3 Key themes and interpretation

This chapter draws together some of the overarching issues and themes of the report and provides a broad context for understanding Indigenous disadvantage.

Interpreting data on Indigenous disadvantage requires an understanding of some of the characteristics of the Indigenous population, including its geographic distribution and age structure. This chapter provides some information about these characteristics (section 3.1), which are explored further in appendix 3.

Indigenous people often experience multiple disadvantage (section 3.2) and different aspects of disadvantage are often interrelated. There are strong links across many of the COAG targets and headline indicators, and across the strategic areas for action (sections 3.3 and 3.4). Action may be needed on several fronts at once in order to make progress and, conversely, sometimes a single action can have multiple effects. Therefore, the report's framework emphasises the need for a whole-of-government approach to closing the gaps in outcomes between Indigenous and non-Indigenous people.

This report includes numerous case studies of projects and programs that are successfully addressing Indigenous disadvantage. These 'things that work' have a range of common characteristics that are explored in section 3.5.

While this report focuses on Indigenous disadvantage in Australia, it contains a small number of comparisons with outcomes for Indigenous peoples in other countries. However, there are many challenges in making international comparisons (section 3.6).

Finally, this chapter concludes with a brief summary of issues to keep in mind while using and interpreting data in the report (section 3.7).

3.1 Indigenous demographics

Indigenous identification

Virtually all the information in this report is based on self-identification by Indigenous people, and therefore relies on an individual's view of their Indigenous status. A small number of administrative data collections require people who identify as Indigenous to provide proof of Indigenous descent or acceptance by the Indigenous community, but this is not necessary for most data collections. Therefore, the accuracy of most of the data in this report depends on the opportunities provided to identify as Indigenous, and people's willingness to do so.

The level of Indigenous identification can vary over time and across data collections. Improvements over time in data collections (for example, the adoption or correct application of the standard ABS question on Indigenous status) will improve the accuracy of Indigenous identification but, in some cases, will also make trend analysis difficult. For example, it might be difficult to establish whether an increase in the recorded use of a service by Indigenous people reflects an actual increase in use, or better identification of existing Indigenous service users.

Throughout this report, the term 'Indigenous people' is used to refer to Aboriginal people and Torres Strait Islander people. Outcomes for different groups of Aboriginal people can vary greatly, however, data can usually only be disaggregated by standard categories such as remoteness, State/Territory, age and sex and not by different Aboriginal cultural or language groups. The situations of Aboriginal people and Torres Strait Islander people can be very different, the relatively small number of Torres Strait Islander people makes it difficult to report separately about their experiences. Available data are summarised in chapter 12 'Outcomes for Torres Strait Islander people'.

Indigenous and non-Indigenous population data

Indigenous and non-Indigenous population data are used extensively throughout this report as denominators for calculating rates and percentages. Most of the indicators in this report are expressed as rates (for example, hospitalisations per 1000 people), or as proportions of a particular population (for example, percentage of people aged 18 years and over). Estimates of numbers of people are sometimes included, but using rates makes it easier to compare outcomes for Indigenous and non-Indigenous people. This report generally uses ABS estimates of the Indigenous population to create rates.

The five-yearly Census provides the basis for estimates of the Indigenous population. It is known that the Census itself significantly 'undercounts' the number of Indigenous people. Therefore, the ABS adjusts the Census count to derive the estimated resident Indigenous population (ABS 2007). The ABS continues to work towards reducing the undercount of Indigenous people in future Censuses.

For non-Census years, the ABS calculates experimental estimates and projections of the Indigenous population (ABS 2009). These projections are based on the adjusted 2006 Census data and a set of assumptions about likely trends in Indigenous population growth (box 3.1.1).

The ABS only publishes official non-Indigenous population data for Census years. For other years, non-Indigenous population data must be derived by subtracting Indigenous population data from total population data.

Box 3.1.1 Indigenous population estimates and projections

In September 2009, the ABS published experimental estimates of the Indigenous population for 1991 to 2006, and projections for 2007 to 2021 for Australia and each State and Territory (ABS 2009). These estimates are adjusted to account for the undercount of Indigenous people in the Census.

The 2009 ABS publication provided two alternative sets of projections:

- 'series A' projections, which assume Indigenous life expectancy at birth will remain constant at 67.3 years for males and 73.0 years for females for the duration of the projection period
- 'series B' projections, which assume that Indigenous life expectancy at birth will increase by 0.3 years per year for both males and females, reaching 72.1 years for males and 77.8 years for females by 2021. This equates to an increase in life expectancy at birth of 5 years over the 15 year projection period for both males and females.

