

Introduction

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How good is Australia's health?

How does it vary between groups?

What things influence it?

What is being done to improve it and how well is that working?

These are the big questions behind *Australia's health 2010*, the 12th biennial report from the Australian Institute of Health and Welfare (AIHW). As a report card to the nation, *Australia's health 2010* brings together the latest available national statistics compiled by the AIHW from many data sources. Its target readers are interested members of the public, clinicians, researchers, students, policy makers and government. Many of the topics it covers are more fully treated in separate AIHW publications, all of which are available on the AIHW website.

We can see from this edition of *Australia's health* and its recent predecessors that there are indeed some answers to these questions. The health of Australians is generally good, it is improving on many fronts and it compares well with other countries.

But the 'simple' big-picture answers have a complex background. They depend on many statistics that are in turn derived from a vast array of data (see Box 1.1) compiled by many people throughout Australia and its extended health system. Those Australia-wide contributors include people working in public and private hospitals, in research agencies, in government health departments, in special health registries such as those for cancer, and in state- and territory-based registries of births, deaths and marriages.

Ultimately, it is all Australians who contribute because there would be no data without them. Through them we also learn about the exceptions, some of them disturbing, to the generally good news. These exceptions include the rising levels of diabetes and obesity, the poorer health of those in lower socioeconomic areas, and especially the health problems that affect so many of Australia's Indigenous people. The aim of *Australia's health*, therefore, is to present all the key parts of the national picture, positive or not.

Box 1.1: Data sources and why some statistics appear old

Each of the many data sources used in *Australia's health 2010* has strengths and limitations that affect how they can be used and what we can infer from the results. The Australian Institute of Health and Welfare (AIHW) takes great care to ensure that data used here are correct and that the conclusions drawn are robust. At various points in this report you will see boxes that highlight issues to consider when interpreting results derived from major data sources.

Although this report is published in 2010, nearly all of the statistics refer to 2008 or earlier. Why is this? First, some data, such as population-based surveys, are collected every 3 or 5 years, or even less often. Second, whether data are collected recently or not, it can often take a year or more before they are fully processed and released to the AIHW. Finally, the AIHW in turn often needs some months to ensure the quality and accuracy of statistics and their analysis before they are released.

Australians place great value on health, and their expectations of the health system are high. This places demands on the system—and notably on governments—to keep doing better. This means minimising mistakes and improving how the system deals with a growing range of challenges. How can it meet the complex needs in dealing with chronic diseases, for example, which continue to become more common as the population ages? Can services to rural areas be improved and how can they attract enough doctors to work there? If public hospitals are in crisis, how can this be avoided? And so on.

Indeed, at the policy level, recent initiatives suggest a mood for reform. Commissioned by the Australian Government, three far-reaching national reports were issued in 2009. They cover health promotion and prevention, primary and hospital care: a roadmap for action by the Preventative Health Taskforce, the draft National Primary Health Care Strategy, and the final report of the National Health and Hospitals Reform Commission. If these reports lead to changes, data will be needed to help drive and guide them, just as data continue to be needed with the vast range of usual business. *Australia's health 2010* and its successors can be part of the process.

This first chapter begins by discussing what health is and presenting a brief picture of Australia today. It then describes some of the broad practical and social factors that Australia needs to consider in its efforts to improve health. Next, it outlines the Australian health system and how its performance is being measured, and follows with a summary of some recent developments in the national health information arena. The chapter concludes by summarising the structure of the rest of the report.

1.1 Understanding health

What is health?

Ideas continue to evolve about what it is to be healthy or unhealthy. One view focuses mostly on the individual and emphasises the presence or absence of disease and of medically measured risk factors. A broader and more widely accepted view includes a wide range of social and economic risk and protective factors along with various aspects of wellbeing. Taking 'health' at its simplest, the World Health Organization (WHO) defines it as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (WHO 1946). This definition has long encouraged health researchers to take a more all-round view of health.

