Measuring the Health of Aboriginal and Torres Strait Islander Peoples

A Background Paper for the Project “Action Oriented Indicators of Health and Health Systems Development for Indigenous Peoples in Australia, Canada, and New Zealand”

Dr. Marcia Anderson, Dr. Ian Anderson, Dr Janet Smylie, Dr Sue Crengle, Dr Mihi Ratima
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1.0 Introduction

Multiple indicators of Indigenous health exist in Australia and there has been a significant focus on the development of these systems over the last decade particularly. To date most of the effort has been directed at the development of macro systems. More recently there has been a significant achievement in refining of the national indicators so that they articulate more clearly with a national policy framework. However, if health indicators systems are going to maximize the opportunities for health gain, through a system-wide approach to the development of service capacity, more work needs to be done a regional and local level where the existing systems remain relatively under-developed. This would potentially include more focus on of Indigenous understandings of health and local priorities. Community level involvement in defining and prioritizing health indicators is essential if indicator systems are to support local service development. There is a tension between the collection of health performance indicators to facilitate health policy and planning and their role in role of indicators in fiduciary accountability.

This paper is a background document for the project entitled “Action Oriented Indicators of Health and Health Systems Development for Indigenous Peoples in Australia, Canada, and New Zealand.” The overall goal of this study is to compare the development of indicator systems for Indigenous health in Canada, Australia and New Zealand in order to conceptualize and pilot a local health indicator development cycle that will contribute to effective health information, surveillance, and monitoring systems within a defined community.

Information was gathered through a review of published and grey literature, and key informant interviews, focusing on the development of health systems performance measurement systems. In this paper we will discuss Indigenous concepts of health, the history of the Australian health care system as it relates to Indigenous peoples and the currently used Indigenous health measurement tools.
2.0 History of Indigenous Health Systems

The Indigenous Peoples of Australia include people of Aboriginal and of Torres Strait Islander descent. According to the 2001 Census Indigenous Peoples comprise 2.4% of the Australian population, with 30% living in urban areas, and the remainder in rural or remote areas. ¹

Similar to Indigenous Peoples worldwide, the Indigenous people of Australia have an understanding of health broader than the biomedical constructions which are based both on the presence or absence of disease and reductionist science. In the 1989 National Aboriginal Health Strategy health was articulated as, “a matter of determining all aspects of their [Aboriginal Peoples] life, including control over their physical environment, of dignity, of community self-esteem, and of justice. It is not merely a matter of the provision of doctors, hospitals, medicines or the absence of disease and incapacity.” ² This was refined into the working definition of health as, “Not just the physical well-being of the individual but the social, emotional, and cultural well-being of the whole community. This is a whole-of-life view and it also includes the cyclical concept of life-death-life.” ²

Pre-contact health care systems functioned within a social system based on three sets of inter-relationships: between people and the land; people and creator beings; and, between people. ² Aboriginal medical practices sought, and continue to seek, meaningful explanations for illness and to respond to the personal, family and community issues produced by the illness. ²

The arrival of European settlers in the 18th century led to a dramatic fall in the population. This occurred as a result of a range of factors, including introduced infectious diseases, frontier violence and the socio-economic devastation consequent on colonisation. ³ There were no health care systems in place to address the disruption that occurred to community wellness as a result of changed relationships to the land, creator beings, and other people. In fact, despite the oft stated intention to protect dispossessed Aboriginal peoples from further harm – suffering continued under the various government systems that were established in the different colonies such as the
Victorian Board of Protection of Aborigines (created in 1860). This board established a system of reserves across the colony and had the authority to force Aboriginal people to move away from their homelands onto them, forcibly remove Aboriginal children, and attempted to control essentially every aspect of their lives, including work and earnings, clothing, diet, marriage and religion.\(^4\)

The States had the primary responsibility for health care at the time of federation in 1901\(^5\), however these systems were characterized by segregation and discrimination, there were few services in Aboriginal communities, and there were ongoing disputes about the responsibility for the provision of care\(^3\). The first Commonwealth Department of Health was established in 1921 and was a small policy-oriented organisation while service provision continued to rest mainly with the States\(^5\). With the exception of the Northern Territory, for which the Commonwealth assumed administrative responsibility in 1911, there were constitutional clauses (section 51(xxvi)) that prevented the Commonwealth from becoming more involved in Aboriginal affairs. Around the 1950s Commonwealth involvement in health became more significant, primarily as a funding body and by 1960 contributed an equal amount of funds as the States\(^5\).

At this time, there would have been no health systems performance measures, or really health measures of any kind at a national level as the Commonwealth didn’t have legislative power with respect to Aboriginal people, who were also not included in the country’s census. Informally, descriptions of care that involved overcrowded and segregated Aboriginal wards, or people being treated on verandas, with high rates of infant death and sickness provide insight into the performance of the system during this period\(^3\).

The 1967 referendum gave the Commonwealth legislative power in relation to Aboriginal people and allowed for the inclusion of Aboriginal peoples in the Census. This gave the basis for the Commonwealth to become more directly involved in Aboriginal affairs generally\(^5\). The Office of Aboriginal Affairs was established in 1968 (changed to the Department of Aboriginal Affairs (DAA) in 1972), and began directing grants to State government Aboriginal Health Units formed to address Indigenous health needs and administer Commonwealth funds\(^6\).
In 1971 the first Aboriginal Medical Service (AMS) was formed in Redfern, Sydney, followed shortly after by the Victorian Aboriginal Health Service in Fitzroy, Melbourne. These services were formed in part as a response to the inadequacies of the mainstream systems to respond to Indigenous health needs, but also to demonstrate and promote Aboriginal control and participation in both health care policy and service delivery. Both services were initially operated on a voluntary basis, taking months to obtain funding grants from the DAA.

In 1973 the Commonwealth government made an offer to the State Ministers to assume full responsibility for Indigenous affairs policy and planning, which all States except Queensland accepted. Subsequent to this an Aboriginal Health Branch was formed in the Commonwealth Department of Health. At the same time a National Plan for Aboriginal Health was endorsed by the Commonwealth Minister for Health, but didn’t have any associated system to evaluate its progress towards its goal of raising the standard of Aboriginal health. Arguably, there was no system for the collection of Indigenous health information prior to the establishment of the Australian Institute of Health (later renamed the Australian Institute of Health and Welfare (AIHW)) within the Commonwealth Department of Health in 1985. Interestingly, the year prior responsibility for all Commonwealth Aboriginal health programs was moved to the DAA.

In 1989 the National Aboriginal Health Strategy (NAHS) was presented to and then endorsed by a Joint Ministerial Forum of Ministers for health and Aboriginal affairs. Underlying principles of this strategy included: acceptance of Aboriginal Peoples’ holistic view of health; recognition of the importance of local Aboriginal community control and participation; and, intersectoral collaboration. The overall goal could be summarised as the achievement of equity in health, and according to the evaluation undertaken in 1994, not only was the goal not achieved, but also the Strategy was never effectively implemented. This evaluation may be considered the one of the first instances of policy evaluation in Indigenous health. As a part of the implementation of the NAHS a draft set of Aboriginal and Torres Strait Islander Health Goals and Targets was produced for the Aboriginal and Torres Strait Islander Commission (ATSIC, replaced DAA in 1990), even though this system was never implemented.
The evaluation served as a reflection of ATSICs inadequate efforts in implementing the NAHS, and along with the unremitting pressure of the Aboriginal Community Controlled Health Services (ACCHSs), served to have the administration of Aboriginal health programs moved to the Commonwealth Department of Human Services and Health (now the Department of Health and Aging)\(^5\). Thus, the Office for Aboriginal and Torres Strait Islander Health Services (now the Office for Aboriginal and Torres Strait Islander Health (OATSIH)) was created\(^6\).

Currently, Aboriginal and Torres Strait Islanders, depending on their geographical location, can choose to access one of the 140 ACCHSs for primary care purposes or the mainstream system (according to 2003-04 Service Activity Reporting data (pers. comm. Kirrily Harrison)). All other services are provided through joint Commonwealth-State funded or State-operated health care systems. Although there is a public and private sector within Australia, Indigenous people rarely access the private sector, as evidenced by the minimal expenditure in the private sector as compared to non-Indigenous Australians\(^9\).

### 3.0 The Development of National Health System Performance Measures

The development of performance measures can be closely tied to the transition to government funding through program budgeting in the mid-1980s. Program budgeting involves the setting of program-specific objectives and the measurement of performance against them\(^7\). Although there are no associated performance measures for mainstream programs such as Medicare or the Pharmaceutical Benefits Scheme (with expenditures in the billions), since the introduction of program budgeting Aboriginal health programs have had to justify their expenditures (growing from $50 million to $200 million annually since the mid-1980s) through the use of performance measures since 1986, when the first draft document “Performance Indicators- Aboriginal Health Services” was released\(^7\).
The reaction of ACCHSs through NAIHO (since renamed National Aboriginal Community Controlled Health Organization (NACCHO)) has been described as hostile. The objections NAIHO raised included: the inappropriateness of DAA formulating health priorities as reflected by the indicators selected; the absence of a national Aboriginal health policy, the absence of agreed program aims or objectives which meant there was nothing to compare measured outcomes against; tying funding to quantifiable health improvements when ACCHSs are but one influence on a person’s or community’s health, and unlikely in a linear relationship to said health; and, the lack of relevance of selected indicators, which was considered to be unprofessional and uninformed.

In 1987 letters were sent to ACCHSs requiring them to submit throughput indicators to DAA every six months, and it was reiterated in 1989 that ongoing funding was tied to the provision of such data by grant recipients. At this point the data required included national level (births, deaths, morbidity rates for different diseases, hospitalisation rates, immunization rates, infant mortality rates) and project level information (client population, number of consultations by various medical staff, prevalence rates for significant conditions, immunisation rates). This data was meant to be aggregatable to regional, state, and national levels. The fact that this was a centrally established process imposed on ACCHSs led to further hostility and a lack of cooperation despite the link to funding. It was also revealing of the lack of informed indicator selection, as indicators such as birth, death and infant mortality rates are only useful epidemiologically when collected from larger population groups than the local ACCHS would serve, a problem that wasn’t rectified until 1993-4 when ATSIC obtained that information from AIHW.

In 1997 there were a few significant developments with regards to Indigenous health information. The Aboriginal and Torres Strait Islander Health Information Plan was released, which articulated the separate but parallel processes of Service Activity Reporting for ACCHSs and National Performance Indicators and Targets in Aboriginal Health to be reported against by national, state and territory government health agencies to the Australian Health Ministers Advisory Council (AHMAC).
Service Activity Reports (SARs) are a joint data collection project of NACCHO and OATSIH\textsuperscript{11}. They were developed in consultation with ACCHS and are collected annually. They include service level data on Commonwealth-funded health care and health related activities, as well as commenting on issues such as funding, staffing and achievements\textsuperscript{11}. This information is used by NACCHO and OATSIH in formulating policy, in planning, and to profile the work of ACCHSs in primary health care.

