Productivity Commission Review

Contribution of the Not For Profit Sector

Research Australia

and

Association of Australian Medical Research Institutes

Submission

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About Research Australia
Research Australia is a unique alliance of over 180 member and donor organisations with a common mission to make health and medical research a higher national priority. For more information on Research Australia visit www.researchaustralia.org

About AAMRI
The Association of Australian Medical Research Institutes (AAMRI) represents 38 independent not-for-profit medical research institutes across Australia. AAMRI members carry out much of Australia's most distinguished and world-renowned health and medical research, in almost every aspect of human health and disease and are major partners in commercialisation of Australian biomedical discoveries. For more information on AAMRI visit www.aamri.org.au

Introduction

Health and medical research (HMR) represents an important component of Australia's not-for-profit sector. Not only is HMR proven to be effective in improving length and quality of life, it has resulted in treatments that improve workforce productivity and increase the pool of workers able to drive the economy. HMR is also closely connected to the global medical technology sector, a knowledge-intensive industry capable of supporting highly skilled jobs and generating economic returns to Australia.

Historically, medical research has been an area of particular strength. Australia has been home to six Nobel laureates in medicine: from Howard Florey's involvement in the discovery of penicillin through to Barry Marshall and Robin Warren's discovery of the Helicobacter pylori bacterium. The ground-breaking vaccine for human papillomavirus was the result of Australian medical research. Despite having only 0.3% of the world's population, Australia contributes nearly 2% of the OECD's medical research publications.[1]

A significant portion of the income used to fund HMR is derived from public sector funding via federal and state government grants. HMR organisations also attract funding from international health and medical research bodies as well as private philanthropy. It is for this reason that AAMRI and Research Australia have an interest in the Productivity Commission inquiry as it relates to funding of its member research institutes and universities; and charities involved in funding health and medical research.

There have been several inquiries of late that have briefly touched on the importance of health and medical research, including reviews into our higher education,[2] hospital,[3] and innovations systems.[4] The Productivity Commission also conducted a review in 2007 into *Public Support for Science and Innovation*. However, the world has changed since these inquiries commenced and we welcome this opportunity to re-examine some of these issues in the light of the government response to these inquiries and the global financial crisis.

Research Australia and AAMRI welcome this opportunity to provide comment on the Productivity Commission's Issues Paper, *Contribution of the Not for Profit Sector*.[5]

Proposed approach to the review

The approach by the Productivity Commission should be broad enough to encompass the contribution by health and medical research to the advancement of community health through both public and not-for-profit avenues.

In 2004 – 2005, $2.8 billion was spent on health R&D in Australia. Private non-profit organisations conduct approximately 16% of health research and development. Overseas funding accounts for around $121 million (4%) of Australian health R & D spending, of which the majority is performed by the private non-profit sector.[6]

The Australian community strongly support health and medical research. Research Australia surveys have found that despite increasing cost-of-living pressures, health and medical research remains a priority for Australians. Research Australia's 2008 *Public Opinion Poll* found that health is considered the greatest issue of importance for Australians.[7] The consistent awareness of health and medical research is all the more remarkable given the emerging worries of mortgages and cost of living increases.

Health and medical research in Australia is undertaken by a number of sectors, including public, private and not-for-profit. Publicly funded research occurs in universities, hospitals, independent medical research institutes, and government agencies. This produces a complex system, whereby the different players all have the ability to influence each other. The 1998 Health and Medical Research Strategic Review (the Wills review) identified a "virtuous cycle", whereby government, research and industry mutually support and feed into each other, delivering returns to the community.[8]

The Federal Government provides approximately two thirds of health research funding in Australia.[9] The primary source of this funding is the National Health and Medical Research Council (NHMRC). NHMRC funding has a strong focus on basic science and recipients are primarily in universities or medical research institutes. The Australian Research Council (ARC) also contributes funding to several types of university-based scientific research which includes medical research, but does not include clinical medicine and dentistry.

Publicly funded medical research can be viewed as an outsourced government service which directly benefits our community. However, the results of that service, namely increased health and wellbeing, can take many years to eventuate, and this is what distinguishes the HMR sector from other types of not for profit organisations. Because of this, a broad definition of the not for profit sector is required to include HMR and its associated charities, which are important contributors to our economy.

Perhaps uniquely amongst the not for profit sector, HMR generates significant financial returns to our economy, as well as health and wellbeing returns. The HMR sector supports highly skilled researcher jobs; and leads to significant innovation, thus this sector should be an important focus for the Productivity Commission.

The goals of the Government's social inclusion agenda are linked to questions related to how best to target programs in areas with the greatest social impact. Research provides an avenue to develop better ways to address health needs in disadvantaged groups such as rural and Indigenous communities, and enhance the efficiency and effectiveness of publicly and privately funded health services.

Research Australia and AAMRI recommend the Commission consider the contribution health services research may make to monitor, evaluate and ultimately support improvements to the delivery of government funded services within the not-for-profit sector.

