear what effects any such premiums would have on risk reduction or demand for general aviation.

Given these uncertainties, there appears no clear route for financing NIIS claims from general aviation accidents.

That said, given the clear concerns about the higher relative risks of injury from general aviation[10], the Commission considers that further work should be undertaken by the Australian Government to pursue mandatory insurance cover of personal injury for pilots and their non-fee paying passengers. To the extent that personal injury liability insurance could be made mandatory for the general aviation category, there would be an option to impose a levy on this form of insurance to cover the cost of NIIS claims. The Australian Government should fund NIIS cover of catastrophic general aviation accidents, until specific sources of funding related to accident risks are established.

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9 With the exception of gliding, parachute operations and acrobatics, which are registered under a different set of arrangements.

10 From 1999 to 2009, the number of serious injuries per million departures for general aviation was about double that of commercial air transport (ATSB 2010).

Medical treatment accidents[11]

The appropriate funding source for no-fault coverage of catastrophic injuries following medical treatments is more complex than for other accidents.

Consistent with the approach adopted in this chapter for other sources of injury, a key consideration in constructing the NIIS for catastrophic medical accidents is to build on existing incentives to minimise risk by:

- motivating the systematic collection and analysis of data that may decrease risks
- varying premiums depending on whether the health sector and practitioners — follow best practice protocols and have the appropriate training and credentials.

For this reason, the NIIS should fund the care and support needs of people who suffer catastrophic injuries in circumstances where changes to behaviour, systems and/or protocols could lead to reductions in the number of catastrophic injuries over time. This would go beyond issues of negligence by individual practitioners or hospitals.

In contrast, there will be some catastrophic accidents that fundamentally represent random events — 'acts of God' — that are not readily amenable to reduction through changes of clinical practice. These accidents resemble many other catastrophic disabilities that arise primarily by chance, such as rare congenital abnormalities. This group of catastrophic accidents would be covered by the NDIS.

It should be emphasised that, from the perspective of someone who is catastrophically injured, their care and support needs would be well met by either system. But the goal of a NIIS would be to prevent some people from ever facing catastrophic injury.

In considering the question of the appropriate choices of funding for catastrophic medical accidents, two main questions arise:

- Which catastrophic adverse events cannot realistically be significantly averted through better training, protocols or system improvements (systemic risk factors, not related to negligence) or through penalties on negligence? (As we discuss

[11] The Commission held a workshop on medical treatment injury following the release of the draft report. Attendees ranged across medical indemnity insurers, state government insurers, the Department of Health, representatives of clinicians and various other experts in the field, including cerebral palsy. The purpose of the workshop was to discuss options for covering and funding medical treatment injuries under the NIIS. The Commission has been heavily guided by the information and comments received from the workshop, and we are grateful to participants (appendix A) for their valuable advice. Ultimately, however, the discussion and recommendations on medical treatment injury in this chapter are those of the Commission.

later, many cases of cerebral palsy fall into this category.) The NIIS would not generally fund adverse outcomes where the most up to date protocol was properly applied or could not have reduced the statistical probability of the adverse outcome.

- Where systemic or negligence risk could be averted, what are the best funding mechanisms?

Determining whether adverse outcomes are matters of chance

Establishing that a medical treatment *caused* a particular injury is often not straightforward. Confounding factors include:

- the impact of the underlying health status of the patient, the normal progression of a disease or illness and the normal risk of a medical intervention
- the inherent risks of medical treatment — there will be some adverse outcomes that cannot be avoided by the exercise of reasonable care and skill (within the confines of current medical knowledge, treatment protocols and technologies)
- objectively determining whether or not an 'injury' occurred in cases such as those relating to birth, antenatal or neonatal care is especially complex, with significant potential for classification errors.

The Commission considers that questions of eligibility for people catastrophically injured following medical treatment should be decided by an expert panel within the NIIS.

- An evidence base would inform decisions of the expert panel, and the panel may choose to use external experts.
- Any persons with a catastrophic injury found not to be eligible under the NIIS would be covered under the NDIS.

For many treatment injuries, the Commission expects that classification issues could be resolved through access to comprehensive data and expert knowledge within the panel. However, the availability of high quality care under the NDIS, will temper the practical implications of any classification errors.

To support the panel's deliberations (see for example box 18.3), there should be a comprehensive database that the NIIS, medical boards, insurers, colleges and researchers could access. This would also offer broader benefits: access to good information and analysis of risks is crucial to guide continued improvements in risk management, reducing the consequences and likelihood of adverse events. The database would assist with the identification of trends based on claim information,

event notifications and information on predictors of adverse events, preventable complications and the impact of co-morbidities (for example, to analyse clinical risks by treatment type and the impact of location, practitioner, hospital, training, experience level, patient characteristics).

The NIIS could help to advance the collection and integration of data. This would involve coordinating with existing bodies charged with improving safety and quality within the health system (under the Australian Safety and Quality framework for Health Care) to ensure national consistency in data collection and reporting frequency.

The NIIS would not make any determination of a practitioner's fault, although an NIIS decision would, undoubtedly, influence the context of a common law claim (with a decision of the NIIS to decline cover likely to weaken the probability of successful litigation). In cases where there could be a risk to public safety, notification to an appropriate disciplinary and/or investigative body for further investigation should be mandatory as it could provide a useful additional measure to reinforce patient safety.[12]

The cost-effectiveness and workability of a panel as a mechanism to identify classes of injuries where risk reduction strategies have a practical role — those that most appropriately should be covered by the NIIS — will only emerge over time. In some instances, the decisions of the panel will be fairly clear, but there will be others where this is not true, and the panel's role would be important in deciding such cases. To the extent costs are included in risk-rated premiums, decisions of the panel would send important signals about what constitutes cost-effective risk reduction and best-practice clinical protocols. (The number of cases to be decided per year would be small, but the lifetime costs to the NIIS (or to the NDIS) of each new person added would be significant, perhaps amounting to millions of dollars per client.)

Over time it would be possible to refine panel processes, including the timeliness of decisions and, if necessary, its independence. The performance of the panel and scope for improvements should be reviewed in the 2020 review (recommendation 18.7).

[12] Notification would be based on the possibility of a practitioner's negligence and the risk of harm to the public. (See, for example, the New Zealand system of adverse event notification (box L.1)). Collaboration between the NIIS, the Australian Medical Indemnity Industry, Medical Boards and clinical organisations could assist with early detection of organisational and practitioner errors.

Box 18.3 **Examples of cases that an expert panel would decide**

An expert panel would make decisions about a range of claims including, for example:

1. Failure to diagnose temporal arteritis (TA), resulting in blindness: A man presents to his GP feeling unwell and with a headache. Given the patient's symptoms and various indicators pointing to a diagnosis of TA (age, history of polymyalgia, ongoing tiredness and morning headaches) the GP completes the necessary investigations, but fails to follow up on the abnormal test results. If a diagnosis of TA is suspected, the protocol would be to commence high dose steroids immediately, as waiting for the results of investigations only increases the risk of visual loss.
2. Alleged delay in diagnosis of spinal tuberculosis(TB): A lady visits her GP having experienced back pain for two months after straining her back lifting groceries. Given the initial presentation and subsequent tests revealing an apparent cause and referral to the relevant specialist, the management of the patient appears entirely reasonable. Confirmation of a diagnosis in TB commonly takes up to two years. The differential diagnosis of chronic back pain is not always straightforward, but would include consideration of TB for patients that have lived in countries with high endemic rates of TB, especially when consistent with TB symptoms (including thoracic spine pain, kyphosis and high CRP/ALP levels). That said, if the expert panel or external clinical advice indicates the treatment was appropriate (within expected professional guidelines, with no evidence to suggest that the presenting condition could or should have been treated earlier) the disability would be considered the result of the natural progression of the underlying condition.
3. Unsterile equipment and wrong patient, resulting in a catastrophic injury: A treating physician administers a local anaesthetic by injection to a patient. When the syringe is returned to the instrument table, the assisting nurse realises it had already been used on the previous patient. The theatre nurse refers to the patient's notes and sees the clinical details do not match those in the patient record. A check of the patient's name bracelet confirms the mix-up. No single individual caused the adverse event, rather it was the result of a number of easily identifiable errors — a systemic error. System failures can be prevented through better adherence to safety protocols, including surgical checklists, availability of sharp disposal boxes to encourage prompt disposal and avoid recapping. Such system weaknesses are not uncommon. For example:
   - In a simulated ward environment, one study found 39 per cent of nurses, technicians and ward clerks failed to pick-up an identity error through basic checks, and so procedures could have been performed on the wrong patients (Henneman et al. 2010)
   - Research shows wide variation in how patients are identified prior to routine but invasive procedures (Chassin et al. 2002, Henneman et al 2010)
   - Research shows not all patients have wristbands in place at the time of surgery (Seiden et al 2006) and if the wristband is present, it may be incorrect or illegible (Howanitz et al 2002).

Source: NZ ACC Treatment injury case studies, various issues 2009-2011.

The special case of cerebral palsy

In this area, there are compelling grounds for funding future care and support from the NDIS rather than the NIIS. This reflects several factors:

- the scientific evidence suggests that most cases of cerebral palsy are not accidents in the typical sense of the word. Most do not involve cases where clinical practices could avoid the disability, but are more akin to other birth defects, which would be covered by the NDIS
- it is particularly hard to reliably determine that medical treatment or care by the physician was the cause in any individual case. Individually risk-rated insurance is not an efficient way of moderating risks and there does not currently appear to be many systemic changes to practice that would avert risk.

As in other areas of catastrophic injury, common law rights to sue for the future care and support needs for cerebral palsy would be removed. This would give people immediate support, whereas currently the particularly complex issues arising from determining fault in this area and the associated protracted litigation processes mean people can face significant delays in receiving adequate services. Removing this head of damage would not eliminate rights to sue for economic loss and pain and suffering. However, people may decide not to pursue such litigation given the difficulty in establishing fault and the fact that their most important need — adequate long-term care support — would have been met by the NDIS.

The NDIS would have an interest in ensuring cost effective early interventions are appropriately provided to participants, reducing the level of functional disability and lowering lifetime care and support costs. The NDIA should ensure agreements with health departments secure adequate provision of clinical health services, post-treatment therapies and rehabilitation programs. In particular, current bottlenecks in access to post-treatment therapies through the health system would need to be overcome (we understand these are rationed and poorly coordinated in some jurisdictions) (Appendix L).

Questions of coverage of medical treatment injury, and cerebral palsy in particular, are discussed in greater detail in appendix L.

Funding of treatment injury

Medical treatment accidents covered under the NIIS could be financed from a variety of sources including:

- savings on current medical litigation costs and other offsets associated with the introduction of the NIIS. This would include:

  - reduced reinsurance costs for medical indemnity insurers
  - reduced legal process costs from shorter disputes about the 'quantum' of damages available under the residual heads of damage for income loss and pain and suffering
  - savings associated with medical claims that do not proceed to litigation because of the determinations of the expert panel (If the panel does not find that medical treatment *caused* the disability — causality is an important precondition for legal liability — a legal claim would be unlikely to succeed)
  - weaker incentives to pursue major medical litigation under the remaining heads of damage (for income loss and pain and suffering) as future care and support costs (which account for between 60 to 100 per cent of damages) would be covered under the NIIS. Among a range of reasons why individuals bring medical malpractice claims, securing funds for future medical and care costs is consistently found to be a major motivation (Rothstein 2010).
- reduced medical indemnity insurance costs associated with the NDIS funding all cerebral palsy (and removing access to the common law to sue for long term care and related heads of damage (see appendix L))
- Australian Government subsidy schemes (box 18.4). These programs would continue to safeguard the affordability of medical indemnity cover. However, to the extent that the NIIS reduces the use (and cost) of these schemes, or they are redesigned following a review at some point in the future, any 'savings' in program costs could be transferred to the pool of funds for NIIS treatment injury. Alternatively, any reduced spend on subsidy programs could be directed to the NDIS, given the reduction in medical indemnity insurance costs from NDIS cover of cerebral palsy
- contributions from the insurance (including self-insurance arrangements) of hospitals and the medical indemnity premiums of physicians for medical treatment accidents.

Appendix L explores each of the points identified above in further detail. The discussion to follow focuses on the latter of these points, since it is central to the Commission's recommendation to fund medical treatment injury from the insurance (and self-insurance) arrangements of hospitals and the medical indemnity premiums of physicians (recommendation 18.2). In particular, if the removal of the insurance costs associated with the lifetime care and support of cerebral palsy cases does not sufficiently outweigh the additional costs associated with the inclusion of no-fault catastrophic injuries, then premium increases would need to be gradually phased in.

(State and territory governments should fund any gap between premium income and catastrophic medical injury claims.)

The Commission considers that the savings from the introduction of the NIIS, plus the reduced call on medical indemnity premiums from the NDIS funding cerebral palsy, will probably be sufficient to outweigh the cost of 'no-fault' claims (that is, the additional cost of extending cover to catastrophic injury claims where no 'at-fault' party can be identified). However, this is a complex matter and subject to uncertainty (box 18.5).

- If the current premium pool of private practitioners and public and private hospitals exceeds the premium pool required with the introduction of an NIIS (the first scenario in box 18.5), there would be an overall saving. This means that the reduced call on premiums from the NDIS funding cerebral palsy, plus other offsets in litigation, reinsurance and capital costs, would be more than sufficient to cover the increase in 'no-fault' coverage. Given that the NDIS would be funding the lifetime care and support costs of severe cerebral palsy, it would be appropriate that any 'saving' would be transferred to the NDIS. This could occur by levying the (now smaller) premiums of practitioners, or by reviewing the availability and design of subsidy arrangements.
- If, on the other hand, the current premium pool is not sufficient (the second scenario in box 18.5), additional contributions from private practitioners and hospitals would be needed.

Based on various sources of information available to the Commission, we have estimated the insurance costs of hospitals and doctors could fall by around $40 million (although the High Cost Claim Scheme already covers a portion of this cost). This is a best estimate however, with uncertainty resulting from several factors.

Box 18.4 Existing Australian Government subsidies for medical negligence claims

High Cost Claims Scheme — reimburses medical indemnity insurers 50 per cent of the insurance payout associated with each claim exceeding $300,000 (up to the limit of the practitioner's cover, at which point the exceptional claims scheme applies). This is a direct measure to ensure premium affordability and predictability, which also reduces medical indemnity insurers' reinsurance costs associated with funding large claims. In 2009-10, Medicare Australia administered payments of $21.4 million for the 98 claims received, with the 82 claims in 2008-09 costing $19.5 million. For an average obstetrics and gynaecology claim eligible for the scheme, the benefit is around $800 000; for an general practice low risk claim, the average benefit is $190 000; and for a General Practice high risk claim, the average benefit is $750 000.

Premium Support Scheme — ensures doctors pay only 20 cents for each dollar of premium beyond that equivalent to 7.5 per cent of their gross income from private billings. Government payments are made to medical indemnity insurers to cover the gap. Of the 64 000 medical practitioner clinicians employed in 2008, around 11 per cent or 7200 clinicians accessed premium support scheme payments. In 2010, the number of practitioners accessing the scheme reduced significantly to only around one-third of the number two years prior. In 2009-10, 2439 practitioners were eligible under the scheme, receiving $17.2 million in payments towards their insurance costs, and with administration expenses of $2.4 million. Of those that access the scheme, around 20 per cent are in the fields of obstetrics and gynaecology and 25 per cent are general practice, with around 35 per cent of their premium paid by the scheme.

Exceptional Claims Scheme — covers the cost of a doctor's private practice claims above the limit of their medical indemnity insurance cover (generally $20 million). No claims have been submitted against this scheme.

Run-off cover scheme — requires medical indemnity insurers to provide free run-off cover for eligible doctors (mostly those retired, with permanent disability, or through death or maternity), with the cost of associated claims funded by government from a levy imposed on insurers' medical indemnity insurance income. Run-off cover occurs because professional indemnity insurance is provided on a 'claims-made' basis, so there is a need for insurance cover, even if a practitioner is no longer working in private practise. In 2009-10, there were 28 claims received, with a total benefit of $2.1 million paid.

Source: www.health.gov.au; Medicare Australia, Annual Report 2009-10 and 2007-08. Cohen, Satchwell and Gould 2011, Medical Injuries under disability care and support schemes, Institute of Actuaries of Australia, Biennial Convention.

Box 18.5 **The impact of the NIIS (and NDIS) on the premium pool**

The current annual costs (T_1) associated with meeting 'at-fault' claims for medical 'accidents' involving individual physicians and public and private hospitals comprise:

- future care and support costs for cerebral palsy (A), other catastrophic injury (B) and non-catastrophic injury (C)
- pain and suffering and income losses for all severities of accidents (D)

That is: T_1 = A+B+C+D. The actual costs borne through premiums by doctors and hospitals (P_1) are less than T_1 because the Australian Government provides subsidies (S) to private practitioners (but not to hospitals). Accordingly, P_1= T_1-S. Currently P_1 is directed solely at parties making claims through litigation.

With the introduction of an NIIS, the costs to be met by the combined NIIS and through the tort system for medical 'accidents' would include a new obligation to meet the long-term care and support costs for catastrophic injury claims where no at-fault party could be identified (E).[13] However, there would be some revenue savings because long-term care and support costs for cerebral palsy (A) would now be covered by the NDIS and there would also be some offsets (F). These offsets would include reduced reinsurance costs, reduced frictional litigation costs, savings associated with medical claims that do not proceed to litigation because of the determinations of the expert panel (discussed above) and reduced claims under the other heads of damage given the availability of the NIIS and NDIS.

Under the assumption that S is preserved at its current value, the total premium costs to be met by doctors and hospitals (P_2) after the creation of the NIIS would be:

P_2= B+C+D+E-F-S

These premiums would be streamed to two different funding pools. The value of B+E (the costs of providing comprehensive cover of catastrophic accidents regardless of fault, based on the claim values as assessed by the NIIS in this area) would go to the NIIS. The remainder would go to the torts system.

There are essentially two possible scenarios with the introduction of an NIIS. The current premium pool either exceeds or falls short of the premium pool required with the introduction of an NIIS. The difference between the current premium pool and the one under the NIIS is P1-P2 = A-(E-F). That would be positive if the cerebral palsy savings (A) are greater than the cost of covering catastrophic injury claims under the NIIS where no at-fault party can be identified (E), less any offsets (F). Under that scenario, no additional contributions from hospitals and practitioners would be needed to fund NIIS claims. However, under a second scenario P1-P2<0, some additional funds would be required.

[13] And would also include the gap between the full costs of providing long-term care and support in *at-fault* cases and what the litigation system actually delivers in these cases. As discussed elsewhere the litigation system does not usually fully-fund those needs, as settlements are discounted for any uncertainty over liability.

There is the complexity created by the 'long tail' of medical indemnity claims — the delay between when an injury occurs and a claim for damages is lodged and/or paid. As a government-guaranteed scheme, the NIIS would put aside an estimate of lifetime liabilities as a participant entered the scheme. Medical indemnity insurance provides cover on a 'claims made' basis — based on claims arising from incidents *notified* during the policy period. This means that when a potential claim is notified to the medical indemnity insurer, the estimated value of the claim is 'put aside' from the premium pool, with estimates adjusted from year to year. The accumulated funds are drawn down as claims are actually made.[14]

- Notifications of cerebral palsy that are considered 'insurable' by medical indemnity insurers will have funds set aside to cover the estimated cost of a later claim. But some of these will not develop into claims because the NDIS will meet their care and support needs. For example, an accident that occurred five years ago, but which has not yet developed into a legal claim, may never do so because of the NDIS. This would represent a saving for medical indemnity insurers and their members.
- On the other hand, some notifications of insurable catastrophic medical negligence will continue to develop into claims even after the NIIS has commenced. This is because the date of the injury precedes the NIIS. That said, to the extent that funds would already have been put aside based on incident notifications, premiums charged by insurers at the commencement of the NIIS would not incorporate these costs.

Why should physicians and hospitals contribute to accidents where no fault can be determined?

The responsibility of hospitals and physicians to fund claims where there has been a practitioner's error (fault-based claims) is clear. The rationale for using medical indemnity premiums and hospitals' insurance to fund 'no-fault' claims primarily relies on the capacity to link the financial contribution from physicians and hospitals to clinical risk management activity. Clinical risk management includes:

- resource allocation decisions

[14] For most catastrophic accidents, including cases of alleged birth asphyxia (cerebral palsy), an insurer would be notified of virtually all cases. There is, nevertheless, a small risk that an incident would not be notified and an estimate of the potential claim cost not put aside. In extreme cases, an insurer could fail to be notified of an incident that is only reported (and a claim for damages lodged) some decades later, and perhaps when the practitioner concerned no longer has policy cover.

- clinical knowledge, training and accepted clinical practice at the time of seeking or receiving treatment from a registered health professional
- the potential for improvements in patient safety over time.

In principle, funding 'no-fault' injuries through premiums recognises that many 'no-fault' injuries are preventable, even when the clinical care was not negligent, through system-wide improvements in clinical risk management. The extent to which improvements should be pursued is largely an empirical question that depends on both the costs and benefits of additional investment in clinical risk management activity.

The cost of lifetime care and support for catastrophic injuries resulting from seeking or receiving treatment is an important cost that should be factored into decisions about clinical risk management. Adequately including these costs would strengthen incentives for cost effective training and innovation in risk management and patient safety. It is likely that some measures need not be costly to implement, such as from ensuring better adherence to clinical protocols, safety checklists, record keeping and incident (or 'root cause') analysis. The issue is how to lever such gains in patient safety through the insurance premiums of doctors and hospitals.

Supposing there is an increased role for linking premiums to reductions in clinical risks, then arguably the cost of such injuries should be reflected in practitioner's premiums and, in turn, the price of supplying private services. There are even stronger arguments for the organisational units of public and private hospitals to contribute towards their share of no-fault claims, since they tend to be directly responsible for clinical governance to systematically prevent treatment injuries.

In cooperation with existing bodies charged with advancing patient safety and quality in each jurisdiction, the NIIS and insurers could encourage risk reduction and improved patient safety in several ways, including through:

- use of electronic health records to better coordinate health care, including clinical decision support and information about drug interactions and other relevant patient health information
- expansion of outcomes research, comprehensive data analysis (including of facts surrounding adverse events) and evidence-based medicine to improve care quality
- improvements in physicians' knowledge and skills through lifelong assessment, recertification, remediation and more intensive licensing review (Rothstein 2010).

In addition, the availability of no-fault lifetime care and support through the NIIS significantly enhances the quality of health services and the level of assurance that

can be offered to patients in the disturbing event of a catastrophic treatment injury. This is an important enhancement to the practitioner-patient relationship and the high level of trust that is relied upon between parties. Moreover, the NIIS will benefit practitioners by taking some of the heat out of medical litigation, which is currently the sole gateway to obtaining funds towards lifetime care and support costs.

Furthermore, the real price of medical indemnity premiums has dropped in recent years. This reflects a range of factors including tort law reforms and the current (apparently well-functioning and well-supported) taxpayer-funded subsidy arrangements. In an environment of generally falling claims and claim cost, a small upward adjustment in the real price of premiums and the insurance costs of hospitals as a result of the NIIS should not threaten the affordability of medical indemnity cover, doctors' incomes or continued practice.

It would be a matter for governments and medical defence insurers to decide how premiums should change across practice groups and specialties in order to fund NIIS claims. However, any changes should seek to strengthen incentives for clinical risk management and cost-effective enhancements in patient safety and be mindful of the need to ensure premium levels do not threaten continued practice.

In summary

With the introduction of an NIIS, the pool of premiums paid by private physicians and hospitals would be required to fund:

- the cost of catastrophic treatment injuries covered under the NIIS, including:
  - the cost of 'at fault' claims for future care and support costs, which are currently met through medical litigation and, hence, already reflected in premiums
  - the cost of extending cover for lifetime care and support to injuries where there is no at-fault party, and also any gap between the cost of fault-based compensation and NIIS lifetime care and support (given settlements are generally reduced to reflect issues over liability). These costs are currently not reflected in premiums.
- damages for income losses and pain and suffering for catastrophic injuries and the fault-based medical negligence costs for all non-catastrophic injuries. These costs are already reflected in premiums.

