Life Saving Research – Funding for medical research

The Australian Government is investing $6.8 billion in medical research over the next four years, including:

* The Medical Research Future Fund (MRFF) ($2.6 billion)
* National Health and Medical Research Council (NHMRC) ($3.7 billion)
* Biomedical Translation Fund (BTF) ($500 million)

The Government is providing $303.5 million in new grants and funding opportunities to assist researchers around the country to tackle health problems including dementia, the wellbeing of Indigenous mothers and their babies, and cancer. The grant funding, which is divided among new grants announced and newly opened opportunities, comes from the MRFF.

The 19 newly announced research projects, funded with grants totaling $50.4 million through the MRFF (full table further below) include:

* $5 million – Charles Darwin University – for a First Nations led, co-designed and staffed study to establish a model for Birthing on Country for Aboriginal and Torres Strait Islander families. Researchers will work side-by-side with communities to help ensure the best maternal and child health care in rural, remote and very remote Australia
* $3 million – University of Melbourne – to strengthen the care available for rural children, who have limited access to specialist paediatric care. Paediatricians and GPs will work together to assess and manage young patients, and
* $1.9 million – The University of Queensland – for an effectiveness-implementation trial in general practice that provides doctors and patients with no current depression/anxiety with the information and resources needed to safely taper and stop using antidepressants.

The Government is investing $253.1 million in opening 16 new MRFF funding opportunities for research into a range of topics including pancreatic cancer, dementia and cardiovascular disease (full table further below).

# Why is this important?

The amount of funding disbursed through the MRFF has grown from $61 million in 2016–17 to $650 million in 2022–23.

Appropriations to NHMRC’s Medical Research Endowment Account (MREA) increased from $689 million in the 2012–13 financial year to $898.3 million in 2022–23. New commitments are expected to reach $920 million for the 2022 NHMRC grant round.

The continued investment in health and medical research helps drive innovation and development of breakthroughs in health, which lead to improved patient outcomes, jobs growth and significant economic returns.

# Who will benefit?

The Government’s investment in research grants will ultimately lead to improvements in the health and wellbeing of Australians. Some of the grants aim to improve treatment and quality of life for Australians who suffer from a wide range of diseases and conditions, including pancreatic cancer, dementia, cardiovascular disease and multiple sclerosis. Other grants focus on research to prevent illness from occurring in the first place or improving diagnosis. Others support research to improve the wellbeing of Indigenous mothers and their babies as well as Australians living in rural and remote areas.

# How much will this cost?

The Australian Government is investing or allocating $303.5 million in new grants and funding programs.

# Medical Research Future Fund, Grant Opportunity Outcomes (Summary)

| Medical Research Future Fund – Grant Opportunity Outcomes | |
| --- | --- |
| 2021 Improving the Health and Wellbeing of Indigenous Mothers and Babies | * $18.4 million * 5 grants awarded |
| 2020 Clinician Researchers: Applied Research in Health | * $32.0 million * 14 grants awarded |

# Medical Research Future Fund, Grant Opportunities Opening

| **Grant Opportunity** | **Available funding ($)** | **Guidelines Available** |
| --- | --- | --- |
| **International Clinical Trials Collaborations** to increase Australian leadership of, and participation in, high quality international collaborative clinical trials across six grant opportunities over the next three years | 37.8m | 30 March 2022 |
| **2022 Pancreatic Cancer Research** to support more effective approaches for managing the pain and symptoms of individuals with pancreatic cancer and to provide access to clinical trials that offer new treatments | 12m | 30 March 2022 |
| **2022 National Critical Research Infrastructure** to enhance Australia’s research infrastructure to promote new research approaches that will address health challenges | 73m | 30 March 2022 |
| **2022 Multiple Sclerosis Research** to provide access to clinical trials and accelerate availability of effective therapeutics for the treatment of Epstein Barr Virus infection, and improve understanding of how immune responses to viruses vary across individuals to inform disease prediction and treatment pathways to ultimately reduce the prevalence and severity of multiple sclerosis and post-viral diseases | 18m | 30 March 2022 |
| **2022 Quality, Safety and Effectiveness of Medicine Use and Medicine Intervention by Pharmacists** to generate evidence that supports the safe and effective use of prescription medicines, improves the quality of care provided to patients with cancer, reduces hospital readmissions due to medication related complications, and supports the safe and effective use of medicines in residential aged care facilities | 15m | 30 March 2022 |
| **2022 Effective Treatments and Therapies** to support the development and implementation of effective exercise programs that reduce the risk of disease in Australian adults aged over 45 years, increase physical activity amongst priority populations, and ameliorate symptoms of progressive neurological deterioration and mental impairment in children and adolescents | 13m | 30 March 2022 |
| **2022 Nurses, Midwives and Allied Health** to support nurses, midwives and allied health professionals to improve the quality of health care, practice and systems by undertaking applied research in health care | 20.3m | 30 March 2022 |
| **2022 Stem Cell Therapies** to generate novel approaches to stem cell-based therapies that have the potential to transform clinical care and generate new treatments using human tissues made from stem-cells for pre-clinical development | 10m | 30 March 2022 |
| **2022 Dementia Ageing and Aged Care** to support research that improves the wellbeing of Australians living with dementia and their carers and enables earlier and more effective diagnosis of dementia | 24m | 30 March 2022 |
| **2022 Cardiovascular Health** to generate knowledge to improve the detection, prevention and treatments for cardiovascular disease and stroke | 24m | 30 March 2022 |
| **2022 Brain Cancer Research Infrastructure** to generate knowledge that enables the development of new approaches, treatments and therapies that accelerate progress in improving the diagnosis and care for patients with brain cancer. | 6m | 30 March 2022 |

