

BA/md

To: The Secretariat,
McKeon Strategic Review of Health and Medical Research

**SUBMISSION TO THE STRATEGIC REVIEW OF HEALTH AND MEDICAL
RESEARCH – From The Faculty Of Health Sciences, University Of Queensland**
(<http://www.uq.edu.au/health/>)

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

Australians expect a quality of life that is among the best in the world. Health care practices grounded in cutting edge health and medical research are fundamental to achieving this. Effective prevention, early detection & optimal management of chronic disease; provision of cost-effective efficacious health care; and the maintenance of independent living and ability to perform daily living activities; are all important for sustaining a high quality of life. Such capabilities can only be achieved and preserved through the underpinnings of a world-class, contemporary health and medical research base.

In addition to quality of life issues and the social and cultural capital that results directly from research, a viable internationally-competitive health and medical research sector is important:

- in direct economic terms, through delaying morbidity, keeping people out of high cost care, and avoiding premature mortality;
- for commercial/industrial growth of new internationally-competitive ventures for drug development, therapeutics, devices, and educational programs;
- in attracting and retaining scientific and clinical talent by creating a culture where the best minds and ideas can be kept within Australia and/or attracted to Australia; and
- in offering the highest standards of cutting-edge evidence-based healthcare informed by a flourishing clinical research environment.

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

- Through the development of models/approaches that encourage synergistic relationships between research, education and clinical service providers. This necessitates breaking down some of the existing structural barriers between

hospitals, universities and independent research institutes. Such interactions are central to models of Academic Health Science Centres established in the UK, USA, Canada, Singapore, Sweden etc. Australia has been slow to move in this direction, in part because of lack of national policy, and in part because of fragmented oversight under multiple commonwealth and state departments. Although a range of models has proved successful abroad, such centres work best where there is high-level university/academic leadership to ensure that the academic and research-driven mission remains an integral driver for improved approaches to health care and delivery.

- Through funding incentives for interactions between different partners in health and medical research (e.g., between the university, the hospital sector, and private medical foundations).
- By better communication/collaboration/resource pooling and elimination of duplication of effort between NHMRC and the various commonwealth and state departments that have interests in health and medical issues. There is a need for an overarching high-level coordination body that has this as their principal remit.
- By improving the fragmented and tenuous career structures that exist for clinical and non-clinical researchers. This requires provision of clearly-defined career pathways, training opportunities and support to encourage greater development of both academic and clinical researchers in the health and medical sector. Key requirements include:
 - Clinical academic training that is more closely aligned to university and hospital career paths, resources and mentoring/support systems. Parity of state funded clinical salaries with federally-underwritten university scales is a priority.
 - A less pyramidal fellowship structure for career researchers. The current narrowing of fellowship numbers with increased seniority makes career progression for dedicated health and medical researchers problematic and wastes manpower.
 - Reward and recognition systems that encourage excellence in collaboration, scale and reach in research to replace the extant focus on individual metrics for sole trader academics.
 - Suitable incentive schemes to encourage graduates in the health professions back into RHD schemes.
 - Workforce planning for research is needed on a level with that of service provision, as Australia's %GDP spend on health and %workforce in the health sector is set to near double over the next 3-4 decades. Sectoral growth will have major funding implications.
- Through long-term core funding for major research centres. There is a clear need for government investment in research salaries and recurrent project costs to complement and sustain the heavy investments made in the last decade in 'bricks and mortar' for health and medical research.
- By greater investment/contribution from the hospital and primary care sectors to applied or translational research. Research KPIs should be considered key for CEOs in teaching hospitals/AHSCs. Allocating 1% of health service funding to

clinical T2/T3/T4 research as happened in the UK would provide a major boost to health networks and healthcare standards.

- By injecting more cash into the system, to bring Australia to levels comparable to our non-US developed-world competitors like Canada, UK, Sweden and Singapore.
- By enhancing NHMRC review processes to:
 - Improve the ease of on-line submission and the inefficiencies and wasted hours and transaction costs associated with the current system
 - Restructure the panel divisions so as to better reflect and represent emerging disciplines and new areas of focus.

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

- A clear priority must be to address better prevention, early diagnosis and management of chronic diseases associated with lifestyle changes and ageing. There is a particular need to focus on conditions where the health outcome differences are greatest between indigenous and non-indigenous Australians.
- An additional priority must be to develop personalized high-tech, cost-efficient multidisciplinary medicine that capitalizes on the recent advances made in molecular genetics, imaging, nanotechnology, and computing.
- In all cases it is important to generate knowledge that helps:
 - Dovetail directly with the health care system
 - Provide for an economically-sustainable national health system

To this end, research is particularly needed on health services, health economics, behavior change, and longer-term efficacy of intervention strategies (T3/T4 translational research), both in the clinical and in the public health/health promotion context

- As per the previous question, other clear strategic priorities are:
 - Development of a system for tighter integration of research, education and clinical practice
 - Fostering the next generation of health and medical researchers, especially clinical researchers

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

- By establishing and properly resourcing organizational structures, such as Academic Health Sciences Centres, that facilitate seamless interaction between the triumvirate of research, education and clinical practice. To maximize efficiency and scale, these should be funded as large multi-partner networks of critical mass.
- By funding research that is genuinely inter-disciplinary/inter-professional in focus where the emphasis – as it is ideally in clinical practice - is upon an integrated solution rather than simply the accumulation of different (often conflicting) disciplinary and professional perspectives on a given problem.

- By funding large research networks around disease or discipline themes, with an emphasis on coordination and implementation of large-scale trials and population impact.
- By continuing to invest in (NHMRC) Partnership and (ARC) Linkage-style schemes with health system partners but with extended funding horizons to permit the longer-term impact of developed therapies/interventions etc to be assessed fully.
- By broadening the current thinking on translation from simple drug and therapy developments to focus also on interventions based on behavior change, education, legislation and new media to promote disease and injury prevention.

The Executive Dean of the Faculty (Prof. Nick Fisk) and I would welcome the opportunity to meet with the Review Committee when they visit Brisbane to expand on the points raised here.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Bruce Abernethy". The signature is written in a cursive, slightly slanted style.

Professor Bruce Abernethy
Deputy Executive Dean/ Associate Dean (Research)