

Submission to the Strategic Review of Health and Medical Research - Health Services Research Association of Australia and New Zealand

Summary of key points

- It is essential that consideration of efficiency and equity, as well as availability and acceptability to patients and the general public of health care services and systems are informed by analysis, and that such analysis and the results should be a fundamental part of health and medical research, translation, and practice. Health Services Research (HSR), a multi-disciplinary research activity with an implicit objective of improving the health services patients receive, can provide timely information to support decisions about policy and practice.
- Since the 1960s, reviews of Australian health and medical research have called for a greater investment in health services and systems research to meet the coming challenges of a sustainable health care system. The World Health Organization, is calling health systems research ‘the brains of the health system’, and arguing for increased investment in this field of research.
- Despite this, health services research and training in Australia is significantly underfunded relative to its potential to improve population health at reasonable cost and there is a shortage of health services researchers relative to demand for their services.
- To be able to provide timely information to health system decision makers, health services research requires: sustainable capacity of health services researchers at different career stages, (a key issue that could help is an expansion of people support schemes focusing separately on health economics and health services research), programmatic funding for health services researchers, and better systems for accessing data that are not prohibitively expensive.
- All research funded by NHMRC that includes an evaluation of an intervention, program or service should explicitly consider the implications of “scaling up” or rolling out the proposed new intervention, program or service across the population or health services more generally.
- There needs to be evaluation and research to inform how the current health reform process will impact on the behavior of patients or providers.
- The most successful policy informative research comes from a synergy between researchers and policy makers, and by ensuring a culture of policy relevant research and research receptive policy. We recommend a similar approach to the UK where the Department of Health has their own Policy Research Program and the NHS has the National Institute of Health Research, in addition to the separate Medical Research Council.
- The current investment in training and research in health technology assessment in Australia is insufficient. There is the need for a workforce that is involved in and leading international research in health technology assessment and contributing to the development of methods.
- Data linkage efforts should be shifted to link data on patients to data about the health care providers who treated them.

Submission to the Strategic Review of Health and Medical Research

Health Services Research Association of Australia and New Zealand

1. About HSRAANZ and Health Services Research in Australia

The Health Services Research Association of Australia & New Zealand was incorporated in Sydney in April 2001. It was set up in response to a growing need to promote health services research in both Australia and New Zealand. The purpose of the Association is to facilitate communication across researchers, and between researchers and policymakers, to promote education and training in health services research, and to ensure sustainable capacity in health services research in Australia and New Zealand. The Association has grown over the years and now has a strong membership base of both individual health service researchers and corporate health services research groups, government departments and agencies. It has a particular focus on early career and Indigenous health services researchers.

The objects of the Association are to encourage and promote the development and conduct of health services research, in order to promote improved health services delivery and improved health; and in particular to promote the development of sustainable capacity in the field of health services research, facilitate and promote communication and collegiality among researchers engaged in health services research, facilitate and promote the regular exchange of views across researchers and policymakers, managers, clinicians and other interested parties, promote the education and development of researchers and others working in health services research, encourage the development of strategically important research, promote excellence in health services research and advocate for appropriate levels of funding for health services research in Australia and New Zealand.

Resources for health care are scarce, and technological advances place greater pressure on government and consumer budgets, with new treatments being available that offer gains in quality of life and survival, but at a high cost (such that other treatments could generate greater gains in population health). Moreover, as the population gains knowledge about the potential of health services to deliver high quality, safe care, their expectations about the processes and outcomes of health care services increases. It is therefore essential that consideration of efficiency and equity, as well as availability and acceptability to patients and the general public are informed by analysis, and that such analysis and its results should be a fundamental part of health and medical research, translation, and practice.

Health Services Research (HSR) is a multi-disciplinary research activity with an implicit objective of improving the health services patients receive. Thus it is an area of applied rather than 'basic' research - it uses theories of human behaviour from contributing disciplines, along with evidence from the medical sciences, to generate and test hypotheses about the delivery of health care. Improvement of health services has many dimensions: better quality care (including care that is effective, timely and appropriate), more accessible care, more equal distribution of

health gains from health services, safer care, and improved efficiency, both allocative and technical, in the provision of health care.