Premiums would, however, be reduced by:

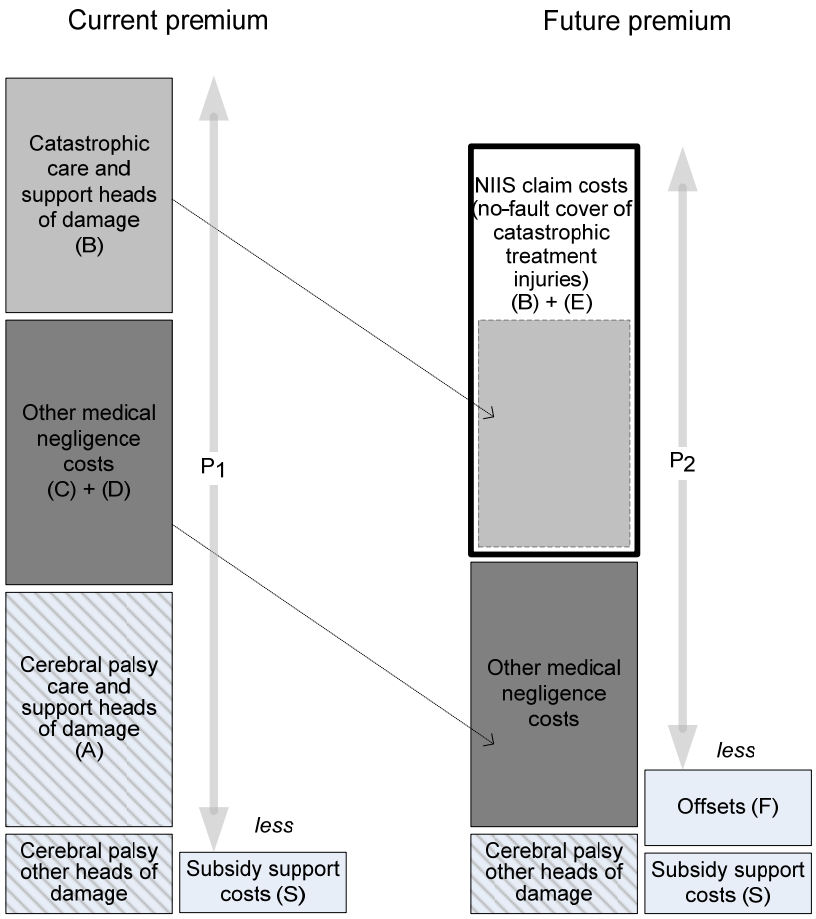
- the various offsets associated with the introduction of the NIIS, including reinsurance and cost of capital savings, fewer claims under the remaining heads of damage and savings in legal process costs
- the cost of cerebral palsy litigation for future care and related heads of damage, which would instead be met through the NDIS. These costs are currently included in premiums and we estimate could reduce insurance costs by around $60 to $100 million dollars each year. (Common law damages for pain and suffering and income losses would continue to be available where a practitioner is found 'at fault' and these costs would continue to be reflected in premiums.)
- spending on subsidy programs.

The Commission recommends that NIIS claims for medical treatment be funded by contributions from the insurance (including self-insurance) arrangements of hospitals and the medical indemnity premiums of physicians for medical treatment accidents.

  – If the removal of the insurance costs associated with the lifetime care and support of cerebral palsy cases does not sufficiently outweigh the additional costs associated with the inclusion of no-fault catastrophic injuries, then any premium increases should be gradually phased in. This would ensure premiums do not threaten existing practice, with State and territory governments funding any gap between premium income and catastrophic medical injury claims.
  – Regardless, the Australian Government subsidy schemes should continue to safeguard the affordability of medical indemnity cover.

Nevertheless, it is likely that covering cerebral palsy cases through the NDIS may put *downward* pressure on premiums and subsidies.

Figure 18.2 **What costs will be included in future medical indemnity premiums?**[a]



[a] This illustration does not include the portion of the total premium pool required for underwriting, general expenses and the net surplus. See box 18.5 for definitions of (A) through to (F).

Workplace accidents

The injury prevention gains from occupational health and safety measures means that catastrophic-level injuries are increasingly a less prevalent feature of workers' compensation schemes, with soft-tissue, muscular skeletal and work-related stress the major types of injury. It is estimated that fewer than 60 cases of catastrophic injury arise from workplace accidents across Australia each year (Walsh et al. 2005).

But the low prevalence of catastrophic workplace injury also means that current workers' compensation schemes are generally not adequately equipped to support the lifelong needs of people with catastrophic injury. Some jurisdictions address this by transferring such cases to their no-fault motor vehicle accident scheme (in effect, catastrophic claims are contracted out to a different scheme, with funding attached).

Such an arrangement exists between Victoria's Workcover and the TAC. The Commission proposes that other governments consider adopting this type of arrangement. Importantly, claims would be financed from workcover premiums, maintaining efficient incentives for injury prevention in workplaces and, where possible, vocational rehabilitation.

Some participants raised concerns about the NIIS potentially leading to the dilution or removal of common law rights. For example, WorkCover Tasmania:

> … is concerned to ensure that any introduction of a national scheme does not disadvantage the catastrophically injured by reducing or removing entitlements that may currently exist under workers compensation arrangements (sub. DR 972)

The Commission is not proposing that cover of lifetime care and support under the NIIS should reduce entitlements. In fact, the opposite is more likely, to the extent that solicitor-client legal costs (paid from the injured person's damages) reduce the funds available to the injured party and:

> … there is often a substantial degree of contributory negligence by the employee that results in damages awarded being reduced. (sub. 600)

In some jurisdictions, including Western Australia, Queensland and Tasmania, adequate funding of catastrophic-level workplace injuries would require legislative change. This is because present arrangements:

- are not sufficiently funded to provide lifetime care and support for those unable to prove the fault of their employer
- provide generally inadequate funding relative to what would otherwise be needed to fund claims in an NIIS setting (mainly due to limitations on statutory benefits, legal costs paid directly from a plaintiff's damages, reductions for contributory negligence and high discount rates).

In particular, under a no-fault approach, the head of damage associated with compensation for future care needs would need to be removed, and additional premium revenue sought to meet the lifetime care costs of additional no-fault catastrophic claims under the NIIS. In the three jurisdictions requiring additional funding:

- it is estimated that approximately double the current allocation of premium revenue (paid as common law lump sum damages) would be necessary to provide no-fault lifetime care and support
- overall, the additional impost would be very modest — estimated in 2005 at around 0.5 per cent of total premiums currently collected (Walsh et al, p. 56).

Acknowledging the inadequacies of Tasmania's present arrangements for dealing with catastrophic workplace injuries, the Tasmanian Government has indicated:

> Coverage of catastrophic injury under a national scheme would seem to offer a more equitable outcome for the very few cases of catastrophic injury (around one per year in Tasmania). (sub. 600, p. 6)

A possibility to be investigated for the management of lifetime care and support needs for catastrophic workplace injuries while in Commonwealth employment might be co-ordination through the Department of Veteran's Affairs, since they have established expertise in these matters. Alternatively, care and support needs could be contracted to the relevant NIIS scheme in the jurisdiction in which the person resides.

With the availability of comprehensive care and support through the NDIS, it is sensible for governments to move away from lump sum payments for lifetime care and support, thereby managing the potential for 'double dipping' into the NDIS in the not uncommon circumstance that a financial lump sum proves insufficient or is mismanaged (chapter 17).

Under the Commission's proposals, existing workcover schemes would continue to source premium revenue to cover catastrophic workplace injuries and manage non-catastrophic claims. Injury prevention programs would remain unaltered, and existing workcover schemes could continue to be involved in facilitating an early return to work where feasible. The only difference would be that the care and support of catastrophic claims would be provided by the NIIS under a contractual arrangement with the relevant workcover scheme.

General injuries arising from accidents in the community and at home

General injuries arise from a broad range of causes. The risk of accidents often reflects the combined effect of:

- environmental factors — for example, maintenance of footpaths, the existence of a partially submerged rock or the safety of playground equipment
- the nature of the activity being undertaking — for example, recreational horse riding, swimming, clearing leaves from a gutter or repairing a home roof, along with an assortment of 'tourist' and 'sporting' activities.

To some extent, catastrophic general injuries are already covered by public liability insurance, though this requires that an insured party be found legally liable. It is estimated that only around 20 per cent of these injuries are able to access some form of compensation (Walsh et al. 2005).

Sporting bodies and public authorities (including schools, local government, government departments and the Crown) are mainly affected by public liability insurance claims, given the prevalence of leisure and recreation activities as a source of injury. Local governments have most exposure, including through their provision and management of beach amenities, swimming pools, sporting grounds, playgrounds, community centres and maintenance of roads and footpaths. (Box 18.6 provides some examples of personal injury liability cases involving local councils.) This suggests that if these accidents were instead covered by the NIIS, the public liability premiums of local governments should fall to some extent.

Accidents also arise from activities on private residences and from violent crime and assault (both in a domestic and non-domestic setting). This raises the additional question of how best to finance NIIS claims on a no-fault basis for catastrophic injuries such as those arising from:

- falling off a ladder or being severely burnt in a house fire
- criminal violence (mainly assault) and self-harm (box 18.7).

Box 18.6 **Local governments' duty of care to prevent injury**

So called 'trip and fall' accidents are the main source of legal action against local councils. Local governments hold a position of authority that requires them to identify whether or not a potential hazard is obvious to an ordinary user, and hence, have a duty to provide appropriate warning of any non-obvious risks. It is often not clear whether or not councils adequately carry out their duty of care to the community:

- Newcastle City Council v Lindsay [2004] NSWCA 198 — This decision found that the defect in the walking path caused by raised tree roots was obvious, but that the council not warning pedestrians had not raised the risk of injury, emphasising that pedestrians also have a duty to lookout for obvious and common risks.
- Timbs v Shoalhaven City Council [2004] NSWCA 81 — permission was sought from the council to remove a large gumtree near a residence. Following inspection, the council did not provide permission for the tree's removal and suggested the tree was safe, but in a later storm the tree fell on the house and caused the death of Mr Timbs. The tree's roots were found to be decaying, and while the council could have advised Mr Timbs to seek independent advice about the condition of the tree, the council's opinion that the tree did not pose a risk in the absence of any further investigation was determined negligent. The council was found liable.
- Swain v Waverley Council [2005] HCA 4 — this case clarified the extent of local councils' duty of care to safeguard beach swimmers and surfers, including through the placement of flags and warning signs, with the injured surfer obtaining damages of $3.75 million (even after a reduction for contributory negligence).

Source: NSW Legal information Access Centre, Hot Topics: Legal issues in plain language, no. 51, p. 19.

In the draft report, the Commission recommended that state and territory governments fund all catastrophic general injuries through a levy on local government rates. It was also proposed that public liability insurance would:

- no longer be required to cover the lifetime care and support costs of catastrophic general injuries. In theory, this could reduce incentives for risk management,[15] but the Commission recommends a broader range of risk management approaches that may be better targeted at general injuries than the heads of damages most covered by public liability insurance. Moreover, levy discounts would be available to local governments that followed the appropriate risk reduction strategies
- continue to be necessary for damages for income losses and pain and suffering, as well as less serious injuries.

In effect, the Commission was looking for a low cost and efficient way to cover the cost, and simultaneously reduce risks. Local government rates meets both objectives.

State government legislation gives effect to the powers and responsibilities of local government.[16] The Commission understands that the imposition of a levy on the rating systems of local councils would require legislative change in order to collect the levy across individual households. The Commission envisages that the NIIS would determine the annual amount payable to cover the cost of general injury claims for each local council. The amount should reflect their actuarially-estimated contributions to NIIS claims, but could be adjusted to reflect risk management activity and other special considerations.

While it would be a decision for individual jurisdictions to make, on balance, the Commission still favours local government sources of revenue because:

- this could be collected reasonably efficiently, as it would be a surcharge on existing local council rates
- property-based taxes are economically efficient and have fewer distortionary effects than other transaction-based taxes (reflecting the low responsiveness of demand and supply to price changes created by the 'tax wedge').

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15 A point made by the Municipal Association of Victoria, which argued that it would introduce moral hazard that could erode current mitigation efforts and potentially increase accidents (sub. DR913, p. 3).

16 Local government are not explicitly mentioned in the Constitution, and hence, their authority is a 'residual power' of state governments. The jurisdiction of local government is usually enacted through specific local government legislation, but also as mentioned within other legislation, such as bushfire, domestic animal control legislation planning legislation and other bylaws. Apart from collecting local government taxes and charging fees, local governments rely on grants from state and Australian governments.

- local councils would be relieved of some of the costs of their public liability premiums, as the high-cost claims would be covered under the NIIS. As such, some of the proposed levy on ratepayers is already factored into rates charges that now cover the costs of public liability premiums. In effect, a proportion of the new levy would simply be a transfer within local government
- a council would have even stronger incentives to encourage state governments to change regulations or laws that affected local risks (such as liquor licensing conditions) and to use the mechanisms available to local government itself to encourage or discourage certain activities, taking account of the full social and economic costs and benefits within their local area. Any success they had in reducing injuries would directly affect the NIIS insurance premium they pay. This might be put into effect through rules and by-laws that affect planning, alcohol free zones, community outreach centres and women's refuges. The National Committee on Violence noted that:

  > … local governments, which are the level of government closest to the everyday lives of most Australians, are in an important position to contribute to the prevention and control of violence within their respective communities. (Chappell 2004, p. 158)

- to the extent that NIIS cover for general injuries reduces individual incentives to privately insure for the costs of disability arising from injury, there are merits in looking at new ways of individuals contributing.

Participants to this inquiry, including local councils, strongly expressed support for a no-fault approach to covering catastrophic general injuries, and many also saw the benefits of a separate NIIS for this purpose (for example, sub. DR764; sub. DR913; sub. DR861). But local councils and their associations opposed the use of a levy on local council rates to fund general injury claims. They raised concerns about:

- the nexus between catastrophic general injuries covered by the NIIS and the scope of a council's control over the risks that contribute to such accidents
- the economic efficiency of local council rates as a source of funds, including the relative efficiency of alternative sources of funds, such as income tax, the administrative ease of collecting a levy on rates, and the distributive implications of the proposed funding mechanism
- the capacity of local councils to raise revenue.

The issue of risk management is discussed below. While the economic efficiency of a levy on rates has been discussed above and, indeed, is the primary reason for proposing municipal rates as a funding source, some further comments are provided below, mainly in the context of alternative funding options.

Risk management

While local councils already undertake risk management consistent with their legislated responsibilities, the potential breadth of their legislated responsibilities is sometimes not clear and, the Commission has been told, varies significantly across jurisdictions.[17]

In some jurisdictions, there would generally be no legal impediment preventing local councils from undertaking broader risk management activity consistent with reducing 'no-fault' injuries.[18] In particular, states can enact specific legislation (other than the Local Government Act) to give effect to additional functions of local government. This includes, for example, planning and licensing laws, and other legislation relating to domestic animal control, fire safety, roads and access to swimming pools.

But in other jurisdictions, more pervasive legislative change would be needed, with the scope of local government tending to be defined more narrowly. In such cases, the state government assumes more exclusive control of the safety of the public, community activities and other civic responsibilities related to general accident prevention.

An additional issue is that councils may lack the relevant skills, information, and financial incentives and capacity to undertake risk management outside of the traditional breadth of their legal responsibilities.

The extent that state governments should seek to expand the scope of a council's risk management activity through the NIIS levy should therefore depend on:

- whether a council could cost effectively adopt practices that reduced injury. Any practice should be likely to pass a cost-benefit test, not just reduce injury. For example, while a program to reduce rates of old aged falls in New Zealand was successful at reducing the incidence of falls by nearly 50 per cent (based on a randomised control trial by Wolf et al. (1996)), its costs outweighed the benefits. State and local governments could agree on a portfolio of generally cost-

[17] In general, the service and functions of local councils can extend to: community services and facilities; public health services and facilities; cultural educational and information; sporting, recreation and entertainment; environment and conservation; waste removal; public transport; water sewerage and drainage; flood protection and mitigation; fire prevention; land and property development; housing; industry development; and tourism development. Any broader responsibilities can be enacted through specific legislation.

[18] Some restraints and qualifications on the ability of a council to exercise services and functions is sometimes imposed

effective risk management strategies, with activity in these areas periodically audited and rewarded, based on compliance

- the availability of relevant skills and expertise. While all councils undertake risk management to some extent, some are more innovative and sophisticated in their risk management activities than others. Many already employ staff specifically for risk management, or share such staff with nearby councils. State governments could facilitate knowledge transfer and learning about accident risks and opportunities for cost effective risk reduction. A regular process of auditing could be effective for this purpose
- the efficiency of administering such arrangements, including the bureaucracy to monitor progress and audit outcomes to ensure proper compliance and accountability. As noted by the Municipal Association of Victoria:

> Where levies are placed on the council and will result in a direct increase in rates, it is unlikely that there will be significant (marginal) administrative costs associated with the task. Where there is a different base applied to apportion the burden across ratepayers, such an attempt to align risks to contributions, the rating system will present a less administratively simple mechanism. (sub. DR913, p. 8)

In summary, state governments may seek to marshal positive local council engagement in risk management activity that lies outside the remit of their traditional responsibilities. This would mean different things across local councils. For example, it could include some activities to reduce alcohol fuelled violence at licensed premises (box 18.7) or address specific issues in certain neighbourhoods or tourist areas. However, to be effective, it may be necessary for state governments to:

- implement legislative change where there is an impediment to local government having broader responsibilities
- establish partnerships within the local government community and with state governments in a structured and ongoing way (see later about the shared role of state governments)
- periodically audit each local council's risk management activities, not simply to ensure compliance, but also to encourage learning and education about risk management
- apply discounts and loadings to an individual council's annual levy, subject to evidence of cost-effective risk management activity, but not necessarily claims experience (This should take account of a local council's specific circumstances to ensure that factors that can influence catastrophic injury but which are generally outside of a local council's control — such as higher rates of social and economic disadvantage — do not affect the levied amount.)
- use grant-based funding to leverage specific risk management activity.

Box 18.7 **Reducing alcohol fuelled violent injury**

Evidence shows that targeting high risk crime 'hotspots' can be effective at reducing rates of assault, including through strategies focussing on types of businesses, such as pubs and clubs, and specific street blocks or neighbourhoods. For example, research shows:

- geographic areas with higher concentrations of liquor outlets also have higher rates of crime, even when possible confounders such as level of unemployment, cultural, income and age are taken into account (Scribner et al. 1995)
- a small number of problematic licensed alcohol premises account for a disproportionate share of violence — in inner Sydney, 12 per cent of hotels accounted for almost 60 per cent of all assaults on hotel premises; in Newcastle, 8 per cent of licensed premises accounted for nearly 80 percent of all assaults on licensed premises; and in Wollongong, 6 per cent of licensed premises accounted for 67 per cent of assaults across all premises. The rate of assault aligned closely to hours of trading (Briscoe and Donnelly 2003)
- a range of public health policies could be effective at reducing alcohol's contribution to community based violence, including targeting alcohol outlet density, alcohol retail sale hours, the price of alcohol, characteristics of violent bars, and violence in emergency departments (Heung, LeMar and Rempel 2011). One study found that a one per cent sustained increase in the price of alcohol above inflation would decrease violent injuries by nearly 2200 a month (Sivarajasingam et al. 2006). Other studies have show that the price of drinks is lower in violent bars than non-violent bars (Quigley et al 2003).
- key environmental variables found to be associated with declining rates of violence include: improved comfort, the non-permissiveness of management and declining to serve to intoxication, female staff, employment of friendly and effective security staff, ID checks and the availability of public transport (Quigley et al 2003; Graham et al 2006; Homel et al. 2004; Graham et al. 2002; Hughes et al. 2011)
- a study found that changing pub closing times in Newcastle (to 3 am and later 3:30 am with a 1:30 am lockout) reduced the incidence of assault by 37 per cent compared to a control locality (Kypri et al. 2011).

The efficiency of alternative funding options

... Funding from the federal tax system or state-based revenues

Some participants have suggested that the NIIS should be a nationally legislated and funded scheme. In particular, the Queensland Government (sub. DR1031), the South Australian Government (sub. DR861) and the Tasmanian Government (sub. DR1032) all supported national funding responsibilities for the NIIS. For the most

part, this reflected concern about 'cost of living pressures' and the affordability of the NIIS through state-based funding sources. The Tasmanian Government was especially concerned that expanding their current responsibilities to general injury would bring significant financial risks:

> If premiums collected from local councils and other sources prove to be insufficient, and there is a high risk that this will be the case, the Tasmanian Government may be required to impose additional levies or fund the NIIS from the Consolidated Fund. (sub. DR1032, p. 22)

The Tasmanian Government also thought that the availability of private insurance products to cover legal liabilities should not draw government into an NIIS that would make them responsible for underwriting scheme liabilities. But, as already noted, fault-based insurance only provides compensation for around 20 per cent of catastrophic general injuries.

Local governments raised the possibility of financing NIIS claims through personal income taxes or payroll taxes (sub. DR913; sub. 766; sub. DR764). They also questioned the relative economic efficiency of municipal rates as an alternative funding source. In particular, the Municipal Association of Victoria argued that the KPMG-Econtech review of the efficiency of state and territory taxes underestimated the economic efficiency loss from the implementation of rates, since the model used does not take account of the different valuation bases used by local governments.

- On the first point, the inefficiency of personal income tax is 24 per cent and 41 per cent for payroll taxes. Both of these revenue sources are significantly higher than the measure of inefficiency for municipal rates which is 2 per cent (KPMG-Econtech review for the Henry Tax Review (Treasury 2009a)).
- On the second point, the Municipal Association of Victoria suggested that households would have incentives to move from areas with higher rates to areas with lower rates. This is not a persuasive argument, given the high transaction costs of moving and the low addition to rates from funding general accidents. Moreover, if people moved because one council failed to mitigate risks well to another council that did, it would be efficiency improving, not the contrary.

... A new mandatory household insurance product

While a householder's home and contents insurance policy generally includes some cover for personal injury, such protection against legal liability usually extends only to non-householders or visitors to a home or residence, it does not cover the householder. In addition, legal liability cover for personal injury is not universally included within home and contents insurance policies and not all households are

insured. The focus of home and contents insurance is not about managing the risk of injury.

The Commission does not recommend that household insurance be used to fund general accidents in the home:

- If it were voluntary, not all people would insure, resulting in patchy coverage (or unfairness, if taxpayers had to pick up the costs for those who did not insure)
- A compulsory levy on household insurance could be introduced, but for those households without household insurance it would need to be a separately mandated levy. (Otherwise, the price effects of a mandatory levy applied only to households with insurance would discourage such insurance in the first place, with significant inefficiencies.) A mandatory levy imposed on all households would overcome the limitations of voluntary or partly mandated levies, but it would be improbable that any realistic arrangement would reduce risks (given difficulties in calculating exposure to risk and monitoring compliance and, hence, would be generally ineffective in its goals).

In the event that a mandatory levy had few benefits in reducing risk, it would amount to a small poll tax (a community charge applied at a single flat rate per capita). Given its mandatory and universal nature, it would be relatively efficient in terms of its distorting effects on people's consumption decisions, but it would impose potentially sizeable administrative and compliance costs, and would not meet the equity goals of the tax system.

Given its inadequacy for covering household accidents, such a tax would also not be justified for coverage of catastrophic accidents in general (and would forgo opportunities for risk management that are available to local government).

... A levy on public liability insurance premiums of businesses and not-for-profit entities

A mandatory levy on public liability insurance paid by businesses and not-for-profit entities would be another possibility. It would, however, involve significant complexities and the potential for unintended impacts:

- In most industries, and especially for smaller businesses, public liability insurance is purchased as a combined product (including, for example, cover for product liability and other general insurance) with a single premium (ACCC 2005). An ad valorem levy would be inappropriate in that context since it would tax insurance that was quite unrelated to general accidents. Moreover, just as in the case of household insurance described earlier, it would be

problematic if a mandatory levy on public liability insurance policies could be avoided by foregoing public liability insurance generally.

- Any additional cost imposed on public liability insurance for not-for-profit parties could discourage certain activities, such as sport and leisure pursuits normally organised by various community groups, which could have negative impacts on public health and community wellbeing.
- It would be likely to be costly to monitor and ensure compliance, and it would sometimes be difficult to even identify the party that would be responsible for paying the premium (many 'businesses' do not hold an ABN).
- As in the case described for households above, risk management activity would be difficult to observe across individual small businesses and households, which would make risk-rating more difficult and costly to administer. That said, adherence to good practices and risk management by local governments and larger businesses could be easier to monitor.

Rather than seeking to fund the extension in coverage of 'no-fault' general injuries through a levy on public liability insurance, there is likely to be greater merit in retaining current insurance for fault-based claims. At least, in theory, it would seem appropriate that current incentives to reduce accidents (and the risk of being found liable) should be maintained by requiring a contribution to the NIIS equivalent to the cost of these claims.

However, given the NIIS would not make any determinations of fault, in practice, ascertaining the cost of fault-based claims could be problematic.[19] Although negligence would ultimately be revealed through legal claims made under the remaining heads of damage and for non-catastrophic injury, using this as a basis for applying a levy to cover the cost of fault-based claims could be very protracted.

A levy on the public liability insurance of local governments

A levy on public liability insurance paid by local government would, again, require that the personal injury component of cover be made compulsory. Taxes on insurance for general revenue raising are generally highly inefficient.[20] However, an insurance levy could be efficient if:

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[19] Although it is proposed that medical practitioners and hospitals would continue to bear costs equivalent to the value of their 'at-fault' claims, it is also proposed that their medical indemnity premiums would fund 'no-fault' NIIS claims. So, in practice, no distinction between 'at-fault' and 'no-fault' claims under the NIIS would be necessary.

