

Australian Medical Research and Innovation Five Year Strategy

The George Institute submission to the Australian Medical Research and Innovation Five Year Strategy

Submitted by: Professor Vlado Perkovic, Executive Director, The George Institute Australia
Contact information: E VPerkovic@georgeinstitute.org.au P 02 8052 4418

The George Institute for Global Health fully supports the Medical Research Future Fund as a mechanism for greater focus on effective research translation, improved healthcare delivery and embedding evidence into clinical practice; in order to build a sustainable, quality health system.

Limited funding means that the NHMRC is increasingly unable to support the full spectrum of health and medical research from discovery, clinical, public health, health services, to evaluation research, in order to optimise outcomes for all Australians. This leads to missed opportunities, including in areas where the needed is greatest, and has potential to stifle research impact.

The MRFF is an opportunity to address this gap with a top-down, priority-driven approach to research spend, to amplify investment in patient-focused research and to help ensure all Australians have access to the best care when they need it, including preventative care.

We recommend a balanced portfolio of research is funded with a focus on potential impact. This should include priority-driven, applied research to realise “low-hanging fruit” opportunities, along with higher-risk, long-term opportunities in areas of high need, where the rewards may be large yet the likelihood of success is lower.

Leveraging opportunities for co-funding from industry, the healthcare system (including state governments) and overseas funding bodies is an additional mechanism that should be used to maximise the impact achieved by MRFF funding.

Our recommendations focus on the applied end of the research spectrum, although we recognise that some investment in early stage research is also wise, as part of a balanced health investment portfolio. Our specific recommendations are:

RECOMMENDATION ONE: *Grow capacity in clinical trials to address the knowledge gap in healthcare delivery and health system efficacy and to identify the most effective ways to prevent and treat our biggest burdens of disease.*

GAP: Clinical trials are one of the most reliable mechanisms by which evidence can be provided for large scale, transformative change across the clinical and healthcare landscape; and are a robust mechanism for much needed effectiveness assessment across the health system.

Australia is a global leader in conducting trials that have answered important questions about the safety, quality or efficiency of new and existing treatments. There are over 60 clinical trial networks and quality registries in Australia that provide capacity to generate high-quality evidence answering key public good questions from real healthcare/clinical settings. These networks and registries have come together to form the Australia Clinical Trial Alliance (ACTA), a national peak body representing these networks and aiming to increase capacity in this critical research area.

However, previous NHMRC schemes supporting these networks (enabling grant schemes, etc.) are no longer available, and most networks are now at risk due to uncertain funding required to sustain central infrastructure, and we risk losing our key ability to investigate vitally important questions about clinical care. This threatens both our capacity to run ‘public good’ trials, and also degrades our infrastructure for managing commercially funded studies, and thus attracting investment to Australia.

SOLUTION: Funding of clinical trials and the networks that facilitate those answering key ‘public good’ clinical questions, should be a key priority of the MRFF, in particular:

Australian Medical Research and Innovation Five Year Strategy

- Support should be provided for ACTA allowing it to sustain and further grow capacity in this area.
- Modest quanta of core funding for high quality collaborative networks would be leveraged several fold, and is clearly good investment.
- Specific funding for large, high-quality trials that answer fundamentally important questions that are beyond the capacity of the NHMRC to fund would deliver very large health and financial returns to the Australian community. This funding could be leveraged by creating joint schemes with similar bodies in other countries.

We also endorse the more detailed recommendations in the separate submission from ACTA.

MRFF BUILDING BLOCKS - Aims: preventions and cures for tomorrow; a translation pathway that maximises opportunities for success; economic benefits; sustainable, high-quality, cost-effective healthcare; healthcare policy and delivery have a strong evidence base; a research engaged workforce; contemporary infrastructure that meets research needs. **Mandatory considerations:** Burden of disease on the Australian community; how to deliver practical benefits from medical innovation to as many Australians as possible; how to ensure that disbursements complement other assistance provided to the sector.

MEASURE OF SUCCESS: Improved patient outcomes due to demonstration of effective therapies; financial savings due to defunding of ineffective therapies; a 'self-learning' health system; and capacity to attract funding from commercial trials to Australia.