Impact measurement

Access Economics notes Australia is becoming a healthier nation with life expectancy the second highest in the world (behind Japan). The annual value to Australians of gains in wellbeing expected to result from all impacts on health (not just Australian R&D) are over $100 billion for females and over $270 billion for males by 2045.[6]

The overall return on investment from HMR in terms of health and wellbeing has been established in two studies by Access Economics, who were commissioned by the Australian Society for Medical Research. These studies measured return-on-investment in terms of health and wellbeing. The latest Access Economics report *Exceptional Returns: The Value of Investment in Health R&D in Australia II* indicated that health R&D returns to Australia (117%) were exceeded only by the mining (159%) and retail sectors (438%).[6]

Moreover, given the current economic climate, the relative value of health R&D is likely to be even greater when compared to these historically high-performing industries.

As a short-term productivity measure, the NHMRC conducts an analysis of the journal publications of the scientists that it funds. The relative impact of funding is based on two factors – the proportional number of papers produced and the number of papers in high quality journals (the "citation impact"). Projects funded by the NHMRC consistently show a relative impact double that of the world average for biomedical publications. Significantly, independent medical research institutes are consistently rated higher than other organisations funded by the NHMRC when it comes to proportional number of publications produced and their impact in the fields of medical and health science.[10]

Case Study

An example of one approach adopted by a philanthropic affiliate of Research Australia is included to illustrate the range of possible impact measures. National Breast Cancer Foundation (NBCF) report - *Achievements in Breast Cancer Research: Learning From the Past, Informing the Future. A Snapshot of the Outcomes of NBCF Funded Breast Cancer Research 1995-2007,* key results include:

- In its 13-year history NBCF has allocated more than $44.5 million to 198 projects, individual awards and research resources.
- $29.4 million has been awarded by other funding bodies to continue research initiated with NBCF funding.
- To date 17 NBCF-funded research projects have been translated into clinical practice or policy and 6 patents have been filed.
- Research funded by NBCF has demonstrated that a cold-like virus, the type A Coxsackie virus, can reduce the size of primary tumours and eliminate secondary tumours altogether.
- With support from NBCF, kConFab, in conjunction with an international consortium of researchers, made the recent discovery of 5 new genes that increase the risk of breast cancer.
- Our funds helped create a unique collection of breast ductal samples that may help discover new risk factors for breast cancer. The results might be used to predict early breast cancer development, hopefully creating better prevention and treatment options for women at high risk.
- Research funded by NBCF has discovered that men with a genetic fault in the BRCA2 gene (which causes about 10% of breast cancer in women) have almost 4 times the risk of developing prostate cancer than men in the general population.

Full report available at www.nbcf.org.au

Philanthropic funding for health and medical research
The recommendations to the Productivity Commission by Philanthropy Australia are supported by Research Australia and AAMRI.

These recommendations are:

- *That philanthropy be covered both separately and in conjunction with the Not-For-Profit Sector.*
- *That the opportunity for philanthropy to make an even greater contribution to the community be recognised and encouraged.*
- *That the Productivity Commission work with the philanthropic sector to identify initiatives to encourage the building of a culture of philanthropy for the greater good of the community.*

There is currently very little information to assess the sources, size and application of philanthropic funding for health and medical research. Research Australia has developed a national initiative to promote philanthropic giving for health and medical research, and views this as a high priority to satisfy the need for reliable and effective mechanisms to build a stronger philanthropic support base.

Universities and medical research institutes are increasingly acknowledging the need to develop baseline data to record and report fundraising activities and results, to support the development of good practice, building confidence in the return on investment and to assist in the strategic development of private philanthropy.

The Group of Eight universities has committed to the adoption of uniform reporting standards on philanthropy to better inform donors and government on the fundraising potential of the sector.

The Commission may wish to further explore how the not-for-profit sector as a whole can be supported to address the methodological difficulties and improvements in accountability and benchmarking.

ENHANCING THE EFFICIENCY AND EFFECTIVENESS OF THE NOT-FOR-PROFIT SECTOR.

Due to the thorough and exhaustive competitive grants process that is necessary to obtain government funding, HMR is regarded as a relatively efficient sector with regard to the allocation of available funding to support excellent research.

The recent *Review of the National Innovation System*, chaired by Terry Cuter,[4] suggested that the HMR sector is fragmented and would benefit from the amalgamation of some medical research institutes with universities.

AAMRI and Research Australia believe that innovative world-class research should be supported wherever it may occur - in universities, independent MRIs and the public hospital sector . In particular we note:

- MRIs are generally recognised for their efficiency and are able to rapidly respond to changing circumstances and trends. The NHMRC study into productivity found that MRIs frequently outperform other NHMRC-funded organisations in terms of journal article citation number and impact.[10]

- Many MRIs are structured as charitable foundations which also have a fundraising arm. As is the case with the Victor Chang Cardiac Research Institute, the Baker IDI and the Telethon Institute for Child Health Research, they may focus on a single disease or affected group which has particular appeal to philanthropic donors. Therefore MRIs can be more successful at attracting charitable donations and private philanthropic funding compared to universities, and they are able to leverage government investment more effectively to attract external funds.

- Many MRIs have strong collaborative links to universities, but retain the independence and freedom from classroom teaching requirements, so are able to focus on research. While researchers in MRIs are freed from the necessity of class-room teaching, most still supervise post-graduate students who undertake further study within their laboratories. In addition, universities and MRIs often voluntarily collaborate when it is appropriate to do so, and enjoy a mutually supportive relationship.

- Some smaller MRIs may benefit from support to encourage co-location, sharing of infrastructure and resources, but this should not be mandated by government.

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