The projections also make other assumptions, the same for both series, which are set out in ABS (2009).

In this report, the 'series B' projections generally have been used as population denominators for the purpose of calculating rates and proportions.

Source: ABS (2009).

How many people?

In 2006, the estimated resident Indigenous population of Australia was 517 000, out of a total population of 21 million people (2.5 per cent of the Australian population). In the Indigenous population, 463 700 (90 per cent) were of Aboriginal

origin only, 33 300 (6 per cent) were of Torres Strait Islander origin only and 20 100 (4 per cent) were of both origins (ABS 2008a). The projected Indigenous population in June 2011 was 575 600, which was 2.6 per cent of the projected total population of 22 319 000 (ABS 2008b; ABS 2009).

Population distribution and mobility

Service providers need to consider the geographic and age distribution of the Indigenous population, and the requirements of different groups if they are to meet people's needs and address disadvantage. Services must also accommodate Indigenous people's relatively high rates of temporary mobility and anticipate medium to long term demographic trends.

Higher proportions of both the Indigenous (30 per cent) and non-Indigenous (33 per cent) populations lived in NSW than in other states and territories in 2006. Other states and territories with significant shares of the Indigenous population included Queensland (28 per cent), WA (14 per cent) and the NT (12 per cent). (ABS 2008a; figure 3.1.1).



Figure 3.1.1 Indigenous population distribution

An estimated 32 per cent of Indigenous people lived in major cities in 2006. A further 21 per cent lived in inner regional areas, and 22 per cent in outer regional areas. An estimated 9 per cent lived in remote areas and 15 per cent in very remote areas. In comparison, almost 90 per cent of non-Indigenous people lived in major cities or inner regional areas (ABS 2008a; figure 3.1.1).

This report presents data disaggregated by remoteness area wherever possible. For many indicators, remoteness data are not available, or are only available only at the national level. However, disaggregation by remoteness at the national level often shows patterns of disadvantage more clearly than disaggregation by State and Territory (but not remoteness), as the proportions of Indigenous people living in different remoteness areas vary across states and territories. However, it should be noted that outcomes can vary across places with similar degrees of remoteness in different states and territories.

Taylor and Biddle (2008) proposed an alternative geographic classification for the Indigenous population based on structural settings (city areas, large regional towns,

Source: ABS (2008a), *Experimental Estimates of Aboriginal and Torres Strait Islander Australians*, *June 2006*, Cat. no. 3238.0.55.001, Canberra. See appendix 3 for more information.

small regional towns and localities, regional rural areas, remote towns, Indigenous towns, town camps and remote dispersed settlements). Disaggregating data into finer geographic classifications (such as structural settings and the ABS Indigenous Areas) is essential for planning and coordinating the delivery of services. However, the structural settings and Indigenous Areas classifications currently can only be readily applied to Census data. As the current edition of this report uses mainly survey and administrative data, these data are disaggregated geographically by remoteness and State/Territory.

For many of the indicators in this report, Indigenous people in remote areas generally have poorer outcomes than Indigenous people in major cities and regional areas, for example, educational outcomes (sections 4.4, 4.5 and 4.7), income (section 4.9), hospitalisation for potentially preventable diseases (section 7.2) and housing (sections 8.3 and 9.1). Biddle (2009a) found similar results using 2006 Census data. The relationship between remoteness and disadvantage is at least partly due to 'the tyranny of distance' creating barriers to accessing services and engaging with the labour market. However, remoteness can also be a proxy for other factors affecting Indigenous disadvantage, such as English language proficiency. Rates of English language proficiency tend to be lower in more remote areas but vary across remote areas in different states and territories.

Although many aspects of disadvantage increase with remoteness, Indigenous people in cities and large regional towns also face significant disadvantage — they are relatively disadvantaged compared to non-Indigenous people, are concentrated in neighbourhoods with low socioeconomic outcomes, and tend to be poorer than non-Indigenous people in those same neighbourhoods (Biddle 2009b; Taylor 2006).

Census data show that Indigenous people are gradually becoming more urbanised, with a noticeable decrease in the number living in remote towns and settlements, and a rising Indigenous population in larger regional towns. At the same time, the non-Indigenous population of some of these regional towns is declining, and so, Indigenous people are becoming a larger proportion of the populations of those towns (Taylor and Biddle 2008).