This report is based on the ideas that health is an important part of wellbeing, of how people feel and function; that it contributes to social and economic wellbeing; that it is not simply the absence of illness or injury, and there are degrees of good health as well as of bad health; and that health should be seen in a broad social context. It can be useful to take a longer range view as well. Factors such as smoking, heavy alcohol use and high blood pressure—to mention just a few—are known to pose serious long-term risks to our health; and disease processes can develop over many years before they show themselves through symptoms. Taking account of this, and of the social factors that influence our health in various ways, it could be said that *healthy people feel and function well in body and mind and are in a condition to do so for as long as possible*.

The development of health statistics is influenced by this evolution in thinking. Although most health statistics are still about ill health (mortality and diseases), there are now serious efforts in Australia and many other countries to develop statistics on the broader aspects

of health. The International Classification of Diseases and Related Health Problems (now in its 10th revision), which is mainly used to measure ill health, is now complemented by the International Classification of Functioning, Disability and Health (adopted in 2001), which is used for measuring levels of functioning and health. Along with these advances, it is now accepted that physical, mental and social wellbeing are inextricably linked to our environment and social values.

A framework

This book is based on the conceptual framework presented in Figure 1.1. It shows that levels of health and wellbeing ('how good is Australia's health?') depend on two broad forces: determinants ('what things influence health?') and interventions and their resources ('what is being done to improve it?'). This closely matches the framework used in our companion publication, *Australia's welfare 2009* (AIHW 2009).

There are many determinants and they interact in complex ways. They include behaviours such as smoking, diet and physical activity, and much broader factors such as our social and environmental background—and all of these interacting with our genetic makeup (see Chapter 3). Interventions can range from personal services to treat us when we are sick through to broad preventive campaigns aimed at determinants such as obesity or physical inactivity.

Two further things should be taken into account in using this framework and its parts. The first is to consider the features and needs of certain groups—not just of individuals or the population as a whole—in terms of their health, their determinants and the care they receive. The second is to remember that Australia's health can be viewed as reflecting the performance of society as a whole, not just of the health system.

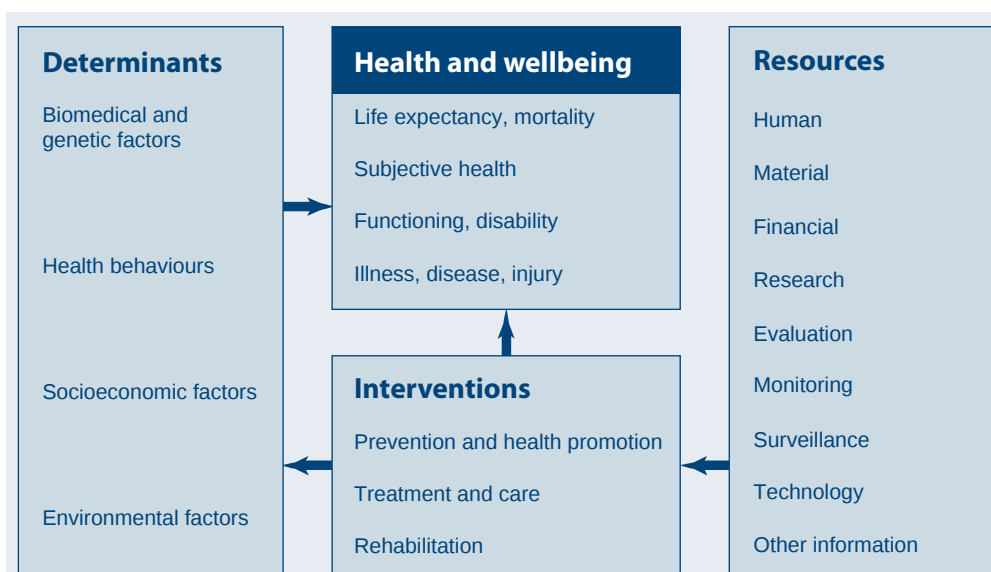


Figure 1.1: Conceptual framework for Australia's health 2010

Australia at a glance



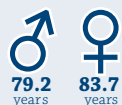
21.9 million people lived in Australia in June 2009.



Indigenous people were estimated at about 550,000 in June 2009, about 2.5% of the total population.



Fertility rate was 1.97 in 2008, the highest since 1977.