[20] KPMG-Econtech review of the efficiency of state and territory taxes for the Henry Tax Review (Treasury 2009a) Inefficiency arises because taxes reduce the demand for insurance.

- it could not be evaded by relinquishing or lowering insurance cover
- it was not levied as a percentage mark-up on existing liability insurance premiums, but as a basic levy amount
- there was scope to receive levy reductions through following appropriate risk management (a point made by the South Australian Government, sub. DR861, p. 10).

Such a levy would of course need to be funded by local governments. They could do so in several ways, but the principal and most efficient revenue source would be rates. In effect, so long as it was *appropriately designed and funded*, a levy on local government public liability insurance would have identical effects to an increase in rates. Subject to the above proviso, a mandatory (non ad valorem) levy on public liability insurance could be an alternative funding source.

However, an explicit (and separately identified) levy raised through rates would have the advantage of public transparency that would be lacking for a levy on public liability insurance. Transparency would have the advantage that the public would more readily appreciate that there were costly risks in their neighbourhoods that were partly under the control of their elected government, and provide an additional pressure for risk reduction.

Moreover, it is hard to get levies on rates wrong, but there are many possible ways of imposing levies on insurance, some of which would be less efficient than the option discussed above. A surcharge on rates is a transparent and low risk financing option.

In summary

The Commission proposes that state and territory governments fund catastrophic injuries arising from criminal injury or general accidents in the community and in people's homes. One efficient avenue for doing this would be through a small impost on municipal rates. If the states do not support a small increase in rates as the means to fund this reform, they should fund catastrophic general accident costs by other means.

The capacity to reduce the risk of such accidents is greatest at the state and local government level. Local governments have generally supported the argument that they can *contribute* to risk management activity, but dispute that they should be solely 'burdened with this responsibility' (MAV, sub. DR913). Given that state governments control local government functions and responsibilities, their ultimate responsibility to fund injuries arising from general accidents under the NIIS (either

through a levy on municipal rates or other means), is consistent with supporting shared responsibility for risk management.[21]

There may be special circumstances affecting injury rates in some local areas, such as higher rates of social and economic disadvantage (including high rates of unemployment), that may warrant a contribution from state general revenues. Indeed, grants from state governments provide an important source of revenue for local governments, and state and territory finances are already the source of funding for victims of crime compensation.

This would be relatively simple to administer and would further increase the incentives of state governments to engage strategies to reduce general injuries, including by:

- partnering with local governments and, where appropriate, using grant-funding and auditing, to achieve specific risk management activities and outcomes
- reducing alcohol fuelled violence associated with the availability of alcohol at venues, restricting opening hours, crowd management, policing and public education (box 18.7)
- early intervention strategies in health, education and community services.

The additional funds required for general injuries represents a relatively small burden on state and territory budgets. However, given the significant broadening of coverage required and paucity of reliable estimates of the additional costs associated with no-fault cover of lifetime care for general injuries,[22] it is possible that liabilities could be partially upfront funded. The issue of full or partial upfront funding of future liabilities is discussed below.

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21 The Commission is presently undertaking a study on the role of local government as a regulator. This will help to clarify the effectiveness of local government in undertaking broader regulatory functions, including as directed by, and on behalf of, higher levels of government.

22 Rough estimates in 2004-05 indicate that the total annual cost could be in the order of $300 to $350 million (or between $415 to $485 million in current values). This was based on around 220 to 250 catastrophic-level general injuries each year, of which only 20 per cent receive public liability compensation (Walsh et al. 2005, p. 52). Revised estimates by the Commission, and based on the proposal that existing fault-based public liability premiums would not contribute to the costs of general injury, suggest the net cost could be closer to around $540 million in current values (table 18.1).

Box 18.8 How common are serious falls and assaults?

The main sources of serious but non-fatal general (or community) injuries are falls and assaults. Fires, burns and self-harm also give rise to a significant number of serious injury cases. Drowning and poisonings tend to be less common.

Falls are most represented in the statistics, with around 32 000 classed as a high threat to the person's life (consistent with a serious non-fatal injury) in 2004-05. Around two-thirds of these were by females, who had a mean length of stay in hospital of one week, which is significantly longer than for all other sources of serious but non-fatal injuries. Unlike other sources of serious injury in the community, falls are by far most commonly experienced by people aged over 65 years:

- The rate of falls for people under 65 years is around 500 cases per 100 000 population. These mostly arise from sport or recreation-related activities at younger ages, or home-related tasks and activities for people aged over 45.
- Rates almost double for each five-year increment in age up to age 80, with 10 per cent of all females aged over 90 years experiencing serious injury from a fall. These are mostly attributed to slipping, tripping or stumbling, and are consistent with a loss of agility, movement and balance associated with ageing — in fact, 10 per cent of all hospitalised falls occurred in aged care facilities.

In 2008, there were over 170 000 assaults recorded in Australia. Previous estimates indicate that around 2 per cent of recorded assaults require hospitalisation (Mayhew 2003). Other statistics show that in 2004-05, there were 4246 serious but non-fatal assaults (about 2.5 per cent of all recorded assaults).

Around three-quarters of all hospitalised cases of assault involve males, and mostly from a bodily force rather than an object or implement. For cases where the injured person was under four years old, the cause of assault in around 50 per cent of hospitalised cases was classified as maltreatment, neglect or abandonment. In most hospitalised cases of assault, the injury is to the person's head, with about 10 per cent involving an intracranial injury. Rates of assault are substantially higher in the Northern Territory than in any other Australian jurisdiction.

Source: AIHW 2008, Hospital separations due to injury and poisoning Australia 2004-05; Mayhew (2003).

Should liabilities be fully funded?

A fully funded NIIS would allocate the estimated lifetime costs of care and support associated with each entrant into the scheme at the time they entered the scheme. This provides certainty about the capacity of the fund to meet a person's future liabilities, and it also provides a buffer against year-to-year variations in costs — in effect, smoothing premiums over time and reducing reinsurance costs. Funds would be invested to generate a capital return and drawn down against as actual costs are incurred to meet participants' care and support needs. A fully funded scheme has the

highest likelihood of solvency and presents a lower risk for future taxpayers, premium payers and scheme participants.

Realistically, fully funding can only apply to the new incidence of catastrophic injuries. People who acquired a catastrophic injury in the past would continue to be supported by the existing disability and health system and the NDIS.

But because the NIIS would be government underwritten, it would also be possible to put aside only a proportion of the estimated lifetime liability, and instead draw on future taxpayer revenues to meet any unfunded gap in scheme expenses (obligations to meet lifetime care and support costs) as they are incurred. This point was raised by some participants, including Professor Richard Madden:

> There is no justification for seeking full funding of the injury compensation system, regardless of the level of integration with the broader NDIS. The scheme is a government scheme, so there is no possibility of default on benefits. (sub. DR997, p. 7)

The South Australian Government also argued that:

> Given the long term nature of the liabilities it may not be necessary for the premium setting arrangements to be slavishly attuned to a full funding requirement in relation to the entitlements that it supports. Given inherent volatility in investment and financial markets a fixed funding ratio target can introduce significant volatility in premiums when investment returns and discount rates move erratically. (sub. 496, p. 19)

Partial pre-funding of future liabilities is a common feature of government guaranteed social insurance systems, and may be equally workable to the extent that a sound governance structure ensures the scheme remains affordable. Under a partial upfront funding arrangement, scheme expenses would be funded more closely to when they were actually incurred, but the present value of either a fully or only partial upfront funded scheme is the same.

Given the well functioning insurance systems already in place to fund injuries, the Commission proposes the NIIS operates on a fully funded basis, with one possible exception. Future liabilities associated with general injuries, including criminal injuries, could be only partially pre-funded. This would lower the initial impost on ratepayers, but consideration of this alternative would have to take account of:

- expectations about intergenerational equity
- the desire to smooth financial commitments associated with a new scheme, until such time that it matures and liabilities start to stabilise
- the ease of merging the NIIS and NDIS if contemplated at some point in the future.

18.4 What might the costs be?

The annual costs of changing to a national no-fault scheme are estimated to be around $830 million (table 18.1). These are additional costs that would need to be reflected in existing premium sources and the proposed new source of funding — local government rates. However, these net costs would be less because of savings to the Australian Government from reduced use of publicly-funded Medicare and other services. These were estimated to be $70 to $80 million in 2004-05 (Walsh et al. 2005, p. 25), or up to $100 to $110 million in current values. Further savings could also be expected as a coordinated lifetime care scheme should produce better health and wellbeing outcomes, reducing long-run usage of services, including of income support.

The estimates only provide a guide to likely current costs as those will be determined by many factors, including the wage costs of attendant care[23], population growth, income effects that drive increased motor vehicle ownership and increased usage of health services, and catastrophic injury rates. (They do not reflect common law damages, other than to the extent that these are included as offsets to calculate the incremental cost of the scheme.)[24] Over the shorter run, changes in the cost of capital and reinsurance, and competition in the insurance industry also affect premium rates. Given these multiple influences, the Commission has not sought to re-estimate the costs with any great precision.

The estimates in table 18.1 are based on Walsh et al. 2005, which have been updated to reflect inflation and population growth (by age and jurisdiction), and revised to reflect new sources of data available to the Commission. The new estimates of the annual gross cost of a NIIS are estimated to be around $1800 million, which would cover an estimated 900 to 1000 persons injured each year. However, given current

[23] Estimates do not include allowance for the impact of the Equal Remuneration Case currently before Fair Work Australia. Though the impact of this case will vary across jurisdictions, in NSW it is estimated the outcome of this case could result in a 10 per cent increase in LTCS scheme costs.

[24] The costs were based on 'bottom-up' estimates of need for care and support across the range of severities and types of catastrophic injuries. Assumptions about the quality and adequacy of care also underlie estimates of costs, and affect comparisons of the cost effectiveness of fault-based vis-à-vis no-fault schemes. The basis for assessing damages within a common law framework varies to that of a no-fault lifetime care scheme. For example, different assumptions underlie allowances for gratuitous care, and where care is funded at commercial rates, assumptions can differ about relative requirements for clinical or nursing care. There is the additional overlay of reductions for contributory negligence and to reflect uncertainty over liability and the risk of going to court. There are greater opportunities in a no-fault lifetime care scheme for economies of scale and associated cost savings from increased effectiveness of health and rehabilitation spending. There is also greater flexibility in allowing for the availability of family care and other circumstances that change at different life stages.

spending associated with lifetime care and support for catastrophic injury of over $1 billion, the annual net cost of an NIIS will be around $830 million (table 18.1). This is the Australia-wide incremental cost of providing fully-funded lifetime care and support for all catastrophic injuries each year. On average across Australia, this represents an additional around $35 per person each year. It should be emphasised that this is an approximate figure in the absence of more detailed evidence.

Table 18.1 **Estimates of the Australia-wide *additional* costs of an NIIS**

$ million per annum, June 2011[a]

	Cause of injury				
	Workplace injury	*Motor vehicle injury*[b]	*Medical treatment injury*	*General injury*[c]	*All*
NSW	0.00	0.00	14.58	175.00	189.58
VIC	0.00	0.00	11.17	134.11	145.29
QLD	6.33	112.00	9.10	109.18	236.61
SA	0.00	36.51	3.31	39.76	79.58
WA	3.80	70.86	4.63	55.52	134.80
Tas	0.06	0.00	1.02	12.27	13.35
ACT	1.27	8.86	0.72	8.68	19.52
NT	0.00	10.12	0.46	5.55	16.14
Australia	11.39	238.34	45.00	540.07	834.81

[a] Based on estimates by Walsh et al. 2005, which were updated for inflation and population growth and then revised to reflect new data sources and more recent analysis on the annual incidence of catastrophic injury for each cause of injury, along with the age and severity distribution of NIIS participants. These were used to estimate the average cost of claims and the annual *gross* cost of fully-funded lifetime care and support for NIIS participants. Various offsets associated with spending on current accident scheme and compensation arrangements were subtracted from this gross cost to provide an estimate of the *additional* or net cost of the NIIS. The resulting costs provide a 'best estimate' of the likely incremental costs of a NIIS, but are subject to a range of assumptions and uncertainties. The cost of aviation, rail and water accidents have not been included [b] The cost of catastrophic injuries from of 'off road' accidents have not been included in estimates. It is understood this could increase costs by an addition $2-3 per vehicle. [c] includes criminal injury. Reduced expenditure on public liability insurance by local governments are not included in estimates.

Source: Productivity Commission estimates.

The impact across jurisdictions will vary, mostly reflecting the different starting points towards the ultimate objective of no-fault lifetime care for all catastrophic injuries, irrespective of cause. In jurisdictions where there is only fault-based insurance covering the costs of catastrophic injury, the incremental cost will be higher.

In Queensland, Western Australia, South Australia and the ACT, the additional cost of an NIIS is likely to be around $50 to $60 per person. In jurisdictions with existing no-fault arrangements for motor vehicle injuries — including New South Wales, Victoria, Tasmania — the additional cost of an NIIS will be around $26 dollars per person. This additional cost is primarily the cost of providing no-fault cover for catastrophic general

injury (including criminal injury), which is around $24 per person across all jurisdictions. It is proposed that this cost would be met through a small levy on a household's rate notice.

For medical treatment injury, the estimates in table 18.1 indicate that the additional cost of the NIIS would be around $45 million. However, given the substantial removal of cerebral palsy lifetime care costs from the medical indemnity system (which will instead be met through the NDIS), hospitals' and physicians' insurance costs could actually fall. We estimate that this reduction in insurance costs could be in the order of $40 million dollars. If this transpired, the Australian Government could seek to recover an amount equivalent to the 'surplus' funds and put this towards the NDIS. Alternatively, the availability of current subsidy programs could be reviewed.

While the Northern Territory already operates a no-fault scheme for motor vehicle injuries, the cost of NIIS cover for motor vehicle injuries is estimated to be significantly higher than other jurisdictions, at around $75 per registered vehicle.[25] This estimate is consistent with previous estimates of higher costs for Northern Territory motorists. For example, estimates reported in Walsh et al. indicate that premiums would be around 40 per cent higher than the average Australian CTP premium (2005, p. 53).

This higher cost reflects the special circumstances of the Northern Territory, with a high serious injury accident rate and a low number of registered vehicles per person. Moreover, rates of claiming are low among Indigenous people, who are disproportionately involved in accidents, but tend not to access the system of care and support potentially available to them (box 18.9). Addressing these issues would raise premiums, which Indigenous Territorians may well find hard to afford, and large increases might have the perverse impact of increasing rates of non-insurance among this group. Meanwhile, non-Indigenous Territorians would bear premium charges that would include large cross-subsidies to Indigenous people.

As recognised more generally in Commonwealth Grants Commission processes, there are grounds for Australians as a whole to contribute more to those jurisdictions facing special disadvantages. Such involvement would be against the background of the Australian Government's already strong involvement in coordinated policies to address Indigenous disadvantage. In that context, there are grounds for the Australian Government to provide a subsidy to the Northern Territory to reduce the costs of a comprehensive catastrophic injury scheme.

[25] Even for jurisdictions with only fault-based arrangements for catastrophic motor vehicle injuries, an additional $30 to $40 would be required per registered vehicle each year.

While addressing the consequences of catastrophic injuries for Indigenous people — who are often in remote locations with limited services and who tend not to make claims — is inextricably tied to the dilemmas in providing other services (chapter 11), reducing the rate of serious injury motor vehicle accidents should be a central focus of the Northern Territory Government. Further speed limit reductions could be an effective first step. The Northern Territory Police, Fire and Emergency Services said that, in the two years following the introduction of 130km/hr speed limits in 2007, there was a 25 per cent reduction in fatal accidents, 44 per cent fewer 'hospitalised' accidents and 77 per cent fewer 'minor injury' accidents (NTPFES, Media Release, August 2009).

Box 18.9 **The challenge of reducing serious road injuries in the NT**

Tackling the rate of serious injury and fatal motor vehicle accidents in the Northern Territory is a complex challenge. The apparent causes are multiple and often overlapping, involving alcohol and drug use, excessive speed and driver fatigue.

Overlying these factors is the difficulty that the Northern Territory is a large geographic area and has a sparse population. This makes monitoring and enforcement of road safety difficult and more costly. Attitudes among NT drivers towards responsible road use and safety are suggested to be poor, with the severity of injuries increased by the non-wearing of seatbelts and the driving of over-crowded and unsafe (and unregistered) vehicles. Indigenous Territorians are over-represented in serious injury statistics.

It is estimated that the annual cost of serious injuries caused by motor vehicle accidents in the Northern Territory is $145 million, with nine people seriously injured on average each week. This cost would be even higher if more Indigenous people sustaining serious injuries were to access services and supports appropriate to their needs.

Strategies of the Northern Territory police to address the problem include:

- intelligence-led traffic policing capacity, and increased monitoring and reporting, including building capacity within NT police and partnerships with other agencies
- targeted education of vulnerable road users
- increased drink and drug driving enforcement
- increased enforcement of speeding, not using seatbelts/restraints, using handheld mobile phones, driving unsafe motor vehicles and other unsafe practices.

Source: NT Police Road Safety Strategy 2008–2013.

18.5 The scope of the NIIS beyond 2020

Participants were divided about the prospect of expanding the cover of the NIIS to other heads of damages and levels of injury. Lawyers reacted to the hint of such a proposal very strongly; others suggested more comprehensive reforms than were

recommended by the draft report; and some were more equivocal. For example, although acknowledging that NIIS cover of lifetime care and support needs for catastrophic injuries is highly desirable, Professor Richard Madden suggested that the changes proposed did not go far enough:

> … the immediate goal must be to abolish all common law actions for care and support (regardless of whether they result from catastrophic injury or not), by providing such care and support through a no-fault system. … The lack of an income replacement system (other than social security) needs to be considered against the expense and systemic problems caused by fault based systems … (sub. DR997, pp. 4, 6)

On the other hand, the Australian Law Council indicated that the proposed NIIS 'risks generating unnecessary opposition' to the NDIS (sub. DR.948).

What about the other heads of damage?

The biggest welfare gains from reform of injury insurance will arise from covering catastrophically injured people for their lifetime care and support, regardless of whether an at-fault first party can be identified. This should be the main priority for reform over the next few years, with particular attention focussed on successful implementation of the NIIS.

However, there may still be significant gains from extending no-fault insurance arrangements to the other heads of damage ('economic losses' and 'pain and suffering') and to limit the use of the common law in these areas. Moreover, the continued availability of the common law could potentially undermine improved outcomes for participants that are specifically intended under an NIIS.

There are many variations in how current 'no-fault' schemes limit the ability to engage in civil actions. Some prohibit court action entirely; other 'hybrid' schemes permit people to maintain their common law rights for other heads of damage.

- In New Zealand, the *Accident Compensation Act 2001* prohibits access to common law damages, excluding exemplary damages for injury caused by an intentional or reckless act of another party.
- In NSW, the LTCS scheme prevents a claim for common law damages for 'future care' damages only, but enables other heads of damage under the common law. Finity (2010) recently examined historical NSW claims data and estimated that the average size of 'residual' damages for hypothetical LTCS scheme claims (in 2009 values with LTCS scheme related future care heads of damages removed) was $860 000.
- In Victoria, the TAC scheme for motor vehicle accidents provides lifetime care and support services and statutory income payments on a no-fault basis, but

also enables common law access for economic loss (above no-fault income entitlements) and pain and suffering.

- In Tasmania, the MAIB provides no-fault lifetime care and support, but allows full access to common law damages.
- In the Northern Territory, the Territory Insurance Office provides no-fault statutory benefits for residents and modified common law damages for non-residents injured in car accidents. Caps limit the amount of attendant care available.

However, any residual fault-based arrangements still use many legal resources, and based on the TAC experience, hybrid arrangements continue to divert a significant proportion of premium revenue away from actual compensation. A hybrid system may also continue to have adverse effects on health and other outcomes for those seeking compensation for these other heads of damage (chapter 17 and appendix J).

The Commission is hesitant to explore the potential for any further reform within this inquiry. This should be the subject of an independent review in 2020, which should also evaluate the performance of the NIIS in achieving its objectives. In particular, as the NIIS becomes operational, evidence will accumulate on outcomes for participants, which will enable any adverse effects from continued access to common law compensation under the remaining heads of damages to be more fully investigated.

For such reasons, common law rights for individuals to sue for pain and suffering and loss of income from personal injury should be retained. The review of the NIIS in 2020 should evaluate the costs and benefits of removing common law rights more fully and expanding the coverage and functions of the NIIS carefully.

In any event, common law fault-based systems would continue to be an important area of redress in many other areas — such as product liability.

What about non-catastrophic injuries?

There is a good case for a no-fault insurance system to cover the care and rehabilitation costs of significant but non-catastrophic injuries. This reflects:

- that the flaws of the common law still apply to this head of damage whether a catastrophic or less severe injury is experienced
- the high proportion of legal costs associated with a lesser common law lump sum associated with less severe injuries — likely to be around 50 per cent (chapter 17) — means that dealing with this group under the NIIS could generate significant efficiencies. Moreover, the costs and delays associated with obtaining common law damages would also be substantially avoided in most cases

- the potential for savings in future liabilities and social welfare costs by providing interim support for cases that are at the boundaries of catastrophic injury. Providing early access to services and supports may facilitate earlier recovery, reducing the risk of further injury, or exacerbation of the original injury, associated with sub-optimal treatment or inadequate rehabilitation. In some instances, relatively minor injuries can trigger a spiral into poor health, social and economic participation outcomes that can be difficult and costly to reverse.

As the NIIS would only include catastrophic-level injuries, the Commission sees merit in the use of a two-staged assessment to distinguish between a participant's interim (say, up to two years post accident) and long-term participation in the NIIS. This has a range of practical advantages, including the points raised above, but in particular, it would:

- limit the potential adverse consequences from any classification errors in determining a catastrophic injury, especially for suspected moderate to severe brain injury where the extent of injury and scope for recovery is initially uncertain
- align with the approach either explicitly or implicitly adopted in existing no-fault motor accident schemes, including
    - the NSW LTCSA, which manages a person's interim (up to two years) and lifetime participation
    - the Victorian TAC, which separately manages a group of what it terms 'long hospital' clients, which despite having initially high levels of care and support needs, is typically only required for a relatively short duration compared to the duration of a catastrophic injury. Nevertheless, a proportion of these clients (up to around 8 to 10 per cent) continue to access services more permanently.

Appendix I looks at how this might operate. It draws on the experiences of current schemes to show that the costs of covering participants at the margin need not raise a scheme's liabilities significantly.

That said, it is not proposed that the NIIS expand to cover all severities of accidental injury, rather that as part of the 2020 review consideration be given to covering those with significant care and support needs and where funding and coordination through the NIIS would reduce the future liabilities of the insurer. Those with only health care costs would be excluded. This separation of functions recognises the appropriate roles of the health system and the NIIS. Similarly, because existing workcover schemes offer no-fault care and support for all non-catastrophic injuries, the NIIS should not expand to cover these.

RECOMMENDATION 18.1

State and territory governments should create insurance schemes that would provide fully-funded care and support for all catastrophic injuries on a no-fault basis, and that would collectively constitute a National Injury Insurance Scheme (NIIS).

The NIIS would include all medical treatment, rehabilitation, home and vehicle modifications and care costs, and cover catastrophic injuries from motor vehicle, medical (excluding cases of cerebral palsy associated with pregnancy or birth, which would be covered by the NDIS), criminal and general accidents. Common law rights to sue for long-term care and support should be removed, though access to damages for pecuniary and economic loss, and general damages would remain.

State and territory governments should develop a national framework in which the separate schemes under the NIIS would operate.

RECOMMENDATION 18.2

State and territory governments should fund catastrophic injury schemes from a variety of sources including:

- ***compulsory third party premiums for motor vehicle accidents***
- ***a small surcharge on passenger tickets of all rail transport regulated under the new rail safety national laws***
- ***a modest levy on domestically registered passenger carrying vessels regulated under the Australian Maritime Safety Authority (as the proposed new safety regulator for all commercial shipping in Australian waters by 2013). A small levy on existing state-based registration for privately owned 'pleasure' vessels***
- ***a small increase in municipal rates for catastrophic injuries arising for victims of crime and from other general accidents (excluding catastrophic medical accidents)***
- ***contributions from the insurance (including self-insurance) arrangements of hospitals and the medical indemnity premiums of physicians for medical treatment accidents:***

  – ***If the removal of the insurance costs associated with the lifetime care and support of cerebral palsy cases does not sufficiently outweigh the additional costs associated with the inclusion of no-fault catastrophic injuries, then any premium increases should be gradually phased in. State and territory governments should fund any gap between premium income and catastrophic medical injury claims.***

– *Regardless, the Australian Government subsidy schemes should continue to safeguard the affordability of medical indemnity cover.*

State and territory governments should fund NIIS claims directly to the extent that they choose not to fund catastrophic general accidents on a no-fault basis through local council rates.