Mobility can make it difficult for governments to plan for the delivery of services such as health, housing, employment and education, as shifting populations cause variation in the level of demand for services at different times in different places. Nationally, Indigenous people appear only slightly more mobile than non-Indigenous people in the medium to long term (measured as the proportion of people who moved residence between 2001 and 2006), and Indigenous and non-Indigenous migration patterns were similar across age groups, with the greatest movement among young adults in both populations (Biddle 2009c).

However, in addition to medium and long term mobility, Indigenous people in remote areas have much higher temporary mobility than non-Indigenous people, and Indigenous people in non-remote areas (Biddle and Prout 2009). Mobility plays an important role in many Indigenous people's maintenance of connections to family and country (DEST et al 2002). However, the reason for some mobility is to access services and employment, which are often only available at long distances from smaller remote towns and communities (Prout 2008).

Age profile of the Indigenous population

Figure 3.1.2 shows the age structures of the Indigenous and non-Indigenous populations. The Indigenous population has a younger age structure than the non-Indigenous population. In 2006, 37.6 per cent of the Indigenous population was aged 14 years or less, compared to 19.1 per cent of the non-Indigenous population (ABS 2008a). The disparity between the Indigenous and non-Indigenous age profiles reflects the gap in life expectancy. While there is a difference in fertility between Indigenous and non-Indigenous people, the fundamental reason for the different profiles is the higher premature death rate experienced by the Indigenous population.

Age standardisation, which accounts for differences in the age structures of populations, enables more realistic comparisons across populations. In this report, relevant data on disability, health and justice outcomes have been age standardised, as these outcomes vary markedly by age. Most age standardised data in the report have been age standardised using the direct method, which is more suited to comparisons over time. However, most mortality data in the report have been age standardised using the indirect method, because small numbers of Indigenous deaths for particular causes make it impractical to apply the direct method.



Figure 3.1.2 **Population distribution, Australia, by age and sex, 30 June 2006**^{a, b}

a Includes 'other territories'. **b** Final experimental estimates of the Indigenous, non-Indigenous and total populations of Australia as at 30 June 2006, based on results of the 2006 Census of Population and Housing, and adjusted for net undercount.

Source: ABS (2008a) *Experimental Estimates of Aboriginal and Torres Strait Islander Australians, June 2006,* Cat. no. 3238.0.55.001, Canberra; table A.1 of appendix 3.

The younger age structure of the Indigenous population presents a potential opportunity for increased Indigenous employment, by filling gaps in the workforce created by the ageing of the non-Indigenous population. This opportunity will grow as increasing numbers of young Indigenous people reach prime working ages (Biddle and Taylor 2009). However, poorer educational outcomes (sections 4.4, 4.5, 4.7 and chapter 6) are an impediment to young Indigenous people taking advantage of this opportunity. While this report shows some limited improvements in higher levels of Indigenous educational attainment (VET and university), much more improvement is needed in school learning outcomes. Research by Taylor (2010), at a remote community in the NT, suggests that unless Indigenous engagement in education in remote communities is dramatically increased, young Indigenous people will continue to struggle to enter the workforce. The potential for younger people to take advantage of the increased demand for labour created by an ageing population has been noted internationally, as has the potential for weak educational systems and labour market rigidities to constrain that advantage (National Institute on Aging 2007)

Appendix 3 contains more extensive demographic data on the Indigenous and non-Indigenous populations, including the age structure, geographic distribution and language use.

3.2 Multiple disadvantage

Different aspects of disadvantage often occur together. Significant interactions between outcomes are noted in the text of each section, but the report does not attempt to map all the possible interactions across strategic areas for action or indicators.

In some areas, research has provided evidence to link certain factors — for example:

- education and income levels are estimated to account for between one-third and one-half of the gap between Indigenous and non-Indigenous people's self-assessed health status (Booth and Carroll 2005, AIHW 2004)
- socioeconomic differences account for between one-third and two-thirds of the gap in early childhood outcomes (Leigh and Gong 2008)
- eleven modifiable risk factors account for almost half of the gap in disease burden (including tobacco, obesity, physical inactivity, high blood cholesterol and high blood pressure (Vos et al. 2007, see section 4.8).

In many other areas, research on the underlying *causal* factors behind Indigenous disadvantage is still thin. However, data sources such as the ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008) and National Health Survey 2007-08 (NHS 2007-08) allow analysis of the *association* between different aspects of disadvantage. Chapter 13 of the report uses data from the NATSISS and NHS to identify some aspects of disadvantage that tend to occur together (box 3.2.1) and to model the effects of some particular influences in isolation (box 3.2.2). However, these analyses do not demonstrate whether disadvantage in one area is the *cause* of another poor outcome.