However, some informants argue that the current indicators do not capture the breadth of the role ACCHSs play in Aboriginal communities, and front line workers are in doubt as to the utility of these reports at the service provision level. Key informants from the OATSIH do not fundamentally disagree, but they do note that the 2005-06 collection will include a question on 'group work’, which may go some way to capturing the non-clinical work of services, even though it still doesn’t capture the extent of this work.

The development of an approach that captures data that is more useful at a service level may require a finer level of granularity (for example by focussing down on greater detail on client and service population characteristics, services delivered, quality measures, changes in health status, local burden of disease etc). This sort of system, when organised nationally and linked to service funding, might be construed as more intrusive. Developments in this direction will require the development of consensus across the sector and ongoing negotiations between OATSIH, ACCHS and peak bodies such as the National Aboriginal Community Controlled Health Organisation (NACCHO).

In recognition that ACCHSs play an important but not solely definitive role in Aboriginal health the \textit{National Performance Indicators and Targets in Aboriginal Health} were developed to measure the performance of the health care system as a whole. In a 1997 meeting the Australian Health Ministers agreed that Commonwealth, state and territory jurisdictions would be held accountable for improving Indigenous health through these publicly available annual reports. These indicators were grouped into nine categories: life expectancy and mortality; morbidity; access; health service impacts; workforce development; risk factors; intersectoral issues; community involvement; and, quality of service provision\textsuperscript{12}. There were initially a large number of proposed indicators, but the lack of quality data limited the implementation of
many. The 2000 report contains 56 indicators, but there is no clear policy rationale for how these indicators were chosen\textsuperscript{12}.

In 2004 the *National Strategic Framework for Aboriginal and Torres Strait Islander Health 2003-2013* was released, having been endorsed by all Australian governments as a framework in which to move forward in Indigenous health endeavors\textsuperscript{13}. The *National Strategic Framework* builds on the 1989 NAHS, addressing approaches to primary health care and population health within contemporary policy and planning contexts. The overarching goal is “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.”\textsuperscript{13(p6)} The *National Strategic Framework* also articulates four specific aims, for example, increasing the life expectancy of Indigenous Australians to a level comparable with non-Indigenous Australians. These aims each have an associated National Performance Indicator.

The *National Strategic Framework* then details objectives and action areas in nine key result areas in three groups as follows:

**Group A: Towards a More Effective and Responsive Health System**
- Community controlled primary health care services
- Health system delivery framework
- A competent health workforce
- Emotional and social well-being

**Group B: Influencing the Health Impacts of the Non-Health Sector**
- Environmental Health
- Wider strategies that impact on health

**Group C: Providing the Infrastructure to Improve Health Status**
- Data, research and evidence
- Resources and finance
- Accountability

Implementation of the *National Strategic Framework* is to be monitored by AHMAC through its Standing Committee on Aboriginal and Torres Strait Islander Health (SCATSIH). As such, the *Aboriginal and Torres Strait Islander Health Performance*
Framework has been developed, and will be reported against for the first time in 2006\textsuperscript{14}. This will replace the National Performance Indicators and Targets for Aboriginal Health, which have been described by key informants as being uninformed by any policy framework and measuring what was feasible as opposed to measuring determinants of health or health outcomes.

The Aboriginal and Torres Strait Islander Health Performance Framework is modelled on the Australian National Health Performance Committee’s (NHPC) Health Performance Framework, with consideration of the health context of Aboriginal and Torres Strait Islander Peoples and its relevant policy questions\textsuperscript{14}. The framework has 18 domains grouped into three tiers as follows: Tier 1- Health Status and Outcomes (Health Conditions, Human Function, Life Expectancy and Wellbeing, Deaths); Tier 2- Determinants of Health (Environmental Factors, Socioeconomic Factors, Community Capacity, Health Behaviours, Person-related Factors); and, Tier 3- Health System Performance (Effective, Appropriate, Efficient, Responsive, Accessible, Safe, Continuous, Capable, Sustainable).

There are two overarching dimensions, quality and equity, which apply across multiple domains. Quality is defined as, “delivering the best possible care and achieving the best possible outcomes for Aboriginal and Torres Strait Islander people every time they deal with the health care system or use the services of the health care system.”\textsuperscript{14} An important element embedded within this is the concept of cultural security, which states that the construct and services of the health system will not compromise the cultural rights, views, values and expectations of Indigenous peoples. It is difficult to conceptualize how one would measure this cultural security, or the lack of it. It can be conceived of as part of the effective, appropriate, responsive and safe domains, although the only measure in the paper that may approximate it is the number of people ‘voting with their feet’ such as a discharge against medical advice\textsuperscript{14}.

The definition of equity is given as “the state or ideal of being just, impartial, and fair such as everyone having the same chance of good health regardless of who they are, where they live, or their social circumstances.”\textsuperscript{14} Equity is to be assessed by making comparisons between Indigenous and non-Indigenous Australians for the measures in
each domain, with a view to answering the question of whether or not the current gap in health status is widening or narrowing.\textsuperscript{14}

In order to populate the Framework with indicators, SCATSIH and the National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data (NAGATSIHID) examined the context and developed policy questions for each domain. These were then taken to a Technical Advisory Group who selected the indicators based on policy relevance, technical merit and feasibility. In the 2006 report some of the indicators will not be able to be reported against because of data quality or availability issues, and the data will not be able to be reported below the state/territory level. However, it is anticipated that the Health Performance Framework will drive a prioritised data development program focussed on the improvement of data necessary to fully populate the Framework. The articulation of the Framework with the National Strategic Framework is a significant development in that it gives the national indicators system a much clearer rationale in Indigenous health policy and strategy.

There have been significant developments in relationship to governance and Indigenous health data systems over the last decade. The National Indigenous health Information Plan Implementation Working Group (NHIP IWG) was established under the NHIP (1997) to oversee the implementation of the \textit{Aboriginal and Torres Strait Islander Health Information Plan}. Then in October 2000 a new mechanism, the National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data was established by the Australian Health Ministers Advisory Council (AHMAC) to advise the National Health Information Management Group (NHIMG) on strategies to improve the quality and availability of data and information on Aboriginal and Torres Strait Islander health and health service delivery, and to draw together the range of existing activities already underway, into a coordinated and strategic process.\textsuperscript{15} When the National Health Information Group (NHIG) was established in October 2003, Health Ministers agreed that NAGATSIHID would become a standing committee of, and provide broad strategic advice to NHIG. NAGATSIHID is the overarching governance structures that draws together a range of stakeholders into a strategic development process. Significantly NAGATSIHID
also includes representation from the ACCHS and independent Indigenous advisors (the recommended membership is described in Attachment One).

NAGATSIHD also supersedes the Aboriginal and Torres Strait Islander Health and Welfare Information Unit Advisory Committee (ATSIHWIU AC), which had previously advised the Australian Bureau of Statistics (ABS) and the Australian Institute of Health and Welfare (AIHW) on their joint work program on Indigenous statistics. However the Australian Bureau of Statistics continues to have a distinct policy process to advise on the development of its statistical program on Indigenous people: the Advisory Group on Aboriginal and Torres Strait Islander Statistics (AGATSIS)

4.0 Current Indigenous Health Indicator Sets

The following section will be a brief description of the currently available health indicator sets at the national, state/territory, and regional levels.

4.1 National Level Health Indicator Sets

Health information at the national level is concentrated within the Australian Bureau of Statistics (ABS) and the Australian Institute of Health and Welfare (AIHW). NACCHO and OATSIH co-publish the Service Activity Reports as mentioned above, and the AIHW compiles the National Performance Indicators, but the health outcomes data within the latter are generated from ABS and AIHW data. The Commonwealth’s Department of Health and Aging also published a report entitled General Practice in Australia: 2004 including two chapters on Aboriginal and Torres Strait Islander primary health care and general practice, but again this contained information from ABS and AIHW sources primarily. The Australian Institute of Health and Welfare also produces triennial reports on expenditures on health services for Aboriginal and Torres Strait Islander people (the first covered the 1994-96 financial years, and with the most recent the 2001–02 financial year). These reports draw on expenditure data from the AIHW, ABS, State/Territory and Australian governments as well as producing estimates of non-government expenditure.
4.1.1 Australian Bureau of Statistics

The ABS performs a Census of Population and Housing on a five year cycle, the most recent cycle of which was 2001. The Census asks if each person is of Aboriginal or Torres Strait Islander origin, and in the latest cycle allowed for respondents to answer yes to both. It collects information on place of residence, language, housing and household composition, income, education, and employment. This allows for the examination of some of the determinants of health down to the Indigenous Location level.

The ABS maintains birth and death registries. Mortality data is taken from death registration forms and medical cause of death forms, however despite ongoing work to increase the recording of Indigenous status on the forms currently only Western Australia, South Australia, Queensland, and the Northern Territory have consistent and publishable results.

The National Aboriginal and Torres Strait Islander Social Survey (NATSISS) was performed in 2002 and compared to the 1994 National Aboriginal and Torres Strait Islander Survey. NATSISS aims to provide broad information across key social concerns and outcomes, and is reportable down to broad regional levels. There is a complimentary General Social Survey providing comparable information for non-Indigenous Australians. NATSISS provides information on culture and language, removal of Indigenous peoples from their natural family, self-reported health, education, employment, income, housing, law and justice including experiences of physical violence, family and community attachments including both supports and stressors, and smoking and alcohol consumption. The survey was developed following broad consultations with Indigenous peoples.

The National Health Survey (NHS) has been performed episodically since 1977, but didn’t include an Indigenous identifier until 1989, and didn’t sample enough Indigenous peoples to report on Indigenous health status until 1995. The latest published cycle in 2001 provides national level information on self-reported health measures, health service use, and lifestyle factors which affect health. Publication of
the results of the 2004 National Aboriginal and Torres Strait Islander Health Survey
was released in April 2006, and has been sampled to provide data at the state/territory
level.

The Community Housing and Infrastructure Needs Survey\(^1\) was last performed in
2001 by ABS but funded by the since-abolished ATSIC. The next survey will be
conducted in 2006 with funding from the Department of Family and Community
Services Indigenous Affairs (FACSIA). It provides information on housing stock,
dwelling management and selected income and expenditure arrangements collected
from Indigenous Housing Organisations. It also collected information from discrete
Indigenous communities on the status of housing, infrastructure, education, health and
other services available, and has information reportable down to the community level.

4.1.2 Australian Institute of Health and Welfare

The AIHW collates information about Indigenous health primarily from
administrative datasets submitted by the states and territories, and one of the main
limitations of the data is the extent to which Indigenous people are given the
opportunity to self-identify when accessing the health care system, and it is variable
across the states and territories, and also across the various databases.