The Australian Government should fund any catastrophic aviation accidents, until specific sources of funding related to accident risks are established.

RECOMMENDATION 18.3

The NIIS should be structured as a federation of separate state-based catastrophic injury schemes, which would include:

- ***consistent eligibility criteria and assessment tools, and a minimum benchmarked level of support***
- ***consistent scheme reporting, including actuarial valuations and other benchmarks of scheme performance***
- ***shared data, cooperative trials and research studies***
- ***elimination of any unwarranted variations in existing no-fault schemes***
- ***a national reinsurance arrangement to pool coverage of high risks among the separate schemes.***

State and territory governments should create a small full-time secretariat to further the objectives outlined above. The NIIS and the NDIA should work closely together.

RECOMMENDATION 18.4

State and territory governments should consider transferring the care and support of catastrophic workplace claims to the NIIS through a contractual arrangement with their respective workers' compensation schemes, drawing on the successful experiences of Victoria's Worksafe arrangements with the Transport Accident Commission.

RECOMMENDATION 18.5

The NDIS should fund all cases of cerebral palsy associated with pregnancy or birth, and that meet the NDIS eligibility criteria. Common law rights to sue for long-term care and support needs for cerebral palsy should be removed, though access to damages for pecuniary and economic loss and general damages would remain, where negligence can be established.

RECOMMENDATION 18.6

The initial priority for the NIIS should be the creation of no-fault motor accident insurance schemes, which should provide services and support for catastrophic injuries arising from motor vehicle accidents in all jurisdictions by 2013. Other forms of catastrophic injury should be covered by at least 2015, with funding commencing by 2014 to establish a funding pool prior to any claims.

RECOMMENDATION 18.7

An independent review in 2020 should examine the advantages and disadvantages of:

- ***widening coverage to replace other heads of damage for personal injury compensation, including for pecuniary and economic loss, and general damages***
- ***widening coverage to the care and support needs of non-catastrophic, but still significant, accidental injuries, except where:***
  - ***the only care needed can be provided by the health sector***
  - ***the injuries arose in workplaces covered by existing workplace insurance arrangements***
- ***the expert panel for medical treatment injury, evaluating the timeliness of its decisions, its independence and cost-effectiveness***
- ***merging the NIIS and the NDIS.***

18.6 Some other matters

There is scant evidence on the size of legal fees and charges

Chapter 17 assessed the issue of legal fees and charges and identified significant difficulties in ascertaining the nature and size of these costs. While the Commission was able to secure some systematic evidence and draw some useful insights, such information is not widely available and was difficult to come by.

There are good grounds to pursue increased transparency to inform policy judgments. The paucity of accurate and comparable data to analyse the frictional costs of existing common law arrangements acts as an obstacle to policy reform that might otherwise direct resources more efficiently. Similarly, it is desirable that consumers be better informed about these costs.

In the draft report, the Commission asked for feedback on the benefits and risks of requiring nationally consistent disclosure of legal fees and charges in personal injury cases. It was proposed that these could be disclosed to an appropriately charged body responsible for monitoring and publicly reporting trends. A number of participants responded and, apart from the legal profession itself, the proposal to require transparency was supported. For example, the Insurance Council of Australia supported the principle of nationally consistent disclosure of legal costs (ICA, sub. DR986, p. 3). They also raised the example of the Dust Diseases Tribunal Regulations in New South Wales, which requires legal costs to be disclosed to the tribunal within 30 days of the settlement of a claim.

The Commission strongly suggests that legal fees and charges associated with personal injury cases be disclosed to the Office of the Legal Services Commissioner (or equivalent) in each jurisdiction. (Alternatively, disclosure to the proposed National Legal Services Commissioner under the COAG draft Legal Profession National Laws would be appropriate if pursued at the national level.) While we have not recommended the mechanism for data collection, the Legal Services Commissioner should then be required to annually publish information on the average legal costs of settlements and court awards, categorised by:

- range or bracket of compensation
- the cause of injury (motor vehicle, workplace, medical, general injury)
- the proportion of party-party costs and disbursements
- the proportion of solicitor-client fees and disbursements.

Along with disclosure of legal costs, it would be relevant to obtain information about the amount of compensation awarded under each head of damage. For settlements, in which a lump sum is settled on a compromise or commercial basis, the plaintiff's original claim is negotiated down. This means that the heads of damages would need to be an estimate, based on the original heads of damage rather than the amount a court would have awarded or the amounts that are later expend by the plaintiff for different purposes. As a precedent, such information is already collected under the National Claims Policy Database regulated by the Australian Prudential Regulation Authority.

A key motivation for improved transparency of legal fees and charges would be to inform sound policy judgments in the proposed 2020 review, which would examine the widening of NIIS coverage to replace other heads of damage for personal injury compensation, including for pecuniary loss and general damages, and non-catastrophic level injuries (recommendation 18.7).

Interactions between the NDIS and NIIS

The NDIS would provide services and supports to people with a demonstrated need for services and supports within the scope of the NDIS, but not otherwise covered under the catastrophic injury criteria of the NIIS. This would include people with a common law claim for compensation in progress who would benefit from early treatments and other interventions.

- At the successful resolution of a common law claim, the costs of services, programs and supports consumed would be recoverable from the damages awarded. Beyond services already provided in the health care setting, these might include vocational assistance, post acute social and medical rehabilitation, home and vehicle modifications, and home and personal assistance.
- Importantly, this would help address the potential for suboptimal outcomes for those pursuing common law claims but without structured access to services and supports.
- Incidentally, it would provide a natural experiment to allow benchmarking of outcomes for people pursuing common law claims against those not involved in litigation proceedings. People with injuries accessing the NDIS would, of course, gain access to services and supports on the same basis as anyone else satisfying the entry requirements and assessment (chapters 3 and 7).

The NDIS would also provide benefits to people with injuries arising from accidents prior to the start date of the NIIS, including those who have received lump sum compensation. If such compensation is still available, the NDIS would attempt to recover from the lump sum the cost of services and supports provided. Similar to the benchmarking of participant outcomes mentioned above, providing services and supports to these people would allow a baseline assessment (of the both the financial and health status), which could be compared against the future outcomes of NIIS participants. Such analysis could help to inform the review of the NIIS in 2020.

Interaction of the NIIS with the aged care sector

For people over the pension age who have catastrophic accident-related injuries, as distinct from other forms of disability, the Commission's view is that:

- the NIIS would fully fund people's support needs attributable to the injury
- the aged care system would still meet any ageing-related costs as they grew older — as in the arrangements under the Victorian Transport Accident Commission and in the New Zealand Accident Compensation Corporation.

The Commission understands that it is generally feasible, albeit sometimes difficult, to identify care and support needs that are substantially the result of injury, as

distinct from those wholly or substantially related to ageing. This is unlike the case for dividing care needs between disability and ageing, because:

- the time and event of an injury is more clearly traceable, as there is usually a clearly identifiable cause — a motor vehicle accident, a fall or a physical assault
- no-fault accident schemes manage the care and support needs of a targeted group of clients. They develop familiarity and experience with knowing and, indeed, planning for needs specifically associated with spinal chord injury, traumatic brain injury, severe burns and blindness. While there are variations in needs across individuals, the source of such variation is mostly identifiable.

Perhaps the greatest impediment to well-functioning arrangements would be poor processes and protocols for agreeing to share funding between areas of government. This has been the experience of New Zealand's ACC, which since realising the impact of additional costs on its liabilities, has recently sought to improve arrangements between agencies about shared funding including by establishing:

- a stream within its National Serious Injury Unit to specifically manage the claims of clients aged over 60, including ensuring that funding for non-injury related needs are sourced from the appropriate government agency based on joint funding agreements
- inter-agency protocols and shared assessment arrangements.

Some estimates of the cost of covering older-aged falls (the major source of injury for this age group) are outlined for New Zealand's accident scheme in box 18.10.

Box 18.10 **Falls by people aged over 65 years in New Zealand**

Each year around 100 000 people aged over 65 years fall and make a new claim under New Zealand's injury scheme. Of those requiring non-acute rehabilitation:

- nearly 60 per cent are discharged home, mostly with some form of support services
- around one-quarter are discharged to an assisted living or residential facility
- around 10 per cent rely only on health sector funding following rehabilitation.

Averaged over the last five years, less than 0.02 per cent of claims for falls by people over 65 years old are at catastrophic level — severe traumatic brain injury or spinal chord injury. In 2009-10, the average spend on catastrophic level falls by people aged over 65 years was around NZD$74 000, with 88 claims covered. Between 50 and 60 per cent of claims received attendant care, around 10 percent received residential care, and nearly all accessed at least some other form of social rehabilitation.

As a proportion of all spending on attendant care, residential care and social rehabilitation for catstrophic injuries, falls by elderly people account for about 2 per cent of expenditures.

Source: Personal Communication NZ Accident Compensation Corporation.

National coordination of research to prevent catastrophic injury

Some participants raised the issue of funding and granting access to NIIS data for research purposes. In particular, the Institute for Safety, Compensation and Recovery Research submitted that data for research will:

> … provide information that can be used to evaluate the efficiency and effectiveness of the schemes, as well as improving our knowledge of the impact of disability in our community and assist in identifying preventive opportunities. We recommend that likely users of scheme data be consulted during the design of data systems for both the NDIS and NIIS. (sub. DR802, p. 2).

At present, there are a variety of state-funded bodies involved in research of personal injury insurance. Given that the federated NIIS will only cover catastrophic injuries, there may be reason for these research units to continue rather than being merged. On the other hand, the establishment of a federated NIIS could provide a stronger platform for national coordination of research.

There is an argument for any research specifically relevant to the prevention of catastrophic injury and the operation of the NIIS to be nationally coordinated, perhaps linked to an NDIA-funded research capability (chapter 12). Either way, access to the national de-identified NIIS dataset should be available irrespective of whether undertaken through coordinated state research bodies or linked to an NDIA-funded research capability. Equally, there would be value in allowing more open access to NIIS data, such as for academic research, to the extent that such research would not be specifically funded through the NIIS.

NIIS cover of overseas visitors

NIIS supports are based around *lifetime* care — this aspect is not directly applicable to the temporary stay of a tourist, as they would not be spending the rest of their life within Australia.

It would be theoretically possible to take the suite of supports usually available under lifetime care, and make them available for the duration of a person's visa. This model would resemble the approach taken in the New Zealand ACC scheme. In New Zealand, there were 1.6 million claims in 2009-10, with 3600 from injured tourists. Out of NZD$3.8 billion cost of all claims, NZD$1 million was spent on tourists (New Zealand Herald 2011).

The Commission's preferred position is that, in general, overseas visitors should rely on private travel insurance. Unlike most areas of disability, there is a functional private insurance market for travellers to cover medical expenses, and this could extend to

some disability supports required for the duration of a person's visa. In addition, overseas visitors (or their insurers) should be entitled to sue for all heads of damage where there is an at-fault party, including for lifetime care and support. However, an exception would be where there were already clear provisions for 'no-fault' coverage of overseas visitors through existing arrangements. For example, the TAC allows visitors to 'commute' the negotiated value of care and support and other benefits into a lump sum. Moreover, as discussed earlier, arrangements already exist for commercial aviation accidents.

19 Implementation

19.1 Implementation in outline

In this report, the Commission has laid out a blueprint for a coherent response to the significant problems that bedevil the provision of disability support services. But while many people need help urgently, implementation cannot occur overnight. The Commission's proposals concern arrangements for the long run:

- They involve two major new national programs on a scale much larger than the sum of all the current state-based disability and accident arrangements, so careful and detailed preparatory work will be needed.
- Different pathways and contingencies are possible and need to be planned for.
- No matter how careful the planning, the introduction of the NDIS, a wholly new and very complex scheme, will inevitably encounter some early difficulties. These would be more manageable and less likely to be serious if the scheme started on a relatively small scale.

Moreover, implementation will confront the difficulties of a major reform being undertaken within a system that has multiple jurisdictions with established systems, overlapping responsibilities and a long-standing shortfall in funding. For such reasons, existing state and territory disability services will have to remain as they are for a while and, even after the introduction of the new arrangements, coexist for some time. During this period, the Australian Government should supplement funding under the National Disability Agreement to reduce some of the worst rationing of support services. This would also help to alleviate pressures on the state schemes during the transition to the NIIS and the NDIS.

This chapter is about the various phases in the implementation of the NIIS and NDIS. The proposed timetable is discussed below and summarised in tables 19.1 and 19.2.

19.2 Implementation of the NIIS

Chapter 18 has laid out a detailed implementation plan for the NIIS, noting several reasons why its overall implementation could be rapid. This would be helped by the strong knowledge base that already exists. Some jurisdictions have already made a successful transition from fault-based to no-fault motor vehicle accident schemes (the Lifetime Care and Support scheme in New South Wales, for example), and a number of others have undertaken detailed work on the possible implementation of a no-fault system. The Heads of Treasuries Insurance Issues Working Group had earlier looked at possible national arrangements for the sharing of information through a central database, benchmarking, and consistent actuarial valuations. Senior state insurance executives meet regularly, and working groups such as the Heads of Compulsory Third Party Authorities and Heads of Workers' Compensation Authorities are well versed in many of the issues.

To facilitate implementation, the Commission proposes that a full-time high level taskforce comprising representatives from all jurisdictions should be established. The initial priority should be the creation of a no-fault motor vehicle accident insurance scheme in all jurisdictions by the end of 2013 (table 19.1). Other forms of catastrophic injury (as specified in chapter 18) should be covered by 2015. To facilitate this, the Commission has recommended that funding begin in 2014, to establish a funding pool prior to the processing of any claims.

Table 19.1 **Implementation of the NIIS**

Date	*Milestone*
Second half of 2011, or early 2012	COAG would: • agree to the establishment of the NIIS, whereby states would implement no-fault accident insurance schemes for long-term care of new cases of catastrophic injury • agree to have these arrangements in place in all jurisdictions for motor vehicle accidents by the end of 2013 • establish a full-time high level taskforce to help implement this The taskforce would report back regularly to Heads of Treasuries meetings and COAG on milestones reached
end 2013	NIIS to cover catastrophic injuries from motor vehicle accidents in all jurisdictions on a no-fault basis
2015	People suffering catastrophic injuries from other causes should be covered by at least 2015
2020	Independent review of the NIIS

This would require a memorandum of understanding between jurisdictions, or other provisions that provide a framework for cooperation and joint activities. (Some

existing cooperative agreements between the states in relation to disability services are noted in box 19.1.)

Box 19.1 **Existing cooperative agreements between the states**

Memorandum of Understanding (MOU) between Victoria and NSW

The aim of the MOU is to assist ADHC and the Victorian Department of Human Services to engage in a collaborative approach to the delivery of specialist disability services in cross-border regions of NSW and Victoria:

- To establish arrangements for the better coordination of service delivery of cross-border specialist disability services
- To enable eligible individuals living in a cross-border community to access specialist disability services funded by the State other than their State of residence, where it is considered appropriate to do so
- To establish an ongoing forum in which cross-border issues can be discussed and resolved
- To facilitate a better understanding of each department's policies and services as it affects day to day regional business.

The Tri-State Agreement

The Western Australia, South Australia and the Northern Territory Governments in 2004 formed the Tri-State Disability Services Group to develop a framework agreement to ensure a coordinated approach to providing disability services to the Ngaanyatjarra, Pitjantjatjara and Yankunytjatjara lands covering 350 000km^2 across the three jurisdictions.

The framework agreement has guided the operations of the three jurisdictions in delivering services to the people of the region over the past five years.

The Interstate Portability Protocol

In 2000, the Disability Services Ministers endorsed a national policy framework regarding the interstate transfer of people with a disability. This framework or Protocol establishes a mechanism to assist people with a disability transferring between jurisdictions to negotiate programs and services to achieve a comparable level of support. Work is currently underway to improve the implementation of the Protocol across jurisdictions.

Source: NSW Government (sub. 536, pp. 49–50).

The key stakeholders in the NIIS will be the state and territory governments. But the Australian Government would play a facilitation role, and perhaps contribute to the premium pool in those jurisdictions where the injury risks are higher (chapter 18). More broadly, it could encourage the states and territories to establish an NIIS as a

quid pro quo of the very large additional revenue contributions it would make to the NDIS.

When established, the NDIA (itself a federated institution) would act as a facilitator, to ensure clear linkages between the various state and territory government schemes. It would:

- host regular meetings of the CEOs of the accident scheme agencies
- act as a forum to address issues such as greater consistency in eligibility, definitions and assessment; the appropriate benchmark standard of care; reporting standards; and benchmarking of performance
- be the central repository for data and its analysis
- assist in undertaking cooperative trials across jurisdictions, combined research studies, and diffusion of any lessons from innovations undertaken by a given jurisdiction.

19.3 Implementation of the NDIS

Early negotiation between all governments

The Australian Government and the state and territory governments should negotiate early on the NDIA and the NDIS.

The initial objective should be to get agreement to allow detailed work to begin immediately on creation of the NDIS and the NDIA, irrespective of how the pathway to a new system unfolds. Examples of such detailed work are given below.

For other matters, such as the structural aspects of the NDIA and the NDIS, early work may need to wait until sufficient jurisdictions have given in-principle support and the broad shape of the scheme has been settled. The Australian Government should be responsible for drafting legislation to establish and underpin the NDIS, but in consultation with state and territory governments.

A taskforce should oversee preparatory work

To oversee an early start on essential preparations, all governments, through the Council of Australian Governments (COAG), should establish a high level taskforce comprising senior officials from all jurisdictions and appropriate individuals with experience in liability and insurance. In view of the commercial, corporate model of

governance proposed for the scheme (chapter 9), the taskforce should be headed by a person with insurance or disability experience who has driven change successfully in a large organisation, appointed with the agreement of all jurisdictions. The taskforce should operate on a full-time basis, and report back regularly to Heads of Treasuries meetings and to COAG on agreed milestones in the planning for the commencement of the NDIS.

A key task will be to develop the details and drafts of the proposed intergovernmental agreements and the associated revenue arrangements, including setting out the financing obligations of the Australian Government and the reciprocal introduction of tax reform by state and territory governments. This will involve close liaison between Heads of Treasuries and the taskforce.

Governments should seek to achieve in-principle agreement on these matters at an early meeting of COAG in 2012, and final agreement in early 2013. This should allow the scheme to commence at the beginning of 2014-15.

While the main task of the implementation taskforce will be to obtain intergovernmental agreement and cooperation, there are also many 'nuts and bolts' issues that will need to be resolved early in order to successfully implement the NDIS. This separate stream should be the responsibility of a expert project management team. While this team would initially be under the control of the implementation taskforce, over time that responsibility would shift to the board of the NDIA.

There are many practical issues that the project management team would need to address:

- *Data and the systems that underpin it* will be critical. These will act like navigation systems, providing continual feedback and informing small ongoing adjustments that will help keep the NDIS on track. Without this feature, the scheme would not be able to effectively monitor outcomes or keep costs under control. For example, under a constrained budget it would mean the re-emergence of rationing and under a flexible budget it would risk the financial sustainability of the scheme. In either case, it would imply less than ideal outcomes for people with a disability and their families. To avoid this, there is a need for high quality, real-time data to be produced and incorporated into day-to-day decision-making. Work should begin on:
  - developing processes for achieving agreement on data standards and content, assessment standards and protocols and standards for services, electronic patient records and so on

  - devising the administrative and IT arrangements to allow communication and reporting between the NDIA and the many assessors, suppliers, and others that will have a role to play (and for whom regular communication and reporting will be important for the smooth running of the NDIS). One possibility would be to start with fairly standard and relatively flexible commercial software packages that are already used in some jurisdictions, but simpler approaches may also work just as well for some parties providing services in the NDIS, as effective communication need not require common or highly sophisticated IT systems. (These matters are discussed in chapter 12.)
  - further developing of *the costing and governance model*, including the planning of monitoring and reporting requirements
  - developing *the invoicing and payment systems* for both service providers and people receiving self-directed funding or vouchers
- Development would start on *the assessment toolbox* so that a reasonable measure would be available at the commencement of the scheme. The Australian Government would fund its development and it would be tested in pilot form in some states for selected groups of existing clients.
- The detailed elements of how *self-directed funding* would work and what rules should apply would need to be agreed to.
- The fine details on the role of *non-government intermediaries (DSOs)* would need to be determined, arrangements put in place to encourage their formation, and people with disabilities would need to be made aware of their potential role in the new scheme.
- Work would be needed with interested support and advocacy groups to plan how to build confidence so that people with disabilities will exercise choice in the new arrangements. People with disabilities and their carers will be looking for information and guidance about the assessment procedures, case management, self-directed funding and complaints mechanisms. Existing disability organisations and advocacy groups should play a key role in disseminating this information.
- Arrangements would also be set in train to encourage capacity building for service providers, who would face a considerably altered client base and client expectations and would require encouragement and guidance to develop appropriate skills and to support their workforce (including training for staff in new service offerings and in dealing with consumers with much greater autonomy to make their own decisions).

- Quality monitoring of *service providers* would be required to protect the interests of clients. The taskforce would oversee the development of the precise procedures and arrangements for implementing the arrangements spelt out in chapter 10, including standards, reporting requirements and other quality controls.
- Consideration would need to be given to expanded and more appropriate *accommodation options*, by engaging with private developers.
- Planning should also commence:
  - for a *regional presence* for the scheme. NDIA staff would be regionally-based, with regional managers (decision-makers) and local area coordinators. People would be able to make enquiries to their local area coordinator, their regional office or through the call centres. The Commission envisages that the NDIA would operate out of, say, 180 sites around Australia (drawing on existing office space where possible). Usually, assessment would be undertaken in a person's home (this will typically be more convenient and allows for easy discussion about home modifications, local supports, transport options etc). Medicare or Centrelink offices would be appropriate in remote areas such as Weipa or the Tiwi Islands.
  - on *workforce development*, in view of the expected large increase in demand
  - to build an evidence base for possible *early intervention* programs
  - to develop a strategy to ensure the appropriate *inclusion of Indigenous people* in the NDIS
  - to develop *information dissemination* strategies (for example, web design) and to prepare for a future *research* role.

The costs of setting up the NDIS, while significant, would be reduced by using the NSW LTCS scheme, TAC, ACC or MAIB schemes as sources for well-tested procedures, guidelines and operating systems.

The taskforce should also start work on the structural elements of the NDIS, once its agreed form is clear. As noted in chapter 9, Commonwealth legislation would be needed to establish the NDIS and the NDIA, and to set in train processes for the creation of the appointment panel for the board, appointment of the board, appointment of the advisory council, the appropriation of funds (and the formula relating to these) and funds management. Such legislation can be sequenced as needed, starting with an early establishment Act, which can be followed later by a financing Act, and the main Act for the scheme.

In the event that not all jurisdictions agree by February 2013 to the establishment of the NDIA, the Australian Government should proceed with those jurisdictions that do. It is important that reforms not be delayed unnecessarily.

Targeted consultation will be needed

This preparatory work would draw on the skills and knowledge of practitioners in the field, and would seek to build upon the best features of the current state schemes. The taskforce would need to consult with key groups to reach a position on many of the matters listed above. For example, discussions would need to be held with:

- disability professionals and insurance experts, about terminology, data definitions, assessment standards and protocols
- people with disabilities, about how the proposed scheme should work and how it would interact with them
- service providers, about administrative procedures, the proposed arrangements for self-directed funding and quality control measures.

However, these consultations should be about implementation, and it is important that they be well targeted and not prolonged. Their primary purpose would be to obtain particular information and to test the practicality and appropriateness of the proposed building blocks of the scheme.

The important thing is to start early on areas where progress would lead to more effective building blocks for better future provision of disability support services, almost irrespective of the final shape of the scheme, and not wait for the structural and legal aspects of the scheme to be agreed upon. The latter approach would lead to completely unnecessary delays in implementing better support programs for people with disabilities.

The Commission sees its proposed timetable (table 19.2) as realistic and achievable. Other large public policy changes have also been introduced to tight timeframes in the past. The Job Network — a sweeping change in employment services across Australia — took two years to implement. The Higher Education Contribution Scheme was also introduced over a very short period, as was Medibank (box 19.2).

Box 19.2 **Implementing Medibank**

Medibank started on schedule, on 1 July 1975. In nine months, the Health Insurance Commission had increased its staff from 22 to 3500, opened 81 offices, installed 31 minicomputers, 633 terminals and 10 medium-sized computers linked by land-lines to the central computer, and registered and issued health insurance cards to 90% of the Australian population. Its information technology was, for its day, state of the art, but the enormous burden of processing around 150 000 claims a day caused severe problems for some months. It was December before the processing delays had been overcome …

Source: Scotton (2000, pp. 9–11).