# Medical Research Future Fund, Grant Opportunity Outcomes (Grant Details by Grant Opportunity)

## 2021 Improving the Health and Wellbeing of Indigenous Mothers and Babies

| **Project Title** | **Project Summary** | **Recipient** | **Funding Amount ($)** |
| --- | --- | --- | --- |
| Birthing on Country: RISE SAFELY in rural, remote and very remote Australia | This First Nations led, co-designed and staffed MRFF study aims to establish exemplar Birthing on Country maternal child health services in rural, remote and very remote Australia in 5 years. Our CIs have worked side-by-side with First Nations communities and stakeholders, building on 25 years of research, to develop the RISE SAFELY Implementation Framework. We will translate existing knowledge on culturally safe maternity care, that saw unprecedented success in an urban site, into three unique settings. We will increase protective factors for birthing women and babies across the first 1000 days, improve outcomes, focus on preventing preterm birth, and make a profound impact on Closing the Gap Target 2: Children are born healthy and strong. | Charles Darwin University | 4,998,540 |
| Birthing in Our Community: gold standard Indigenous maternal infant health | Birthing in Our Community (BiOC) is an Indigenous-led Maternal Infant Health program designed and implemented in Brisbane. BiOC’s outcomes, published in the Lancet Global Health (2021), show a 50% reduction in pre-term births, improvement in healthy weight babies, increased antenatal visits and an increase in exclusively breastfeeding at discharge. We will extend the reach of BiOC to three settings and follow cohorts of families (n=~1800) to assess clinical outcomes and program acceptability. Further, we will evaluate scalability, sustainability, feasibility and cost effectiveness of this ‘gold standard’ program. Our goal is to build the evidence base to support adaptation and implementation of BiOC programs in urban Indigenous communities. | Institute of Urban Indigenous Health | 4,999,156 |
| Replanting the Birthing Trees to Support First Nations Parents and Babies | This First Nations-led project aims to transform intergenerational cycles of trauma to support parents in achieving their hopes and dreams for a happy, safe and healthy family. We will do this by building infrastructure for culturally-safe, trauma-integrated, holistic, transdisciplinary perinatal care, critical in the first 2000 days. Based on rigorous co-design, this innovative program includes: a resource repository for parents, clinicians and decision-makers; support framework; integrated culturally-validated assessment tool; workforce development resources; culturally and emotionally safe continuity-of-care implementation toolkit; and a therapeutic model to support families with complex social and emotional needs to stay together. | University of Melbourne | 4,999,905 |
| Optimisation of screening and management of hyperglycaemia in pregnancy | High blood glucose in pregnancy increases babies’ risk of being born premature, by caesarean, larger/smaller than optimum, with low blood glucose levels, and difficulty breathing. This project will implement, evaluate and refine alternative screening for detecting high blood glucose in pregnancy at regional, state and national levels. We will use three-way learning between Aboriginal community members, health providers and researchers to co-design and trial self-management strategies for high blood glucose in pregnancy. This project will empower Aboriginal women and their families to make positive lifestyle choices aimed at improving birth outcomes and health for subsequent pregnancies and prevent or delay progression to chronic disease. | Derby Aboriginal Health Service | 3,236,071 |
| Arelhe ante areyele arntarnte-arelhetyeke ampe akweke arle atnyenetyenheke | This highly innovative First Nations-led project aims to transform compounding cycles of intergenerational trauma and harm to positively reinforce cycles of intergenerational nurturing and recovery for First Nations parents and babies. This project consists of a team of community leaders, peak bodies, health and social care services, education providers, mental and family health clinicians, researchers, and consumers who will collaborate to address critical and documented gaps in perinatal care and drive transformative shifts in policy and practice. This project will combine First Nations ways of knowing, being and doing with First Nations led co-designed innovative perinatal strategies to support parents to achieve their dreams for a happy, safe, and healthy family. | Children’s Ground Limited | 200,000 |

