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# BETTER DATA FOR BETTER DECISIONS

# The Case for an Australian Health Survey

Better Data for Better Decisions is the sequential report to the policy roadmap Getting Australia's Health on Track and outlines a national implementation strategy for an ongoing commitment to the Australian Health Survey. This report has been compiled by a national collaboration of leading chronic disease experts and clinicians.



AUSTRALIAN HEALTH POLICY COLLABORATION



#### THE CASE FOR AN AUSTRALIAN HEALTH SURVEY 2021

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The collection of such rich and valuable data should not be seen as an unnecessary expense to be avoided in times of austerity, but rather vital systems infrastructure enabling prospective evaluation, and real-time response, flexibility, and adaptation to Australia's health, public health, and chronic disease needs and challenges.

- Leung J, Tolhurst P. Australian Health Policy Collaboration, Victoria University; 2015.



#### **KEY POINTS**

• Effective health services planning and management depends on comprehensive health information about the health of people. Australia has a number of health related surveys but remains behind most other advanced countries in the health information it regularly collects and uses in health policy and planning.

• One survey, the Australian Health Survey, conducted by the Australian Bureau of Statistics during 2011 – 2013, has provided the comprehensive health information that health services planning and medical and health services research need.

• The Australian Health Survey measured a comprehensive range of anthropometric, biomedical and environmental measures and risk factors for preventable chronic diseases in the Australian population.

• These data have provided invaluable intelligence to address the burden of chronic disease to individuals, families, carers, employers, the economy and the community.

• Repeating the Australian Health Survey regularly would provide data that tracks changes in health needs and risk factors to provide better targeting of health care and health interventions and improve efficiency in health care spending.

• The second Australian Health Survey should be undertaken in 2021. Therafter, the Australian Health Survey should be conducted every six years, in conjunction with the current National Health Survey.

• The Medical Research Future Fund (MRFF) provides an appropriate source of funding.



#### INTRODUCTION

The Australian Health Survey, undertaken by the Australian Bureau of Statistics during 2011–2012, provided a baseline of the most comprehensive health surveillance data ever collected and reported in Australia (2).

For the first time the survey incorporated measurement of a comprehensive range of anthropometric, biomedical and environmental measures and risk factors for preventable chronic diseases across the Australian population. The Australian Aboriginal and Torres Strait Islander Health Survey 2012–13 collected similar data for the Aboriginal and Torres Strait islander population. The value of this high-quality national data to services, policy makers, researchers and funders was, and continues to be, profound. Currently, there is no commitment to repeat this survey.

At the end of 2016, a national collaboration of leading health scientists, clinicians and organisations endorsed routine comprehensive health surveillance as one of the ten most significant policy measures to improve Australia's health. Those involved in the national collaboration have united to assist Australia to be pro-active in preventing and reducing chronic diseases. Their work has developed agreed targets for improvement in significant health risk factors in the population by the year 2025, in accord with the World Health Organization's global agenda for the prevention of non-communicable (chronic) diseases worldwide (3).

In this policy paper we summarise the impact on the Australian population of chronic diseases - such as cardiovascular disease, diabetes, cancer, chronic obstructive pulmonary disease and mental illness - and the limitations of current health data in Australia to help reduce and prevent this impact. We also discuss the urgent and future need for, and costs-benefits of, a comprehensive approach to population health surveillance that includes invaluable biomedical data. Opportunities for an enhanced surveillance system are also summarised.

We recommend investment in a second Australian Health Survey in the year 2021, and every six years thereafter, to ensure the availability of routine comprehensive health surveillance data for addressing chronic disease.



## CHRONIC DISEASE IN AUSTRALIA

Chronic disease affects individuals, their families and carers. Chronic disease affects participation in education, the workforce and the community, impacting on labour efficiency and hampering economic growth. There is a heavy direct cost of chronic disease borne by individuals, health insurers and by governments.

Approximately half of all Australians have a chronic health condition and around 20 per cent have at least two. Chronic diseases present the biggest health challenge of the 21<sup>st</sup> century. These diseases are responsible for nine out of every ten deaths nation-wide. Four groups – cardiovascular disease, cancer, chronic obstructive pulmonary disease and diabetes – account for three-quarters of all deaths due to chronic disease (4).

Many of these diseases wield their most enduring impact through reducing quality of life and functional abilities. Increasingly, cancer and kidney disease are chronic 'treatable' diseases that do not result in early death, but diminish the quality of life for people over many decades (5).

