National Strategies for Improving Indigenous Health and Health Care

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Overall Program Assessment

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 5. Cancer, Health Services & Indigenous Australians by John Condon, Cooperative Research Centre for Aboriginal and Tropical Health.

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

ABS	Australian Bureau of Statistics
ACCHS	Aboriginal Community Controlled Health Service
AHMAC	Australian Health Ministers' Advisory Council
AHW	Aboriginal Health Worker
AIDA	Australian Indigenous Doctors' Association
AIHW	Australian Institute of Health and Welfare
AMA	Australian Medical Association
APY Lands	Anangu Pitjantjatjara Lands
ARIA	accessibility/remoteness index of Australia
ATSIC	Aboriginal and Torres Strait Islander Commission
ATSIHPF	Aboriginal and Torres Strait Islander Health Performance Framework
ATSIHWIU	Aboriginal and Torres Strait Islander Health and Welfare Information Unit
CARPA	Central Australian Rural Practitioners Association
CATSIN	Congress of Aboriginal and Torres Strait Islander Nurses
CCT	Coordinated Care Trial
COAG	Council of Australian Governments
COPD	chronic obstructive pulmonary disease
CPHC	Comprehensive Primary Health Care
CSHTA	Community Health Services Training Australia
DALYs	disability adjusted life years
DASR	Drug and Alcohol Services Report
DEWR	Department of Employment and Workplace Relations
DRG	diagnosis related group
EPC	enhanced primary care
FTE	full-time equivalent
GP	general practitioner
GPPAC	General Practice Partnership Advisory Council
GST	goods and services tax
HACC	Home and Community Care
HBG	health benefit group
HIC	Health Insurance Commission
HR	human resources
HRG	health resource group

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
NSFATSIH	National Strategic Framework for Aboriginal and Torres Strait Islander Health
NTP	Ngunytju Tjitji Pirni
OATSIH	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
SCATSIH	Standing Committee on Aboriginal and Torres Strait Islander Health
SCRGSP	Steering Committee for the Review of Government Service Provision
STI	Sexually transmitted infection

Acknowledgements

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[1]. 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* (NATSIHC 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.

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

Communicable diseases control through vaccination
• *Increased childhood immunisation rates* – to 91% of children in the Tiwi Islands and 100% in Wilcannia (KPMG 2000).
• 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 2003b).
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 (Miller *et al.* 2001; Torzillo 2003; Department of Health and Aged Care 2001b).
Cancer screening
• 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).
Reduced complications of chronic disease
• 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).
• 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).
Improved maternal and child health outcomes
• 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 & Longbottom 2004; Eades 2004; Atkinson 2001).
• 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).

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

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

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

National leadership and planning
• Framework Agreements are in place in all jurisdictions, and health forums are established.
• Regional planning is completed in all jurisdictions and plans are being used to inform service enhancement priorities.
• 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.
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) (Deeble *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).
• Between 1998 and 2001, the proportion of PHCSs providing preventive programs increased from 54% to 74% providing men's health programs, 69% to 88% providing women's health programs, 74% to 80% providing child growth monitoring and 61% to 73% providing well person's health checks (SAR 1998–99 to 2000–01).
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

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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

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

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 time frame.

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 2003e). 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.

1 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.

2   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.

10. *Data collection* systems need continuous improvement (Commonwealth of Australia 2002, pp. 21-22).

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,*

1998–2003), and encapsulated in the third principle of the Government's response (Commonwealth of Australia 2002) to the CGC report.

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.

3   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

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

Source: AIHW 2001.

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[4]. 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 $14 300 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

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4   Because a greater number of Indigenous people become ill at a younger age and have shorter life expectancy the age boundaries used for
    planning in aged care are 50+ for Indigenous people and 70+ for non-Indigenous people (Lincoln Gerontology Centre 2002, pp. 15, 29).

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)
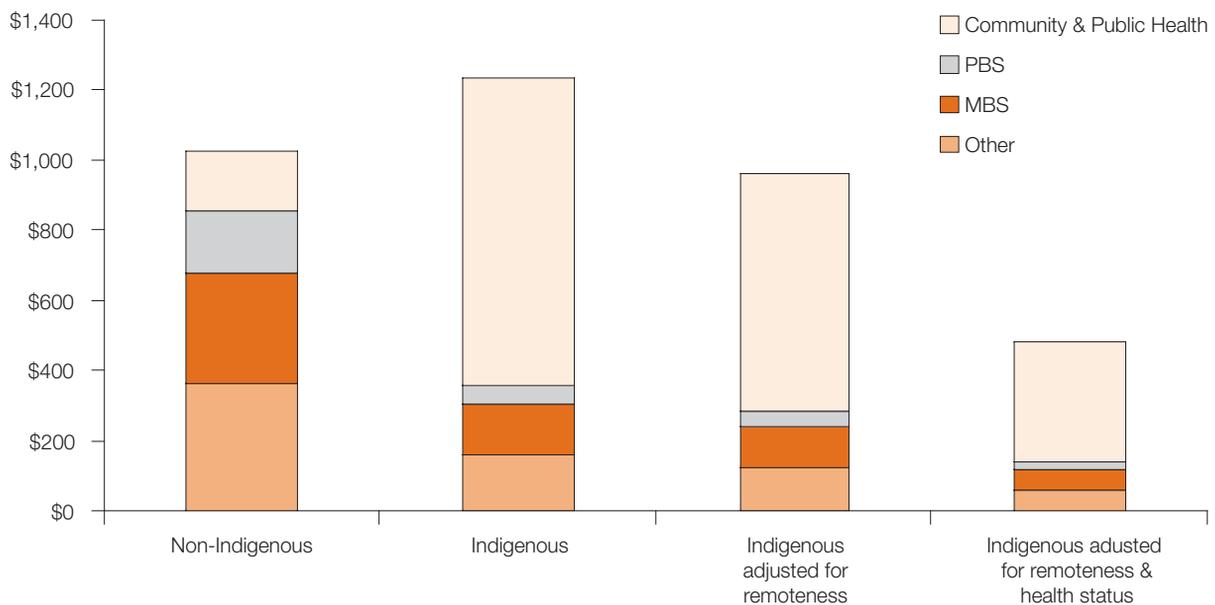
Source: OATSIH (2003b) based on AIHW 2001.

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

Financial year	1999–00	2000–01	2001–02	2002–03
Australian Government expenditure*	$3.8m	$6.0m	$12.1m	$15.1m
Participating services	105	105	151	153

(* 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
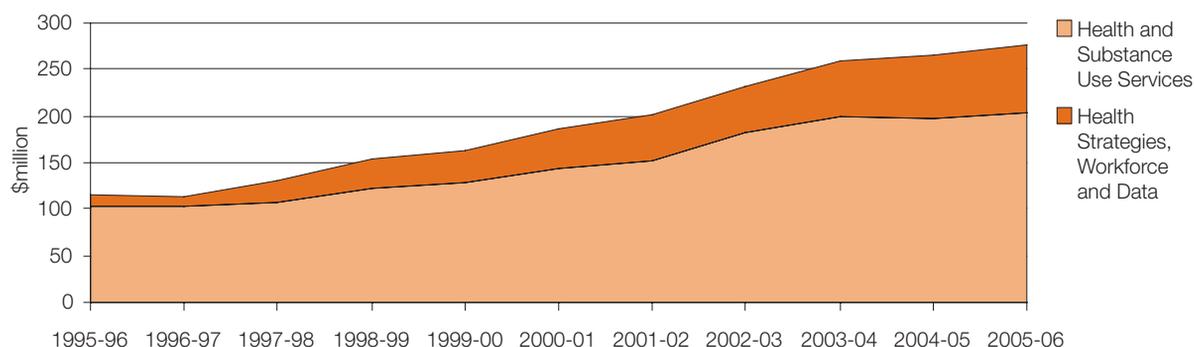
Source: Department of Health and Aged Care (2001a, vol. 2, p. 15).

Figure 3: Total episodes of care for PHCS services 1997–2001[5]

Total episodes of health care reported in Service Activity Reporting
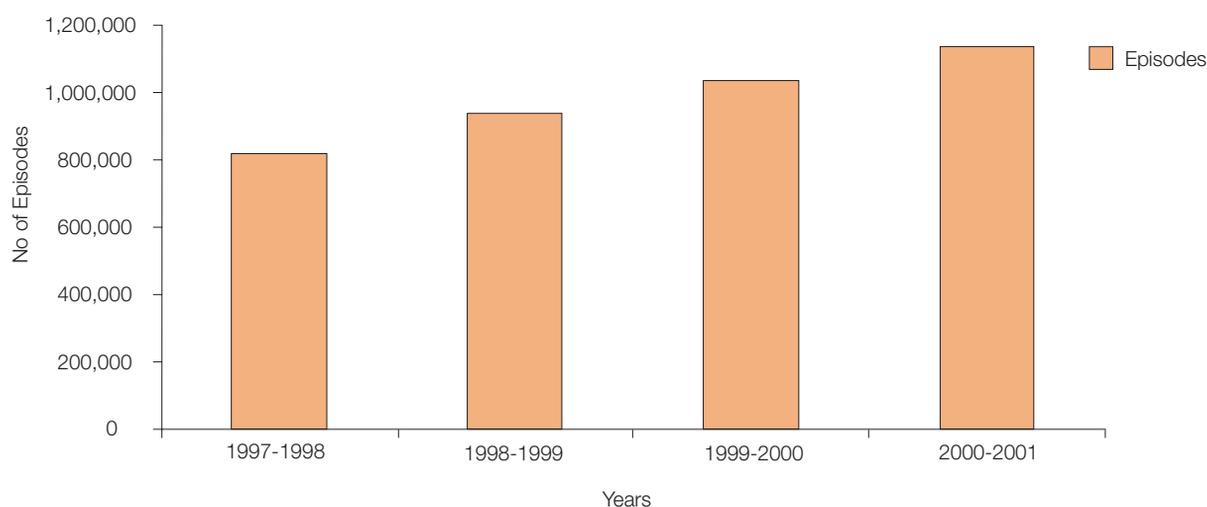
Source: OATSIH & NACCHO 2003, p. 27.

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.

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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 A<u>n</u>angu 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 Anangu 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 to194 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)

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 (NAGATSIHID) 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)

4   Strategies for narrowing the gap

The Review required advice on the strategy and relevant timeframes required to achieve appropriate levels of comprehensive and effective health care for Aboriginal and Torres Strait Islander people. This part commences with a consideration of the requirements for an adequate well-managed service delivery system on the ground, and then addresses the broader issues of national leadership, supportive policy, workforce capacity, information and healthy public policy.

The experience of the last 30 years (since the initiation of Aboriginal Community Controlled Health Services), and particularly the period since the mid-1990s, means that decisions about how to improve health care for Indigenous Australians can now be made with a degree of confidence. There are some important limiting factors that mean a developmental approach is required, and expenditure growth should be carefully scaled to enable capacity to develop. It is also essential, while taking a national perspective, to ensure that regional and local variations in health problems, health system capacity, cost structures, workforce supply and community capacity are recognised. All strategies will need to be tailored to local and regional conditions, within the framework of national goals and policies.

4.1   Care delivery models

This section defines comprehensive primary health care, explains some of the necessary conditions for effective CPHC and proposes the development of a delivery system model for Indigenous-specific services funded by OATSIH (with variations for location and other factors). This section is focused primarily on Indigenous-specific agencies, but the role of mainstream agencies in Indigenous health care delivery is also addressed.

4.1.1   Definition and scope of comprehensive primary health care

The established OATSIH definition of comprehensive primary health care (CPHC) is sound and consistent with the WHO definition described in the Alma-Ata declaration (WHO 1978). Its taxonomy of four key elements specifies a platform of services:

- 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);

- facilitation of access to secondary and tertiary care—referral, support for referred patients, development and maintenance of links 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 that lie outside the direct ambit of the health system (OATSIH 2003c; 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, the following is a draft list of the key elements.

Table 3: Elements of comprehensive primary health care

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

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

4.1.2 Chronic disease care: a 'best buy' requiring a base of CPHC

The modelling carried out by Beaver and Zhao (2004) assessed the 'best buys' for reducing the burden of illness for nine preventable chronic conditions. They found that Clinical Primary Health Care (new cases) and Clinical Primary Health Care (existing cases) were the most effective interventions for the purposes of saving health care resources. Health promotion was the third priority for eight of the nine diseases (malnutrition is the exception). Prevention was more effective than hospital care in terms of saving resources (Beaver & Zhao 2004, p. 21).Health promotion and prevention become more effective in saving resources in the longer-term (20 years), but are still less cost-saving than clinical primary health care (Beaver & Zhao 2004, p. 21).

These findings illustrate the potential for enhancing the cost-effectiveness of intervention through evidence-based planning and care delivery. However, effective delivery of these most effective interventions requires a platform of comprehensive primary health care. Good clinical care for new and existing cases can only

be reliably provided from a base of competent general primary health care, readily accessible to patients and responsive to their broad health concerns. 'Best buys' are part of effective primary health care, not a substitute for it.

