Role of research universities in health and medicine

Key proposals
Universities have much to contribute to the improvement of health delivery, research and teaching/learning. In progressing health reform, the Government should be mindful of the need to:

1. strengthen high quality medical research;
2. promote translation of research to teaching, population health and health services; and
3. address Health Workforce issues effectively.

Issues and challenges
1. Improving the quality of medical and health research, and its translation into health service delivery, is critical to Australia’s ability to address future health challenges. Alignment of research, education and clinical care is critical to a strong, innovative health system. Such alignment and integration will be essential for Australia’s future health care system to have improved clinical outcomes, in a financially sustainable context.

Greater recognition needs to be given to the importance of research in hospital and non-hospital clinical environments.

The Government needs to ensure that all organisations undertaking medical research in Australia continue to be effective and efficient in the expenditure of research funds—the Group of Eight (Go8) is concerned about the ongoing viability of some independent medical research institutes. It would be preferable if they were to affiliate or combine with universities and other larger, well established research organisations.

Increased recurrent funding is needed, to optimise the research outcomes following investment in research facilities. The attached graphs show a slowing in the growth of National Health and Medical Research Council (NHMRC) support for the Australian health and medical research workforce, and in expenditure of NHMRC funding commitments in recent and future years. The Go8 considers that further growth in research funding is required, to ensure that Australia remains a leader in health and medical research, and that research can be applied for the benefit of Australians’ health.

Adequate funding for excellent medical research is essential for continued international competitiveness in attracting and retaining high quality researchers.

The Government also needs to fund the infrastructure and indirect costs of research adequately and equitably, whether the research is undertaken in a university, hospital or medical research institute.

2. The Go8 recommends that the Government provides for the development of academic health centres as an important element of future health education, training, developing and maintaining ongoing skills for the health workforce.

As part of the health reform processes the Go8 has led representations to NHMRC to consolidate a medical research environment which fosters rapid translation of research findings to better health and patient outcomes through teaching, prevention and health services delivery. Translation of research findings to teaching needs to include undergraduate, postgraduate and continuing professional education. Universities are central to this knowledge translation, but need both funding and cooperation of other participants in the research/teaching/professional clinical practice space.
Academic health systems and centres or similar organisations overseas (including UK, USA and Canada) are seen as highly successful and innovative ways of organising for the integration of quality leading edge health care, linked with research, and providing a strong teaching and learning environment. While details of models vary, all have a strong emphasis on integration of these different dimensions.

In the United Kingdom, for example, the University College London (UCL) partners provide an alliance between academia and health services which reaches beyond hospitals to community settings, beyond treatment to prevention, beyond acute to chronic conditions, effectively providing an integration of research, education and health care. “The academic health science centre accreditation process in England reflected the belief that such centres drive discovery and quality of care, and the need to compete at an international level in the life science field.” (Tooke, J, and Jacobs, I: Academic health science systems Lancet vol. 375, Issue 9728, p. 1781-2, 22 May 2010.)

Imperial College Healthcare partnership (with Hammersmith and St Mary’s) is another London example of an integrated Academic Health Science Centre aiming to transform health outcomes by harnessing scientific innovation, generating, testing and deploying new diagnostics and therapies, enhancing the biomedical and health care workforce of the nation, and improving training of scientists and clinicians as the next generation of leaders. (See www.ahsc.org.uk.) Recognition as an Academic Health Science Centre required demonstration of excellence in research, patient care and education, and communicating the vision for the partnership, with plans to take new discoveries and promote their application in the UK National Health Service and across the world.

Go8 universities have been watching the development of these models overseas, and believe that the time is right for their establishment here—although they recognise that it will be complex and will require strong cooperation. Go8 universities will work with governments towards this objective.

The following two diagrams illustrate the complexity of the present financing mechanisms, and the inter-linkages that need to be strengthened to provide for better integration of research, teaching and health care delivery, including research-led health promotion and reduction of the burden and impacts of disease. The universities, and particularly the research-intensive universities, have a critical role to play in facilitating and enabling real and effective integration and collaboration to occur, working across the many stakeholder organisations and their disparate roles in the health system.

