National Strategies for Improving Indigenous Health and Health Care

Judith Dwyer, Kate Silburn and Gai Wilson, La Trobe University
In 2003, a series of papers was commissioned to provide information, analysis and advice to Government as part of a Review of the Australian Government’s Aboriginal and Torres Strait Islander Primary Health Care Program. The Review examined issues relating to funding for comprehensive primary health care for Aboriginal and Torres Strait Islander people and the impact of activity in this area. The commissioned material complemented information obtained from previous reviews and evaluations as well as that obtained from program data.

An Interdepartmental Committee (IDC) oversaw the Review process. Members of the IDC were from the Australian Government Departments of the Treasury; Prime Minister and Cabinet; Finance and Administration; Immigration and Multicultural and Indigenous Affairs; Health and Ageing (Chair); and Aboriginal and Torres Strait Islander Services.

This is Volume 1 of the published Review papers. It is the major external assessment undertaken for the Review and it draws on the findings of all commissioned papers as well as material from a range of other sources.

The papers in this series are:

**Volume 1. National Strategies for Improving Indigenous Health and Health Care** by Judith Dwyer, Kate Silburn and Gai Wilson, La Trobe University.

**Volume 2. Investment Analysis of the Aboriginal and Torres Strait Islander Primary Health Care Program in the Northern Territory** by Carol Beaver, Centre for Chronic Disease, University of Queensland and Yuejen Zhao, Health Gains Planning Unit, Department of Health and Community Services, Northern Territory.

**Volume 3. Costings Models for Aboriginal and Torres Strait Islander Health Services** by Econtech Pty Ltd.

**Volume 4. Capacity Development in Aboriginal and Torres Strait Islander Health Service Delivery – Case Studies** by Cindy Shannon and Helen Longbottom, School of Population Health, University of Queensland.


**Volume 6. Maternal and Child Health Care Services: Actions in the Primary Health Care Setting to Improve the Health of Aboriginal and Torres Strait Islander Women of Childbearing Age, Infants and Young Children** by Sandra Eades, Menzies School of Health Research.

**Volume 7. Substance Misuse and Primary Health Care among Indigenous Australians** by Dennis Gray, National Drug Research Institute, Curtin University of Technology; Sherry Saggers, Centre for Social Research, Edith Cowan University; David Atkinson, Rural Clinical School, University of Western Australia and Phillipa Strempel, National Drug Research Institute, Curtin University of Technology.

The opinions expressed in these papers are those of the authors and are not necessarily those of the Australian Government.

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### Acronyms and abbreviations

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<th>Description</th>
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<tbody>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
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<tr>
<td>ACCHS</td>
<td>Aboriginal Community Controlled Health Service</td>
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<td>AHMAC</td>
<td>Australian Health Ministers’ Advisory Council</td>
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<td>AHW</td>
<td>Aboriginal Health Worker</td>
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<td>AIDA</td>
<td>Australian Indigenous Doctors’ Association</td>
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<td>AIHW</td>
<td>Australian Institute of Health and Welfare</td>
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<tr>
<td>AMA</td>
<td>Australian Medical Association</td>
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<tr>
<td>APY Lands</td>
<td>Anangu Pitjantjatjara Lands</td>
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<tr>
<td>ARIA</td>
<td>accessibility/remoteness index of Australia</td>
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<tr>
<td>ATSIC</td>
<td>Aboriginal and Torres Strait Islander Commission</td>
</tr>
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<td>ATSIHPF</td>
<td>Aboriginal and Torres Strait Islander Health Performance Framework</td>
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<tr>
<td>ATSIHWIU</td>
<td>Aboriginal and Torres Strait Islander Health and Welfare Information Unit</td>
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<tr>
<td>CARPA</td>
<td>Central Australian Rural Practitioners Association</td>
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<tr>
<td>CATSIN</td>
<td>Congress of Aboriginal and Torres Strait Islander Nurses</td>
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<tr>
<td>CCT</td>
<td>Coordinated Care Trial</td>
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<tr>
<td>COAG</td>
<td>Council of Australian Governments</td>
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<tr>
<td>COPD</td>
<td>chronic obstructive pulmonary disease</td>
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<tr>
<td>CPHC</td>
<td>Comprehensive Primary Health Care</td>
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<tr>
<td>CSHTA</td>
<td>Community Health Services Training Australia</td>
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<tr>
<td>DALYs</td>
<td>disability adjusted life years</td>
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<tr>
<td>DASR</td>
<td>Drug and Alcohol Services Report</td>
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<tr>
<td>DEWR</td>
<td>Department of Employment and Workplace Relations</td>
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<tr>
<td>DRG</td>
<td>diagnosis related group</td>
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<tr>
<td>EPC</td>
<td>enhanced primary care</td>
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<tr>
<td>FTE</td>
<td>full-time equivalent</td>
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<tr>
<td>GP</td>
<td>general practitioner</td>
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<td>GPPAC</td>
<td>General Practice Partnership Advisory Council</td>
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<td>GST</td>
<td>goods and services tax</td>
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<tr>
<td>HACC</td>
<td>Home and Community Care</td>
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<tr>
<td>HBG</td>
<td>health benefit group</td>
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<tr>
<td>HIC</td>
<td>Health Insurance Commission</td>
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<td>HR</td>
<td>human resources</td>
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<td>HRG</td>
<td>health resource group</td>
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IDC  Inter-departmental Committee
IT  information technology
MBS  Medical Benefits Scheme
MOU  memorandum of understanding
NACCHO  National Aboriginal Community Controlled Health Organisation
NAGATSIHID  National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data
NAHS  National Aboriginal Health Strategy
NATSIEHP  Review of the Implementation of the National Aboriginal and Torres Strait Islander Eye Health Program
NATSIHC  National Aboriginal and Torres Strait Islander Health Council
NHC  Nganampa Health Council
NHIMG  National Health Information Management Group
NHMRC  National Health and Medical Research Council
NIHIP  National Indigenous Health Information Plan
NPHP  National Public Health Partnership
NSFASTSIEH  National Strategic Framework for Aboriginal and Torres Strait Islander Health
NTP  Ngunytju Tjitji Pirni
OATSIEH  Office for Aboriginal and Torres Strait Islander Health
PBS  Pharmaceutical Benefits Scheme
PHC  Primary health care
PHCAP  Primary Health Care Access Program
PHCSs  Australian Government funded Aboriginal and Torres Strait Islander primary health care services
SAR  Service activity report
SCATSIEH  Standing Committee on Aboriginal and Torres Strait Islander Health
SCRGSP  Steering Committee for the Review of Government Service Provision
STI  Sexually transmitted infection
Acknowledgements

The authors were commissioned to prepare this paper on the basis of expertise in health policy and health systems, rather than expertise in Indigenous health. The Interdepartmental Committee sought an independent assessment, and we accepted the task acutely aware of the responsibility and the need for access to expert advice. We were assisted by several experts in Indigenous health and related fields, including Professor Ian Anderson, Associate Professor Cindy Shannon, Dr John Condon, Dr Sandra Eades, Ms Karen Gardner, Associate Professor David Legge, Dr Helen Longbottom, Dr Bev Sibthorpe, Dr Paul Torzillo, the staff of the Office for Aboriginal and Torres Strait Islander Health (especially Mary McDonald, Susan Jones, Helen Pampling and other staff working on the review), members of the AHMAC Standing Committee on Aboriginal and Torres Strait Islander Health, members of the Board of the National Aboriginal Community Controlled Health Organisation and many others. Jo Condron provided research assistance. We are deeply grateful for the generosity and openness with which our requests for advice, resources and commentary were met. The views expressed and any errors are ours.
Summary

The severity and human cost of poor health among Indigenous Australians is well recognised, and the challenge of overcoming Indigenous Australians’ health disadvantage is daunting. However, over the last eight years, a good foundation for effective action to improve Aboriginal and Torres Strait Islander health has been built. Although results are not yet seen in widespread improvement in ‘headline’ indicators of health outcomes, there is evidence of intermediate improvements in health status in some communities, increasing capacity in the primary health care system and greater engagement by the mainstream health system.

Indigenous Australians do not yet enjoy equitable access to effective health care, and continued effort to build a comprehensive primary health care system that can meet their needs is required. While it will take some years of development to achieve equitable access to primary health care for Indigenous Australians, there is sufficient evidence of its effectiveness to warrant the investment required. Significant real improvements in health outcomes, measurable through indicators of health status, can be expected.

However, health is not determined by health care alone. Much could also be gained if current initiatives to strengthen community capacity and coordinate investments in Indigenous communities are successful in addressing some of the social determinants of ill-health; and if Indigenous communities and governments are successful in fostering an environment that enables communities, families and individuals to engage more actively in sharing responsibility for their own health.

This paper was commissioned following the Australian Government’s request to the Minister for Health and Ageing to review the Aboriginal and Torres Strait Islander Primary Health Care Program. The Primary Health Care Review (the Review), undertaken through an Inter-departmental Committee (IDC), reported to the Australian Government through the Minister for Health and Ageing in the 2004–05 budget context. Our task was to provide an assessment of the level and impact of current funding and health care provision for Indigenous Australians; a strategy for improving the effectiveness of health care for Indigenous people; and advice regarding outcome indicators against which the effectiveness of Australian Government investment in Indigenous health care could be monitored. Government policy, as articulated in the National Strategic Framework for Aboriginal and Torres Strait Islander Health (NATSIC 2003) and in the Government’s response to the Commonwealth Grants Commission report on funding (Commonwealth of Australia 2002), is taken as the guiding framework for this paper.

The context in which this paper was developed did not allow open consultation with Indigenous health care organisations or Indigenous communities. Our assessment is based on available literature from government, Indigenous and research arenas, and draws heavily on the many reviews conducted over recent years. The evidence has been analysed against available standards and norms, and the framework of government policy goals, with a focus on access to care and effectiveness of the service system.

The paper contains proposals for expansion in the program of primary health care for Indigenous Australians which are intended to be developed in a way that is consistent with the National Strategic Framework for Aboriginal and Torres Strait Islander Health. These proposals, and others, will require development, testing and refinement, in partnership between Indigenous organisations and communities and government, when funding allows expansion to occur.

This extended summary is intended to present the main ideas and proposals in a form that can be read as a stand-alone document, in order to make the substance of the report accessible to a broader readership.

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1 This paper was written before the decision to abolish ATSIC was announced. The implications of this change for some aspects of health care planning and forums have not been addressed.
Our approach to the task

Our approach is based on program logic, a model for evaluating programs in complex environments that tracks the causal connections between inputs, throughputs, impacts and outcomes. We have assembled the available evidence, with the generous assistance of the Australian Department of Health and Ageing and the advice of independent experts, and used comparators from mainstream Australia and the indigenous populations of comparable countries, to assess each element of the Australian Indigenous health ‘program’. Our focus is on the primary health care services funded by the Australian Government, both Indigenous-specific and mainstream, within the context of the whole complex and interdependent Australian health care system.

In this paper, we start from a consideration of the questions facing decision makers (on what basis can decisions about investment in Indigenous health be made and in what ways can health care delivery address the problem?) and then examine current access to health care and the evidence regarding its effectiveness. Next we consider the current limiting factors in the capacity of the health system and how they might be resolved. We then address the question of measurable improvements in the impacts and outcomes for Indigenous Australians’ health that could be expected if Indigenous people have adequate access to good health care; and finally consider the levels of investment required to enable these outcomes.

The challenge of improving Indigenous health

The Australian Government has expressed its determination to address Indigenous Australians’ health disadvantage both alone (Commonwealth of Australia 2002, p. 25) and in concert with state and territory governments (NATSIHC 2003). Commitment to addressing Indigenous disadvantage more broadly has been affirmed through a range of policy and leadership initiatives, including most recently the Council of Australian Governments (COAG) Shared Responsibility initiative and the report Overcoming Indigenous Disadvantage: key indicators 2003 (SCRGSP 2003). The need for strategies to address health disadvantage is consistently acknowledged as a core component of the broader agenda.

The challenge now is to determine the most effective strategies for achieving measurable progress in Indigenous health. The context is one of long-standing health problems, combined with long lead times required to demonstrate improvements, particularly in ‘headline’ indicators such as reduction in mortality rates. In this context, government policy has established two key criteria against which any proposed policy or funding change can be assessed: the potential to improve health outcomes and the potential to improve equity of access to effective health care services (Commonwealth of Australia 2002).

The role of health care

While the causes of illness and injury for any community lie in broad environmental, economic, social and biological factors, nevertheless an effective health care system is essential to preserve life and health. It does so through diagnosis and treatment; through early intervention to minimise the impact of illness and injury; through identifying and managing risks to health (e.g. the spread of infectious disease); and through supporting the capacity of individuals, families and communities to take responsibility for their own health. No amount of investment in housing, education, employment, infrastructure or other potentially health-promoting public policy can replace the functions of health care; but the effectiveness of health care can be greatly enhanced by the positive impacts of healthy public policy.

The role of comprehensive primary health care

Ready access to local primary health care (PHC) is universally recognised as the foundation of a functioning health system. Primary health care provides an immediate response to acute illness and injury; it protects good health through screening, early intervention, population health programs (such as antenatal care and immunisation) and programs to promote social and emotional wellbeing and prevent substance abuse.
Critically for the Indigenous population, primary health care identifies and treats chronic diseases (including diabetes, cardiovascular and renal disease) and their risk factors. Primary health care also acts as a pathway to specialist and tertiary care, and enables local (or regional) identification and response to health hazards; transfer of knowledge and skills for healthy living; and identification and advocacy for the health needs of the community.

The Australian health system as a whole is built on a base of primary health care, which works well for most Australians. But there is strong evidence that it has not worked well for Aboriginal and Torres Strait Islander people, and problems with access to primary health care provided the momentum for the development of the Indigenous-specific health sector (in the form of Aboriginal Community Controlled Health Services) beginning in 1971.

While lack of access to a responsive health system, particularly primary health care, is not the only cause of Indigenous health disadvantage, there is good evidence that primary health care can make a significant contribution to redressing it (Commonwealth Grants Commission 2001, p. 116).

**Current access to primary health care is inadequate**

Access to primary health care is essential to improve health status, but the current level of primary health care provision to Indigenous Australians is inadequate to meet that need. The delivery system for Indigenous primary health care is and will remain a complex inter-dependent network of services, Indigenous-specific and mainstream, generalist and specialised, across all ages and all aspects of health need. The challenge is to improve access for Indigenous Australians to effective care across this broad system. This section assesses current adequacy of access, and argues that the current strategy of both developing the Indigenous-specific sector and enhancing mainstream accessibility must continue.

Indigenous Australians use services funded through the Medical Benefits Scheme (MBS) and the Pharmaceutical Benefits Scheme (PBS) at less than half the rate of non-Indigenous Australians (even with no adjustment for the relatively higher burden of disease). In 1998–99, for every $1 of MBS-funded services used by non-Indigenous Australians, 41c was used by Indigenous Australians, and through PBS, the equivalent measure is 33c (OATSIH 2003a, p. 33; AIHW 2001). Access to services funded through the Office for Aboriginal and Torres Strait Islander Health (OATSIH) partly redresses this imbalance, but total Australian Government spending on primary health care services for Indigenous Australians was only about 70% of that for other Australians (AIHW 2001, pp. 4, 25–26).

These comparisons based on cost are not by themselves a good measure for equity of access, because they are not adjusted for need, or the higher cost of delivery to small remote and rural communities. The level of utilisation of health services by Australians rises sharply with their level of illness. People with one significant medical condition use 4 times the average MBS and PBS services; with five conditions, it is up to 12 times. Given the poorer health of Indigenous Australians, equitable access to health care would result in much higher than average use.

Indigenous Australians’ access to primary health care is a problem in all areas of Australia, but varies with location. Aboriginal and Torres Strait Islander Australians do not access mainstream services, even in cities where they are readily available, to the level that would be expected given their health status. The government’s approach to improving access is based on two complementary strategies: increasing the capacity of the Indigenous-specific sector, and enhancing the accessibility of the mainstream primary health care system, through adjustments to MBS and PBS and other measures. Both of these strategies are essential, because Indigenous Australians (like all Australians) need good access to a complex network of primary health care services with good linkages. Both Indigenous-specific and mainstream services are needed by Indigenous communities.
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Indigenous-specific services will continue to play an essential role in addressing Indigenous health disadvantage, for four key reasons. Firstly, Indigenous Australians need different services because their health needs are different. In particular, the greater prevalence of chronic diseases in the Indigenous population means that a complex ongoing set of interventions is required which can only be provided by a skilled multi-disciplinary workforce, able to sustain effective long-term treating relationships and links with other providers. General practice services funded through the MBS are not able to meet these needs fully (Keys Young 1997), while Indigenous-specific agencies are designed to provide the basic health infrastructure required for effective service delivery.

Secondly, for several reasons including historical and cultural ones, mainstream health services are not generally capable of meeting the needs of Indigenous Australians and this makes it hard for Indigenous people to use them. This lack of capacity is more pronounced in some areas where traditional cultures and languages are still practised. Work to change the responsiveness of mainstream services should continue, but effective primary health care is needed now. Many Indigenous Australians will go without primary health care (Keys Young 1997, p. 61) if a service that specifically welcomes them and responds appropriately to their needs is not available.

Thirdly, the Indigenous population constitutes such a small proportion of the total primary health care ‘market’ in many areas of Australia (even if they used mainstream general practitioners (GPs) and other services proportionately) that their power in the market to stimulate mainstream health services to be responsive to their needs is severely limited. Their high levels of poverty exacerbate this problem. GPs are responsive to their markets, and a strategy that relied on GPs making independent decisions to substantially change their services to meet the needs of 2% of the market would be unlikely to produce significant results, and neither would many of them have the skills and experience to do so. However, there are some outstanding exceptions among GPs and mainstream community health agencies, and the work of these individuals and groups makes a valuable contribution, as do GPs who work part-time in local Indigenous-specific clinics.

Finally, the role of Indigenous-specific services is not simply one of substitution for mainstream services. They also provide a base for training of both Indigenous and non-Indigenous health professionals, and for research and development of new approaches to Indigenous health (either alone or in partnership with mainstream agencies and researchers). This aspect is particularly important in urban services, because of their proximity to medical schools etc. and to the headquarters of mainstream specialist providers (e.g. the leadership of child and adolescent mental health services tends to be based in capital cities). Indigenous-specific services in all areas provide the referral pathway to specialist and tertiary services, and support the providers in their responses to Indigenous patients. They are also the appropriate base for community development approaches to improving health.

For these reasons, an effective primary health care system for Indigenous Australians requires Indigenous-specific services. This applies in urban as well as rural and remote areas. While a much higher proportion of Australian Government health care spending for Indigenous people in remote regions is through OATSIH funding (over 90% of primary health care spending in remote areas was through OATSIH in 1998–99) more than half of all spending for urban and rural people was also through OATSIH (between 50% and 60%), in spite of the much greater availability of mainstream services.