Box 3.2.1 Measuring multiple disadvantage

Chapter 13 examines patterns of disadvantage using proxy measures of COAG targets and other headline indicators and strategic change indicators. Different aspects of disadvantage often seem to occur together — for example, poor education may be linked with poor employment outcomes, and both may be linked with low income.

Section 13.1 uses data from the ABS National Aboriginal and Torres Strait Islander Social Survey 2008 (NATSISS 2008) and the ABS National Health Survey 2007-08 (NHS 2007–08) to present information on the interactions between various indicators of disadvantage. The data do not indicate cause and effect relationships between different aspects of disadvantage — that is, the data do not say that disadvantage in one area is the cause of another poor outcome — rather they show where there are correlations between different aspects of disadvantage.

In 2008, both Indigenous and non-Indigenous people with lower educational attainment, low incomes, who were unemployed or not in the labour force and/or whose principal source of income was a government pension, allowance or benefit were more likely to experience other socioeconomic disadvantages. However, significantly higher proportions of Indigenous experienced multiple disadvantage.

Source: chapter 13, section 13.1.

Chapter 13 also includes some information from a Productivity Commission research project into factors related to Indigenous labour market participation and unemployment (box 3.1.2). In this analysis, statistical techniques have been used to isolate the contribution of various factors one by one, while holding other modelled factors constant. The use of this technique means that the results of this analysis are not comparable to other sections of the report.

Box 3.2.2 Influences on labour market outcomes (multivariate analysis)

Using data from the ABS NATSISS 2008, the Productivity Commission used a technique called multinomial regression analysis to identify which factors have the strongest effects on Indigenous labour force participation and unemployment. The technique allows modelled factors to be held constant, in order to isolate the effect of just one factor.

The analysis found that lower proportions of Indigenous people in poor health or with disabilities were employed than those with good health or without a disability. Those with higher levels of education were more likely to be employed than those with lower levels of education. English language skills increased the likelihood of employment while arrest in the previous five years decreased employment rates.

Source: chapter 13, section 13.2.

3.3 Multiple causes

Prevention and early intervention lie at the heart of the report framework. The focus is on encouraging action in the strategic areas that, over time, will lead to improvements in the COAG targets and headline outcomes, and progress toward the priority outcomes. However, this report on its own does not provide sufficient information for governments to allocate resources. Resource allocation requires governments to combine information on outcomes from this report with information on service delivery and expenditure. Some relevant sources of additional information include:

- the *Indigenous Compendium* to the annual *Report on Government Services*, which provides information on the efficiency and effectiveness of, and equity of access to, mainstream government services in the areas of education, justice, emergency management, health, community services and housing (SCRGSP 2004–2011)
- the *Closing the Gap Clearinghouse*, which provides evidence-based research on what works to overcome Indigenous disadvantage (AIHW and AIFS 2011)
- the two-yearly *Indigenous Expenditure Report*, which provides information on expenditure on services to Indigenous Australians (IERSC 2011)
- the two yearly *Aboriginal and Torres Strait Islander Health Performance Framework Report*, which brings together evidence and data in relation to 71 performance measures across three domains: health status and outcomes; health determinants; and health system.

The diagrams in figures 3.3.1 and 3.3.2 illustrate just some of the many linked factors that can affect outcomes. In figure 3.3.1, the COAG target of employment, the closely related COAG target of year 12 attainment and the headline indicator of tertiary attainment, are influenced by outcomes across the framework. It is obvious that educational success will depend on outcomes such as enrolment, attendance and attainment in the 'Education and training' strategic area, which in turn depend on the achievement of basic skills for life and learning during 'Early child development'. However, social and environmental factors, such as those in the 'Home environment' and 'Safe and supportive communities' strategic areas for action, also affect all these outcomes. Of course, these are not the only factors at work — employment and education outcomes can also be influenced by the intergenerational effects of parental income, employment and education levels. The message from the framework is that, although educational services play an important role in achieving these COAG targets and headline indicators, many other services must also play a part.



In figure 3.3.2, the COAG target of 'Life expectancy' is clearly linked to the 'Young child mortality' target and the 'Disability and chronic disease' headline indicator. In turn, these outcomes will be influenced by outcomes such as 'Birthweight' and 'Injury and preventable disease' in the 'Early child development' strategic area for action, and 'Obesity and nutrition' and 'Tobacco consumption and harm' in the 'Healthy lives' strategic area. But actions in these areas must be supported by actions to address outcomes such as 'Access to clean water and functional sewerage and electricity' and 'Overcrowding in housing' in the 'Home environment' strategic area, and 'Alcohol and drug consumption and harm' under the 'Safe and supportive communities' strategic area. Actions must also address other social determinants of health in the education and employment areas.