The AIHW maintains the National Hospital Morbidity Database based on the
National Health Data Dictionary definitions for the National Minimum Data Set for
Admitted Patient Care. This allows the calculation of hospital separation rates by
geographic region, major diagnoses, and also hospital expenditures. The
incompleteness of Indigenous identification means the number of hospital separations
recorded as Indigenous is an underestimate of Aboriginal and Torres Strait Islander
hospitalisations. The extent to which the identification of Indigenous Australians
occurs in data collections is referred to as coverage. While there is incomplete
coverage of Indigenous hospitalisations in all states and territories, four jurisdictions
(QLD, WA, SA and the NT) have been assessed as having better coverage in 2003–04
(AIHW 2005). It has therefore been recommended that aggregate Indigenous hospital
separations reporting be limited to SA, WA, NT and Qld.
The National Community Mental Health Care Database was collated for the first time in 2000-2001, but the quality of Indigenous identification was in need of improvement for all jurisdictions except the Northern Territory.

There is a National Minimum Data Set for Alcohol and Other Drug Treatment Services that is a subset of the information that is routinely collected by the states and territories.

Although each state and territory is supposed to ask patients if they have Indigenous ancestry, the Cancer Registries can only report reliable incidence data for Indigenous Australians in the Northern Territory, Western Australia, and Queensland.

The National Perinatal Statistics Unit collects information on Indigenous status, antenatal care including age of mother, birth weight, and perinatal mortality. An important limitation is that it doesn’t contain any information on the father and thus doesn’t count Indigenous children born to non-Indigenous mothers.

The AIHW partnered with the University of Sydney to publish the BEACH report. This is a report of general practice activity in Australia, and is generated from randomly selected physicians who are approached to record data on 100 consecutive patients, including their Indigenous status. This allows for a description of the number of encounters, the characteristics of the GPs, the characteristics and content of the encounter, the morbidity managed, and patient risk factors. Given the small sample size because of the small number of Indigenous patients identified, the data is presented as a collation of the past 5 years of collection.

The AIHW also require the identification if Indigenous status in the following National Minimum Data Sets (NMDS): Child Notifications; Admitted patient palliative care NMDS; Admitted patient mental health care NMDS; Aged Care Assessment Program; multiple Commonwealth housing-related data collections; Commonwealth/State/Territory Disability Agreement NMDS; Home and Community Care NMDS; and, Supported Accommodation Assistance Program NMDS.
The AIWH has developed an approach to reporting Indigenous data and data development that integrates with its generic publishing program as well as producing Indigenous specific reports include the report on Indigenous Housing needs 2005 and the biennial Health and Welfare of Australia’s Aboriginal and Torres Strait Islander Peoples (which we describe in more detail below). Some examples of recent AIHW publications that include Indigenous data integrated within a generic publication include the: Commonwealth-State Housing Agreement for 2004-05 data; Public and State owned and Indigenous managed housing; Chronic kidney disease in Australia, 2005; Cervical Screening in Australia, 2002–2003; Child protection Australia 2004–05 and Mortality over the twentieth century in Australia: Trends and patterns in major causes of death. The AIHW series also report on agreed data definitions and strategies to improve data quality and examples that include discussion on Indigenous data include: National Housing Assistance Data Dictionary Version 3 and the report Improving the quality of Indigenous identification in hospital separations data.

4.1.3 The Health and Welfare of Australia’s Aboriginal and Torres Strait Islander Peoples 2005

This is the latest edition of the biennial joint publication of the ABS and AIHW. It combines available information on Indigenous health from the two agencies, supplemented with OATSIH and published reports. The focus of the report is at a national level, although some data is broken down to the state/territory level. It also includes a chapter on Torres Strait Islander health compared to all Indigenous Australians. The overall aim of the publication is to provide a broad picture of the change in health and welfare of Indigenous Australians over time.

The areas covered in the 2005 report include: demography and socio-economic context; education and health; housing circumstances; disability and ageing; mothers and babies; health status; health risk factors; mortality; health services provision, access and use; community services; Torres Strait Islander peoples, and data sources.

There are three main issues impacting the quality of the reported data. The first is the difficulty in estimating the size of the Aboriginal and Torres Strait Islander
populations. This is due to a growth in the population of 16% between the 1996 and 2001 Census, 12% of which was accounted for by natural growth, and the remainder due to other causes such as a change in the propensity to identify as Indigenous (the population increase between the 1991 and 1996 Census is thought to have distinct underlying factors – 30% of it has been explained by demographic factors). It is not possible to predict how these factors might change over time. Also, birth and death data is not available nationally limiting the ability to calculate natural growth in these periods. These two factors combine to affect the quality of the population estimates needed to calculate outcome rates, limiting their comparability across time periods.

The second issue is the incomplete identification of Indigenous Australians in administrative datasets due to differing methods of collection or failure to record status. The completeness of the data and it varies across states/territories and according to administrative data set. Priority has been given to the improvement of hospital separation data, consequently a report has recently been released with recommendations for strategies to improve the quality of Indigenous identification in hospital data.

The final issue surrounds the data from national surveys. A common issue has been that the sample of Indigenous Australians has been too small to report reliable data as Indigenous Australians make up a small proportion of the population and are more likely to be in remote areas, which may be excluded from the surveys. Also, there are concerns about the relevance of the questions to Indigenous Australians, the concepts used, and the reliability and comparability of self-reported information.

4.2 State/ Territory Level Data Sets

The States and Territories are responsible for reporting on the National Minimum Data Sets as described above to the AIHW, and thus have access to the same data sets, however there are significant differences in recording of Indigenous status and therefore some states/territories will not be able to publish data because of the poor quality. As an example, cancer data is only reported as reliable from Western Australia, Northern Territory, and Queensland.
Different jurisdictions have developed their own reporting processes. For example, the Department of Health, Government of Western Australia in collaboration with the West Australian Aboriginal Community Controlled Health Services produced a report *Health Measures 2005 A report on the health of the people of Western Australia* there is a section on Aboriginal health which includes demographic indicators, life expectancy, mortality, infant mortality, birth weight, cardiovascular disease, and injury and poisoning data. This serves as an example of state level collation of Indigenous-specific data.

In Victoria the Koori Human Services Unit of the Department of Human Services collates information submitted by the Koori Hospital Liaison Officers into a report entitled *Koori Health Counts!*. The stated aim of the report is to “improve the availability of Aboriginal health information in Victoria and to provide the information in a way that is appropriate for use within the community.” The information included is population characteristics, admissions data (number of admissions, reason, and age of patient), birth data, and death information, including why the information is needed and what it is used for. The Department of Human Services has also recently released its third *Aboriginal Services Plan Key Indicators* report for 2003-04. The purpose of the DHS *Aboriginal Services Plan* is to improve the health and wellbeing of all Aboriginal Victorians by better focusing departmental resources and the *Aboriginal Services Plan Key Indicators Report* is an integral part of the reporting and monitoring regime established for this plan.

In the Northern Territory, as part of the Public Health Outcome Funding Agreement performance reporting measures are required to assess the progress towards achieving the priority public health outcomes in the areas of communicable diseases, cancer screening and health risk factors. The Agreement specifically mentions the obligation of both parties to “give appropriate attention to strategies and policies” in this arena as they relate to Aboriginal and Torres Strait Islander Peoples. The performance indicators were jointly agreed to by the Commonwealth and the NT government, and are guided by the same three tiered framework as the *Aboriginal and Torres Strait Islander Health Performance Framework*, but with indicators selected to reflect the NT’s specific health goals.
4.3 Regional Level Data Sets

There were no mainstream reports on regional level Indigenous-specific data identified, and this relates to the inability to survey a sufficient sample size to allow reliable reporting down to this level, or the small populations of regional levels that act as a barrier to being able to calculate statistically reliable rates.

In the Aboriginal Community Controlled Sector there are multiple examples of regional level data. The Victorian Aboriginal Health Service publishes an annual report that is primarily service focused, but does contain some health measures such as perinatal statistics\(^{38}\).

The Central Australia Aboriginal Congress states in their annual report that they have developed data sets that reflect the clinic and program strategies allowing verifiable data on the essential performance indicators for the programs\(^{39}\). In their annual report they also present some service output data. Nganampa Health Service in SA also publishes some service output and health outcome data in its annual reports.

OATSIH requires each ACCHS to report every six months in a Service Development and Reporting Framework. This requires the health service to plan and set aims for the upcoming year, decide on strategies to accomplish them, and ways to measure their progress. This is encouraged by the availability of funding every third year to do a quality improvement project. This process has the potential of integrating local priorities into performance measurement processes. However, as services define their own performance measures, the date are not aggregatable.

5.0 Published Reports

An extensive literature review was performed in the databases: Medline, CINAHL, AMED and APAFT Full Text using the terms “health surveys” or “health indicators” and “community health services” or “community based” and “Australian Aboriginal” or “Torres Strait Islander” or “health services, indigenous” or “aborigin$ or Indigenous or first nation$” and “Australia”. The focus was to identify prior examples of performance indicator development. This literature search was supplemented by
Denis Griffin authored an article discussing the development and use of performance indicators specific to the Renal Unit at Townsville General Hospital\textsuperscript{40}. The methodology included a literature review, patient survey, health professional survey and benchmarking exercise that enabled the setting of minimal standards. It’s not clear how this translated into the development of the seven performance indicators ultimately used. They included: decrease admissions caused by infection, non-compliance, technique breakdown, etc; demonstrate decreased length of stay in hospital; establish a network between the community, community health professionals, and the hospital-based dialysis services; and, demonstrate increased community awareness of the impact of end stage renal failure.

The Cooperative Research Centre for Aboriginal and Tropical Health wrote a report for the Primary Health Care Access Program Working Group entitled \textit{Development of a Performance Reporting System for Indigenous Primary Health Care}\textsuperscript{41}. The aim of the project was to develop an interim performance reporting system, endorsed by the Northern Territory Aboriginal Health Forum, for use by Commonwealth/ Northern Territory co-funded Indigenous primary care service providers. The process involved a literature review, consultations with experts and key stakeholders, and a workshop in which the proposed performance indicators were reviewed by the steering committee and project team. This workshop identified a list of criteria for indicator selection that included the following questions:

- Is the measure useful from the service provision point of view?
- Is the measure useful from the funding point of view?
- How frequently should the measure be reported?
- Can the data be collected/ reported?
- Is data available/ are there any quality issues?

The first two questions acknowledge the need of performance reporting to meet the accountability of governments, and be acceptable (and useful) to service providers. The second factor is a common complaint of service level providers in regards to reports such as the SAR that were developed solely as accountability reporting, and
are not useful. On the other hand, key informants from the OATSIH argue that the SAR and SDRF have been developed as complimentary processes – SAR for national policy and SDRF for service level development and planning.