Implement the NDIS slowly and build it up over time

Even with successful completion of the preparatory work discussed above, the proposed NDIS would be too large and complex to implement fully at a single start date. It would need to be rolled out in a carefully staged way. Consequently, many people who would be entitled to support services under the guiding legislation would not be able to receive them until the scheme was fully operational, which will take several years (five years, in the Commission's view). The drafting of the legislation should include a timetable for the transition to a full scheme. But once fully operational, the scheme would provide support services to all who are entitled, as specified in the legislation.

As noted in chapter 3, the Commission is recommending that the NDIS provide three tiers of support (and therefore, three somewhat different populations of customers):

- tier 1: promoting opportunities for people with disabilities, and creating community awareness of the issues that affect people with disabilities; and minimising the impact of disability
- tier 2: information, referral and web-based services
- tier 3: the provision of funded individualised supports.

When the NDIA first begins operation, it would need to be able to begin delivering tier 1 and tier 2 services, at least initially at a basic level. Delivery of these services should improve quickly, as the NDIA refines its processes and learns more.

For the all-important tier 3 services, the Commission proposes that the scheme would begin with a group of clients that is sufficiently large, but not unmanageably so. While all people with disabilities entitled to support from the NDIS have high

needs, there are too many for the scheme to incorporate all of them at the proposed starting date for the scheme (July 2014). The scheme needs to begin slowly to allow the NDIA to test its procedures, learn about what elements of the scheme work best and determine what adjustments need to be made. The administrative arrangements will need to be bedded down, links with external assessors and support providers made functional, regional offices opened and staffed, and so on. The capacity of the available workforce of experienced assessors and case managers to handle a sizeable intake load, and the effectiveness of internal processes to equilibrate their decisions, would also be an important constraint.

Gradual implementation would allow the NDIA to refine the scheme's processes with a client base that is not overwhelming; build robust and well-functioning assessment, funding and case management processes; fine tune administrative arrangements; and allow for a measured recruitment process that would encourage good staffing selection (rather than a rush to select a large number of people in a short time period).

Moreover, given the inevitable uncertainties about the exact costing of the scheme before its commencement (chapter 16), the early phase would be used to provide a much more precise estimate of the longer-run size of the Australian Government's premium contributions to the NDIS premium fund. It is difficult to predict such matters as how many people with disabilities will apply to the NDIA for services and support, what their assessments will reveal in the way of reasonable and necessary support, what mix of needs they will have, how much informal care they can reasonably be expected to rely upon themselves, and so on.

The phased introduction of the scheme would reduce the risks of costly, abrupt changes to the services market, as funding shifts from block to individualised funding.

It would give service providers time to adapt their administrative systems, and to train and recruit new staff.

NDIA staffing

Some participants have queried how the establishment of NDIA could be achieved quickly, given the need for large numbers of qualified staff. In this regard it is important to note that the NDIA would be an assessment and funding agency operating to strong insurance principles. It would provide individualised assessment and funding but would not itself deliver support services and would not replace any specialist disability service.

The Commission's consultations suggest that recruitment of allied health professional as assessors is feasible in the timeframe outlined. Rollout would be strictly staged.

The NDIA will require a small nucleus of senior management and administrative staff, and a regional network of local area coordinators, regional managers and administrative staff. In large part these are likely to be selectively recruited from large and small insurance organisations, disability service agencies, NGOs, local government and state and territory disability departments/commissions. Importantly, as the NDIA is about implementing a new approach, it would be essential that NDIA workers adhere to the key principles of the NDIA in their day-to-day operations (a people focus, choice, certainty, high quality service, and common sense in expenditure). Under the model proposed by the Commission, service providers are also likely to be seeking to recruit additional staff, and from much the same sources.

The NDIA will need to have some people with a strong understanding of the present arrangements in order to make the transition go smoothly. While these people are likely to come from a variety of sources including NGOs and support organisations, the NDIA may see merit in engaging suitable employees currently employed by state governments in local and state organisational roles. The Commission has been advised that there are legislative approaches that the NDIA could use, if it wished (and there was a need) for suitable staff to be recruited to the NDIA in a manner that would safeguard accrued entitlements.

Nevertheless, as a CAC Act body, the NDIA would not employ staff under the Public Service Act. Its recruitment process would be strictly merit-based, and would be on whatever terms and conditions the NDIA saw as necessary to attract the skills it needed.

The proposed transition period for implementing the NDIS would allow time for people employed in state and territory government disability departments to decide whether to apply for positions in the NDIA, stay in the state government services field, or choose other roles.

As the Commission is recommending a regional network with locally-based staff (including managers), a substantial geographical relocation of employees is not expected.

Which people to start with?

Our proposal would be to select a few regions that each contained a modest number of people who were likely to be eligible for the scheme (say, around 10 000 per region) and launch the scheme in those regions in July 2014. Together, they would form a 'test bed' where early problems could be identified and ironed out, the efficacy of the toolbox tested and refined, and more precise estimates of likely scheme costs arrived at.

Many state governments expressed a readiness to host the initial launch of the NDIS in their jurisdiction.

- The New South Wales Government nominated the Hunter region as appropriate, 'due to its population size and mix of rural and metropolitan settings; and the existence of a current single access point for community care (sub. DR922, p. 5 and attachment A).
- The Victorian Government said it was 'very well-placed to host the first stage of implementation of an NDIS, and is keen to do so', referring to its 15 years' experience in implementing a self-directed approach to disability services and its 'excellent reputation for successfully managing lifetime care and support schemes' through TAC and WorkSafe Victoria (sub. DR996, p. 1).
- The South Australian Government advocated its involvement in the first phase as an opportunity for early alignment of its own blueprint for disability policy reform with the NDIS agenda (sub. DR861, p. 1).
- The Queensland Government said that, in view of 'the significant development of the Business Information System in Queensland, which collects information on the delivery of disability services [and] from disability support organisations and providers, Queensland would be well placed to be a trial jurisdiction for the development of any new, national system' (sub. DR1031, p. 20).
- The Tasmanian Government said that Tasmania is 'an appropriately sized and distinct region for such a roll out, and would be well positioned given the reforms undertaken to date in the specialist disability services sector' (sub. DR1032, p. 18).

While launching the scheme in more than one region would be logistically more demanding than a single site, the willingness of many states to host the first stage of the scheme may help ameliorate such difficulties. (The Commission notes that Victoria has already established an implementation taskforce.)

In the second year (2015-16), the scheme would expand Australia-wide, and should be fully operational by 2018-19. In the intervening years, more people with

disabilities would be brought into the scheme. Groups that might be considered for the early rollout stages might include:

- people with newly-acquired disability who would meet the criteria for support under the scheme; this would allow the NDIA to learn about helping clients from the onset of disability, allow for the optimal use of early intervention measures, and might limit the scheme's exposure to cost escalations, were these clients to be brought in at a later date
- children aged under five years who have substantial core activity limitations, as early investments have the potential to have high long-run payoffs
- select groups for whom involvement in pilot early intervention programs looks promising; this would inform future therapies and approaches to disability
- people who are now cared for by ageing carers, thus benefiting both the person with a disability and the aged carer
- people who have been inappropriately placed in nursing homes.

Many participants, in their responses to the draft report, drew attention to the extreme difficulties faced by particular groups of people with disability and argued for their early inclusion. The Commission is very sensitive to these issues, and aware of the stresses that many people are under. But it is also aware of the risks to the scheme of undue haste. In its view, the practicality of particular levels of intakes each year and the makeup of those groups should be a matter for the NDIA to manage as it sees fit. As it built up its internal capacity and refined its procedures to reflect what it had learned while supporting clients who took part in the trials, it would be well placed to decide such matters. For example, it might choose to take on much larger numbers of clients in the second and subsequent years, as its systems, procedures and workforce were more established and the NDIA had become a more experienced agency.

However, many people have been waiting a long time for better services, so the process for incorporating people into the scheme must not be open-ended. The Commission proposes that the NDIA's legislation should give the NDIA some flexibility, but should specify that all those who met the criteria for entitlement must be receiving services by 2018-19.

Table 19.2 **Implementation of the NDIS**

Date	*Milestone*
Second half of 2011, or early 2012	COAG would: • agree to an MOU that sets out in-principle agreement that the NDIS should commence in stages from July 2014 • create a **high level taskforce** with agreement of participating jurisdictions, to be headed by a person with insurance or disability experience who has driven change successfully in a large organisation (appointed with the agreement of participating jurisdictions) The taskforce would: • develop a draft intergovernmental agreement for final signing in 12 months • establish an expert **project management implementation team** with experience in commercial insurance and disability to work full time on planning the details of the scheme – including targeted consultation and early work on key operational arrangements, including assessment tools, risk management and transition arrangements • report regularly to Heads of Treasuries meetings and COAG on milestones reached in the planning for the commencement of NDIS in July 2014
July 2012 to June 2013	*During 2012-13*, the following need to be well underway: • drafting of legislation • preparing MOUs with government departments • developing data collection protocols • researching appropriate IT arrangements • recruiting and training of staff • testing of assessment tools • preparing manuals • determining pricing arrangements • working with providers to identify likely areas of workforce shortage and strategies to address them, with a particular focus on regional launch sites • drawing up of tenders • developing communications strategies • detailed planning for the regional launch sites, including with new and potential service providers, DSOs, NGOs and community groups By Feb 2013: final consideration and agreement by COAG to the intergovernmental agreement, including an agreement on funding arrangements March to June 2013: Commonwealth to introduce legislation to create NDIS and NDIA, with an initial appropriation • state legislation and further Commonwealth legislation to follow Announcement of the NDIA board

(continued next page)

Table 19.2 **(Continued)**

Date	*Milestone*
July 2012 to June 2013 (continued)	The NDIA board to commence formally • the board to appoint a CEO • the board to appoint interim staff from the taskforce executive, the project management implementation team, and/or from elsewhere, as determined by the board • staff recruitment to begin The NDIA should be established by June 2013.
July 2013 to June 2014	*During 2013-14:* • NDIA staffing levels would be rising (including regional offices) • IT infrastructure would be purchased • workforce strategy would be implemented • capacity building would commence, including providing information and assistance to service providers in preparation for moving away from block-funding Intensive work for rollout of the scheme in selected launch regions, including: • appoint and train NDIA regional managers (July - Dec) • establish local and regional offices for NDIA for the initial launch regions (July – Dec) • regional managers would engage with existing and potential service providers (Aug – Dec) – and check on their preparations for expansion in 2014, including recruitment, and testing of IT systems (early 2014) • intensive training of allied health professionals as NDIS assessors for the initial launch regions (early 2014) • recruitment and training of local area coordinators • public information campaigns and outreach in the initial regional launch sites by local area coordinators to local disability organisations, people with disabilities, existing and potential service providers, local community service groups and local media (early 2014) • information sessions in these regions for people with disabilities, their families and carers, service providers and the general community (early 2014) – what the NDIS will do for people – the assessment process – people's rights and responsibilities • disability support organisations may also undertake group information sessions • call for interest and pre-registration of those participating in the initial launch

(continued next page)

Table 19.2 **(Continued)**

Date	*Milestone*
July 2014	In July 2014, the NDIS would commence providing full services in a few regions of around 10 000 clients per region • thereby providing high quality services to many thousands of people, while allowing fine-tuning of the scheme in the light of lessons learned Throughout 2014-15, all local and regional offices would be established across Australia, with local staff engaged and trained • a national information campaign would be undertaken, including information sessions by local area coordinators to local disability organisations; people with disabilities, their families and carers; existing and potential service providers; local community service groups; local media; and the general community – in all regions, work would commence with local groups on a compact to increase social participation and employment opportunities for people with disabilities The NDIA would work with providers to monitor the developing workforce and to address emerging shortages.
July 2015	In July 2015, the NDIS would extend nationally to cover all of Australia • progressively it would be expanded to cover all relevant people with a disability, commencing with all new cases of significant disability and some of the groups most disadvantaged by the current arrangements.
2016-17	Second year of national rollout
2017-18	Third year of national rollout NDIA evaluation of effectiveness of self-directed funding
2018-19	Final year of national rollout: all current and new clients to be receiving NDIS services
2020	Independent review of NDIA and NDIS

Initial costs would be low

Only a rough estimate of the expected annual costs of implementing the NDIS over the proposed timeframe can be given. It is clear that early costs would be minimal, as the key challenges in the first few years will be to plan effectively, and to get the legislation and the organisational structure of the NDIA in place.

Significant costs would not be incurred until the NDIS began providing supports to people with disabilities. This is scheduled to commence in July 2014, and costs would then rise over the subsequent four fiscal years. The full $6.5 billion net additional cost would not be felt until 2018-19.

More details of cost estimates are contained in chapter 16.

Table 19.3 **Estimated annual operating costs of the NDIS, 2011-12 to 2018-19**

Year	*Stage of implementation*	*Likely annual costs*
remainder of 2011-12	getting agreement	$10 million
2012-13	planning the details of the scheme setting up legislation	$50 million
2013-14	bedding down administrative arrangements	$550 million
2014-15	scheme begins with regional rollouts	$900 million (net)
2015-16	first full year of national rollout	$2.4 billion (net)
2016-17	second full year of national rollout	$3.9 billion (net)
2017-18	third full year of national rollout	$5.4 billion (net)
2018-19	final year — rollout now complete	$6.5 billion (net)

In addition, the NDIS would need to build up a reserve for smoothing fluctuations in claims and to meet contingencies. The Commission proposes that the Australian Government should build up reserves during the start-up years, so that future reserve requirements after establishment of the full scheme would be negligible, and may not be required at all.

19.4 Interaction between the two schemes

There are likely to be some economies of scope between NDIS and NIIS (for example, some local area coordinators, assessors and support providers may undertake the same function for clients in both schemes). In such cases, it would be important to streamline compliance burdens, for example, in relation to reporting and performance monitoring, to avoid a 'doubling-up' of such requirements.

In time, there may be some logic in bringing the NIIS into the NDIS. However, as discussed in chapter 18, this is not clearcut, as there are some differences between the two schemes, and the gains from a merger might not be worth the costs. The Commission considers it much more important that governments address the undoubted problems of the present arrangements through the NDIS and NIIS, rather than wait many more years in an attempt to achieve a consensus on a single all-encompassing scheme.

The Commission recommends that, in 2020, governments should institute an independent and public inquiry into the appropriateness of a merger. After this period of operation, sufficient experience and information would be available to better establish the costs and benefits of this.

RECOMMENDATION 19.1

In the second half of 2011 or early 2012, the Australian Government and the state and territory governments should, under the auspices of COAG, agree to a memorandum of understanding that sets out an in-principle agreement:

- ***that the NDIS should commence in stages, with:***
  - ***regional rollouts undertaken in several states and territories commencing in July 2014***
  - ***full national coverage in 2015-16 for some high priority groups***
  - ***progressive coverage of all groups in subsequent years, with a fully operational scheme by 2018-19***
- ***to follow the reform timetable for the NIIS specified in recommendation 18.6.***

RECOMMENDATION 19.2

To give effect to recommendation 19.1, state and territory governments and the Australian Government should create:

- ***a full-time high level taskforce from participating jurisdictions and an expert project management team to commence work on the detailed implementation of the NDIS, including all transition arrangements***
  - ***to be headed by a person with insurance or disability experience who has driven change successfully in a large organisation, appointed with the agreement of all jurisdictions***
  - ***with a draft intergovernmental agreement to be prepared for final consideration and agreement by COAG in February 2013***
- ***a full-time high level taskforce from all jurisdictions to commence work on the implementation of the NIIS by the states and territories***
- ***the NDIA by June 2013.***

RECOMMENDATION 19.3

In the period leading up to the full introduction of the NDIS, the Australian Government should supplement funding under the National Disability Agreement to reduce some of the worst rationing of support services, particularly for supported accommodation and respite.

RECOMMENDATION 19.4

In 2020, there should be an independent public inquiry into the operation of the NDIS and its effectiveness in meeting the needs of people with disabilities. The review should also encompass the review of the NIIS as set out in recommendation 18.7.

20 The benefits of reform

Key points

- As a major reform, the proposed NDIS will generate substantial economic benefits.
- These benefits arise from many sources: wellbeing gains to people with disabilities and informal carers; efficiency gains in the disability sector; savings to other government services; increased participation, and the resulting fiscal gains.
- The net *economic* cost of the NDIS is not the budgetary cost of around $6.5 billion (which is a transfer of resources from one group to another). Rather, the economic costs reflect the distortionary impacts of raising the revenue. That represents a cost of around $1.6 billion. Given this, the NDIS would only have to produce an annual gain of $3,800 per participant to meet a cost-benefit test. Given the scope of the benefits, that test would be passed easily.
- The most important of the economic benefits are the welfare impacts for people with a disability and their carers. While not counted in official statistics about the performance of the economy, these are genuine and large economic gains. One, partial way of assessing these gains is the value of the implicit income transferred by the NDIS to people with disabilities. Commission estimates suggests benefits of around $7.8 billion annually. This is likely to significantly understate the benefits.
- It is harder to measure some of the other economic benefits of the NDIS, but it is possible to assess some of its economic effects. These will take some time to emerge. Were Australia to achieve employment ratios for people with disabilities equivalent to the average OECD benchmark — a highly achievable target given the proposed reforms — employment of people with mild to profound disabilities would rise by 100 000 by 2050.
- In fact, the package of measures, including through DSP reforms, would be likely to raise employment by considerably more than 100 000. Under a reasonable scenario, the Commission estimates that there could be additional employment growth of 220 000 by 2050 (including those without core activity limitations).
- By 2050, the collective impact of these two employment gains would be around a one per cent increase in GDP above its counterfactual level, translating to around $32 billion in additional GDP (in constant price terms) in that year alone.
- However, it is important to note that some of the economic impacts of the NDIS measured in official statistics of employment and output do not include the offsetting reductions in unmeasured informal employment and output.
- There would also be fiscal gains from reductions in DSP beneficiaries and an increase in part-rate DSP payments. These gains materialise slowly, but the value rises steeply. Taking account of the benefits over the longer run, the reforms would produce the equivalent of a $2.7 billion dollar (constant price) annuity over the next 90 years.
- The bottom line is that benefits of the NDIS would significantly exceed the additional costs of the scheme.

The NDIS — and the accompanying reforms to the Disability Support Pension and employment supports — will have fundamental impacts on the lives of people with disabilities, and more generally for Australians. This chapter explores the nature of those benefits, and where possible, tries to enumerate their potential value. (There would be additional significant benefits from the NIIS, but many of the benefits — such as through efficiency and early intervention — are canvassed in chapters 17 and 18). Some parts of this chapter are necessarily technical and precise in exposition. This reflects the fact that cost-benefit analysis is a difficult area, and that it depicts costs and benefits in ways that are different from the everyday use of such terms. The difficulties of such analysis are compounded by the importance of, but inherent difficulty in, valuing the many intangible and equity impacts of the NDIS.

Section 20.1 of the chapter defines the scope of economic benefits, since the source and nature of such benefits is commonly misunderstood. Section 20.2 considers the nature and significance of the potential gains from the NDIS, since these inform qualitative judgments about the potential benefits of the scheme. An additional important element of any economic appraisal is not just the potential for gain, but whether a government policy is likely to achieve that potential — the subject of section 20.3. Given the information from section 20.1 to 20.3, it is then possible to undertake a 'plausibility' test of the likelihood of a net benefit from the NDIS (section 20.4). The remainder of the chapter (sections 20.5 to 20.8) explores particular types of economic effects and their benefits from implementing the NDIS. Section 20.9 gives the bottom line.

20.1 What *are* economic benefits?

In considering the economic benefits of the NDIS, it is critical to understand what economists refer to as costs and benefits.

The separation of economic from social benefits is often not appropriate. Formally, economic benefits are any outcomes ('goods') that improve a person's wellbeing.[1] The supply side — *how* things are produced — is not relevant for wellbeing, except in so far as it creates opportunities for people to buy more goods and services, have greater leisure, lead better lives generally, or contribute more broadly to society.[2]

[1] In rigorous analysis, when economists refer to 'utility' they are referring to wellbeing, and when they refer to goods they mean anything that raises such wellbeing (holidays, good health, friends) and 'bads' (such as pollution or crime) as anything that lowers wellbeing.

[2] Gross domestic product — the supply side of an economy — is often closely linked to consumption — but is not an appropriate measure of wellbeing. For example, the destruction of houses from fire or flood may lead to an increase in construction activity, and higher GDP, but clearly to a loss of wellbeing.

For instance, employment gives people income to finance their consumption, meaningful interactions with others and a sense of self worth (chapter 6). But people also enjoy leisure, and people need to be paid to work. It is the *outcomes* of employment that matter for economic wellbeing, and not necessarily employment itself. Otherwise, retirement would be seen as bad.

Only some goods are adequately measured by economists and statisticians.

Some economic benefits are measured reasonably well

Goods and services produced in markets or priced in dollar terms are reasonably well measured. These are the types of consumption reported in national accounts and in the financial media. Measuring consumption in this area provides a useful, but incomplete, estimate of people's wellbeing. As discussed in section 20.5, the prospects of better employment for people with disabilities would raise their prosperity and consumption.

But many goods are measured badly

Other kinds of 'goods' are measured less well or poorly. For instance, domestic labour, like caring, cooking a meal, and undertaking your own house renovations, produce goods that people value, but they do not appear in ABS labour market statistics or the national accounts. Moreover, communities and families produce many 'goods' that are not priced, but that improve people's wellbeing (good relationships, hobbies, helping others). While people often do not think of these as economic benefits, they are included within the framework used by economists. Understanding the value of intangibles is particularly important in evaluating policies that have a social as well as an (conventionally defined) economic rationale — as is the case with the NDIS.

While there are difficulties in enumerating them, the above less tangible 'goods' should be counted in cost-benefit analyses of policies that affect the 'production' of such goods. For example, one of the major economic impacts of a policy that reduced crime rates would not just be the avoided costs for the police and justice system, but the reduced emotional trauma for victims. The Commission attempted to incorporate the alleviation of these kinds of intangible costs into its analysis of the benefits of gambling policy and consumer regulation (PC 2008 and PC 2010b).

In its advice on measuring costs and benefits in policy analysis, the Department of Finance and Administration (2006, Appendix II) underlines the importance of counting non-market improvements in the quality of life. In 1996, a group of

eminent economists, including Nobel laureate, Kenneth Arrow, set down principles for good cost-benefit analysis, noting that:

> Not all impacts of a decision can be quantified or expressed in dollar terms. Care should be taken to ensure that quantitative factors do not dominate important qualitative factors in decision making. (Arrow et al. 1996)

20.2 Evidence suggests that the *potential* economic gains from the NDIS are large

The Commission has identified many deficiencies in the current disability system that affects the lives of people with disabilities and the community as whole. These fall into three main categories.

(i) Low economic participation

First, people with disabilities have low engagement in the labour market and many depend on government social income transfers. The result is that many people with disabilities are poor and cannot afford to buy things customarily purchased by other Australians (going on holiday or owning a car). They also lose the benefits of social interaction associated with employment. Moreover, the community loses the benefits associated with the economic engagement of people with disabilities (such as forgone tax revenue), while having to meet the expenses of income support.

(ii) Inefficiency

Second, the current system results in the inefficient use of government services. This includes the wasteful use of resources in the current disability system. It also extends to areas of government service provision outside the disability system, such as in the health and justice systems.

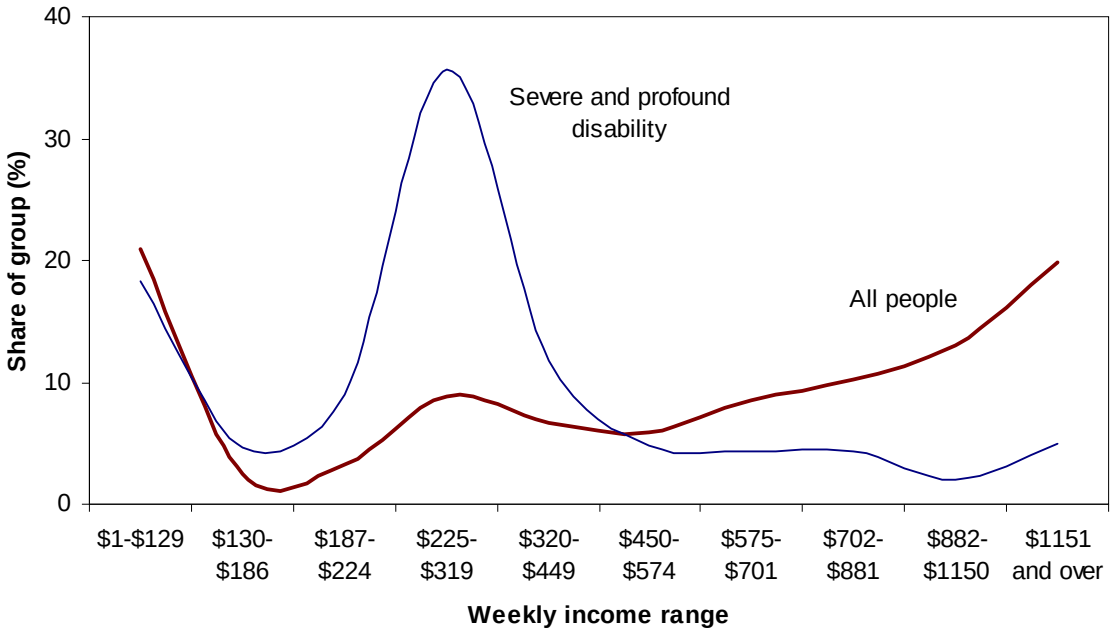
(iii) Intangible impacts

Thirdly, the system leads to adverse 'intangible' impacts that are not easily priced. For people with disabilities, these include loss of opportunity, being dirty and uncomfortable because people with disabilities cannot get adequate access to personal support, indignity, lack of choice, loneliness, and lack of respect. Just the most simple of things — contact with people — can be significantly lacking. ABS survey data (appendix B) show that nearly one in five people with a profound disability have had no social contact with others in a three month period, while nearly all people without disability had at least one contact in that time. The other side of the coin of this social isolation is that the general community faces costs because of its reduced interaction with people with disabilities. There are benefits

for people without disability from an inclusive society. Finally, the adverse impacts of the current system on informal carers are profound.