3.4 Multiple effects

Although some high level outcomes may require actions across a range of areas, sometimes a single, well-targeted action can have effects across a number of strategic areas for action and influence a range of high level outcomes. These interactions emphasise the need for a whole-of-government approach to assessing the costs and benefits of such actions.

For example, housing typically is regarded as the responsibility of departments of housing. But as illustrated in figure 3.4.1, reducing overcrowding in housing can affect outcomes in the 'Education and training', 'Healthy lives', 'Home environment' and 'Safe and supportive communities' strategic areas for action, and can contribute to the COAG target of 'Reading, writing and numeracy', and headline indicators of 'Disability and chronic disease' and 'Family and community violence'. Although other influences are also important in each of these areas, there is sufficient evidence for education, health and justice departments to be concerned about housing issues.



Figure 3.4.1 Multiple effects — overcrowding

Figure 3.4.2 illustrates similar links for actions designed to address excessive alcohol consumption and associated harm. Misuse of alcohol can affect outcomes in the 'Early child development', 'Healthy lives', 'Economic participation', and 'Safe and supportive communities' strategic areas for action, and can contribute to the COAG target of 'Employment' and the headline indicators of 'Disability and chronic disease' and 'Family and community violence', among others. Although alcohol misuse is not the only influence in these areas, a range of studies have identified the significant part this risk factor can play in a broad range of outcomes (section 10.3).



3.5 Things that work — success factors

Brief case studies of 'thing that work' in improving outcomes for Indigenous people have been a part of this report since 2005. Not everything that matters can be captured in indicators, and some information is better presented in words, rather than numbers. In particular, community level change may not show up in State and Territory or national data.

As noted in chapter 2, 'Things that work' in this report were assessed against a broad set of criteria before they were included. However, formal evaluations of Indigenous programs are relatively scarce. In order to provide a range of examples to illustrate how things can change for the better, the Steering Committee included case studies of some promising programs that have not undergone rigorous evaluation.

There is an urgent need for more research and evaluation to identify successful Indigenous programs and the reasons for their success. The Closing the Gap Clearinghouse (AIHW and AIFS 2011) is becoming a valuable resource for policy makers and Indigenous communities, and is the source of some of the 'things that work' case studies in this report. However, the Clearing House will only achieve its

full potential if governments commit to funding and publishing more evaluations and research.

Analysis of the 'things that work' and extensive consultation with Indigenous people, governments and researchers have identified the following 'success factors':

- cooperative approaches between Indigenous people and government often with the non-profit and private sectors as well
- community involvement in program design and decision-making a 'bottom-up' rather than 'top-down' approach
- good governance at organisation, community and government levels
- ongoing government support including human, financial and physical resources.

These success factors are closely related to the six determinants of good governance explained in chapter 11 (Governance and leadership): governing institutions; leadership; self-determination; capacity building; cultural match; and resources. While these success factors appear to emphasise the roles of government and Indigenous people, without direct involvement of the private sector there are limits to improvements in outcomes, particularly in areas such as employment and economic development.

Cooperative approaches

Cooperation between Indigenous people and governments seems an obvious ingredient for successful programs. Nevertheless it does not always occur. Cooperative approaches require Indigenous communities and organisations, governments, non-profit organisations and private businesses to work as partners. If each party acknowledges the value, and supports the contributions of the other partners, success is much more likely. Hunt (2010) has explored some aspects of cooperative partnerships between non-government organisations, Aboriginal organisations and communities. Cooperative approaches are closely related to the second success factor — community involvement in program design and decision-making — a 'bottom-up' rather than 'top-down' approach.

Most case studies in the report rely on cooperative approaches between governments, Indigenous people and other organisations. Examples include:

• the Cape York Institute's Higher Expectations Program — Secondary, and the Australian Indigenous Education Foundation, which are collaborations between the Australian Government and philanthropic and corporate supporters in the private sector (box 4.5.2)

- the Wuchopperen Indigenous Health Service Filling the Gap Indigenous Dental Program, which operates as a partnership between Wuchopperen, the community, its steering committee and volunteer dentists (box 7.6.2)
- the Aboriginal Liaison Program in SA, which operates through a partnership between the SA Dental Service and Aboriginal Community Health Services (box 7.6.2).

