The prevalence of disability

As the population ages, there will be increasing numbers of people with a disability because disability rates are substantially higher among the old. While ageing will be a major cause of disability in future years, the prevalence of disability also depends on changes in the underlying health and social environment. The monitoring of disability trends is important to provide information on future healthcare requirements and the costs of caring for older people.

Drawing on the ABS survey of Disability, Ageing and Carers (SDAC), this paper presents a picture of people with disabilities in Australia, with an emphasis on older age groups. It examines trends in the prevalence of disability both in Australia and overseas and examines the characteristics of people with a disability by employment status. It then compares ABS data with that on Disability Support Pension recipients and presents the Commission's projections on disability trends which were used as a basis for expenditure projections in chapter 8.

7.1 Measuring disability

Disability is a growing social concern, but how it is measured is the subject of much debate. Disability is a difficult concept to measure because it encompasses a wide range of physical and cognitive problems that are difficult to categorise (Mayhew 2001, p. 3).

Disability also depends on a person's perception of their ability to perform activities associated with daily living. Survey data can underestimate some forms of disability. People may not report certain socially stigmatised conditions, such as alcohol and drug related conditions, schizophrenia, and mental degeneration.

On the other hand, disability data can be too inclusive and measure minor difficulties in functioning that do not require assistance from the community. It also has the potential to count people with disabilities more than once.

The most comprehensive survey about people with disabilities in Australia is the ABS *Survey of Disability, Ageing and Carers* (SDAC) The survey collects information about the nature and severity of disability. The most recent survey was conducted in 2003.

The ABS disability survey measures varying degrees of disability. The survey records a person as having a disability if he/she has a restriction or impairment that restricts everyday activities and has lasted or is likely to last for at least six months. The core levels of restriction are whether a person needs help, has difficulty or uses aids or equipment with a core activity task (namely communication, mobility and self care). Four levels of restriction are measured.

- **Profound**: the person is unable to do, or always needs help with a core activity task.
- Severe: the person sometimes needs help with a core activity task or has
 difficulty understanding or being understood by family or friends or can
 communicate more easily using sign language or other non-spoken form of
 communication.
- Moderate: the person needs no help, but has difficulty with a core activity task.
- **Mild**: the person needs no help and has no difficulty with any of the core activity tasks, but uses aids and equipment; or cannot easily walk 200 metres or cannot walk up and down stairs with a handrail; or cannot easily bend to pick up an object from the floor; or cannot use public transport, has difficulty using public transport or needs help or supervision to use public transport.

In addition to measuring restrictions to core activities, the ABS measures schooling or employment restrictions. For example, an employment restriction occurs when, because of their disability, a person is permanently unable to work; is restricted in the type of work performed; requires an average of one day off a week; is restricted in the number of hours worked; requires the employer to provide special equipment, modify the work environment or make special arrangements; needs ongoing assistance or supervision; or would find it difficult to change jobs or find a better job (ABS 2003d).

In practise, disability is appropriately measured according to the purpose for which it is being used. For example, in a social policy context, the main interest is in people with profound or severe levels of disability, as these people are in most need of income support and services, such as aged care.

7.2 Trends in the prevalence of disability by age

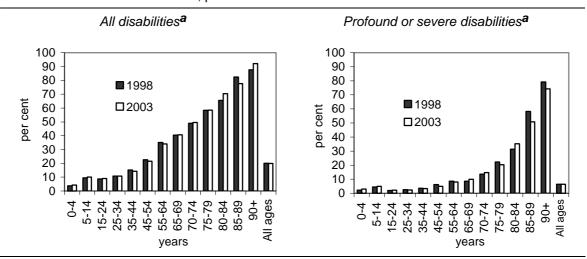
The 2003 ABS SDAC found that one in five Australians are living with a disability, unchanged from five years ago (after age standardisation). The overall disability rates for males (19.8 per cent) and females (20.1 per cent) were almost identical in the two surveys.

The prevalence of disability steadily increases with age. In 2003, the rate of disability increased from 4 per cent for those aged less than four years to 41 per cent for those aged 65 to 69 years and 92 per cent for people 90 years and older. Similarly, rates for profound and severe disabilities increased with age, reaching over 70 per cent for people aged 90 and over (figure 7.1).

The ABS found that for all age groups the difference between disability rates in 1998 and 2003 was not significant (figure 7.1).

