



Medical Research Future Fund

Snapshots 2019–20 to 2020–21

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Title: Medical Research Future Fund snapshots 2019-20 to 2020-21

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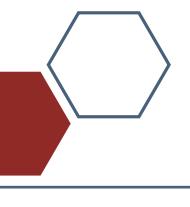
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Contents

Introduction	4
Patients	5
Clinical Trials Activity	6
Emerging Priorities and Consumer-Driven Research	
Global Health	10
Research missions	12
Dementia, Ageing and Aged Care Mission	13
Australian Brain Cancer Mission	15
Cardiovascular Health Mission	17
Genomics Health Futures Mission	19
Indigenous Health Research Fund	21
Million Minds Mental Health Research Mission	23
Stem Cell Therapies Mission	25
Traumatic Brain Injury Mission	27
Researchers	29
Clinician Researchers	30
Frontier Health and Medical Research	32
Researcher Exchange and Development within Industry	34
Research translation	36
Medical Research Commercialisation	37
National Critical Research Infrastruture	39
Preventive and Public Health Research	41
Primary Health Care Research	43
Rapid Applied Research Translation	45
Research Data Infrastructure	47



Introduction

The Medical Research Future Fund (MRFF) is a \$20 billion long-term investment supporting Australian health and medical research. It invests in all research stages in line with national priorities.

By helping our researchers develop their ideas in Australia, the MRFF builds stronger relationships between researchers, health care professionals, governments and the community. It also makes Australia's growing biotech industry even stronger while creating jobs and potential exports.

The MRFF began in 2015 and its capital will grow to \$20 billion by 2021. It is a significant investment in our economy, wellbeing and sustainable health system.

d 2019–20 Budget. This includes secure funding for each of the 20 initiatives under the MRFF.

MRFF 10-year plan

Developing new drugs, devices, treatments and cures may take more than a decade. This 10-year plan gives researchers and industry certainty and direction, and will reaffirm Australia's reputation as a world leader in medical research.

The Australian Government announced a \$5 billion,

10-year investment plan for the MRFF as part of its

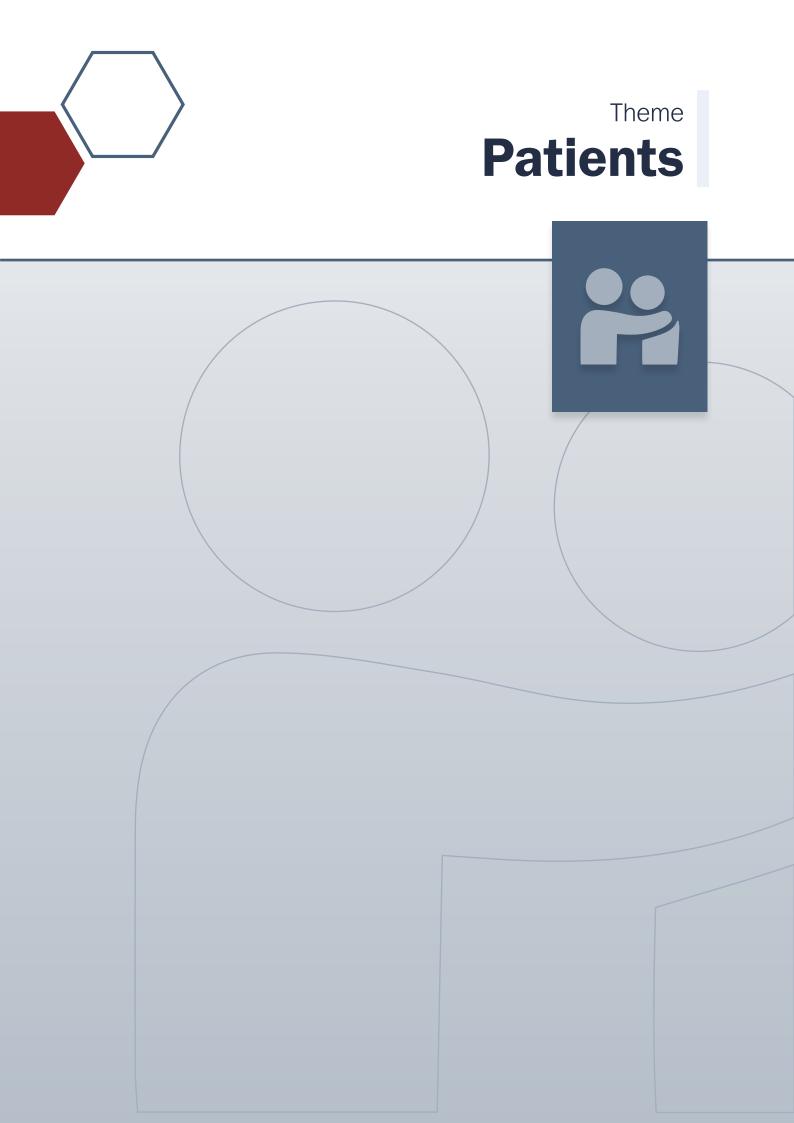
Patients	Funding innovative treatments, supporting clinical trials, and delivering more advanced health care and medical technology to improve the health of all Australians
Researchers	Supporting our researchers to make breakthrough discoveries, develop their skills and progress their careers in Australia
Research missions	Helping researchers think big to tackle significant health challenges through investment, leadership and collaboration
Research translation	Moving research ideas from the lab to the clinic, so that medical discoveries become part of clinical practice for GPs, specialists and hospitals