Life expectancy continues to increase, so an Australian male born today can expect to live to 79.2 years and a female to 83.7 years.



Australians aged 80 years or over now number about 800,000 (3.7% of the total population); nearly two-thirds of them are female.



64% of people live in capital cities, numbering 14 million in June 2009.



25% of Australians were born overseas, especially the United Kingdom, New Zealand and Asia.



Unemployment was 5.5% in December 2009.



Australia was 12th wealthiest among OECD countries, based on gross domestic product (GDP) per person in 2007.



Expenditure on health was 9.1% of GDP in 2007–08, amounting to over \$103 billion or \$4,874 per person.

1.2 Australia at a glance

Australia is a vast continent with a relatively small population: 21.9 million people as at June 2009. The population is highly urbanised, with over 64% living in capital cities and mostly along the eastern seaboard and the south-eastern corner of the continent.

The Australian population is ageing, and this affects requirements for health and aged care services, the economy, and income support structures. Population ageing is marked by an upwards shift in the age structure, so the proportion of younger people declines as the proportion of older people increases. The median age of the population has increased from 31.6 years in 1989 (ABS 2008a) to 36.9 years in 2008, and is projected to increase to between 38.7 and 40.7 years in 2026 (ABS 2008b).

1.3 Improving health and measuring performance

Many things influence health—as further described in Chapter 3—including preventive and treatment interventions. Living in a country that is socially and economically prosperous is arguably the most important factor in ensuring a good average level of health for a population. A prosperous country can afford to spend more on education and health care, thereby improving the health of its population. This can lead to improved employment that in turn can lead to more economic and social prosperity, and so maintain the healthy cycle.

However, these influences are not experienced to the same degree by all groups. There are differences among groups, such as their education and income levels, their choices about healthy living, and so forth.

Action on broad social risk and protective factors can be seen as the widest and most far-reaching form of ‘health intervention’. Such action is among the great aims of society for reasons that include health, in its narrower sense, but which go well beyond it. It follows that this involves much more than the health system. However, that system can do much in its own right. Its activities range from clinical and preventive services and programs through to efforts to help improve the physical, social and economic environment for groups or individuals at special risk.

Given the great range of influences on health, major improvements depend on strong partnerships between components of the system—such as public and private health and clinical care—and require that the health sector works with other sectors to make the best use of available resources. Partnerships are also vital between the health system and others involved in the lives of those using the system, such as family and friends, teachers and employers.

As in other areas of public policy, pursuing the best health for a society involves value judgments and includes political processes with competing interests. Along with limited resources, the challenge of providing improved health requires choices, priority setting and trade-offs between the health sector and other sectors, between prevention and treatment services, between improving health overall and reducing inequalities, and between short-term and longer term objectives.

National health performance

In 2001, Australia's National Health Performance Committee adopted a conceptual framework designed for measuring health system performance, the National Health Performance Framework (NHPF). It was revised in 2008 and the result is shown in Figure 1.2 in a shorter form. It can be seen that some of the NHPF's major features are consistent with the conceptual framework for this report (Figure 1.1), through two of the NHPF's three 'domains', namely 'health status and outcomes' and 'determinants of health'. In particular, however, the NHPF offers a structure for considering the performance of the health system. The framework's 'dimensions' include:

- availability and accessibility of services and programs
- safety of care
- effectiveness of interventions in achieving the desired outcome
- responsiveness of the health system to individual or population needs
- the degree to which care is integrated and coordinated.

Based on the NHPF, Australia's health ministers have agreed on a series of performance indicators. Chapter 9 describes those indicators and discusses the latest related statistics.

Health status and outcomes			
Health conditions	Human function	Wellbeing	Deaths
Determinants of health			
Environmental factors	Community and socioeconomic factors	Health behaviours	Biomedical factors
Health system performance			
Effectiveness	Safety		Responsiveness
Continuity of care	Accessibility		Efficiency and sustainability

Figure 1.2: The National Health Performance Framework

1.4 The Australian health system: an outline

The Australian health system is complex, with many types of public and private service providers, and a variety of funding and regulatory mechanisms.