Figure 7.1 The prevalence of disability by age group 1998 and 2003

Prevalence rates, per cent



^a Data for all ages has been age standardised to 2003 survey. Data source: ABS (2003d).

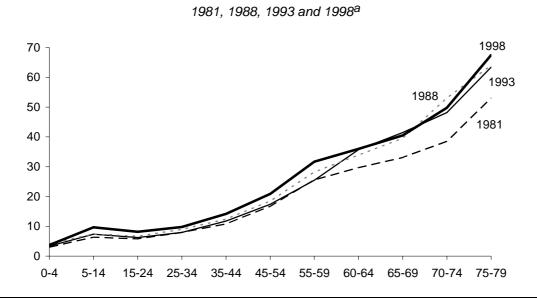
Changes in survey design between 1981 and 1998 have previously made it difficult to compare disability rates prior to 1998. However, in 1998 the ABS produced adjusted estimates, using criteria common only to the 4 surveys conducted between 1981 and 1998, in order to compare disability trends over time.

Adjusted estimates between 1981 and 1998 indicate that the prevalence of disability has been increasing over time (figure 7.2). Much of the increase has been in the severe restriction category.

... the total specific restriction rate increased from 14.7% in 1988 to 16.1% in 1998, though dipping to 14% in 1993. The rise in 1998 was primarily due to increased rates of severe restriction (from 4.4% in 1993 to 5.5% in 1998) and mild restriction which has increased steadily since 1988. (Davis et al. 2001, p.9)

Figure 7.2 The prevalence of disability by age group 1981 to 1998

Prevalence rates, per cent



^a Estimates have been adjusted for comparability, only criteria common to the four surveys have been used *Data source:* ABS (1998b).

A few age groups accounted for a large proportion of the increase:

Over 80 per cent of the difference between 1993 and 1998 and 75 per cent of the difference between 1998 and 1988 is contributed by the 5 to 14 years, 45 to 64 years, 75 to 79 years and over 85 years age groups. (Davis et al. 2001, p.10)

Several reasons have been suggested as to why age-specific disability rates may have increased from 1981 to 1998. These include improved survival rates (more people are surviving life-threatening events such as premature birth, accidents and disease and these can have ongoing effects that limit activities) and greater awareness of disabilities (Davis et al. 2001, p.13).

However, it is difficult to ascertain whether the increase in disability rates is *real* or a statistical anomaly resulting from methodological and conceptual problems. Some of the measured increase can be explained by:

- a greater willingness of people to self-identify in surveys as having a disability.
 This may be the result of economic incentives to report disability such as the
 Disability Support Pension or a greater acceptance of, and openness about,
 people with disabilities in society; and
- improved survey methods and designs. In particular, the wider scope of survey screening questions identifying people with disabilities and the introduction of computer-assisted interviewing in 1998 has resulted in the greater capture of people with disabilities.

The Australian results appear at odds with international trends. Internationally, a growing body of research has found a decline in the prevalence of disability and in particular among the older population.

Declines in disability prevalence were reported for the USA, Germany, France and Japan; moderate declines in disability were reported for Sweden; mixed patterns of prevalence were reported for Canada, with a clear decline for people aged 65 to 74 years, but an increase in most age groups over 75 years; and no consistent declines were reported in the UK and the Netherlands (Wen 2004, p.3).

A number of factors have been proposed as to why some measures of the prevalence of disability may be falling, including education, socioeconomic status, medical improvements, increased use of aids and equipment, health-related behavioural change and access to technology and assistive devices (Cutler and Schoeni in AIHW 2003d).

However, there have been some mixed trends. In some OECD countries the decline in the prevalence of disability has been accompanied by an increase in the reported prevalence of chronic diseases or conditions (Wen 2004, p. 3). Further, there is contention about measurement of disability, limited survey data and the quality of data on which these results are based (Schoeni et al. 2001, p. 206; Freedman et al. 2004; Freedman and Schoeni 2004).

And even in the US, where declines are usually reported, there is less clear evidence regarding trends in severe disabilities that affect Activities of Daily Living, such as bathing and dressing. There is even less evidence regarding trends in cognitive function among the aged population (Freedman and Schoeni 2004).

Notwithstanding these concerns, there is no consistent evidence internationally that the prevalence of disability is rising. In this context, this study has projected declining disability rates for the purpose of admission to residential nursing homes, despite the historical ABS data and the difficulties in establishing trends. This approach has also been adopted in other projections, such as Hogan (2004).