However, the mainstream primary health care system, both Australian Government and state/territory funded, also makes an essential contribution which could be further strengthened. Efforts to enhance the accessibility of MBS and PBS services since the landmark Keys Young Report (1997) have made it easier for Indigenous Australians to obtain Medicare cards, use GPs and receive prescribed medicines. They have also assisted Indigenous-specific agencies through enabling MBS funding for their GP services. This work should continue, and the current proposal to set up an MBS item for an Aboriginal and Torres Strait Islander Adult Health Check is a relevant example.
Impact and outcomes of the current system of health care

We have argued that access to good primary health care is essential to enhancing Indigenous health status, and that current access is inadequate. While recent increases in funding have improved access, significant focused effort within the health system only commenced eight years ago (in 1995–96), and has developed gradually over that time. While continuing poor health status is not unexpected in these circumstances, there is evidence that the impact of existing services is positive. Because of poor access, evidence of impact can only be assessed in relation to those communities that are reasonably well served by effective primary health care. This evidence is by definition local, and the impact tends to be swamped in national and state/territory-level data.

There is reliable evidence of real achievements by Indigenous-specific services in some key areas (see summary in the Appendix). A few examples are highlighted in Table A below.
Table A: Examples of impacts and outcomes of Indigenous-specific health services

<table>
<thead>
<tr>
<th>Communicable diseases control through vaccination</th>
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<tr>
<td>• Increased childhood immunisation rates – to 91% of children in the Tiwi Islands and 100% in Wilcannia (KPMG 2000).</td>
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<tr>
<td>• Indigenous people who attend an Indigenous-specific medical service are more likely to be appropriately vaccinated for Pneumococcal disease than Indigenous persons who attend a GP (76% versus 32% respectively) (Department of Health and Ageing 2003a).</td>
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<th>Treatment of communicable diseases</th>
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<td>• By 1997–98, the prevalence of gonorrhoea in the Anangu community served by Nganampa Health Council was reduced by 46% and chlamydia by 20%. Prevalence has since remained stable at 5% and 6% respectively. Approximately 70% of the adult population served by Nganampa Health Council participate in an annual STI screen (Miller et al. 2001; Torzillo 2003; Department of Health and Aged Care 2001b).</td>
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<thead>
<tr>
<th>Cancer screening</th>
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<td>• The Northern Territory Well Women’s Program, which operates in a region with a high proportion of Indigenous women and has a long history of engagement with women and local Aboriginal Health Services, has achieved a high rate of cervix screening (61%) in the Alice Springs Remote area, which is comparable to the rate for Australian women generally (62%) (Condon 2004).</td>
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<th>Reduced complications of chronic disease</th>
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<td>• In 1999 a trial to improve diabetes care in the Torres Strait resulted in an 18% fall in hospital admission rates and a reduction of 41% in the number of people admitted to hospital for diabetes-related conditions. On follow-up in 2002 there was a continuing reduction in hospital admissions for diabetes complications (from 25% in 1999 to 20% in 2002). The proportion of people with good glycaemic control increased from 18% to 25%, and the proportion of people with well-controlled hypertension increased from 40% to 64% (McDermott et al. 2001; McDermott et al. 2003).</td>
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<tr>
<td>• A mental health project at the Geraldton Regional Aboriginal Medical Service reduced psychiatric admissions of Aboriginal and Torres Strait Islander people to Geraldton Regional Hospital by 58% (Laugharne et al. 2002).</td>
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<tr>
<th>Improved maternal and child health outcomes</th>
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<td>• Since 2000 the Townsville Aboriginal and Islander Health Service’s Mums and Babies Project increased the numbers of women presenting for antenatal care (from 40 to over 500 visits per month in 1 year). The number of antenatal visits made by each woman has doubled, with the number having less than four visits falling from 65% to 25%, Pre-natal deaths/1000 reduced from 56.8 prior to the program to 18 in 2000; the number of babies with birth weights less than 2500 grams has dropped significantly; and the number of premature births has also decreased (Shannon &amp; Longbottom 2004; Eades 2004; Atkinson 2001).</td>
</tr>
<tr>
<td>• Since 1990 an antenatal program at Daruk Aboriginal Community Controlled Medical Service, Western Sydney has achieved increased awareness amongst Aboriginal women of the importance of antenatal care. Thirty-six per cent of Indigenous women presented within the first trimester, compared with 21% at Nepean and 26% at Blacktown Hospitals’ antenatal clinics; and women attended more antenatal visits (an average of 10 at Daruk compared to six at Nepean and nine at Blacktown) (Eades 2004).</td>
</tr>
</tbody>
</table>

There are many other examples of mainstream and Indigenous-specific services actively improving access to services for Indigenous Australians with high need. For example, the Inala Health Centre General Practice in Queensland, working with the local Indigenous community, increased services from a low of 12 Indigenous attendances in 1995–96 to 3894 in 2000–01. The Centre has an Indigenous doctor and used several strategies to improve access, including employment of another Indigenous staff member, display
of posters and other visual signs of welcome, cultural awareness training for all staff, dissemination of information about the services to Indigenous communities and promotion of collaboration between service providers (Department of Health and Aged Care 2001b).

Evidence regarding the broad impact of mainstream health care is incomplete, due to inadequate data regarding Indigenous status in the most populous states. State and national collections appear to show evidence of improvement in some indicators.

- Aboriginal and Torres Strait Islander infant mortality has declined from over 80 deaths per 1000 live births in the 1970s to 26 deaths per 1000 live births in 1981 (ABS 2000c, p. 76), with continuing gradual improvement. In 2000–02 the Indigenous infant mortality rate in the Northern Territory was 18.1 per 1000 live births (compared to 11.2 for the total population) and in NSW, which had the lowest rate, it was 9.5 per 1000 live births (compared to 5 deaths/1000 live births) (ABS 2003, p. 96).
- Indigenous life expectancy increased by 1.6 years for males and 0.9 years for females over the ten years from 1989–1999 (as measured by median age at death). Non-Indigenous life expectancy increased by 2.7 and 2.8 years, so the gap continued to grow (ABS 2000c).
- Age-specific death rates have declined for all age groups except 15–24 and 45–54 years (based on WA, NT and SA data) (ABS 2000c, p. 75).

A less direct measure of impact is offered by calculating the effect on Indigenous health and health care of withdrawing OATSIH funding for primary health care services. For nine preventable diseases (which account for about 27% of current health spending for this population), the withdrawal of OATSIH-funded services in the Northern Territory was estimated to cause a loss of healthy life (using Disability Adjusted Life Years or DALYs) of 2.6, 6.1 and 12.6 years per person in 5, 10 and 20 years time respectively (Beaver & Zhao 2004). Savings in the OATSIH program would be offset by increased costs to other parts of the system, largely hospital costs, resulting in a ratio of costs to savings of 5 times over 5 years, 7 times over 10 years and 11 times over 20 years. The applicability of this modelling nationally is untested, and it cannot be generalised to other diseases. However, the overall findings are supported by the known impact of effective primary health care for chronic conditions in populations globally. Further, the modelling is robust to realistic variances in key assumptions, and can be accepted as a valid indicator of the direction (if not the precise measure) of the real positive impact of health care provision.

The available evidence of health impact in Indigenous populations, and the known effective interventions of primary health care, indicate that the impact of effective primary health care is seen in:

- reduced prevalence and incidence of communicable diseases that are susceptible to immunisation programs;
- reduced complications of chronic disease through effective chronic disease management programs;
- improved maternal and child health outcomes (such as birth weight) through the implementation of culturally appropriate antenatal and early childhood programs; and
- reduction in social and environmental risks through effective local public health advocacy, such as changes to liquor licensing regulations.

The available evidence of intermediate health outcomes achieved by effective Indigenous-specific health services gives grounds for governments to increase their investment in improving access to comprehensive primary health care. Further, there is no reason to believe that health interventions that are of proven effectiveness for the general population cannot be effective in Indigenous populations, provided that the delivery system that brings these interventions is effectively tailored to the needs of Indigenous communities.
Capacity of the health system

While funding levels are a critical brake on access, the current capacity of the delivery system is also not adequate to respond to health needs. Significant growth in funding would need to be complemented with vigorous attention to some major limiting factors, and further development of the service system including:

- care delivery models;
- structure of the delivery system;
- workforce development;
- governance development;
- data for decision making;
- effective leadership;
- coordination by governments; and
- greater engagement by the mainstream health system.

These issues are of vital importance—four that go directly to the major questions for government are addressed below.

Care delivery models

The existing OATSIH definition of comprehensive primary health care (CPHC) provides a sound basis on which to build further specification of the basic platform of services, and of service system models. The four key elements are:

- competent clinical care—treatment of acute illness and injury, emergency care and management of chronic conditions (including mental illness);
- population health programs—antenatal services, immunisation, screening programs for early detection of disease, and specific health promotion programs (e.g. physical activity, nutrition, oral health, prevention of substance misuse);
- pathway for access to secondary and tertiary care—referral, support for referred patients, development and maintenance of linkages with a range of health services (such as medical specialists and referral hospitals) and related community services (aged care, disability); and
- client/community assistance and advocacy—identification of factors contributing to illness or risk; working with individuals and communities to develop strategies to reduce risk or harm, including for health risk factors and health determinants which lie outside the direct ambit of the health system. (NATSIHC 2003; Shannon & Longbottom 2004).

If the goal of comprehensive primary health care for Indigenous Australians is to be achieved, a necessary next step is to develop better specification of the basic platform of services and capabilities that must be achieved at various levels (e.g. for given population sizes and travel distances).

Detailed specification of services is a task that is beyond the scope of this paper, and should be tackled by a multi-disciplinary group with strong clinical and community input. However, Table B below gives a draft list of the key elements.
## Table B: Elements of comprehensive primary health care

<table>
<thead>
<tr>
<th>Health services</th>
<th>Support</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical services—with access to emergency care 7 days/24 hours (local or remote)</td>
<td>Standard treatment protocols for common conditions, based on evidence</td>
<td>Competent and expert care</td>
</tr>
<tr>
<td>Antenatal care</td>
<td>Data collection, evaluation, monitoring</td>
<td>Well lead and managed (sound policies and procedures, practice guidelines and manuals)</td>
</tr>
<tr>
<td>Immunisation</td>
<td>Ongoing staff development—including health worker training</td>
<td>High quality</td>
</tr>
<tr>
<td>Care of 0–5 yr olds, and support for effective parenting</td>
<td>Intersectoral collaboration (focused on known opportunities for health gain)</td>
<td>Universal access</td>
</tr>
<tr>
<td>Sexually transmitted infection (STI) services</td>
<td>Programs to enhance the capacity of Indigenous families and individuals to take responsibility for their own health</td>
<td></td>
</tr>
<tr>
<td>Primary medical care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screening where there is an appropriate method and good evidence of outcomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to specialist care and referral to secondary and tertiary services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary prevention of chronic disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Care coordination for people with complex and chronic conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental health services and programs to enhance social and emotional wellbeing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific vertical programs (nutrition, substance abuse)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Based on personal communication with Dr Paul Torzillo (2 September 2003)

### The delivery system

Specification of a platform of services that should be available to all Indigenous Australians is an important step, and can be used to guide the development of the system that can deliver these elements. It is important to clarify that all Australians need access to a wide range of primary health care services, and no one agency or type of service can provide the full range. Key elements include GPs, pharmacies, laboratories and radiology services; and allied health, maternal and child health, women’s health, men’s health, aged
care, and community health programs, domiciliary care, transport, and mental health. The list could go on. The point is that a service system, with effective links between services, rather than any single program is required.

The precise mix of agencies and service delivery methods required to achieve access to these services will be highly variable, and local planning and capacity development remain essential. However, it is possible to specify key characteristics of the required delivery system.

Firstly, we have argued above that such a system is made up of a combination of Indigenous-specific and mainstream services, and even further enhancements in MBS and PBS will not change this reality, although they could deliver meaningful improvements.

Secondly, effective comprehensive primary health care requires a combination of ‘horizontal’ and ‘vertical’ systems and programs. The horizontal element is made up of local/regional primary health care agencies and GPs, adequately resourced to deliver and coordinate the required platform of services in an integrated package of care for their communities, complemented by specialist services (such as the Royal Flying Doctor Service and pathology laboratories). The vertical element is made up of targeted national- or state/territory-level programs (e.g. Eye Health, Cervix Cancer Screening), which are designed to address specific health issues and achieve specific targets.

It follows that a strategy of funding ‘best buys’ won’t work unless there is a strong network of local and regional service providers in place to deliver them. The modelling carried out by Beaver and Zhao (2004) assessed the best buys for reducing the burden of illness from nine preventable chronic conditions. They found that clinical primary health care for newly diagnosed and existing patients was the most effective intervention for saving health care resources (primarily through better management of the progression and complications of chronic disease, and resulting reduced demand on more expensive components of the delivery system).

These findings illustrate the potential for enhancing the cost-effectiveness of intervention through evidence-based planning and care delivery. They also indicate that delivery of the most effective interventions requires a platform of comprehensive primary health care. Best buys are part of effective primary health care, not a substitute for it.

Thirdly, there is a minimum size below which health care agencies cannot be effective. For Indigenous-specific agencies, there are good reasons to move towards a regional model, based on achieving critical mass. Arrangements for existing small agencies, and to enable local responses to local problems, will be needed. This element of the service system is further addressed under governance below.

Specification of the basic platform of services that constitute CPHC, and the establishment of an agreed regional model for the Indigenous-specific service system, with adequate resourcing, have the potential to deliver several benefits. These measures can provide a guide for decision making in relation to funding and support, can support progress towards the goal of equity of access to care, assist the development of good practice in clinical care and the use of effective interventions, and enable stronger governance and management.

**Governance and structure of Indigenous health organisations**

There are many examples of good governance and management practice in the field of Indigenous health, and there are also areas where improvement is required. The Australian Government funds a range of Indigenous health agencies, most of which are Aboriginal Community Controlled Health Services (ACCHSs). They are represented nationally by the National Aboriginal Community Controlled Health Organisation (NACCHO).
In 2000–01, 129 Indigenous-specific primary health care organisations were funded by the Commonwealth and they provided 1.3 million episodes of care. A significant proportion of funded primary health care services (43% or 56 services) receive less than $500,000 per year with only 17 services receiving over $2 million per year. The ACCHSs receive funding from multiple sources and programs, each requiring different reporting formats.

Service capacity often reflects historic arrangements and agencies are not currently funded equitably on the basis of community need. It should be noted that the Government has considered and rejected the option of reallocating existing funding for Indigenous health organisations more evenly (Commonwealth of Australia 2002, p. 25) in light of the Commonwealth Grants Commission (CGC) finding that there was no evidence of funding in excess of needs in any location (CGC 2001, p. 144).

We propose two policy principles for action to enhance the effectiveness of Indigenous organisations. Firstly, future funding should be provided at levels that enable agencies to achieve critical mass for good governance and effective service delivery. In many areas, a regional approach to governance structures, with local arrangements for service delivery, is the most practical method of achieving this goal given small, dispersed populations. Alignment of regional boundaries, and the size of regions, should be based on the design requirements for effective health care delivery. Arrangements to accommodate existing small agencies will be required.

Secondly, the principle of Indigenous governance of Indigenous-specific services should remain strong, and the forms and types of organisations that are accommodated by this principle should continue to develop, in accordance with Indigenous community needs. At the same time, other forms of engagement for specific services and purposes (such as partnership arrangements and Indigenous services and committees within mainstream agencies) need to be actively pursued.

**National system development for Indigenous health**

Effective delivery of health care also requires good stewardship and governance at the national system level. Since 1995–96 the Australian Government (both alone and in concert with states and territories) has progressively implemented strategic reforms aimed at enhancing the health care system for Indigenous Australians at the national level. Highlights of system-level developments are summarised in Table C below.

The location of responsibility for Indigenous health within the Australian Department of Health and Ageing is virtually universally supported within the health sector, including Indigenous health organisations. The reasons for this support include the greatly enhanced ability to bring public health and medical expertise to bear, the emerging evidence of effectiveness, the leverage applied to the mainstream health system to enhance its response to Indigenous health disadvantage, and the record of achievement over the last eight years in allocating increased funding from within the health budget to Indigenous health. Responsibility for Indigenous health should remain with the mainstream health portfolio.
Table C: System-level development

<table>
<thead>
<tr>
<th>National leadership and planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Framework Agreements are in place in all jurisdictions, and health forums are established.</td>
</tr>
<tr>
<td>• Regional planning is completed in all jurisdictions and plans are being used to inform service enhancement priorities.</td>
</tr>
<tr>
<td>• The National Strategic Framework for Aboriginal and Torres Strait Islander Health, which sets out a 10-year plan, was endorsed by all governments in July 2003.</td>
</tr>
</tbody>
</table>

Increased investment in service delivery (1995–96 to 1998–99 unless otherwise specified)

| Australian Government funding has grown from $1059 per Indigenous person to $1433 (annual growth of 10.6%) and state/territory funding increased from $1144 to $1470 (annual growth of 8.7%) (AIHW 2001). |
| The number of episodes of care provided by Australian Government funded Aboriginal and Torres Strait Islander primary health care services (PHCSs) increased by 39% (SAR 1998–99 to 2000–01). |
| The number of Medicare-funded GP services provided in Aboriginal Community Controlled Health Services (ACCHSs) and state/territory-funded clinics increased by an estimated 142% (from 0.25 GP services per Indigenous person to 0.56) (Deebler et al., 1998; AIHW 2001). |
| The number of private GP services provided to Indigenous people increased by an estimated 54% (from 1.63 GP services per Indigenous person to 2.36) (Department of Health and Ageing data 2003, unpublished)². |
| The number of PBS items dispensed per Indigenous person increased from an estimated 1.43 to 2.11, with an estimated total cost increase of 100% (i.e. from $9.8m to $20.4m) (Department of Health and Ageing data 2003, unpublished). |
| Between 2000–01 and 2002–03, access to PBS in remote areas was improved through Section 100 arrangements from a total of $6.6m to $16.6M (Department of Health and Ageing data 2003, unpublished). |

Workforce and data development

| The number of doctors working in PHCSs has increased significantly with available data suggesting that it has doubled in the period since 1997–98 to a total of 201 in 2001–02. (SAR 1997–98 and 2001–02)³. |
| There are now 44 Indigenous general practitioners (50% more than in 1996) and 921 Indigenous registered nurses (33% more) in Australia (ABS 2001 Census); and 178 Indigenous students graduated from tertiary health professional courses in 2002. |
| Since 1998, computerised patient information and recall systems have been implemented in 57% of ACCHSs (SAR 2000–01). |

Impact of adequate investment in effective health care

Ultimately the Government’s goal is to eliminate the life-expectancy gap between Indigenous and non-Indigenous Australians. However, government also recognises that focusing on this indicator of health is not a practical strategy (SCRGSP 2003). The current Aboriginal and Torres Strait Islander Health Performance

² It should be noted that there are caveats on both MBS and PBS data (AIHW 2001). Direct comparisons of 1995–96 data with 1998–99 data are additionally difficult due to changes in both methodology and data availability.