Community involvement

Community involvement in program design and decision-making — a 'bottom-up' rather than 'top-down' approach — is closely related to self-determination, one of the determinants of good Indigenous governance. The Harvard Project on American Indian Economic Development found that self-determination led to improved outcomes for North American Indigenous people:

When [Indigenous people] make their own decisions about what approaches to take and what resources to develop, they consistently out-perform [non-Indigenous] decision-makers. (Harvard Project on American Indian Economic Development 2003-04)

The former Aboriginal and Torres Strait Islander Social Justice Commissioner, Tom Calma, considered that much of the failure of service delivery to Indigenous people was a direct result of the failure to engage and to support and build the capacity of communities:

Put simply, governments risk failure if they develop and implement policies about Indigenous issues without engaging with the intended recipients of those services. Bureaucrats and governments can have the best intentions in the world, but if their ideas have not been subject to the 'reality test' of the life experience of the local Indigenous peoples who are intended to benefit from this, then government efforts will fail. (Calma 2006)

Community involvement is a key factor in the success of most case studies in this report. Some specific examples of successful community involvement include:

- the Cape York Family Income Management project, which was designed by Indigenous people to build financial literacy, and is overseen by a working group including representatives from each Indigenous community, the Australian Government, Westpac Bank and Cape York Partnerships (box 4.9.2)
- the community controlled Urupuntja Health Service, which provides preventative activities and health care to the Utopia community and its 16 outstations (box 7.1.2)
- the Indigenous elements of the Standby Response Service, which were developed in partnership with Indigenous communities in northern Australia and

involve training local community members to provide assistance to people bereaved by suicide (box 7.8.2)

Good governance

Good governance — at organisation, community and government levels — is closely related to several of the key determinants of good Indigenous governance:

- governing institutions
- leadership
- capacity building
- cultural match.

Unless organisations, communities and governments demonstrate principles of good governance, programs are likely to fail.

Good governance is essential to all successful case studies in the report. Particular examples include:

- Nganampa Health Council, a successful community controlled organisation that has provided health services, including child health services, to the Anangu people of SA for many years (box 5.5.2)
- Papunya Tula Artists, which was established in 1972, and is entirely owned and directed by Indigenous artists of the Western Desert. It has operated independently of government support for more than ten years (box 10.1.2)
- finalists and winners of the BHP Billiton Reconciliation Australia Indigenous Governance awards that have demonstrated excellence across key determinants of good governance (section 11.1).

Ongoing government support

Ongoing government support — including human, financial and physical resources — is closely related to resources, one of the key determinants of good Indigenous governance. Many Indigenous programs are funded as short-term pilot programs with no continuity. Many Indigenous organisations, including successful long term organisations, are funded through multiple, short term government contracts that increase uncertainty and place pressure on capacity and sustainability.

Some of the 'things that work' case study programs included in previous editions of this report no longer exist because government funding and support have been withdrawn.

Some examples of programs and organisations that have been able to provide long term benefits to Indigenous people because of ongoing government support include:

- the Teacher Education Scholarship Program in NSW, which has provided scholarships to Indigenous students studying to become primary or secondary school teachers since 2002 (box 6.3.2)
- the home ownership program now marketed as IBA Homes, which was established in 1975 and has helped more than 14 100 individuals and families since its inception (box 8.3.2)
- the Housing for Health program in NSW, which over more than 10 years has fixed 72 000 items for 11 500 Aboriginal people living in 2714 houses in 72 Aboriginal communities (box 9.3.2).

3.6 International comparisons

Comparisons of Indigenous disadvantage in Australia with the disadvantage experienced by minority indigenous peoples in other countries provides scope to identify where improvements are being made overseas that may help Australia to more effectively address Indigenous disadvantage.

Caution must be used in comparing data with other countries, due to variations in data quality and scope, estimation methods, coverage of the Indigenous populations and definitions of who is an Indigenous person. The economic, social and political environments may also be quite different.

The most meaningful comparisons of outcomes for Aboriginal and Torres Strait Islander people in Australia is with developed countries with a history of relatively recent European colonisation, and a non-Indigenous majority — countries such as the United States, Canada, and New Zealand.

Many Latin American countries also have relatively recent European colonisation and indigenous minorities. However, most Latin American countries are less developed than Australia, have different economic, legal and social systems and typically have less developed statistical collections.

In some countries, particularly in Africa and Asia, groups of people may be identified as indigenous but various ethnic groups have lived together for significant periods. In such cases, the distinction between indigenous and non-indigenous people can be less clear cut, and no comparisons with such countries are attempted in this report.