The existing OATSIH definition of comprehensive primary health care is a sound basis on which to build further specification of the basic platform of services, and service system models, which are needed to improve access to health care and health outcomes for Indigenous Australians. It is possible to identify some services that provide a clear and strong return on investment, but (with some minor exceptions) they can only be effectively provided from a base of comprehensive primary health care.

4.2   The primary health care delivery system

Effective primary health care is a seemingly non-controversial goal in most health systems, but is nevertheless difficult to achieve. Perhaps one of the reasons for this is that the primary health care system is at the bottom of the pyramid, characterised by small-scale provider organisations (or small groups of practitioners), providing services that lack the glamour of tertiary care and operating far from the centres of power. Strong policy support from the centre needs to be informed by an understanding of some of the dilemmas primary care providers face. This section attempts to outline some of the conditions required for effective primary health care, and the key elements of the service system.

4.2.1   Requirements for effective primary health care

Reference to the mainstream Australian system for models of comprehensive primary health care is not particularly helpful, because the mainstream system is itself plagued by discontinuities, jurisdictional boundary problems, and great tension between the goal of integrating care for patients on the one hand and the goal of targeting services through tight specification of eligibility and service types on the other. In this respect, Indigenous programs are less conflicted and contested by competing interests and there is perhaps more freedom to develop a coherent system. The major tensions that the system must balance are explained below.

Achieving both integration of care and effective targeting

There is much rhetoric about the need for integrated care, and a significant body of experience in finding methods for delivering it ('horizontal programs'). But there is also evidence to support the pursuit of specific health goals and the use of targeted programs to achieve health gain in relation to specific health problems ('vertical programs'). These potentially conflicting goals or methods are both important, and need to be managed together.

As in all organised human endeavour, there is a need in health care to enable specialisation (i.e. break the system up into manageable components of care and manageable organisational arrangements) on the one hand, and then to find ways of coordinating the pieces to make a coherent whole on the other (Mintzberg 1991). In the case of Indigenous primary health care (and this is also true in the mainstream), the most effective approach is for primary health care organisations or practitioners to fulfill the integrating function, presenting a 'seamless' point of entry to the whole system and acting as the anchor point for individuals, coordinating access to care and working with clients to ensure that the inputs of all the other players are managed coherently.

If this anchor point and integrating function are working, vertical programs, delivered either by the primary health care service itself or in close collaboration, can be tightly specified and targeted; and population-level key performance indicators can be collected and monitored, with a minimum of discontinuity for the patient. Secondary prevention for chronic illness can be achieved with both specialised skill and generalised

management of care for the individual. Finally, the needs of the seriously ill can be met in a coordinated way.

For this approach to managing both integration and targeting to work, some prerequisites must be in place.

- The implications of new, targeted programs for primary health care providers (increased workload; new data collection and information technology [IT] needs; facility and equipment requirements; need to develop new partnerships) must be recognised in the development of policy and funding programs (e.g. Centre for Remote Health 2003).

- The work of establishing effective links with primary care providers must be included in the remit of targeted programs that sit outside core primary health care activities (e.g. breast cancer screening), and both the process of development and the resourcing levels must take this into account.

Community governance/localism and national/state/territory programs

The second significant tension that must be managed is the potential conflict between the desire of local communities and agencies to determine local priorities and the policy goals of national or state/territory programs that seek to improve outcomes at population level.

Both of these goals are vital: inability to respond to local issues can be a serious barrier to implementing local solutions for health gain, and can compromise effective local management of resources and services. On the other hand, it is equally vital that the primary health care system has the capacity to support the delivery of national programs in areas where there is strong evidence of both significant need and the effectiveness of an intervention or program method.

These potentially conflicting goals can be reconciled. For example, the Northern Territory Preventable Chronic Disease Strategy has been implemented in both mainstream and Indigenous health care organisations, with considerable success (Weeramanthri *et al*, 2003). Focused on five diseases, the Strategy has succeeded in achieving interim outcomes. Preliminary analysis against a baseline of 21 indicators shows a trend in:

- improvement of birth weights;

- sustained high levels of immunisation;

- a slowing in the rate of growth of renal dialysis treatments;

- a decline in the number of diabetic amputations in the Top End;

- some improvements to the food supply;

- a relatively stable per capita alcohol consumption; and

- a continuing decline in adult smoking prevalence, though slower than in the rest of the country and still with very high levels in the Indigenous community (Territory Health Service 2001).

A careful process of development and negotiation of this program is seen as essential to its success.

For this sort of success to be generalised, the following are required.

- Effective use of planning and negotiation forums (such as the Partnership Forums - see section 4.4.1) to enable participation by all parties in the development of national/regional priorities, to identify potential conflicts between local and national priorities, and establish arrangements to enable local variation.

- Agreed methods of framing requirements and negotiating local implementation so that programs can be targeted to real local priorities, local agencies can plan for engagement and if necessary be resourced to deliver their component, and so that there is joint ownership of program outcomes.

For comprehensive primary health care to be effectively implemented, the decision-making and management processes of the delivery system (at all levels) must be designed to support the primary care level. This in turn requires that the inevitable tensions between integrated care and targeted programs, and between local and national priority-setting, be acknowledged, recognised as legitimate challenges for all parties, and carefully managed through robust, durable and mutually respectful negotiation processes.

4.2.2   Service system models

Good system design in this field must recognise and accommodate diversity while ensuring that universal access to a common platform of services is available. While there will be variation in levels of funding, capacity and volumes of services delivered across the Indigenous-specific sector, it would be useful to establish standards and benchmarks against which service development could be planned and progress towards the goal of universal access could be monitored. While the following discussion is focused on Indigenous-specific agencies as the cornerstone of the model, we would emphasise that achieving CPHC requires a network of services, Indigenous and mainstream. Differences between remote, rural and urban models are noted as they arise.

The Primary Health Care Access Program (PHCAP) program has established benchmarks for relative funding effort and absolute levels of funding for primary health care on the basis of population size, remoteness and current capacity to utilise Medicare. We propose that a flexible service system model also be developed, based on a regional approach. A core platform of primary health care services to be provided at regional and local levels for given population sizes would be specified, and could be used as a template to guide funding decisions and service development.

The historical development and local autonomy of ACCHSs must be respected, while at the same time recognising that sustainability and effective health care delivery arrangements are essential. The success of any new approach will depend on strategies that focus on health care delivery and the goal of health gain, rather than on re-organising existing organisations to fit a model. While the forms and structures of existing organisations may need to change over time (particularly where small size is a strong limiting factor on effectiveness), this should be achieved as part of a program of growth and development in health care delivery, by negotiation and in stages. The regional template should not specify a requirement for a single regional board of governance. Rather it should allow for a mix of organisational arrangements, including the following:

- Local ACCHSs linked at regional level through consultation and negotiation forums, and shared support services (finance, human resources [HR], IT, data collection, clinical and management protocols).

- Regional ACCHSs with local clinics and programs (e.g. Nganampa Health Council SA, Katherine West NT, Central Australian Aboriginal Congress NT).

- A regional primary health care network including Indigenous-specific and mainstream organisations, that work together on health programs for Indigenous people to ensure that the necessary services are available in the region.

- Arrangements whereby community-based agencies contract with government or private sector agencies for care delivery, and act as purchasers rather than managers of service delivery.

The service system model should enable funding for necessary support services at regional and local level. A regional network of local ACCHSs could establish and jointly manage a regional support capacity, to provide shared services such as financial reporting, human resource and industrial relations expertise, staff development, information systems support, data processing, and supply management, where they are not

achievable at local level. Clinical support services could also be provided by this mechanism, including diagnostic services, evaluation of care and analysis of evidence both of effective methods and local and regional progress against indicators and targets.

The service system model would need to be flexible enough to support cross-portfolio sharing or pooling of resources, such as a single facility housing all health, community and education agencies in small communities.

It is also important that regional boundaries are determined on the basis of the needs of health care delivery, recognising mainstream health regions where appropriate. Consistency with local government and Aboriginal and Torres Strait Islander Commission (ATSIC) boundaries is also strongly desirable.

In building a stronger and more capable comprehensive primary health care system, it will be essential to take a developmental approach, with an agreed growth path. In some under-serviced areas, it will not be practical to develop an Indigenous-specific agency, or at least, not immediately. For these cases, the service system model could also specify good practice in providing Indigenous services from within mainstream organisations, such as is currently happening in Central Australia under PHCAP. The National Strategic Framework for Aboriginal and Torres Strait Islander Health requires that these services should be provided in partnerships among Indigenous-specific and mainstream agencies, in ways that maximise community decision making, influence and control (NATSIHC 2003).

It may be helpful to describe stages of development, with a cluster of characteristics of each level (e.g. from Stage 1 where there is no Indigenous-specific service through to Stage 4 where there is a good Indigenous primary care service with effective links into other services, strong regional structures, etc.).

The establishment of an agreed model for the Indigenous-specific service system, combined with specification of the basic platform of services that constitute CPHC, has the potential to deliver several benefits. These measures will provide a guide for decision making in relation to funding and support, support progress towards the goal of equity of access to care, assist the development of best practice in clinical care and the use of effective interventions, and support stronger governance and management.

4.2.3 Care coordination for people with chronic conditions

The significant burden of chronic disease in Indigenous communities means that care coordination is of central importance, and arrangements that are known to be supportive of care coordination should be designed into the primary health care system.

There are three important system design elements. Firstly, the role of the primary care provider as the coordinator of the patient's care must be endorsed. Secondly, funding methods that enable the primary care provider to perform this function (possibly including some element of capitation) are needed. Thirdly, capacity to link medical records would facilitate the effective transfer of needed information between care providers. Each of these elements raises issues of privacy and choice, which need to be resolved with Indigenous communities and individuals.

The development of the Oacis system in South Australia (which currently provides an integrated medical record for patients with kidney disease across metropolitan Adelaide) provides a model for a clinically appropriate, well-designed use of record linkage to improve care (HealthConnect Program Office 2003). Privacy issues have been addressed, and technical requirements are understood. While such a system may seem a long way in the future particularly for remote services, these agencies have proven their willingness and capacity to use sophisticated solutions to the problems of distance and isolation, with many ACCHSs routinely using population registers. For example, Nganampa has established a population register that includes information on daily clinical contacts as well as specialised medical databases. This is used to plan

and implement strategic health interventions, and provide activity reports to staff, communities and funding bodies. Nganampa has also established a chronic disease register to improve the management of clients with a chronic illness (Shannon & Longbottom 2004). It seems that there is support for this kind of system among some communities who understand the privacy issues involved, and see them as acceptable in the context of potential health gain (e.g. for antenatal care and immunisation programs).

Given the importance of complex chronic illness in the Indigenous population, systems and processes that enable strong coordination of care are needed. They will require collaborative development and informed agreement by communities, with particular sensitivity to any concerns about privacy and autonomy. There are some early signs of informed and considered acceptance among Indigenous communities.

4.2.4   Indigenous-specific agencies in urban areas

The extent to which Indigenous-specific agencies are best placed to deliver all elements of comprehensive primary health care will vary with location, including remoteness but also local conditions (such as distance from and relationships with other agencies). Other factors include the relative roles of private general practice and the full range of public and private sector care providers, and their readiness to provide appropriate care.

The basic definition of CPHC describes services that should be available to urban Indigenous Australians, whose poor health status indicates poor access to existing health care agencies. But there are more options for Indigenous people in relation to access to care; and for Indigenous-specific agencies in relation to working collaboratively with others, and these should be taken up where they can deliver health benefit.

While concern to allocate the maximum possible amount of funding to remote and rural people is recognised, this should not mean continuing disadvantage for urban Indigenous people. They should be able to use an Indigenous-specific primary health care service if they need to do so. A need based on reluctance to use mainstream services (for whatever reason) is a valid need in circumstances where such reluctance will result in lack of access to health care. The challenge to enhance the acceptability of mainstream services lies primarily with the mainstream, and secondarily, with the ACCHSs (whose roles include advocacy and advice to the mainstream).

The application of service system models and the basic platform of CPHC will be different in urban areas. The same access principles should apply. The challenge to make mainstream services more acceptable and accessible to Indigenous Australians lies primarily with the mainstream (see section 4.3).

4.2.5   Services for non-Indigenous Australians in remote areas

Expansion of the network of primary health care in remote areas could provide an opportunity to resolve the question of access to Indigenous-specific services for non-Indigenous people in areas where the ACCHS is the only local service. This issue is generally satisfactorily resolved in practice, and codifying the arrangement in policy would strengthen the basis for good practice. The funding method could be based on either MBS/PBS or a component of per capita funding, or a combination of the two.

