The Australian Society for Medical Research

January 16, 2017

Budget Policy Division
Department of the Treasury
Langton Crescent
PARKES ACT 2600
Email: prebudgetsubs@treasury.gov.au

Re: Pre-Budget Submission

Investment into health and medical research (HMR) provides exceptional returns and represents an opportunity for Australia to secure its long-term economic, health and social prosperity. This Submission provides a roadmap for Treasury to capitalise on this timely opportunity. As an organisation that prides itself on always using an evidence-based approach in its advice to Government, the Australian Society for Medical Research (ASMR) is pleased to make the following recommendation, based on the results of recent independent economic modelling.[1]

Recommendation: Allocate an **additional $350 million** to the Medical Research Endowment Account (MREA) of the National Health and Medical Research Council (NHMRC) in the 2017-18 Federal Budget.

This investment strategy will achieve two important goals:

(i) **Laying the foundation for a visionary and sustainable HMR investment model:** Benchmarking investment in the Australian HMR sector to total Health System Expenditure (HSE) will ensure sector sustainability. Independent economic modelling indicates that incrementally increasing investment into the NHMRC MREA to reach 3% of HSE in 10 years' time will generate ***$58 billion in health and economic benefits***.[1] As the NHMRC MREA currently accounts for 0.55% of total HSE, an immediate boost of $350M (~0.25% of HSE) is the first step towards implementing this long-term strategy.

(ii) **Providing short-term stability to the HMR sector:** The HMR sector has been decimated in recent years by static investment and, as a result, plummeting grant funded rates. Our recommendation for additional investment into the NHMRC MREA will return grant and fellowship funded rates to their historic norms of ~25%, thereby stabilising a sector under immense pressure and driving health and economic returns.

Significance of this investment

The Federal Government is tasked with ensuring all Australians enjoy the best possible health and healthcare, while also being fiscally responsible to current and future generations. *HMR cannot address all of the economic challenges we face but it does hold* ***the key to substantially alleviating projected health expenditure and to creating a knowledge environment where collateral benefits fuel a growing economy.*** Great nations emerge when people are empowered by a supportive and visionary Government – our HMR sector is filled with researchers who simply require opportunity to make their invaluable contribution to our future health and economic prosperity.

Evidence for our recommendation

Australian HMR provides exceptional economic, health and social returns

As the major funding body for HMR in Australia, the NHMRC is essential for enabling health and medical innovation.

- Investment into NHMRC-supported projects and people yields exceptional returns – ***every $1 invested returns $3.20*** in economic, health or social benefits, including wellbeing gains, avoided health system and indirect costs, and commercialisation.[1,2]
- NHMRC investment between 2000-2015 is projected to yield ***net returns of over $1.5B per year.***[1]
- The ***largest increase in real exports over the last decade has been in medical instruments and medicinal and pharmaceutical products***[3] – an industry with a rich future as Australia transitions from a resource-based economy to a knowledge-based economy.

The Australian HMR workforce is being decimated

Despite the clear benefits of HMR, Government investment into the NHMRC has remained static over the past 5 years. This has precipitated historic lows in grant funded rates, particularly for Project Grants and mid-career fellowships (< 1 in 6 applications funded), which, in turn, has resulted in damaging workforce attrition.

- There has been a ***16% loss of personnel*** (full-time equivalent) supported by NHMRC Project Grant scheme since 2013[1] – if reflective of the broader HMR sector, a 16% loss of workforce equates to a ***$4.5B reduction in net benefits***.[1] This downward trend in workforce capacity will inevitably worsen without enhanced investment.
- ~ 1 in 4 PhD-qualified researchers have less than 2 months of job security.[4,5]

As a result of workforce instability, many research leaders are being forced to take their intellectual capital overseas or to other industries, meaning breakthrough research is not being translated into tangible returns for Australia. Replacing these experts is not a cost-effective option[6] – *these experts must be retained*.

The Medical Research Future Fund (MRFF) is not a magic bullet

The Government is praised for establishing the Medical Research Future Fund (MRFF), a visionary initiative that is expected to disburse $1B per year by 2021. However, the recent announcement of the MRFF Strategic Platforms and Priorities[7] confirms that this initiative will not address many of the problems currently facing the HMR sector.

- The MRFF provides little scope for 'People Support' and thus is highly unlikely to mitigate HMR workforce decline.
- Clinical translation and commercialisation requires a solid foundation of discovery-driven basic research – ***all stages of the research pipeline must be supported***.

For the MRFF to meet its aspirational goals, there must be a concomitant commitment to investing in the NHMRC MREA, which supports the people and projects that drive translation and commercialisation.

Our recommendations present an evidence-based solution that will maximise economic, health and social returns from HMR

Immediate: ***Increase investment into the NHMRC MREA by $350M.*** This will have the dual effects of (i) paving the way towards a sustainable investment strategy whereby research allocations are benchmarked against total Health System Expenditure (see below) and (ii) providing immediate stability to a workforce under immense pressure. Particularly vulnerable at present are the Project Grant and Career Development Fellowship schemes (2016 funded rates of 15.2% and 13.3%, respectively). An immediate injection of $350M into the NHMRC MREA will allow these schemes to be returned to acceptable levels of ~25%. While this falls short of the >40% funded rates recommended by the 2008 House of Representatives Standing Committee on Industry, Science & Innovation,[8] it is still far more tenable than the status quo.

Long-term: ***Increase investment into Australian HMR incrementally to reach 3% of total HSE by 2026***. ASMR strongly advocates for benchmarking HMR investment against total HSE in order to achieve a predictable and sustainable investment model for the HMR sector. NHMRC investment as a proportion of HSE dropped to 0.55% in 2016; if investment remains static in real terms, it is projected to drop to 0.34% of HSE by 2025 due to increasing healthcare costs.[1] Should investment be increased to 3% of HSE by 2026, independent economic modelling projects a ***windfall of $58B in net benefits*** over the 10 year period.[1]

Expected outcomes and significance

Our request for a modest amount of immediate additional investment will provide short-term stability to the HMR sector, while transitioning to a more sustainable investment model will bring Australia into line with other leading nations and provide a solid foundation for the translation and commercialisation aspirations of the MRFF. This will allow the Government to forge a more prosperous Australia, rich in economic, health and social returns.

It is time to ask ourselves what sort of nation we want to be over the coming decades – a global leader in health and medical innovation or a minnow just trying to keep pace? We have been fortunate to prosper on the back of the resources boom for the past 30 years, but as this comes to an end, we have an incredible opportunity to forge a new future, utilising our intellectual capital to live up to our moniker of the "clever country". This is clearly Australia's winning formula: we have the evidence that HMR provides exceptional returns, we have the highly-skilled workforce needed to achieve these returns – we are ready and willing to tackle the challenges of the future if supported in these endeavours.

While certain incentives may entice industry and corporations to take up the slack, the ultimate responsibility of ensuring the prosperity of all Australians comes down to the Federal Government. Enhanced Government support for health and medical research will be a cornerstone in shaping a 21st century society founded on a strong knowledge-based economy, a healthy population and social equality.

Yours sincerely,



Dr Dan Johnstone
President

Dr Sarah Meachem
Immediate Past President

Dr Roger Yazbeck
President Elect

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3. Prime Minister's Manufacturing Taskforce, Report of the Non-Government Members, 2012,www.innovation.gov.au/industry/manufacturing/Taskforce/Documents/SmarterManufacturing.pdf
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