Comparability of international data

Comparable data on Indigenous disadvantage are available for only a limited number of indicators. Different definitions, counting rules and collection methods limit the comparability of data from different countries. However, many countries have agreed to adopt international definitions for particular statistics such as life expectancy, disease codes for mortality and hospital statistics, labour force participation and international trade.

While some total population data are comparable between countries, comparable data on indigenous people are not commonly available. Different countries use different definitions to determine who is counted as indigenous, and, even where definitions are similar, the extent to which indigenous people are identified in data collections varies both within and across countries.

The United Nations (2009) has prepared a comprehensive assessment of the state of the world's indigenous peoples. The report is largely qualitative, and focuses on the human rights of indigenous people. The limited quantitative data on outcomes for indigenous people in different countries are older than those available for this report and do not include the most recent Indigenous life expectancy estimates for Australia published by the ABS in 2009.

Cooke et al. (2007) compared outcomes for indigenous peoples in Australia, Canada, New Zealand and the United States for life expectancy, income, educational attainment and the Human Development Index used by the United Nations Development Programme (UNDP). However, the most recent data assembled by Cooke et al. (2007) are from 2001. The compilation of data on Indigenous Australians has progressed substantially since then, including the introduction by the ABS of a substantially revised method for estimating Indigenous life expectancy.

Indicators with international comparisons

Life expectancy

The gap in life expectancy between Indigenous and non-Indigenous people in Australia for 2005–2007 (11.5 years for males and 9.7 years for females) appears to be larger than in other countries where Indigenous peoples share a similar history of relatively recent European colonisation. In Canada in 2001 there were gaps of between 5 and 14 years between different Aboriginal groups and all Canadians (Statistics Canada 2005). In New Zealand in 2005–2007 there was a Māori/non-

Māori gap of 8.6 years for males and 7.9 years for females (Statistics New Zealand 2008).

Other comparisons

Cooke et al. (2007) compared outcomes for indigenous and non-indigenous peoples in Australia, Canada, New Zealand and the United States, including people aged 18 to 24 years who had attained year 12 or were still studying, and median annual incomes. Data for 2001 showed larger gaps between indigenous and non-indigenous people's outcomes in Australia, than in Canada¹, New Zealand and the United States. However, the data are not included in this report because they are not recent.

3.7 Interpreting data in the report

Readers of this report should bear the following issues in mind when interpreting the data in this report. (Appendix 4 contains more information about data limitations.)

Timeliness

The data in this report are the most recent available. Many data collections are not updated annually, and some data collections require significant time for processing and validation between collection and publication.

Sources

Data for this report have been drawn from three main types of sources — Census, survey and administrative data. Each has strengths and weaknesses.

Census data

The ABS Census of Population and Housing takes place every five years. The Census is rich in information and has the potential for extensive disaggregation, and the 2006 Census was a major data source for the 2009 report.

¹ Canadian data are for Canadians who identified as Aboriginal in the national census, not the Registered Indian population. Cooke et al. (2007) also report data for the Registered Indian Population.

The 2006 Census included responses from just over 450 000 people who identified as being of Aboriginal and/or Torres Strait Islander origin. The undercount of Indigenous people was highest in WA (estimated at 25 per cent) and the NT (estimated at 20 per cent). Census data for these jurisdictions still provide a high quality picture of the circumstances of those who were counted, but readers should not assume that the characteristics of those who were counted in the Census are necessarily the same as those who were missed.

The ABS has undertaken significant work to improve the Indigenous response rate in the 2011 Census.

Survey data

Surveys can provide a rich source of data at higher levels of aggregation, for example, national and State and Territory data, and sometimes remoteness area disaggregation. However, the reliability of survey data is limited by sampling error, especially if data are disaggregated further than the survey sample was designed to allow.

The ABS has introduced a three yearly rolling program of Indigenous household surveys, the most recent being the 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS). Data from this survey were published in late 2009, and form an important component of this report. The next survey in the program will be the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), which is scheduled for collection in 2012-13 as part of the Australian Health Survey.

Data from other ABS surveys are included in this report, often to provide non-Indigenous comparators for NATSISS data. Most general population surveys do not contain a large enough Indigenous sample to allow for disaggregation by Indigenous status.

Administrative data

Administrative data are usually collected as part of the management of a service (for example, hospital patient records). These data are constantly updated and new data may be available annually or more frequently. However, Australia's federal system means that there are often differences across states and territories in the types of services provided or definitions used within collections, which make it difficult to compare across jurisdictions or to estimate national totals. Major differences in definitions or data collections are noted in this report as appropriate.