Chronic diseases generate billions of dollars in avoidable health expenditure every year and are the major driver of health system utilisation and costs (6). For example, cancer is responsible for about one in every ten hospital admissions (5) and muscle, bone and joint conditions account for the largest cost category for combined public and private hospital expenditure in Australia in 2015-16 (7). Cardiovascular disease is the most expensive disease nationally, costing approximately \$7.5 billion each year, with more than half spent on patients admitted to hospital (8).

The Productivity Commission '*Shifting the Dial*' report (2017) made a series of recommendations in health, stating that should the recommendations be accepted the level of Australia's GDP will be enhanced by the greater participation of those whose health is improved and by the greater participation of their voluntary carers. The Productivity Commission estimates this GDP effect could rise to over \$4 billion a year (9).



#### THE STATE OF PLAY IN NATIONAL HEALTH DATA

There are scores of organisations across Australia collecting and analysing data gathered from health systems, patients, and financing systems.

The Australian Bureau of Statistics undertakes regular and valuable national population health and health services data collections, including:

• the *Patient Experience Survey* (10) which is an annual collection from a nationally representative sample of private households and obtains information on the use of selected health services, barriers to access, and waiting times for access;

• the National Health Survey (11), a series of nationally representative samples, now occurring at intervals of three years, which collects information about the prevalence of long-term health conditions, health risk factors, the use of health services, demographic and socioeconomic characteristics of individuals and individual health care;

• the National Aboriginal and Torres Strait Islander Health Survey (12) at 3-yearly intervals, which collects detailed information on the socio-economic circumstance of Aboriginal and Torres Strait Islander people every six years; and

• the Survey of Disability, Ageing and Carers (13), which has been conducted eight times since 1981, measures the prevalence, socio-economic status and demographics of older people, people with a disability, their needs for support and the needs of their carers.

There are a range of other health data collections published by agencies including the Australian Bureau of Statistics; the Australian Institute of Health and Welfare; Commonwealth, state and territory agencies; research institutes and not for profit agencies.

These data collections are valuable, but vary in quality, timeliness, methodology and scope. There is significant duplication of health surveys and data between governments and service sectors, and a diversity of methods and data sets. There are also significant gaps, for example there was a 20 year gap between national surveys that investigated population nutritional status (the 1995 National Nutrition Survey (14) and the Australian Health Survey 2011-13), and yet diet-related diseases are profoundly shaping our health care needs and expenditure for childhood (15) and adult (16) health.

Physical activity surveillance has had varied methods and measures at both the State and national levels for the last thirty years, providing limited trend information and demonstrating differences between methods used (17). Strikingly, and perhaps consequentially, sectoral interest and advocacy groups have begun targeted data analysis and reporting in order to inform and influence policy development (3, 18, 19). In terms of uniform data sets, the collection of alcohol sales data is only mandatory in Western Australia, Queensland and the Northern Territory (20) but national collection would substantially improve surveillance and the capacity to assess effects of alcohol related policy changes.



The ongoing National Health Survey and the Aboriginal and Torres Strait Islander Health Survey, for example, provide regular national data on population health. However, they are largely based on self-reported information obtained through interviews. These surveys are a less reliable and accurate approach to the measurement of risk factors for chronic disease including blood pressure, cholesterol, diabetes mellitus and nutritional intake than the collection methods and surveillance standards of the Australian Health Survey 2011-13.

The Productivity Commission 'Shifting the Dial' report (2017) explored the inadequacies of data collection and management in Australia (9) and established that Australia is not keeping up with international best practice. For example, the *Health Survey for England* is conducted annually with a representative sample size of 10,000 including 2,000 children (21). A sub-sample also participate in biomedical measurement. It provides "...vital information which is used by central government (e.g. the Department of Health and Public Health England) and local government for a range of different purposes, including:

- monitoring changes in health and lifestyles;
- monitoring the prevalence of specific health conditions;
- planning services;
- policy development;
- monitoring and evaluating policy."

Local authorities use the survey to compare local indicators with national figures, and the survey is known to be widely used by the National Health Service, charities and voluntary organisations and by Universities for education, research and analysis purposes. Data from the survey is also used as a component in the formula allocating public health grants from the Department of Health to local authorities. This survey, and others including the *National Child Measurement Programme* and the *UK National Study of Health and Wellbeing*, are the reason why the UK is recognised internationally as a world-class source of public health intelligence.



