



Australian Government

**Australian Institute of
Health and Welfare**

*Authoritative information and statistics
to promote better health and wellbeing*

AIHW submission to the Standing Committee on Community Affairs, References Committee

**Inquiry into Australia's domestic response to the World Health
Organization's (WHO) Commission on Social Determinants of
Health report 'Closing the gap within a generation'**

Australian Institute of Health and Welfare
Canberra

Scope of the submission

The Australian Institute of Health and Welfare (AIHW) welcomes the opportunity to make a submission to the *Inquiry into Australia's domestic response to the World Health Organization's (WHO) Commission on Social Determinants of Health report 'Closing the gap within a generation'*.

AIHW has a statutory role to collect, produce and coordinate health and welfare related information and statistics. In line with its expertise, AIHW's submission will centre on items (c)(iii) and (d) of the terms of reference.

- 1) The extent to which the Commonwealth is adopting a social determinants of health approach through appropriate Commonwealth data gathering and analysis.
- 2) Scope for improving awareness of social determinants of health.

About AIHW

AIHW is a major national agency set up by the Australian Government under the Australian Institute of Health and Welfare Act to provide reliable, regular and relevant information and statistics on Australia's health and welfare. AIHW is an independent statutory authority established in 1987, governed by a management Board, and accountable to the Australian Parliament through the Health and Ageing portfolio.

AIHW's aim is to improve the health and wellbeing of Australians through better health and welfare information and statistics. AIHW collects and reports information on a wide range of topics and issues, ranging from health and welfare expenditure, hospitals, disease and injury, and mental health, to ageing, homelessness, disability and child protection. The Institute's mission is 'authoritative information and statistics to promote better health and wellbeing'.

AIHW holds a large number of National Minimum Data Sets which cover a wide range of both health and welfare areas (see Appendix A). The AIHW also maintains and extensively uses the National Mortality Database and the National Death Index.

The accuracy and reliability of information is critical. AIHW has made significant investments in our meta-data repository, MeTEOR, to encourage national consistency.

AIHW has an exemplary record in maintaining the privacy and security of information on individuals, critical in the sensitive health and welfare areas. This has been achieved via a combination of regulatory arrangements (Privacy Act, AIHW Act, AIHW Regulations) and sound practices.

As well as reporting on its own data holdings, AIHW regularly undertakes analysis using publicly available datasets. The Institute releases around 150 publications every year including two flagship publications *Australia's Health* and *Australia's Welfare* (released in alternate years). These substantial and well-researched publications highlight the current state of play in these sectors and are an excellent resource for information on health and welfare needs and services in Australia.

1. Commonwealth data gathering and analysis

The Commission's recommendations

The Commission's report states that evidence-based policy-making requires good data on:

- the extent of the problem
- up-to-date evidence on the determinants
- what works to reduce health inequities.

In working towards minimum health equity surveillance system the first requirement would be to ensure the availability of basic mortality and morbidity data, stratified by socioeconomic group and by regions. The Commission suggests that countries also need to:

- build routine health statistics where they do not exist
- improve routine health statistics to allow health and mortality time-trends to be measured by sex and social strata
- improve the representativeness, statistical power, data quality and methods, consistency/comparability, geo-referencing facility and frequency of surveys
- improve knowledge about health and mortality across all ages and social strata.

In working towards a more *comprehensive* health equity surveillance system, the Commission advocates that data on the most important social determinants of health should be collected and analysed together with health data. In particular it is suggested that a comprehensive surveillance system should provide causal evidence on a range of social determinants.

Australia's current position

Health and socioeconomic status in Australia

Compared to many countries, Australia is in an enviable position in terms of health outcomes, at least at the national level. In 2009, Australia was ranked sixth among OECD countries for life expectancy at birth for both males and females. Australian life expectancy has increased over the past century for a number of reasons including the control of many infectious diseases, improvements in hygiene and sanitation, advances in medical care, rising living standards and better working conditions, better nutrition and health education, and significant reductions in smoking over the last several decades.

However, there is no doubt that for some sub-populations, health and social outcomes can be improved.