There are 43 selected indicators in the paper that have been mapped using the same framework as the Aboriginal and Torres Strait Islander Health Performance Framework, with the tiers health status and outcomes, determinants of health, and health systems performance. In the accompanying technical instructions the source of data for each indicator is identified, which highlights the internal medical information systems as a key source of data for ACCHSs.

On review of department websites to see if this framework has been implemented, a paper entitled *National Primary and Community Health Network Format for Reports from Peak Bodies and Jurisdictions* it states that the Aboriginal Health Forum has agreed to 19 key performance indicators. Steps have been taken to establish the governance for the development phase of this project and personnel have been recruited. The next phase will involve further consultation with service stakeholders and the development of a data management policy.

6.0 Indicators Compendium

An inventory of potential performance measures was collated as part of the Aboriginal and Torres Strait Islander Health Performance Framework by the National Health Performance Committee. This inventory is arranged according to the three-tiered Framework: health status, determinants of health, and health systems performance. It includes the source of information for each indicator, but it is important to note that the inventory does suggest some indicators not currently collected in Australia. The inventory is presented in Attachment 1. This inventory served as the starting point for the selection and development of policy relevant indicators for inclusion in the Health Performance Framework, although the compendium did not cover all domains. In Attachment two we include the final set of indicators that were selected for this health performance framework.
7.0 Indigenous Health Information Issues

The commonly identified issues that impact on the quality of Indigenous-specific health data include: lack of accurate and consistent identification of Indigenous people in health data sets; lack of national level indicators on issues important to Indigenous communities; lack of commitment by funding agencies, governments, and researchers to return information to the communities/sources from which it was obtained; and, the focus on collection of health or health-related information that is not useful at a service provision level, although it should be noted the SDRF has the potential to address some of these issues.

Identification of Indigenous people relies on the person encountering the system, or appropriate designate, being asked if they are of Aboriginal or Torres Strait Islander origin in a way in which they will feel comfortable answering. Some reports suggest that patients are only asked if they look Aboriginal for fear of offending people. The identification of Indigenous peoples in birth and death registration is improving, but at this point only Queensland, Western Australia, South Australia, and the Northern Territory have reportable results. Refer to section 4.1.3 for a review of how this affects population estimates and therefore the calculation of outcome rates.

The incompleteness of data in other jurisdictions is, for the most part, untested and unknown. As a result of this, there is a tendency to use the information of the above named states and territories as a proxy measure for Indigenous people in all of Australia.

The reliance on hospital separation rates as a marker of morbidity leads to an underestimation of the burden of illness of a community where either there is a high prevalence of diseases for which hospitalization is not required or people avoid hospitals because of previous racist encounters or other reasons. An example of this are the recurrent undiagnosed, untreated infections (such as otitis media) that occur amongst Indigenous children. In the past there has been a gap with respect to the availability of measures of social and emotional well-being, despite the importance of this as reflected by the number of ACCHSs with such programs. The 2004-05
NATSIHS has collected data on SWEB for the first time, and the HPF has a performance indicator that relates to this.

On discussion of current national level initiatives with regional and community level workers, a common theme is the lack of utility of current mandatory data reporting. This is a result of two main factors: first, the lack of relevance of selected indicators at that level; and, the inability to report data below a state/territory level. The first issue relates to the selection of indicators that reflect national priorities. However, there is significant variability in the context in which ACCHSs operate, and their priorities can be quite different than those of the Commonwealth’s or other ACCHSs. To date the presence of reporting frameworks that include a balance of community/region-specific indicators and national or universal indicators has been lacking. The second factor is a result of either small populations in a region or survey sampling that isn’t large enough to provide statistically reliable results. ABS continues to work on supplemental sampling strategies to provide better quality data.

The perceived lack of return of understandable and relevant information may lead communities and service providers to believe that the information collected is not being used at all. There may not be an understanding among data collectors, therefore, about why they need to collect such information, how the information will be used, or what privacy protection measures are in place. Although many of the ACCHSs have computer-based medical information systems, they may not have the infrastructure (including funding, human resources, or training) to use them effectively to generate health measures. Given the high priority of necessary service provision, without an understanding of the importance/utility of such information accurate collection/recording may not occur.

8.0 Concluding Remarks

The *Aboriginal and Torres Strait Islander Health Performance Framework* has been designed to measure the impact of the *National Strategic Framework for Aboriginal and Torres Strait Islander Health*. Its ability to do so will be limited by the availability of appropriate quality data for reporting, a major factor of which is the inconsistent recording of Indigenous status across the states/territories although this
is improving. The Health Performance Framework will however, provide the basis for a prioritised national data development program to build the capacity to report against all included measures over time. As each state/territory is responsible for designing plans to implement the National Strategic Framework for Aboriginal and Torres Strait Islander Health and to achieve the specified aims, each state/territory will also be required to report progress on implementing the framework.

As the above framework will not be able to report data below the state/territory level, there is still a gap in the availability of relevant Indigenous-specific data at regional and community levels which impairs the ability of services at a local and regional level to make evidence-based policy decisions or service delivery plans. In this respect the development of the SDRF is a significant step in addressing this gap.

What is interesting about this framework is that it shifts the focus of accountability from individual ACCHSs (although they are still required to report throughput measures in the SAR and SDRF) to the state/territory and federal governments, and how well they are doing in implementing this strategy in order to improve the health of Indigenous Peoples in Australia, using an Indigenous understanding of health. The indicators were selected to measure progress along key policy questions in each domain, and thus have significant potential to actually change relevant policies. It is hoped that this process of ongoing performance measurement will lead to an effectively implemented strategy to improve the health of Indigenous Peoples in Australia, as opposed to the never effectively implemented National Aboriginal Health Strategy of 1989.

8.0 Acknowledgements

A number of people assisted in the implementation of this project, both in its conceptualisation, undertaking reviews of the unpublished and published literature and key informant interviews, providing feedback. Dr Ian Anderson was responsible for the implementation of the Australian arm of this project and together with Dr Marcia Anderson for drafting this report. Dr David Brockman and Ms Angelina Tabuteau provided initial support in the review of the published and unpublished literature and some key informant interviews, which was completed by Dr Marcia
Anderson. Dr Janet Smylie, Dr Sue Crengle and Dr Mihi Ratima provided support in the conceptualisation of the Australian arm of the project and the structure of this report. Feedback and assistance in locating documents was provided by Ms Joy McLaughlin, Ms Debra Reid, Dr Brendan Gibson, Ms Kırıry Harrison, Ms Elaine Topping, all from the Office For Aboriginal and Torres Strait Islander Health, Commonwealth Department of Health and Ageing. Permission for reproducing the data and information in Attachment One and Two was provided by the Office for Aboriginal and Torres Strait Islander Health who supported the work of the Technical Advisory Group in the development of the Aboriginal and Torres Strait Islander Health Performance Framework.
9.0 References


10. Australian Institute of Health and Welfare 1997. *The Aboriginal and Torres Strait Islander Health Information Plan...this time, let’s make it happen*. Canberra: AIHW.


45. Australian Bureau of Statistics. *Themes- Indigenous Directions in Australia’s Aboriginal and Torres Strait Islander Statistics.* Available at:
Attachment One

Membership
National Advisory Group for Aboriginal and Torres Strait Islander Health Information and Data (NAGATSIHID)

The Australian Health Ministers Advisory Council (AHMAC) recommends that NAGATSIHID membership comprise:

a. A single representative from the following organisations:
   - The Australian Bureau of Statistics (ABS)
   - The Australian Institute of Health and Welfare (AIHW)
   - Department of Health and Ageing (DoHA)
   - Aboriginal and Torres Strait Islander Commission (ATSIC)
   - Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS)
   - Torres Strait Regional Authority
   - Statistical Information Management Committee (SIMC).

b. Two representatives from the Steering Committee for Aboriginal and Torres Strait Islander Health (SCATSIH) formally known as Heads of Aboriginal Health Units (HAHU), Indigenous Australians.

c. Two representatives from the National Aboriginal Community Controlled Health Organisation (NACCHO).

d. Three Indigenous Advisors on Aboriginal and Torres Strait Islander health and welfare.

e. An epidemiologist with expertise in Indigenous health issues.

f. At the March 2002 NAGATSIHID meeting, the group agreed not to limit the number of observers. Secretariat should be approached to check the capacity of the meeting to accommodate any requests for observers.
Attachment Two

Aboriginal and Torres Strait Islander Health Performance Framework
Inventory of Potential Performance Measures

Tier 1: Health Conditions, Human Function, Life Expectancy and Wellbeing, and Deaths

Performance Measures: Health Conditions

1. Low birth weight infants (NPI 28, NHPC 4.12)
2. Overweight and obesity (NPI 31)
3. Proportion of persons with high blood pressure (NHPC 4.11)
4. % children passing school entry hearing screening tests (NZ)
5. Injuries presenting to hospital accident and emergency facilities (NPI 35)
6. Prevalence of anxiety and depression (NPI 36)
7. Vaccine preventable disease notification rates (NPI 37)
8. Meningococcal disease notification rates (NPI 38)
9. Sexually transmitted disease notification rates (NPI 39)
10. Ratios for all hospitalisations (NPI 40)
11. The % of patients with coronary heart disease, last blood pressure reading 150/90 or less (UK Quality).
12. The % of patients with coronary heart disease, whose measured cholesterol is 5mmol/l or less (UK Quality).
13. Hospitalisation ratios for circulatory diseases (NPI 41)
14. Hospitalisation ratios for injury and poisoning (NPI 42)
15. Hospitalisation ratios for respiratory diseases and lung cancer (NPI 43)
16. Hospitalisation ratios for diabetes (NPI 44)
17. Hospitalisation for tympanoplasty associated with otitis media (NPI 45)
18. Incidence of heart attacks (NHPC 1.01)
19. Incidence of cancer (NHPC 1.02)
20. Proportion of diabetics with HbAlc < 6.5% (OECD)
21. (Prevalence of) arthritis/rheumatism (Canada)
22. (Prevalence of) spina bifida (OECD)
23. (Prevalence of) transposition of great vessels (OECD)
24. (Prevalence of) limb reduction (OECD)
25. (Prevalence of) Down's syndrome (OECD)
26. Decayed-missing-filled-teeth (DMFT) (OECD)
27. Acquired immunodeficiency syndrome (AIDS) (OECD)
28. Cancer incidence
   28.1. Malignant neoplasms (OECD)
   28.2. Malignant neoplasms of colon (OECD)
   28.3. Malignant neoplasms of lung (OECD)
28.4. Malignant neoplasms female breast (OECD)
28.5. Malignant neoplasms of cervix (OECD)
28.6. Malignant neoplasms of prostate (OECD)