#### WHAT WE NEED TO KNOW

We need to improve Australians' health, by addressing the risk factors that lead to poor health, preventable chronic disease and the related effects on employment, education and community participation.

We need to know what is happening in the Australian population that affects people's health; individuals' personal habits, family and community environments, biomedical markers and how people use health services.

We already know that the proportion as well as numbers of people living with chronic health conditions is continuing to increase substantially, and we know that an increasing number of people have high risk factors for chronic disease.

Drawing from a global agenda set by the World Health Organization, a national collaboration of Australian health experts are working together to improve action and accountability on chronic disease in Australia by the year 2025 (3). The expert collaboration compiled currently available national health data to assess how Australia's population measures up against health improvement targets as reported in *Australia's Health Tracker 2016* (22).

The 2016 report card highlighted concerning population health trends in adults and children, including more overweight and obesity, higher blood pressure and more emergency visits due to alcohol misadventure.

The 2016 report card also revealed the limitations in currently available data. *Australia's Health Tracker* shows that Australians have too little physical activity and high rates of sugar, salt and junk food consumption. However, the current regular data collections, such as the three-yearly National Health Survey, have meant that these risk factors could not be tracked adequately over time.



## THE VALUE OF THE AUSTRALIAN HEALTH SURVEY

A thorough evaluation of the Australian Health Survey 2011-13 was published in 2017 (23). The evaluation found that the rich data from the survey have been and continue to be used to inform responses to contemporary health challenges. Data have been used to fill identified population health data gaps, in particular around the prevalence of undiagnosed chronic disease and nutrition deficiencies.

The evaluation highlighted stakeholders' keen enthusiasm and appreciation of the uses of the data.

The cost of the three components of the Australian Health Survey in 2011-13 was \$54.5 million (23). This investment has provided data for hundreds of health experts, planners, researchers, industry, government agencies and communities to identify and begin to respond to the range of risk factors for chronic diseases in the Australian community, increasing the efficiency and effectiveness of preventive health interventions.

Considerable investment is already made in reporting waiting times for surgery and in accident and emergency departments. Such efforts are of limited utility if there is no comprehensive monitoring of whether we are achieving success in reducing the risk factors of chronic disease which increase demand for inpatient care and these services.

A second Australian Health Survey in 2021 will address many of the current limitations of health surveillance. Ensuring the data from the survey are available widely to be used by researchers will provide significant public value. Furthermore, the evaluation of the outcomes and utilisation of the Australian Health Survey 2011-13 should inform a national consultation, review and design process very soon in order to implement the next survey by 2021. Significant skills, resources and systems remain from the 2011-13 design and data collection phase and these should be mobilised for the next iteration before they are lost.



#### **DIRECTIONS FOR THE FUTURE**

Despite escalating health care costs and rising prevalence of preventable disease, there is no ongoing commitment to comprehensive population measurement of risk factors for preventable chronic diseases. Therefore vital indicators of the population's health, such as independently measured cholesterol, salt consumption, physical activity and discretionary food intake, cannot be reported over time unless another comprehensive survey occurs.

Regular, recurrent conduct of the Australian Health Survey would also provide critical information over time to understand the associations between health status, risk factors, and disease. Existing health prevention campaigns may not be efficiently targeted – better associative data would allow for better targeting of health promotion messages, particularly using new media.

The Australian Health Survey 2011-13 collected and reported on a comprehensive collection of health data, including anthropometric and biomedical measures, that is needed over time for a healthier, more productive Australia. Regular collection and reporting of this range of data is critical to planning and ensuring the adequacy of Australia's health services into the future. Trends in risk factors provide a strong indication of what the incidence of chronic disease is likely to be over the medium term. Undesirable changes in risk factors, when detected and remedied early, will lead to a lesser burden of chronic ill-health in future years.

The Australian Government's existing Medical Research Future Fund provides an appropriate source of funding for ongoing *Australian Health Surveys*. Data from the single *Australian Health Survey* has been a substantial resource for medical and health services research.

Another Australian Health Survey in 2021, and then each six years thereafter, will provide Australia with a comprehensive health surveillance system that can be expected to show a substantial return on investment through improved planning and provision of health services to prevent and respond to chronic diseases in the Australian population.

The major sources of ill-health in Australia are cancer, heart disease, injury and mental health. Regular surveys are critical for monitoring the causes and future burden of these conditions. Judicious detection and responsive early intervention to improve risk factor profiles is one of the most important strategies to improve the health of the Australian community.



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