4.2.6   Mainstream service delivery

This discussion of the primary health care system has focused largely on Indigenous-specific agencies, because this is the sector that has Indigenous health as its primary goal, and which can be designed and adapted to respond as closely as possible to Indigenous health care needs. However, the mainstream system also plays a vital role. On any given day, at least as many Indigenous Australians attend private GPs as ACCHSs across Australia, and Indigenous people rely on the mainstream secondary and tertiary systems.

There is growing awareness at all levels in the mainstream health system of the fact that Indigenous health care is everyone's responsibility, but that awareness and willingness is yet to be converted to active engagement throughout the mainstream system. There is some tendency to regard Indigenous health care as the responsibility of the ACCHS sector, and in the secondary and tertiary sectors, as a primary health care issue.

Acceptance of responsibility throughout the system needs to be embedded into the full range of policy and governance instruments, from Health Service Agreements to statements of objectives in Articles of Association or incorporation, and the strategic plans of agencies. Continuing national, professional, management and peak body leadership is needed.

The role of mainstream services is to provide easy access to quality care for Indigenous patients. This requires policy commitment; understanding of the health care needs of Indigenous patients, and the particular barriers to access that they encounter; the engagement of clinicians in ensuring that clinical practice is appropriate; and the supportive role of Aboriginal Liaison Officers and local ACCHSs.

It also requires debunking of the myth that Indigenous-specific funding is more than adequate to meet needs. This myth underlies an attitude or belief in some mainstream providers that the health care funding pie has been definitively cut on racial lines, and that mainstream resources are really for the care of non-Indigenous people.

For the providers of health care, better ascertaining and recording of Indigenous status is an immediate practical issue, often needed for effective care delivery as well as for better understanding and reporting of Indigenous health status and health care use in the long term.

The Divisions of General Practice have an important role to play in enhancing the capacity of general practice in Australia to provide effective primary health care for Indigenous Australians. The recent review of the role of Divisions of General Practice (Department of Health and Ageing 2003a) notes the variable relationships between them and ACCHSs, and the variable level of engagement in relevant activities by the divisions (Department of Health and Ageing 2003a, pp. 45-47). The report acknowledges the fact that for some Divisions of General Practice, the absolute numbers and the proportions of potential Indigenous patients who might use general practice care in the area are very low, but notes that 'it is essential that all Divisions undertake activities that improve the health of Indigenous Australians' (Department of Health and Ageing 2003a, p. 46). In four relevant recommendations, it urges that the Australian Government fund a consortium to identify models of best practice for Divisions of General Practice and ACCHSs in working together; that a common performance indicator be introduced by the Australian Government to measure effective engagement between the two sectors; and that guidelines for culturally safe practice in general practice be developed.

The Government has supported the Commonwealth Grants Commission's view that appropriate strategies to address lack of responsiveness by mainstream agencies include involving Indigenous Australians in the design and delivery of mainstream services; and improving the relationship between mainstream and Indigenous-specific programs (Commonwealth of Australia 2002, p. 15).

The mainstream health system's commitment to enhancing Indigenous health and health care needs to be strengthened, and embedded in policy, service agreements, strategic plans, objectives, performance agreements and other instruments. A strategy and resources are needed to support this work, and to support mainstream clinicians in their endeavours to enhance the effectiveness of the care they provide to Indigenous patients.

4.3 Governance and structure of Indigenous health organisations

There appears to be significant variation in the organisational effectiveness of Indigenous health services. Some are relatively well-funded, well-staffed, well-governed and managed, able to provide a comprehensive range of primary health care services, and supported by useful data about their communities, client base and service outputs. In three significant field studies (Department of Health and Aged Care 2001b; Shannon *et al.* 2002; Shannon & Longbottom 2004) the critical success factors for comprehensive primary health care and the Indigenous-specific health service sector have been examined. The factors identified are generally consistent with the principles of good health care management and practice applying in the mainstream:

- adequate secure resourcing;

- reasonable access for the population to be served;

- interventions based on good evidence of efficacy;

- effective collaboration by the range of providers needed for comprehensive care;

- capacity for innovation based on evidence;

- priority-setting that reflects community perceptions of needs; and

- acceptability to the community.

The differences lie in the particular styles of comprehensive primary health care (with a greater range of services being provided by single agencies serving Indigenous communities, as compared to agencies of similar size in the mainstream); and in the way that the principle of community engagement is expressed.

There are some outstanding examples of success. Detailed case studies of Nganampa Health Council SA and Townsville Aboriginal and Islander Health Service QLD (Shannon & Longbottom 2004) reveal that, with the current level of investment and current system influences, these services have been able to develop into effective primary health care services.

> 'Their development has taken a long time and sustained effort over many years. They have demonstrated that they have good systems in place to manage their resources on a daily basis and have strategic approaches to manage longer term issues. Both services have intermediate outcomes that should, in time, lead to improvements in health outcomes' (Shannon & Longbottom 2004, p. 121).

The authors include a cautionary note about the potential for health gains to be undermined by the impact of social and economic disadvantage in these communities.

The Australian Government funds a range of Indigenous health agencies, mostly to provide primary health care services, and many also receive state/territory funding. The majority of these agencies are ACCHSs which are defined by the National Aboriginal Community Controlled Health Organisation, the peak body for ACCHSs, as

> '… primary health care services initiated and managed by local Aboriginal communities to deliver holistic and culturally appropriate care to people within their community. Their board members are elected from the local Aboriginal community.' (NACCHO 2003, p. 2)

NACCHO is strongly committed to this model of community control (for reasons including the history of the sector's development in an environment of mainstream neglect). The services provided by these agencies include:

- the diagnosis, treatment and management of illness and disease;

- population health programs such as screening and immunisation; liaison with secondary and tertiary health services; and

- advocacy and support roles.

In 2000–01, 129 Indigenous-specific primary health care organisations were funded by the Australian Government and they provided 1.3 million episodes of care, as well as undertaking related activities such as training (Department of Health and Ageing data 2003d).

A significant proportion of Australian Government-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 annum and able to offer a broad range of primary health care services. This funding is often from multiple sources each requiring different and specific reporting formats. The higher burden of disease experienced by Indigenous people impacts on staff workloads and coupled with relatively low funding levels, generally limits the capacity of these services to provide early detection and prevention programs. However, there are a number of high capacity agencies that are providing a good base of clinical care, and early detection and prevention programs, which are having an impact. The roles agencies play vary by location, with ACCHSs providing virtually all primary health care in some remote areas, often including 24-hour emergency care. State/territory-funded Indigenous-specific and mainstream services provide such care in other remote areas (e.g. some parts of the Northern Territory, and in Cape York).

Service capacity often reflects historic arrangements, and agencies are not currently funded fully 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 services more evenly (Commonwealth of Australia 2002, p. 25) in light of the Commonwealth Grants Commission finding that there was no evidence of funding in excess of needs in any location (Commonwealth Grants Commission 2001, p. 144).

4.3.1   Effective Governance in Indigenous agencies

There are many examples of good governance practice in the field of Indigenous health, and there are also areas where improvement is required.

The extent of effective governance and leadership in ACCHSs around the country, and the development of appropriate governance styles and conventions, needs to be acknowledged. Most services meet accountability requirements, and over time, board members and staff have developed impressive skills and expertise in managing 'interculturally' (i.e. between traditional informal Indigenous ways, obligations and relationships, and the formal legal structures of incorporated organisations). For example, the Katherine West Health Board, which was established in 1997 to manage a coordinated care trial, has extended its role to become a community-controlled service provider, delivering a range of services (and purchasing others) in one of the most remote communities in Australia. Initially, Territory Health Services provided technical support to the Board so that members gained the skills and expertise to govern a service with complex arrangements. The Board now has the capacity to assess and plan for the whole of the region's health needs and has made a significant improvement in the provision of health services for its service population (Department of Health and Aged Care 2001b; KPMG 2001).

The contributions made by clinicians and managers with the drive and technical competence needed to build successful organisations, especially those who have sustained their commitment over many years, have been vital but largely unrecognised. Shannon *et al.* (2002, p. 64) found that leadership (by Indigenous and non-Indigenous people) was a key factor in the success of the projects they examined: 'Strong and

sustained leadership by a skilled individual was key to a number of projects but was not acknowledged despite the evidence' (Shannon *et al.* 2002).

However, the incidence of governance problems in ACCHSs is of concern with 24 of 184 (13%) community-managed organisations delivering health and substance use services experiencing difficulty in July 2003 (OATSIH unpublished 2003h). Causes of these problems include the following.

1. *Small size* of organisations, that must nevertheless shoulder the full burden of corporate accountability, often without access to critical resources and skills such as accountancy services, HR expertise, adequate IT and timely legal advice, and without an adequate asset base, or secure ongoing funding.

2. Arising from the above, weakness or poor development of guidelines, *policies and procedures* that might otherwise strengthen and protect ongoing management functions, particularly for small organisations or organisations that have grown rapidly without implementing a robust management system.

3. The intensity of demand for the time, energy and influence of key leaders in communities, with *leadership skills* being stretched too thin in communities that are under high levels of stress.

4. The shortage of *Indigenous health and management professionals* with management skills and experience; and difficulties of recruiting and retaining skilled staff (Indigenous or not), exacerbated by lack of security of tenure for staff employed on 'soft' funding.

5. The challenge of creating and sustaining effective corporate governance in the 'intercultural' space occupied by Indigenous organisations (Martin 2003), and the difficulties of *managing the tensions* between formal governance structures and methods and the informal structures and relationships within communities, including strong family groupings.

6. The complexities of administering different *reporting requirements* from different funding sources, and the burden of constant submission writing for renewal/expansion of funding sources with the need to 'invent innovation' to meet funding guidelines.

7. Difficulties in developing and maintaining *effective linkages* with other agencies whose contributions to care are necessary.

This list is similar to one that might be produced in relation to service failure in mainstream health services, particularly in smaller organisations and rural areas.

Community control as a governance model

The principle of community control is one of the key features of Indigenous-specific agencies and one of the cornerstones of the development of these services (Shannon *et al.* 2002). It is based on the political goal of self-determination (Griew *et al.* 2003; Anderson 1994), and the practical goals of improving community capacity and tailoring services to meet needs in ways that will be accepted by Indigenous people. It essentially requires that ownership and governance of the health agency are vested in the local Indigenous community, generally through the mechanism of a local Indigenous board of governance and an Indigenous CEO. This arrangement aims to enable the local community to decide on its priorities, policies, management structure, staffing and service profile, within funding guidelines.

Community control emerged with the founding of the first Aboriginal Medical Service in Redfern NSW in 1971, and has been closely held and valued within the sector and more broadly by

Indigenous communities. It was accepted as a fundamental part of the National Aboriginal Health Strategy (NAHSWP 1989) and is endorsed in the National Strategic Framework for Aboriginal and Torres Strait Islander Health (NATSIHC 2003). The principle of community control has similarities to the traditional and still common governance structures of some public hospitals, community health centres and other mainstream health agencies (including the substantial non-government sector).

While the concept of 'cultural appropriateness' is generally endorsed in relevant government policies, government agencies and policy analysts also express concern that good corporate governance may be compromised in Indigenous organisations precisely because of adaptations of generally accepted governance principles. Areas of concern include weaknesses in the separation between board and management roles; and in the application of conventions for avoidance of conflict of interest, for example through strong demarcation between the roles and interests of recipients and providers of services (Martin 2003). We note that these issues also give rise to governance problems in mainstream agencies.

Shannon *et al*. (2002), in their assessment of achievements, developed a typology of forms and methods of community control and community participation. They describe a broad continuum of engagement with Aboriginal and Torres Strait Islander communities, with five levels—community-controlled, community-initiated, community-grounded, community-adopted and community-oriented projects (Shannon *et al*. 2002, p. 12).

The key issue from a health system perspective is quality health care supported by good governance and effective management.

The Commonwealth Grants Commission has endorsed the importance of 'working partnership arrangements and effective community control of services' (Commonwealth Grants Commission 2001, p. 133) and the Government has endorsed the importance of community engagement in its response to the Commonwealth Grants Commission report (Commonwealth of Australia 2002). This policy position is supported by the findings of Shannon *et al*. (2002), which reiterate the widespread though hard won general support in Aboriginal and Torres Strait Islander health policy for the participation of Aboriginal and Torres Strait Islander people and organisations in primary health care. The successful projects they reviewed demonstrated

'…the value of diversity at a local level within a national framework that provided consistency in policy direction. The success of a range of models of community participation reflected the importance of engagement of the community, rather than the necessity of one prescriptive model' (Shannon *et al*. 2002, p. 66).

They also stress the need for diversity, to 'reflect the diversity inherent in Aboriginal and Torres Strait Islander communities', shaped within the broad strategic directions that might ensure equity in access to care.

We propose two policy principles and a number of practical areas for action to enhance the effectiveness of governance in Indigenous organisations. Firstly, future funding should be provided at levels that enable agencies to achieve critical mass for good governance and effective service delivery. 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 and the needs of ACCHSs. At the same time, the validity of other forms of engagement for specific services and purposes (such as partnership arrangements and Indigenous services and committees within mainstream agencies) should be recognised.