HSR differs from single-discipline research in that it seeks to understand these dimensions from multiple perspectives. It calls on knowledge from the contributing direct service disciplines of medicine, nursing, allied health, and psychology to understand dimensions of effectiveness, quality and safety of direct care in all its forms. It calls on the disciplines of psychology, sociology, political science, management science and health economics, to understand the social dimensions of care: access, distribution, timeliness, efficiency. While HSR shares a concern for improvement of health services with practitioners of 'big-P' health policy (health ministers, senior bureaucrats), it is distinguished by its emphasis on a research basis for policy, in contrast to big-P policy practitioners who must consider expedient policy solutions and electoral support. HSR is underpinned by a belief that systematic investigation of health services, and the systems in which they are provided, is helpful in improving health outcomes.

The focus on **services** is what distinguishes HSR from other multidisciplinary health research activities. Population health (and most of 'public health') rightly focuses on the antecedents to ill-health and explanations for the distribution of health and disease. 'Public health' is historically an amalgam of population-based measures (eg, sanitation) and individual health services (eg, immunisation), but public health research is usually not principally 'service' focussed. The audience for HSR extends across a broad spectrum, from innovators in bioscience to experts in indigenous health. Practitioners and researchers share an interest in understanding how health services contribute to their own domains and how they can be improved to increase the welfare of society more generally.

Health services research and training is significantly underfunded relative to its potential to improve population health at reasonable cost. There is a shortage of health services researchers relative to demand for our services yet this has not been effectively translated into additional research funding. The past 10 years has seen some growth in the number of dedicated health services research centres in Australia, partly funded through the NHMRC Health Services Research, Capacity Building Grants and CRE schemes; and partly through State government funding (most notably recently in Queensland, with the inauguration of Australian Institute for Health Services Innovation) which have enabled some fledgling domestically based Masters and PhD training programs to be implemented.

2. Response to review questions

a) Why is it in Australia's interest to have a viable, internationally competitive health and medical research sector?

(Terms of Reference 1 and 6)

1. The need for Australia to build and retain internationally competitive capacity across the research spectrum, from basic discovery research through clinical translation to public health and health services research.

6. Strategies to attract, develop and retain a skilled research workforce which is capable of meeting future challenges and opportunities.

Although there is an increased demand for health services researchers to contribute to policy making in Australia at all levels of government, there is no concomitant investment in the development of a sustained and sustainable education, research and training capacity in Australian tertiary institutions. There is a tendency for HSR in Australia to be overshadowed by basic science and clinical medicine and to be lumped together with public/population health, despite the fact that since the 1960s, reviews of Australian health and medical research have called for a greater investment in health services and systems research to meet the coming challenges of a sustainable health care system. All this is at a time when Australia faces major challenges in transforming our health service delivery into a sustainable 21st century health system. And at a time when the World Health Organization, calling health systems research 'the brains of the health system', is arguing for increased investment in this field of research.

A key issue that could help is an expansion of people support schemes focusing separately on health economics and health services research. This will play an important role in the career development and retention of health services researchers.

b) How might health and medical research be best managed and funded in Australia?

(Terms of Reference 2, 3 and 7)

2. Current expenditure on, and support for, health and medical research in Australia by governments at all levels, industry, non-government organisations and philanthropy; including relevant comparisons internationally.

3. Opportunities to improve coordination and leverage additional national and international support for Australian health and medical research through private sector support and philanthropy, and opportunities for more efficient use, administration and monitoring of investments and the health and economic returns; including relevant comparisons internationally.

7. Examine the institutional arrangements and governance of the health and medical research sector, including strategies to enhance community and consumer participation. This will include comparison of the NHMRC to relevant international jurisdictions.

One of the challenges for health system decision makers is the need for timely information to support decisions about policy and practice, particularly related to health services organisation, funding and delivery. Health services research can provide this information, but it is best achieved through mechanisms that do not rely on specifically commissioned research and consultancies, but rather a culture of ongoing research and evaluation that makes effective and ongoing use of high quality data from administrative and survey sources to address a broad range of research questions. This creates a culture and a research environment in which health services research capacity can be readily mobilised to specific questions, and can also provide an ongoing evidence base to support health service decisions. Two ingredients are critical to this - a sustainable capacity of health economics and other health services researchers at different career stages, and an environment that supports the availability of data to researchers. There is currently insufficient utilisation of administrative data to undertake research to support health system decision making and policy. This would be facilitated by programmatic funding for health services researchers, but also by better systems for accessing data in a timely way. The NHMRC as well as State and Federal bureaucracies could do much to support this, in particular to ensure that access to data is not prohibitively expensive for researchers.