Those who provide health services include medical practitioners, nurses, other health professionals, hospitals, clinics, and government and non-government agencies. Funding is provided by all levels of governments, health insurers and individual Australians. Health services and funding are covered in depth in chapters 7 and 8, but an overview is provided here to acquaint the reader with major elements of Australia's health system.

Overall coordination of the public health-care delivery system is the responsibility of federal, state and territory health ministers. They are supported by the Australian Health Ministers' Advisory Council (AHMAC), a committee of the heads of the Australian Government, state and territory health authorities. AHMAC advises Australian health ministers on policy, resources and financial issues.

Box 1.2: Is this description of the health system accurate?

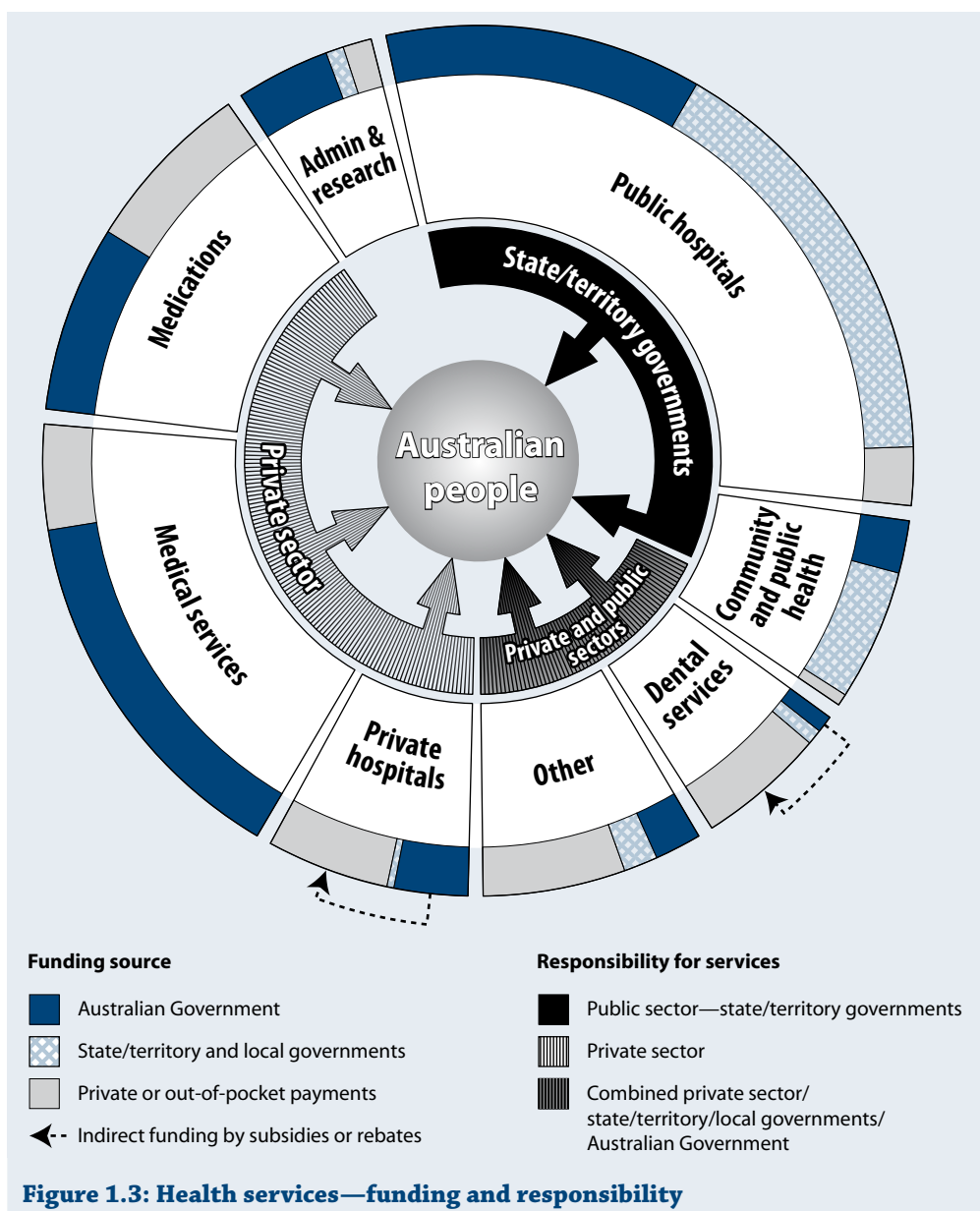
As already specified, the Australian Government has before it three major reports issued in 2009 and they contain many recommendations. Some of those recommendations, if taken up, may lead to significant changes to Australia's health system. However, this section describes the system at the time that *Australia's health* goes to print in the first half of 2010.