Differences in socioeconomic position affect the circumstances in which people are born, grow, live, work and age. Differences in individual circumstances make people more or less vulnerable to poor health outcomes through mechanisms such as material conditions, psychosocial support, and health related behaviours. The health system can reduce inequality through well-targeted health promotion, disease prevention and treatment.

AIHW would draw to the Committee's attention that the Commission's recommendations have been prepared in a multilateral environment and have sought to be broadly applicable to a wide range of national circumstances. However, the specifics of any government's response should derive from the particular circumstances and the degree of avoidable health inequality it faces. Australia is starting from an enviable position, particularly in terms of our

economic fundamentals, compared to many other developed countries. In addition, Australia has a universal health care system, highly targeted social support system as well as a mature education and training system. Nonetheless, there are aspects of our social support arrangements (e.g. disability support and some aspects of the health care system) that have been the subject of considerable community and government debate recently.

The challenge for Australia will be in identifying those groups most disadvantaged by health inequities and understanding the pathways between poorer health outcomes and the range of social determinants. Understanding the mechanisms involved will also be a critical step in minimising avoidable health inequities.

Data requirements

Australia is in a good position in regards to the consideration of the Commission's recommendations, particularly in regards to a minimum health equity surveillance system. However, in moving towards a more comprehensive system, the analytical challenges are both conceptual and empirical.

There are often competing conceptual theories in terms of the mechanics of the causal pathway and sometimes even in terms of the direction of causality. Empirically, the data requirements are very challenging and some degree of compromise will always be required in order to begin the analysis. However, in order to attempt any in-depth analysis of causality or effectiveness, good quality data sources containing information on both the social determinants and health outcomes need to be available. Ideally, the data would be longitudinal rather than cross-sectional. While recognising that collecting longitudinal data is often much more resource intensive, the fact that social determinants are often temporally distant to health outcomes means that estimating associations from cross-sectional data can be very difficult.

Investment in data along these lines requires funding, and some longitudinal surveys can be very expensive. However, such information and analysis can help direct policies and services towards those that have the greatest effectiveness.

Strengthening the evidence base

AIHW is a leading player when it comes to building the evidence base on the social determinants of health. AIHW has recently been involved in a number of projects that aim to improve the knowledge base in this area. For example, the Institute has recently written reports on: the social distribution of health risk and health outcomes; the health of males in five key population groups; and lung cancer by socioeconomic status (including risk factors, incidence and mortality rates). In addition to this work, AIHW has created an on-line Indigenous Observatory, reports against 68 indicators as part of monitoring the Aboriginal and Torres Strait Islander health performance framework, has been involved in establishing the Closing the Gap Clearinghouse and has been accredited as an integration authority for undertaking data linkage. Below are some details of the AIHW work on social determinates and Indigenous health (see also Appendix B for links to relevant publications).

The Indigenous Observatory

The [Indigenous Observatory](#) is an on-line resource which provides a focal point for the work on improving and using information on Indigenous health and welfare issues. The Observatory features key reports and a collection of papers on a range of topics that need attention. For example the 2011 Observatory papers covered topics such as demography,

housing, chronic disease, mortality and life expectancy, eye health, access to services and homelessness.

The National Aboriginal and Torres Strait Islander Health Performance Framework (HPF)

The [HPF detailed analyses](#) report has been published every two years since 2006. The report presents data on 68 measures canvassing health status and outcomes, determinants of health and health systems performance. Considerable analysis focuses on the link between social determinants such as education, employment, income, housing, access to services and health outcomes. The national and jurisdictional reports are used to inform policy analyses, planning and monitor program implementation.

Closing the Gap Clearinghouse

In 2007 COAG agreed to establish a [clearinghouse](#) for evidence on what works to close the gap on Indigenous disadvantage. In 2009 the Department of Families, Housing Community Services and Indigenous Affairs (on behalf of the Commonwealth) engaged AIHW to deliver the Clearinghouse services. This is being done in collaboration with the Australian Institute of Family Studies.