Practical strategies to enhance governance capacity are also required. The key requirements (in place or underway in some areas) include the following.

- Access to key areas of **technical management know-how** and capacity, either in-house or through other means, including accounting and financial management, information systems, human resource management and industrial relations, and legal and other support for compliance with applicable standards and regulations.

- **Development of governance, leadership and management skills** through effective learning programs and methods, and identification of the essential skills and experience required of board members. Resources are required to enable trialling and evaluation of a range of approaches to support emerging and current Indigenous leaders in health care (including both formal teaching and alternative approaches such as mentoring, coaching and learning sets).

- Support for the development, testing and evaluation of **policies and procedures** to guide boards, managers and staff in the fulfilment of governance and management requirements.

- **Alignment of funding programs, accountability and reporting requirements** to enhance security of funding, reduce the burden of reporting and submission-writing, and encourage focus on meaningful indicators of throughput and impact of service delivery.

- **Infrastructure for quality improvement** activities, including clinical protocols (see Couzos & Murray (2003) and the CARPA manual [CARPA 1997]), good IT and data systems, benchmarking, and a user-friendly evidence base.

Case study: factors supporting effective governance

Nganampa Health Council (NHC) has worked hard to achieve good governance. NHC was established in 1983 and took over management of the health service from the South Australian government in 1985. The administrative centre for the health service is at Umuwa and there are six major clinics and three health worker stations. NHC receives approximately $9 million dollars per year from a range of sources.

The governing body (the Council) has 20 members, including the Director (who is an Anangu person), Anangu Health mayatjas (managers), an elected representative from three health worker stations, three elected representatives of the Women's Council, four elected general representatives from the Anangu Pitjantjatjara Lands, two elected Anangu Health Worker representatives and the Chairman of Anangu Pitjantjatjara.

The Council meets every four to six weeks. The NHC committee is provided with technical, clinical and financial advice. The Health Services Director presents options and potential consequences in decision making and problem solving, the Medical Director provides advice on medical and clinical

matters and the finance manager provides financial planning advice. A principle of 'twinning' has been established, by which Anangu and non-Anangu managers work together in complementary roles. NHC also has processes to obtain input from other staff (including having representatives on the NHC and through getting reports from staff at meetings).

The NHC has overseen the development of very effective models of primary health care (see section 3.7) that are demonstrated by measurable impacts and improved health outcomes over time.

Source: Shannon & Longbottom 2004

While the principle of community control is well established and clearly supported in public policy, achieving good governance is a continuing challenge for Indigenous-specific agencies, as it is in the mainstream. We propose the development of a robust framework for the Indigenous-specific service system, including the specification of a basic platform of services, combined with action in accordance with the principles and strategies outlined above, to support continuing development of good governance.

4.3.2   Governance in the mainstream

Attention to Indigenous health at the governance level of mainstream health care organisations (public and private hospitals, regional health services, divisions of general practice, community health, mental health, disability services and many others) is patchy. Indigenous community representatives, and Indigenous health professionals can make a significant contribution in this area, and some States (notably South Australia and New South Wales) have incorporated Aboriginal Health Advisory Committees into the governance arrangements for mainstream health agencies. However, there is no consistent approach to engaging Indigenous people in mainstream health care planning and management.

There are some outstanding examples of initiatives taken by health care agencies to ensure better access for Indigenous people, and to enhance the relevance and effectiveness of their services. For example, in recognition of a failure to engage with Aboriginal and Torres Strait Islander communities in a strategic planning process, the Parks Community Health Service in South Australia undertook work to build relationships with local Aboriginal and Torres Strait Islander people that, over time, resulted in the establishment of an Aboriginal Health Committee. This committee developed strategies that would be effective and acceptable to the local community and was successful in securing funding for a team of Aboriginal Health Workers.

The Aboriginal Health Team has developed joint services and programs with other Aboriginal and community organisations. This work has also involved examining how mainstream agencies can validate different cultures in their policies, practices and processes. A key impact is an increase in the number of Aboriginal and Torres Strait Islander people using mainstream services at the Parks Community Health Centre (Tesoriero 1995). Such efforts seem to depend on a combination of motivation by clinical and management leaders in the organisation, a critical mass of demand or use, and the availability of resources.

There is also evidence that research bodies, both government (NHMRC and others) and non-government (such as the national foundations for various illnesses or organs), are instituting policies and procedures to ensure that the research agenda is relevant to Indigenous Australians, and that research on health care delivery and health system design addresses their concerns and supports the development of tailored interventions to meet their needs.

The learned colleges of the health professions, peak bodies such as the AMA and the organisations that support general practice (including the divisions and their peak bodies) are also increasingly attending to their responsibilities for Indigenous health. However, practice on the ground by divisions, as evidenced by

vigorous participation in partnerships and initiatives with Indigenous health organisations, remains very variable (Commonwealth of Australia 2003, p. 47).

Attention to the needs of Indigenous communities by mainstream health care providers and other mainstream agencies is patchy, and the governance levels of these organisations bear responsibility for ensuring that Indigenous Australians enjoy equitable access to needed services. Measures to formalise and consolidate that responsibility are required.

4.3.3   Capacity of government agencies

Martin (2003) suggests that it is not only Indigenous capacity that needs to be built, but that capacity of government and its agencies is often a major limiting factor in addressing disadvantage. Policies, procedures, funding program 'rules' and the conduct of relationships are seen as insufficiently responsive to the challenges of health care delivery and to the realities of Indigenous communities.

Government departments and their officers as well as Indigenous organisations, communities and their representatives need the skills for strategic engagement in relationships for planning, funding and accountability. The middle-level officers of government departments, who function as the major interface with health care providers, need content knowledge and management skills. Health care provider organisations express frustration about rapid staff turnover, asymmetric timelines (i.e. a perception that deadlines only apply to the less powerful) and the length of the chain-of-command in government departments. At the same time, providers acknowledge the support they receive from Department of Health and Ageing and state/territory department staff, and the commitment of many staff to improving Indigenous health.

While there is much good practice and constructive engagement, we would suggest that the effectiveness of public administration of Indigenous health could be improved through careful examination of current strengths and weaknesses (e.g. through organised constructive feedback on performance) and use of the results to revise operating procedures, program guidelines and staff training programs.

4.4   National system development for Indigenous health

Since the *National Aboriginal Health Strategy* (NAHSWP 1989), and the transfer of responsibility for Indigenous health to the Australian Government health portfolio in 1994–95, a slow but steady development of supportive policy platforms and national implementation plans is evident. The evaluation of the NAHS (ATSIC 1994), and its conclusion that implementation of the 1989 strategy had substantially failed, led to recognition that achieving coordinated action was a very difficult challenge, one which required concerted and sustained effort.

4.4.1   National leadership and coordination

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. The *National Strategic Framework for Aboriginal and Torres Strait Islander Health* (NATSIHC 2003) provides a consistent strategic direction, and was endorsed by all Australian governments in 2003. National coordination is now addressed through NATSIHC and SCATSIH; and the Framework Agreements reinforce the strategic direction in each state/territory jurisdiction. Information and data improvement are being addressed through the NSFATSIH, SCATSIH, NAGATSIHID, the ABS and the AIHW; and the *Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework* (SCATSIH 2002) provides guidance for all relevant parties. With the exception of AIHW and the ABS, all of these initiatives or bodies, and many more, are less than seven years old.

The picture at the state/territory level is complementary, with the development of new forums, advisory bodies and methods of engagement with the Indigenous community. The Framework Agreements negotiated during the latter half of the 1990s established commitment from all jurisdictions to:

- develop national and state/territory level forums;

- introduce regional planning;

- increase allocation of health sector resources to reflect the level of need; and

- place a priority on improvement in data collection and evaluation (Anderson *et al.* 2002).

Continuing national leadership is essential to maximising the performance of the health system for Indigenous health. The leading and coordinating role of the Australian Government is clearly accepted, but the roles of states and territories in funding and coordinating major parts of the health system mean that coordination between the levels of government is a critical challenge. Elaborate arrangements to achieve coordination between levels of government and with Indigenous organisations and community representatives will continue to be needed, and will continue to require financial and human resources to maintain. Creativity is required to ensure that coordination is achieved where it adds value, and that the 'policy disconnect' noted by Indigenous organisations is avoided.

Many of the necessary elements of national coordination for Indigenous health have been consolidated over the last ten years.

- The *National Aboriginal and Torres Strait Islander Health Council* was established by the Minister in 1996 and restructured in March 1999 following a review of its operation. The Council has played a key role in linking the development of national Aboriginal and Torres Strait Islander health policy and strategy with local and regional developments. It is charged with bringing together the Framework Agreement partners as well as a range of other people with expertise to provide national policy advice.

- *State and Territory Health Forums* were established in each state and territory under the Framework Agreements to decide on key issues in regional planning, to contribute to policy development and to evaluate the implementation of the Framework Agreements. The Forums include representatives from the Australian Government, state and territory governments and the Torres Strait, ATSIC (the Torres Strait Regional Authority in the Torres Strait) and the Aboriginal and Torres Strait Islander community-controlled health sector. The Forums have achieved varying levels of success to date.

- The *Standing Committee on Aboriginal and Torres Strait Islander Health* (SCATSIH) provides advice to the Australian Health Ministers' Advisory Council on matters of Indigenous health.

- The *National Public Health Partnership* is a mainstream inter-governmental working arrangement to plan and coordinate public health activities, provide a more strategic and systematic approach to addressing health priorities and provide a vehicle to assess and implement major initiatives, new directions and best practice in population health. It has adopted a policy requirement that attention to Indigenous health be included in all mainstream public health initiatives (National Public Health Partnership 2002, p. 2).

- The *Joint Advisory Group on General Practice and Population Health*, which is made up of four nominees of the National Public Health Partnership (NPHP), and four nominees of the General Practice Partnership Advisory Council (GPPAC), also includes a nominee of NACCHO to improve the link with Indigenous community-based primary health care services (OATSIH 2003b).

NACCHO and its state/territory affiliates provide leadership in the field and act as advocates for the interests of their members.

These policy and strategy platforms demonstrate political and institutional will and promote coordination in action on Indigenous health. As Shannon & Longbottom (2004) found from case studies, one of the clear contributors to success in Indigenous health care delivery was political commitment, and the location of projects within a supportive policy framework. For example, Queensland Health's Indigenous Workforce Management Strategy—sponsored by the Director-General—provided the necessary authority and policy commitment to make Indigenous recruitment an acceptable performance indicator at district level, and to ensure workforce change. The Western Australian Aboriginal Identification Project (Young 2001) is another example of the influence of national strategies, in this case in response to recommendations of the Aboriginal and Torres Strait Islander Health Information Plan as endorsed by the Australian Health Ministers' Advisory Council.

Impact of supportive policy on effective care: Katherine West

The Katherine West Coordinated Care Trial (CCT) demonstrates the benefit of a supportive policy environment. Katherine West used the opportunity afforded by the CCT to explore new funding and structural options, with a resulting improvement in health services. Having established its policy 'niche', the Katherine West CCT has been influential in the development of arrangements for PHCAP, which potentially allow models of coordinated care to be extended and modified, bringing additional primary care resources and a new approach to funding. Shannon & Longbottom (2004) concluded that the continued development of a policy framework for Aboriginal and Torres Strait Islander health was an imperative. The building of broad consensus in policy direction, and a commitment to coordination and integration is crucial to effective progress, and the experience of the Katherine West CCT is an exemplar of this effect.

While national coordination and negotiation arrangements are vital, continuing leadership and commitment are required to ensure that they are focused on achieving results on the ground, and that their work bears fruit. The current arrangements are necessarily complex, but we would recommend that these structures remain in place to guide and support the development of additional capacity and enhanced effectiveness in the provision of Indigenous health care and healthy public policy.

4.4.2   Existing portfolio allocation should be maintained

The location of responsibility for health within the Australian Government Department of Health and Ageing is virtually universally supported within the health sector, including by 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, and the record of achievement over the last eight years in the allocation of increased funding from within the health budget to Indigenous health. The benefits of location within the health portfolio also include an enhanced ability to benchmark spending and strategies in Indigenous health with mainstream standards and approaches; and greater engagement of the mainstream health system, state/territory health authorities, training institutions and learned professional colleges than would otherwise be the case. Responsibility for Indigenous health should remain with the mainstream health portfolio.

A long-term strategic policy framework with appropriate resource commitments is seen as essential to support and sustain further achievements in Aboriginal and Torres Strait Islander health and to enable further capacity building, enhanced sustainability of programs and improved health outcomes. The location of responsibility for health within the Australian Government Department of Health and Ageing is virtually universally supported within the health sector, including by Indigenous health organisations.

4.5   Workforce development

A competent workforce of adequate size is critical if both mainstream and Indigenous-specific health services are to be effective. Currently, the capacity of the workforce is a key limiting factor in the provision of health services to Indigenous Australians, in rural, remote and urban areas.