## 2020 Clinician Researchers: Applied Research in Health

| **Project Title** | **Project Summary** | **Recipient** | **Funding Amount ($)** |
| --- | --- | --- | --- |
| Assessing cultural safety in GP Consultations for Indigenous Australians | Significant health disparities exist for Australian Aboriginal and Torres Strait Islander people. Training a culturally safe health workforce is vital to address this issue. Despite recognition that the definition of cultural safety must be determined by Indigenous people and communities, there are currently no tools to assess cultural safety within consultations based on community-derived data. This project will explore cultural safety as described by Australian Indigenous people, with the aim of developing a tool to assess general practitioner cultural safety based on these insights. As an organisation involved in medical education, this project will allow us to assess cultural safety more appropriately in medical learners. | Queensland Rural Medical Education Limited | 120,320 |
| CURE-NG: A human challenge model to develop new treatments for gonorrhoea | The CURE-NG project will: - Undertake translational research to develop treatments that will address the rising incidence of gonorrhoea and the critical threat of drug-resistant infection - Develop and implement a controlled human infection model (CHIM) of male gonorrhoea urethritis and a first-in-human oropharyngeal gonorrhoea CHIM - Transform how biomedical interventions for gonorrhoea are developed - Accelerate antimicrobial and vaccine development for gonorrhoea - Substantially build Australia’s clinical trial capability and leadership - Embed the emerging technology of microbial genomics into CHIM translational research - Enhance translational workforce capability and specific capacity to use CHIMs for clinical translation | University Of Melbourne | 2,300,321 |
| Enhancing prison-to-community mental healthcare for Aboriginal prisoners | Aboriginal and/or Torres Strait Islander people are incarcerated at an alarming rate and those in prison often suffer with significant mental health need associated with elevated risk of poor outcomes before and after return to the community. The proposed research project aims to test the effectiveness of a new culturally-enhanced and release-focused mental health intervention designed to improve both mental health care in prison and to support the critical prison-to-community transition for Aboriginal and/or Torres Strait Islander men and women. The project is led by clinicians and Aboriginal Health workers, and additionally aims to build clinical research capacity in this vitally important field. | University Of New South Wales | 1,180,613 |
| Equipping Tertiary Care for the Optimal Diagnosis of Primary Aldosteronism | Primary aldosteronism (PA) is a common and potentially curable cause of hypertension that confers a high risk of heart disease and stroke if not diagnosed and treated. Its diagnosis requires specialised tests in the hospital. However, our hospitals are not yet equipped with cutting-edge technology for a speedy diagnosis nor have the capacity to diagnose hundreds of thousands of affected patients in a timely manner. This project will establish modern tools and efficient pipelines to optimise the capacity of our hospitals to accurately diagnose PA. The outcomes of this research project are expected to set the standard for high quality guidelines for the diagnosis of PA and transform clinical practice in health services across Australia. | Monash University | 2,993,294 |
| Intensive physiotherapy to lower hospital length of stay after hip fracture | This clinical trial will test whether intensive physiotherapy delivered early following hip fracture can accelerate physical recovery and reduce hospital days. We will recruit 620 participants from 8 acute hospitals across 5 Australian states. Intervention participants receive intensive physiotherapy 3 times/day for 7 days during their acute hospital stay. The primary outcome is length of stay, with secondary outcomes of physical mobility, health-related quality of life and falls. Longer-term impact and health care costs will be quantified with 12-month follow up. We will embed implementation science methods to enhance translation of findings into routine care, and will build clinical research capacity in health services across Australia. | Monash University | 2,930,647 |
| Optimal Post rTPA-iv Monitoring in Ischaemic Stroke (OPTIMISTmain) | The OPTIMISTmain will compare standard monitoring versus low-intensity monitoring schedule for 24 hours following thrombolytic therapy for acute ischaemic stroke. The key difference in the monitoring schedule is over the 2- to 24-hour time period; there will be no difference in the frequency of monitoring over the first 2 hours when most bleeding complications tend to occur. This research will establish whether a widely applicable less-intense monitoring schedule improves patient recovery, and allows freeing up of health care resources to engage in direct stroke management or care elsewhere, leading to avoidance of unnecessary intensive care unit stay, expedited stroke work-up, and reduced hospital stay. | The George Institute For Global Health | 1,774,988 |
| PROMOTE: a cluster-randomised implementation trial to promote evidence use | The PROMOTE randomised controlled trial will test the clinical benefit and cost effectiveness of an implementation package to increase clinician use of arm and stroke rehabilitation evidence in practice. We will recruit 14 hospitals across 3 Australian states to deliver arm rehabilitation to 238 patients after stroke. The primary outcome is clinician adherence to guidelines, with secondary outcomes of patient arm and hand movement, health-related quality of life and cost. In partnership with the Stroke Foundation, we will embed consumer involvement and employ implementation science methods to conduct a process evaluation alongside the trial. Together these will allow rapid translation of findings into routine stroke care. | Monash University | 2,996,464 |