The objectives of the Clearinghouse are:

- To build a cumulative evidence base for what works to close the gap in Indigenous disadvantage.
- Improve access by policy makers, service providers, and the general public to evidence on best practice and success factors to close the gap in Indigenous disadvantage.
- Rigorously assess the evidence for policies and interventions aimed at closing the gap.
- Improve the coordination of research and evaluation efforts across Australia.
- Identify gaps in the evidence on what works to close the gaps in disadvantage.

Data linkage

There is great potential to utilise data linkage in a health equity surveillance system. Data linkage brings together information about people, places and events from different data collections based on common features, and is one of the most powerful means for adding value to data. In particular, data sets containing information on the socioeconomic status, education, ethnicity and Aboriginal and Torres Strait Islander status of the population, could be linked to routinely-collected administrative data sets on health outcomes, such as mortality, specific health conditions and hospitalisation. Further it would be possible to link data over long periods, either retrospectively and/or by annual updates, to enable the creation of longitudinal data sets that would be a powerful resource for providing information on health outcomes over the life course for particular subpopulations.

There is considerable experience with data linkage at both the state and national level, including one-off projects investigating health outcomes that could help inform more general systematic work.

AIHW is accredited as a Commonwealth Integrating Authority and has considerable experience over a number of years in linking data and in the analysis of linked data sets to investigate pathways as well as patterns of service use. Over the last few years, a national system for carrying out data linkage has been gradually built through the work of the Population Health Research Network and more recently through the development of new principles for the integration (linkage) of Commonwealth data for statistical or research purposes. This work aims to maximise the value of existing and new data sets for research

and statistical purposes, while ensuring strong protections to preserve privacy and confidentiality. This opens up new opportunities to use data linkage for health outcomes surveillance.

Gaps in the Australian evidence

While Australia has high quality information on health and welfare issues, there is significant scope for improving the evidence base in terms of the social determinants of health. While the association between health status and socioeconomic conditions is well recognised, establishing a causal link between these factors and health outcomes has been much more difficult.

For example, with regard to the association between educational attainment and health outcomes of Indigenous Australians, Dunbar and Scrimgeour (2007) claim that the research remains mainly speculative and inconclusive. However, the methodological complexity of conducting this research should not be underestimated.

‘A range of issues for further investigation is indicated from the research conducted so far. For example, the pathway linking education, employment, increased earning capacity and health outcomes has not been subject to the necessary longitudinal research and analysis to make a definitive judgement about the importance of educational success (and related earning capacity) to the achievement of positive health outcomes.’

The discrete nature of many data sources creates a disjoint between information on health outcomes and broader health determinants. Key considerations are the issues of confidentiality and safe data storage. For example, large amounts of personal information are held on Centrelink and Medicare Australia databases. While Centrelink currently conducts data matching with other departments and agencies, this is primarily limited to compliance, not research, purposes. Data are protected under the *Privacy Act 1988*, as well as laws relating to social security, families, health, child support and disability services, and as such the department is bound by strict confidentiality provisions which limit how the data can be used and who can have access to it. However, administrative databases such as these are potential sources of highly valuable information which could be used for future analysis of health inequalities and social determinants.

In terms of identifying key disadvantaged groups, there is limited coverage of Indigenous identification in key administrative data sources. For other disadvantaged groups (e.g. Culturally and Linguistically Diverse (CALD), recent migrants, the homeless, disabled or low-income), identification can also be limited. AIHW is undertaking a project to investigate the feasibility of improving the capture of information on CALD populations across a number of community services data collections. Similar work on the feasibility of incorporating a disability module in a number of key data collections is also being undertaken by AIHW in collaboration with the Commonwealth and jurisdictions.

While the majority of the data held by AIHW does not contain information regarding the social or economic circumstances of the individual, most data sets include geographical information which can be used in conjunction with area measures of social disadvantage. The most common used area measure is SEIFA, a suite of indexes produced by the ABS using census data which ranks geographic areas in terms of their socioeconomic characteristics. However, an area can have a diverse range of people and such indices can obscure valuable within area variation. Smaller areas are therefore usually preferable for analysis, as long as the numbers are sufficient to enable meaningful analysis.