The workforce required to provide comprehensive primary health care to Indigenous Australians includes a diverse mix of health care providers (general practitioners, Aboriginal health workers, nurses, allied health, mental health and public health personnel) and a range of skilled professionals to manage and administer complex services (including health service managers, accountants, human resources personnel, data managers and IT providers).

4.5.1   Current workforce issues

To deliver effective services, whether through Aboriginal community-controlled health services or through mainstream agencies, the workforce needs to be highly skilled (both clinically and in the provision of culturally appropriate services), and available. There are currently a number of limitations with respect to both skill and availability of the workforce that need urgent and sustained attention. These include the low capacity of mainstream agencies to provide culturally appropriate and evidence-based care to Indigenous people who often have co-morbidities and complex care needs (Department of Health and Aged Care 2001a); the limited number of appropriately skilled personnel in rural and remote areas; and the limited number of Indigenous health care professionals. In 2001 only 0.9% of health care providers were Indigenous (3742 people)[6], and of these, 853 (23%) were employed as Aboriginal Health Workers (AIHW 2003a, p. 18). Excluding this category, the proportion is a tiny 0.7%—this number would need to be increased almost four-fold to reflect Indigenous representation in the population as a whole (2.4%).

The following table provides an overview of the percentage of Indigenous people participating in selected categories of the health workforce in 2001.

Table 4: Indigenous and total health workforce 2001 in selected categories

Worker category	Total number	Total Indigenous	%
Medical staff (including general practitioners, specialists, medical administrators, trainees)	46 804	151	0.3
Nurses (including registered and enrolled nurses and nursing assistants)	244 419	1 916	0.8
AHW (Indigenous health worker)	915	853	93.2
Dentists and dental workers	25 052	155	0.6
Pharmacists	12 046	10	0.1
Allied health professionals	38 645	133	0.3
Complementary therapies	6 926	24	0.3
Environmental health officer	3 302	114	3.5

Source: AIHW 2003a, p. 85-86

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6 Health care providers include medical, medical imaging, dental, nursing, pharmacy, allied health, complementary therapies and other personnel.

There are fewer total health and community services workers in remote areas than in major cities (1498 health workers per 100 000 population in very remote Australia compared to 3005 in major cities; and 796 community services workers per 100 000 population in very remote Australia compared to 1008 in major cities) and high rates of staff turnover in these areas (AIHW 2003a, p. xiv). Rapidly growing areas on the outskirts of major cities also experience low relative numbers of health and community service workers.

However, some progress has been made in recent years, as evidenced in the 2001 census results:

- 44 general practitioners identified as Indigenous, 50% more than in 1996;

- 61 Indigenous medical administrators in 2001, almost three times the number in 1996; and

- 921 registered nurses identified as Indigenous, 33% more than in 1996 (694).

4.5.2   Current initiatives

It is imperative to address workforce issues if the capacity of both mainstream and Aboriginal community-controlled health services is to be increased. A coordinated effort by Australian Government and state/territory governments is required to address the training, supply, recruitment and retention of appropriately skilled health professionals, health service managers and health policy officers to work in both mainstream and Indigenous services (Standing Committee on Aboriginal and Torres Strait Islander Health 2002).

All Australian governments endorsed the Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework in 2002, which provides a consistent approach to Indigenous primary health care workforce development. This work is progressed through the AHMAC Aboriginal and Torres Strait Islander Health Workforce Working Group. The key objectives of the health workforce strategy are:

- increasing the numbers of Indigenous people working in all health professions;

- improving the clarity of roles, regulations, recognition, training and support provided to Aboriginal and Torres Strait Islander Health Workers;

- addressing the development needs of other professionals, both health care providers and managers, contributing to Aboriginal and Torres Strait Islander health;

- improving the training, recruitment and retention of both Indigenous and non-Indigenous staff working in Aboriginal and Torres Strait Islander primary health services; and

- making governments accountable for achieving these objectives and supporting Indigenous people to drive the process.

Health professionals

In 2002, 35 Indigenous students commenced a course in general medicine, compared to 22 in 2001 (DEST data). The membership of the Australian Indigenous Doctors' Association (AIDA) in 2003 included 55 Indigenous medical practitioners and 70 Indigenous medical students.

Several initiatives which aim to improve workforce capacity are underway. The Puggy Hunter Memorial Scholarships Scheme, which provides scholarships to Indigenous students in health careers, was established in 2002. AIDA and the Congress of Aboriginal and Torres Strait Islander Nurses (CATSIN) continue to increase their capacity and provide a higher level of assistance and support to their members, especially medical and nursing students.

The Indigenous Nursing Education Working Group (established by OATSIH in 2000) has formulated recommendations to increase the participation of Aboriginal and Torres Strait Islander people in the nursing workforce and to increase the competence of the nursing workforce to deliver culturally appropriate care to Indigenous Australians (Indigenous Nursing Education Working Group 2002). Recommendations address

recruitment and retention of Indigenous nurses, curriculum development and implementation, advanced nursing practice and post graduate education, articulation between Aboriginal Health Worker courses and university study, establishment of partnerships between Aboriginal and Torres Strait Islander communities and universities, and monitoring and accountability. The working group is pursuing the implementation of its recommendations with universities, nursing registration boards and others, with a focus on developing a consistent approach to the education of nurses about Aboriginal and Torres Strait Islander health and culture.

It is generally recognised that as a group ACCHSs experience ongoing shortages in their workforce. A recruitment and retention package for health professionals employed by ACCHSs is required, including individual retention payments (similar to the Rural and Remote GP Program) weighted towards remote and rural services, and recognising the additional difficulties of retaining staff in non-urban areas. Rural health workforce agencies assist ACCHSs, among others, in GP staff recruitment and retention, and this service could well be extended to other health professions.

OATSIH intends to provide a mechanism for strengthening salary supplementation for doctors, nurses and allied health workers employed by Australian Government-funded, Indigenous-specific agencies, especially in rural and remote areas. A key element in attracting medical staff to work in Indigenous primary health care is to ensure that service in Aboriginal and Torres Strait Islander communities contributes materially to a doctor's career. Currently, leaving the proximity of the major teaching hospitals in the larger cities can have a negative effect on the chance of a doctor being accepted for specialty training or advancement. OATSIH proposes to work with the colleges to ensure that service to Indigenous communities is recognised for these purposes.

Aboriginal Health Workers (AHWs) play a key role in facilitating access to the health system for Aboriginal and Torres Strait Islander people, and there is a need to enhance their skills, raise their professional status and establish the potential for their training to articulate to tertiary sector training and health careers. Community Health Services Training Australia (CSHTA), a national industry training advisory board, is developing revised AHW competencies, aimed at strengthening their role and capacity, with completion expected in 2005. Negotiations to establish AHW associations in each state and territory are taking place, with the first association already established in South Australia.

An implementation package is required to support the new national AHW competencies currently under development, drawing on the lessons learned from the under-utilisation of the 1996 AHW national competencies. This will require the development of standard learning resources, a comprehensive competence assessment strategy, support for ACCHSs for ongoing training and associated salary costs, articulation into the tertiary sector and support for community-controlled Registered Training Organisations. Consistency of application of national competencies across Australian Government and state/territory-funded primary health care agencies is also necessary.

Some important steps in ensuring that mainstream health professionals are trained in Aboriginal and Torres Strait Islander issues have been taken. The Committee of Deans of Australian Medical Schools has made an explicit commitment to increasing enrolments and retention of Indigenous students, and has completed a draft Indigenous studies curriculum, intended to be a standard component of all medical degrees. The Royal Australian College of General Practitioners and some GP divisions are also active in workforce training and development. The Australian Nursing Council also recently endorsed a recommendation that all state and territory nursing registration boards incorporate Indigenous studies in nursing curricula. A Masters of Applied Epidemiology (Indigenous Health) course is operating at the Australian National University (National Centre for Epidemiology and Population Health). OATSIH has funded nursing courses with a

focus on Indigenous health at Deakin and Sydney universities. The Queensland General Practice Alliance has been funded to assist GPs in providing accessible services to Indigenous clients. There does not seem to be similar progress in some other important professions, including dentistry and allied health.

OATSIH intends to pursue a coordinated package of initiatives designed to increase the number of Aboriginal and Torres Strait Islander people working in the health professions. This includes improved retention and support services for Aboriginal and Torres Strait Islander students in tertiary health courses, student incentives, cadetships and scholarships, incentives for innovative course design, on-campus support mechanisms and support for professional associations. Professional associations are key vehicles in providing the close personal support that has been shown to be effective in improving Aboriginal and Torres Strait Islander graduation rates. OATSIH will continue to work closely with the Australian Indigenous Doctors' Association, the Congress of Aboriginal and Torres Strait Islander Nurses and the proposed national Aboriginal Health Worker association. OATSIH will also work with the GP Education and Training program to ensure that 10% of all GP registrar training places are identified as Indigenous health training places.

Given the significance of the undersupply of health professionals, it would make sense for governments to invest in further strategies to increase the participation of Indigenous young people in health professional education (Objective 1 in the Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework). This is clearly a long-term investment, and an inter-departmental responsibility, and should be sustained for at least 10 to 15 years. The strategies for Objective 2 (roles, regulation and recognition of Aboriginal Health Workers) and the other objectives in the Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework would provide a quicker return, and could be pursued more vigorously with a significant investment.

Management and other support staff

The need for professional development for management and other staff should also be addressed. Areas such as IT, planning, accounting, evaluation and general management are in need of attention.

A health management training course jointly funded by the New South Wales Government, the Department of Employment and Workplace Relations (DEWR) and OATSIH, managed by the Australian College of Health Service Executives and delivered by the University of New England, assists Indigenous managers and aspiring managers to undertake mainstream health management qualifications. It is proposed that this program will be developed nationally as a multi-site program of health management studies, with additional funding support to be sought from state and territory governments and DEWR. This initiative would focus on assisting Indigenous managers or aspiring managers with a track record in health or related sectors to attain recognised mainstream qualifications.

Good human resource practice is also important, and funding to enhance HR management skills (in areas of recruitment, retention, performance management, staff development, job design) for organisations providing health care to Indigenous people could also be allocated.

Management and leadership development for Indigenous managers and board members provides an important opportunity to improve governance and the retention and performance of staff. A small number of strategies should be trialled and evaluated, and the successful ones should be made available at regional, state/territory and national level. Indigenous organisations have a key role as settings for learning, and as the carriers of experience and technical knowledge.

The establishment of stronger regional networks or regional services may also assist in the management of workforce problems. Health professionals and managers are often attracted to diversity and development

opportunities in their jobs, and the potential to work across a regional network may assist with staff recruitment and retention.

4.5.3   Good human resource management practice is also needed

While overall supply of health professionals and skilled support workers is a critical issue, it is also true that agencies can act to improve their ability to attract and retain good staff. Nganampa Health Council, for example, has acted consistently and over a long period of time to enhance its management of staff, provide needed on-the-job training (as well as being a registered provider of training), and provide a supportive working environment for staff (Shannon & Longbottom 2004). Nganampa still experiences staffing difficulties, but they would be more severe without good HR practice.

Good human resource practice improves recruitment and retention

An analysis of existing human resource management within a number of effective Indigenous primary health care services has suggested key requirements for effective recruitment and retention strategies (Shannon & Longbottom 2004; Department of Health and Aged Care 2001b). These include:

- the leadership and cultural knowledge of Indigenous management and staff;

- a clear philosophy and mission statement that recognises the value of skilled committed staff and is relevant to their work;

- a well-defined organisational structure with clear roles and responsibilities, and the necessary mix of staff and skills to support an organisation of its size;

- managerial and administrative expertise and a dedicated financial manager;

- a dedicated human resources manager;

- critical mass of staff and resources;

- annual reports produced every year, providing a comprehensive overview of the organisation's work including financial statements;

- clear policies and procedures, reviewed and updated as required;

- an ongoing program of review and evaluation;

- regular clinical staff meetings (3–4 times per year) to review goals and strategies;

- a recruitment strategy that involves bringing short-listed applicants to visit communities and understand the environment in which they would be working;

- an intense orientation process that includes a focus on cultural issues, the local service delivery context and practical issues (e.g. four-wheel drive training course);

- probation arrangements and active performance management;

- terms and conditions for staff that reflect an understanding of the demands placed upon them and the personal and professional isolation that can be felt working in remote communities. For example, a one-week break every 12 weeks, in which staff are required to leave the remote setting; an open phone policy, which encourages staff to seek advice and de-brief on difficult issues;

- staff supported in their roles by skilled technical advisors and visiting specialists;

- staff supported by key local community people with specialised knowledge;

- a professional development program which staff are encouraged to undertake and which is related to service activities;

- secure recurrent funding for staff training programs;

- career advancement possibilities within the organisation;

- a high value placed upon the role of the Aboriginal Health Workers as a critical component of the primary health care system;

- a comprehensive accredited Aboriginal Health Worker training program;

- long-serving staff who carry corporate memory; and

- adequate salaries.