RECOMMENDATION TWO: *Dedicated funding stream to identify how to effectively get people the healthcare they need and ensure research is embedded in the health system.*

GAP: While a growing evidence base underpins our knowledge of effective and ineffective treatments, there is insufficient research assessing the most effective ways to implement proven and new treatments for the biggest killers and causes of disability, in addition to cost-effective preventative strategies; and how to implement research outcomes into practice. As a result, many people who would benefit from proven treatments never receive them, and others are given treatments that are ineffective or even harmful. A key contributor to this situation is the limited existing funding for and inadequate capacity in health services, healthcare delivery and evaluation research. By comparison, the National Institute Health Research scheme in the UK provides strong evidence for great ROI and transformative potential of such funding on both the health and research sectors.

Urgently needed are:

- Investment in clinician researchers (both medical and non-medical) and multi-disciplinary teams, who are best placed to design and implement successful healthcare delivery strategies;
- Prioritisation of research projects specifically targeted to the design and assessment of optimal healthcare delivery and translation. These should use rigorous research methods to trial different approaches and ascertain what works (e.g. task sharing, payment systems);
- Promotion of novel solutions/innovations that are proactive, fit-for-purpose, cost-effective, and accessible, while removing barriers (e.g. e/mHealth, novel uses of existing treatments, health informatics)
- Meaningful consumer engagement/input while maintaining an evidence-based focus (e.g. through improved clinician/health professional and consumer access to up-to-date research).

SOLUTION: Building capacity in health systems and healthcare delivery research, through direct funding streams via the MRFF for both clinician-researchers and suitable projects, will help effectively create a quality, effective, accessible and consumer-centred health system; and address a shortfall in evidence in this area of high need.

Australian Medical Research and Innovation Five Year Strategy

MRFF BUILDING BLOCKS - Aims: preventions and cures for tomorrow; a translation pathway that maximises opportunities for success; economic benefits; sustainable, high-quality, cost-effective healthcare; healthcare policy and delivery have a strong evidence base; a balanced and appropriately skilled workforce. **Mandatory considerations:** Burden of disease on the Australian community; how to deliver practical benefits from medical innovation to as many Australians as possible; how to ensure that the financial assistance provides the greatest value for all Australians.

MEASURE OF SUCCESS: Improved patient outcomes especially from chronic disease and injury; translation of existing and future evidence expedited into practice; maximise ROI / research impact; an effective, quality and consumer-centred health system aligned with the principles of Medicare; and the broad health workforce effectively leveraged.

RECOMMENDATION THREE: *Address imbalances in researcher funding and leverage full potential of Australia's rich and diverse pool of medical and health expertise.*

GAP: An extremely competitive and limited funding environment means many excellent researchers are lost to the system - a missed opportunity. Research translation and implementation occurs most quickly and effectively when clinicians providing care are involved with healthcare funders in the design and conduct of relevant research. The limited funding available for clinicians from a range of backgrounds wishing to undertake part-time research alongside clinical activities clearly inhibits optimal engagement of clinicians in research.

This is also true for people undertaking part-time research due to other responsibilities (family, administrative, etc.) who are often at least as productive as full time researchers, and particularly affects women in research, leading to gender inequities highlighted by the large number of female early-stage researchers and the very small number of female senior researchers.

MRFF BUILDING BLOCKS - Aims: a translation pathway that maximises opportunities for success; a balanced and appropriately skilled workforce; a research engaged workforce; preventions and cures for tomorrow; healthcare policy and delivery have a strong evidence base. **Mandatory considerations:** Burden of disease on the Australian community; how to deliver practical benefits from medical innovation to as many Australians as possible; how to ensure that the financial assistance provides the greatest value for all Australians.

SOLUTION: Leverage clinician researcher expertise by funding research protected time for high quality applicants at all career stages from a range of clinical backgrounds encouraging and supporting part time applications; and adopting a 'career path' award system for Australia's best/most productive clinician researchers (such as the MacArthur Fellowship in the US).

MEASURES OF SUCCESS: Increased funding and career opportunities for clinician, female and early-mid career researchers; improved evidence-based healthcare, health system efficiency and quality, and patient outcomes; improved gender equity in the medical and health sector; and full expertise of the health workforce leveraged.