Given the complex funding arrangements and multi-faceted nature of the health system, it is no wonder that the public can find it difficult to understand who is responsible for their services and how to effect change. Figure 1.3 represents the main groups of health services, their funding sources and who has responsibility for providing them. It provides an at-a-glance picture to help answer the question, 'Who funds and who runs the health system in Australia?' More complete information about service provision and funding is found in chapters 7 and 8.

The (white) middle ring shows the major groups of services; the outer ring shows who funds each group and in what proportion; and the inner ring shows who actually delivers the service—the public sector, the private sector or both. Starting with the outer ring, the proportion of different funding sources for each service group is colour-coded. Funding is provided by the Australian Government or state, territory and local governments, as well as by private health insurance and out-of-pocket payments by individuals. Where Australian Government funding is provided indirectly in the form of subsidies or rebates, this is indicated by a broken arrow.

In the middle ring, the size allocated to each service group relates to its total expenditure. *Public hospitals*, *Private hospitals*, *Dental services* and *Medications* are familiar elements of the system. The *Community and public health* group includes community nursing and public health education campaigns, among others. *Medical services* includes general practice and specialist care as well as pathology and medical imaging. *Other* includes patient transport and aids, as well as health professionals such as physiotherapists and psychologists. *Administration and research* includes state departments of health, and hospital or community health administration and research. Examples are not exhaustive and each group of services consists of many types of activities.

Private sector providers (inner ring in the figure) include individual medical practices and pharmacies. Public sector service provision is the responsibility of state and territory governments, in the case of public hospitals, and a mixture of Australian Government and state, territory and local governments for community and public health services.



Who pays for health services?

Over two-thirds of total health expenditure in Australia is funded by government, with the Australian Government contributing two-thirds of this, and state, territory and local governments the other third. The Australian Government's major contributions include the two national subsidy schemes, Medicare and the Pharmaceutical Benefits Scheme (PBS). Medicare subsidises payments for services provided by doctors, optometrists and other allied health professionals such as clinical psychologists. The PBS subsidises payments for a high proportion of prescription medications bought from pharmacies, with individuals contributing out-of-pocket payments for these services as well. The Australian Government and state and territory governments also jointly fund public hospital services.

Between them, these government arrangements aim to give all Australians—regardless of their personal circumstances—access to adequate health care at an affordable cost or no cost. These schemes are further subsidised by social welfare arrangements, with larger rebates provided for individuals or families who receive certain income support payments (such as for unemployment or disability). There are also special health-care arrangements for members of the Australian Defence Force, and for war veterans and their dependants.

Services and subsidies

Most people's first contact with the health system is through a general medical practitioner (GP). Patients can choose their own GP and are reimbursed for all or part of the GP's fee by Medicare. For specialised care, patients can be referred by GPs to specialist medical practitioners, other health professionals, hospitals or community-based health-care organisations. Community-based services—a range of which can also be accessed directly by patients—provide care and treatment for such health concerns as mental health, alcohol and other drug use, and family planning.

Patients can access public hospitals through emergency departments, where they may present on their own initiative, through the ambulance services, or after referral from a medical practitioner. Public hospital emergency and outpatient services are provided free of charge, as is inpatient treatment for public patients. People can also choose to be treated as private patients when they are in hospital, whether the hospital is a public or a private hospital. Those admitted to public hospitals can choose to be treated there as private patients, and others can choose to be admitted to a private hospital.

Private patients treated in a private hospital can select their treating specialist, but charges then apply for all of the hospital's services (such as accommodation and surgical supplies). Medicare subsidises the fees charged by doctors, and private health insurance contributes towards medical fees and hospital costs.