29. Injuries in road traffic accidents (OECD)

30. Proportion of resident clients with diabetes with a HbA1c less than 7% and less than 9.5% in the last 12 months, Mean HbA1c level for resident diabetic clients in the last 12 months (NT)

31. Children's hearing loss (NPI47)

**Performance indicators: Human Functions**

32. Self-reported absence from work due to illness (OECD, see also IHS items about time off work/study or reduction in usual activity due to illness)

33. Compensated absence from work due to illness

34. Years lived with disability (NHPC 3,2)

35. Acute care management admission (UK NHS)
   35.1. Severe ENT infection
   35.2. Kidney/urinary tract infection
   35.3. Heart failure

36. Discharge rates for paediatric asthma children under 5 and 5-14 (NZ)

**Example performance indicators: Life Expectancy and Wellbeing**

37. Life expectancy for:
   37.1. Total population at birth (NPI 5, OECD)
   37.2. Females at birth (OECD)
   37.3. Females at age 40 (OECD)
   37.4. Females at age 60 (OECD)
   37.5. Females at age 65 (OECD)
   37.6. Females at age 80 (OECD)
   37.7. Males at birth (OECD)
   37.8. Males at 40 (OECD)
   37.9. Males at 60 (OECD)
   37.10. Males at 65 (OECD)
   37.11. Males at 80 (OECD)

38. Perceived health status:
   38.1. health > good, female, 15-24 (OECD)
   38.2. health > good, female, 25-44 (OECD)
   38.3. health > good, female, 45-64 (OECD)
   38.4. health > good, female, 65+ (OECD)
   38.5. health > good, female, all ages (OECD)
   38.6. health > good, male, 15-24 (OECD)
   38.7. health > good, male, 25-44 (OECD)
   38.8. health > good, male, 45-64 (OECD)
   38.9. health > good, male, 65+ (OECD)
   38.10. health > good, male, all ages (OECD)
   38.11. health > good, total, 15-24 (OECD)
   38.12. health > good, total, 25-44 (OECD)
   38.13. health > good, total, 45-64 (OECD)
   38.14. health > good, total 65+ (OECD)
   38.15. health > good, total, all ages (OECD)
Example performance indicators: Deaths

39. Infant mortality rate (NPI 6)
40. Early adult death (NPI 49)
41. Age-specific all-cause death rates and ratios (NPI 50)
42. Standardised mortality ratios for all causes (NPI 51, OECD)
43. Standardised mortality ratios for circulatory diseases (NPI 52, OECD)
44. Standardised mortality ratios for injury and poisoning, including suicide (NPI 53)
45. Standardised mortality ratios from respiratory diseases and lung cancer (NPI 54, OECD)
46. Standardised mortality ratios from diabetes (NPI 55, OECD)
47. Standardised mortality ratios from cervical cancer (NPI 56, OECD)
48. Causes of mortality:
   48.1. Infectious and parasitic diseases (OECD)
   48.2. HIV disease (OECD)
   48.3. Malignant neoplasms (OECD)
   48.4. Malignant neoplasms of colon (OECD)
   48.5. Malignant neoplasms of female breast (OECD)
   48.6. Malignant neoplasms of colon (OECD)
   48.7. Diseases of blood (OECD)
   48.8. Endocrine, nutritional and metabolic diseases
   48.9. Mental and behavioural disorders (OECD)
   48.10. Diseases of nervous system (OECD)
   48.11. Ischaemic heart diseases (OECD)
   48.12. Acute myocardial infarction (OECD)
   48.13. Cerebrovascular diseases (OECD)
   48.15. Bronchitis, asthma and emphysema (OECD)
   48.16. Diseases of the digestive system (OECD)
   48.17. Chronic liver diseases/cirrhosis (OECD)
   48.18. Diseases of skin and subcutaneous tissue (OECD)
   48.19. Diseases of musculoskeletal system (OECD)
   48.20. Diseases of genitourinary system (OECD)
   48.21. Complications of pregnancy/childbirth (OECD)
   48.22. Perinatal conditions (OECD)
   48.23. Congenital anomalies (OECD)
   48.24. Symptoms and ill-defined conditions (OECD)
   48.25. External causes of mortality (OECD)
      48.25.1. Land transport accidents (OECD)
      48.25.2. Accidental falls (OECD)
      48.25.3. Intentional self-harm (OECD)
      48.25.4. Assault (OECD)
      48.25.5. Adverse effects from medicines (OECD)
      48.25.6. Misadventures to patient during surgical medical care (OECD)
49. Maternal and infant mortality
   49.1. Infant mortality (OECD)
   49.2. Neonatal mortality (OECD)
   49.3. Perinatal mortality (OECD)
   49.4. Maternal mortality (OECD)
50. Potential years of life lost due to:
50.1. all causes (OECD)
50.2. infectious and parasitic disease (OECD)
50.3. HIV disease (OECD)
50.4. Malignant neoplasm (OECD)
50.5. Malignant neoplasms of colon (OECD)
50.6. Malignant neoplasms of lung (OECD)
50.7. Malignant neoplasms of female breast (OECD)
50.8. Malignant neoplasms of cervix (OECD)
50.9. Malignant neoplasms of prostate (OECD)
50.10. Diseases of blood (OECD)
50.11. Endocrine, nutritional and metabolic diseases (OECD)
50.12. Diabetes mellitus (OECD)
50.13. Mental and behavioural disorders (OECD)
50.14. Diseases of nervous system (OECD)
50.15. Diseases of circulatory system (OECD)
50.16. Ischaemic heart diseases (OECD)
50.17. Acute myocardial infarction (OECD)
50.18. Cerebrovascular diseases (OECD)
50.19. Diseases of respiratory system (OECD)
50.20. Influenza and pneumonia (OECD)
50.21. Bronchitis, asthma and emphysema (OECD)
50.22. Diseases of digestive system (OECD)
50.23. Chronic liver diseases/cirrhosis (OECD)
50.24. Diseases of skin and subcutaneous tissue (OECD)
50.25. Diseases of musculoskeletal system (OECD)
50.26. Diseases of genitourinary system (OECD)
50.27. Complications of pregnancy/childbirth (OECD)
50.28. Perinatal conditions (OECD)
50.29. Congenital anomalies (OECD)
50.30. Symptoms and ill-defined conditions (OECD)
50.31. External causes of mortality (OECD)
50.32. Land transport accidents (OECD)
50.33. Accidental falls (OECD)
50.34. Intentional self-harm (OECD)
50.35. Assault (OECD)
50.36. Adverse effects from medicine (OECD)
50.37. Misadventures to patient during surgical/medical care (OECD)
Tier 2: Environmental Factors, Socioeconomic Factors, Community Capacity, Health Behaviours and Person-related Factors

Example Performance Measures: Environmental Factors

51. Environmental tobacco smoke: children under 15 years who live in a household with a smoker (NHPC 4.1)
52. Environmental tobacco smoke: workplace smoking restrictions (NHPC 4.2)
53. Exposure to second-hand smoke (Canada)
54. Housing with Utilities (NPI10)
55. Fluoridated water (RHIF 2.1.1)
56. Access to clean water and functional sewerage (IDR)
57. Overcrowding in housing (IDR, RoGS)
58. Notification rates of Ross River virus by State and Territory (NHPC 4.3)

Example Performance Measures: Socioeconomic Factors

Education
59. Educational status of the adult population (RHIF 2.2.1)
60. High school retention rates (RHIF 2.2.2)
61. Progression from school to university (RHIF 2.2.3)
62. Years 10 and 12 retention and attainment (IDR)
63. Post secondary education - participation and attainment (IDR)
64. Preschool and school attendance (IDR)
65. Year 3 literacy and numeracy (IDR)
66. Years 5 and 7 literacy and numeracy (IDR)
67. Retention at Year 9 (IDR)
68. Completed secondary school education (NPI 8)
69. High school graduates (Canada)
70. Post-secondary graduates (Canada)
71. Average number of years of schooling (Canada)
72. Participation in education and training by people aged 15-24 years, by sector (RoGS)
73. Level of highest educational attainment of people aged 15-64 years, by labour force status (RoGS)
74. Apparent rates of retention from year 10 to year 12, Indigenous full-time secondary students (RoGS)
75. Year 3 students who achieved the reading benchmark (RoGS)
76. Year 5 students who achieved the reading benchmark (RoGS)
77. Year 3 students who achieved the writing benchmark (RoGS)
78. Year 5 students who achieved the writing benchmark (RoGS)
79. Year 3 students who achieved the numeracy benchmark (RoGS)
80. Year 5 students who achieved the numeracy benchmark (RoGS)
81. VET participation rates for all ages, by Indigenous status (RoGS)

Employment
82. Workforce and employment (RHIF 2.2.4)
83. Labour force participation and unemployment (EDR)
84. Employment (full-time/part-time) by sector (public/private), industry and occupation (IDR)
85. CDEP participation (IDR)
86. Long term unemployment (IDR)
87. Self employment (IDR)
88. Employment status (NPI 9)
89. Unemployment rate (Canada)
90. Long-term unemployment rate (Canada)

**Income**

91. Differentials in death rates across socioeconomic quintiles (NHPC 4.4)
92. Household income (RHIF 2.2.5)
93. Gap between rich and poor (RHIF 2.2.6)
94. Sources of income (RHIF 2.2.7)
95. SEIFA (RHIF 2.2.8)
96. Household and individual income (IDR)
97. Home ownership (IDR)
98. Income poverty (NPI 7)
99. Low income rate (Canada)
100. Children in low income families (Canada)
101. Average personal income (Canada)
102. Median share of income (Canada)
103. Government transfer income (Canada)
104. Owner-occupied dwellings (Canada).