Program evaluation

Program evaluation has a critical role to play in expanding the evidence base. However, the strength of evaluation evidence in Australia could be improved, particularly in terms of measuring policy effectiveness. In particular, the more 'upstream' interventions, where the link between policy and health outcomes can be quite distal, are typically not comprehensively evaluated.

More often than not, program evaluations focus on inputs and outputs, and capture the 'efficiency' of the initiative in question. The evaluation can thus inform how well the processes worked, but not how well the outcomes have been achieved.

The bias towards efficiency over effectiveness evaluations is no doubt due to the difficulties associated with measuring outcomes which can be difficult to measure and often associated with significant time lags. Separating out the impact of a particular policy from broader changes is also a major challenge. More research is needed to assess different ways of evaluating programs in this area using a mix of methods including quantitative and qualitative research, field studies, expert and lay knowledge.

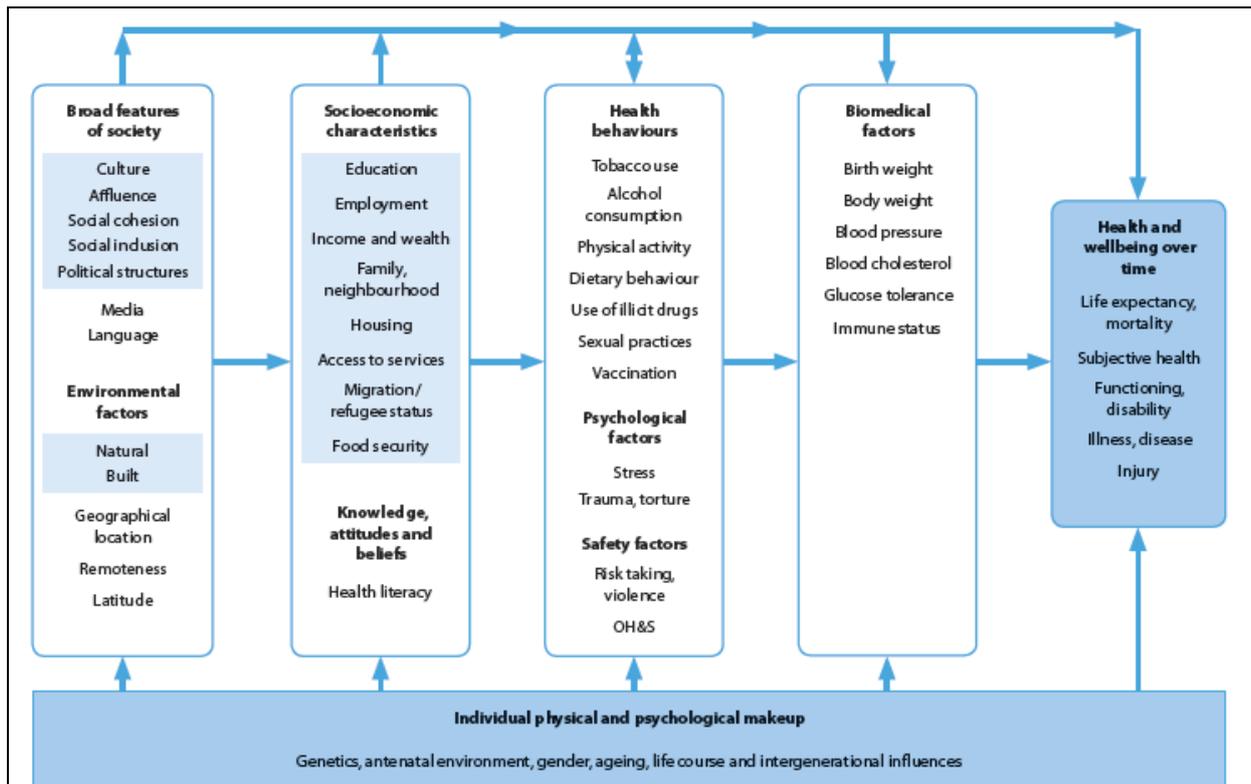
Translational research

Translational research seeks to find practical applications of the knowledge gained by scientific research. Ensuring that findings and evidence from research and evaluation are embedded into policy and practice in a timely manner will be critical to reducing existing health inequities. Translational research requires a well-functioning network between researchers and health practitioners in which data, knowledge and practice can be continuously reviewed and refined, an aspect that requires ongoing attention.