**Funding sources**

- **Medical Research Institutes**
  - Commonwealth
    - NHMRC
  - Industry
  - Public

- **Hospitals & clinics**
  - Commonwealth
    - NHMRC
    - DoHA
    - Medicare
  - State
  - Industry
  - Health insurance funds
    - Public
      - Fees
      - Donations

- **Universities**
  - Commonwealth
    - NHMRC
    - ARC
    - DEEWR
    - DIISR
  - State
  - Industry
  - Public
3. The Health Workforce is complex, with many Commonwealth and State/Territory government and non-government professional organisations involved. Stronger integration of objectives, strategies and activities is essential, and the Commonwealth has a critical role to play. Progress on addressing some issues has been slower than desirable, and there has been a high level of uncertainty. The Go8 is actively engaged with the new Health Workforce Australia, the Medical Board of Australia, and the Commonwealth Department of Health and Ageing, while individual Go8 universities are involved with the respective State/Territory health authorities. The Go8 universities will continue to work with these agencies, to seek to maximise the benefits to the community and the quality of the health workforce from funding that had already been provided, and from future initiatives.

The Go8 is particularly concerned about access to quality post-university clinical training, including the quality of supervision and support. The Commonwealth must ensure that sufficient clinical training places are funded and available. The Go8 universities are concerned to ensure that the next generation of clinical academics and medical researchers are well prepared. Providing a development pathway or pipeline from undergraduate study to the end of their career for high quality medical academics and researchers is important.

Availability of clinical training places for overseas medical student graduates is important to sustain international student demand. There needs to be improved pathways for such graduates to remain in Australia and enter professional practice and/or research, as part of the solution to meeting future health workforce needs.
Objectives

Go8 universities support and seek to play a lead role in integration of health research, education and services. They are seeking a closer involvement with the Commonwealth Government in development and implementation of the policy detail.

They seek a stronger medical and other health research environment, with an internationally competitive present and future medical, clinical and health services research workforce, including excellent future academic health teaching and research leaders. They seek government support for structures which effect rapid translation of research to services delivered in the community and hospitals. They seek government support for high quality training places for both Australian and international graduates of Go8 universities, with incentives for those Australian-trained international graduates who wish to, to remain in Australia and become part of the health workforce.

Solutions

Hospital and Health Services reforms, including specific allocation of adequate funding arrangements, provide a potential avenue for improvement of integration of research, teaching and services. However these important issues could be overlooked in the overall size and complexity of health care policy, major reform, and the multiple stakeholders involved.

Ministers responsible for health, education and skills, and research, science and innovation need to take a joined-up approach to health and medical research, training and delivery, linked with population health initiatives and public and private hospital services and community health services and settings, to ensure that optimal synergy is achieved. Universities have a critical role in achieving the integration that is needed.

While Go8 universities are located in major cities, they already have a strong and growing commitment to research and models of prevention and health service delivery relevant to rural and regional populations, and development of skills and support mechanisms for clinicians, including supervisors of their students undertaking clinical placements located in those areas.

Attachment

Attachment A: Graphs of NHMRC funding support of the Australian research workforce 2003-2010, and Expenditure of NHMRC annual funding commitments
Attachment A

NHMRC funding support of the Australian research workforce 2003-2010

These data are estimates of the NHMRC-supported research workforce. The data come from people supported directly by people support schemes and estimates of people funded by research support schemes (e.g., Project and Program Grants).

Expenditure of NHMRC annual funding commitments

The overall height bar in the figure represents NHMRC’s annual expenditure for research and can vary in the years shown in grey due to variations in the uptake of grants, grant funding decisions made in previous years and variations in indexation as set by the Department of Treasury. Expenditure for years 2011 to 2014 is an ESTIMATE ONLY for these reasons.