



## Centre for Eye Research Australia

29 March 2012

Mr Simon McKeon  
Chair  
Strategic Review of Health and Medical Research in Australia  
PO Box 4226  
Manuka ACT 2603

Dear Mr McKeon

### **Submission to Strategic Review of Health and Medical Research in Australia**

I am pleased to enclose the Centre for Eye Research Australia's (CERA) submission to the Strategic Review of Health and Medical Research in Australia.

CERA appreciates the opportunity to respond to the Review and to contribute to the future of our sector.

If you have comments on our submission please do not hesitate to contact me directly.

Yours sincerely

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*Affiliated with the University of Melbourne and the Royal Victorian Eye & Ear Hospital*



## **Submission to the Strategic Review of Health and Medical Research in Australia**

The Centre for Eye Australia (CERA) welcomes the opportunity to provide a submission to the Strategic Review of Health and Medical Research in Australia.

Since its establishment in 1996, CERA has achieved considerable growth and is now one of the world's leading specialty eye research institutes, currently ranked 4<sup>th</sup> in terms of scientific publications.

CERA is a member of both the Australian Association of Medical Research Institutes (AAMRI) and Research Australia, and supports the key contentions of the submissions prepared by these peak bodies, such as:

1. A stronger focus on, and an increase in funding for, research translation building the capacity of health systems, health economics, health services and implementation research
2. Providing support for early and mid career researchers
3. Reviewing and reducing unnecessary red tape
4. Placing priority on medical research addressing health problems in Australia
5. The commissioning of a major study to strengthen global and local philanthropic support

In addition, below are the following opportunities directly relevant to our experience and to vision impairment:

- 1) An adjustment of the national system for health and medical research funding to better match projected demands on the Australian health system, both in social and economic terms.**

The costs of treating eye disease are large in proportion to many other diseases - \$1.8 billion in 2004, more than coronary heart disease, stroke, arthritis and depression. Vision impairment also leads to substantial indirect costs, including the cost of carers, aids, equipment, home modifications and rehabilitation. Vision loss has a direct effect on quality of life: it increases the risk of depression, and very costly accidental falls and fractures. Each of these health issues may lead to an increased level of care or institutionalisation.

Treatment and rehabilitation costs associated with eye disease are forecast to increase markedly as a consequence of the rapid increase in Australians aged 65 and over, up to around 25 per cent of the population by 2042. In this context, the cost-benefit for eye research is strong: for every \$1 spent on eye research spending there is a \$5 return in healthcare savings (Access Economics). Research into eye disease is more readily translated into the clinic as the risk is low compared to treatments for systemic disease of any sort.

An analysis of the cost burden for two of the major eye diseases, age related macular degeneration

(AMD) and glaucoma, demonstrates the case for an adjustment to the existing National Health and Medical Research Council (NHMRC) funding model. For example, the total cost of treating AMD (the leading cause of vision loss in the developed world) treatment, currently estimated at over \$2.5 billion/year will rise to over \$6 billion/year by 2025. The major drug for macular degeneration treatment, Lucentis, has become the third largest item in the Pharmaceutical Benefits Scheme (PBS) in dollar terms. In 2010-11 financial year, outlays for the drug rose by 32 per cent in just 12 months - the greatest increase in dollar terms for the PBS.

Despite this level of expenditure, many patients receiving this drug continue to lose vision and further, this treatment is not applicable for a significant percentage of patients with AMD. A treatment that delayed the progression of this disease would significantly lower these costs and all the peripheral costs associated with vision loss in the elderly.

Similarly, the treatment cost for glaucoma is projected to increase from \$1.9 billion in 2005 to \$4.3 billion by 2025.

In contrast, the proportion of NHMRC-funded research for ophthalmology and vision science has reduced by a massive 44 percent as a total percentage of NHMRC funding between 2000 and 2009.

There is a clear role for medical research institutes working in sub-specialty fields of medicine affiliated with a university and health service. CERA's affiliation with the University of Melbourne and the Royal Victorian Eye and Ear Hospital has been highly effective for integrating research with clinical care and training the next generation of ophthalmologists. The world's other leading eye research institutes also have a close partnership between an independent research institute and a university (Wilmer Eye Institute in the United States is affiliated with Johns Hopkins University and Moorfields Eye Hospital in the United Kingdom is affiliated with the University College London).

**2) Streamline the funding of direct and indirect research costs between governments; raise and equalise the level of indirect funding for medical research institutes to be consistent with universities.**

An increase in the level of indirect funding for medical research institutes to be consistent with universities is critical in maintaining international competitiveness. Both the United States and the United Kingdom fully reimburse indirect costs of research and it is submitted that government is best placed to provide indirect funding due to the limitations in attracting private or philanthropic funding for essential operating costs.

We propose that the Australian and state governments collaborate and align their funding processes to reduce complexity, cost shifting, duplication and resources for medical research institutes. The NHMRC should be readily able to provide data on direct research funding allocations to state governments, to enable existing funding formulas to distribute indirect funding allocations. In Victoria, medical research institutes are required to submit separate applications to the NHMRC and to the Victorian Department of Business and Innovation for Organisational Infrastructure Support (indirect) funding grants. The level of funding provided by the State directly responds to the amount of funding awarded by the NHMRC.

However, it is a stable pool of funds, so the cents per dollar of direct funding received decreases each year as medical research institutes attract more direct funding.

**3) Maintain a sustainable and effective workforce of clinician scientists.**

This issue is highlighted by the disparity between income for researchers constrained by competitive government funding allocations and ophthalmologists receiving an average salary of approximately \$450,000. A clear framework is required to encourage clinicians to support research, incorporating training, logistics and incentives. This framework could include a stronger integration of research in professional development, an increase in the level of funding for practitioner fellowships, and the provision of an integrated and shortened pathway for research and clinical training.

**4) Support establishment of the Aikenhead Centre for Medical Discovery**

CERA joins with St Vincent's Institute, the University of Melbourne, the Bionics Institute and other partners in advocating for both national and state support in bioengineering and intelligent drug design through the Aikenhead Centre for Medical Discovery. The Centre will demonstrate global leadership in bringing together clinicians, engineers, scientists and students to stem the tide of rising health costs, and to inspire and train a new generation of scientific pioneers, doctors and nurses to deliver real health benefits to Australians. The project is consistent with the Victorian Health Priorities Framework 2012-2022: Metropolitan Health Plan and five of the eight National Health Priorities.

**5) Additional commitment to the Avoidable Blindness Initiative (especially in the Asian Pacific region) and Indigenous eye health.**

It is estimated that 80 percent of global blindness is preventable or treatable. The allocation of additional funding through AusAid, consistent with Australia's adoption of the United Nations Development goals, is required. Australia is strongly placed to improve the quality of life for thousands of people through targeted investment in avoidable blindness through the Asian Pacific region.

Australia is the only developed country with trachoma, a bacterial infection of the eye associated with poor hygiene, crowded housing and poverty. A targeted investment is required to eradicate this issue for our Indigenous citizens. Indigenous children are five times less likely to have vision loss than non-Indigenous children. However, by the time they reach adulthood, they are six times more likely to be blind and three times more likely to have low vision. In addition to trachoma, lack of access to ophthalmological and general healthcare is a huge issue.