³ This is an estimate based on 1997–98 and 2001–02 SAR data. The data from the two periods are not directly comparable (due to lack of recording of full-time equivalent numbers in the earlier year) but any error is likely to understate the real gain.
Framework (ATSIHPF) project, under the auspices of the Australian Health Ministers’ Advisory Council’s (AHMAC) Standing Committee on Aboriginal and Torres Strait Islander Health (SCATSIH), is working to develop an evidence-based framework for monitoring progress in health, consistent with the whole-of-government approach endorsed by COAG in the report *Overcoming Indigenous Disadvantage: key indicators 2003* (SCRGSP 2003).

One of the distinguishing features of the COAG and AHMAC approaches is the explicit tracing of links from strategic action to headline indicators. The Aboriginal and Torres Strait Islander Health Performance Framework will be the chief vehicle for assessing the effectiveness of implementation of the National Strategic Framework for Aboriginal and Torres Strait Islander Health, which has been endorsed by all governments. It will use program logic to trace the impacts and outcomes of health system interventions, and will use indicators for monitoring each major element of the ‘program’ of Indigenous health care. The table below outlines the highest priority indicators agreed by SCATSIH in 2002, as an interim measure pending the development of the Aboriginal and Torres Strait Islander Health Performance Framework.

**Table D: Priority indicators from the current National Performance Indicators for Aboriginal and Torres Strait Islander Health**

<table>
<thead>
<tr>
<th>Outcomes</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Life expectancy at birth</td>
<td></td>
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<tr>
<td>Infant mortality rate</td>
<td></td>
</tr>
<tr>
<td>Low birth weight babies</td>
<td></td>
</tr>
<tr>
<td>Child hearing loss</td>
<td></td>
</tr>
<tr>
<td>Vaccine-preventable disease rates</td>
<td></td>
</tr>
<tr>
<td>Overweight and obesity</td>
<td></td>
</tr>
<tr>
<td>Sexually transmitted infection rates</td>
<td></td>
</tr>
<tr>
<td>Age-specific death rates and ratios</td>
<td></td>
</tr>
<tr>
<td>Impacts</td>
<td></td>
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<tr>
<td>Pap smear rates</td>
<td></td>
</tr>
<tr>
<td>Childhood immunisation</td>
<td></td>
</tr>
<tr>
<td>Smoking prevalence</td>
<td></td>
</tr>
<tr>
<td>Alcohol consumption</td>
<td></td>
</tr>
<tr>
<td>Inputs and processes</td>
<td></td>
</tr>
<tr>
<td>Government expenditure</td>
<td></td>
</tr>
<tr>
<td>Indigenous workforce</td>
<td></td>
</tr>
<tr>
<td>Access to health care</td>
<td></td>
</tr>
<tr>
<td>Management of key conditions</td>
<td></td>
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</tbody>
</table>

This is an appropriate list of indicators, and the existing evidence of local impacts and outcomes shows emerging improvements in many of the items. The list will be refined as part of the finalisation of the Performance Framework.
Designing the right indicators is a technical challenge, as they must be valid signposts for better health and sensitive to improvements on the ground. The second step is to select a workable number of them (as SCATSIH has done). Good data collection and analysis are also essential, and finally, none of this will serve its purpose without consistent focus and monitoring over time.

The Aboriginal and Torres Strait Islander Health Performance Framework project should deliver valid answers to the question of impacts and outcomes in a reasonable timeframe. The work by the Australian Institute of Health and Welfare (AIHW), the Australian Bureau of Statistics (ABS), OATSIH, state/territory health authorities and health care providers over recent years to improve data collection, including the identification of Indigenous status, provides a strong foundation, but further effort is required.

We conclude that the elements of an effective performance monitoring system are in place or in progress, as a result of focused effort over several years, and results should be forthcoming within a reasonable timeframe.

**Required types and levels of investment**

We have argued that significant additional funding is required to meet the Government’s policy goals of equitable access to effective health care and improved health outcomes. In this section, we address the questions of funding levels, methods and timeframes.

**Funding levels**

Recent expert analyses of total spending and Indigenous health care needs relative to non-Indigenous Australians (see below) show clearly that less than half of the required funding is currently available. Within this total level of spending, there is also a mismatch of type of investment, with low spending on primary health care offset by higher use of hospital care (at approximately twice the rate of non-Indigenous Australians), which is neither good for health nor an efficient use of health resources.

In regard to primary health care, current spending is also less than half the level that is required. MBS and PBS spending has increased in recent years in response to changes designed to make medical and pharmaceutical services more accessible to Indigenous Australians, but is still less than half of equivalent spending on non-Indigenous Australians, without adjustment for need or remoteness. This is partly compensated for by grant funding through OATSIH, but the total level is still inequitable in comparison to non-Indigenous Australians, and inadequate to maximise health impacts and outcomes.

Adjustments for need and remoteness add significantly to total funding requirements. Given the poorer health of Indigenous Australians, equitable access to health care would result in higher than average use. The additional cost of delivering services in remote areas, and other characteristics such as high proportions of patients who primarily speak languages other than English and lack literacy skills, mean that higher unit costs of care are also incurred.

There is no simple answer to the question of how much funding will deliver the needed level of access to effective care. The economic modelling that has been done in recent years (Econtech 2004; Commonwealth Grants Commission 2001; Mooney et al. 1998; McDermott & Beaver 1996; Beaver et al. 1996; McDermott 1995) has variously allowed for burden of illness, remoteness, costs of treating people for whom English is not their first language, and the costs of infrastructure. Estimates range from 2.2 to 7.3 times the average per capita resources required by the non-Indigenous population.

OATSIH has analysed the modelling work, noting that some of the studies use data from specific populations, such as Indigenous people living in the Northern Territory. When figures are adjusted to take into account the Indigenous population on a national basis, and including allowance for remoteness and burden of illness, they fall between 3 and 6 times the national average per capita expenditure (OATSIH 2003c). The Commonwealth Grants Commission concluded that ‘at least 2 times' average per capita expenditure was
required given adjustment for poorer health status and greater reliance on the public system; and that this number would need to be multiplied by a factor of up to 2 to allow for the impact of greater costs in remote areas.

Econtech (2004), in a paper commissioned for the Review, estimates the required level of total health funding on a population needs basis (i.e. adjusting for the poorer health status of Indigenous Australians) at approximately 2.21 times the spending on non-Indigenous health care. There was no adjustment made for the additional costs of remoteness, or for culturally appropriate services.

The OATSIH analysis (OATSIH 2003e) concluded that lower resource requirement estimates emerge from modelling of the costs of a minimum level of health services. The higher estimates relate to the cost of providing additional services, to address health inequities and to provide culturally appropriate programs.

We conclude that total health spending on Indigenous populations would need to be increased to a level between 3 and 6 times the national average per capita expenditure to achieve equitable access to effective care. It is beyond the scope of this paper to estimate the budget implications of applying this modelling to OATSIH and other funding programs.

**Funding methods**

The complex nature of the primary health care system, and the involvement of both national and state/territory governments, inevitably mean that funding programs will also be complex and require significant planning and coordination effort.

The Primary Health Care Access Program (PHCAP) provides a framework for ensuring needs-based planning and allocation of funding; for collaboration between mainstream and Indigenous providers; and for managing the partnering relationships among key stakeholders, including governments, which are a necessary part of this endeavour. The evidence of impact presented earlier indicates that PHCAP-funded sites are delivering improved health impacts. While PHCAP is far from perfect, the forums and agreements it has created are in place, the policy intentions are broadly understood, and the major partners remain committed to the program. Any replacement is likely to suffer from the same complexities and long lead times. We conclude that investment in PHCAP should be continued, and that it should be used as one major method of increasing the funding for primary health care for Indigenous Australians.

Funding for ongoing primary care services needs to be made more certain, so that agencies can consolidate their focus on quality and effectiveness. Although complexity of funding sources makes this task difficult, OATSIH and other funding agencies could work with the sector to achieve it.

**Timeframes**

Health gain from additional resources is not a straight-line ‘dose response’ relationship. In a situation where there is inadequate primary health care, too small an increase may not enable the system to reach the level of effectiveness where health gains begin to be seen. However, the sort of increase required cannot be taken up quickly and a staged program of increased funding is required. Funding for service delivery should increase at a pace determined by the capacity of the delivery system to deploy it effectively. Investment in system infrastructure (including workforce development, better information systems and data collection, resources to support good governance, leadership development and infrastructure for quality improvement) should be front-loaded into the funding roll-out, to ensure that sound capacity is developed in a timely way.

We propose that a staged increase in funding of comprehensive primary health care for Indigenous Australians be properly scaled, based on the PHCAP framework, using a variety of funding formulae appropriate to local organisations and conditions. Administrative arrangements should provide greater certainty for primary health care providers and should hold providers accountable for outputs and impacts.
Conclusion

The weight of the evidence we have considered in the course of preparing this paper has convinced us that the groundwork has been done and there is a clear pathway for government to fulfill its commitment to address Aboriginal and Torres Strait Islander Australians health disadvantage.

Summary of conclusions

- Government commitment to overcoming Indigenous disadvantage requires that policy and funding decisions be based on two criteria: the potential to provide equitable access to effective health care; and the potential for improvement in Indigenous health.
- Good progress has been made in recent years in the development of the service delivery system and system infrastructure, both mainstream and Indigenous-specific.
- Current access to and investment in Indigenous primary health care is too low, but the existing level is producing some positive health impacts and outcomes.
- Investment in comprehensive primary health care should be increased to a level between 3 and 6 times the national average per capita expenditure.
- Funding should be allocated through both Indigenous-specific and mainstream funding programs, and to both Indigenous-specific and mainstream providers.
- The principle of community control of planning, management and delivery of Indigenous primary health care services should be maintained, in accordance with the National Strategic Framework. Community participation in partnerships and other forms of collaboration with mainstream health care agencies is also needed.
- The Primary Health Care Access Program should continue to be used as the major vehicle for additional funding and for the development of effective partnerships and plans.
- Urban Indigenous-specific agencies should continue to be supported, in light of the needs of urban Indigenous Australians, and in recognition of the roles these agencies play in developing the capacity of the mainstream health system.
- Indigenous health care should continue to be funded and administered as part of the health portfolio.
- Outcomes and impacts of increased funding should be monitored through the National Performance Framework currently under development. Sustained monitoring of a small number of valid indicators, focused on those conditions and targets that are sensitive to improvements in primary health care, and supported by robust data collection and analysis, are needed.
Introduction

This paper has been commissioned by the Department of Health and Ageing (on behalf of the Interdepartmental Committee [IDC]) as part of the Primary Health Care Review (the Review). The Review arose from the Government’s request to the Minister for Health and Ageing to review the Aboriginal and Torres Strait Islander primary health care program and report in the 2004–05 budget context. The Review was undertaken through an Interdepartmental Committee comprising members from the Departments of Health and Ageing, Treasury, Finance and Administration, Prime Minister and Cabinet, Immigration and Multicultural and Indigenous Affairs, and Aboriginal and Torres Strait Islander Services.

1.1 Purpose and scope

The objectives of this paper are to:

• assess the impact of Australian Government funding for comprehensive primary health care for Aboriginal and Torres Strait Islander Australians (both mainstream and Indigenous-specific) in various locations including urban, rural and remote areas;
• provide advice on the strategy and relevant timeframes required to achieve appropriate levels of comprehensive and effective health care for Aboriginal and Torres Strait Islander Australians; and
• provide information and advice on the likely short-, medium- and longer-term health impacts that could be expected to result from increased investment in this area.

1.2 Approach to the task

Our approach is based on program logic, that is, a model for evaluation of programs in complex environments that tracks the causal connections between inputs, throughputs, impacts and outcomes. Thus we examine the levels of funding, the way funding is applied, and the service delivery that results, in terms of their effectiveness to produce the desired outcome, which in this case is to eliminate or minimise Indigenous health disadvantage.

We have assembled the available evidence, with the generous assistance of the Office for Aboriginal and Torres Strait Islander Health (OATSIH) and the advice of independent experts, and used comparators from mainstream Australia and the indigenous populations of comparable countries, to assess each element of the Australian Indigenous health ‘program’.

The next part of this paper explores the nature of the challenge the country faces in the effort to improve the health of Indigenous Australians and key aspects of the policy context. This section establishes the context and the fundamental policy goals, which are the foundations for the application of program logic—that is, they establish the goals and standards against which the effectiveness of the program is then assessed.

Part 3 (Effectiveness of current programs) examines current levels of access to primary health care services and the impacts and outcomes of the current service system.

Part 4 (Strategies for narrowing the gap) examines the current capacity of the health system and proposes strategies for improving access and outcomes.

Part 5 (Measuring improvement and required investment) addresses the difficult challenge of designing and monitoring reliable indicators to provide valid information about progress in access to health care and in health outcomes. The required level of investment to achieve measurable results is assessed in this section.

We have attempted throughout to enable the reader to appreciate the current situation, weigh the available evidence and assess strategies on the basis of their potential to deliver measurable improvements in the
health of Indigenous Australians. The paper has been kept as concise as possible, consistent with meeting these requirements. For ease of reference, the focus of each part is explained in italics at the beginning, and the import of each section is summarised in italics at the end. Case studies are used to illustrate with practical examples some of the approaches and models we assessed, and some successful strategies already underway.

On terminology

We have used the terms ‘Indigenous-specific services’ and ‘Indigenous primary health care agencies’ when we need to encompass both Aboriginal Community Controlled Health Services and other agencies (such as those owned and managed by state or territory governments) established with the primary goal of providing health care to Indigenous people. Aboriginal Community Controlled Health Services are defined as ‘primary health care services initiated and managed by local Aboriginal communities to deliver holistic and culturally appropriate care to people within their community’ (NACCHO 2003, p. 2). Other terms are defined as they arise, and the glossary provides a check list of the abbreviations used in this paper.
Context: Indigenous policy, Indigenous health and health care

This part gives an overview of Indigenous health disadvantage, and examines the rationale for focusing on health care, and particularly primary health care, in strategies that aim to improve Indigenous health outcomes. It also outlines the policy framework adopted for this paper.

2.1 Indigenous health disadvantage

The significant health disadvantage of Indigenous Australians has been well documented and is seen in virtually all accepted indicators of health status. Indigenous Australians have much higher death rates than non-Indigenous Australians in all age groups (ABS & AIHW 2003, p. 179) and the infant mortality rate is over two and a half times the national average (ABS 2000c, p. 75). Men of Aboriginal and Torres Strait Islander descent die, on average, 21 years earlier than their non-Indigenous counterparts, and for women the difference is 19 years (ABS & AIHW 2003, p. 182). This gap could potentially be greater if life expectancy was divided into years of good health and years of disability (WHO 2000). However, the exclusion of NSW and Victorian data (accounting for about one-third of the total Indigenous Australian population) from both the numerator and denominator in the calculation of these headline rates means that the precise gap is not known and could be slightly smaller than estimated.

The gap applies to both rural/remote and urban Indigenous populations, although patterns of disease and access to services are different. The AIHW notes that there is an increase in mortality rates in the general population with remoteness of location, and this gradient may also apply to the Indigenous population. While this has not been conclusively established, there is evidence that Indigenous Australians living in remote Australia have higher levels of some conditions such as end stage renal disease, than those living in urban areas (Cass et al. 2001).

The history of concerted effort in policy development, funding programs and service delivery to improve the health of Indigenous Australians is a relatively short one (arguably commencing only in 1995–96), if assessed against experience in comparable countries (USA, Canada and New Zealand) (Ring & Firman 1998; AMA 2003). Available information indicates that of the indigenous populations of these countries, Indigenous Australians suffer the highest burden of illness and early death. By the end of the 1990s, the USA, Canada and New Zealand had decreased the gap between their indigenous and non-indigenous populations to between five and seven years while Australia’s gap remained significantly greater at 21 years for males and 19 years for females (WHO 2000; AMA 2003; ABS & AIHW 2003; Ajwani et al. 2003). While differences in methods of identifying Indigenous status and other data problems mean that these figures must be treated with caution, the size of the difference in the longevity gap is too large to be explained by data problems or statistical artefacts. It should be noted that there has been a recent reversal (i.e. widening of the longevity gap) in New Zealand, which coincides with significant economic and structural changes in New Zealand during 1980–1999 (Durie 2003; Ajwani et al. 2003).

While there are significant gaps in the available data, there is no doubt that the health disadvantage of Indigenous Australians in all locations is significant when measured against mainstream Australia and when compared to the situation of Indigenous peoples in comparable countries. Specific national initiatives to address Indigenous health disadvantage have commenced relatively recently compared to the USA, Canada and New Zealand, and have not yet delivered equitable access to health care. Overcoming Indigenous health disadvantage (in rural, remote and urban locations) is a major national challenge.
2.2 Social, economic and cultural factors underlie the health problem

Health is determined by environmental, social, economic and biological factors, and health care alone is not the answer to any community’s health problems. Indigenous people’s health in particular is affected by the history of colonisation, and the ensuing economic and educational disadvantage, cultural dislocation, social exclusion, remoteness and other factors specific to their situations.

Both Indigenous and other commentators refer to a failure of public policy to address the broader social, economic and cultural determinants of poor health outcomes for Indigenous Australians (Ring & Brown 2002; Pearson 2000; Langton 2002; Altman & Hunter 2003). The deep and widespread problems of poverty, breakdown in family relationships and family violence, youth alienation, and abuse of alcohol and drugs have complex causation. There is a sense of uncertainty as to how underlying causal factors can be addressed and vigorous debate from different ideological perspectives. Uncertainty about policy directions is also reflected in the complexity of arrangements for institutional leadership and coordination among the various levels of government.

While the analysis of Indigenous leaders such as Dr Noel Pearson and Professor Marcia Langton remains controversial, new approaches to preventing abuses, regaining community cohesion and enhancing economic productivity are emerging. They share a shift in focus from receipt of assistance (‘sit down money’) to active community and individual engagement and self-determination (Pearson 2000; Langton 2002). Recent initiatives from within the Indigenous community are focused on addressing the underlying causes of disadvantage as well as the effects. Examples include the Youth Employment and Training Initiative in Mackay Queensland, the Tangentyere Night Patrol in the Northern Territory and the Atunypa Wiru Minyma Uwankaraku: Good Protection for all Women Project in the Northern Territory (Queensland Government 2003).

This is not to suggest that transformational change will come quickly, given the inter-generational nature of the damage that has been suffered by Indigenous Australians, both since white settlement and in the last 30 years. However, there is a sense that Indigenous leaders and communities are seeking to build community capacity from the inside, in active partnerships with government, business and the non-government sector. The willingness of mainstream Australia to support new initiatives (e.g. the Indigenous Enterprise Partnership, a partnership between Cape York communities and companies such as Westpac, and the establishment of the Rio Tinto Aboriginal Foundation) is also an optimistic sign.