Three graphs below summarise some of the extreme deficiencies across important aspects of the wellbeing of people with disabilities — income, distress and local disadvantage (Figures 20.1 to 20.3). They demonstrate that, compared with Australians as a whole, people with significant disabilities are often poor, highly distressed and located in areas of general disadvantage.

Figure 20.1 **People with severe disabilities are typically poor**
2009[a]

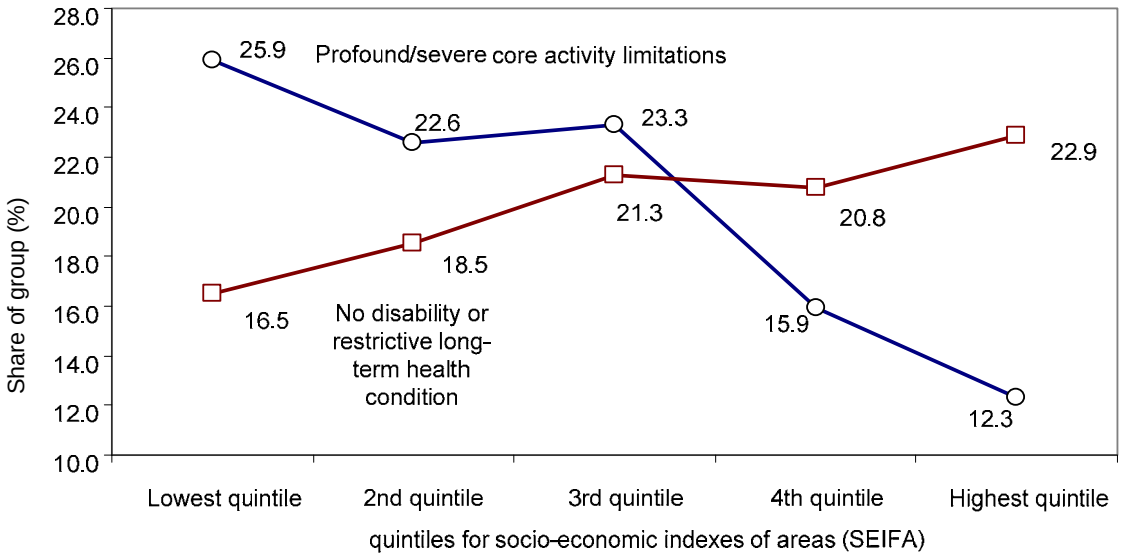


[a] The data are derived from the 2009 SDAC. They relate to people of working age (15-64 years). The data are indicative of the difference in the income distribution of people with disabilities, but should be interpreted carefully. Unlike the ABS's publication, *Household Income and Income Distribution, Australia, 2007-08* (Cat. No. 6523.0), the SDAC is not ideally suited to examination of income distribution. This is best undertaken on an equivalised household basis, which takes account of the number of people in, and other aspects of, a household. An equivalised measure provides an indicator of the economic resources available to a standardised household. Its derivation is complex. The implication is that the chart ignores the fact that (a) many people with a disability who have low personal incomes live in households where another family member earns some income (mainly wages or government transfers, which underestimates their genuine access to resources, (b) some people with significant disability may nevertheless be a significant breadwinner for others in a household (such as children), which overestimates their genuine access to resources and, (c) that a truly equivalised measure should take account of the fact that there are extra resources required for support of people with disabilities, meaning that again, a household with a person with a disability would have a lower capacity for consumption than an otherwise identical household with no person with a disability. It is likely that the above chart underestimates the relative poverty of people with severe disabilities compared with people without disabilities.

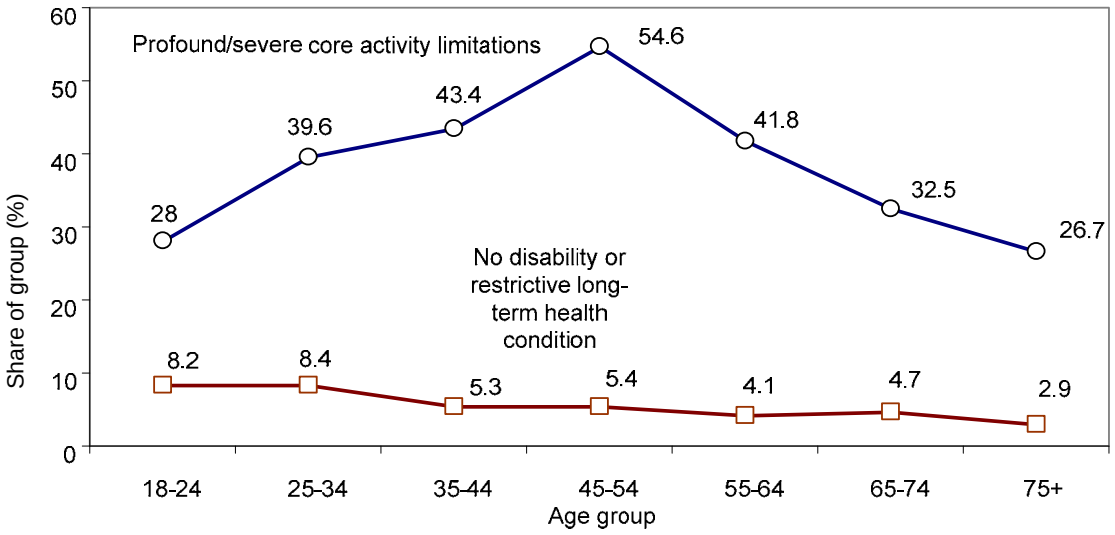
Data source: SDAC 2009 (unpublished data)

Figure 20.2 **There is compelling evidence of low wellbeing**

People with severe disabilities live in disadvantaged areas[a]



A large share of people with severe disabilities suffer severe distress[b]



a The SEIFA is measured in this case as a relative socio-economic disadvantage index, which covers 17 variables, including proportion of low income households in the area; proportion of people who do not speak English well; proportion of households who pay low rent; and proportion of people with no post-school qualifications. A low quintile means the bottom 20 per cent of the most disadvantaged geographic areas.
b Stress is measured using the Grouped Kessler 10 score.

Data source: ABS, 2011, *Aspects of Disability and Health in Australia, 2007-2008*, Cat. No. 4367.

Chapter 2 provides a more comprehensive assessment of the low wellbeing and lack of opportunity of people with disabilities.

A system that cost-effectively reduced the deficiencies above would produce significant economic benefits.

20.3 But how much would the NDIS make a difference?

In cost-benefit analysis, a critical issue is not just identification of a problem, but also assessment of the extent to which a policy intervention would make a difference. Conceptually, that involves comparing the ex post outcomes from the intervention with what would have happened in the absence of policy change (the 'counterfactual'). That is difficult with even the best methodologies (randomised control trials), but it is particularly hard when the policy intervention has not yet occurred and when the system change is as comprehensive as the NDIS. Nevertheless, many major reforms face this difficulty, and the incapacity to measure impacts precisely is not a basis for policy inertia. In that context, the questions are whether:

- the policy change is large enough to credibly have large effects
- there is *reasonable* evidence about past policies or behaviours that can be used to assess the likely impacts, as well as the judgments of people with disabilities, service providers and carers.

On the former question, the NDIS represents a major change in the current system, including allocating more resources more fairly, giving people greater say, and constructing a disability system designed to maintain efficiency and rigorously contain cost blowouts. Table 1 of the overview provides a qualitative indicator of the scope of the changes, while chapters 14 and 16 indicate the large additional funding involved (roughly a doubling of current resourcing).

On the latter question, the Commission has examined a wide range of evidence in designing the NDIS to address the deficiencies of the current disability system, and in determining the appropriate scope and resource requirements for the scheme. Of course, while some evidence is more credible and reliable than others, 'evidence' is much broader than what academic studies show. It can include people's views and experiences, surveys, expert opinion, results from analogous policy changes, and concordance with accepted understanding of how people behave. The Commission drew from a range of such evidence about the prospective impacts of the NDIS.

Empirical evidence suggests significant wellbeing gains from reducing unmet need

Analysis of the Survey of Ageing Disability and Carers (SDAC) provides some indicators on the wellbeing of people with disabilities and carers. In some cases,

SDAC provides information about wellbeing by the degree of unmet need. This is important for the analysis of the impacts of the NDIS because the scheme would significantly reduce the level of unmet need. Table 20.1 provides an illustration of the potential magnitude of wellbeing effects that might flow for carers from the NDIS. The table shows very low wellbeing outcomes for carers where the formal support needs of the person with a disability support are not being met. The potential gain from alleviating unmet needs is shown in column 4 (shaded) — and are very substantial. The cost of carers' low wellbeing is hard to measure in dollar terms. However, the dollar value of intangible costs that have far smaller impacts on people's lives have been found to be large,[3] implying that the dollar equivalent of low wellbeing of inadequate supports for carers would be very high.

While, the SDAC provides far fewer measures of wellbeing for people with disabilities than carers, table 20.2 shows three areas where the gap in outcomes between those having their needs met and those not are relatively high. Again, the NDIS should significantly close that gap.

Analysis of the survey of Household, Income and Labour Dynamics in Australia (HILDA) — a general survey covering around 20 000 people — has found very high values for increased social and economic participation for people with disabilities (Yu 2010, 2011). (As an indicator of the importance of 'intangibles, this research found that gains of employment are *not* only associated with the extra money). As discussed in greater detail below, there is significant potential for employment gains for people with disabilities from implementing a broad package of reforms, of which the NDIS would be a part (section 20.5).

Reducing costs in government services

As discussed in chapter 2, inadequacies in the current disability system rebound elsewhere — in the health system, income support, the justice system and the wider disability system itself. For instance, inadequate community-based supports sometimes result in long and costly use of hospital beds ('bed-blocking'). Also, proper supports such as appropriate wheelchairs, cushions, mattresses, attendant care and incontinence aids, reduce the likelihood of pressure sores — which are costly to treat and can be life threatening. Better support of informal carers through proper respite and other services would reduce relinquishment rates and blockage of respite beds, and reduce the need for inappropriate and costly full-time accommodation services.

[3] For instance, in the Commission's inquiry into consumer policy, studies of consumer detriment found large welfare losses from 'nuisance', and this was exemplified by litigation outcomes (PC 2008).

Table 20.1 **Wellbeing of informal carers for people eligible for funded support by the NDIS**

2009[a]

Impact	*Share of carers experiencing impacts*		
	Person cared for claims they need additional formal assistance (A)	Claims does not need additional formal assistance (B)	Potential impact of NDIS (B-A)
	%	%	%
Physical and emotional effects of the caring role			
Wellbeing has changed	52.7	32.6	-20.1
Feels satisfied	18.6	24.8	6.2
Feels weary or lacking in energy	50.1	33.6	-16.5
Frequently feels worried or depressed	47.1	33.4	-13.7
Frequently feels angry or resentful	23.3	7.1	-16.1
Has been diagnosed with stress related disorder due to caring role	18.5	10.8	-7.8
Often has sleep interruptions that affect daily functioning	31.7	17.2	-14.5
Lost or losing touch with or changed circle of friends since taking on the caring role	47.5	35.5	-12.0
Relationship with person cared for			
Strained or lacked time together	22.1	16.8	-5.3
Unaffected	37.4	43.5	6.1
Brought closer together	40.5	39.7	-0.7
Relationship with other co-resident family members			
Strained or less time to spend with them	50.2	34.3	-15.9
Unaffected	38.9	49.0	10.1
Brought closer together	9.5	12.3	2.8
Relationship with spouse or partner			
Strained or lacked time together	47.8	30.9	-16.9
Unaffected	30.2	38.0	7.8
Brought closer together	22.0	31.1	9.1

a The data relate to co-resident primary carers providing informal supports for people who would qualify for the NDIS. The *potential* impact of the NDIS is the difference between outcomes for people caring for a person with a disability whose has his or her needs met and the outcomes for carers where that is not the case. The assumption is that by significantly reducing unmet need for people with disabilities, the wellbeing gap between the two groups of carers would be narrowed.

Source: SDAC 2009 (unpublished data).

Table 20.2 **Outcomes for people with disabilities clearly reflect the extent of unmet need**[a]

	Needs additional assistance	*Does not need assistance*	*Potential NDIS impacts*
Participation rate	26.1	34.5	8.4
Contact a few times a day with non-resident family or friends	15.8	23.6	7.8
Can go out as often as would like	41.9	65.1	23.2

a Unfortunately, the SDAC does not pose anywhere as large a set of wellbeing questions to people with disabilities as it does for carers. Many questions relate to very specific social activities, like going to church or attending a cinema, and not surprisingly do not show up many significant gaps between those with met and unmet needs. Moreover, the data do not indicate the *degree* to which needs are met, further weakening the data for the purposes intended.

Source: SDAC CURF 2009.

Studies of early interventions (which would be properly funded under the NDIS) often demonstrate significant and measurable returns for future disability system costs and for the health sector (chapter 13). Table 13.1 provide summaries of seven recent economic studies — involving a range of interventions — often involving savings to the health system (in addition to the unmeasured benefits to people's wellbeing).

Sometimes early interventions produce gains outside the health system. There is a high proportion of people in the criminal justice system with an acquired brain injury or a mental illness. 37 per cent of prison entrants reported having a mental disorder at some time and 18 per cent reported that they were currently taking medication for a mental health related condition (AIHW 2009b). Similarly, the Department of Justice in Victoria (2007) found that the rate of intellectual disability was 30 per cent higher among the prison population than the general population. These prisoners also had a higher number of prison incidences recorded against them and were assessed as being a higher risk of offending. The NDIS *may* alleviate this.

People that are supported properly may be less likely to offend. For instance, the Commission has recommended community supports for people with enduring and significant psychiatric disability (chapter 3). These people are at a higher risk of homelessness and offending than others, but ongoing assistance to manage in the community is likely to increase their wellbeing, and lower the costs that are borne by other government agencies and the community at large. For instance, the NSW Integrated Services Project (ISP) was aimed at people with challenging behaviours (McDermott, Fisher and Gleeson 2010). Most of the people in this study would be eligible for the NDIS (for example clients had mild intellectual disabilities, acquired

brain injuries from alcohol and substance abuse, and multiple psychiatric diagnoses). 50 per cent of the clients had spent some time in prison in the 12 months before the ISP. The evaluation found that the number of days spent in prison decreased on average by 87 days per year. (There were also other gains, with the number of hospital emergency presentations decreasing on average by 20 presentations per year and the number of days in hospital decreased on average by 45 days per year).

Personalisation has efficiency and wellbeing benefits

A large body of literature on personalisation and self-directed funding (appendix E and chapter 8) shows major benefits for people with disabilities and carers, at typically no greater cost. Many of these studies have used rigorous randomised control trials. Few people with disabilities have access to self-directed funding currently in Australia (appendix D). If they desired it, most would have this as an option after the introduction of the NDIS. While many people may not initially choose to self-direct by cashing out their packages, most would exercise greater choice (such as having a say in determining their individual package of supports and in choosing service providers).

Supplier efficiency and choice

The existing disability support system is not as efficient as it could be. Much of it has been centred on the contractual relationships between service providers and governments, not supports chosen by people to suit their lives. As one participant noted, a support provided at the wrong time is like 'sending a bald man to a barber'. An ill-delivered service is waste. A new coherent system would achieve much better value for money.

The NDIS would be structured so that, as much as feasible, competition was strong between service providers, underpinned by choice and information for people with disabilities and intermediaries (disability support organisations), who would act as brokers and build the capacity of people to make informed choices (chapter 10). Over the longer run, competition should encourage more innovative and cost-effective services, especially in major metropolitan areas where there should be a large number of alternative providers.

Moreover, the Commission has recommended an insurance governance arrangement, which would encourage productivity improvements. The Commission widely consulted with insurers and people running motor vehicle accident schemes — such as the Victorian Transport Accident Commission, the NSW Lifetime Care and Support Authority and the New Zealand Accident Compensation Corporation.

The experiences of these schemes suggested that there are significant efficiencies from adopting insurance principles in the governance of the NDIS (and the NIIS). Such design features are likely to increase the longer-run economic benefits of a properly governed disability system.

The gains could be large. The costing undertaken by the Commission uses existing service prices, which will incorporate any inefficiency in the sector. If the NDIS were to induce just a one per cent improvement in the productivity of the sector, then all other things being equal, that would reduce the costs of the NDIS by around $130 million per annum. This would provide around a 2 per cent reduction in the incremental budgetary cost of implementing the NDIS (noting that current sector funding is around $7 billion and the new funding around $6.5 billion.)

The Commission is not aware of any studies that rigorously assess the potential for productivity gains in the disability sector, but some exist for aged care facilities, which share common features with some disability services, and most particularly exists in a similar, highly regulated market, dominated by not-for-profit agencies. In Australia, the most sophisticated study (undertaken for the Hogan Review) found that the average efficiency of the aged care sector could be improved by about 17 per cent (CEPA 2003). The relevance of this is that it supports the contention that significant gains in productivity may be achievable in disability sector too. Clearly, large improvements in productivity — say 10 percentage points — would drive down the costs of the disability sector by $1.3 billion, representing a saving of around 20 per cent in the budget required to implement the NDIS.

Tax efficiencies

The Commission has given first preference to a 'tax swap' as the vehicle for funding the NDIS. Such a swap has the potential for producing significant economic efficiencies by displacing inefficient state and territory taxes with more efficient Australian Government ones. A reduction in the marginal excess burden of tax of 10 percentage points for the nearly $5 billion of revenue for disability supports currently raised by state and territory governments represents an economic benefit of $500 million.

Whether that saving should be counted as a benefit of the NDIS is unclear. On the one hand, governments are always free to negotiate tax swaps that are not connected to any specific deals on new spending proposals. On the other hand, such tax reforms have not occurred (after the GST reforms), and to the extent that an NDIS — which must be funded from somewhere — *induces* such a tax swap, the gain could be seen as an outcome of the NDIS reform.

Diverse groups recognise the benefits

No group has disputed that the current disability system needs change and more funding, and the majority have agreed that the types of reforms proposed by the Commission would achieve much better outcomes. That includes peak business bodies, state and territory governments, service providers, people with disabilities, and carers. Experts have indicated the scale of the deficiencies and how they could be resolved through reform along the lines of the NDIS. (Expert advice was particularly useful in considering the benefits of incorporating community mental health into the NDIS.) In many areas of public policy, there are winners and losers, with winners strongly endorsing the policy and losers opposing. The tariff reform debate in Australia took this form. This adversarial approach has not been a feature of submissions to this inquiry (of which there were over 1000). Groups usually concerned about the role of government in the community and its spending — such as the business sector — have supported change (Business Council of Australia, sub. DR1015).

Gains are readily achievable

Achieving gains in some areas of social policy — such as indigenous disadvantage, intergenerational poverty and persistent welfare dependence — have proved to be very difficult. This reflects the particularly complex interplay of factors underlying such entrenched disadvantage and the local cultural norms that reinforce them. However, some communities aside (such as Indigenous communities — chapter 11), the kinds of disadvantage related to disability are less complex. Much of severe disability reflects a lottery in life, and can affect any family — a person can be a successful doctor or tradesman one day, and a stroke-victim the next. By providing support, the government and the community can reduce many of the worst disadvantages of disability using simple approaches (like the reasonable resourcing of personal care, certainty of supports, a better chance of a job and assistance in daily management tasks). There remain some complexities in this area, and some changes — such as the greater exercise of choice — may take some years to realise. However, as several participants observed, achieving much better outcomes quickly is not 'rocket science' (Sue O'Reilly, sub. 131; LISA Inc, sub. 11; Colin and Rosemary Iverson, sub. 174).

Accordingly, the collective evidence suggests that there are strong prospects that the NDIS would substantially improve people's lives and improve efficiency — a large economic benefit. Indeed, these economic benefits are likely to eclipse the benefits of many things that are counted as valuable in official statistics.

The remainder of this chapter sets out some of the specific areas where benefits are likely to be realised, shows some plausible scenarios for certain kinds of benefits and, where possible, indicates the possible dollar values of those benefits. That said, given the nature of some of the intangible economic benefits, the Commission has not attempted to measure the entire net benefits of the NDIS in dollar terms.

20.4 A basic plausibility test

One way of testing the plausibility of net benefits from the NDIS and its associated package of reforms is to

- consider the costs of the scheme (using the conventional cost-benefit framework for measuring these) and identify the value of the benefits per scheme participant that would be required to just outweigh these
- make a judgment whether the measure of benefits derived from the above calculation passes a credibility test, taking into account the wide set of benefits described above.

The costs

Budgetary costs are not economic costs

The *budgetary* costs of the NDIS are its incremental costs of around $6.5 billion, not the gross amount of around $13.6 billion (chapter 16). However, budgetary amounts are not economic costs. In thinking about the *economic* costs and benefits of $6.5 billion of spending, several factors are particularly important.

The real economic costs from *financing* the NDIS stem from the fact that raising $6.5 billion dollars distorts people's decisions in ways that makes them worse off. The size of this effect depends on how the NDIS is financed. The Commission is recommending that, in the first instance, the Australian Government seek to reprioritise its spending to fund the NDIS in preference to increased taxes. From an economist's perspective, this can still be seen as a tax financing method because it would be identical to cutting the relevant government spending, lowering taxes and then raising the forgone revenue using new taxes. Therefore, it raises similar considerations about the distorting effects of taxes as entirely new tax collection.[4]

[4] However, it would have potentially significant efficiency gains because displacing government spending results in no net economy-wide tax increases, and so would be more efficient. (Tax distortions rise with higher taxes.)

The distortions from higher taxes arise when people work less when governments tax labour, invest less when governments tax returns on investments, and move less when governments put stamp duties on conveyancing. Chapter 14 sets out one measure of the size of these costs when government increases its taxes by a small amount (the 'marginal excess burden' of tax or MEB). As shown in tables 14.1 and 14.2, the size of the MEB varies with the type of tax. The Commission's approach to financing the NDIS is to use the best set of efficient taxes (noting that tax reform may further enhance such efficiency, reducing the economic costs of the scheme further), rather than to use one new hypothecated tax.

A reasonable assumption is that the relevant marginal excess burden would relate to income tax revenue (such as through increases in tax revenue that occur when tax thresholds do not completely reflect inflation — so-called 'fiscal drag' — rather than through changes in marginal tax rates). There are many estimates of the MEB for income tax (for example, Gabbitas and Eldridge 1998). The most recent of these studies undertaken for the Henry Tax review (chapter 14) suggested that the MEB of income tax was around 24 per cent. That suggests that the approximate *economic* cost of funding the NDIS would be around 0.24 × $6.5 billion or about $1.56 billion.

Lost consumption benefits to taxpayers who finance the scheme

The $6.5 billion reduces the income (and therefore consumption) of one group of people — taxpayers in the general community and raises the consumption of people with disabilities and informal carers by the same dollar amount. In conventional cost-benefit analysis, taxpayers lose from such an exchange (though see section 20.8 for alternatives where this is not true), with the economic impact on them depending on the marginal loss in *welfare* of a lost dollar of income. This is termed the 'marginal utility of income' (MUI) by economists and is used widely in cost-benefit analysis of government policies (Farrow 2009; Layard et al. 2008; Stiglitz 1988, pp. 273ff; Summers and Heston 1999; Cowell and Gardiner 1999). The importance of the MUI underlies progressive taxes, which re-distribute income from high to low income people.