**Performance Measures: Community Capacity**

**Demographic information**

105. Demography (RHIF 2.3.1)
106. Dependency ratio (RHIF 2.3.2)
107. Internal migration (RHIF 2.3.3)
108. Fertility (RHIF 2.3.4)
109. Population (Canada)
110. Population density (Canada)
111. Dependency ratio (Canada)
112. Urban population (Canada)
113. Aboriginal population (Canada)
114. Immigrant population (Canada)
115. 1 and 5-year mobility (Canada)
116. Population within strong Census Agglomeration Influenced Zones - MIZ (Canada)
117. Lone-parent families (Canada)
118. Visible minorities (Canada)

**Safety and Crime**

119. Community safety (RHIF 2.3.5)
120. Perception of risk (RHIF 2.3.6)
121. Repeat offending (IDR)
122. People in prison custody (NPI 11)
123. Children on long term care and protection orders (IDR)
Other

124. Carer activity (NHPC 4.5)
125. Voluntary work participation rates (NHPC 4.6)
126. Transport (RHIF 2.3.9)
127. Cost of living (RHIF 2.3.10)
128. Business activity (RHIF 2.3.11)
129. Proportion of Indigenous people with access to their traditional lands (IDR)

Performance Measures: Health Behaviours

Tobacco, alcohol and other drug use

130. Proportion of adults who are current smokers (NHPC 4.7)
131. Proportion of adolescents who are current smokers (NHPC 4.8)
132. Tobacco (RHIF 2.4.1)
133. Tobacco consumption (IDR)
134. Smoking status (Canada)
135. Smoking initiation (Canada)
136. Changes over time in smoking behaviour (Canada)
137. Smoking prevalence (NPI29)
138. Alcohol (RHIF 2.4.2)
139. Alcohol consumption (IDR)
140. Frequency of heavy drinking (Canada)
141. Alcohol consumption (NPI 30)
142. Illicit drugs (RHIF 2.4.3)
143. Drug and other substance abuse (IDR)

Physical activity

144. Proportion of adults (aged 18 years and over) who are insufficiently physically active to obtain a health benefit (NHPC 4.9)
145. Physical activity and inactivity (RHIF 2.4.4)
146. Leisure time physical activity (Canada)

Nutrition

147. Nutrition (RHIF 2.4.5)
148. Breastfeeding practices (Canada)
149. Dietary practices (Canada)

Other health behaviours

150. Sexual practices (RHIF 2.4.6)
151. Problem gambling (NPI 33)

Performance Measures: Person-related Factors

The Defining the Domains paper limits measures under this domain to measures about genetic susceptibility to particular diseases. No existing measures were found in the national or international literature. Note - the actual Person-related Factors domain itself is not limited to genetic susceptibility to disease. The only limit is to the measures that will sit under this domain. In reports, under Person-related Factors, it will be possible to comment on measures that are relevant to the Person-related Factors domain that sit under other domains.
Tier 3: Accessible, Safe, Continuous, Capable and Sustainable,
Effective, Appropriate, Efficient and Responsive.

Performance Measures: Accessible

Affordability
152. Bulk billing (also look at regional variations) (NHPC 3.17, RoGS)
153. Problems in paying medical bills eg IHS (CMWF)
154. Number or Proportion of Indigenous / non-Indigenous persons assisted through medical subsidy and prescription items (PHCAP 31)
155. Not filling a prescription due to cost by income/insurance (CMWF)

Access to pharmaceuticals
156. Availability of pharmaceuticals by area (CMWF)
157. Medicines management: The number of hours from requesting a prescription to availability for collection by the patient is 72 hours or less. (UK Quality)

Access to after hours care
158. Difficulty getting care weekends/evenings by income/insurance (CMWF)
159. % practices providing after hours care for patients (GP)
160. S AR data on After Hours Care

Access to Service
161. Access to nearest health professional (IDR, OECD)
162. Distance to nearest hospital, community centre and medical centre (RHIF 3.5.1, NPI 16 and 17, Canada)
163. Rates public/private/acute beds per 1,000 population by area (CMWF)
164. Unable to get care because not available where live (CMWF)
165. Adult's access to preventative/ambulatory health services (US HEIDIS)
166. Availability of mental health/chemical (US HEIDIS)
167. Proportion of Indigenous Australians experiencing barriers to accessing the health system compared to non-Indigenous ie cost, location, discrimination (IHS).
168. Median delay between onset of chest pain and presentation for emergency care at hospital (NHPA)
169. Median delay between onset of stroke and presentation for emergency care at hospitals (NHPA)
170. % of patients admitted to hospital with acute stroke who are managed in specialised stroke units (NHPA)

Workforce
171. Frequency of visit to community - GPs, nurses, AHWs, AHP, specialists in rural and remote areas (availability GPs NHPC 3.18 and Ind Disadvantage)
172. Number of days at work in clinical services by staff category (doctors, nurses, health workers, counsellors, allied health workers and Aboriginal health workers) (PHC AP 28)
173. Availability of staff for x days per week by staff category (doctors, nurses, health workers, counsellors, allied health workers and Aboriginal health workers) (PHCAP 29)
174. Numbers of GPs and EFW, Community health services, maternal and child health services. Indigenous health services, public dental, alcohol and other drug treatment services by region (RHIF 3,5,2, RoGS)
175. Female GPs (RoGS)
176. Number of patients per GP by area (CMWF)
177. Number of GPs per person adjusted for community need (CMWF)
178. Difficulty seeing specialist by age/income (CMWF)
179. Workforce availability in primary health care services where there are large numbers of Aboriginal and Torres Strait Islander people (PHCAP 107, NPI 22)
180. Workforce availability in hospitals that provide services to Aboriginal and Torres Strait Islander populations (NPI 23)
181. Availability of primary care providers (US HEDDIS)
182. Children's access to primary care providers (US HEIDIS)
183. Availability of obstetrical/prenatal care providers (US HEIDIS)
184. Number of primary health care per head of service population (doctors, nurses, health workers, counsellors, allied health workers and Aboriginal health workers) (PHCAP 107)
185. Ratio of full time equivalent staff to estimated zone population, by profession (NT 26)
186. Rate of Aboriginal environmental health workers employed in the public sector per 1,000 Aboriginal persons (PH) - Tier 2

Access to surgery
187. Access to elective surgery (NHPC 3,19)

Access Dental
188. Dental care (US CF)
189. Availability of dentists (US HEIDIS)

Performance Measures: Safe

Surgery and medical misadventure
190. Rates of medical and surgical misadventure (reporting complaints and critical incidents in hospitals NPI 14.1,) (RHIF 3.6.1).
191. Estimated deaths associated with medical mistakes compared to the leading causes of death in the US (US CF)
192. Discharge in an unstable condition by race/ethnicity (CMWF)
193. Hospital separations with adverse event by external cause group - Indigenous Rate Ratio to all Australian rate (NHPC 3.21, NHPC 5.17).
194. Hospital acquired infection (NZ) Surgical site infection rates (RoGS)
195. Admissions having missed diagnosis or inadequate treatment in emergency patients (US MS)
196. hip fractures while in health care facilities and in the community (Canada 6a, 6b, 6c)
197. 46) Perineal status after delivery - % mothers with third or fourth degree lacerations (RoGS)

Staff safety
198. workers compensation claims for health sector workers (Canada)
199. some local info on needle stick injuries etc. (Canada)
200. Number of OH&S incidents compared to previous year (PHCAP 95-96)

Clinical management
201. preventable adverse events and causes (US CF)
202. preventable adverse events and outcomes (US CF)
203. preventable adverse drug events (US CF)
204. trends and types of medication-prescribing mistakes (US CF)
205. potentially inappropriate prescribing for the elderly (US CF)

Records Management
206. Electronic prescribing and clinical data in general practice (NHPC 3.20, GP)
207. General practice with electronic information management systems (RoGS)
208. % PIP practices using computers for clinical purposes (RoGS)

Performance Measures: Continuous

Usage of care planning
209. Rate of usage of Enhanced primary care services (NHPC 3.22, NHPC 5.18, RoGS)
210. Health assessments by GPs (NHPC 3.23 and suggested by population health, RoGS)
211. Local/provincial information on how often formal plans are made for care of patients after they leave hospital (Canada)
212. % of Canadians % who have a regular family doctor by province (Canada)
213. Care planning and case conferencing (RHIF 3.7.1)
214. Effective use of PIRS care plans and case management (PHCAP 97-98)
215. Proportion of clients with preventable chronic diseases managed on care plans (by disease) (NT 11)

Collaboration
216. SAR questions of linkages with hospitals eg discharge planning, antenatal and chronic disease share care arrangements between service and hospital. Rates of AHP/ specialists visiting AMSs.
217. SAR data on rates of AHP and specialists visiting AMSs.

Waiting times
218. Waiting times - eg emergency Department, elective surgery, AHP, specialists (NHPC 3.16).
219. Emergency department waiting times by Triage category (RoGS)
220. Waiting times for elective surgery by clinical urgency category (RoGS)
221. In-hospital waiting time for femur fracture (OECD)
222. Waiting time cataract surgery (Eye)
223. Waiting times for radiotherapy (cancer) (NZ CAN 01)
224. Numbers waiting longer than 6 months for CABG/angioplasty (cardio) (NZ CAR 03 and CAR 05)
225. Size of inpatient waiting list per head of population (weighted) (UK NHS)
226. Local/provincial waiting time data (Canada 8)
227. Patients who wait less than 2 hours for emergency admissions (through A&E) (UK NHS)
228. % of outpatients seen within 13 weeks of GP referral (UK NHS)
229. % of those on waiting list waiting 12 months or more. (UK NHS)

Performance Measures: Capable

Quality assurance
230. Accreditation- % AMSs (Accreditation in GPNHPC 3.24, PHCAP 110-112, RoGS)
231. Accreditation - hospital (RHIF 3,8.1)

Level of skill of staff
232. Level of qualifications of GPs, nurses, AHW etc working in AMSs and mainstream health services.
233. % GPs with vocational recognition (RoGS)

Training
234. Workforce strategies - continuous training, cultural training, orientation policies. (Higher education and training in key health professions NPI 21, PHCAP 101).
235. Provide details of training and development opportunities by professional group and type of training undertaken (RHIF 3.9.1)
236. Proportion of new staff who have been employed for at least 6 months who have attended an orientation program (NT 40)
237. Number of OR Proportion of Health Workers trained in Hearing Health (PHCAP 44)
238. Number of OR Proportion of health workers who have nutrition specific training (PHCAP 65)
239. Selected local/provincial records on continuing education, quality assurance activities, disciplinary proceedings etc. (Canada)
240. Education and training eg all clinical employees trained in basic Hie support skills in the preceding 18 months. All practice employed nurses have an annual appraisal and personal learning plan. All new staff receive induction training. All non-clinical staff

Performance Measures: Sustainable

Expenditure
241. Expenditure on Aboriginal and Torres Strait Islander health (NPI 2) compared to needed.
242. Expenditure on health (RoGS, OECD) eg per person, by Indigenous status, by source of funds, public/private hospital, sector.
243. Proportion of annual health expenditure, as defined by the Public Health Expenditure Project, on core public health activities. (PH)
Workforce

244. Recruitment and turnover of GPs. (Note: NHPC 3.25 indicator GPs over 50 years not appropriate as many work in AMSs early in career).

245. Workforce strategies - staff recruitment and retention policies. (Higher education and training in key health professions NPI 21, PHCAP 101).

246. Reduction in staff turnover rate (PHCAP 105)

247. Staff turnover (NZ)

248. Staff stability rate (NZ)

Performance Measures: Effective/Appropriate

Note that measures that could be suitable for the Effective and Appropriate domains are presented together below. Because of the large overlap issue between these domains, the Defining the Domains paper recommended that the “Appropriate” domain will be limited to measures of care, interventions or actions that are based on standards that have been specifically established for Indigenous Australians.