This paper does not seek to address the broad field of Indigenous affairs, nor to comprehensively address the major social and environmental determinants that contribute to illness, injury and disability. Rather, we seek to outline the policy context, and acknowledge the complexities and uncertainties that face government, Indigenous peoples and all those who wish to contribute to reducing disadvantage.

Some important policy decisions have been made. But there is not yet a strong sense of progress towards an envisioned future in which Indigenous Australians enjoy prosperity and health to a level comparable to other Australians, while retaining and building strong Indigenous identities, cultures and communities. Progress on broad social, economic and cultural determinants of health status is essential (but not sufficient) if Indigenous health disadvantage is to be addressed.

2.3 Is a focus on health care necessary?

The health system does not hold the key to the prevention of illness and injury arising from social and economic causes, although it does have a contribution to make particularly at the community and regional level. However, an effective health care system is nevertheless essential for several reasons. Firstly, the current burden of illness in Indigenous communities requires proportionate allocation of health care resources to meet the resultant need for health care. Diagnosis and treatment of cancer, diabetes, heart disease, mental illness, communicable diseases and the full range of health problems, as well as maternity and infant care, can only be provided through an adequate health care system.
Secondly, screening, early diagnosis and secondary prevention in the management of chronic disease are essential to limit the future burden of illness requiring treatment. Thirdly, health knowledge and the advice of health professionals is required to enhance the capacity of individuals, families and communities to share responsibility for their own health. To do this requires knowledge about and resources for healthy lifestyles, local identification of emerging health hazards, and local action to ‘make healthy choices easy’ (through improving access to resources for health such as healthy food supply). While the education system, for example, can contribute in many ways, it is not reasonable to expect school teachers to be responsible or knowledgeable in these areas. By the same token, health workers cannot expect to change the broader determinants of health status. However, they can act at a local level to identify and assist communities to ameliorate the local impacts of causal factors, and thereby enable communities to advocate for change at the regional, state/territory or national level.

Evidence from other populations, including mainstream Australia, clearly demonstrates the impact of access to good health care in reduced burden of illness and longer life as well as reduced pain and suffering (WHO 2000). The mechanisms through which this gain is delivered (effective illness prevention, maternity care, screening, diagnosis, treatment, rehabilitation and palliation) are applicable to all people. The things that vary are the pattern of illness and injury; the relative impact of different environmental, social, cultural and biological factors; and thus the required focus of effort, mode of intervention and style of care delivery.

Given the relatively poor health of Indigenous Australians the provision of health services is particularly critical. However, they do not currently have equitable access to these services and this, along with the broader conditions of their lives, contributes to their health disadvantage. In rural and remote areas where a larger proportion of Indigenous Australians live (70% compared to less than 33% for all Australians) (ABS & AIHW 2003, p. 17), mainstream primary health care services (funded through MBS and PBS) are either not available, not adequate or not suitable for a variety of reasons (Keys Young 1997). Consequently, Indigenous people are more affected by the general difficulties in access to care that apply outside cities and major centres, as well as being uniquely disadvantaged as compared to rural and remote Australians generally.

Thirty per cent (30%) of the total Indigenous population resides in major cities representing one per cent (1%) of the population in these cities (ABS & AIHW 2003, p. 2). Urban Indigenous people typically experience less infectious diseases and have better access to hospital services for injuries than rural and remote Indigenous people. However, they are also disadvantaged in access to mainstream care (Department of Health and Aged Care 2001a) and, given their health status, are relative under-users of primary care and specialist services. Evidence for this includes the following.

- Total health care expenditure per capita (including public acute care and private hospitals, Australian Government contribution to residential aged care, medical services provided under MBS, PBS, and OATSIH-funded services) for Indigenous people in highly accessible areas (using the accessibility/remoteness index of Australia [ARIA] classification) is $1145, lower than that for non-Indigenous people in the same area ($1373) and lower than that for Indigenous people in remote areas ($2259) (AIHW 2001, p. 13).
- MBS and PBS expenditure on Indigenous Australians is lower than for non-Indigenous Australians in every ARIA category. The lowest per person expenditure on non-Indigenous Australians (which occurs in remote and very remote areas) is higher than that for the highest expenditure category for Indigenous Australians (in highly accessible areas) (AIHW 2001).
- In 1997, between 15% and 20% of Aboriginal and Torres Strait Islander people using urban health services did not have access to a current Medicare number (Keys Young 1997, p. 15). This problem is likely to have been reduced (although not eliminated) in recent years, through successful initiatives to increase Medicare enrolment.

*Health care alone is not the answer to any community’s health problems, but no community can sustain good health outcomes without an effective health care system. Indigenous Australians do not enjoy equitable access to health care, in particular primary health care, and this contributes to their poorer health status.*
Evidence for this position arises from global evidence of the effectiveness of health interventions, as well as from the demonstrated impacts of improved Indigenous access to health care where it has been achieved (see section 3.7 below).

2.4 Is primary health care important?

The design of the Australian health system is intended to ensure access to the appropriate level of care at the right time, in the interests of both better health outcomes and lower costs. For most Australians, rapid access to local primary health care ensures that diagnosis and intervention are initiated as early as possible, and that access to specialist and hospital care is controlled by primary care gatekeepers. The general principle is to respond to health need at the primary level or the level closest to primary care that is appropriate. This design principle is endorsed by a wealth of evidence from around the world (WHO 1978; WHO 2003).

Health care delivery systems: complexity and collaboration

The health care delivery system in all developed countries is a complex network of generalist and specialised agencies and providers, with a structure determined partly by effective design to meet changing needs and partly by the impact of history and professional and other sectional interests.

In most areas, for both mainstream and Indigenous populations, multiple providers contribute to the delivery of health care, linking with each other and coordinating care where possible. Collaboration and coordination at the local level are necessary to reduce gaps and duplication, and to ensure continuity of care for individuals. There are many methods by which links between providers are established and maintained (from GP referral networks with community health services and hospitals through to cooperative health planning arrangements at regional and state/territory level).

For Indigenous health care, coordination between providers and collaboration between the primary health service and Indigenous communities present particular challenges. A key provider, such as an Aboriginal Community-Controlled Health Service (ACCHS), may take on the role of facilitating community involvement and coordination between providers. Alternatively, an organisation such as a health advisory board may be established for this purpose, and to drive reform to better meet the diverse needs of local Aboriginal and Torres Strait Islander people (Department of Health and Aged Care 2001b p. 28).

The best arrangements to meet the needs of different communities will vary, but will almost inevitably require collaboration between service providers, and between Indigenous and mainstream agencies.

When access to primary health care is compromised, one major impact is that people present for care later and sicker. Diagnosis and intervention are delayed, disease processes are more advanced, and resultant mortality, morbidity and disability are increased. Much of the current reform effort in the mainstream health system is aimed at moving care out of hospitals and into the primary care sphere for conditions (known as ambulatory care sensitive conditions) where this approach is appropriate (e.g. see Swerissen 2002; Department of Human Services Victoria 2002). The contrast is stark for the Indigenous community: it has been estimated that, adjusting for age, the rates of hospital admission of Indigenous Australians are between 2 and 11 times higher than for non-Indigenous Australians for these conditions (Stamp et al. 1998).

Comprehensive primary health care is more than primary medical care. It brings additional elements of health protection, health promotion and identification of emerging and local needs, as well as a strong multi-disciplinary approach that aims to optimise both the productivity of skilled health staff and the breadth of coverage of health care needs. The mix of services required under the banner of comprehensive primary health care will vary in accordance with several factors, including the availability of other providers.
For Indigenous communities in remote and some rural areas, primary health services provided largely by an Indigenous-specific organisation (backed up with appropriate arrangements for access to specialist and tertiary care) are generally the most efficient models that can be provided locally.

**Comprehensive primary health care**

The *National Strategic Framework for Aboriginal and Torres Strait Islander Health* (NATSIHC 2003, p. 17) identifies that comprehensive primary health care includes at least the following elements.

- **Clinical services** (for management of chronic and communicable disease, acute care and emergency care).
- **Illness prevention services** (including population health programs such as immunisation, screening programs and environmental health programs).
- **Specific programs for health gain** (e.g. antenatal care, nutrition, physical activity, social and emotional wellbeing, oral health and substance misuse).
- **Access to secondary and tertiary health services** and related community services (such as aged and disability services).
- **Client/community assistance and advocacy**.

For Indigenous Australians in cities and major regional centres, primary health care services that are focused on the particular needs of the Indigenous community play a valuable role as part of the health system, but do not necessarily provide universal care for all Indigenous residents and generally do not need to cover the same breadth of health care needs. These communities have more choice in their use of services. However, just as agencies such as Family Planning and those specialising in industrial injury provide a key resource for both their patients and other care providers, Indigenous primary health care agencies play a vital role in the health system. This role has five components:

- acting as informed advocates for the health needs of the local Indigenous community;
- ensuring access to primary health care for many urban Indigenous people who would otherwise not access such care;
- specialist resource to the mainstream and as a lever for action to improve the responsiveness of the mainstream health system;
- education and training for Indigenous and non-Indigenous health professionals in the delivery of primary health care to Aboriginal and Torres Strait Islander people; and
- resource support for some Indigenous-specific rural and remote services.

Finally, a focus on primary health care is important because of the growing role of the primary health care sector (both mainstream and Indigenous) in the prevention and management of chronic illness. Chronic conditions (as opposed to infectious disease) are now the major burden of illness for most of the world’s people, and are a growing problem for Aboriginal and Torres Strait Islander people, accounting for much of the gap in life expectancy (Beaver & Zhao 2004, p. 5). Effective clinical management of conditions such as diabetes, heart disease, kidney disease, cancer and mental illness is the key to reducing their consequences and costs. This requires both specialist knowledge and ongoing, community-based delivery of the package of care people with these conditions need, with a strong focus on preventing the development of complications. Early identification of those at risk or in the early stages, and intervention to reduce the risk or retard the development of chronic illness is critical. Primary prevention (through diet, exercise, lifestyle
generally and attention to environmental and social factors) can also assist in containing and ultimately reducing the impact of these conditions. As Beaver and Zhao point out, the growing epidemic of chronic disease requires realignment of the service delivery system from its current focus on acute care to a chronic care model, with a stronger focus on comprehensive primary care (Beaver & Zhao 2004, p. 5).

The coordinated care trials and other initiatives have demonstrated the importance of a well-organised primary sector in minimising the burden of illness among people living with chronic conditions such as diabetes, heart disease, kidney failure and some cancers (KPMG 2001). For example, in the Tiwi Islands the introduction of a Renal Disease Project under the auspice of the Tiwi Health Board resulted in improved service provision and an estimated reduction in progression to end-stage renal disease of 50% (Department of Health and Aged Care 2001b).

This role is likely to grow in importance, and while the evidence of benefits to patients is stronger than the evidence of cost savings in the acute sector, both aspects are important. Collaboration between primary care staff and specialist staff in hospitals is particularly important in relation to this group of patients.

* A focus on the provision of comprehensive primary health care for Indigenous communities is appropriate within the overall design of the Australian health system. Mainstream delivery mechanisms need to be complemented with Indigenous-specific primary health care services. The roles of Indigenous primary health care services in rural and remote areas are different from their roles in cities and major regional centres.

### 2.5 Policy context

This section notes the broad development of a supportive policy framework for coordinated action and identifies the Government policy that was used to guide the considerations and recommendations in this paper. Finally, this section explains our working definition of Indigenous disadvantage and health disparities for the purposes of this paper.

The Australian Government has expressed its determination to address Indigenous health disadvantage both alone (Commonwealth of Australia 2002, p. 25) and in concert with state and territory governments (NATSIHC 2003).

Commitment to addressing Indigenous disadvantage more broadly has been demonstrated through a range of policy and leadership initiatives, including most recently the COAG Shared Responsibility initiative and the report *Overcoming Indigenous Disadvantage: key indicators 2003* (SCRGSP 2003). The need for strategies to address health disadvantage is consistently acknowledged as a core component of the broader agenda.

The challenge now is to determine the most effective strategies for achieving measurable progress in Indigenous health. The context is one of longstanding health problems, combined with long lead times required to demonstrate improvements, particularly in ‘headline’ indicators such as reduction in mortality rates. In this context, government policy has established two key criteria against which any proposed policy or funding change can be assessed: the potential to improve health outcomes and the potential to improve equity of access to effective health care services (Commonwealth of Australia 2002).

Since the 1970s, many policy documents have been written about Indigenous health and government responsibilities and action. While there is sometimes a sense of ‘too much talk, too little action’, significant progress has been made, and several important decisions are of benefit in the current context. The transfer of responsibility for Indigenous health from the Aboriginal and Torres Strait Islander Commission (ATSIC) to the then Commonwealth Department of Health and Aged Care in 1995–96 was an important landmark,
as it bought much needed health expertise into the area and, for the first time, made the Australian health department take responsibility for Indigenous health. It also provided the opportunity for an enhanced leadership and stewardship role at a national level both within the health sector and across government. While this change was controversial, it was welcomed by the Aboriginal Community Controlled Health Sector, including NACCHO, and the Australian Medical Association (AMA) at the time (Anderson & Sanders 1996) and it seems the question is now settled.

The National Aboriginal Health Strategy of 1989 (NAHSWP 1989) is an important foundation document on which current policy and program directions have been based. The recent endorsement of the National Strategic Framework for Aboriginal and Torres Strait Islander Health (NATSIHC 2003) continues this work. The developing policy direction and focus has established a valuable base for coordinated national action, manifested in the Aboriginal and Torres Strait Islander Health Framework Agreements (Framework Agreements) (between the Australian Government, the relevant states/territories, ATSIC and NACCHO state affiliates) and the COAG-sponsored Shared Responsibility Agreements for whole-of-government coordination in Indigenous affairs (between the Australian Government, the states/territories and selected regional councils).

The recent release by the Productivity Commission of the report, Overcoming Indigenous Disadvantage: key indicators 2003 (SCRGSP 2003), which is endorsed by COAG, also demonstrates ‘a new resolve, at the highest political level, not only to tackle the root causes of Indigenous disadvantage, but also to monitor the outcomes in a systematic way that crosses jurisdictional and portfolio boundaries’ (SCRGSP 2003, p. v).

For present purposes, two current policy statements have been adopted as the policy framework that guides this report.

### 2.5.1 Australian Government policy

The Government response (Commonwealth of Australia 2002) to the Commonwealth Grants Commission Report on Indigenous Funding 2001 (CGC 2001) includes a concise statement of ten principles to be used in redressing Indigenous disadvantage. These principles provide a clear and useful guide for the purposes of this paper. In summary, they are:

1. Services should be flexible and based on partnerships and shared responsibilities with Indigenous people.
2. Programs and services should be funded and implemented in a secure, long-term context.
3. Access should be based on equity with all Australians and a focus on measurable outcomes.
4. Mainstream programs and services have the same responsibility to assist Indigenous as all other Australians.
5. Resources needed to address disadvantage faced by Indigenous clients can be greater than for other groups, especially in rural and remote locations.
6. Additional Indigenous services are required where mainstream services are unable to meet need.
7. Capacity to achieve outcomes is an important criterion in determining whether mainstream or Indigenous-specific programs and services should be used.
8. Coordination is needed within and between governments.
9. Improving community capacity is key to achieving sustainable outcomes for Indigenous communities.
2.5.2 National Strategic Framework for Aboriginal and Torres Strait Islander Health

The National Strategic Framework for Aboriginal and Torres Strait Islander Health (NSFATSIH) (NATSIHC 2003) builds on the 1989 National Aboriginal Health Strategy that was never fully implemented (ATSIC 1994). It is a guide for government action over the next ten years to ensure a coordinated, collaborative and multi-sectoral approach to improving health outcomes. Significantly, the National Strategic Framework for Aboriginal and Torres Strait Islander Health was endorsed by Federal Cabinet in February 2003, following consultation, negotiation and agreement with key Indigenous health stakeholder organisations, and signed by the Australian Health Ministers’ Conference (AHMC) in July 2003. The National Strategic Framework for Aboriginal and Torres Strait Islander Health has been endorsed by all governments (Australian Government as well as all states and territories) thereby providing a multilateral, bipartisan and whole-of-government commitment to its implementation. Strengthening comprehensive primary health care is one key priority.

The Framework acknowledges a shared responsibility with and represents a significant partnership between different levels and sectors of government and Indigenous organisations. The challenge remains to translate the key strategies into concrete steps with clear responsibilities for the Commonwealth, state and territory governments; to provide resources; and to maintain commitment to its implementation. Processes are underway for these purposes, including the development of a health performance framework to monitor improvements in health status.

State and territory governments are currently responsible for developing National Strategic Framework for Aboriginal and Torres Strait Islander Health Implementation Plans at the jurisdictional level, and the Australian Government is preparing a national level implementation plan across the fourteen relevant Commonwealth Government agencies. Implementation plans are intended to identify practical strategies to be implemented within each jurisdiction, as well as performance information to be used to monitor NSFATSIH performance through the proposed Aboriginal and Torres Strait Islander Health Performance Framework.

The National Strategic Framework for Aboriginal and Torres Strait Islander Health establishes an agreed Commonwealth, state/territory and Indigenous health stakeholders approach that can serve as a base for concerted action. It stresses a whole-of-government and whole-of-health-system responsibility, and the need for sustained effort. In order to make further progress, more concrete strategies and additional resources are required across governments and across the range of mainstream and Indigenous-specific programs. The policy settings are in place, the challenge now is one of implementation. Successful implementation will require sustained investment and sustained effort by all parties.

2.6 Defining disadvantage and health equity

The National Strategic Framework for Aboriginal and Torres Strait Islander Health provides a clear statement of the policy goal:

‘To ensure that Aboriginal and Torres Strait Islander peoples enjoy a healthy life equal to that of the general population that is enriched by a strong living culture, dignity and justice.’ (NATSIHC 2003, p. 7)

Equality of health outcomes is not generally seen as a realistic goal, given the impact of factors as diverse as individual genetics and climate on the longevity and wellbeing of human beings, and the term equity is more frequently used. Put simply ‘... equality is concerned with sameness; equity with fairness. Policies are unlikely to be able to make people the same, but they can ensure fair treatment.’ (Baum 2002, p. 228)

Equity of access to health care is an important related policy goal, enshrined in Australian legislation and health policy (including the Health Insurance Act 1973, and the Australian Health Care Agreements,
The key principle is that access to health care should be proportionate to need rather than ability to pay. The provision of care according to burden of illness, and according to the availability of effective treatments (i.e. capacity to benefit), are both supported by this principle. The decisions of governments and health care providers about how to spend the health dollar can be analysed in terms of the relative weightings given (in practice) to these two criteria.

It is one of the objectives of the Aboriginal and Torres Strait Islander Health Performance Framework that any measurement of health equity and health outcomes should be set in a program logic framework (i.e. tracing linkages from inputs through to outcomes). The Aboriginal and Torres Strait Islander Health Performance Framework and the NSFATSIH take a whole-of-government approach and will apply that approach to the processes, outputs and outcomes on which health systems and related sectors can have an impact.