Australians also visit dentists and other private sector health professionals such as physiotherapists, chiropractors and natural therapists. Costs are usually met by the patients themselves or with the support of private health insurance.

Several state and territory governments and the Australian Government have established free 24-hour telephone-based health advice services in recent years. These are staffed by health professionals who answer queries from callers about health problems, assisted by specialised reference software. The service aims to become nationwide and at the time of writing this report in the first half of 2010 it covers the Australian Capital Territory and the Northern Territory, New South Wales, South Australia and Western Australia.

Health insurance

In addition to coverage by Medicare and the PBS, Australians have a choice of a variety of private health insurance schemes. At the end of December 2009, 44.7% of the population was covered by basic private health insurance (PHIAC 2010). Participation in private health insurance membership is encouraged by a federal government tax rebate scheme. Hospital insurance schemes cover services in private hospitals as well as those provided in public hospitals for private patients. These are supplemented by additional schemes that cover a wide range of allied health and other professional services, including some alternative or complementary health services.

Other health services

The services above are complemented by public health preventive services such as:

- immunisation services and other communicable disease control (including biosecurity)
- public health education campaigns (including health promotion in the areas of nutrition and physical activity)
- activities to ensure food quality
- injury prevention activities
- programs to reduce the use and harmful effects of tobacco, alcohol and illicit drugs
- environmental monitoring and control
- screening programs for diseases such as breast cancer, cervical cancer and bowel cancer.

Who regulates health services?

Health services are regulated in various ways. State and territory governments are responsible for licensing or registering private hospitals (including free-standing day hospital facilities); and each state and territory has legislation relevant to the operation of public hospitals. State and territory governments are also largely responsible for industry regulations, such as the sale and supply of alcohol and tobacco products. Profession-specific registration boards established by each state and territory government are responsible for registering medical practitioners and other health professionals until July 2010, when the Australian Health Practitioner Regulatory Authority is scheduled to assume this responsibility as part of a national scheme.

The Australian Government's regulatory roles include overseeing the safety and quality of pharmaceutical and therapeutic goods and appliances, managing international quarantine arrangements, ensuring an adequate and safe supply of blood products, and regulating the private health insurance industry. There is also an established role for governments in the regulation of food safety and product labelling.

Other parts of the system

Health services are supported by many other agencies. Research and statistical agencies provide the information needed for disease prevention, detection, diagnosis, treatment, care and associated policy. Consumer and advocacy groups contribute to public discussion and policy development. Professional associations for health practitioners set professional standards and clinical guidelines. Universities and hospitals train undergraduate and postgraduate health professionals. Voluntary agencies contribute in various ways, including raising funds for research, running educational and health promotion programs, and coordinating voluntary care.

Although they are not seen as strictly part of the health system, many other government and non-government organisations play a role in influencing health. Departments of transport and the environment, liquor licensing authorities, the education sector and the media are just a few examples.

1.5 National health information

Health information is a fundamental component of the evidence base for developing and evaluating health policies and programs. In this report 'national health information' refers mainly to statistical information derived from surveys or administrative data. (More broadly, health information includes research into the nature, causes and mechanisms of disease as well as clinical trials and other research into diagnosis and treatments.)

Since 1993, the collection of national health information in Australia has been governed under the National Health Information Agreement (NHIA), whose signatories are the Australian Government Department of Health and Ageing, state and territory health authorities, the Australian Bureau of Statistics, the AIHW, the Department of Veterans' Affairs and Medicare Australia. The NHIA provides for a cooperative approach to developing, collecting and exchanging national health information, and helps to improve access by community groups, health professionals, and government and non-government organisations. A major product of the NHIA is the *National health data dictionary*, which is updated annually to provide standards for national health information and is used as a guide for gathering health data.

What is health information?

Health information is described in the NHIA as data concerned with:

- the health status and risks of individuals and populations
- the provision of health care services, health promotion and disease prevention programs, including information on the uses, costs and outcomes of services and programs, and the resources required to provide them.