| RELEASE: REdressing Long-tErm Antidepressant uSE in general practice | Our project is a cluster randomised controlled effectiveness-implementation trial in general practice to determine effectiveness of RELEASE compared to usual care on decreased antidepressant use and improved quality of life, and to evaluate our implementation strategy. Australians are amongst the highest users of antidepressants in the world (around 1 in 10 adults), due mostly to increasing long-term use against clinical guidelines. RELEASE targets people on long-term (>12 months) antidepressants with no indication for continued use (no depression/anxiety) and provides both doctors and patients with the information and resources needed to safely taper and stop these drugs to minimise adverse drug effects and improve quality of life. | The University Of Queensland | 1,912,691 |
| SCANPatient: Synoptic reporting of CT scan Assessing caNcer of the Pancreas | Classification of resectability in pancreas cancer is not standardised. This novel project will validate and implement a world-first innovation in the management of patients with pancreatic cancer (PC). We will test a new, locally developed synoptic, radiological template in the routine reporting of CT scans based on an international consensus to accurately define the surgical resectability of nonmetastatic PC. Properly assigning patients as resectable, borderline or unresectable should improve outcomes for all patients with PC, ensuring optimal treatment is received. Patients with unresectable cancers will not be subjected to futile surgery, whilst every opportunity to undergo complete resection is offered to those who may benefit. | Monash University | 2,931,686 |
| Strengthening care for rural children: stepped wedge trial in primary care | Across NSW and Victoria, 860,000 children, 30% of the States’ population, live in rural areas. Although 19% of these children live with a chronic illness, there are fewer GPs per capita and paediatric specialty care is often lacking. Strengthening Care for Rural Children (SC4RC), a model where paediatrician and GP’s work together in GP practices, aims to deliver and rigorously evaluate a primary health care system strengthening programme that can bridge the gaps in access to health services and health outcomes between children living in rural Australia and their urban peers. It aims to improve the health of children by increasing capacity of the existing rural GP workforce to assess and effectively manage paediatric conditions. | University Of Melbourne | 2,996,188 |
| The Australian New Zealand Oncofertility Clinical Trials Network | Many children and young people diagnosed with cancer receive treatment that renders them infertile. This is of major concern to families. This research will enable wide-scale implementation of new digital tools, guidance and models of oncofertility care across 9 Australian New Zealand Haematology Oncology (ANZCHOG) cancer centres in order to raise benchmarks of patient-centred oncofertility care. Families will receive discussion of the risks to fertility, and potential fertility preservation options (freezing of eggs sperm or gonadal tissue) in the critical window between cancer diagnosis and cancer treatment. This will offer clinicians new models of care and young cancer survivors the chance of future parenthood. | University Of Melbourne | 2,999,970 |
| The Target Protein Trial | Intensive Care Unit (ICU). This muscle wasting causes ‘ICU-acquired weakness’, which is associated with increased death and longer duration of time on a ventilator and in ICU and hospital. There is preliminary evidence that increasing protein content during ICU admission reduces muscle wasting. This trial will answer the important question: Does giving more protein during ICU admission improve outcomes that are important to patients and the community? | University Of Melbourne | 1,894,446 |
| Transforming Clinical Research to Improve Outcomes for Preterm Infants | 15 million babies are born preterm each year. Preterm birth is the leading cause of death and disability among children < 5 years. There is urgent need for interventions to reduce complications of prematurity and improve outcomes. Traditional trials are often resource intense and may take many years. Adaptive Platform Trials are innovative allowing multiple interventions to be evaluated simultaneously. This project will develop an Australasian Adaptive Platform Trial to Improve Preterm Birth Outcomes. The project will identify research priorities and core outcomes important to families and the health service. It will build the infrastructure and expertise required to run the Platform trial and implement the findings into clinical practice. | University Of Melbourne | 2,642,199 |
| Validating cognitive screening for first-episode psychosis - CogScreen | Cognitive impairment is common in first-episode psychosis (FEP) and predicts poorer patient outcomes. Clinical guidelines recommend routine cognitive screening of patients with psychosis so that treatment is in line with the cognitive needs of the patient. The problem is that there are no well-validated cognitive screening tools for clinical use in FEP. The CogScreen study will establish the most accurate cognitive screening tool for patients attending Australian early psychosis services. CogScreen will provide clinicians with a rapid and cost-effective way of identifying cognitive impairment in FEP patients, so that they can refine diagnosis and deliver more effective treatments and services, leading to better outcomes for patients. | University Of Melbourne | 2,294,990 |