The overarching COAG policy goal is to overcome Indigenous disadvantage. The concept of health equity may be useful for present purposes. Equity as a policy goal is defined in terms of equitable investment, equitable access to health services and equitable health outcomes as between non-Indigenous and Indigenous Australians, and between different Indigenous population subgroups. The goal of the National Strategic Framework for Aboriginal and Torres Strait Islander Health, consistent with these concepts, is to achieve equity in the context of a developing health system, through attention to all the key elements of program logic from inputs through to outcomes.
Effectiveness of current funding and programs

Access to primary health care is essential to improve health status, but the current level of primary health care provision to Indigenous Australians is inadequate to meet that need. The delivery system for Indigenous primary health care is and will remain a complex inter-dependent network of services, Indigenous-specific and mainstream, generalist and specialised, across all ages and all aspects of health need. The challenge is to improve access for Indigenous Australians to effective care across this broad system. This part first assesses current adequacy of access, and argues that the dual strategy of both developing the Indigenous-specific sector and enhancing mainstream accessibility should continue. We then present a summary of available evidence of the impacts and outcomes of existing care delivery, before turning to the related issue of good data for decision making.

3.1 Framework for assessment: program logic model

The program logic approach tracks a theoretical causal pathway where desired outcomes such as improved health status and wellbeing are premised on the generation of certain impacts, such as changes in modifiable risk and protective factors operating in individuals and environments. These impacts are premised on changes in processes and/or structures such as improved capacity and higher quality or better coordination of services and programs. In turn, the implementation of new processes and structures requires a range of inputs or activities such as supporting policy directions, workforce development and funding. These chains of inputs and effects take place in a wider social and political context that mediates the effectiveness of all elements. However, if empirical evidence of change can be seen for each of the points along the continuum, then it can be reasonably predicted that the outcomes are at least in part attributable to the program (Gabriel 2000, p. 347).

Our assessment of the system is focused on access and effectiveness, but other aspects are also addressed (service system design, quality and data). We have not conducted any primary research or formal consultations. We have used available literature from government, Indigenous and research arenas (including a number of major pieces of research work commissioned for this Review). OATSIH staff have assisted by providing copies of the many published reviews and assessments in various areas of Indigenous health care and access to some internal documents on a confidential basis. We have referred to the research literature and official data collections wherever possible. The evidence thus assembled has been analysed against available standards and norms, and the logic of the program model to enable us to form conclusions about the adequacy and effectiveness of the health system elements. There are many limitations, arising from lack of reliable data and research evidence, as well as lack of consultation and the short timeframe for meeting the requirements of the Review. We have attempted to identify those limitations as they arise. We have taken a pragmatic approach to the need to reach conclusions on imperfect evidence, while attempting to ensure that this process is transparent to the reader.

We have used the program logic framework in our analysis, which is designed to track linkages between inputs (such as funding, workforce, policy), structures and processes, outputs and ultimately outcomes.

3.2 Comparison to available international benchmarks

Canada, the USA and New Zealand are the most relevant comparator countries, with commonalities in both mainstream and indigenous populations and systems. Each of these countries began providing comprehensive primary health care services to their indigenous populations much earlier than Australia, sustained higher levels of funding over a longer period of time and have significantly reduced the difference in life expectancy between their indigenous and non-indigenous populations.
A number of factors have been identified as contributing to the disparity between Australia and the USA, Canada and New Zealand in health outcomes for indigenous peoples. Access to clinical primary health care is a major factor. International studies have demonstrated that in developed countries the level of primary care services is directly correlated with better health outcomes. This is especially so for low birth weight and infant mortality (Starfield 1996; Starfield 2000). While Australia is ranked as having a middle-level development of primary health care systems, access to this system for Indigenous Australians requires improvement (Ring & Firman 1998). In the USA services to indigenous people have included clinical care, prevention, education, community leadership and involvement. Collaboration with other sectors such as the environment and housing have also been evident. These services have been more comprehensive than those provided to the non-indigenous population and have frequently been delivered by an indigenous-specific service system (Kunitz & Brady 1995; Kunitz 1996).

A long-term commitment by governments to funding and supporting health services, including indigenous-specific services, is a key element in achieving improved health outcomes. Canada initiated selective health care services for indigenous people as early as the 1800s. The US Federal Government also began funding primary health services in the early 19th century, and established the Indian Health Service in the 1950s. By the 1990s an annual amount of $2.2 billion was provided (Kunitz 1996). Improvements in health status have been demonstrated, although some caution must be used when referring to this data as it only includes enrolled Native Americans. Infant mortality, deaths from infectious diseases and alcohol consumption declined dramatically, and the rate of deaths from chronic disease has been limited (Kunitz 1996).

A more direct comparison can be made in relation to diabetes. The 1994–96 American Indian/Alaskan Native age adjusted death rate for diabetes was 3.5 times the US all-races rate for 1995 (Indian Health Service, n.d. p. 138). In Australia in 1999–2001, diabetes accounted for 10.6 times as many deaths as expected for Indigenous males and 17.6 times as many deaths for Indigenous females based on the total Australian male and female rates (ABS & AIHW 2003, p. 136).

New Zealand also has a long history of targeting the health of the indigenous population, commencing in the 1900s. In 1990–94, the average Australian Indigenous mortality rate (for all causes) was 1.9 times the Maori rate, 2.4 times the American indigenous rate and 3.2 times the rate for the total Australian population (Ring & Firman 1998). While data problems give rise to a need for caution, the Australian Bureau of Statistics (ABS) concluded that data problems could not entirely explain the differences (ABS 2000b, pp. 44–45).

Active engagement by communities in their health services has also been identified as a positive factor in contributing to improved health outcomes. Strong leadership by Maori and Native American peoples has contributed to the development of primary care services since the middle of the 1950s (Pool 1991). In contrast, Australian governments only commenced funding Indigenous-specific primary health care services in the 1970s in response to community initiatives (Anderson & Sanders 1996).

The implementation of proactive workforce strategies by governments, and educational institutions giving priority to the training of Indigenous people, have also been significant in comparator countries, with the first Maori doctor, for example, graduating in 1899, whilst the first Australian Indigenous doctor graduated in the 1980s, almost 100 years later (McLean 1991; ABS & AIHW 1997).

Canada, New Zealand and the United States have made significant progress in improving health outcomes for their indigenous populations. Lessons for Australia include the need for a strategic approach that is resourced, implemented and sustained; a well-funded comprehensive primary health care system that maximises access for Indigenous peoples and incorporates strong community ownership by them; the need to develop a competent workforce; and ensuring that the health sector can collaborate with other sectors such as the environment or housing portfolios of government. Australia has only recently developed an approach that addresses some of these lessons, and the challenge of full implementation and sustained effort remains.
3.3 Current access to primary health care

Indigenous Australians use services funded through the Medical Benefits Scheme (MBS) and the Pharmaceutical Benefits Scheme (PBS) at less than half the rate of non-Indigenous Australians (with no adjustment for the relatively higher burden of disease). In 1998–99, for every $1 of MBS-funded services used by non-Indigenous Australians, 41c was used by Indigenous Australians, and through PBS, the equivalent measure is 33c (OATSIH 2003a, p. 33; AIHW 2001). Access to services funded through OATSIH partly redresses this imbalance, but total Australian Government spending on primary health care services for Indigenous Australians was only about 70% of that for other Australians (AIHW 2001, pp. 4, 25-26).

Terms and concepts: Mainstream funding programs and mainstream providers

‘Mainstream’ is a term adopted by the Indigenous community to describe non-Indigenous Australia, and now widely used in this field. It is a useful term because it is shorter than ‘non-Indigenous’ and less sensitive than ‘white’.

In the field of primary health care, mainstream funding programs are those which pay for services delivered to all Australians, principally MBS and PBS. Mainstream providers on the other hand are those not working in Indigenous-specific health care agencies. Thus Indigenous providers may be paid for through mainstream funding programs (as when doctors in an ACCHS bill Medicare). Similarly, mainstream providers may be paid for through Indigenous-specific funding (as when an ACCHS contracts with a hospital to provide specialist care in an Indigenous clinic).

It is recognised that the mainstream mode of delivery of MBS- and PBS-funded services is not effective for Indigenous Australians, particularly in rural and remote Australia where market conditions do not support the availability of sufficient numbers of health care providers. Other contributing factors include the difficulty some Indigenous people experience with maintaining effective Medicare enrolment, proving their identity and making co-payments, as well as cultural and social factors that inhibit use of mainstream services by Indigenous people (Keys Young 1997). The significance of these other factors is evidenced by the lower use of MBS- and PBS-funded services by urban Indigenous people (see Table 1). MBS services used by urban Indigenous people (per capita) cost the government 43% of the level used by urban non-Indigenous people, and the same ratio for PBS services is 36%. The amounts of MBS and PBS expenditure for both Indigenous and non-Indigenous rural and remote people are lower than the equivalent urban population; but Indigenous status is a stronger predictor of low usage than remoteness.

Table 1: MBS/PBS expenditure per capita, Indigenous and non-Indigenous 1998–99

<table>
<thead>
<tr>
<th>Area of expenditure (per capita)</th>
<th>Urban</th>
<th>Rural</th>
<th>Remote</th>
<th>Urban</th>
<th>Rural</th>
<th>Remote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indigenous</td>
<td>157</td>
<td>151</td>
<td>84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non-Indigenous</td>
<td>367</td>
<td>285</td>
<td>197</td>
<td>0.43</td>
<td>0.53</td>
<td>0.43</td>
</tr>
<tr>
<td>PBS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indigenous</td>
<td>55</td>
<td>56</td>
<td>23</td>
<td>0.36</td>
<td>0.48</td>
<td>0.25</td>
</tr>
<tr>
<td>non-Indigenous</td>
<td>152</td>
<td>116</td>
<td>89</td>
<td>0.43</td>
<td>0.53</td>
<td>0.43</td>
</tr>
<tr>
<td>OATSIH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indigenous</td>
<td>212</td>
<td>183</td>
<td>386</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non-Indigenous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>424</td>
<td>391</td>
<td>492</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non-Indigenous</td>
<td>519</td>
<td>401</td>
<td>286</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is some evidence that other mainstream Australian Government-funded programs are also less effective in delivering services to Indigenous Australians. Use of Aged Care Assessment Teams (which determine access to Residential Aged Care and some Home and Community Care services) in 2000–01 was 45 assessments per 1000 Aboriginal and Torres Strait Islander people over 50 years of age, compared to 112 per 1000 non-Indigenous Australians over 70 years of age. The number of aged care assessments for Indigenous Australians decreased between 1998–99 and 2000–01 and at this time it was lower than when national reporting began in 1995–96 (Lincoln Gerontology Centre 2002, p. 29). In 2001–02, 0.6% of people in residential aged care facilities reported being of Aboriginal and/or Torres Strait Islander descent (AIHW 2003b).

In 2002–03, approximately 2.5% of Home and Community Care (HACC) clients across Australia and 43% of those from the Northern Territory reported being of Aboriginal or Torres Strait Islander descent (Department of Health and Ageing 2003c, p.7). While this overall level of access is approximately equivalent to the proportion of Indigenous people in the community, when the burden of illness is taken into account, the levels of use of HACC services could be expected to be higher. In addition, access to these services is not consistent across regions. For example, in a needs assessment conducted recently in Victoria, it was found that of 960 Aboriginal and Torres Strait Islanders in the Western Metropolitan Region of Melbourne classified as being in the target group, only 19 were receiving HACC services (the regional total target population was 9406 clients) (Frizzell 2003).

The Aboriginal and Torres Strait Islander Aged Care Strategy was introduced in 1994 to enable the development of flexible models of residential and home-based care that could change as communities changed. By 2002, 63 services were receiving funding under this strategy for 300 residential places and 111 aged care packages (AIHW 2003c).

For Aboriginal and Torres Strait Islander Australians, the proportion of health expenditure on private sector services such as private hospitals, private dentists and allied health professionals was very low at 5% in 1998–99 compared with about 26% for other Australians (AIHW 2001). In part this reflects the lower socioeconomic status of Indigenous Australians and their greater reliance on government-funded services.

3.3.1 Adjusting for need

These comparisons based on cost are not by themselves a good measure for equity of access, because they are not adjusted for need, or the higher cost of delivery to small remote and rural communities. The under-utilisation of Australian Government-funded programs is more stark when the relative burden of illness and injury among Indigenous Australians is considered. Because of higher need for health services, Indigenous Australians would be expected to use health services at a significantly higher average rate than the rate applying to all Australians.

The level of utilisation of health services by Australians rises sharply with the level of illness. A study linking MBS, PBS and hospital data (Department of Health and Aged Care 2000) demonstrated that average health service costs for a person with one condition were $2300 per person per year, $5400 for people with two conditions, and $14300 for five conditions. The mainstream Coordinated Care Trials, which generally targeted people with complex, ongoing medical conditions, also provide relevant experience. For example, the North Eastern Victoria Trial population (prior to the trial) used MBS and PBS at five times the national average, and the rate for the NSW Linked Care Trial was 6.6 times (Monash University & KPMG 2000). Given
the poorer health of Indigenous Australians and the proportion living with more than one chronic disease, equitable access to health care would result in higher than average utilisation with estimates of per capita resources required by the Indigenous population ranging from 1.9 to 7.3 times the average required by the non-Indigenous population (OATSIH 2003e).

Actual per capita expenditure on primary health care in 1998–99 for Indigenous Australians is compared to expenditure for non-Indigenous Australians in Figure 1 below, which graphically illustrates the gap when remoteness and burden of illness are taken into account. The index for remoteness used in the calculation of this graph is 2 (only applied to the population in remote areas) and for burden of illness is 2.

If access to services were equitable, it could be expected that Indigenous Australians’ use of Australian Government-funded health programs would be at least twice that of non-Indigenous Australians, and the cost would be between 2 and 7 times the average for all Australians, according to residence in remote versus rural or urban areas. The Commonwealth Grants Commission considered the various estimates presented and concluded that ‘per person expenditure benchmarks that range from double the national average in highly accessible areas to just over four times the national average in very remote areas would not be unreasonable’ (Commonwealth Grants Commission 2001, p. 127). The required level of expenditure is more comprehensively addressed in section 5.2.

Figure 1: Total primary health care expenditure 1998–99 (per capita)

Note: Other includes patient transport, dental, non-PBS medical and appliances

3.3.2 Recent initiatives to address the mainstream access gap

Recognition of a significant gap between expected need for mainstream programs and actual spending on Indigenous Australians (Deeble et al. 1998; Keys Young 1997) led the Australian Government and states/territories to agree in principle to increase funding in line with need, documented in the Agreements on Aboriginal and Torres Strait Islander Health (Framework Agreements) developed in the mid-1990s (Burns et al. 2002).
The Keys Young Report (1997) on use of MBS and PBS by Indigenous Australians identified some areas where changes could be made to improve these programs. It also concluded that without significant structural modifications MBS and PBS could not be made wholly appropriate mechanisms for financing health services for Indigenous Australians. Progress on improving Indigenous access through mainstream funding programs is addressed below.

**Improving access to the Medical Benefits Scheme**

Significant work has been undertaken to achieve needed changes in the MBS. To improve access to Medicare and the quality of related data, the Health Insurance Commission (HIC) and its partners have:

- implemented an active campaign to improve enrolment in Medicare through simplified enrolment procedures and agreements with state/territory authorities, ACCHSs and directly with communities;
- examined barriers to billing in ACCHSs and developed streamlined arrangements which are currently being trialled in a large remote Aboriginal and Torres Strait Islander primary health service;
- introduced (in November 2002) a voluntary Indigenous identifier on the MBS database to assist with obtaining accurate data on MBS use (OATSIH 2003d); and
- in recognition of the need for longer consultations and other differences in the style of work for GPs within Indigenous-specific services, enabled doctors employed in ACCHSs and some remote Aboriginal and Torres Strait Islander Health Services managed by State Governments (Queensland, and Northern Territory) to charge Medicare for their services, creating an additional revenue stream for the service. This arrangement (under section 19(2) of the *Health Insurance Act 1973*) has allowed some agencies to employ local GPs to provide sessions.

In the period since the introduction of this arrangement the number of doctors employed in ACCHSs increased significantly, doubling from approximately 97 doctors in 1997–98 to 201 doctors in 2001-02 (DHA 2003d). At the same time there have been very significant increases in services provided through this mechanism (increasing from 95 000 in 1995–96 to 415 167 in 2001–02) (OATSIH 2003d). This has been the greatest contributor to increased access to MBS over the past few years.

In addition, the HIC has introduced new MBS items for health assessments available to all Australians, with different eligibility criteria for Indigenous Australians in recognition of their poorer health status (principally a lowering of the age criterion from 65 to 55 years). However, uptake of these health assessments has been low, with 4269 Indigenous people accessing them between November 1999 and August 2003. Even the lower age limit on these items excludes many Indigenous people who would benefit from health assessments, given the high burden of chronic disease amongst those aged from 15 to 54. Work to address this limitation is well advanced.

The HIC has also introduced Enhanced Primary Care (EPC) items for care planning and case conferencing services, for which Aboriginal and Torres Strait Islander people of any age with a chronic condition and complex care needs are eligible. However, there is currently no data on use of these services by Indigenous people.

Other initiatives to improve access to MBS include the training of new GPs in undergraduate programs and registrar placements. Most universities now include Indigenous health as a core part of medical practitioner training and a significant proportion of Aboriginal and Torres Strait Islander health services have become accredited GP registrar training sites since the late 1990s (OATSIH 2003d).

Local health system development, involving local GPs and communities working together to improve access of GP services, has been effective in some areas. The leading example is Inala Health Service in Queensland where the number of Indigenous patients was increased by 203% between 1995 and 2000 (Department of Health and Aged Care 2001b). However, this kind of action is not yet widespread enough to influence national statistics. Access to specialists, imaging and pathology services is a further problem (Cunningham 2002) that flows on from lower use of primary health care, and is yet to be addressed.
Improving access to the Pharmaceutical Benefits Scheme (PBS)

Work to improve access to pharmaceuticals through the PBS has been focused on access in remote areas. Special supply arrangements were introduced in 1998, under the provisions of s.100 of the National Health Act 1953, which enable supply of prescribed medications free of charge (to all patients, Indigenous or not) by eligible remote area Aboriginal and Torres Strait Islander Health Services.

The increase in the number of participating services and expenditure on pharmaceuticals through s.100 is shown in Table 2.

Table 2: PBS Section 100 – Expenditure and number of participating services

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Government expenditure*</td>
<td>$3.8m</td>
<td>$6.0m</td>
<td>$12.1m</td>
<td>$15.1m</td>
</tr>
<tr>
<td>Participating services</td>
<td>105</td>
<td>105</td>
<td>151</td>
<td>153</td>
</tr>
</tbody>
</table>

(* excludes GST)

Source: OATSIH 2003d.