Immunisation

249. Child Immunisation rates (NHPC 3.05, NHPC 5.6, RH1F 3.1.1, PHCAP 48, NPI26, NT 15, RoGS, GP, NZ- CHI01, OECD, CFN, US IHS, USCF, US HEIDIS, UK NHS, World Bank) eg Proportion of children seen in the health centre in the previous month who have immunisations due that are given the relevant immunisation (NT)

250. Adult immunisation rates (NHPC 3.06, PHCAP 50 and 51, NPI 27, NT 16, PH, RoGS, GP, Canada 14d, US IHS 5127, USCF, US HEIDIS) eg Proportion of adults seen in the health centre in the previous month who have immunisations due that were given the relevant immunisation (NT)

251. Adolescent immunisation (US HEIDIS)

252. Pneumonia (US HCF A) -
   252.1. Influenza vaccinations
   252.2. Pneumococcal vaccinations
   252.3. Blood culture before antibiotics are administered
   252.4. Appropriate initial empirical antibiotic selection
   252.5. Initial antibiotic dose within 8 hours of hospital arrival
   252.6. Influenza vaccination or appropriate screening
   252.7. Pneumococcal vaccination or appropriate screening

253. Use of prevention services (eg pap smears and flu shot) by province (Canada)

Women's health and early childhood

254. Cervical cancer screening rates (NHPC 3.03, NHPC 5.4, RHIF 3.1.2, PHCAP 3 and 4, NPI 25, NT 20, NHPA, GP, OECD, Canada, US HEIDIS, UK NHS, World Bank) eg Proportion of resident female clients having pap tests for cervical cancer in the previous 24 months period for the target group (15 — 69 years)


256. Proportion of resident clients who have an abnormal pap smear in the previous 12 months who have had appropriate followup (NT 24)

257. Proportion of pregnant women attending their first antenatal visit at or before 20 weeks gestation. (PH)

258. Proportion of pregnant resident clients attending their first antenatal visit at or before 13 and 20 weeks gestation (NT 28)
259. Prenatal care in the first trimester (US HEIDIS)
260. Average number of antenatal visits per pregnant current client (PHC AP 63)
261. Number of OR Proportion of mothers who attend postnatal followup consultation (ie normally provided at six weeks). (PHCAP 64)
262. Check-ups after delivery (US HEIDIS)
263. Timely initiation of prenatal care (US CF, US HEIDIS)
264. Number of OR Proportion of babies presenting for 2-4 week postnatal check (PHCAP 17)
265. Average number of visits per child for child health and growth assessment in children aged:
   265.1. < 6 mths,
   265.2. 7-18 mths,
   265.3. 19 mths to 3 years (PHCAP 18)

Child health

266. Number of OR Proportion of children screened according to GAA Guidelines by indigenous and non-indigenous status (NT 2 & 3 specific) (PHCAP 21)
267. Number of OR Proportion of children screened at school entry (by indigenous and non indigenous status) (PHCAP 23)
268. Proportion of resident clients aged 5 and 10 years who have been screened according to the guidelines for Healthy School Aged Kids in the previous 12 months, by gender. (NT 18)
269. Number of OR Proportion of children screened for ear disease, by age group:
   269.1. 0-5 years; and
   269.1.1. 5 years (PHCAP 45)
270. Treating children’s ear infections (US Heidis)
271. Proportion of 10 year old children having Mantoux test. (NT 18)
272. Appropriate treatment of chronic otitis media in young children (US IHS 5153)

Adult health

273. Proportion of resident clients aged 15 years and over who were screened for chronic diseases in the past year, by age group and gender (NT 1)
274. Smoking cessation counselling (PHCAP 2, US CF and US HEIDIS)
275. Number of OR Proportion of persons screened for social health issues (drug and alcohol / emotional and social well being). (PHCAP 71)
276. Colorectal cancer screening (US CF)
277. Primary prevention for non-communicable diseases (nutrition, physical activity, injury prevention and mental health — Tier 2 ) (PH)
278. Communicable disease surveillance and response (including immunisation) (PH, Canada 13a 13b 13d)
279. Effective screening of STIs (World Bank, PHCAP 69)
280. STI contract tracing (SAR)
281. Services provide free condoms in the community, in public areas in the clinic, during consultations (SAR)
282. Treatment for HIV (US CF)
283. Service runs needle exchange service for intravenous drug users.(SAR)
284. Primary prevention for illicit and licit drugs (PH)
285. Proportion of injecting drug users, reporting less than three years drug injection, seen at needle and syringe programs, who were tested for hepatitis C antibody, who had hepatitis C antibody 1995-2000 (PH)
286. Proportion of population who have been tested for chlamydia, gonorrhoea, syphilis and HIV/AIDS in the last 12 months, by age group and gender (NT 19)
287. Number and proportion of resident clients who have been seen by a dentist or dental therapist in the previous twelve months. (NT 17)
288. Annual dental visit (US HEIDIS)
289. Nutritional information for identified obese patients (US IHS 5157)

Mental health
290. Mental health care: treatment for depression (US CF)
291. Follow up hospitalisation for mental illness (US HEIDIS)
292. Mental health in primary care (UK NHS)
292.1. Volume of benzodiazepines
293. Ratio of antidepressant to benzodiazepine use (>2 weeks (GP)

Eye
294. Number of OR Proportion of persons screened for eye disease (PHCAP 32)
295. Tachoma surveillance (Eye)
296. % population screened for visual acuity and need for glasses (Eye)
297. % target population treated Trachoma (Eye)

Diabetes
298. % pregnant women screened for gestational diabetes (NHPA)
299. Measures of effective management of chronic disease and risk factors eg follow up checks required for diabetics (NHPC 3.11, PHCAP 10,12,14,27, NPI19, OECD, RoGS - glycaemia control diabetics etc), eg case management and effective follow up (Eye)
300. NT Indicators: Proportion of resident clients with diabetes who have had a HbAl c test in the last 12 months
301. Diabetes (NHPA, RoGS, GP, NZ DIA 02 DIA 04, OECD, US HCFA, US IHS, USCF, US HEIDIS) -
301.1. Biennial retinal exam by an eye professional (also Eye) (US IHS 5090)
301.2. 6 monthly/ Annual HbAlc testing (US IHS 5122)
301.3. Biennial lipid profile
301.4. Prevention Kidney complications (US IHS 5101)
301.5. Weight management (US IHS 5096)
301.6. Diabetic dental (US IHS 5089)
301.7. Nutrition (US IHS 5085)
302. QA of adherence to camera based screening protocols Diabetic Retinopathy (Eye)
   eg % VA is recorded, % pictures that are gradable
303. Chronic care management (UK NHS)
303.1. Diabetes

Asthma
304. Chronic care management (UK NHS)
304.1. Asthma
305. Asthma management (US CF)
306. % people with asthma who have a recent written Asthma Plan (NHPA Asthma 3.16,GP)
307. The ratio of prescriptions for reliever to preventer medication among asthma patients (NHPA Asthma 3.20)
Cardiovascular

308. % adult patients screened for hypertension (GP)
309. Preventative care/early intervention eg screening for diabetes, hypertension, coronary heart disease, cholesterol, well persons checks (PHCAP 10 and 11, SAR)
310. Acute Myocardial Infarction (US HCFA) -
   310.1. Early administration of aspirin
   310.2. Early administration of beta-blocker
   310.3. Timely reperfusion
   310.4. Aspirin at discharge
   310.5. Beta-blocker at discharge
   310.6. ACEI at discharge for low left ventricular ejection fraction
   310.7. Smoking cessation counselling during hospitalisation
311. Cardio - Time form presentation at emergency departments to clinical and ECG assessment and administration of appropriate reperfusion therapy (NHPA)
312. Heart Failure (US HCFA)
   312.1. Appropriate use/non-use ACEI at discharge
313. Beta blocker treatment of heart attack (US HEIDIS)
314. Medication to prevent recurrent heart attack (US CF)
315. Speed to treatment with clot-dissolving drugs following a heart attack (US CF)
316. Stroke (US HCFA)-
   316.1. Discharged on antithrombotic
   316.2. Discharged on warfarin
   316.3. Avoidance of sublingual nifedipine.
317. Stroke prevention for patients with atrial fibrillation (US CF)
318. % adults with a previously documented cholesterol test within the last 5 years (GP)
UK Quality Indicators:
319. The % of patients with newly diagnosed angina who are referred for exercise testing and/or specialist assessment.
320. The % of patients with coronary heart disease who smoke, whose notes record smoking cessation advice.
321. The % of patients with coronary heart disease, whose notes record that aspirin (or other anti-platelet or anti-coagulant therapy) is being undertaken.
322. The % of patients with coronary heart disease, who are currently being treated with beta blocker (unless contraindication).
323. % patients with a history of myocardial infarction who are currently treated with an ACE inhibitor.
324. Patient communication eg practice supports patients stopping smoking — literature and appropriate therapy.

Prescribing management

325. Proportion of consultations in which antibiotics are prescribed (GP)
326. Antibiotic treatment for sore throat (US CF)
327. Antibiotic treatment for pneumonia (US CF)
328. Medicines management: A medication review is recorded in the notes for all patients being prescribed four or more repeat medicines (excluding OTC and topical medications) (UK Quality)
Performance Measures Efficient

329. Relative expenditure on primary health care versus acute care (Expenditure Report).
330. Local/provincial costs of particular services (Canada)

Hospital

331. Recurrent cost per case-mix adjusted separation (RoGS)
332. Recurrent costs per non-admitted occasion of service (RoGS)
333. Hospital stays for patients who may not have needed admission (Canada 1 Oa 1 Oc)
334. Unit cost of maternity (adjusted for casemix and market forces) (UK NHS)
335. Unit cost of caring for patients in receipt of specialist mental health services (adjusted for casemix, quality and market forces) (UK NHS)

General Practice

336. Cost to Government of general practice per person (RoGS)

Example Performance Measures: Responsive

337. Rates of satisfaction/complaints Indigenous clients (compared with non-Indigenous) eg Indigenous Consumer Perspectives Survey. (PHCAP 125,127,133,137, Complaints hospitals NPI14, RoGS, NZ, CMWF, UK Quality, US HEIDIS) (eg practice has an agreed procedure for handling complaints)
338. % complaints resolved (NZ)
339. Trust in GPs (NHPC)
340. Patient satisfaction with treatment for cervical cancer, breast cancer, prostrate cancer (NHPA)
341. % of perceived medication needs met among patients with depressive disorders (NHPA)
342. Periodic polls of providers and public about overall satisfaction with the health system (Canada 9)
343. Patients with operations cancelled for non-medical reasons on the day or, or after admission (UK NHS)
344. Patient satisfaction or acceptability (WHO):
   344.1. Patient-rated dignity of treatment
   344.2. Patient-rated autonomy and confidentiality
   344.3. Patient-rated promptness of attention
   344.4. Patient-rated quality of basic amenities
   344.5. Patient-rated access to support networks during care
   344.6. Patient-rated choice of care provider
345. US/Commonwealth fund:
   345.1. Perceptions of health care quality
   345.2. Public perceptions of the health care system
   345.3. Consumer assessments of health plans
   345.4. Patient reports of problems with hospital care
   345.5. Satisfaction with nursing home care
Sources and Abbreviations