That said, there is controversy about the measurement of the MUI and the extent to which cost-benefit analysis should take account at all of the re-distributive effects of government interventions (Harberger 1978, Kaplow 1996). In some cost-benefit analysis, the benefits of any resulting re-distribution are ignored on the grounds that if government wanted to re-distribute income, it should do so directly through the tax/transfer system. However, as noted by Stiglitz:

> … when a government's ability to re-distribute income through non-distortionary means is limited, the distributive effects of a government project should be taken into account (p. 274)

This is an area dogged by complexities, with the results highly dependent on the underlying assumptions (Johansson-Stenman 2001). Nevertheless, it is common practice for cost-benefit analysis to provide higher weights from benefits or costs to people with lower incomes. For example, it is recommended by the UK Treasury where distributional impacts of a policy are important (HM Treasury 2011), and it has undertaken recent methodological research in this area (Fujiwara and Campbell 2011). The Australian Department of Finance and Administration noted:

> As a general practice, it is recommended that analysts refrain from attaching distributional weights to cost and benefit streams in the interest of avoiding subjective bias. The exception is where an unambiguous government policy objective can be identified to assist the specific group at which the project or programme is aimed; and where the priority of assistance to this group relative to other groups is also clearly established. These are stringent and restrictive conditions. (DOFA 2006, p. 86)

We explore aspects of this issue further below, but the bottom line is that there are stronger grounds for including distributional impacts in the analysis for two reasons:

(a) a major motivation for the NDIS is essentially re-distributive (to move resources to people with large unmet needs from taxpayers generally)

(b) the NDIS would be a more efficient route for such re-distribution than the tax-transfer system (that is just giving people with disabilities extra money without any constraints and letting them buy what they want). Moreover, the usual problems of re-distribution are much less acute for the target group of the NDIS than for re-distributive policies generally applying to other people (see box 20.7 later).

Once the MUI is considered relevant, the welfare loss of taxpayers, and welfare gain from NDIS participants will depend on their incomes and individual circumstances. Nevertheless, other than in the circumstances spelt out in section 20.8, taxpayers experience a wellbeing loss (C_1) from the transfer of $6.5 billion to the NDIS.

The benefits

Section 20.2 described the broad groups of likely benefits — private benefits for people with disabilities, fiscal offsets and economic efficiency gains. It is important to note, given the discussion of the marginal utility of income above, that the private welfare gains from additional resources provided by the NDIS to people with

disabilities (C_2) will be greater than the lost benefits to taxpayers (C_1). Box 20.1 gives a concrete example of why that is likely.

Box 20.1 **A tale of two people**

To give a concrete example, Mike has an annual income of $150 000, which he spends on all basics of life, but also holidays, a nice house and a car. In contrast, Mary, who has a severe disability, has an annual income — after government transfers — of $25 000, and she gets around half of her reasonable personal care needs met. Beyond the basics, she cannot buy the things that Mike can. More particularly, she is sufficiently poor that she cannot afford to top up her support needs to an adequate level. She would need another $15 000 to do so. She cannot get out much, she needs a nappy because she cannot get enough personal care, and she endures discomfort and indignity. (Later in this chapter, we will also discuss how these circumstances affect her employment, and the consequences this has for her and the community.)

There are many people like Mike in Australia and relatively few people like Mary. Under the NDIS, 15 'Mikes' give up $1000 each and Mary gets goods valued at $15 000 to buy the needed supports (closely equivalent to an income supplement of $15000).[5] Mary now has an income equivalent to around $40 000 and the 15 'Mikes' have $149 000 each, only a very little lower than before. The loss in wellbeing experienced by each Mike is low, and is still likely to be low when summed across all 15 of them. The wellbeing gains for Mary in having her needs met are likely to be very large in comparison with aggregate lost wellbeing of the collective Mikes. The incremental consumption benefits in this case are equal to the sum of the losses in wellbeing for the 15 Mikes and the wellbeing gains for Mary. (In some approaches to the cost-benefit analysis, the losses to Mike are more apparent than real — an issue we discuss later).

Accordingly, the NDIS and associated reforms produce three broad economic benefits:

- the excess value of consumption from resources transfers to people with disabilities (V or C_2-C_1)
- efficiency benefits (E), such as more efficient service provision
- the economic benefits of fiscal savings, such as those arising from reduced DSP payments (F). The economic benefits of fiscal savings are not the dollar value of the savings themselves, though that is what will show up on the government's budget bottom line. Rather, fiscal savings take pressure off taxes, and the gain from doing so is equal to the avoided marginal excess burden on those taxes. In

[5] Not exactly so, since at the margin, Mary might spend a small amount of the $15 000 on things outside her individualised package that are not directly related to her disability, in which case the income equivalent of the package is somewhat less than its dollar amount (reflecting the inefficiency sometimes entailed by hypothecation).

other words, the economic benefits from fiscal gains are symmetric to the economic costs of higher taxes.

The remaining relevant factor is the distorting impacts of taxes (MEB), which as noted earlier, is around $1.56 billion.

Given there are around 410 000 people funded by the NDIS, the value of V+E+F per participant in the scheme would have to exceed about $3800 per person to pass a conventional cost-benefit analysis.[6] Given the large intangible costs described above and in chapter 2, and the reasonable prospects for some benefits from both E and F, that prospect seems strongly probable. The NDIS meets the 'plausibility test'.

20.5 The employment impacts on people with disabilities of the NDIS, DSP and employment service reforms

As discussed in chapter 6 and appendix K, Australia has a relatively poor performance in employment of people with disabilities. The NDIS would provide much greater support for people with disabilities. As shown below, there are around 60 000 adults who would be eligible for the NDIS and who perceive employment as a genuine possibility (table 20.3). Moreover, many of the obstacles to work appear to be surmountable, either through the direct interventions of the NDIS (in school to work transition programs, supported employment and community engagement) or through changes in broader employment supports (for example, in disability employment services, which lies outside the NDIS).

While there is good potential for achieving better job outcomes for people eligible for funded NDIS support, the target for disability employment initiatives is much larger. Changes in community attitudes and individual initiatives can also affect the general employment prospects of people with disabilities outside tier 3 of the NDIS. The Commission has proposed a range of initiatives that are likely to engage the community and business to improve employment outcomes (chapter 4). These are part of the tier 2 functions of the NDIS. Complementary measures from reform of the DSP and additional provision of employment services (chapter 6) and appropriate training would provide greater incentives for employment, provide better support for people in jobs, and improve job matching. Recent analysis by Mavromaras (2011) using Australia's HILDA survey found that even short VET courses can significantly improve employment prospects for people with

[6] That is, $1.56 billion/410 000.

disabilities, increasing their productivity and attractiveness to employees. That study also found that most people in the survey reported that they could work to some extent, despite their disability.

A *package* of reforms, of which the NDIS would be a core part, would be the most effective way of achieving long run gains in disability employment rates.

Table 20.3 **The NDIS would improve employment prospects for people receiving funded support**

	People eligible for funded NDIS supports 15–64	*Share of those not working*
	Number	% of total
Not in work, but no current employment restrictions	8 117	4.0
Say that they cannot work at all under any circumstances	140 193	69.9
Say they could work, but have employment restrictions	42 647	21.3
Restricted in type of job	7 067	3.5
Restricted in number of hours	1 051	0.5
Difficulty changing jobs or getting a preferred job	7 547	3.8
Need for time off from work (at least one day per week)	5 875	2.9
Need for employer provided equipment and/or special arrangements	6 707	3.3
Need for support person at work or is receiving assistance from a disability job placement program or agency	849	0.4
Need for ongoing supervision or assistance	13 550	6.8
Say they cannot work, but could in fact work if they received further support[a]	9 548	4.8
Training	1 119	0.6
Equipment	969	0.5
Working at home	2 471	1.2
Time off	534	0.3
Assistance with work or personal care tasks	2 987	1.5
Other	1 469	0.7
Main target group for employment assistance	**60 313**	**30.1**
Total people in the NDIS who are not working	200 505	100.0

[a] Some people initially said that they could not work, but subsequently in the survey indicated that they could do so with some supports. [b] The main target group is everyone not in work, except those who say they could not work under any circumstances.

Source: SDAC 2009 (unpublished data)

The Commission has undertaken detailed, but experimental, calculations of the potential impacts of the combined impacts of the introduction of the NDIS and its proposed DSP/employment reforms. These are similar in vein to the scenario approaches — informed as much as possible by evidence about what may be plausible — used by the Commission in its ex ante assessment of the possible gains from the COAG National Reform Agenda (PC 2006) and Lattimore (2007).

Conservative assumptions have been used. In particular, change would probably be relatively slow. This reflects the fact that major reforms, like the NDIS and DSP changes, are likely to be most effective for people who are just entering the system for the first time. People in the 'stock' would often have missed opportunities for early intervention, had poor educational experiences, been dogged by low expectations by others ('learned passivity' as one party put it), faced a community culture not strongly conducive to their employment and had long breaks from employment that erode skills and confidence. The system should try to engage these people, but the success rate could be expected to be higher for people who are entering the disability system for the first time.

Moreover, the implications of employment change for national output needs to take account of the type of jobs being created. As discussed in the Commission's work on the National Reform Agenda (PC 2006, p. 284), Forbes et al. (2010) and Lattimore (2007), the research suggests that the productivity rates of people leaving (or at the margin, not entering the DSP) tend to be lower than the average worker, and their weekly hours of work lower. It is notable that many have relatively low qualifications (Mavromaras 2011, p. 8) and have had precarious employment experiences, which is why many entered the DSP in the past. This is an *average* phenomenon. There will be some people with disability with advanced skills, who with support, would have much higher than average economy-wide productivity levels and could work longer hours than many others.

That said, even conservative assumptions lead to significant economic and employment effects. Table 20.4 shows the impacts of two 'what if' scenarios, both of which have been realistically modelled so as not to exaggerate the gains.

The impacts of catching up to OECD average employment

Were Australia to reach the average OECD relative employment rate for people with mild to profound disabilities (compared with those without such disabilities), then it is estimated that their overall employment would rise by around 100 000 by 2050. This equates to an increase in the employment rate of this group of 11 per cent above its counterfactual level.

This employment increase would in turn increase GDP by around 0.2 percentage points above its counterfactual level. The latter may not sound very high, but it would be a permanent effect, and GDP is a large value. So, in 2050 alone, the increase in constant price terms of GDP would be around $8 billion.

DSP, NDIS and employment services reform

In fact, with a package of reforms, it is likely that Australia could do better than the OECD average in terms of employing people with mild to profound core activity disabilities. This reflects the strong growth prospects of the economy and the fact that the Australian economy has a particularly strong orientation to the production of services (Productivity Commission 2003b, p. 23ff), which may generally better suit the employment of people with disabilities. Moreover, many people have work limiting disabilities — but no core activity limitations — and the prospects of their greater employment are ignored in the 'catch-up' calculations above.

While only one source of employment improvement, the Commission has examined some credible 'what if' scenarios associated with reform of the DSP (and the associated improvements in employment supports, greater aspirations of people with disabilities, and increased receptiveness of the community and business to the employment of people with disabilities). The reforms proposed by the Commission would be likely to reduce the inflows into the DSP and to increase the outflow rate. It is still expected that absolute DSP numbers would rise, mainly reflecting population growth, but also the 'momentum' to the stock by given inflow rates, which can only be expected to fall gradually. The Commission has incorporated some reduction in the inflow rate and an increase in the outflow rates under the counterfactual of no policy change — reflecting the fact that stronger economic growth affects such rates. We have assumed that:

- the DSP inflow rate falls from 0.62 per cent to 0.35 per cent by 2050 through DSP reform. Notably, the inflow rate was just under 0.45 per cent in 2006 (before rising again), so the assumption does not appear excessively optimistic. For our purposes we have assumed that under the counterfactual (without the Commission's proposals), the inflow rate would fall to 0.45 per cent, reflecting the impacts of pre-announced policies, such as changes to the impairment tables announced by the Australian Government.[7]
- the DSP outflow rate rises only slightly from 6.2 per cent to 7 per cent in line with reversion to recent rates. The Commission has not estimated large increases in outflow rates, since reforms produce two contrary pressures on outflows. On the one hand, people already on the DSP will have more opportunities for jobs. On the other hand, the outflow rate mostly relates to people who have just entered the DSP (appendix K), and the inflow rate will have fallen. The Commission has assumed that these factors cancel each other out, so that the net impact of reforms relative to the counterfactual are approximately zero.

[7] The Commission has not factored in the proposed expansion of the income tax free threshold associated with the carbon tax, which will also affect work incentives.

Accordingly, the outflow rates are the same under both the policy change and counterfactual and tend to 7 per cent.

A further important aspect of DSP reform is the expectation that the employment rate of people who *remain* on the DSP would rise. We have assumed that a doubling of the employment rate to around 20 per cent (mainly in part-time, lower skilled jobs) is possible.

Table 20.4 **Employment, output and fiscal gains from two scenarios**

Impact	*Unit*	*Impacts of catch-up to OECD*
Additional share of people with mild to profound disability in work (2050)	%	10.6
Number of additional people with mild to profound disability employed (2050)	Number	100 795
Increase in GDP over counterfactual (2050)	%	0.22
Increase in GDP over counterfactual (2050)	$m	8 006
		***Additional** impacts of DSP reform*[a]
Reduction in DSP population rate cf counterfactual (2050)	%	15.9
Additional increase in employment by people with disability by 2050[b]	Number	218,250
Increase in GDP over counterfactual (2050)	%	0.66
Increase in GDP over counterfactual (2050)	$m	23,596
		Total impacts
Additional increase in employment by people with disability by 2050 (a)	Number	319 046
Increase in GDP over counterfactual (2050)	%	0.88
Increase in GDP over counterfactual (2050)	$m	31 603
Annuity value of net fiscal savings to DSP (2010 to 2101)[c]	$m	2 834

[a] The impacts of the DSP net out the impacts of achieving 'catch-up' to the OECD employment performance. [b] The employment gains include people who continue to be eligible for the DSP. [c] The fiscal savings from the DSP reflect the outcomes of 'catch-up' and the other incremental gains from DSP/employment support improvements. All dollars are in 2010-11 constant prices.

Source: Commission calculations.

Collectively, these changes both add to economic growth and lead to fiscal savings from reduced DSP outlays (sometimes in the form of paying part, rather than full rates of DSP). Realistically, some people who do not enter the DSP under the reforms (or who leave it), are likely to receive income support from other sources at times (for example, as a result of periodic unemployment). We have made an assumption about the average level of such payments.

Overall, the impact of these reforms could be a reduction by 2050 in the DSP stock of 15 per cent compared with the counterfactual (with the DSP rate as a share of the

working age population being 4.9 per cent at that time, compared with a counterfactual rate of 5.9 per cent). Including those people who would work while at least receiving a part pension, employment would be around 220 000 higher than the counterfactual. *In order to avoid double counting, we have made an assumption that nets out the employment changes reflecting achievement of the OECD catch-up scenario discussed above.*[8] This reflects the likelihood that many people with mild to profound disability comprising the 'catch-up' group would formerly have been receiving the DSP. Accordingly, the estimated employment impact of 220 000 is additional to the 100 000 employment increase associated with the 'catch-up' effect.

The GDP impacts of DSP reform are greater than those associated with the employment gains for people with mild to profound disability rates, mainly reflecting the larger size of the employment changes. Overall, the effect would be an increase in GDP of an estimated further 0.7 percentage points above its counterfactual level. In 2050, that would translate to additional GDP of around $24 billion.

The fiscal effects begin slowly — and as noted above — are moderated by the fact that many people would continue to access a part pension or sometimes use other income support payments. Nevertheless, the fiscal effects grow over time, and when summed and put in present value terms, can fund a large annuity. For some indicative calculations, the reforms would produce a fiscal saving equal to an annuity of more than $2.7 billion per year in constant price terms.[9]

Some cautions about the Commission's estimates above

The results above reflect assumptions. The Commission has attempted to make these as realistic as possible, and has estimated the impacts of policy compared with reasonable counterfactuals. The general approach has been to adapt the methods of the Treasury Intergenerational Report (and the similar approach described in chapter 14) to take account of additional labour inputs generated by a package of reforms aimed at greater employment integration of people with disabilities. However, the results *are* assumption led. The detailed model is available on request.

8 However, the fiscal gains discussed below incorporate gains from the employment of both groups.

9 The annuity value is calculated by initially estimating the present value of fiscal savings over a long period (in this case until 2101, when the ABS population projections cease). The present value of the savings was equal to around $80 billion. The annuity value is the *fixed* amount paid (in constant price terms) for each of those years, such that the present value of the stream of payments is also equal to $80 billion. This gives a better idea of the scope of the fiscal savings, when the savings grow over time as a policy reform 'bites'.

Secondly, as emphasised earlier in this chapter, not all economic effects are economic gains. For example, employment involves forgone leisure and the lost gains from informal work. Nevertheless, the modelled reforms do generate significant long-run fiscal savings, and do raise employment and economic output. The results ignore any fiscal savings to government from taxes on the additional labour (though such savings are transfers and, given tax-free thresholds, are unlikely to be high) or from GST revenue (which would be more important). While the Australian Government's budget processes do not factor in these indirect types of fiscal offsets in making decisions about whether to adopt spending measures (given their uncertain character), they are nevertheless relevant to the economic analysis of the impacts of the NDIS and the associated package of reforms.

As with many of the other gains from disability reforms, some of the most significant benefits are intangible. In his research using the HILDA survey, Yu (2011) found that the *wellbeing* effects of keeping or getting a job (when the alternative state was unemployment) for someone with a work-limiting disability was more than $300 000 annually. This is implausibly high, and Yu himself acknowledged that the results varied with different model specifications. Nevertheless, the actual dollar value aside, Yu still found enough supporting evidence that

> … income is significant for overall life satisfaction but is much less important than economic and social participation and perceived social support; and, participation and social support are particularly more important among people with work-limiting disability than among others. (p. 14)

What do other studies show about the gains?

There have been few other assessments of the employment and output effects of a major systemic reform to disability supports. However, there have been assessments of some major changes.

PWC (2008) examined the economic impacts from reducing the post-injury time lost at work following the creation of the ACC in New Zealand. The study identified a difference in the average time lost due to illness and injury between Australia and the UK (both 1.44 days annually per worker) and New Zealand (1.02), which was ascribed to the impacts of the ACC. This difference equates to 3 hours per worker per year. Taking the ratio of hours worked to GDP, and multiplying by 3 additional hours suggests a $315 million GDP benefit from the ACC. This is one area where GDP is a good measure of the economic benefit, as the gain does not come from displacing leisure or non-market labour, but from using productive resources that would otherwise have been wasted. This benefit alone

exceeded the additional costs of the scheme (above what they would face if they had similar arrangements to Australia). (Moreover, there would be many other benefits, beyond GDP, from reducing time lost due to injury — most particularly wellbeing gains to the workers concerned.)

In this inquiry, National Disability Services Australia (sub. DR836, pp. 3–4) reported modelling from Compelling Economics about the financial effects of employing people with disabilities and carers:

> If just 4 per cent of people currently on the DSP found employment within the community services sector (a relatively low-paying sector and one which has limited flow-on effects), the model predicts the economic impact to be about $5 billion dollars. If, however, these people found employment across all industry sectors (in accordance with the percentage of the workforce working in each major industry sector) the economic impact (the industrial and consumption effects) could be as large as $25 billion. … If just 20 per cent of the 187,900 carers in Australia who were of workforce age, not in the workforce and were caring for a person under 65 years returned to work in the community services sector, the benefit to the economy would be $6.3 billion. If, however, the 20 per cent of carers returning to work found employment across all major industry sectors the economic impact would be around $32 billion.

These are very significant employment and output effects. However, these results are based on so-called 'multiplier' analysis, in which stimulation to one part of the economy has apparent cascading effects on output and employment in other parts of the economy. Multiplier analysis of this kind is problematic because it fails to recognise that resources in an economy are finite, and that expansion in one part of the economy draws resources that would otherwise be used elsewhere. There may be local effects where there is significant local unemployment, but at the economy-wide level, the effects are either modest, or where there is unemployment, better resolved through other policies (macro stabilisation policy). The NSW Treasury (2007, p. 12) noted:

> First and foremost, input-output analysis is concerned with measuring economic activity, and is not a tool for the evaluation of projects. Input-output analysis does not take account of the alternative uses (opportunity costs) of resources. Input-output analysis, however, will always indicate positive impacts - activity - without providing guidance as to whether such impacts correspond with net benefits. Poor investments, perhaps in heavily subsidised fields of endeavour, could be associated with greater levels of activity than good investments.

20.6 How many carers could potentially re-enter the workforce?

It is useful to consider the *potential* population of carers who may be able to return to work following the introduction of the NDIS. Overall, the Commission estimated that there were around 220 000 co-resident primary carers of people with disabilities who would be eligible for funded supports by the NDIS. (The estimates exclude people who perform a non-primary caring role or who are not co-residents, and so the real potential population of carers that the NDIS may support would be higher.) Around 120 000 of these carers were not employed (table 20.5). Of these, around 15 000 reported that they had left work because alternative disability supports were not available or too costly, or because they could not change their working arrangements to be compatible with a carer's role. The work prospects of this group are likely to improve the most after the establishment of funded support by the NDIS. The Commission examined a (conservative) scenario in which:

- this group was the only one whose labour supply was responsive to the NDIS
- 50 per cent of them obtained a job. A less than a 100 per cent effect is reasonable because jobs may not always be available or attractive compared with the Carer's Payment; and many carers face obstacles in the formal labour market after years of performing an informal carer's role. Nevertheless, the 50 per cent estimate is probably conservative
- they have the average economy-wide productivity rate
- they have 80 per cent of the average weekly hours of others (equating to around 27 hours a week), reflecting the likelihood that more will work part-time than the average employee.

If the change was instantaneous, this would translate to an increase in GDP of around $750 million annually. Clearly, the effect would take some time to occur. There would be some savings from reduced Carer Payments. This would be likely to underestimate the true labour supply response by carers:

- As noted earlier, informal carers are sometimes not co-resident, and yet their work capacity may also be affected by their caring role.
- Some people who have left work because of their emotional connection to the person with a disability or because they preferred to care fulltime may be responding to the inadequacy of existing formal supports. Some of these may also enter work — at least on a part-time basis — when the NDIS delivered better supports.
- Many carers — around 100 000 — work while exercising a caring role. Yet around 40 000 of these have reduced their weekly hours, and around one quarter

need to take time off work to undertake their caring role (table 20.6). Assuming that the NDIS allows the former group to increase their weekly hours by 5 hours a week, and that the latter group would take 10 days less off per year would equate to an to an increase in GDP of a further $800 million.

Table 20.5 **Primary carers often have lost connection to the labour force**[a]

	Sex of carer		*Age group of main recipient of care (years)*			*Total*
	Male	Female	less than 15	15-44	45-64	
	no.	no.	no.	no.	no.	no
(a) Employed primary carers	26 138	74 529	52 952	33 000	11 806	100 667
(b) Primary carers who were not employed						
Worked just before taking on the caring role	17 308	36 668	21 296	16 388	14 794	53 976
Did not work just before taking on the caring role	13 791	54 787	29 792	21 435	14 492	68 579
Total primary carers who were not employed	31 100	91 455	51 088	37 822	29 286	122 554
Reason primary carers had left work just before taking on caring role						
To commence or increase care	8 587	25 547	16 212	9 322	8 120	34 133
Retired/became eligible for pension/benefit/other	10 903	14 272	7 698	9 786	6 675	25 175
Total primary carers who had left work just before taking on the caring role	19 490	39 819	23 910	19 108	14 794	59 309
Reasons primary carers had left work to commence or increase care						
Alternative care not available/too expensive/unable to change working arrangements	3 581	12 204	8 094	4 245	3 447	15 784
Emotional obligations/preferred to care full-time/other	5 005	13 343	8 119	5 076	4 673	18 348
Total primary carers not employed who had left work to commence or increase care	8 585	25 547	16 212	9 322	8 120	34 132
Selected effects on income and expenses						
Role has decreased income or caused extra expenses	32 393	92 790	63 602	36 538	21 770	125 183
Has difficulty meeting everyday living costs	25 395	64 844	43 454	27 893	16 726	90 239
Total primary co-resident carers (a+b)	57 238	165 984	104 040	70 822	41 093	223 221

a The CURF estimates provide a slightly lower population of people with disabilities covered by the NDIS than the Commission's estimate of the eligible population (which also takes account of evidence from outside the CURF). Accordingly, the results have been re-weighted to address the under-numeration.

Source: SDAC CURF 2009.

Table 20.6 **Carers who do work, often need to reduce their workload**[a]

	Sex of carer		*Age group of main recipient of care*			*Total*
	Male	Female	less than 15	15-44	45-64	
	no.	no.	no.	no.	no.	no
Needs time off work	8 937	18 584	15 951	8 100	2 338	27 521
Does not need time off work	17 201	55 944	37 000	24 900	9 469	73 146
Weekly hours are unchanged	17 499	43 988	29 002	22 299	7 903	61 487
Weekly hours worked are reduced	8 639	30 541	23 950	10 701	3 903	39 180
Total	26 138	74 529	52 952	33 000	11 806	100 667

a Missing data mean that adding across age groups does not add to the total.