This initiative has had a significant impact. Using 2001 population numbers it appears that for remote area Indigenous Australians access to pharmaceuticals through this mechanism alone equates to around $134 per capita—a very significant increase on previous access levels estimated at $23 per capita in 1998–99. Access in urban and rural areas (which are not eligible for the s.100 arrangement) is not likely to have changed significantly from 1998–99 levels of $55 and $56 respectively (OATSIH 2003d). Extension of the s.100 arrangements, with appropriate adjustments for urban settings, would improve this situation.

Population health programs

The Australian Government has also introduced a range of population health programs specifically targeted to Indigenous Australians. This is important because while some mainstream population programs (such as cervical screening) are particularly relevant to Aboriginal and Torres Strait Islander peoples’ health, they are often not used because they are not tailored to meet the needs of this group. For example, the National Childhood Pneumococcal Vaccination Program (which provides access to free pneumococcal vaccine for children considered at highest risk from invasive pneumococcal disease) has an emphasis on Indigenous children given that their rates of pneumococcal disease are up to 15 times higher than those of non-Indigenous children living in urban areas. Between 2001–02 and 2003–04 $19.25 million has been committed to this program. However, there has been varied uptake, with higher coverage in areas where there are high proportions of Indigenous Australians. There is evidence to suggest that Indigenous Australians who attend an Indigenous-specific medical service are more likely to be appropriately vaccinated than Indigenous people who attend a GP (76% versus 32% respectively) (OATSIH 2003d).

Population screening programs have also been made more relevant:

- While cancer is the third most common cause of death for both Indigenous and non-Indigenous Australians, causing 16% and 29% of deaths respectively in 2001, the survival rates for most cancers are lower for Indigenous than other Australians, indicating that preventive strategies and clinical care are not as effective as they should be for this group. Initiatives to address this problem include the Aboriginal and Torres Strait Islander Women’s Forum, which has contributed to the Principles and Practice, Standards and Guidelines for Providers of Cervical Screening Services for Indigenous Women, a resource that will assist agencies involved in cervical cancer prevention and control to ensure that their services are appropriate and accessible to Aboriginal and Torres Strait Islander women.
• The Aboriginal and Torres Strait Islander Bowel Cancer Screening Pilot Site Working Group provides a consultative mechanism for achieving optimal Aboriginal and Torres Strait Islander participation in the pilot and possible national bowel cancer screening program. The Working Group is investigating barriers to participation in bowel cancer screening with a view to developing a strategic plan to address them in the event of a national roll-out.

• Although the provision of breast screening programs is improving, national data shows that uptake levels among Indigenous women remain low. In 2001 the National Advisory Committee to BreastScreen Australia endorsed a strategy for increasing the participation of Aboriginal and Torres Strait Islander women in breast cancer screening. An evaluation of the impact and outcomes of the strategy is planned for 2004 (OATSIH 2003d).

Increasing awareness of Indigenous health disadvantage in mainstream public health and health promotion programs seems to have led to improvements in coverage of Indigenous health concerns. For example, the National Public Health Partnership, an inter-governmental initiative to plan and coordinate public health activities and to provide a more strategic and systematic approach to addressing health priorities, included recognition that Aboriginal and Torres Strait Islander issues should be given priority in all areas of the work program (National Public Health Partnership 2002, p. 2). This has resulted in the development of initiatives such as Eat Well Australia with strategies to include Indigenous communities in mainstream programs and targeted Indigenous initiatives where additional work is required (in this case, the National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan) (National Public Health Partnership 2001).

3.3.3 Access through OATSIH funding programs

Australian Government funding through the Office for Aboriginal and Torres Strait Islander Health (OATSIH) is intended to facilitate health system improvements and to fund Indigenous-specific services. Since the mid-1990s there has been consistent growth in OATSIH funding programs from new policy initiatives. These include:

- additional funding in 1995–96 for workforce, mental health, hearing, data improvement, planning and service support initiatives;

- additional funding for primary health care services each year; and

- resources for social and emotional wellbeing programs in 1998–99, as well as specific funding to combat infectious diseases in Aboriginal and Torres Strait Islander communities.

Figure 2 below shows how this funding has been distributed between the various areas of action.

Recurrent Australian Government funding for Indigenous-specific primary health care services in 1998–99 was estimated at $187.5 million, or more than double the $91 million of MBS and PBS funding that flowed to Indigenous Australians in that year (AIHW 2001). System capacity to deliver care has improved in line with increased funding since the mid 1990s as shown in Figure 3.
Figure 2: Indigenous health expenditure—actual and budgeted 1995–96 to 2005–06


Figure 3: Total episodes of care for PHCS services 1997–2001

Source: OATSIH & NACCHO 2003, p. 27.

Indigenous-specific agencies are unevenly distributed across the states and territories, and there are large variations in staff size and operating budget. This reflects the largely historical and opportunistic nature of the decisions to fund each of the individual services (Shannon & Longbottom 2004). Ease of access to Indigenous-specific services is thus variable across the country, with some areas relatively well supplied, and others either lacking ready access to an Indigenous-specific agency or having access to a small agency which is not able to meet many aspects of need.

5 Figure 3 refers to the increase in the number of episodes of health care between the years 1997–98 and 2000–02 for those 90 PHCSs that reported for each of these years and including the intervening years. (OATSIH & NACCHO 2003, p. 27).
Some aged care programs under the Aged Care Act 1997 include Aboriginal and Torres Strait Islander-specific initiatives. There are 30 Aboriginal and Torres Strait Islander-specific residential aged care services run directly by Aboriginal and Torres Strait Islander community-based organisations or that target the local Aboriginal and Torres Strait Islander community. There has been a significant increase in the number of places under this strategy from 27 places in 1996 to 480 in 2003.

Despite these advances it is evident that access is inadequate to meet the high levels of health care need. For several reasons access to primary care through MBS and PBS is not fully effective for Indigenous Australians, and significant under-funding and under-utilisation of primary care services is the result. This issue was identified several years ago, and changes to mainstream and Indigenous-specific funding programs, have resulted in improved access. However, the level of spending is not sufficient to achieve equitable access to primary health care when compared to levels of spending for non-Indigenous Australians, particularly in light of the burden of illness and injury among Indigenous Australians, and their geographic locations. Increased investment is needed if the health system is to manage the current burden of illness as well as achieve improvement in health outcomes. Consideration of the size of that investment, and its components, needs to be based on the potential impact on health outcomes as well as the goal of equity of access. We return to this question in Part 5.

3.4 Access to state/territory-funded services

Because of the split responsibilities between state/territory governments and the Australian Government for the delivery of health care, it is essential to examine briefly the funding and use of programs under both jurisdictions to obtain a complete picture.

Expenditure for Indigenous Australians through programs administered by state and territory governments, mostly admissions to public hospitals, accounted for around 70% of total Indigenous expenditure, almost twice the rate for non-Indigenous Australians (36.5%) (AIHW 2001). State/territory contributions to primary health care for Indigenous people are highly variable (see section 5.3 for further consideration of this issue).

Data on Indigenous use of mainstream state/territory-funded services is poor, due to failure to collect data on Indigenous status consistently (ABS & AIHW 2002). In 1999–2000 only the Northern Territory and South Australia reported having acceptable data on Indigenous status and morbidity in hospital statistics (ABS & AIHW 2002).

Nationally, it is not possible to draw reliable conclusions about adequacy of access to hospital services from the available data on admissions of Indigenous people (which would be expected to be higher than the non-Indigenous population given their greater burden of disease). However, in 2000–01, after adjusting for age, Indigenous Australians were admitted to hospital approximately twice as frequently as the general population (ABS & AIHW 2003, p. 77). This level of hospitalisation is of concern whether it reflects the greater burden of disease or the lower access to primary care, and represents a significant cost to both Indigenous Australians and the health system.

A recent study of hospitalisation patterns of Australia’s Indigenous population found that in general Aboriginal and Torres Strait Islander patients also have longer stays in hospital than non-Indigenous patients. Although longer stay in hospital can be the result of numerous factors, for the Indigenous population it is likely to be in part a result of inadequate primary health care (Ishak 2001).

The split in responsibility for health between the Australian Government and states/territories means that there would also be a split in the flow of any future cost savings accrued in the acute sector that might result...
from more effective primary health care. It is essential that concerns about cost- and benefit-shifting are managed in a constructive way between the Australian Government and the states and territories.

Condon (2004) notes the improvements that are possible through improved collaboration between primary care and specialist agencies. He cites the evaluation of the Specialist Outreach Program which commenced in 1997 in the Top End of the Northern Territory. Through this program, the number of gynaecology consultations provided for women living in remote Indigenous communities in the Top End increased from less than 200 in 1996 (when only hospital outpatient services were available) to approximately 1000 in 1999, 90% of which occurred in community health centres in remote communities. Forty-seven per cent of gynaecology consultations provided by the specialist outreach service included colposcopy for follow-up of Pap Test abnormalities or other cervical symptoms (Gruen et al. 2001).

A general picture of under-use of mainstream services in urban areas is evidenced by the repeated experience of dramatic increases in uptake of services in mainstream agencies when they take action to make their services accessible and welcoming to Indigenous people. For example, there was an 85% increase in the number of Aboriginal and Torres Strait Islander people using the Darebin Community Health Service, located in the inner northern suburbs of Melbourne, after the health service employed an Aboriginal community development worker, built collaborative working relationships with Indigenous organisations at the local level, improved the cultural knowledge of non-Indigenous staff, and improved the cultural appropriateness of service models (Firebrace et al. 2001). Similarly in the acute sector, Flinders Medical Centre initiated action to enhance its services to Aboriginal and Torres Strait Islander people in 1996, including establishing Karpa Ngarratendi (Aboriginal health team), ensuring appropriate signage and an Aboriginal and Torres Strait Islander space, and working with the local Kaurna Heritage Committee on sites of significance on the Flinders Medical Centre campus. In the five years from 1996–97 to 2001–02, attendance by Aboriginal and Torres Strait Islander people increased tenfold, from 178 to 1752 (including increased transfers from the Northern Territory) (C Morgan pers. comm. 29 August 2003).

The overall picture of Indigenous use of health care that emerges is one of higher spending on hospital care (delivered through states and territories, jointly funded) and lower access to primary care, particularly through the Australian Government’s mainstream funding mechanisms. This pattern of use is not the most effective for any population.

3.5 Structure of the primary health care delivery system

This section addresses the dual strategy of using both mainstream and Indigenous-specific agencies to deliver health care for Indigenous people, and the capacity of this mixed system to extend coverage to all Indigenous Australians.

3.5.1 Complementary Indigenous-specific and mainstream services

Access to primary health care is a problem in all areas, but varies with location. Indigenous people do not access mainstream services, even when they are readily available, to the level that would be expected given their health status. The Government’s approach to improving access is based on two complementary strategies: increasing the capacity of the Indigenous-specific sector, and enhancing the accessibility of the mainstream primary health care system, through adjustments to MBS and PBS and other measures. Both of these strategies are essential, because Indigenous Australians (and all Australians) need good access to a complex network of primary health care services with good linkages. Both mainstream and Indigenous-specific services are needed by Indigenous communities.
Indigenous-specific services will continue to play an essential role in addressing Indigenous health disadvantage, for four key reasons. Firstly, Indigenous Australians need different services because their health needs are different. In particular, the greater prevalence of chronic diseases in the Indigenous population means that a complex, ongoing set of interventions is required which can only be provided by a skilled multi-disciplinary workforce, able to sustain effective long-term treating relationships and links with other providers. GP services funded through the MBS are not able to meet these needs fully (Keys Young 1997), while Indigenous-specific agencies are designed to provide the basic health infrastructure required for effective service delivery.

Secondly, for several reasons including historical and cultural ones, mainstream health services are generally not structured or organised to address the specific spectrum of indigenous health disadvantage. The lack of capacity is more pronounced in some areas where traditional culture and languages are still practised. Work should continue to change the responsiveness of mainstream services, but effective primary health care is needed now. Many Indigenous people will go without primary health care (Keys Young 1997, p. 61) if a service that specifically welcomes them and responds appropriately to their needs is not available.

Thirdly, the Indigenous population constitutes such a small proportion of the total primary health care ‘market’ in many areas of Australia (even if they used mainstream GPs and other services proportionately) that their power in the market to stimulate mainstream health services to be responsive to their needs is severely limited. Their high levels of poverty exacerbate this problem. GPs are responsive to their markets, and a strategy that relied on GPs making independent decisions to substantially change their services to meet the needs of 2% of the market is unlikely to produce significant results, and neither would many of them have the skills and experience to do so. However, there are some outstanding exceptions among GPs, and mainstream community health agencies, and the work of these individuals and groups makes a valuable contribution, as do GPs who work part-time in local Indigenous-specific clinics.

Finally, the role of Indigenous-specific services is not simply one of substitution for mainstream services. They also provide a base for training for both Indigenous and non-Indigenous health professionals, and for research and development of new approaches to Indigenous health (either alone or in partnership with mainstream agencies and researchers). This aspect is particularly important in urban agencies, because of their proximity to medical schools etc. and to the headquarters of mainstream specialist providers (e.g. the leadership of child and adolescent mental health services tends to be based in capital cities). Indigenous-specific services in all areas provide the referral pathway to specialist and tertiary services, and support the providers in their responses to Indigenous patients. They are also the appropriate base for community development approaches to improving health.

For these reasons, it is not feasible to build an effective primary health care system for Indigenous Australians without Indigenous-specific services. This applies in urban as well as rural and remote areas. While a much higher proportion of health care spending for Indigenous people in remote regions is through OATSIH funding (over 90% of primary health care spending in remote areas was through OATSIH in 1998–99) more than half of all spending for urban and rural people was also through OATSIH (between 50% and 60%), in spite of the much greater availability of mainstream services.

However, the mainstream primary health care system, both Australian Government and state/territory-funded, also makes an essential contribution which could be further strengthened. As noted above, efforts to enhance the accessibility of MBS and PBS services since the landmark Keys Young Report (1997) have made it easier for Indigenous Australians to obtain Medicare cards, use GPs and receive prescribed medicines. They have also assisted Indigenous-specific agencies through enabling MBS funding for their GP
services. This work should continue, and the current proposal to set up an MBS item for an Aboriginal and Torres Strait Islander Adult Health Check is a relevant example.

### 3.5.2 Capacity to extend coverage

All communities should have secure established methods by which access to needed care is guaranteed. For rural and remote communities, linkages, transport, communication and partnerships among providers can address deficits. But they will only be effective if they are well planned, widely understood, adequately resourced and accountable, and mutually agreed by the range of providers which are necessarily involved (OATSIH 2003b).

The impact of the current incomplete coverage is that some programs are unavailable to large sections of the Indigenous population. For example, well person’s health checks have the potential to detect both risk factors and unidentified illness within communities (e.g. diabetes). These would be more widely detected if access to comprehensive primary health care was more widely available. However, a renal screening program carried out in a South Australian Indigenous community found that more than 25% of all adults screened (n=42/149) had previously undiagnosed persistent microalbuminuria (a marker for renal disease). Hypertension was found in more than 40% of participants and 58% of those had been undiagnosed prior to screening (Shephard et al. 2003).

Limited capacity within the primary health care system is also highlighted by the recent report on the Review of the Implementation of the National Aboriginal and Torres Strait Islander Eye Health Program (NATSIEHP) (Centre for Remote Health 2003). The authors found that the National Aboriginal and Torres Strait Islander Eye Health Program is not well integrated with existing primary health care services, partly due to the limited capacity of the primary health care system to support it. While some aspects of the program can run independently, the poor level of integration means that key components of eye health care are not incorporated into regular primary health care practice, such as well person’s checks (including diabetes screening) and chronic disease care, including retinopathy screening for diabetics.

The authors also found minimal benefit to the Eye Health program from mainstream programs or services, and they call for enhanced linkages between the NATSIEHP and other mainstream programs at a national, state and regional level.

The existing network of Indigenous-specific and mainstream agencies serving rural and remote Indigenous communities needs to be extended so that coverage is complete. The population size of communities will largely determine the range of services that can be provided locally, not only because of high cost but also for technical and workforce reasons. The evidence we have reviewed for this paper indicates that comprehensive coverage is achievable given adequate resources, careful staging of growth and attention to workforce strategies. Further, the policy framework within which such expansion can occur, as articulated in the National Strategic Framework, is established. Implementation is now required.

*Extending coverage to provide secure access to comprehensive primary health care is an essential step in developing the capacity of the system to respond to need, and this will continue to depend on a mix of both Indigenous-specific and mainstream health care providers and funding programs. For remote communities, Indigenous-specific services are major providers, alone and in collaboration with others for some aspects of primary care and for effective access to secondary and tertiary services. In urban communities, Indigenous-specific agencies play an essential role in ensuring access to needed care, but it is a different one.*
3.6 Quality of current services

Quality of health care is a broad concept currently defined as ‘the extent to which a health care product or service produces the desired outcome’ (Australian Council for Safety and Quality in Health Care 2003). It cannot be separated from issues such as access which are addressed elsewhere in this paper. In relation to mainstream services, we have taken the quality goal to be ensuring that Indigenous Australians receive the same quality of care as non-Indigenous Australians, and care that is appropriate to their needs.

Systematic evidence regarding the quality of care provided to Indigenous Australians in mainstream agencies is not available. However, there are a number of reports that document the kinds of issues faced by Indigenous Australians when using services and that impact profoundly on the quality of care provided to them. These include the history of the organisation’s role, attitudes of service providers, lack of cultural knowledge (including in the planning and design of facilities and services), physical environment, poor communication and lack of information (Clarke et al. n.d.; Devitt & McMasters 1998). The relative under-use of diagnostic services is also an indicator of a potential quality problem (Cunningham 2002).

Indigenous patients require competent, informed and responsive care from health care providers who are able to deal appropriately with what can be a challenging patient group (presenting with atypical patterns of disease and complex pathology). Racism, or cultural stereotyping, can impede the communication that is necessary for good history-taking, accurate diagnosis, effective treatment and adequate follow-up.

Patients also need confidence and a level of trust for the treating relationship to be successful. The recent history of interactions between hospitals and Indigenous people cannot be ignored. For example, until the 1960s, public hospitals provided segregated accommodation for Aboriginal and Torres Strait Islander people (Saggers & Gray 1991) and participated in the removal of children (Human Rights and Equal Opportunity Commission 1997). Racism and cultural stereotyping impede the development of trust and respect, and Indigenous people are subjected to experiences of shaming in the course of their care (Department of Human Services (SA) 2003). Shame is described as ‘a powerful emotion resulting from the loss of the extended self’ that ‘profoundly affects Aboriginal and Torres Strait Islander health and health care outcomes’ (Morgan et al. 1997, p. 598).