In the context of the conceptual framework outlined in Figure 1.1, the health information collected under the NHIA is about:

- assessing the level and distribution of the health of populations
- measuring the level, distribution and influence of health determinants (see Section 3.1 for definition)
- quantifying the inputs to the health system
- monitoring and appraising health interventions
- furthering knowledge through research and statistics
- evaluating the performance of the health system
- understanding the interrelationships of all of the above.

How national health information is governed

The NHIA is governed under AHMAC; its principal committee, the National e-Health and Information Principal Committee (NEHIPC); and the National Health Information Standards and Statistics Committee (NHISSC), which is a standing committee of NEHIPC. The various major bodies and their reporting relationships are shown in Figure 1.4.

Important activities for the NHISSC include performance reporting for the Council of Australian Governments (COAG) National Healthcare Agreement and dealing with new and emerging information issues related to the development of e-Health systems.

The NHISSC also has responsibility for the endorsement of metadata standards for inclusion in the national health metadata registry, and provides stewardship of the national health performance framework on behalf of AHMAC. It provides advice to NEHIPC on national statistical protocols and standards for data linkage, geocoding and data anonymisation and, in conjunction with the Australian Collaborating Centre for the WHO Family of International Classifications, provides advice on the classification needs for health information.

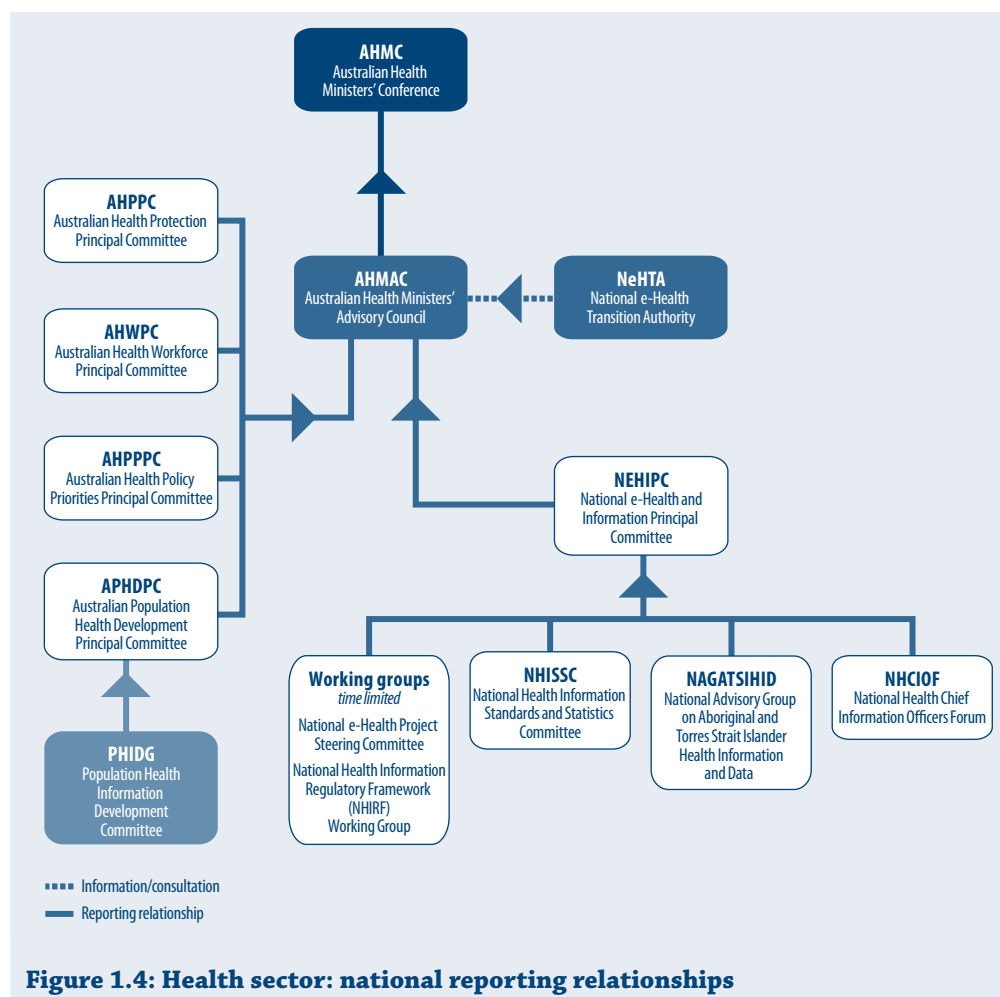


Figure 1.4: Health sector: national reporting relationships

Developments and achievements

The AIHW acts as the Committee Secretariat to the NHISSC and works closely with it to promote health information development. A particular focus of its work over the past 2 years has been the new national performance reporting regime introduced by COAG to support its reform directions. The development of indicators, informed by nationally consistent data from the jurisdictions, has been a key focus during this period. Notably, COAG's emphasis on timely reporting is driving the refinement of data supply and validation processes. In working to deliver more timely data, the AIHW and NHISSC are continuing to ensure that data are nationally consistent and of sufficient quality for their purpose.

Significant achievements since the publication of the last *Australia's health* in 2008 include:

- developing and specifying the technical detail of COAG performance indicators, and the beginning of the data development work needed to ensure the COAG performance reporting regime is well-supported; this work being done under the auspices of the inter-jurisdictional NHISSC
- work on the statistical underpinnings of the national e-Health agenda, including analyses of the future data supply chain and collaboration with the National e-Health Transition Authority (NEHTA) to understand implications for key elements of the AIHW's statistical collections, such as terminologies, the individual e-Health record and the discharge summary
- the AIHW's data and analysis contributions to the National Health and Hospitals Reform Commission 2009 report