Source: See above.

Accordingly, under reasonable assumptions, the NDIS could increase GDP by around $1.5 billion annually (given existing productivity levels and prices), but the realisation of this effect would be some time off.

It is important to interpret these changes carefully, and to appreciate where the biggest gains may lie. While the above employment and GDP changes are economic *effects* of the NDIS, not all of the gains are economic *benefits*. This is because much of the employment effect represents a shift from formerly unpriced informal work to formal work in markets. One way of illustrating why measured employment can be misleading in this context is to consider a hypothetical case in which there are two families with children with a disability. The carers in each family swap roles. They switch from informal care for their own child to formal paid care for the other's child. The *measured* economy wide level of employment would have risen by two, although caring hours may not have changed at all.

In fact, the economic benefits relating to the employment of carers may sometimes lie elsewhere. One major benefit would be the better utilisation of some carers' skills. Under current arrangements, people with highly valuable specific human capital (such as law, computing science or business skills) can be forced to leave their jobs to take on greater caring roles because of inadequate formal support. In that case, while the NDIS may not increase the (appropriately measured) *number* of employees in the economy, it would allow a more productive allocation of labour. People with skills and qualifications could return to occupations where their productivity is higher. Participants gave personal examples of this, where the gains, just from their own experiences alone, would amount to millions of dollars of economic benefits over a lifetime (box 20.2).

Box 20.2 What some participants said about the obstacles to employment

As a communications professional with strong employment history and post-graduate tertiary qualifications, if I had been able to continue a combination of full and part time employment in a two-income household while raising two children I would expect at age 50 to have paid off my mortgage, accumulated $500K in super and have a property/stock investment. Instead, because one of my two children has a disability, my total income loss has been around $1.2m and the economy has missed out on my tax payments and consumer spending for over 10 years, as I haven't been able to commit to even part-time employment during school years. This won't change beyond school age as there is no personal care/support available to TAFE/university students. I have not been able to undertake the professional employment for which I am trained due to [no vacation or after school support; the need to personally provide therapy supports to my child], unbelievable amounts of time spent filling in forms… (participant in inquiry)

I have an 8 yr old son, Max who has Angelman Syndrome (a neurodevelopmental disorder that results in a severe intellectual disability, lack of speech and epilepsy). I also have another son who is 10 yrs old. When my first child was born I was working as a project manager at a biotechnology company in Melbourne (salary about $90k full time) and went back part-time when he was about 6 months old. [After Max was born, I have had an interrupted career, reflecting the fluctuating nature of Max's condition and the poor nature and flexibility of the supports available, such as poor access to after school care.] In a few years time he will be of high school age and there will be no after care options for him and I will probably have to give up work again or work flexible hours if I can get them. (participant in inquiry)

David [who has since died] was the national political correspondent for the Bulletin Magazine, working out of the federal parliamentary press gallery, when our third child, Shane, was born in October 1989. It was a highly prestigious and privileged job that David absolutely loved, and the culmination of his then 20-year career in journalism, most of it as a political reporter for the Australian newspaper. … Apart from his concerns about my psychological, emotional and physical state, the primary reason David decided to give up his career in mid-1991 was because he wanted to concentrate so intensively on exercising/stimulating/working with Shane every day in the very crucial early intervention years when the brain is still developing. He was totally devoted to Shane - as to our other two children, although they undoubtedly suffered because of Shane's intensive needs, and because David and I were so abandoned and entirely left to our own devices in any sort of therapy/respite sense. (participant in inquiry)

It often affects families more after parents split and by then the mother/father (usually mother) have been out of the workforce for quite some time so therefore their poverty and the dilemma [of working or not] is accepted as being 'normal' in our moral society. After all they were out of the workforce anyway! Give it a few weeks and I will be your subject. I do not have free family care (besides me) in two more weeks, as my youngest daughter who has been providing 'free' care to her sister whilst studying needs to have her own career, not just be a back up to mine. Soon a decision will have to be made whether to quit my job or leave my daughter in respite care – the only alternative available to me after being a sole parent carer for more than two decades.

Words in […] is paraphrasing by the Commission.

Moreover, as shown in table 20.1, better support for people with disabilities would be associated with significant wellbeing benefits for carers. Some of these may be realised by creating a more diverse life and role through formal paid employment.

Furthermore, work increases income (a major concern for carers — table 20.3) and the potential for families to live a better life.

20.7 A more complex analysis of the 're-distributive' effects of the NDIS

It is useful to isolate the possible magnitude of the re-distributive impacts of the NDIS beyond the qualitative analysis presented in section 20.4. In undertaking this analysis, it is important to understand the nature of these re-distributional effects. Disability has two fundamental impacts on the consumption possibilities of people:

- The low income of people with disabilities and their families often reflects disability. Carers and people with disabilities face significant obstacles to employment, and when working, often do so on a part-time basis and on lower wages than the average (showing up in figure 20.1 and in chapter 6). That alone means they have a lower potential to enjoy the same level of economic wellbeing as other, richer, households. (This is a major reason for trying to achieve better employment outcomes.)
- Given the nature of disability (and indeed one basis for its definition), people with severe disabilities have significant limitations in activities of daily living and in self-management (as in many cognitive impairments). Recalling that non-market work is a large source of (albeit unmeasured) income and consumption, households with a person with a disability cannot 'produce' (and therefore consume) as many non-market based goods as others. A simple example would be the capacity for home refurbishment when so much time is spent meeting basic personal needs, but a more important one is that support needs displace the capacity for people with disabilities and carers to enjoy leisure (an important economic good). This means that the *real* income (and wellbeing) of households with a person with a significant disability is considerably less than other households, *even* where the households have the same measured dollar incomes.

The Commission has undertaken some experimental calculations of the economic benefits of the NDIS in providing the equivalent of around $15 800 of hypothecated disability supports per NDIS participant. There are several assumptions underpinning these calculations (box 20.3).

The results suggest that non-NDIS taxpayers lose welfare equal to around $3.0 billion, while NDIS participants gain welfare benefits of $10.8 billion, or a net consumption benefit of $7.8 billion from re-distribution. Given the distortionary impacts of raising the funding, this would suggest net economic benefits from just this effect of over $6 billion.

One possible concern in the calculations is that it is assumed that the dollar value of transfers to NDIS participants are equivalent to an income transfer of the same amount. In conventional economic analysis, the benefits to people of hypothecated payments are less than their equivalent income value. However:

- the considerable freedom people have in fashioning supports means that the value of the packages would be closer to their income equivalent
- as explored in greater detail in chapter 8, the apparent weakness of hypothecation is less clear for some groups of people and for some purchases (for example, in some clinical therapies, or where people might focus on the 'now', and downplay the long-term wellbeing benefits of certain investments).

Box 20.3 The methodology for calculating the benefits of (just one aspect) of the re-distributive impact of the NDIS.

The analysis of just one of the re-distributive impacts of the NDIS depends on the following assumptions:

- A marginal elasticity of income of 1.24 (ρ) as measured by Layard et al. 2008 — which is one of the more careful studies in this area, and consistent with other findings.
- The development of equivalised household income distributions for people eligible for the NDIS and those who are not (taking account of data from the ABS SDAC and the Household Income and Income Distribution, Australia, 2007-08).
- Financing the NDIS through a progressive tax on income[10] (which leads to contribution levels of around $30 per person with annual incomes of around $30 000 up to an average $1400 per annum for people in the top 10 per cent of the income distribution. The parameters for the progressive tax regime are set so they generate the required $6.5 billion of revenue.

Developing weights based on the usual formulation:

$w_i = \left\{ \frac{\bar{y}}{y_i} \right\}^{\rho}$ where y_i is the ith income value across the population, and $\bar{y}$ is the median income. In the estimates, the weights take account of the significant levels of transfers involved (that is, the same marginal rate is not applied for every dollar of transfer, but alters as transfers decrease or increase incomes).

For tractability (and because of data limitations), it is assumed that all people eligible for funded supports under the NDIS receive the same entitlement.

[10] Of course the actual financing method may be a reduction in government spending elsewhere, but as noted earlier, there is a tax equivalent to this form of financing.

Given the above, the assumption of no loss from hypothecation seems reasonable. Moreover, even were there a welfare loss from hypothecation, it would be likely to be relatively small compared with the likely underestimation of benefits arising from other sources. The Commission is likely to have significantly understated the benefits of re-distribution because:

- the value of the marginal utility of income is drawn from analysis of the general population broken down by income levels. It is likely that for families experiencing significant disability, the marginal utility of income, at any given level of income, would be higher than that found for the average person
- the estimates of the benefits excludes the fact that the value of transfers to people with disabilities should reflect that properly measured income would be lower than those recorded by official statistics. Were that effect included, it would raise the weights on the value of the income transfers to people with disabilities and further raise the net benefits.

A warning about the use of distributional weights in other cost-benefit analyses

It is critical to understand that in most circumstances, the analysis of re-distribution benefits taken above should *not* be applied in many cost-benefit analyses, unless the wider efficiency impacts of such re-distribution are also included in the analysis. This reflects a host of reasons:

- *Work disincentives:* Re-distribution not only affects the work incentives, productivity and capital accumulation as governments tax labour and capital income (the marginal excess burden discussed earlier) to acquire the revenue needed to fund the income transfers, but it also affects the work incentives and productivity of people *receiving* the income transfers. This is a major problem in current income transfer systems, and one of the principal targets of attempts by governments to balance the need for equity and the problems doing that has on people's incentives to contribute economically to a society. The Commission examines just such problems in relation to the Disability Support Pension (which covers a much larger population of people with lower disability severity on average than those receiving funded supports from the NDIS).
- *Moral hazard:* Income transfers can create moral hazard. People can reduce the income penalties of risk taking if they can be compensated for bad outcomes, while bearing the full benefits if the outcomes are good. For example, people would be willing to make riskier investments than would be optimal. Moreover, people's care about their health or the riskiness of any other activities would also be reduced.

- *Encouraging a shift to non-market work:* People would have incentives to shift their effort into unobservable untaxed non-market based work, even if they were relatively inefficient in this activity, knowing that the resulting lower observed income would lead to higher income transfers from government.
- *Fraud*: It could encourage fraud or reluctance by people to truly reveal changed income or other circumstances. Social security fraud, while rare, still involves significant losses to taxpayers, and sizeable compliance costs. These losses and costs would be significantly more were governments to base income transfers solely on equalising the marginal benefits of income amongst people. These problems become particularly hard if the circumstances justifying transfers were hard to objectively verify. For instance, this already applies to people with less severe and hard to diagnose problems, such as some muscular injuries or anxiety conditions
- *Intertemporal issues*: Snapshots of people's incomes fail to take account of income over their lifecycle. In a given year, it might seem reasonable to provide large transfers to a high-achieving, but low income PhD student, but those grounds look far weaker when the likely lifetime income of such a person is considered.

These problems are likely to be largely absent among people eligible for the NDIS (table 20.7).

20.8 A wrinkle or two

Transfers from higher income people may actually raise their own wellbeing

As raised earlier, the costs of forgone income for taxpayers may not be as large as implied by conventional economic analysis (and indeed may actually be benefits).

One way in which this would arise is if people's own wellbeing improved if they transferred income to people with disabilities. That is true for many people, and is revealed by the significant role played by philanthropy and volunteering by ordinary people in the current disability system (a role the Commission does not want to crowd out — chapter 4). However, it is clear that people have not voluntarily met *all* the unmet needs of people with disabilities in their local communities, as evidenced by the substantial deficiencies discussed in chapter 2.

Table 20.7 **The problems of re-distribution largely disappears for NDIS participants**

Apparent problem of re-distribution	*Why the problem does not apply to NDIS participants*
Work disincentives	The provision of significant resources under the NDIS is unlikely to reduce the incentives for people with severe and permanent disabilities to seek work. This reflects three factors. First, the obstacles posed by severe disability to employment are already substantial. Second, access to resources under the NDIS is not subject to means testing, as is the case for income support payments. Thirdly, if anything, the provision of supports would be likely to encourage rather than discourage work because it improves the functioning that is a prerequisite for getting a job. As an illustration, a paraplegic with low means and no job would be unlikely to get a job without a well-functioning wheelchair, (and no private financial institution would lend money to buy such a chair). The Commission has been advised that people sometimes have to wait for wheelchairs, or are told that, until more funding is available, they should put up with wheelchairs that they have outgrown.
Moral hazard	Most cases of disability among NDIS participants arise from factors outside their control (such as disease, most accidents, congenital malformations, chromosomal abnormalities and birth trauma). Where moral hazard may apply most — certain types of accidents — it would be the NIIS not the NDIS that would cover new cases. Where it would be appropriate, the NIIS would include the capacity for risk rating.
Encouraging a shift to non-market work	One of the motivations for the NDIS is that without adequate support, people with severe disabilities cannot engage in such non-market 'work' — like personal care, cooking and cleaning.
Fraud	The NDIS applies only to people with significant and permanent disabilities — many of which are manifest. Testing for eligibility would involve expert assessments. Consequently, it is much easier to observe disability accurately in the NDIS (than in other areas where people might seek assistance from government, such as more minor disability or emotional trauma from natural disasters). Moreover, the design of the NDIS encourages people to only reveal severe disability if they genuinely have it because the NDIS would provide supports that are generally only relevant to their specifically identified disability needs (a so-called 'incentive compatible' design). Even when people cash out their individualised packages under self-directed funding, they must adhere to an appropriate and approved plan. In the main, payments hypothecated to a person's disability support needs are not valuable for people without significant disability.
Intertemporal issues	The eligibility test for funded support by the NDIS requires disability to be severe and permanent, with the strong likelihood that people have low lifetime incomes as well as low incomes in any given year.

In theory, this might reflect the practical difficulties of unilateral action by taxpayers, such as finding the people who need support, knowing how much support they need and monitoring outcomes. These difficulties can only be met by some system, and that cannot be created by a single taxpayer. As put by Woolley

(2006), people may want income re-distribution, but are unable to achieve it because of the difficulty of collective action. The NDIS would solve these practical problems, and it is possible that any individual would be willing to commit resources to a coherent system so long as other taxpayers also did so (thus making re-distribution a public good in this case).

To the extent that this was true, the apparent costs from taxpayer transfers identified by conventional cost-benefit analysis above would be too high, and the net economic benefits of the NDIS would be greater. That said, the size of any such effect is uncertain (and, as Woolley notes, empirical evidence about income re-distribution as a public good is not strong).[11]

The NDIS raises the benefits of transfers from the current disability system

The current disability system already provides billions of dollars of support to people with disabilities. However, in many cases, it directs those supports in areas that do not take account of the preferences of people with disabilities. (Outside Western Australia and some parts of the Victorian system, the packages of supports do not allow much choice for people with disabilities.) This implies that under the current system, the 'excess value of consumption' (V identified above in section 20.4) is less than it might otherwise be. By providing more individualised funding, the NDIS leverages greater economic benefits from *existing* funding. These represent pure economic benefits, because the economic costs of existing funding have already been borne.

20.9 The NDIS as an insurance product

As discussed earlier, an alternative framework for considering the economic value of the NDIS is that it acts as an insurance product. People show that they value insurance for many risks in their lives — from loss of goods (car and household insurance), the loss of income for themselves and their families (income protection and life insurance), and holiday insurance. People value insurance even if they never claim. This is revealed by the fact that the sales of insurance services in Australia in 2009-10 was $37 billion. The actual wellbeing benefits of those sales

[11] It is likely that a half way house applies. People value other people's wellbeing, but at some point, their willingness to provide further transfers starts to wane. However, all that means is that the marginal welfare gains to the philanthropist from philanthropy decline at some point. They would still assign some value to transfers, even if those transfers exceeded the amount they thought appropriate. Accordingly, once philanthropy is an important motivator for taxpayers, the gains from the NDIS are greater than suggested in the modelling in this chapter.

(so-called ‘consumer surplus’) is hard to determine because they depend on the nature of the demand. Nevertheless, existing (non-disability) insurance policies could be expected to produce economic benefits to Australians of many billions of dollars.

As discussed in chapter 14, there are no adequate commercial products for providing lifetime care and support for disabilities, so there is no benchmark for the value of the more comprehensive insurance product represented by the NDIS. In that context, to the extent that people see the NDIS as an insurance product, payments to the NDIS insurance pool by taxpayers do not represent welfare losses for themselves and benefits for people with disabilities. Rather, the contributions would reflect the price that (barring market failures) people would willingly pay to purchase peace of mind that they or their family would receive reasonable lifetime care and support if they were to acquire a severe disability. The framework used to value the re-distributive benefits of the NDIS above would still (roughly) apply. The difference would be that the value to people with disabilities in that framework would be equivalent to the sum of the expected benefits to taxpayers of ‘premium’ payments to the common insurance pool. However, it is important to emphasise that the insurance approach is an alternative way of valuing the gains of the NDIS. Counting the insurance value and the re-distributive benefits as separate gains would be double counting.

20.10 The bottom line

Drawing on the above evidence, the Commission considers that the benefits of the NDIS would significantly exceed the additional costs of the scheme (which are — as we explain above — much lower than many people might think).

APPENDICES

A Consultations

A.1 Conduct of the inquiry

Following receipt of the terms of reference, the Commission placed notices on the inquiry website, advertised in national and metropolitan newspapers and sent a circular to a wide range of individuals and organisations, inviting participation in the inquiry. The Commission then embarked on an extensive round of informal consultations to help it understand the key issues and to become aware of the most appropriate ways of engaging with people with different disabilities.

The Commission also commenced discussions with the Independent Panel established by the Government to advise the Commission, and the Commission met with the panel at frequent intervals during the course of the inquiry (chapter 1).

In May 2010, the Commission released several documents in different formats, and an online Auslan presentation, to help people and organisations provide their views to the Commission:

- A full issues paper covering the issues in detail, indicated some particular matters on which it sought information, and invited formal public submissions.
- A short set of questions addressing the main issues for people wanting to provide a personal response based on their personal experiences (perhaps made in confidence).
- A short Auslan presentation of the key questions and a text version of the Auslan presentation was placed on the inquiry website.
- An Easy English version of the key issues was also made available. It was prepared in a questionnaire format that allowed people with disabilities or their support worker/s to write answers on the printed document, to be returned to the Commission.

Accompanying this material was a circular that advised participants about the different means by which they could make their views known to the Commission, explained how the Commission intended to publish material so as to reach the most

people and provided information as to how the public hearings would be organised to facilitate their involvement.

As explained in chapter 1, initial public hearings were held in June and July 2010, and the draft report was released on 28 February 2011. The draft report was distributed widely and made available on the inquiry website for downloading in whole or in part. Most participants were sent an 80-page report that contained the terms of reference, key points, an extended overview that summarised the Commission's findings and analysis, and all draft recommendations and requests for information. A smaller number of participants, mainly governments, major disability organisations, academics and research centres, were also sent several hundred pages of supporting chapters and appendices. However, all of this material could be read on the inquiry website, and printed copies were available to anyone on request.

Public hearings were held in April 2011 to discuss the draft report. In total, the Commission held 23 days of public hearings, at which 237 presentations were made, and received over 1000 public submissions, of which more than 400 were received in response to the draft report.

All transcripts and public submissions have been placed on the inquiry website and will remain there indefinitely as part of the public record of the inquiry.

The Commission also benefited from discussions with a wide range of interested parties in Australia and New Zealand during the course of the inquiry. A list of individuals and organisations that the Commission held discussions with is contained in section A.2.

To help it address a range of issues relevant to the introduction of a National Injury Insurance Scheme for people with catastrophic injuries resulting from medical treatment, the Commission held a Treatment Injury Workshop in Sydney on 19 May 2011. A list of all attendees is given in section A3.

The Commission thanks all those who contributed to this inquiry.

A.2 Visits and discussions

Australia

Aboriginal Disability Network

ACT Government departments

Advanced Personnel Management

Arryonga Community Health Centre, Arryonga, Northern Territory

Australian Blindness Forum

Australian Bureau of Statistics

Australian Federation of Disability Organisations

Australian ICF[1] Disability and Rehabilitation Research Program, University of Sydney

Australian Institute of Health and Welfare

Australian Local Government Association

Australian Lung Foundation

Australian Public Service Commission

Australian Social Inclusion Board

Baptcare

Graham Bashford

Brightwater Care Group

Bill Buckingham

Café 64, Walgett, New South Wales

Carers Australia (national meeting of all branches)

Central Australian Aboriginal Congress, Northern Territory

Centre for Disability Studies, University of Sydney

Centrelink

Office of the Chief Psychiatrist, Victoria

Chris Cuff

Comcare

CRS Australia

Darwin Community Legal Centre

Darwin roundtable (National Disability Services, Northern Territory; Somerville Community Services; Total Recreation; National Disability Coordination Officer, Charles Darwin University; Autism Northern Territory; Step Out Community Access Service [from Katherine by teleconference]; Lifestyle Solutions)

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1 ICF refers to the International Classification of Functioning, Disability and Health (see http://sydney.edu.au/health_sciences/aidarrp/about_us.shtml).

Department of Education, Employment and Workplace Relations

Department of Families, Housing, Community Services and Indigenous Affairs

Department of Health and Ageing

Department of Human Services (Australian Government)

Department of Finance and Deregulation

Department of the Prime Minister and Cabinet

Disabilities Research Unit, University of Adelaide

Disability Advocacy Service, Northern Territory

Disability ACT

forum hosted by the Disability Coalition of Western Australia (attendees included National Disability Services WA; the Developmental Disability Council of WA; People with Disabilities WA; Headwest; Advocacy Southwest; CASA (Committed About Securing Accommodation for People with Disabilities); the Ethnic Disability Advocacy Centre; and Carers WA)

Disability Services Commission, Western Australia

Disability Services Expo

Dorothy Sales Cottages

Dyson Consulting Group (Maree Dyson)

First Peoples Disability Network

Golden City Support Services

Heads of Workers' Compensation Authorities and Heads of Compulsory Third Party Authorities (National, and Long Term Support Working Group)

Professor Ian Hickie AM, Psychiatry, School of Medical Sciences, University of Sydney

Insurance Council of Australia

Integrated Disability Association, Northern Territory

Koomarri Employment Services

Law Council of Australia

Local Government Association of South Australia and Local Government Risk Services

Professor Patrick McGorry AO

Mental Health Commission, Western Australia

Mental Health Council of Australia

Mission Australia

Moree — disability service providers roundtable; Newell Advocacy

Motor Accident Insurance Board, Tasmania

MS Australia

National Council on Intellectual Disability

National Disability Alliance

National Disability Services

National People with Disabilities and Carer Council

New South Wales Council for Intellectual Disability

New South Wales Government departments

New South Wales Lifetime Care and Support Authority

Ngaanyatjarra Pitjantjatjara Yankunytjatjara Women's Council, Alice Springs, Northern Territory

Northern Territory Government departments, Alice Springs and Darwin

Perth Home Care Services

Physical Disabilities Australia

Queanbeyan Hospital

Queensland Government departments

Professor Dinah Reddihough, Director of Developmental Medicine, Royal Children's Hospital, Melbourne

Royal Society for the Blind, South Australia

Supreme Court of Victoria, Senior Master's Office

Social Inclusion Board of South Australia

South Australian Government departments and agencies

SA Mutual Liability Scheme

St Giles Society

Tasmanian Government departments

Dr Jane Tracy, Centre for Developmental Disability Health, Monash University

Transport Accident Commission

The Treasury

UnitingCare Australia

Victorian Government departments

Waltja Tjutangku Palyapayi Aboriginal Corporation, Alice Springs, Northern Territory

Western Australian Government

Professor Harvey Whiteford, Psychiatry and Population Health, University of Queensland

Worksafe Victoria

New Zealand

Accident Compensation Corporation

New Zealand Government departments

Kaleidoscope Consulting International

United Kingdom

HM Treasury

A.3 Treatment injury workshop

In May, 2011, the Commission organised a workshop to discuss a range of issues relevant to the introduction of a National Injury Insurance Scheme for people with catastrophic injuries resulting from medical treatment. Issues discussed included coverage of treatment injury under the NIIS, risk management, financing of treatment injury claims and implementation and transitional issues.

Attendees were as follows:

- Australian Medical Association
- Department of Health and Ageing
- Medical Insurance Group Australia
- Avant Mutual
- MDA National
- School of Paediatrics and Reproductive Medicine, The University of Adelaide
- The NSW Self Insurance Corporation (NSW Treasury)
- The Australasian Faculty of Rehabilitation Medicine, Royal Australasian College of Physicians
- Queensland Government Insurance Fund

- Victorian Managed Insurance Authority
- Therapeutic Goods Administration
- NSW Lifetime Care and Support Authority
- Medical Indemnity Industry Association

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