In relation to mainstream primary care, anecdotal evidence indicates variable quality, and grounds for concern that problems of communication and ‘compliance’ impact negatively on clinical outcomes (Keys Young 1997). Keys Young (1997, p. 50) documented that even in situations where Indigenous people could get access to medication, poor communication and lack of supports to take it correctly meant that they were often not able to do so. For example, a family without a refrigerator will not be able to store some medications properly; instructions to take medications with meals can result in medicines not being taken properly if meals are not regular; and limited literacy means that written information on labels can be useless. One method of addressing these issues, available as a result of changes to PBS access under s. 100, is to provide medication at the point of consultation, when health workers can explain appropriate use in the relevant conditions.

While formal mechanisms such as cultural awareness training may have a long-term impact, they are only one element required to create change. There are other more immediately effective approaches to improving the quality of mainstream care for Indigenous Australians.

- A focus on the goal of effective clinical care, and an analysis of what is needed to achieve it, is more likely to lead to practice change among clinical staff.

- The development of strong working relationships between mainstream clinical staff and staff of Aboriginal Health Services and/or hospital-employed Aboriginal Liaison Officers lays the basis for effective collaboration and sharing of expertise.
Leadership in mainstream agencies to encourage and support clinical staff to provide quality care for Indigenous Australians is an essential prerequisite for improved quality.

Information regarding the quality of services in Indigenous-specific agencies is not systematically available, and anecdotal evidence indicates that it is variable, as it is in mainstream agencies. While many organisations undertake regular monitoring of quality indicators, this practice does not seem to be universal.

One notable difference between the mainstream and Indigenous system (not surprising given its smaller size and shorter history) is the relative lack of infrastructure for quality. Mainstream quality agencies such as the Quality Improvement Council (for community-based health services) and the Australian Council for Healthcare Standards (for hospitals and others) have developed some resources to support quality in health care delivery to Indigenous people, but this is not adequate to serve the needs of Indigenous-specific agencies. The apparent general lack of benchmarking capacity and data is an indicator of the early stage of development of quality infrastructure for the Indigenous sector.

Existing quality monitoring in the Indigenous-specific sector seems patchy, and the development of infrastructure for quality needs attention. Apart from access problems, the main barriers to quality of care for Indigenous Australians using mainstream health care services seem to arise from lack of familiarity in some clinical staff with the atypical patterns of disease and complex pathology experienced by many Indigenous patients, and cultural and other barriers to effective clinical relationships between mainstream staff and Indigenous clients. Methods are available to address these issues, and leadership is required to ensure that action is taken.

3.7 Impact and outcomes for Indigenous health

In this section, we examine the available evidence of the impacts and outcomes of health care for Indigenous Australians. We focus on Indigenous-specific services, but also address mainstream health impacts. An illustration of the application of program logic to the inputs, process and structures, impacts and outcomes of one major ACCHS (Nganampa Health Council) is provided.

While recent increases in funding have improved access, significant focused effort within the health system only commenced eight years ago (in 1995–96), and has developed gradually over that time. Continuing poor health status is not unexpected in these circumstances, but there is evidence that the impact of existing services is positive. Because of poor access, evidence of impact and outcomes can only be assessed in relation to those communities that are reasonably well served by effective primary health care. This evidence is, by definition, local and the impact tends to be swamped in national and state/territory-level data.

Evidence regarding the impact of health care and health outcomes for any population is far from complete. In approaching this question, there are some important limitations which must be acknowledged.

1. The complexity of health and health care means that simple indicators of broad health outcome can never give a valid reliable measure of the effectiveness of the health care system or the return on investment in health care. Health outcome measures reflect more than health system activities; they are an indication of whole-of-government and non-government activity.

2. The focus in measuring impact of health care is properly confined to those areas where it can make a difference.

3. Indicators are more reliable and available in relation to specific illnesses, causes, markers and pathways. These indicators are useful for judging the impact of specific interventions over time.
While health outcomes (longevity, wellbeing, functional capacity) are the ultimate goal of health care, intermediate outcome indicators are the most useful for assessing the contribution of primary health care to health improvement, because they are sensitive to primary health care interventions. The long lead times between implementation of primary health care interventions and health outcomes precludes direct assessment of health improvements in the short to medium term (OATSIH 2003f).

The gap in health outcomes for Indigenous Australians remains critical, but the picture on the ground gives some cause for optimism. Since the mid-1990s, there has been increased investment in Indigenous health, through a mixture of Indigenous-specific and mainstream initiatives. The result is increased availability and quality of primary health care services for Aboriginal and Torres Strait Islander people in some regions; and some improvements in access for Indigenous people to mainstream services. Increased numbers of Indigenous people in the health workforce, increased Indigenous health knowledge and information, and the development of a strategic research capacity (Shannon et al. 2002) have also resulted.

3.7.1 Impacts and outcomes of Indigenous-specific services

Shannon et al. (2002), in their analysis of successful Indigenous-specific health projects, also found that progress is patchy. In areas where funds had been invested in capacity building and service provision, there was evidence of improved accessibility, better service provision and improved quality of care. There was also evidence of an increasing focus on the development and adoption of strategies with measurable impact, including maternal and child health services, substance use programs, a range of disease-specific initiatives, and injury prevention and control strategies.

There is reliable evidence of real achievements by Indigenous-specific services in some key areas (outlined in the Appendix). Some examples are given in the listings below.

**Communicable diseases control through vaccination**

- *Increased childhood immunisation rates*—to 91% of children in the Tiwi Islands and 100% in Wilcannia (KPMG 2000).
- *Increased adult immunisation and reduced incidence of pneumococcal disease* in far north Queensland. Almost all (96%) of the estimated Indigenous population over 50 received the influenza vaccine for the first time in the first five years of the program, and 73% received the pneumococcal vaccine. The annual incidence of vaccine preventable invasive pneumococcal disease decreased from 120 cases/100 000 Indigenous adults in 1993 to 13/100 000 in 1999, rising to 44/100 000 in 2000 (Hanna et al. 2001).
- The Northern Territory *Haemophilus influenzae type b (Hib) Vaccination Program* resulted in 75% of children under five being adequately immunised, with 8.3% being partially immunised by the end of 1996. The incidence of invasive Hib disease in children under five decreased from 141/100 000 in the pre-vaccination era to 19/100 000 following vaccination (Department of Health and Aged Care 2001b; Markey 1998; Markey et al. 2001).
- Indigenous people who attend an Indigenous-specific medical service are more likely to be appropriately vaccinated than Indigenous people who attend a general practitioner (76% versus 32% respectively) (OATSIH 2003d).

**Treatment of communicable diseases**

- By 1997–98, the prevalence of gonorrhoea in the Anangu community served by Nganampa Health Council was reduced by 46% and *chlamydia* by 20%. Prevalence has since remained stable at 5% and
6% respectively. Approximately 70% of the adult population served by Nganampa Health Council participate in an annual STI screen. Between 1985 and 2000, syphilis rates in those between 12 and 45 years reduced from approximately 20% in 1984 to 0.5%–1% and have remained at this level (Miller et al. 2001; Torzillo 2003; Department of Health and Aged Care 2001b).

- Ngaanyatjarra Health Service in Western Australia has achieved a fall in gonorrhoea rates from 14.1% in 2001 to 12% in 2002 (Ngaanyatjarra Health Service, cited in OATSIH 2003g).
- Reductions in prevalence of scabies from 36% to 2% within nine months through Healthy Skin Programs in three communities in the Northern Territory (Dowden 1999; Scarlett 2001; Connors 2001).

Cancer screening

- Wurli Wurlinjang Aboriginal Community Controlled Health Service in Katherine has reduced the percentage of women who have never had a Pap smear from 44% to 28% (Department of Health and Aged Care 2001b; Todd 1999).
- Northern Territory Health Department increased screening for cervical cancer at Yuendumu to 78% of eligible women, from 51% prior to the screening program (and from 2% in 1987) (Department of Health and Aged Care 2001b; Gilles et al. 1995).
- The Northern Territory Well Women’s Program which operates in a region with a high proportion of Indigenous women and has a long history of engagement with women and local Aboriginal Community Controlled Health Services, has achieved a high rate of cervix screening (61%) in the Alice Springs Remote area, which is comparable to the rate for Australian women generally (62%) (Condon 2004).

Reduced complications of chronic disease

- A community-directed program for primary and secondary prevention of obesity, diabetes and cardiovascular disease in the Looma community (Kimberley region of WA) resulted in participation in diet and/or exercise strategies by 49 high risk individuals; protection from increase in plasma glucose and triglycerides in these people at high risk (over 2 years); improvements in diet and level of physical activity amongst the community generally; and reduction in fasting insulin amongst the general community (Rowley et al. 2000).
- The Tiwi Islands Renal Disease Project, funded by the National Health and Medical Research Council (NHMRC) in consultation with the Tiwi Health Council in 1995, used antihypertensive medication for all people identified as suitable for treatment, achieving 70% compliance with treatment, reduction in blood pressure and reduced progression to death and end stage renal disease by 62% over the three-year period of the project. Estimated savings on dialysis were between $700 000 and $3.1 million over three years (Hoy et al. 1999; Hoy et al. 2000).
- In 1999 a randomised trial to improve diabetes care in the Torres Strait, where communities have the highest rates of diabetes in Australia, resulted in an 18% fall in hospital admission rates in some communities and a reduction of 41% in the number of people admitted to hospital for diabetes-related conditions in communities with recall and reminder systems. On follow up in 2002 there was a continuing reduction in hospital admissions for diabetes complications (from 25% in 1999 to 20% in 2002). The proportion of people with good glycaemic control increased from 18% to 25%, there was increased use of insulin (7% to 16%), and the proportion of people with well-controlled hypertension increased from 40% to 64% (McDermott et al. 2003).
• The Yarrabah Family Life Promotion Program (established in response to three suicide epidemics beginning in the mid 1980s) has reduced the incidence of self harm. In the three quarters ending in June 1996 there were 45–50 incidents of self-harm per quarter for males and 20–25 for females. This rate fell to 10–20 incidents for both men and women in late 1996 and to fewer than 5 in 1998. There were no deaths from suicide in 1997 and 1998, compared to three in the mid-1980s, nine in the early 1990s and eight in the mid-1990s (Mitchell 2000; Hunter et al. 1999).

• A mental health project at the Geraldton Regional Aboriginal Medical Service reduced psychiatric admissions of Aboriginal people to Geraldton Regional Hospital by 58% (Laugharne et al. 2002).

Improved maternal and child health outcomes

• Since 2000 the Townsville Aboriginal and Islander Health Service, Mums and Babies Project increased the numbers of women presenting for antenatal care (from 40 episodes of care per month in February 2000 to over 500 per month by January 2001, a level sustained in 2002–03). The number of antenatal visits made by each woman has doubled, with the number having less than four visits falling from 65% to 25%; 93% of those attending had at least one ultrasound. Pre-natal deaths/1000 reduced from 56.8 prior to the program to 18 in 2000; the number of babies with birth weights less than 2500 grams has dropped significantly; and the number of premature births has also decreased (Shannon & Longbottom 2004; Eades 2004; Atkinson 2001).

• By 1998–99 approximately 90% of women attending Nganampa Health Council had their first antenatal visit earlier than 20 weeks, approximately 90% had more than five antenatal visits and almost 100% of women were having an ultrasound. Between 1984 and 1996 perinatal mortality rates decreased from 45.2/1000 to 8.6/1000 (the national average for non-Indigenous babies is 6.7/1000), the proportion of babies with low birth weight decreased from 14.2% to 8.1% (the national average is 6.2%), and the mean birth weight increased from 3080 grams to 3183 grams (national mean is 3365 grams) (Eades 2004; Sloman et al. 1999).

• An antenatal program operating at Daruk Aboriginal Community Controlled Medical Service, Western Sydney since 1990 has achieved increased awareness among Aboriginal and Torres Strait Islander women of the importance of antenatal care. Thirty-six per cent of Indigenous women presented within the first trimester, compared with 21% at Nepean and 26% at Blacktown Hospitals’ antenatal clinics; and women attended more antenatal visits (an average of ten at Daruk compared to six at Nepean and nine at Blacktown) (Eades 2004).

• The Strong Women, Strong Babies, Strong Culture Program piloted in the Top End of the Northern Territory achieved an increase in the proportion of women who attended for antenatal care in the first trimester of pregnancy from 16.7% to 24.4%; and increased the diagnosis and treatment of genital infections during the study period. Following the trial, only 0.9% of women in pilot communities required treatment for genital infections compared to 37.4% in non-intervention communities. There was an increase in average birth weight in intervention communities of 171 grams (compared to an increase of 92 grams in non-intervention communities); reduction in the prevalence of low birth weight by 8.4% in pilot communities and 1.5% in non-intervention communities; a reduction in the proportion of preterm babies of 1.5% in pilot communities compared to an increase of 1% in non-intervention communities; and reduction in the proportion of babies born with low birth weight (from 20% to 11%) (Mackerras 2001).
• Congress Alukura, a branch of the Central Australian Aboriginal Congress, sees 98% of Indigenous women who receive antenatal care in Alice Springs. The proportion of women starting antenatal care in the first three months of pregnancy has increased from 21% to 33%; and more women are having pap smears. The average birth weight of babies born to these women increased from 3168 grams to 3271 grams (narrowing the gap with non-Indigenous babies to 50 grams) (Mackerras 1998).

• Ngunytju Tjitji Pirni Aboriginal Corporation (NTP) operating from Kalgoorlie in Western Australia is a child and maternal health service that has achieved an increase in antenatal screening from 14 women between January and June 2002 to 75 women in the same period in 2003; an increase in the number of people receiving health education from 83 in 2002 to 644 in 2003; and an increase in infant and child checks from 57 in 2002, to 599 in 2003. Outcomes include a marked improvement in infant health with a reduction in the number of low birth weight babies (Ngunytju Tjitji Pirni Aboriginal Corporation, cited in OATSIH 2003g).

Reduction in social and environmental risks

• The health service in Halls Creek in Western Australia worked with the community to reduce alcohol consumption. Over time emergency evacuations due to alcohol-related injury decreased and there was a reduction in domestic violence (Department of Health and Aged Care 2001b; Douglas 1998).

• The communities living on the lands around Curtin Springs in the Northern Territory took action to reduce alcohol consumption through negotiating conditions restricting alcohol sales with the Curtin Springs Roadhouse. The local health service played a critical advocacy role. This initiative resulted in significant reductions in the amount of alcohol purchased (as measured by a 79% decrease in purchases by the roadhouse between 1997 and 1998). Outcomes include reductions in violence and alcohol-related health problems, with the number of people presenting at the Amata Clinic with alcohol-related trauma decreasing from 41 in 1996 to 14 in 1997 (Department of Health and Aged Care 2001b; D’Abbs et al. 1999; Gray et al. 2004).

• The Woorabinda Aboriginal Council in collaboration with the local hospital developed a number of intervention strategies to reduce injury, including restricting the trading hours of the Woorabinda public house. Over two years the intentional injuries in the community declined significantly (Department of Health and Aged Care 2001b).

There are many other examples of mainstream and Indigenous-specific agencies actively improving access to services by Indigenous people with high need. For example, the Inala Health Centre General Practice in Queensland, working with the local Indigenous community, increased services from a low of 12 Indigenous attendances in 1995–96 to 3894 in 2000–01. The Centre has an Indigenous doctor and used several strategies including employment of another Indigenous staff member, display of posters and other visual signs of welcome, cultural awareness training for all staff, dissemination of information about the services to Indigenous communities and promotion of collaboration between service providers (Hayman 2001).

A less direct measure of impact is offered by calculating the effect on Indigenous health and health care of withdrawing OATSIH funding for primary health care services. For nine preventable diseases (which account for about 27% of current health spending for this population), the withdrawal of OATSIH funding in the Northern Territory was estimated to cause a loss of healthy life (using Disability Adjusted Life Years or DALYs) of 2.6, 6.1 and 12.6 years per person in five, ten and 20 years time respectively (Beaver & Zhao
2004). Savings in the OATSIH program would be offset by increased costs to other parts of the system, largely hospital costs, resulting in a ratio of costs to savings of 5 times over five years, 7 times over ten years and 11 times over 20 years. The applicability of this modelling nationally is untested, and it cannot be generalised to other diseases. However, the overall findings are supported by the known impact of effective primary health care for chronic conditions in populations globally. Further, the modelling is robust to realistic variances in key assumptions, and can be accepted as a valid indicator of the direction (if not the precise measure) of the real positive impact of health care provision.

3.7.2 Impact and outcomes of mainstream health care

Evidence regarding the broad impact of mainstream health care is incomplete, due to inadequate data regarding Indigenous status in the most populous states. State/territory and national collections appear to show evidence of improvement in some key indicators.

- Indigenous infant mortality has declined from over 80 deaths per 1000 live births in the 1970s to 26 deaths per 1000 live births in 1981 (ABS 2000c, p. 76), with continuing gradual improvement. In 2000–02 the Indigenous infant mortality rate in the Northern Territory was 18.1 per 1000 live births (compared to 11.2 for the total population) and in NSW, which had the lowest rate, it was 9.5 per 1000 live births (compared to 5 deaths/1000 live births) (ABS 2003, p. 96).

- Indigenous life expectancy increased by 1.6 years for males and 0.9 years for females over the ten years from 1989 to 1999 (as measured by median age at death). Non-Indigenous life expectancy increased by 2.7 and 2.8 years, so the gap continued to grow (ABS 2000c).

- Age-specific death rates appear to have declined for all age groups except 15–24 and 45–54 years (based on Western Australian, Northern Territory and South Australian data) (ABS 2000c, p. 75). While the quality of some of the data on which these assessments have been made is variable, Northern Territory data is of consistently high quality. A recent comprehensive analysis of the Northern Territory data on mortality trends in the Indigenous population over 4 years of age shows a significant and steady decline in all-cause age standardised mortality between 1967 and 2000: 30% for females and 19% for males (Condon et al. unpublished).

3.7.3 Impact of effective primary health care: case study using program logic

This case study illustrates some of the health outcomes and impacts achieved by Nganampa Health Council. Figure 4 below, developed in consultation with Dr Paul Torzillo, is structured using program logic, so that it also provides an illustration of the links between inputs, structures and processes, impacts and outcomes.

The Nganampa Health Council is an ACCHS, formed in December 1983, providing comprehensive primary health care to people living on the Agangu Pitjantjatjara Lands (APY Lands) in the north west of South Australia, a population of 2833. There are seven major and many smaller communities on the lands. Nganampa is governed by a board of management elected from the local Aboriginal community and many of its managers and staff are Aboriginal. Nganampa has a clear mission statement and organisational structure, well-defined roles and responsibilities, and good human resource management practices to underpin service delivery. Management and practice has also been informed by richly contextualised local knowledge, regular reviews, evaluations and research (Shannon & Longbottom 2004).

Common health problems of children include respiratory illness, ear disease, gastroenteritis, skin infections, malnutrition and growth failure, adolescent illness, STIs and petrol sniffing-related illness. In addition, serious infections such as meningitis and trachoma occur more frequently in Indigenous children than non-Indigenous children. Common adult problems include Syndrome X disorders (obesity, diabetes, vascular
disease, renal failure and hypertension) as well as trauma and STIs in young adults. Some people on the APY Lands also have diseases such as tuberculosis and rheumatic fever, and again, while these are not common, they are more common in this population than the non-Indigenous population (Torzillo 2003).

