Announcement of the outcomes of the NHMRC initiative to recognise NHMRC Advanced Health Research and Translation Centres

If we are to have a first class health system in Australia, it is essential that we find better and more rapid ways to integrate the findings of health and medical research into patient care and the training of our health professionals.

It is only through research that new treatments and therapies are developed reliably, and it is only through collaboration between researchers, health practitioners and policy makers that we see the results of this research in action.

Australia is renowned for conducting excellent medical research. Every day, our researchers make new discoveries for the benefit of our health. Whether it is identifying a new gene, developing a new diagnostic device, discovering that one treatment is more effective than another, or perhaps that some of our current treatments are not effective at all, our research community is constantly generating new knowledge.

However ensuring that knowledge gets from the researchers’ publications to the patient’s bedside is not easy.

Around the world, it is widely recognised that advances in research and its translation into evidence-based patient care needs to come more powerfully from collaboration of researchers, health practitioners and administrators, working together in the interests of patients.

There has been a strong international move towards encouraging “Centres” of collaboration between health leaders and academia in recent years in the UK, Europe and the USA.

Such Centres encourage and support clinical leadership in both academia and in the health system. Importantly, such Centres can also help overcome the centrifugal effects of different funding mechanisms for patient care, education, training, and research.

Here at home, much more can be gained for the Australian people by health care organisations, academia and research institutions working together harmoniously and cooperatively. The best can be exemplars for research, translation, patient care and training at a national level.

To help foster this, NHMRC introduced a new initiative to encourage, recognise and celebrate those Australian collaborations of local health networks, universities, medical research institutes and community centres that already excel.

Last year, NHMRC called for submissions from the health sector and their academic collaborators for recognition as NHMRC Advanced Health Research and Translation Centres, a title reserved for those who promote leadership and excellence in research, translation and patient care. The results of this initiative are presented in this paper.

The NHMRC initiative aimed to promote stronger interactions and relationships between health networks and centres, universities’ research activities, medical research institutes and potentially non-government organisations, to benefit patient care.

This is not a research funding initiative, instead it is intended to build upon research towards a self-improving health system.

NHMRC found that there was great enthusiasm for the initiative from State and Territory health policy leaders, local health network heads, universities and clinical and health services research leaders for the idea. We received submissions from every state and territory in the nation.
Each submission was judged against a top international standard against six criteria:

1. Leadership in outstanding research- and evidence-based clinical care, including for the most difficult clinical conditions,
2. Excellence in innovative biomedical, clinical, public health and health services research,
3. Programs and activities to accelerate research findings into health care and ways of bringing health care problems to the researchers
4. Research-infused education and training
5. Health professional leaders who ensure that research knowledge is translated into policies and practices locally, nationally and internationally
6. Strong collaboration amongst the research, translation, patient care and education programs.

Eight submissions were strong enough to warrant review by our international panel of experts, and the results of that review are below.

Summary of findings

Four Centres have been recognised as being of top quality internationally and have been recognised as NHMRC Advanced Health Research and Translation Centres. These are:

- Alfred Health and Monash Health and Partners Advanced Health Research and Translation Centre
- Melbourne Health Care Partners Advanced Health Research and Translation Centre
- South Australian Advanced Health Research and Translation Centre
- Sydney Health Partners Advanced Health Research and Translation Centre

These four centres reflected strengths across the six selection criteria to a top international level, particularly the research and health delivery sectors; and their ‘team’ approach was evident and demonstrable. The commitment and active involvement of CEOs of health services was evident, as was a demonstrable record of collaboration and a sharing of resources for research and access to patients, registries and databases.

Three Centres have been recognised as having the potential to operate at top international levels in the near future.

- Brisbane Diamantina Health Partners Advanced Health Research and Translation Centre
- Sydney Alliance for Health Research and Training Advanced Health Research and Translation Centre
- Western Australia Advanced Health Research and Translation Centre

These three centres were early in their collaboration but have the clear potential to operate at the top international level soon. It was clear that all three had already made significant progress in planning and implementing collaborative approaches at top international levels.

These Centres will be encouraged to further develop plans and strategies for recognition, with a further assessment soon. NHMRC have been informed that this initiative has sparked powerful collaborative discussions between parties in these three submissions on a whole regional or city basis, for the first time in some cases. We strongly recommend that these continue.

NHMRC wishes to make special mention of the submission from the Hunter Advanced Health Research and Translation Centre. The international review panel was impressed with the achievements, vision and strong community support of this submission. Though there was a smaller critical mass of research excellence compared to the larger Centres, which mean that it was not comparable to the top internationally in those criteria, the Hunter Advanced Health Research and Translation Centre is a creative, cohesive and collaborative model that already provides an excellent model for impactful regional approaches. This model of effective regional and local collaboration will be factored into further NHMRC work in this area. This Centre showed clearly the improvements in health that can be accomplished through translation of research in regional communities.