7.3 Disability and labour force status

People with a disability have lower participation rates, lower rates of employment and higher unemployment rates than people without a disability. For older age groups, people with a disability have significantly lower participation rates and employment rates (figure 7.3).

In this section, the Commission uses unpublished data from the 1998 ABS SDAC to explore the characteristics of people with a disability according to labour force

status, with an emphasis on older age groups. Although somewhat outdated, the labour market trends observed in the 1998 data are likely to be similar today.

With a disability Without a disability 90 90 80 80 70 70 60 60 50 50 40 40 30 30 20 20 10 10 0 15-24 25-34 35-44 45-54 55-59 60-64 15-24 25-34 35-44 45-54 55-59 60-64 ■ Employed ■ Unemployed ■ Not in the labour force

Figure 7.3 Employment and disability status, 1998, per cent

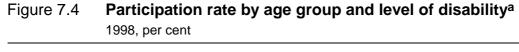
Data source: Unpublished data from ABS (1998b).

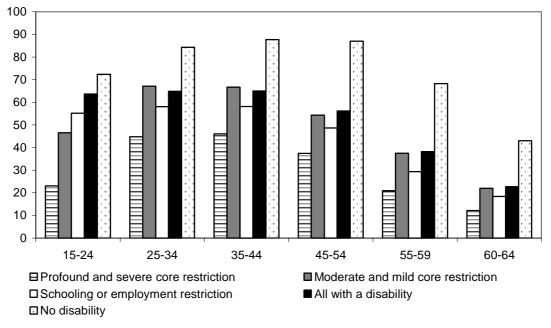
Disability and labour force participation

Many people with disabilities are not in the labour force. In 1998, 47 per cent of people aged 15-64 years with a disability were not in the labour force, compared with 20 per cent of those without a disability.

Participation in the labour force decreases markedly with greater levels of disability. In 1998, the participation rate for people that reported a profound core activity restriction was 19 per cent compared with 57 per cent for people with a mild core activity restriction and 80 per cent for people without a disability.

Participation is also lower for older age groups. In 1998, 23 per cent of people aged 60 to 64 years with a disability were in the labour force compared with a participation rate of 43 per cent for people without a disability. For people in this age group with a profound or severe disability the participation rate was even lower at 12 per cent (figure 7.4).





^a Data by age group are subject to high standard errors; Most people that reported a schooling or employment restriction also reported a profound, severe, moderate or mild restriction to a core activity; all with a disability includes those with and without a specific restriction.

Data source: Unpublished data from ABS (1998b).

Disability and unemployment

People with a disability experience significantly higher rates of unemployment than people without a disability. In 1998, the unemployment rate for people with a disability was 12 per cent compared with 8 per cent for people without a disability.

The difference in unemployment rates for people with and without a disability is significant for all age groups. It is particularly apparent for younger age groups as well as the 50 to 59 years age group (figure 7.5).

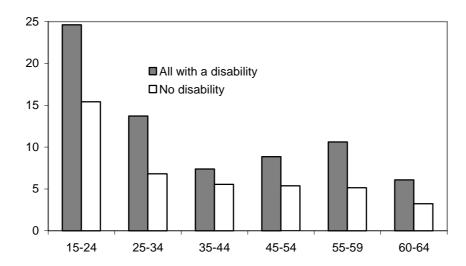


Figure 7.5 **Disability and unemployment rate, 1998, per cent**

^a The 1998 data revealed that for the age groups 15-24, 25-34, 55-59 and all ages the unemployment rate was highest for moderate and mild restriction rather than profound and severe restriction. These estimates are subject to high standard errors and contradict aggregate results from the 2003 survey. (The all ages data for 2003 show that the unemployment rate is highest for profound and severe levels of disability.) For these reasons, the Commission has chosen to report only the 'disability' and 'no disability' statistics, rather than the different degrees of disability as in figure 7.3.

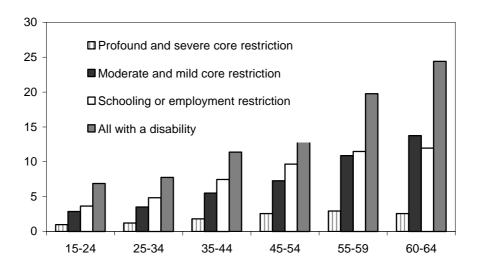
Data source: Unpublished data from ABS (1998b).