- work involving the Australian Commission on Safety and Quality in Health Care and the AIHW in developing a draft set of national health-care safety and quality indicators
- improvement in the monitoring of the safety and quality of maternity care, and maternal and perinatal outcomes in line with recommendations in the Australian Government report, *Improving maternity services in Australia, the report of the Maternity Services Review 2009*. The report recommended the implementation of arrangements for consistent, comprehensive national data collection, monitoring and review for maternal and perinatal mortality and morbidity
- work involving Cancer Australia, other peak bodies responsible for cancer control and the AIHW to provide improved data on cancer prevalence, outcomes and screening programs
- development of a data set specification to underpin the collation of health workforce statistics from the new National Registration and Accreditation Scheme that will replace state-based registration of health practitioners
- development of metadata associated with new or refined national data sets, registries and suites of indicators.

1.6 How this report is presented

This report generally follows the framework depicted in Figure 1.1 and the structure of its predecessor, *Australia's health 2008*. The main features of the chapters are described below. Chapters 2 to 8 provide key facts at the beginning of each chapter to summarise important messages that follow. Boxes and figures within the chapters provide extra information that may be useful to the reader and 'user friendly' language has been used as much as possible.

Chapter 2 provides an overview of the health status of Australians and answers questions such as 'Which diseases and conditions impose the greatest burden on our population?' and 'Is our health improving overall?'.

Chapter 3 focuses on determinants, the complex mix that influences our health: biomedical and genetic factors, health behaviours, socioeconomic factors and environmental factors. The chapter discusses why some diseases happen in the first place and which preventable risk factors contribute to them.

Chapter 4 covers the main diseases and injuries seen in Australians and tracks changes in their levels, as well as their effects on health system use.

Chapter 5 describes the health of a range of population groups and shows that some, especially Aboriginal and Torres Strait Islander people, do not share in Australia's generally good health.

Chapter 6 takes a view across people's life span, summarising the health of babies, children and young people, working-age people and older people.

Chapter 7 presents extensive information on health services and their use in Australia, including public health services, hospital services, and services provided by doctors and other health professionals.

Chapter 8 examines health system expenditure and funding, and describes statistics on the health workforce. It outlines some of the complexities of resourcing the health system.

Chapter 9 focuses on the performance of the health system, using indicators that were designed to summarise that performance.

Supplementary tables covering a range of topics are included online at <www.aihw.gov.au>. Many of the tables provide time series information. Throughout the text, these tables are indicated using an 'S' and the following symbol : for example, 'See Table S27 .

A list of abbreviations and a glossary are at the end of the report.

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