The availability of a skilled workforce is a major limiting factor on the capacity of the health system to provide effective health care to Indigenous Australians. The Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework (SCATSIH 2002) sets out specific objectives and methods of pursuing them, and provides a policy framework for addressing workforce shortages. Strong investment in workforce development will be important as part of an overall strategy to enhance Indigenous access to effective primary health care. Good human resource management practice also contributes to agencies' ability to attract and retain good staff.

4.6   Information and data

Good information and data is required to support planning, evidence-based practice, quality improvement and for monitoring and reporting on changes over time. To be most useful, this data should be accurate, consistent, tracked over time and freely available to all who want to use it, especially Indigenous communities and health services.

4.6.1   The National Strategic Framework for Aboriginal and Torres Strait Islander Health: goals and strategies

To support the collection, collation and publication of accurate comprehensive data, capacity building at the local, state/territory and national levels is required. Priorities have been specified in the National Strategic Framework for Aboriginal and Torres Strait Islander Health. In relation to improving data availability and quality the National Strategic Framework for Aboriginal and Torres Strait Islander Health makes the following recommendations:

- Continuing implementation of the National Aboriginal and Torres Strait Islander Health Information Plan;

- Developing consistent environmental health audit tools and environmental health indicators for Indigenous communities;

- Linking data collection activities at all levels of government between health services, housing agencies and other community and welfare programs to facilitate a cross-sectoral approach and support preventative and environmental health activities;

- Conducting representative surveys where there are important information gaps (such as oral health);

- Improving the quality, collection and management of health workforce data in both mainstream and Aboriginal community-controlled health services.

In relation to the development of data, information management and utilisation at the service level, the National Strategic Framework for Aboriginal and Torres Strait Islander Health specifies:

- development of minimum data sets useful for planning at local, regional and state/national levels;

- development of a framework that clarifies the nature and purpose of existing data and identifies and addresses gaps; and

- investment in information technology and staff skills to enable establishment of improved data systems in primary health care services, including computerised patient records for use as care planning tools, and improved resources for evaluation and analysis of health system data.

Further, the National Strategic Framework for Aboriginal and Torres Strait Islander Health recommends that to improve data quality and availability, continuing oversight of data issues by the National Advisory Group for Aboriginal and Torres Strait Islander Health Information and Health is needed. It is essential to make sure that Indigenous people are involved in developing data collections so that they are appropriate to their needs. It is also vital to ensure that:

- the ABS standard for Aboriginal and Torres Strait Islander identification is used in all data collections;

- training and support to health care staff for collecting data about Aboriginal and Torres Strait Islander status at all collection points is provided;

- the employment of Indigenous people by organisations involved in data collection, analysis and research is encouraged;

- the ABS survey and census collection program is maintained;

- mainstream data collections include adequate samples of Aboriginal and Torres Strait Islander peoples; and

- annual reporting of the Aboriginal and Torres Strait Islander National Performance Indicators is maintained.

These goals and activities need to be adequately resourced. Activity to address both the national- and agency-level information needs is underway, and is described below.

4.6.2   Information for clinical, management and accountability needs

The data required for national collections of health status, and for monitoring at the national level are often different from the data required for management, evaluation, and quality improvement at the agency level. This information is vital to the effectiveness of care and for accountability, and will also require resourcing.

A Service Development and Reporting Framework for OATSIH-funded services is being developed. This work is intended to make reporting easy for service providers, and to enable them to use the information they collect for continuous quality improvement and evaluation. Compliance with reporting will be built into accountability requirements under the single funding agreements.

It is critical that data collection for reporting is not over-burdensome for agencies (Sibthorpe *et al.* 2003, p. 2), can be incorporated into daily practice, and produces information that is meaningful for communicating with communities. This means that routine data collection is necessarily limited in scope. To complement routine datasets, it may be useful to establish nationally coordinated sentinel sites for comprehensive data

collection on specific issues or activities. Establishing sentinel sites would also enable piloting of data collection methods and refinement of data. The Cooperative Research Centre in Aboriginal Health and other research groups have the needed capacity to support this work.

4.6.3 Information for health system performance measurement

Growing demands for health care, rising costs, limited resources and evidence of wide variations in health care practice have prompted interest across the world in the measurement and improvement of health system performance.

Indicators of long-term health outcome (such as increased life expectancy at birth) are too distant in time from the factors that impact on health to be useful for policy makers and others in their endeavours to measure the success of programs and interventions. Focusing only on the longer-term outcomes can create the perception that nothing is changing and engender a sense of hopelessness, when in fact there may be good evidence that gains are being achieved (SCRGSP 2003).

Performance indicators should enable measurement of health system functions and should provide answers to questions about relationships between different elements of the system (e.g. between health financing, and the level and distribution of health services) (Murray & Frenk 2000). Good data collection is clearly critical if performance indicators are to be meaningful.

Interim National Aboriginal and Torres Strait Islander Health Performance Indicators, which were intended to enable governments to report on progress towards improving Indigenous health, were endorsed by AHMAC in 1997. These indicators covered mortality and morbidity, access to and impact of health services, workforce development, health risk factors, intersectoral issues, community development, and quality of service provision and were reported on in 1998, 1999 and 2000 (ABS & AIHW 2003). A refined set of 56 indicators and a draft framework were developed by the Cooperative Research Centre for Aboriginal and Tropical Health in consultation with the AIHW, OATSIH, SCATSIH, NHIMG and NACCHO and endorsed in 2000 (ABS & AIHW 2003). These indicators pertain to government inputs, social equity, access to health services, risk markers and outcomes for people (Burns *et al*. 2002). However, data for reporting against indicators were either not available or of poor quality in many jurisdictions and all jurisdictions have agreed to continue reporting and to attempt to make improvements to enable complete coverage in the future (ABS & AIHW 2003). SCATSIH has prioritised 15 indicators (see Table 5) and is overseeing a scoping project to identify the improvements that are needed to enable reporting against them.

Table 5: Priority indicators from the current National Performance Indicators for Aboriginal and Torres Strait Islander Health

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

In May 2003, SCATSIH agreed to oversee the development of a national Aboriginal and Torres Strait Islander Health Performance Framework (ATSIHPF) to support the implementation of the National Strategic Framework for Aboriginal and Torres Strait Islander Health, consistent with the mainstream National Health Performance Framework (Australian National Health Performance Committee 2001). This Framework includes three levels: health status and outcomes, determinants of health and health system performance. Equity is intended to be built into each level. The health system performance level has nine dimensions (effective, appropriate, efficient, responsive, accessible, safe, continuous, capable and sustainable). OATSIH is currently undertaking work to define each of the dimensions of health system performance from Aboriginal and Torres Strait Islander perspectives as well as to map existing indicators that may be useful.

Both the National Aboriginal and Torres Strait Islander Health Performance Framework and the Service Development and Reporting Framework should be supported. It is essential that indicators of primary health care performance are harmonised across the two frameworks, using common data definitions (where relevant) and ensuring that processes of collection, processing, collating and analysing data are synergistic.

Investment in improved data collection by primary health care providers is essential, but needs to be focused and streamlined. As much as possible, routine data collection in primary health care organisations should be a by-product of administrative and clinical processes. Routine comprehensive collection on some key indicators should be complemented by sentinel site surveys and research. The Aboriginal and Torres Strait Islander Health Performance Framework project is expected to deliver valid indicators of impacts and outcomes.

The work by AIHW, 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.

4.7   Working with other sectors: healthy public policy

Governments and health systems are often criticised for failing to work effectively with other sectors, and thereby failing to take advantage of opportunities to enhance the health impacts (or reduce the health risks and consequences) of policies and programs in other portfolios of government and in industry generally.

The goal of intersectoral collaboration is pursued vigorously in rhetoric, but is in fact a real struggle to achieve. There are many good reasons for this—health is not the goal of living, but a resource for living, and not every decision can be based on health considerations. Lack of attention to health goals by other portfolios is also an inevitable downside of the necessary structuring of the work of government into functional portfolio areas.

However, effective intersectoral collaboration can strongly enhance the effectiveness of health expenditure. Beaver and Zhao estimate that it might be possible to increase the benefits of primary health care by 35% when other sectors, and the community, are highly engaged (Beaver & Zhao 2004, p. 34). There is evidence of consistent effort by Indigenous organisations to take advantage of this potential leverage. For example, service activity reports show that approximately 80% of Australian Government-funded Aboriginal and Torres Strait Islander primary health care agencies have undertaken some school-based activity; approximately 75% have provided support for public housing issues (OATSIH & NACCHO, 2003); while 20% have organised store-based dietary interventions (Keys Young 1997). The Keys Young report notes that capacity to do this appears to be linked to funding—better-funded services are more likely to be proactive.

The critical factors for success seem to be a combination of:

- an important health issue at stake;

- a practical method, with a strong cost–benefit case, of enhancing health impact (or minimising health risk) within another system; and

- leadership at the key pivot point, which may be local, regional, state/territory or national.

The best approach to enhancing the effectiveness of intersectoral collaboration may be to establish the conditions that *enable* opportunities to be exploited, rather than attempting to set up machinery that *requires* reporting about collaboration (such as a mandatory health impact statement), which does not have a proud record of success. Very different approaches might be needed at local versus national level, and while uncertainty about effectiveness remains, experimentation should continue. The following conditions might enable opportunistic gains in this respect:

- Recognition of the legitimacy of primary health care providers working with key local services such as schools and councils, to identify health hazards that can be addressed locally;

- Strengthening of information systems through which local and regional patterns of health problems can be identified and analysed;

- Support for local and regional coordinating mechanisms, such as standing cross-portfolio forums, which build relationships and create opportunities for collaboration;

- Development of mechanisms to enable primary health care providers to generate quick responses to maintenance/environmental issues that directly impact on health, such as leaking sewage drains.

The current program of Shared Responsibility Agreements under the aegis of COAG (Office of Aboriginal and Torres Strait Islander Affairs 2003) are a potentially important move to enhance the capacity of government to work across portfolios and the Australian Government/state/territory divide, and with Indigenous communities. Careful evaluation of this initiative will provide valuable insight into the factors that drive success as well as those which impede it.

Analysis of models from Canada (for early childhood policy and services) (Budgell 2002), the UK ('joined-up government', again often focused on support for families with young children) and the USA could also offer useful insights (Eades 2004).

It is important that work on intersectoral collaboration be focused at 'the pointy end'—that is, be driven by substantive opportunities rather than simply general principles. As noted earlier, there is an ever present risk of wasting time and resources on enterprises with little chance of success.

It would be useful to select a small number of key intersectoral issues, in collaboration with Indigenous organisations, for follow-through. Examination of the non-health determinants of key Indigenous health problems indicates that the following issues may be high priority:

- Family and community violence and abuse

- Support for early childhood development and effective parenting

- Improving educational opportunities for disadvantaged children (both health and social disadvantage)

- Trauma and injury prevention

- Alcohol and substance use

- Environmental risk factors (local and regional).

The following principles should apply.

- Clinical and public health expertise should be made available for working with other sectors, as this is the 'value add' the health system can offer.

- ACCHSs and other primary care agencies/services should be recognised as a strong source of knowledge about local and cultural issues, and should be resourced to participate in intersectoral work. At the same time, the reality that they cannot alone be responsible for outcomes on issues outside their control must be recognised.

- Engagement with industry should be based on local issues and specific evidence for effective methods.

- ATSIC and ATSIS are important partners for interactions between Indigenous communities and other Indigenous programs.

We suggest that approaches to intersectoral collaboration should be pitched at two levels. Firstly, Indigenous primary health care organisations should be resourced to pursue local opportunities to address health risk factors and preventable illness through working with other sectors on practical programs with a health component, and the legitimacy of their roles as advocates should be recognised. Secondly, at the national level, a short list of key issues should be identified and proposed to government for endorsement as a required focus for cross-portfolio action by the relevant departments. We would strongly urge that this list include a focus on early childhood development and health, for two reasons: this area is critically important for the future of Indigenous communities; and there is good evidence regarding a range of cost-effective interventions (Eades 2004).

5 Measuring improvements and required investment

The fundamental question that this paper addresses is whether increased (that is more equitable) investment in comprehensive primary health care for Indigenous Australians will result in a measurable improvement in health and wellbeing; and if so, how best should that investment be deployed. Our assessment is that there is now sufficient knowledge about how to invest additional funding for health gain that a planned progressive increase in investment is warranted. This part addresses the impacts and outcomes that might be achieved, the required level of Australian Government investment, and the funding methods and programs required. A short conclusion completes the paper.

5.1 Measuring the impact of adequate investment

It will be important, as part of a program of increased investment in primary health care for Indigenous Australians, that a manageable number of sensitive indicators of health outcomes and impacts are chosen and consistently monitored over time. People can then focus on ensuring that data collection and data quality activities provide the information needed to support sound monitoring. However, indicators are just artefacts that stand as signposts towards the goal of equitable health outcomes and cannot be allowed to displace the goal itself (as those who have focused on surgical waiting lists in various states have inevitably learned).