All research funded by NHMRC that includes an evaluation of an intervention, program or service should explicitly consider the implications of “scaling up” or rolling out the proposed new intervention, program or service across the population or health services more generally, in terms of both costs and consequences (the latter considered broadly as encompassing health outcomes as well as utilisation, other outcomes relevant to patients and the general public and the health workforce). This will help ensure that the researchers have explicitly considered the likely impact of proposed changes to treatment patterns, programs or services. The HSRAANZ would be willing to develop guidelines for researchers about incorporating such changes to funding applications.

c) What are the health and medical research strategic directions and priorities and how might we meet them?

(Terms of Reference 5, 12 and 13)

5. Likely future developments in health and medical research, both in Australia and internationally.

12. The degree of alignment between Australia’s health and medical research activities and the determinants of good health, the nation’s burden of disease profile and national health priorities, in particular “closing the gap” between indigenous and non indigenous Australians.

13. Opportunities for Australia’s health and medical research activities to assist in combating some of the major barriers to improved health globally, especially in the developing world.

The HSRAANZ with its cross-Tasman focus and its strategic focus on Indigenous health services research is in a unique position to contribute to knowledge and understanding of the culturally appropriate services required to help Aboriginal and Torres Strait Islanders “bridge the gap”. We can learn a great deal from our NZ colleagues in terms of how Indigenous research is conceptualized, implemented and interpreted, in particular the use of Indigenous researchers as

fully integrated members of research review panels and training researchers in understanding the cultural basis for Indigenous research.

d) How can we optimise translation of health and medical research into better health and wellbeing?

(Terms of Reference 4, 8, 9, 10 and 11)

4. The relationship between business and the research sector, including opportunities to improve Australia's capacity to capitalise on its investment in health and medical research through commercialisation and strategies for realising returns on Commonwealth investments in health and medical research where gains result from commercialisation.

8. Opportunities to improve national and international collaboration between education, research, clinical and other public health related sectors to support the rapid translation of research outcomes into improved health policies and practices. This will include relevant international comparisons.

9. Ways in which the broader health reform process can be leveraged to improve research and translation opportunities in preventative health and in the primary, aged and acute care sectors, including through expanded clinical networks, as well as ways in which research can contribute to the design and optimal implementation of these health reforms.

There are many other aspects of health reform which are not mentioned here, including fundamental changes to the way health services, including pharmacy and public hospitals are being funded. There is currently little research capacity in these areas, yet they represent major elements of reform. If these are not within the remit of NHMRC, then it is not clear who should or will fund this very important research. Relative to the potential for huge impacts on health care costs, on delivery of services, on the health care workforce and on consumer outcomes that could result from health care reform, there is very little consideration of the need for evaluation and for research to inform how reform will impact on the behavior of either patients or providers. The potential for unintended consequences from changes to how services are funded and performance is rewarded is very high, as has been demonstrated in other countries, as well as from previous policies implemented in Australia, and yet the investment in evaluation, both prospective and retrospective is limited.

It is very important to provide policy makers and bureaucrats with incentives to be 'research-friendly'. The onus seems to be squarely on researchers to have an impact on policy and decision making, but there seem to be limited incentives for health bureaucrats to build evidence for use in policy design and evaluation in a systematic fashion. Past efforts within NHMRC at fostering health services research have had very limited impact on health policy. The call for NHMRC Partnerships Centres has been very recent after several years delay, and appears to be on clinically-driven topics, rather than on health system-driven and health reform-driven topics. There has been very narrow consultation on the topics of these centres, which appears to have been focused on policy makers with limited input from researchers. This is very unusual compared to practice in other countries. Further, the most successful policy informative research comes from a synergy between researchers and policy makers, and by ensuring a culture of