2. Improving awareness of social determinants

Where possible, the AIHW presents health information relevant to a range of social determinants. The AIHW *Australia's Health* reporting framework for the determinants of health, encompasses both the structural and individual aspects of social determinates, in line with the framework developed for the Commission (Figure 1).

The framework shows how the broad features of society, environmental factors and geographic location can influence the nature of people's socioeconomic characteristics, such as their level of education and employment. These also influence people's health behaviours, their psychological state and factors relating to safety. These, in turn, can influence biomedical factors, such as body weight and glucose metabolism, which may have health effects through various further pathways. At all stages along the path, the various factors interact with an individual's genetic composition.



Note: Blue shading highlights selected social determinants of health.

Source: Australia's Health 2012, AIHW.

Figure 1: A framework for the determinants of health

In efforts to maximise the quality and relevance of information available to the broader community, AIHW has placed attention on openness and transparency. For example, AIHW maximises the information available to the community by:

- providing a wide range of information including data cubes, publications, education worksheets, bulletins, fact sheets, and publications 'in brief'
- having all content available for download from the AIHW website
- ensuring readability and understandability of information
- providing free access to information (Creative Commons licencing)
- improving the timeliness of information
- accurate and relevant media reporting.

Increasingly, AIHW is being asked for data and information in regards to major policy issues. As an example, there is increasing attention on Indigenous health and welfare, with a focus on COAG Closing the Gap targets.

Anticipating future policy and data requirements will be an ongoing challenge. Strengthening the evidence base on the social determinants should be one focus of the Institute's work.

However, AIHW recognises that all data collections have a cost and that the community and governments demand value from its spending. It is therefore important to design efficient data collection processes, including the ability to collect once, use often. As such, it is important to consider how best to design data collections in a way that allows the nature of

the relationship between health and socioeconomic position to be studied in a timely manner.

AIHW is in a strong position to lead the way in increasing awareness of the social determinants of health. With continued developments in the data collections and the broader evidence base, Australia has the potential to grow the knowledge base in this area. Such knowledge would not only benefit Australia, but also the Commission's work and the broader global community.

Appendix A

AIHW data holdings

AIHW holds a large number of National minimum data sets (NMDS) which are a set of data elements agreed for mandatory collection and reporting at a national level. The current NMDS held by AIHW cover a wide range of both health and welfare topics and include:

- Admitted patient care
- Non-admitted emergency department care
- Outpatient care
- Alcohol and other drug treatment services
- Community mental health care
- Elective surgery waiting times
- Government health expenditure
- Mental health establishments
- Perinatal
- Public hospital establishments
- Disability Services
- Juvenile Justice
- Functioning and disability
- Specialist homelessness services
- Early childhood education and care

AIHW also uses data provided by the Registries of Births, Deaths and Marriages, the Australian Bureau of Statistics (ABS) and the National Coroners Information System to maintain the National Mortality Database (NMD) and the National Death Index (NDI). The NMD is used for reporting on causes of death and the NDI enables data linkage activity for health and medical research relating to mortality.

Appendix B

Relevant AIHW publications

Below are links to some of AIHW's recent publications where health information is presented in relation to a range of social determinants.

Social distribution of health risks and health outcomes: preliminary analysis of the National Health Survey 2007-08

<http://www.aihw.gov.au/publication-detail/?id=10737422718>

The health of Australia's males: a focus on five population groups

<http://www.aihw.gov.au/publication-detail/?id=10737421980>

Lung cancer in Australia: an overview

<http://www.aihw.gov.au/publication-detail/?id=10737420419>

Australia's health 2012

<http://www.aihw.gov.au/publication-detail/?id=10737422172>

Australia's welfare 2011

<http://www.aihw.gov.au/publication-detail/?id=10737420537>

Indigenous Observatory

<http://www.aihw.gov.au/indigenous-observatory/>

Closing the Gap Clearinghouse

<http://www.aihw.gov.au/closingthegap/>