The lead times between increased investment in effective programs and improved health outcomes as measured by life expectancy are long. If the goal is to ensure that investment in health care is effective, it is more useful to monitor intermediate indicators of outcome and impact, because these indicators are more sensitive and results can be assessed in a shorter timeframe.

Only sustained effort will bring results

'Current Indigenous mortality rates are at a level last seen for all Australians back in the early 1950s. For overall life expectancy, the corresponding reference point is the early 1920s. Given these excessive time lags in the profile of mortality, even if the pace of mortality change that has occurred among the total Australian population were to now apply to the Indigenous population, it would still take another 40 years before the Indigenous infant mortality rate reached the current level observed for the total population. Moreover, unless program efforts aimed at improving health outcomes for Indigenous Australians are dramatically enhanced, with commensurate effects, it will take another seven decades before the expectation of life at birth among Indigenous Australians reaches the level currently recorded for the total population. Clearly, the timetable for Indigenous mortality improvement is long term, and this adds further weight to the opportunity cost argument that there is an imbalance between health expenditure on Indigenous Australians and their needs' (Kinfu & Taylor 2002, p. v).

The release of *Overcoming Indigenous Disadvantage: key indicators 2003* by COAG has established a new framework for developing useful indicators. The chosen goals and indicators are rightly focused on enabling effective monitoring of progress towards equitable outcomes for Indigenous Australians. However, the COAG framework is not specific enough to measure health system performance, and the indicators require further development and interpretation to be useful at this level (SCRGSP 2003, p. XXII).

The Aboriginal and Torres Strait Islander Health Performance Framework being developed by SCATSIH will include measures that reflect program logic for the whole health system from inputs through to outcomes and will distinguish between short-, medium- and long-term measurement of health system activity.

The ATSIHPF recognises that headline indicators such as mortality and life expectancy are significantly influenced by factors outside the control of the health system. Therefore, while health system performance will be measured against factors that are attributable to the health system, other determinants of health will also be measured to enable monitoring of progress across the whole spectrum of factors that influence health outcomes.

Health outcomes will be measured in relation to prevalence of disease and functional impairment, life expectancy, wellbeing and mortality. Determinants of health such as socioeconomic and environmental status, community capacity, health behaviours (e.g. smoking and excess alcohol consumption) and individual factors (e.g. blood pressure, cholesterol levels) will also be included. The ATSIHPF will measure health system performance in relation to nine domains of health system activity and overarching principles of quality and equity. One of the objectives of the Aboriginal and Torres Strait Islander Health Performance Framework is to include performance measures that recognise that comprehensive primary health care systems and appropriate secondary and tertiary health care are being developed, but have not yet been achieved.

Long- and short-term targets for improved Indigenous health and improved access to health care should be established on the basis of the Aboriginal and Torres Strait Islander Health Performance Framework and the Service Development and Reporting Framework, both currently under development.

5.2   Required level of Australian Government investment

This section examines current funding levels and patterns of use, and the estimated levels of spending required to enable equitable access to comprehensive primary health care; and to maximise health gain.

5.2.1   Current funding levels and patterns

The current level of spending on Indigenous health care is inadequate to meet the health needs of the population. Recent expert analysis of *total* spending and Indigenous health-care needs relative to non-Indigenous Australians (see below) shows 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.

Total expenditure on health services for Aboriginal and Torres Strait Islander Australians is estimated at $1245 million in 1998–99. This was equivalent to $3065 per person, compared with the $2518 per person estimated to have been spent for non-Indigenous Australians. This equates to $1.22 being spent per Indigenous Australian for every $1 spent per non-Indigenous person (AIHW 2001).

There are three major distinctions in types of health expenditure that must be understood in this field—mainstream versus Indigenous-specific, Australian Government versus other (state/territory, non-government and private), and primary health care versus secondary and tertiary care. Mainstream funding programs are major source of *total* health expenditure on Indigenous Australians, but if only primary health care expenditure is considered, mainstream *Australian Government* primary health care programs (MBS and PBS) provide less than half of the total.

The vast majority of *total* expenditure on Aboriginal and Torres Strait Islander Australians in 1998–99 (90%) was through mainstream Australian Government and state/territory health services, with inpatient hospital care making up the largest single component (36.4%, compared to 21.8% for non-Indigenous Australians). Only about 13% of total health expenditure on Indigenous Australians arises from use of mainstream Australian Government funding programs (including MBS and PBS), compared to 37% for non-Indigenous Australians (AIHW 2001). See Table 6 below for further details.

Table 6: Estimated health expenditure per Indigenous and non-Indigenous person 1998–99

	Per person Indigenous ($)	Per person non-Indigenous ($)	Ratio Indigenous/ non-Indigenous
Through state/territory programs			
Admitted patient expenditure	1 115	548	2.04
Other through state/territory program expenditure	1 090	372	2.93
Total through state/territory programs	**2 205**	**920**	**2.40**
Through Australian Government programs			
Indigenous-specific programs	298	1	..
MBS/PBS	224	601	0.37
Other Australian Government programs	169	336	0.50
Total through Australian Government programs	**691**	**937**	**0.74**
Through local government programs	**20**	**11**	**1.78**
Services through private sector programs	**148**	**650**	**0.23**
Total recurrent expenditure	**3 065**	**2 518**	**1.22**

Source: AIHW (2001, p. 4)

Setting aside state/territory and private expenditure, the largest avenue of delivery of *Australian Government funding* is through Indigenous-specific programs (43%), at a level of around $300 per person (AIHW 2001).

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 the 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 costs. 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.

5.2.2   Estimating needed funding levels

There is no simple answer to the question of how much funding will deliver the required 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 with little or no English, 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 NT. 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 2003e). 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 people) 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 Econtech paper also estimates the cost of bringing funding for Indigenous-specific services to the level currently provided to a set of eight 'best practice' Indigenous health services (2 very remote, 1 remote, 2 rural and 3 urban). Agencies were selected for the Econtech modelling on the basis of location (i.e. a mix of urban, rural, remote) and mode of service delivery (i.e. a mix of hub and spoke model, town-based service with outreach services and stand-alone service). In all cases agencies selected were high capacity sites demonstrating current best practice in the delivery of effective health primary health care services for Indigenous Australians.

The costing study indicates that, to extend the *current* level of care provided by these agencies to all Indigenous Australians, an average funding level of $890 per person is required (ranging from $2789 per person in very remote to $399 in urban areas). This is compared to the 1998–99 average per capita level of OATSIH funding of $295 per capita. The total cost of this level of funding is $409 million. The authors note the limitations of this method, including the lack of allowance for unmet need, for variations in the availability of alternative services or for inadequate staffing in some key areas (including specialists and allied health professionals). If an allowance is made for the cost of achieving adequate staffing in remote areas, the costs rise to $944 per capita or $432 million. They also note that this is modelling for the provision of 'best practice' in one component of the care system, Indigenous-specific services, rather than for a comprehensive care system. That is, the figures do not include mainstream programs such as Medicare, which would need to be considered as part of an integrated system. The authors also assume no increase above the current 'best practice' levels in any location, that is, no allowance is made for unmet need in the areas served by the chosen agencies.

The OATSIH analysis (OATSIH 2003e) concluded that the lower resource 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.

Health gain from additional resources is not a straight-line 'dose response' relationship. In a situation where there is inadequate primary health care to enable effective interventions to be provided to those who need them in a comprehensive, coordinated way, there is an outcomes curve. Too much money will give rise to diminishing returns, too little may not enable the system to reach the tipping point where health gain begins to be seen. This view is supported by the modelling undertaken by Beaver and Zhao (2004), and the strongly positive saving:cost ratios from optimal investment for the nine conditions, particularly arising from Clinical PHC (new cases) and Clinical PHC (existing cases) (Beaver & Zhao 2004, p. 21).

We conclude that total health spending on Indigenous populations would need to be increased to a level between 3 and 6 times the current 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.

5.3   Funding methods, programs and timelines

This section addresses the Primary Health Care Access Program (PHCAP) as a funding framework to resource comprehensive primary health care, then turns to funding formulae. We discuss the need for certainty and longer-term funding cycles; the need for a phased development program; and the need for effective accountability mechanisms. Our proposals are summarised in the final section.

There has been much progress in recent years towards making existing funding programs more effective, including the gradual implementation of PHCAP; improvements in the accessibility of MBS and PBS (addressed in section 3.3); growing understanding of the costs of service delivery; and increased funding for infrastructure, training and other development needs through OATSIH. Much has been learnt about how additional investments might best be deployed.

5.3.1   PHCAP provides a framework and a method

The Primary Health Care Access Program is a program of health system reform being implemented in partnership between the Australian Government, each state or territory government, the ACCHS sector and ATSIC (OATSIH 2003c). PHCAP has three objectives:

- to increase the availability of primary health care services in areas where they are inadequate;

- to reform the local health system so that it meets the needs of Indigenous Australians; and

- to empower people to take better care of their own health.

A formal agreement will be established between the Australian Government and each state and territory, via a memorandum of understanding (MOU), committing them to jointly fund improved comprehensive primary health care to better meet the needs of Indigenous Australians. Each MOU will include a commitment to:

- a range of potential models for service delivery with a preference for community-controlled models;

- joint funding arrangements that include maintenance of existing effort and an increase in resources in line with the arrangements in the Framework Agreements;

- financial transparency;

- potential funds pooling and other joint service arrangements; and

- re-investment of savings made in the acute sector from increased investment in primary health care (OATSIH 2003c).

The process is careful and complex. Funds are only allocated through PHCAP in states/territories where joint regional plans specified under the Framework Agreements have been completed. Only a few sites in each state/territory are being developed under this arrangement and many of these sites have a cap of 2000 on the population size that can be covered (as there were not sufficient funds to extend the program to the whole population). This has caused considerable debate and meant that implementation processes were more complicated than they might have been. It is intended that different implementation arrangements will be made in each state/territory, but implementation must ensure a joint approach to the roll-out of PHCAP and include strategic planning in the relevant local area. Local-level planning will include:

- identification of needs, priorities and gaps in both mainstream and Indigenous services;

- how services can be improved and expanded to form an effective and integrated local area health system; and

- governance and fund-holding arrangements.

The maximum level of funding to be allocated by the Australian Government under PHCAP is determined with reference to benchmarks that take into account the poorer health of Indigenous Australians and the increased cost of providing services in remote areas. The mix of funds will vary with the capacity to use Medicare (OATSIH 2003b). The basic benchmark is 2 times the average per capita use of MBS with an additional loading for remoteness (up to 4 times per capita use of MBS). The funding, which is assessed against the benchmark, includes funds currently utilised through the MBS, funds currently allocated for primary health care services and other funding. A total of $78.8 million over four years was allocated in the 1999–2000 Australian Government budget, and a further $19.7 million/year to be allocated from 2003–04 was committed in the 2001–02 budget, taking the total recurrent base to $54.7 million per annum (OATSIH 2003c).

Local-level planning provides opportunities to fill service gaps, improve links in the system (to improve care coordination and reduce duplication) and provide arrangements for greater community involvement (OATSIH 2003c). The case study below demonstrates the use of PHCAP to bring mainstream and Indigenous-specific services into partnership, with a net increase in the resources available to the local Indigenous community.

PHCAP sites include the four former Aboriginal Coordinated Care Trial sites, five sites in South Australia, seven sites in the Northern Territory and five in Queensland. A recent appraisal of the implementation of PHCAP strongly supports the program, identifying that the conceptual foundation, operational framework, long-term commitment and use of planning processes as a way of engaging communities and service providers are excellent aspects of the program (Mandala Consulting 2003). However, there is some concern in the field that the Program is 'too bureaucratic' and the machinery for approving expenditure under PHCAP is unnecessarily complex; that the 'rules' seem changeable; and that significant delays are being experienced as a result. Recommendations for improvement include simplifying the program, allowing greater flexibility to respond to different operating circumstances and expediting progress (Mandala Consulting 2003).[7]

Case study: PHCAP and the mainstream in Northern Adelaide

The strategic planning process undertaken in the Northern Metropolitan Region of Adelaide achieved a whole-of-system approach by engaging Indigenous community members and bringing them together with both Indigenous-specific and mainstream service providers.

The key to the success of the working relationships was a common vision to create a united Aboriginal Health Team. The mechanism was an MOU between two community-controlled health services and a mainstream community health service, which identifies clear service improvement outcomes. The planning identified service gaps for Indigenous people and proposed integrated mainstream and Indigenous-specific strategies to close the gaps.

Major achievements of the planning process were greater collaboration and coordination of programs and services on the ground and a significant increase in the commitment of the mainstream agencies to Indigenous health.

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7 The Department of Health and Ageing is currently reviewing PHCAP and seeking to simplify arrangements for PHCAP implementation.