policy relevant research and research receptive policy. This needs to recognise that high quality research arises from availability of data and the infrastructure within the research community to develop and address questions, and to use the results of research to inform the development of policy. Unlike many other Australian government policy areas, DoHA does not have its own internal research capacity or funding. They rely on NHMRC to fulfil this role. This may be appropriate for biomedical and clinical research, but not for health services, health policy and health economics research. A model in the UK is that the Department of Health has their own Policy Research Program and the NHS has the National Institute of Health Research, in addition to the separate Medical Research Council. Both the Policy Research Program and NIHR were established to undertake research on the health service focusing on the needs of patients and the public. This is laudable and *we recommend that a similar approach be followed in Australia*. Until this changes, it will continue to be the case that health services research will compete with clinicians for research funding, with the compounded problems that the research is evaluated according to inappropriate criteria including expectations of impact, that it is unlikely to be timely, and will be severely underfunded. This will result in a continuing relatively small share of research funding going into health services research, and very little impact on health policy and practice.

10. Ways in which health and medical research interacts, and should interact, with other Government health policies and programs; including health technology assessments and the pharmaceutical and medical services assessment processes.

The issue of the shortage of a skilled workforce in health technology assessment, of which health services research is a key component has been raised in a number of previous reviews, but has not been adequately addressed in Australia as yet. In the 2009 report of the Health Technology Assessment Review, the review noted:

“The HTA workforce is made up of various occupations and roles across private and public sectors such as data collection, HTA assessors, economic evaluators and health economists. In Australia this workforce is scattered across a number of sectors and jurisdictions such as Australian and state and territory government agencies, consultants, private health insurers, industry and the public hospital system. There is a general stakeholder view that the existing workforce is not sufficient to comfortably meet the current workload of HTA and is not growing sufficiently to manage the likely, continuing increase in the use of HTA.”(p. 111-12)

The HSRAANZ agrees that the current investment in training and research in health technology assessment in Australia is insufficient to meet the needs of the health system, particularly for reimbursement decision making. Beyond the simple matter of the growth in demand for skilled researchers trained in health technology assessment outstripping the growth in supply, there is also the need for a workforce that is involved in and leading international research in health technology assessment. This is still a relatively young field of research in which methods are developing. For Australia to have the highest quality decision making, researchers must not just be undertaking health technology assessment but contributing to the development of methods.

Finally, there is a need for greater overlap and interaction between health technology assessment and other policy analysis. How effective and cost-effective a new health care technology will be depends on how it will be used in practice, which means that analysis must extend beyond extrapolation from the results of clinical trials to consideration of the incentives and behaviour that result from how it is funded, and how related health care services are funded. This requires a

sophisticated approach that combines health technology assessment methods with other appropriate quantitative and qualitative analysis methods.

11. Ways in which the Commonwealth's e-health reforms can be leveraged to improve research and translation opportunities, including the availability, linkage and quality of data.

Data represents the most essential form of infrastructure available for health services research. Health services researchers are leaders in data linkage and have developed both the means and capacity to link various forms of administrative data as well as administrative data with other types of data such as survey data. To properly examine and conduct research into the efficiency of the health care system requires the linkage of data on inputs (health professionals, hospitals, GP practices etc) to outputs and outcomes (volume of services provided, performance indicators, and health outcomes). How changes in inputs influence health outcomes is vital to examining health sector efficiency. The data linkage process so far has been focused on linking data on the demand-side, ie linking data of patients. Whilst this is important, there is very little linkage of patients' data to data on the health care providers who treated them. For example, hospital data do not indicate who referred patients and so there is no link to primary care services, a major omission in data linkage given the importance of primary care in reducing hospital expenditures. Health Workforce Australia are building a national statistical resource and it is unclear the extent to which they are involved in current data linkage efforts.

We therefore welcome the advent of e-health and the data linkage opportunities it brings, but would strongly advise that data linkage efforts be shifted to link data on patients to data about the health care providers who treated them. This is the only way that the efficiency and equity of the health care system can be examined using administrative and national data.

It is important to recognize that there are currently significant barriers to accessing linked data as the extraction process is costly and time consuming. Also one-off data extractions which one researcher must keep confidential runs contrary to others reproducing and testing results of a study. This could be overcome through the development of a random sample of administrative health and potentially clinical data on a sub-sample of the Australian population that could be used by multiple research teams.

It is necessary to move beyond funding linkage infrastructure to funding projects targeted at exploiting this valuable data resource.