There can be issues with the accuracy of Indigenous identification in administrative collections, across jurisdictions and over time. Indigenous Australians are not always asked the standard Indigenous status question, there are situations where they may choose not to identify, and there are also some inconsistencies in the recording of Indigenous status across jurisdictions. Further work is required to assess and improve the quality of Indigenous identification in administrative data collections. Governments have committed to improve Indigenous identification in data collections as part of the National Indigenous Reform Agreement.

In addition, administrative data can be affected by the availability or accessibility of services, and by Indigenous people's willingness (or 'propensity') to access those services. For example, different rates of substantiated child abuse and neglect across jurisdictions or over time may be the result of differential access to services or different propensities to report child abuse, rather than differences in its occurrence (section 4.10).

Interpreting survey data (standard errors, error bars and confidence intervals)

The report draws extensively on ABS survey data, including the:

- National Aboriginal and Torres Strait Islander Social Survey 2008
 (NATSISS 2008)
- National Health Survey 2007-08 (NHS 2007-08)
- Survey of Income and Housing 2007-08 (SIH 2007-08)
- National Aboriginal and Torres Strait Islander Health Survey 2004-05 (NATSIHS 2004-05)
- National Health Survey 2004-05 (NHS 2004-05)
- National Aboriginal and Torres Strait Islander Social Survey 2002 (NATSISS 2002)
- General Social Survey 2002 (GSS 2002)
- National Health Survey 2001 (NHS 2001)
- National Health Survey Indigenous Supplement 2001 (NHS(I) 2001)
- National Aboriginal and Torres Strait Islander Survey 1994 (NATSIS 1994).

Survey results are subject to sampling error, because they are based on samples of the total population, rather than the whole population. Where survey data are shown in charts in this report, error bars are included, showing 95 per cent confidence intervals. Data collections that seek to include the entire population (for example the

Census of Population and Housing) are not subject to sampling error. (Although not survey data, data on years 3, 5, 7 and 9 literacy and numeracy also include 95 per cent confidence intervals, as explained in section 4.4.)

There is a 95 per cent chance that the true value of the measure lies within the interval shown by the error bars. If there is an overlap between confidence intervals for different results, it cannot be stated for certain that there is a statistically significant difference between the results. This report only highlights statistically significant differences (although it should be noted that 'statistically significant' differences are not necessarily material or important).

Relative standard errors (RSEs) are a statistical measure of the precision of a survey statistic. RSEs for all survey data included in the report are shown in the attachment tables referred to in the report, which are available on the Review website (www.pc.gov.au/gsp). The 95 per cent confidence intervals shown in the error bars in the charts are equivalent to 1.96 times the RSEs above and below the estimate. See ABS (2010a) for more information about RSEs, confidence intervals and tests of statistical significance. Information on the calculation of error bars is included in the glossary.

Disaggregation

Where possible, relevant indicators are disaggregated into various categories — for example, by sex, State and Territory, remoteness and age groups. For most indicators in this report, remoteness areas are according to the ABS Australian Standard Geographical Classification (ASGC). The ASGC remoteness classification identifies a location in Australia as having a particular degree of remoteness based on its distance from population centres of various sizes. Some indicators are disaggregated into five remoteness area categories (major cities, inner regional, outer regional, remote, and very remote). When data quality does not support disaggregation into five categories, indicators may be collapsed into three categories (major cities, regional, and remote) or two categories (non-remote and remote).

A map of Australia showing geographic areas according to each of the five remoteness area categories is included in section 8.2. The distribution of the Indigenous population according to remoteness areas is presented in section 3.1. For more information on how remoteness is defined, see ABS (2001a, 2001b, 2010b).

Rate ratios and rate differences

For some indicators, rate differences and rate ratios are calculated to compare rates between different groups, consistent with approach in NIRA reporting:

- a rate difference highlights the difference between rates, for example if the Indigenous rate for an indicator is 70 per cent and the non-Indigenous rate is 90 per cent, the rate difference is 20 percentage points. The six COAG Closing the Gap targets and many other indicators are expressed primarily using rate differences, to measure the change in the Indigenous/non-Indigenous gap over time. This is consistent with COAG's emphasis on closing gaps in outcomes between Indigenous and non-Indigenous people
- a rate ratio compares rates to allow statements such as 'the Indigenous rate is three times the non-Indigenous rate'. For example if the Indigenous rate is 30 per cent and the non-Indigenous rate is 10 per cent, the rate ratio would be three to one (or 3:1).

3.8 References

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