For example, during the course of the planning process the State Government increased their annual recurrent financial contribution by $747 800 with a commitment to an additional $519 000 in one-off funds for specific initiatives such as capital works and program development.

Additional Australian Government funds made available through PHCAP (including access to MBS and PBS) are supporting increased access to GPs, nurses and Aboriginal Health Workers, child and youth services, men's health, nutrition and diabetes programs. In addition, both Governments have made substantial commitments to upgrade and refurbish clinic facilities at the two health sites, which provide a 'shop-front' for delivery of a range of jointly funded services.

The CPHC approach provides for multidisciplinary health assessments and referrals to relevant allied health professionals, specialists, clinics and social services such as food banks and financial counselling (which now provide outreach sessions to both sites). Other actions include the development of culturally appropriate protocols with the major hospital in the region, and arrangements for referrals to local GPs.
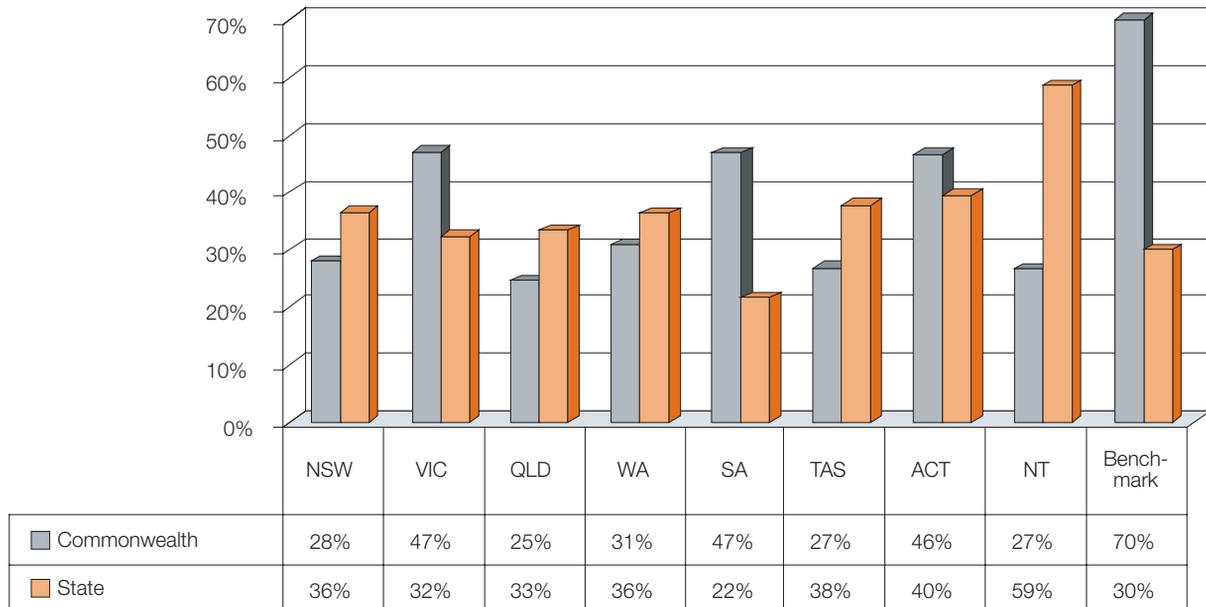
Institutional racism is also being addressed, through revision of relevant policies and procedures, input to student training and cultural awareness training to achieve behaviour change in mainstream workers. This strong reform approach includes strategies to improve services for Indigenous people in the major public hospital in the region, as well as mental health services, GPs and prisons (including exit planning).

The planning process has given community members a greater understanding of the services in the region and an understanding of how PHCAP has the potential to improve them. A 'Leadership Group' has been formed to provide advice and oversee the planning, development and implementation of health and human services (both mainstream and Aboriginal-specific) for Aboriginal people in the region. This will ensure continuing involvement of the community in setting directions for the region and will maintain a coordinated approach to Aboriginal affairs by Aboriginal people for Aboriginal people in the region.

Case study provided by OATSIH 2003.

The National Strategic Framework for Aboriginal and Torres Strait Islander Health and the agreed regional health funding benchmarks established under PHCAP provide a useful basis on which to plan funding growth. The contributions made to primary health care funding by the Australian Government and state/territory governments vary in each jurisdiction. Figure 5 below compares these contributions with the PHCAP regional health funding benchmarks. These benchmarks are based on the 'basic' PHCAP model adjusted for regional cost variations. This gives an indication of the minimum level of resources required jointly between the Australian Government and state/territory governments to enable the development of effective primary health care services for Indigenous Australians.

In every jurisdiction, the Australian Government is providing well below the benchmark of what is provided for non-Indigenous Australians, largely because of under-utilisation of MBS and PBS programs. By contrast, in every state and territory with the exception of South Australia, the states and territories are funding at or above the benchmark. To assist in improving access to MBS funding, it would be helpful to allow primary health care providers to negotiate options including a choice between billing and partial cashing out the MBS aliquot for their populations.

Figure 5: Recurrent funding (1998–99) as a proportion of the PHCAP benchmark

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Bench-mark
■ Commonwealth	28%	47%	25%	31%	47%	27%	46%	27%	70%
■ State	36%	32%	33%	36%	22%	38%	40%	59%	30%

Source: OATSIH (2003b, p. 7) using data from AIHW (2001)

Given the progress made under the PHCAP arrangements, and the investment in consultation, planning and negotiation forums, PHCAP offers the most practical and potentially most effective approach to a funding rollout. The key requirements to make this work include the following:

- increased investment, which will not only enable service development, but also give the parties to the enterprise a strong motivation to make it work;

- continuation of development of effective multi-party forums for planning and negotiation;

- continuation of the principle that funding increases are for additional services, not substitution; and

- engagement of mainstream providers as part of the system of care for Indigenous Australians.

Success for any partnership or alliance project, in the commercial world, in government and in the health care system, requires careful attention and considerable investment in relationship-building, including the development of trust and mutual understanding of business or policy imperatives and organisational cultures (Spekman & Isabella 2000). The PHCAP project faces all of these challenges, with the additional element of intercultural communication. No-one should be surprised that progress is initially slow, or that the road is rocky. The benefits are seen when mature alliance partners are able to work together to a level not previously possible and achieve mutually beneficial outcomes.

The *Katherine West CCT* has demonstrated the potential benefits of strategic use of increased resources. The pooling of an Australian Government allocation based on modelled per-capita PBS/MBS expenditure, and the Northern Territory Government's budget for the purchase of health services and administrative costs was backed up by an administrative contribution from OATSIH. The trial tested a potentially sustainable alternative method for funding primary health care that drew

on Australian Government medical and pharmaceutical benefits, capitating and adjusting for relative need. While the method was debated, the testing of a new approach and commitment of increased funding has been successful in both health gain and good governance in a community control model (Shannon *et al*. 2002, pp. 55–56).

We recommend that the rollout of PHCAP continue and be accelerated using additional funding. PHCAP provides a framework for ensuring sound planning and allocation of funding, for collaboration between mainstream and Indigenous providers, and for managing the partnering relationships among key stakeholders, including governments, that are a necessary part of this endeavour. We considered the option of revising or rebadging the PHCAP program, because of the negative feelings in some areas about delays, and because of the inevitable wear and tear in partnership programs. We concluded that there is more to be gained by persisting, and not wasting the existing progress and learning.

5.3.2   Funding formulae and phasing

A range of funding approaches is required, both for different agencies and for different operations within agencies. A mixed model could involve tailored combinations of:

- a base grant for infrastructure (management, support services, training, IT, data collection and reporting) and for a base line service capacity (clinical management);

- capitation-based grant funding for a specified platform of primary health care services for the defined catchment population (which could in remote areas include non-Indigenous people);

- simple grant or fee-for-service arrangements (with low transaction costs) for services to additional patients (visitors, etc.);

- negotiated grants for specific additional services (i.e. for participation in 'vertical' programs, such as the Eye Health Program);

- capital and equipment funding, based on business plans.

Funds pooling is one method that has much to offer under the PHCAP umbrella, but it is not the only way to bring Australian Government and state/territory funding together, and should remain as one of a range of approaches. It may be particularly relevant in remote areas where there is only one provider, but joint funding of agencies may also be appropriate in other areas.

The need for improved funding is urgent, but the gap between current and needed levels (between 3 and 6 times the current OATSIH funding) is so large as to be unbreachable in the short term. A staged long-term program of growth in funding would be required to enable sustained growth in capacity, while also ensuring that the most effective interventions and service models are used. 'Front-loading' of investments in workforce development, governance capacity-building, data, information and other infrastructure for quality would enhance the effectiveness of funded service delivery and smooth the budgetary requirement.

5.3.3   Funding certainty

The literature review and over 100 case studies initially nominated for consideration by Shannon *et al*. (2002) (only 10 met their selection criteria for inclusion) demonstrated the 'stop–start' nature of past Aboriginal and Torres Strait Islander health policy and the short funding cycles that programs endured.

'There has been a repeated search for innovation which results in a high turnover of projects and recycling of ideas, rather than utilising the not insignificant knowledge currently available and properly evaluating its effectiveness. The combination of rigorous evaluation, with realistic performance indicators, and extended cycles of funding would contribute to greater organisational stability and enable capacity building to occur.' (Shannon *et al.* 2002, p. 66)

One of the clear requirements for improved performance in Indigenous primary health care is to move the balance of core and project-specific funding, so that higher proportions of total budgets are predictable. Reliance on 'soft funding' is a serious impediment to recruitment and retention of staff, and to strategic planning and development of services and organisations. Effective accountability must be assured, but 'stop-start' funding is not the best way (Shannon *et al.* 2002, p. 56).

The Australian Government (OATSIH) is aware of this problem, and much of its budget is allocated to service providers in a predictable way. However, OATSIH is not the only funder, and further progress towards reliable funding levels is needed.

Funding for ongoing primary care services needs to be made more certain, so that agencies can consolidate their focus on quality and effectiveness.

5.3.4   Accountability in a developmental framework

Accountability requirements should reward effectiveness, and enable the sharing of lessons learned. ACCHS organisations point out that their funding is more closely monitored than any other health sector. However, it is still important that funding and reporting requirements are designed so as to focus on the achievement of outputs rather than accurate accounting for inputs. It is equally important that the real costs of infrastructure and development are recognised, and that use of this portion of funding is monitored in appropriate terms (that is, in terms of capacity building rather than health service volume outputs) over an extended timeframe. The international development field may provide useful examples of methods for ensuring accountability while promoting sustainability and capacity-building.

The development of OATSIH within the Australian Department of Health and Ageing and its state and territory counterparts, and the evolution of community-controlled health organisations provide the basis for an increasingly comprehensive accountability framework for Indigenous health. However, Shannon *et al.* (2002) note that accountability regimes seem not to contribute to achievement in Aboriginal and Torres Strait Islander health practice, perhaps because responsibility for the projects they studied was diffused over a range of funders and other stakeholders. In most cases, financial accountability was to the funding agency, and requirements in this regard were clear. They also found increasing use of performance indicators to measure outcomes, and a growing focus on evidence-based approaches. However, staff were less likely to represent themselves as *strategically* accountable for their outcomes within a specific policy framework. Too many different accountability requirements in the pursuit of diverse policy and program objectives do not provide a good basis for coherent organisational strategy.

These findings and observations reflect dilemmas outlined earlier in this paper, that is, the challenge of balancing local agendas and community accountabilities with state/territory or national priorities, performance and accountability requirements. The diffusion noted by Shannon *et al.* (2002) is a significant challenge that needs to be managed collaboratively among the major stakeholders, including the funded agencies. The ongoing importance of the partnership forums and regional planning is highlighted by this dilemma. The need for sophisticated thinking about accountability measures is also brought into focus, and current work on the Aboriginal and Torres Strait Islander Health Performance Framework (outlined

in section 4.6), will potentially provide one of the key technical requirements to enable accountability measures to be harmonised across jurisdictions and levels.

Shannon *et al.* (2002, p. 59) concluded that 'accountability, evaluation and funding reform were all possible, most usefully tied together in one package and necessarily related to processes of defining accountabilities to communities as well as funders'.

Reconciling community-level and system-level accountability

Programs in the Shannon *et al.* (2002) study with superior evaluation and accountability strategies had a more plausible story to tell about results. They showed that it was possible not only to reconcile accountability with community ownership but also that accountability constructed around very specific outcomes for community was the most powerful. Both the *Fixing Housing for Better Health* and the *Katherine West Coordinated Care Trial* were exemplars. They had strong lessons for both funders and service providers in Indigenous health (Shannon *et al.* 2002, p. 59).

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 addressing Indigenous 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 people 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.

- The full potential of the mainstream health system to contribute to redressing Indigenous health disadvantage has not yet been realised, although there is increasing awareness of the need and commitment to contributing.

- Outcomes and impacts of increased funding should be monitored through the Aboriginal and Torres Strait Islander National Performance Framework currently under development. Sustained focus on 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.

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