Disability and employment

In 1998, over 11 per cent of people employed had a disability. Older employed workers have higher rates of disability. In 1998, nearly one in four workers aged 60 to 64 years and 20 per cent of workers aged 55 to 59 years had a disability. This compares with 7 per cent for those aged 15 to 24 years and 8 per cent those aged 25 to 34 years.

People employed with a disability generally have a low level of disability. In 1998, less than 2 per cent of employed workers stated they had a profound or severe or core restriction and over 5 per cent reported a moderate or mild core restriction. For employed people aged 60 to 64 years, the rate of profound or severe restriction was 3 per cent compared with 14 per cent for a moderate or mild core restriction (figure 7.6).

Figure 7.6 Workers employed with a disability by degree of disability 1998, per cent



^a Data by age group and degree of disability are subject to high standard errors; Data are not additive. Most people that reported a schooling or employment restriction also reported a profound, severe, moderate or mild restriction to a core activity. All with a disability includes those with and without a specific restriction.

Data source: Unpublished data from ABS (1998b).

Further, older workers have significantly higher rates of employment restriction than younger workers. In 1998 nearly 12 per cent of workers in the 60 to 64 year age group reported that they had an employment restriction. This compares with 4 per cent for those aged 15 to 24 years and 5 per cent for those aged 25 to 34 years (Figure 7.6).

7.4 Disability Support Pension

One would expect that the level of disability within the community would move in line with changes in the number of Disability Support Pension recipients. However, the number of recipients of Disability Support Pension as a percentage of the population has been increasing at a significantly greater rate than the prevalence of disability measured by the ABS.

A comparison with ABS data

ABS surveys found no statistically significant difference in age adjusted disability rates recorded in 1998 and 2003. In comparison, the percentage of the population (aged 16-64 years) receiving Disability Support Pension increased 14 per cent between 1998 (4.5 per cent) and 2003 (5.2 per cent). Moreover, ABS (adjusted) statistics found that disability rates increased less than 30 per cent between 1981

(14.6 per cent) and 1998 (18.8 per cent). And over the same period, the percentage of population (aged 16-64 years) in receipt of the Disability Support Pension nearly doubled (2.3 per cent in 1991 and 4.5 per cent in 1998).

Comparing ABS survey data with measures of Disability Support Pension recipients is problematic. The pension data are sourced from administrative records and the primary condition is clinically assessed. In contrast, the ABS data are based on a large scale population survey and the assessment of a disability is dependent on the awareness and self perception of the respondents.

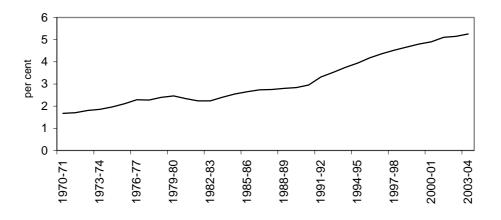
Further, the definition of disability for ABS measurement differs from that employed by the Department of Family and Community Services (FaCS) for Disability Support Pension purposes. For example, the ABS disability survey includes Down's Syndrome in congenital abnormalities and cerebral palsy in nervous system disorders, while for Disability Support Pension purposes these disabilities may be recorded as intellectual disabilities (Davis et al. 2001, p.22).

Another concern is that there may be a possible bias resulting from undercounting in the ABS survey. The FaCS data measure all recipients of the Disability Support Pension, whereas the ABS survey is unable to capture all recipients of this pension.

In recent times, it appears that the major driver of the number of Disability Support Pension recipients have been changes in the way Disability Support Pension and other substitute payments have been administered, rather than changes in the prevalence of disability in the community. Prime among them have been changes embodied in the Disability Reform Package of 1991.

Prior to the introduction of the Disability Reform Package applicants for Disability Support Pension had to demonstrate a 'permanent incapacity'. This was replaced by a requirement that applicants must be 'substantially incapacitated' for at least the next two years. This easing of the eligibility criteria in 1991 has resulted in a significant increase in the percentage of the population receiving Disability Support Pension (figure 7.7).

Figure 7.7 **DSP recipients 1970-71 to 2003-04** percentage of population aged 16 to 64 years



Data sources: Treasury and FaCS.