NHPC – National Health Performance Committee
PHCAP – Primary Health Care Access Program
NPI – National Performance Indicators for Aboriginal and Torres Strait Islander Health
NT - NT Performance Reporting System for Health Zones Project conducted by the CRC (NT) AIHW – Australian Institute of Health and Welfare – Rural, regional and Remote Health Information Framework and Indicators RoGS – 2004 Report on Government Services, Productivity Commission
NZ – Ministry of Health Indicators for District Health Boards
OECD – Organisation for Economic Cooperation and Development
Canadian Institute for Health Information
CFN – Canada First Nations
CDS – Canadian Aboriginal Diabetes Strategy Feb 2002
US HCFA - Quality Indicators for Medicare’s Health Care Quality Improvement Program (Hurst J. and Jee-Hughes M. Labour Market and Social Policy – Occasional Papers No 47)
UK Quality– United Kingdom NHS Quality Indicators
UK NHS High-level Performance Framework Indicators (Hurst J. and Jee-Hughes M. Labour Market and Social Policy – Occasional Papers No 47)
SAR – Service Activity Reporting (annual data collection with Commonwealth funded Aboriginal primary health care services)
NHPA Asthma – Technical Review and Proposed Documentation of proposed NHPA asthma indicators and data sources
GP – General Practice – Evidence –based indicators for improving the quality of health care provision in General Practice
NHPA – National Health Priority Area indicators reported through Australia’s Health (as at October 2001)
NSFATSIH – National Strategic Framework Aboriginal and Torres Strait Islander Health
CMWF – Commonwealth Fund – International Working Group on Quality Indicators Working Paper on Disparities Indicators in 5 countries
Eye – Review of OATSIH Eye Health program – recommended indicators for the future monitoring of the program
IDR – Overcoming Indigenous Disadvantage: Key Indicators Report 2003
IHS – Indigenous Health Survey (conducted by the ABS 6 yearly)
PH – Population Health adaption of NHC indicators
Attachment Three: Indicators Selected for the Aboriginal and Torres Strait Islander Health Performance Framework

### Health Status and Outcomes (Tier 1)

<table>
<thead>
<tr>
<th>Health Conditions</th>
<th>Human Function</th>
<th>Life Expectancy and Wellbeing</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Low birthweight infants</td>
<td>• Prevalence of severe or profound core activity restriction by age and sex</td>
<td>• Life expectancy for total population at birth by sex</td>
<td>• Infant mortality rate</td>
</tr>
<tr>
<td>• Top reasons for hospitalisation by principle diagnosis</td>
<td>• Number of children with special needs (aged 0-4) and (5-18)</td>
<td>• Perceived health status</td>
<td>• Perinatal mortality</td>
</tr>
<tr>
<td>• Hospitalisation ratios for injury and poisoning by age group</td>
<td>• A measure (to be developed) of community functioning</td>
<td>o health ≥ good, female, all ages</td>
<td>• Rates of SIDS</td>
</tr>
<tr>
<td>• Hospitalisation for pneumonia</td>
<td></td>
<td>o health ≥ good, male, all ages</td>
<td>• All causes age standardised deaths rates</td>
</tr>
<tr>
<td>• Circulatory disease</td>
<td></td>
<td>• Median age of death</td>
<td>• Standardised mortality ratios for leading causes</td>
</tr>
<tr>
<td>• Acute rheumatic fever and rheumatic heart disease</td>
<td></td>
<td>• Social and emotional wellbeing</td>
<td>o Standardised mortality ratios for circulatory diseases</td>
</tr>
<tr>
<td>Rheumatic heart disease</td>
<td></td>
<td></td>
<td>o Standardised mortality ratios for injury and poisoning, including suicide</td>
</tr>
<tr>
<td>• Prevalence of blood pressure</td>
<td></td>
<td></td>
<td>o Standardised mortality ratios from respiratory diseases and lung cancer</td>
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<tr>
<td>• Prevalence of Diabetes</td>
<td></td>
<td></td>
<td>o Standardised mortality ratios from diabetes</td>
</tr>
<tr>
<td>• End stage renal disease</td>
<td></td>
<td></td>
<td>o Standardised mortality ratios from cervical cancer</td>
</tr>
<tr>
<td>• Decayed-missing-filled-teeth DMFT (adult) &amp; dmft (children)</td>
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<td></td>
<td>o Standardised mortality ratios from other cancers</td>
</tr>
<tr>
<td>• HIV/AIDS, hepatitis C and sexually transmissible infection notification rates</td>
<td></td>
<td></td>
<td>• Maternal mortality</td>
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<tr>
<td>• Children’s hearing loss</td>
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</tbody>
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### Determinants of Health (Tier 2)

<table>
<thead>
<tr>
<th>Environmental Factors</th>
<th>Socioeconomic Factors</th>
<th>Community Capacity</th>
<th>Health Behaviours</th>
<th>Person-related Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Access to functional Housing with Utilities</td>
<td>• Educational status of the adult population</td>
<td>• Demographic information</td>
<td>Tobacco, alcohol and other drug use</td>
<td>• Prevalence of overweight and obesity</td>
</tr>
<tr>
<td>– This measure includes proportion of dwellings with access to electricity or gas, clean water and functional sewerage</td>
<td>• Years 10 and 12 retention and attainment</td>
<td>• Dependency ratio— including identification of the age distributions within the ratio</td>
<td>• Tobacco use by age/sex</td>
<td></td>
</tr>
<tr>
<td>• Overcrowding in housing</td>
<td>• Post secondary education – participation and attainment</td>
<td>• Single-parent families by age group</td>
<td>• Tobacco age at commencement.</td>
<td></td>
</tr>
<tr>
<td>• Appropriate storage of food and healthy standards</td>
<td>• Year 3, 5 and 7 literacy and numeracy</td>
<td>• Safety and Crime</td>
<td>• Tobacco use during pregnancy</td>
<td></td>
</tr>
<tr>
<td>• Environmental tobacco smoke: children under 15 years who live in a household with a smoker</td>
<td>• Educational status of women and mothers</td>
<td>• Community safety</td>
<td>• Harmful and hazardous alcohol consumption</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Employment status (full-time/part-time) by sector (public/private), industry and occupation</td>
<td>• People in prison custody</td>
<td>• Drug and other substance use including inhalants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o CDEP participation</td>
<td>• Substantiated notifications of child abuse</td>
<td>• Physical activity</td>
<td></td>
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<tr>
<td></td>
<td>• Income</td>
<td>o Children on long term care and protection orders</td>
<td>• Level of physical activity and inactivity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Education</td>
<td>• Rates of kinship care</td>
<td>• Nutrition</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Other capacity measures</td>
<td>• Dietary behaviour including levels of intake of sweetened beverages, fruit and vegetable and also fat intake</td>
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<tr>
<td></td>
<td></td>
<td>• Transport</td>
<td>• Breastfeeding practices</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Proportion of Indigenous people with access to their traditional lands</td>
<td>• Other health behaviours</td>
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<td></td>
<td></td>
<td></td>
<td>• Self reported unsafe sexual practices</td>
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</tbody>
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## Health System Performance (Tier 3)

<table>
<thead>
<tr>
<th>Effective</th>
<th>Appropriate</th>
<th>Efficient</th>
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</thead>
</table>
| • Measures of chronic disease management. This would include measures that are relevant to  
  o Diabetes  
  o Cardiovascular  
  o Renal  
  o Respiratory  
  o Cancers  
  o Chronic mental illness management  
  • Antenatal care  
  • Ambulatory sensitive/preventable hospital admissions  
  • Key procedures - differentials (could be surgery rates eg cataract surgery)  
  • Interventions  
  o Immunisation (child and adult)  
  o Cancer screening (in particular cervical)  
  • Access to brief interventions and broader health promotion (particularly for tobacco and alcohol)  
  • Due to the similarity of definition between Effective and Appropriate it was decided the measures selected would be relevant to both domains. The measures are therefore only listed once under Effective.  
  • Avoidable and preventable admission  
  • Avoidable and preventable deaths |

<table>
<thead>
<tr>
<th>Responsive</th>
<th>Accessible</th>
<th>Safe</th>
</tr>
</thead>
</table>
| • Consumer satisfaction  
  o A measure of people ‘voting with their feet’, such as discharge against medical advice  
  o Access to mental health services  
  o Governance  
  o A measure of competent governance systems will be a priority for data development  
  • Access to services by types of service compared to need (eg primary care, hospital, dental and allied health and post acute care and palliative care)  
  • Affordability of health services including, but not limited to access to bulk billing  
  • Availability of pharmaceuticals  
  o not filling prescriptions due to cost  
  o Pharmaceutical Benefits Scheme expenditure per capita by region  
  • Access to after hours primary health care  
  o A proxy measure could be the use of Emergency Departments for triage category 4 & 5 (ie problems that could be dealt with within a primary health care setting)  
  • No performance measures are included for this domain:  
  o The measures that fit within this domain are not considered a high priority for the HPF as they are not likely to be issues that significantly and specifically affect Aboriginal and Torres Strait Islander peoples.  
  o It is considered more appropriate that the NHPC report against such measures and include disaggregations by Indigenous status in keeping with its approach to determine ‘is it the same for everyone’. |

<table>
<thead>
<tr>
<th>Continuous</th>
<th>Capable</th>
<th>Sustainable</th>
</tr>
</thead>
</table>
| • Care Planning – a measure of the proportion of clients with preventable chronic diseases managed on care plans will need to be developed as there is currently no mechanism to enable it to be measured  
  • Rates and usage of Enhanced Primary Care items on MBS  
  • Use of cancer treatment protocols for Indigenous vs non-Indigenous Australians  
  • Extent to which individuals have a regular GP or health service  
  • Accreditation across service types  
  o This will be measured in areas where a high proportion of the population is Indigenous because if it was measured across Australia it becomes a mainstream measure  
  • Aboriginal and Torres Strait Islander people in Tertiary Education for health related disciplines (eg nurses, doctors and other allied health professions)  
  • Proportion of Aboriginal and Torres Strait Islander people in health workforce  
  • Expenditure on Aboriginal and Torres Strait Islander health compared to need  
  o This will draw on information in the Report on Health Expenditures for Aboriginal and Torres Strait Islander people and  
  o Will be reported as a proportion of total expenditure on health (ie Indigenous and non-Indigenous) and over time  
  • Relative per capita expenditure across population health, primary health care and acute care  
  • Recruitment and retention of clinical and management staff (including GPs) |

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