



Medical Research

Future Fund



AUSTRALIAN MEDICAL RESEARCH AND INNOVATION PRIORITIES 2016-2018

Australian Medical Research and Innovation Priorities 2016-2018

Under the *Medical Research Future Fund Act 2015*, the Health Minister must take this document (*Australian Medical Research and Innovation Priorities 2016-2018*) into account when making decisions relating to financial assistance provided from the Medical Research Future Fund (MRFF). The Australian Medical Research Advisory Board has constructed this initial list of priorities to be read and considered in conjunction with the *Australian Medical Research and Innovation Strategy 2016-2021*.

Strategic and international horizons		
Antimicrobial resistance	Investment in this global challenge, consistent with Australia's First National Antimicrobial Resistance Strategy (2015–2019), with a focus on research to bring to market point-of-care solutions.	
International collaborative research	Create a reserve for rapid funding of international collaborative work in priority areas of health and medical research, capable of leveraging multiple agency, discipline, national or industry investment.	
Disruptive technology	Assess the impact of disruptive technologies such as artificial intelligence, wearables, genomic engineering and emerging markets on health service delivery and health training requirements.	
Data and infrastructure		
Clinical quality registries	Provide start-up investment in disease or therapy-focussed clinical registries supported by a national framework to maximise interoperability and value of research to clinical practice.	
National data management study	Study, in collaboration with key agencies, the requirements for infrastructure enhancement that expands the use of secure, digitised (My Health Record) and linked health and social data and inter-agency collaborative research.	
MRFF infrastructure and evaluation	Establish:	
	(1) a consumer-driven health and medical research agenda;	
	(2) a method to guide future MRFF priorities; and	
	(3) the means to measure and report on economic returns from investments.	
Communicable disease control	Enhance and coordinate research on national surveillance of and response to current and emerging infectious diseases and antimicrobial resistance.	
Health services and systems		
National Institute of Research	In partnership with the states and territories, determine the feasibility of establishing a national institute focused on health services, and public and preventive health research to facilitate evidence-based and cost-effective healthcare.	
Building evidence in primary care	Work alongside the Medicare Benefits Schedule Review Taskforce to identify interventions with limited supporting evidence that are amenable to randomised control trial investigations, and engage the existing workforce to build capacity.	

Behavioural economics application	Support development of research in applied behavioural economics that concentrates on public and preventive health, with an emphasis on early intervention in mental health, healthy eating and physical activity.	
Drug effectiveness and repurposing	Invest in post-clinical effectiveness studies of drugs and other health interventions and support pre-clinical proposals that identify new uses for existing drugs.	
Capacity and collaboration		
National infrastructure sharing scheme	Develop and evaluate a national scheme that enables researchers to locate and access existing high cost infrastructure to maximise hardware use and foster research collaboration.	
Industry exchange fellowships	Connect industry and academia via PhD and postdoctoral fellowships to enable and encourage talent exchange, with the aim of stimulating entrepreneurial and translation capabilities.	
Clinical researcher fellowships	Expand the scope and scale of the existing NHMRC Practitioner Fellowships Scheme to increase engagement of research-focussed clinicians in problem-solving and the translation of research into clinical practice.	
Trials and translation		
Clinical trial network	Provide infrastructure support for existing and new national clinical trial networks to enhance innovation, collaboration, clinical research capacity and patient participation.	
Public good demonstration trials	Invest in extension of clinical trials of proven therapies with limited opportunity for further commercial sponsorship to at-risk groups including adolescents and young adults, culturally diverse groups, and people with complex co-morbidities.	
Targeted translation topics	Work with the NHMRC-accredited Advanced Health Research and Translation Centres to deliver research agendas in primary care, acute and sub-acute settings relating to:	
Commercialisation		
Research incubator hubs	Create and evaluate virtual or actual health research incubator hubs that stimulate partnerships across a range of academic, clinician and industry stakeholders to generate early-stage research ideas for diagnostics, devices and molecular therapeutics.	
Biomedical translation	Through the Biomedical Translation Fund, seek out matched private capital to invest via licensed fund managers in pre-clinical to early clinical translation of research of commercial value.	