Template for submissions to the Strategic Review of Health and Medical Research

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Submission summary: (300 words or less)

Thank you for the opportunity to provide a submission to the McKeon Committee's Strategic Review of Health and Medical Research in Australia. As the peak patient support and advocacy body for the more than 70,000 Australians living with the Inflammatory Bowel Diseases (Crohn's Disease and Ulcerative Colitis), Crohn's & Colitis Australia (CCA) welcome the timely review and hope to bring to the Committee's attention the vital need that Medical Research currently plays and to suggest further means of enhancing the future health of Australians through improved Medical Research.

Please use the following questions to structure your submission:

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

Australia is in many ways a fortunate country, bestowed with natural resources and a stable democracy, which have lead to our wealth and comparative good health. However, this fortune should not be taken for granted, nor should complacency lead to a drop in our high standards of living. As a rich nation with a strong currency, now more than ever, do we need to maximise the opportunities that our excellent tertiary education system provides to generate further exportable intellectual property and to foster the development and retention of our world-class researchers. Just as we can export raw minerals and import finished products, so to do we lose exceptional researchers to overseas institutions and then pay many times over the cost of the pharmaceuticals that their intellectual endeavours generate.

A strong health and medical research sector also provides many other benefits. Having a critical mass of appropriately trained and supported clinicians and researchers allows timely and local appropriate translation of new scientific and medical discoveries and practices to Australia with the benefit of improving our nations health. This critical mass also attracts gifted overseas researchers to come to Australia to contribute to the world-class research of our leading institutions, again with immediate local and potential future gains in both knowledge, but also the developments of patents and future therapies. Collaboration is the essence of effective modern research and having strong Australian research units facilitates exchange of cutting edge technologies for the rapid expansion of local research, thereby allowing us to keep pace with heavily endowed overseas institutions. On the clinical front, we have an excellent international reputation for conducting clinical trials to a high standard; thereby meaning our centres of clinical excellence are sought after sites for international clinical drug and device trials. These trials give our patients early access to new therapies and also provides our leading clinicians with hands on, early familiarity with these new therapeutics, also enabling us to

better assess their appropriateness to our heath care system if and when they prove efficacious and an application is made for our Pharmaceutical Benefits Scheme or Therapeutics Goods Agency to register and subsidise them.

Just a few examples of Australian medical research excellence that have changed world wide medical practice include the discovery of Helicobacter pylori by Marshall and Warren, the discovery of granulocyte macrophage colony stimulating factor, and the human papilloma virus cervical cancer vaccine. Further strengthening of this sector would also enable local development and distribution of the first rate discoveries made in Australia, allowing us to take them to the world market and truly become knowledge based economy.

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

At present, much of Australia's health and medical research is segregated into the realms of the basic scientist and the clinician, with little overlap. There needs to be a targeted approach to increase the number of clinician scientists that can effectively bridge this divide and provide the appropriate conduit to educate both the clinicians on the rapidly evolving scientific front, but also to guide the scientists with the most pressing clinical needs for the community. As noble as science for science's sake is, it may not always be the best return on our finite investment dollars. Further to this theme, the involvement of clinician researchers in the establishment of research priorities and the assessment of research grant applications is vital to maintain this focus. Translational research should be a priority, as should seed funding for early clinical trials of new therapies.

The NHMRC should regularly audit and review the effectiveness of its selection process, to determine of the best projects are being funded and to compare the research outcomes of both funded and non-funded projects to assess this. At present, funding typically goes to already high performing centres where much of the research the project aims to do, has to be completed to provide enough results to attract funding. This self fulfilling cycle denies funding to potentially truly innovative projects where seed funding of so called "blue sky" projects may unearth potentially important new avenues of research. While large amounts of money should still go to proven performers, the provisions of dedicated, protected research time and resources to innovative clinician researchers is vital, where the balancing of urgent clinical needs may result in fewer publications and less time to dedicate to the grant funding cycle.

The concept of a single dominant funding body is also restrictive. Industry and the philanthropic centre should be given encouragement to contribute to research and there should be the provision of a conduit for this. Currently, much time is spent submitting multiple applications to multiple siloed organisations in an attempt to attract funding, often to simply keep valuable scientists and technicians employed. This clearly detracts from the available time to dedicate to forging ahead with medical discovery.

If we wish to become a knowledge-based economy with world-class health care, we need to commit to funding that reflects these desires. Benchmarking our health and medical research funding against the top international performing nations is vital to maintain competitiveness.

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

1. Determining our clinical needs and research priorities. This needs to be developed periodically from a forum involving both clinical and scientific leaders, assessing the most important and achievable improvements in our nation's health.

2. A review of what the bottlenecks and obstacles are to successfully developing local discoveries into viable and marketable therapies without needing to send the development offshore. This needs to involve highly productive researchers, institutions, government and industry.

3. Seed funding and early development funding. Dedicated monies are needed to take strong hypotheses to the proof of principle stage in order to attract larger grant funding. Provision of appropriately supported and compensated environment to undertake the expensive and risky first steps in translating a new discovery into practice. This is required to reach a point where venture capital can be secured to locally develop potential global blockbuster therapies.

4. Clinical effectiveness research. Are we getting the best outcomes from our available therapies and clinicians? Most of current medical therapeutic research is testing new agents developed by large pharmaceutical companies, which are typically more expensive than currently available treatments. Our currently available treatments themselves have often only gone through a limited number of pharmaceutical company sponsored trials in order to gain sufficient results to obtain listing for reimbursement. Often these agents are not appropriately tested on certain groups in our population that ultimately receive them, nor are there many head to head studies of competing products on the market due to the prohibitive costs of undertaking such trials. Clinical effectiveness studies of new clinical algorithms designed by experienced clinicians can improve the outcomes of existing therapies, some of which will be out of patent and hence significantly cheaper to the health care system.

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

The development of a critical mass of clinician scientists and federally funded academic health care centres would optimise the translation of health and medical research into clinical practice and improved patient outcomes. At present, the competitiveness to gain research funding drives clinicians either away from clinical practice or more commonly out of basic scientific research. The lack of suitable clinician researcher appointments at our flagship institutions propagates the divide between the bench and the bedside. Similarly, the lack of integration of our universities and hospitals adds layers of complexity and bureaucracy to creating such positions. The uncertainty of research funding versus the guaranteed, more flexible and more lucrative realms of particularly private practice are an irresistible lure for our young clinicians, particularly in an age of increased costs of housing and the much higher percentages of female medical graduates with the requirements of career disruption to have a family. The provision of a meaningful proportion of clinician-scientist positions in federally funded academic medical centres would remove these obstacles and divorce them from the state versus federal government funding disputes that cripple our existing leading public hospitals. These cost shifting decisions between Medicare and state government public hospital funding removes bureaucratic incentives for more efficiency and throughput and the development of innovation and enhanced pathways of care.