This regional and community approach could also be achieved by other applicants that were not shortlisted.
The Value of Advanced Health Research and Translation Centres

Given the excellence of so many Centres already and the potential uncovered through the review process, it is clear that there is huge opportunity for the ongoing improvement of health care policy and practice in Australia through the strategies and approaches developed by the Centres.

The leadership on show in these Advanced Health Research and Translation Centres provides a model for a more agile, self-improving health system.

A strong set of Advanced Health Research and Translation Centres around Australia has the potential to:

- Increase the cost-effectiveness of health care by identifying, testing and introducing systems of care, procedures and devices that are most effective.
- Restrain cost increases by identifying and eliminating those process, procedures and treatments that are ineffective or less cost-effective.
- Provide strong and more effective dissemination of information towards achieving improvements.
- Provide a more powerful base for clinical trials- to the benefit of patients and our clinical trials industry.
- Provide much greater efficiency in the use of resources – clinical, community, research – through rationalisation, avoiding duplication, and gaining critical mass efficiencies.

Examples of this potential can be seen in the Appendix - a list of examples of achievements documented by the four top Centres alone.

Future Actions

NHMRC will work with health policy makers nationally to build and expand this concept in the future, given the potential already uncovered in this initiative. The enthusiasm and strategic vision of all the bids identified clearly how Australian health could benefit and the potential to gain further value though links to similar initiatives in health internationally.

We will also consider how to undertake another round soon to recognise further development of collaboration and achievements in translation. We encourage those with the potential to achieve this in a short time to continue to develop plans, strategies and collaboration.

All eight of these Centres are in fact networks, bringing together collaborations of at least one local health network (and often more), at least one university (and sometimes more), medical research institutes, and community centres.

It should be noted that when this initiative was run, primary care was undergoing transition from the Medicare Locals to the Primary Health Network configuration and it was not therefore possible to incorporate these entities into submissions. Future rounds of recognition should clearly incorporate this crucial sector.

Background

NHMRC funds much original health services and clinical research aimed at providing evidence for improving health policy and practices. In 2014, NHMRC support for clinical and health services research totalled $328 million.

NHMRC Council’s discussions on how to accelerate the translation of knowledge from research into better care led to the realisation that there is underutilised leadership that should be tapped; leadership within the health and medical research community, leadership in State and Territory Health policy making and leadership at the local health network level.

Building on an international trend, we therefore developed the concept of NHMRC Advanced Health Research and Translation Centres.

In mid-2014 we called for submissions from the health system for recognition by NHMRC for the excellence of their work and collaboration with academia.
The submissions were judged by an international Review Panel of Professor Sir Robert Lechler (Kings College London), Professor Dermott Kelleher (Imperial College London), Prof. Tom Walley (Director of the UK National Institutes of Health Research Health Technology Assessment Programme and Professor of Clinical Pharmacology at Liverpool University), and Professor Martin Schechter, (Head of School of Population and Public Health, University of British Columbia).

The panel was asked to:

- provide NHMRC with advice on the submissions and which particular centres show the leadership characteristics indicated above at an internationally competitive level,
- advise NHMRC which centres show potential to achieve such characteristics, and
- advise NHMRC the actions that could be taken to further encourage development of leadership centres.

NHMRC received 12 submissions and eight were shortlisted for interview.

The full report is available on the [NHMRC website](https://www.nhmrc.gov.au).
Appendix

Examples presented by the four recognised Centres include:

- Using intravenous saline has better outcomes compared to intravenous albumin in critically ill patients, and estimated to be capable of saving $700 M per year - Sydney Health Partners Advanced Health Research and Translation Centre.

- A Cooperative National Registry of Acute Coronary care, Guideline Adherence And Clinical Events (CONCORDANCE) – allows clinicians to monitor themselves against others and best practice guidelines to reduce variability in treatment of Acute Coronary Syndrome (ACS) – Sydney Health Partners Advanced Health Research and Translation Centre.

- Home visits to new mothers is the only successful intervention to reduce obesity in early life – Sydney Health Partners Advanced Health Research and Translation Centre.

- Ultrasound extra-corporeal shock wave therapy for plantar fasciitis is ineffective – Alfred Health and Monash Health and Partners Advanced Health Research and Translation Centre.

- Vertebroplasty for osteoporotic vertebral fractures is ineffective – Alfred Health and Monash Health and Partners Advanced Health Research and Translation Centre.

- Physiotherapy is ineffective for hip osteoarthritis, knee osteoarthritis and rotator cuff disease of shoulder – Alfred Health and Monash Health and Partners Advanced Health Research and Translation Centre.

- Demonstrated unnecessary medicine use e.g. anti-psychotics in people with dementia, non-steroidal anti-inflammatory medicine in people with heart failure – South Australian Advanced Health Research and Translation Centre.

- New workforce models of care developed for specific diseases, services and primary care – Melbourne Health Care Partners Advanced Health Research and Translation Centre.

- Cost-effectiveness of using immunohistochemistry in colorectal cancer – Melbourne Health Care Partners Advanced Health Research and Translation Centre.