The health service has developed over a 20-year period, slowly building management and service capacity and adding to its funding base. It now provides a range of primary health care services in a number of sites and initiates action and projects in sectors other than health (Nganampa Health Council 2000). Nganampa has prioritised the provision of high quality clinical care and has responded to local needs, such as immunisation, sexual health screening (Miller & Torzillo 1998), and chronic disease management.

Nganampa’s innovations in STI screening and treatment are an example of the practical demonstration of a new more effective approach which contributed to new policy directions. Nganampa has also improved the coordination of primary, secondary and tertiary care through more streamlined referrals and contributed to a more efficient use of those services. For example, Nganampa has achieved a consistent reduction in the levels of emergency evacuations to hospitals for acute conditions (Department of Health and Aged Care 2001b).

The Nganampa Health Council has also maximised the integration of different vertical programs by focusing on ongoing patient-centred care. In addition Nganampa has been effective in harnessing funds from a range of sources in order to provide an integrated service. Their aged care and disability facility sourced funds from various governments and departments in order to provide treatment, housing, meals and personal maintenance services (Shannon & Longbottom 2004).

Nganampa has also addressed the health of the Anangu people by improving their environment. The Housing for Health initiative identified shortfalls in health hardware such as washing facilities, waste disposal, and food storage and preparation resources. Alternative designs for necessary infrastructure were generated in consultation with local people and built. This initiative demonstrated that a competent primary health care service is well-placed to define the requirements for intersectoral action for health.

Nganampa currently receives funds equivalent to approximately four times average MBS spending per capita. However, due to its remoteness, there are still budget shortfalls each year due to the costs associated with patient assisted-transport and employment of nurses (Busutil 2003).

Figure 4 below is a simplified map and not all of the arrows linking processes/structures with impacts and outcomes have been drawn. For example, monitoring the health of the population and having effective recall and reminder systems (impact) will link to most of the outcome boxes. Similarly, Anangu Health Worker education and good staff orientation will enhance the capacity of the organisation to produce all the elements identified under the impacts heading.

3.7.4 Summary of impact of effective primary health care

The available evidence of health impact in Indigenous populations and the known effective interventions of primary health care, indicate that the impact of effective primary health care is seen in:

- reduced prevalence and incidence of communicable diseases that are susceptible to immunisation programs;
- reduced complications of chronic disease through effective chronic disease management programs;
- improved maternal and child health outcomes (such as birth weight) through the implementation of culturally appropriate antenatal and early childhood programs; and
- reduction in social and environmental risks through effective local public health advocacy, such as changes to liquor licensing regulations.
The available evidence of intermediate health outcomes achieved by effective Indigenous-specific health services gives grounds for governments to invest in further improving access to comprehensive primary health care. Evidence regarding the impact of mainstream services is poor, due to lack of data regarding Indigenous status. However, there is no reason to believe that health interventions that are of proven effectiveness for the general population cannot be effective in Indigenous populations, provided that the delivery system that brings these interventions is effectively tailored to the needs of Indigenous communities.
Figure 4: Nganampa Health Council ‘Program’: impacts and outcomes

**Inputs**
- Funding: In 2001–02 approx $9m (access to Medicare funding difficult)
- Physical infrastructure: Administrative centre at Umuwa and 6 major clinics and 3 health worker stations
- Governance: Governed by the Anangu Health Committee which meets every 4–6 weeks
- Management: An Anangu Director A Health Services Director Manager A part-time Medical Director Each clinic has an Anangu Health Mayatja (Manager) A finance manager, program accountant and book-keepers are based in Alice Springs
- Clinical, administrative, public and environmental health staff

**Processes/structures**
- Data system including: Population register to provide basis for activity, outcome reporting and program planning; chronic disease register; and paper-based system to record daily collection of health statistics
- Acute clinical care (and use of standard treatment protocols across all clinics)
- Prevention programs (immunisation, sexual health screening and chronic disease management)
- Programs such as aged and disability care, women’s health, children’s health, dental health
- Hospital liaison
- Extensive staff orientation
- Anangu health worker education

**Impacts**
- Health of the population is monitored: a recall and reminder system is being put in place but this is not well established yet as the service does not have a reliable computerised recall mechanism for most of these chronic conditions
- Increased proportion of people listed on the chronic disease register (from 16% of population in 1998 to 48% of population in 2002)
- Improved access to competent, evidence-based care
- Increased proportion of children immunised from around 60% in the 1980s to more than 90% in 2003
- Increased numbers of people being screened every year for 3 STDs (approx 70% people between 12 and 40 years)
- School age checks performed – 80% of target group tested and referred to treatment as required.
- Increased number of women screened for cervical abnormalities (approx 73%)
- Increase in number of women attending antenatal care as per guidelines
- 120 people registered with HACC program, 179 people spent 2298 days in respite care

**Outcomes**
- Should result in reduction in morbidity and mortality associated with chronic disease in the longer term
- Reduced emergency evacuations (from 294 in 1997–98 to 194 in 2001–02)
- Should lead to reduced incidence of vaccine preventable communicable diseases
- Reduction in number of people with and Prevalence rates of STDs. Gonorrhoea decreased from 14.3% to 5.4%; Chlamydia from 9% to 3.9%; Syphilis from 20% to 0.7%
- Should lead to increased child health, including eye and ear health
- Perinatal deaths decreased from 45.2/1000 to 8.6/1000
- Reduced mortality from treatment of cervical abnormalities is a longer term outcome
- Low birth weight babies reduced from 14% in early 1980s to 6% in 2003 (and mean birth weight is now the same as the national average)

Health of the population is monitored: a recall and reminder system is being put in place but this is not well established yet as the service does not have a reliable computerised recall mechanism for most of these chronic conditions.

Increased proportion of people listed on the chronic disease register (from 16% of population in 1998 to 48% of population in 2002)

Improved access to competent, evidence-based care.

Increased proportion of children immunised from around 60% in the 1980s to more than 90% in 2003.

Increased numbers of people being screened every year for 3 STDs (approx 70% people between 12 and 40 years).

School age checks performed – 80% of target group tested and referred to treatment as required.

Increased number of women screened for cervical abnormalities (approx 73%)

Increase in number of women attending antenatal care as per guidelines.

120 people registered with HACC program, 179 people spent 2298 days in respite care.

Reduced emergency evacuations (from 294 in 1997–98 to 194 in 2001–02)

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Should lead to increased child health, including eye and ear health.

Perinatal deaths decreased from 45.2/1000 to 8.6/1000

Reduced mortality from treatment of cervical abnormalities is a longer term outcome.

Low birth weight babies reduced from 14% in early 1980s to 6% in 2003 (and mean birth weight is now the same as the national average)
3.8 Cost-effectiveness

The Review required an assessment of the cost-effectiveness of current services, and two consultancies were let to address this issue, one with a focus on estimating resource requirements (Econtech 2004) and the other with a focus on estimating the cost-effectiveness of different levels of investment in various types of interventions (Beaver & Zhao 2004). Beaver and Zhao provide an analysis of the cost-effectiveness of current OATSIH funding for the Northern Territory population.

Both are useful papers, but neither provide a comprehensive assessment of the cost-effectiveness of the range of current services, in the sense of relating current spending in various components of the service delivery system to health impacts or outcomes and comparing their value for money. The complexity and interdependence of the main elements of the health system make it virtually impossible to provide a meaningful answer to such a broad question, and we have not attempted to do so. This section focuses instead on the cost-effectiveness of services funded by OATSIH.

The Beaver and Zhao (2004) paper uses a sophisticated system for matching resources (Health Resource Groups or HRGs) and benefits (Health Benefit Groups or HBGs) based on a framework developed in the UK, which can be thought of as roughly analogous to Diagnosis Related Groups (DRGs) for hospital care. They focused on nine preventable diseases (hypertension, diabetes, renal disease, ischaemic heart disease, chronic obstructive pulmonary disease (COPD), respiratory infections, diarrhoea, malnutrition and skin infections) which account for about 27% of current health spending for the Northern Territory Indigenous population. The analysis uses known health impacts of interventions at various levels of the health system (health promotion, prevention, clinical primary health care (new cases), clinical primary health care (existing cases) and hospitalisation, and calculates health benefits using DALYs and the actual costs of delivering these types of interventions.

They analysed the effectiveness of the current level of Australian Government investment in primary care by calculating the impact on the Northern Territory Indigenous population of withdrawing OATSIH grant funding for these nine diseases. They found that withdrawal would result in reduced grant costs of $23 million over five years, $59 million over ten years and $104 million over 20 years (using a 5% discount rate). The impact would be delayed diagnosis and treatment, more severe chronic conditions and more hospitalisations. As discussed above in section 3.7.1, the loss of healthy life would be equivalent to a loss of 2.6, 6.1 and 12.6 years per person in five, ten and 20 years time respectively. The increase in costs for the Territory government, and MBS and PBS, would exceed $136 million over five years, $470 million over ten years and $1261 million in 20 years (Beaver & Zhao 2004, pp. 32-33). That is, the ratio of costs to savings from not funding Indigenous services in relation to these nine preventable conditions is 4.9 times over five years, 7 times over ten years and 11.1 times over 20 years. The authors note the limitations of the modelling, including limitations of the expenditure and cost data, and other information required to inform scenario assumptions, as well as the short timeframes in which the work was completed (2003, p. 2).

*Based on modelling in the Northern Territory (Beaver & Zhao 2004), OATSIH funding for Indigenous-specific services is highly cost-effective, resulting in net health system savings of between 5 and 11 times the cost over 5 to 20 years, and additional years of healthy life of between 2.6 and 12.6 over the same periods.*

3.9 Lack of good data undermines decision making

Good data is required for management, needs-based planning (at local, regional, state/territory and national levels), the development of evidence-based practice, and for monitoring and reporting on changes over time. Planning and resource allocation models are only as useful as the data that are available to support them.
3.9.1 Current data problems

Currently there are a number of problems with data collection on Indigenous health and health care, both at the population level and at the service delivery level, and these constrain effective policy development, planning and program evaluation. These issues include:

- poor identification of people of Aboriginal and Torres Strait Islander descent;
- little focus on Indigenous Australians in mainstream data collections;
- variability in quality and consistency of data collected across jurisdictions; and
- inadequate recording of successful and attainable evidence-based approaches (NATSIHC 2003).

In addition, changes in the numbers of people identified as being of Aboriginal and or Torres Strait Islander descent in national data collections have made it difficult to track changes to the health of Indigenous Australians. It appears that the remarkable ‘denominator shift’ that occurred between the 1991 and 1996 census may have resulted from a combination of an increased number of people prepared to identify as Indigenous, changes in census editing procedures and changes in the proportion of couples in which one partner is Indigenous who identify their children as Indigenous. It appears that changes between the 1996 and 2001 censuses are based more on real population growth than further changes in the propensity to identify as Indigenous (ABS & AIHW 2003).

The absence of reliable data from the larger states (New South Wales and Victoria) in most population-based data collections is a major problem. While Indigenous people make up a small proportion of the total population in these jurisdictions (2.1% and 0.6% respectively), the Indigenous people of NSW and Victoria form 29.4% and 6.1% respectively of the total Indigenous population (ABS & AIHW 2003). Further, because they are more urbanised than the Indigenous populations in other areas, the absence of data on their morbidity and mortality is a significant limitation on current knowledge and on ability to track and analyse change. Efforts are underway to improve the situation in all states and territories, but continued effort and political commitment are required.

The failure of mainstream health care providers to collect data on Indigenous status from their patients is another important problem. Recent research has demonstrated effective strategies for doing so (Pulver et al. 2003; Young 2001).

3.9.2 Service-level data for Indigenous-specific services

Since 1998–99 Australian Government-funded Aboriginal and Torres Strait Islander primary health care services have reported data on their service activity, including activity not funded by the Australian Government, through service activity reporting (SAR). Aboriginal and Torres Strait Islander substance-use services now also contribute to a specialised Drug and Alcohol Service Report (DASR). These data collections provide the most comprehensive source of information on the activities of Australian Government-funded Indigenous health services. Limitations to the data include the use of broad indicators and the reliance in some cases on estimates of episodes of care and service population figures (which have not been independently audited). The collection provides information on service activity per annum, funding levels and workforce composition. The agencies have achieved a 97% response rate over the last three years of collection of SAR. Neither the SAR nor DASR are designed to provide client level information nor to assess the performance of individual agencies.

3.9.3 National data collections

In 1995, the Commonwealth funded the Aboriginal and Torres Strait Islander Health and Welfare Information Unit (ATSIHWIU) to improve data and statistics about the health and welfare of Australia’s Indigenous peoples. This Unit was run by the ABS’s Centre for Aboriginal and Torres Strait Islander Statistics until June
2002 when the ABS decided not to renew the contract. A review of the ATSIHWIU in late 2002 identified that it had been successful in improving data and recommended that the work continue. OATSIH is continuing targeted work to improve the quality and availability of Aboriginal and Torres Strait Islander health and welfare statistics through arrangements with the ABS and AIHW. This work includes:

- continued production of the biennial report on the *Health and Welfare of Australia’s Aboriginal and Torres Strait Islander Peoples*;
- assessing the available Indigenous mortality data to determine whether the data quality supports time trend analyses; and
- an examination of Indigenous identification processes in key administrative data sets with a view to improving the quality of Indigenous data in these collections.

The ‘National Indigenous Health Information Plan …This time, let’s make it happen’ (NIHIP) was adopted by AHMAC in 1997 and the National Health Information Management Group (NHIMG) was charged with implementing the plan. Key objectives of the plan include:

- addressing the ethics, ownership and use of data about Indigenous Australians;
- developing a strong Indigenous workforce to facilitate improvements in the coverage and quality of Indigenous health information;
- improving the capacity of major health and related data collections to separately identify Indigenous persons; and
- fostering a long-term commitment to major special purpose collections to obtain essential information unable to be obtained from administrative data sources.

In 2001 the National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data (NAGATSIIHD) was established to advise the NHIMG and is now responsible for continuing implementation of the NIHIP. This includes working on improving Indigenous identification in a range of administrative datasets (birth registrations, death registrations, hospital separations, cancer registries, general practice data collections, community mental health services data, and alcohol and other drug treatment services data); advising relevant agencies on information and data collection priorities; and providing advice to SCATSIH on National Performance Indicators (ABS & AIHW 2003).

Implementation of the NIHIP is specified as a key action area of the *National Strategic Framework for Aboriginal and Torres Strait Islander Health* (NATSIHC 2003). In addition, the NSFATSIH has outlined a comprehensive range of strategies for data availability and quality, data development, information management at the primary health care level, and research and knowledge transfer.

### 3.9.4 Improvements in data and information

Significant data problems remain, but progress has been made.

- Since 1997, four biennial reports on the health and welfare of Australia’s Aboriginal and Torres Strait Islander peoples have been produced by the AIHW and the ABS and the fifth is due in 2005.
- The 2001 National Health Survey included a supplementary Indigenous sample and provided estimates of Indigenous health indicators. National Indigenous Health Surveys will be undertaken every six years from 2004–05.
- Improved quality of Indigenous data from the Census of Population and Housing and for annual Indigenous population estimates and projections (ABS & AIHW 2003).
- A voluntary Indigenous identifier is now included in Medicare registrations (ABS & AIHW 2003, p. 9).
- The Communicable Diseases Network of Australia is currently working on making surveillance for STIs nationally consistent (OATSIH 2003a, p. 24).
• A framework for reporting on the performance of mainstream services in meeting the needs of Indigenous Australians for inclusion in the yearly Report on Government Services has been developed.

• The inclusion of a question about Indigenous identification in the Alcohol and Other Drug Treatment Services National Minimum Data Set and provision of advice from the AIHW to agencies about how to improve data quality.

• Progress in improving the coverage of Indigenous births has meant that ABS was able to publish information about births registered as Indigenous in 1999 for all states and the Northern Territory (ABS & AIHW 2003).

• The proportions of Indigenous Australians identified as such in the death registration systems have been increasing steadily, albeit slowly, over recent years (ABS 2000c; ABS & AIHW 2003).

• The AIHW continues to work with state and territory authorities to improve the coverage and quality of Indigenous data in collections of hospital separations, cancer registrations, community mental health services, alcohol and other drug treatment services, community services and disability services.

• The Department is also funding a project (auspiced by NAGATSIHID) to improve Indigenous identification in communicable diseases reporting.

• The National Housing Data Agreement achieved publishable data across all COAG jurisdictions in 2003.

• The Expenditure Report prepared by AIHW every three years.

Significant progress has been made in recent years towards improving national, state/territory and service-level data on the health and health care of Indigenous Australians. It is vital that this work continues, and is adequately resourced, as it provides the basis on which monitoring of effectiveness and decisions about how best to improve health and health care can be made.

Case study: Western Australian Aboriginal Child Health Survey

The first fully representative community survey of Aboriginal child health and wellbeing has been underway throughout Western Australia since April 2000. The project is being conducted under the auspices of the Kulunga Research Network by researchers from the Telethon Institute for Child Health Research. Funding for the project has come from a mixture of Australian Government and state government and private organisations. The ABS has been a major partner providing consultancy services as well as outposted staff and support for survey development and field work.

By the end of 2001, over 130 screeners and interviewers (60% of whom were Aboriginal Australians) enumerated a selection of 786 census districts from across Western Australia, listing 166 287 dwellings and randomly sampling 2386 families with Aboriginal children under the age of 18 years. A total of 1999 (83.8%) of these families consented to participate. Intensive interviews gathered information on 5289 children with separate interviews on 1073 young people aged 12–17, and additional interviews with 3153 carers of these children. School data was also collected for a high proportion of the children. During 2002, intensive data screening, cleaning, editing and validation took place. In addition, record linkage work was undertaken to further enhance the scope of the data; 92% of carers gave consent for their survey data to be administratively linked to hospital records, and 96% of carers gave consent for the data on their children to be linked to both hospital and birth records. Where consent was given, 96% of children and 93% of carers were successfully linked to the administrative health records maintained on the WA Health Services Research Linked Database.
Survey results will be communicated to participating Aboriginal communities in a culturally appropriate form with the assistance of the project’s Aboriginal Steering Committee and the Kulunga Research Network. Starting in late 2003 and continuing through 2004, the findings will be published in several formats. A monograph will provide an epidemiological framework not previously available as a planning resource to define the burden and impact of common child disorders at the population and regional levels. This information will assist policy makers, service planners and purchasers in health, education, family and children’s and justice agencies in estimating service needs and the potential advantages of alternative policies and programs. Additionally, a major community-based dissemination strategy is planned to communicate survey findings to Aboriginal communities throughout Western Australia. This aims to provide information relevant to community-level decision-making needs.

(Source: Telethon Institute for Child Health Research, 2003, p. 235)