Loss of access to other forms of support, such as Veterans' Affairs Service Pension, Widow B and Wife Pension and the gradual lifting of the minimum age for the Age Pension for women (from 60 to 65 by 2014) women, has also been a significant driver of the number of Disability Support Pension recipients. It has resulted in an increase in the proportion of people claiming Disability Support Pension as their capacity to access other payments is reduced.

Overall, there are significant differences between the ABS survey data and FaCS Disability Support Pension data in terms of the way disability is measured. Any comparison should be treated cautiously. The FaCS data provide comprehensive information on the number of recipients of the Disability Support Pension over time, but is not able to measure changes in the prevalence of disability. In recent years the number of Disability Support Pension recipients has been driven by policy change rather than changes in the underlying health and social environment.

Disability Support Pension projections

Chapter 8 examined the likely trajectory of expenditure on the Australian Government's major personal benefit payments, including Disability Support Pension.

Coverage rates were derived for six age groups for both males and females using a coverage trend model. Trends were based on historical time series data extending from 1991-92 to 2003-04. The primary approach was to allow a tapering of growth based on logistic curves (technical paper 2). Exceptions are the rates for 50 to 59 and 60 to 64 year olds. Based on recent trends, the following was considered appropriate:

- for males aged 50-59 years and 60-64 years a slight, gradual decline in coverage rates;
- for females aged 50-59 years a constant coverage rate; and
- for females aged 60-64 years an increase in coverage rates reflecting the phased increase in Age Pension eligibility age until 2014 and then constant thereafter.

Figure 7.8 presents the Commission's projections on disability trends, which were used as a basis for expenditure projections in chapter 8.

Figure 7.8 Disability Support Pension coverage rates 1990-91 to 2044-45a

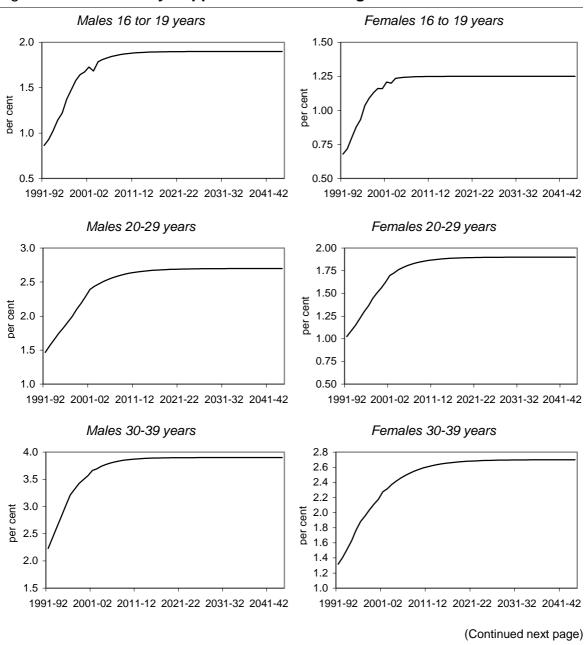
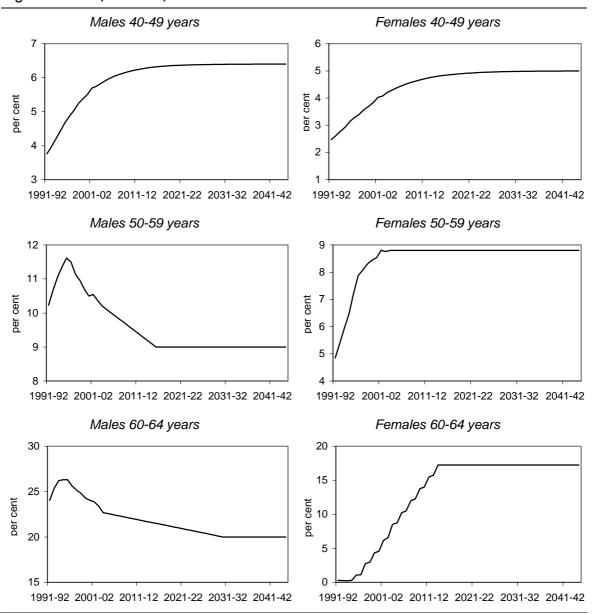


Figure 7.8 (Continued)



Data source: Data between 1991-92 and 2003-04 are from FaCS (2001) and provided by FaCS. Data between 2004-05 and 2044-45 are Commission estimates (chapter 8).