MRFF snapshots

This report presents a snapshot for each of the 20 initiatives under the 10-year plan. The snapshots show key information at a glance, including budget, early funding priorities and timelines for grant opportunities in 2019–20 and 2020–21. They show current or completed activity for each initiative, as well as delivery horizons and expected outcomes over the next 10 years.

Using the snapshots, researchers and other stakeholders can see the current state of each initiative, plan for upcoming opportunities, and see how each initiative will be established, expanded and embedded over time.

MRFF funding is directed into 4 themes:



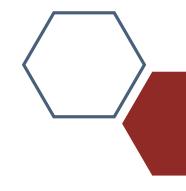


Australian Government

Department of Health

Clinical Trials Activity

Medical Research Future Fund Snapshot 2019–20 to 2020–21







Goal

To increase clinical trial activity in Australia, help patients access clinical trials, and enable researchers to bring international trials to Australian patients



Budget

Total Budget allocation (as at Budget 2019–20) \$614.2 million

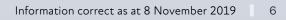
over 10 years

Total committed = \$87.7 million (over 12 years from 2016–17 to 2027–28, including \$5.8 million from 2016–17 to 2017–18) Grant rounds in progress = \$8.4 million

Not yet allocated = \$528.8 million (over 9 years from 2019–20, not including an overspend of \$5.1 million in 2018–19)

	2019-20 (\$m)	2020-21 (\$m)	2021–22 (\$m)	2022-23 (\$m)
Budget	67.1	66.5	62.6	62.6
Committed	15.6	9.3	7.2	2.4
Grant rounds in progress	8.4	-	-	-
Not yet allocated	43.1	57.2	55.4	60.2

Funding timeline				19-20				20-21	
International Clinical Trials Collaborations (ICTC)	Grants open Projects selected Projects underway	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr
Rare Cancers, Rare Diseases and Unmet Needs (RCRDUN)	Grants open Projects selected Projects underway								
including general funding rounds, childhood brain cancer, reproductive cancers and neurological disorders	Grant process: Ope The International C applications and is	Clinical T	rials Collat	poration (l					r grant dates



- Rare Cancers, Rare Diseases and Unmet Need
- Childhood brain cancer
- Reproductive cancers
- Neurological disorders

Current or completed activity

- 5 projects funded under ICTC, with \$8 million committed or expended
- 48 projects funded under RCRDUN, with \$75 million committed or expended
- Current projects include a Phase 1 trial on medulloblastoma in children and young adults. Led by Monash University, this international trial aims to offer real hope to young people with this disease by translating research findings into practice

Delivery horizons

Establish 2016–17 to 2018–19

RCRDUN:

- First round funded 19 clinical trials for \$26.6 million
- Second round funded 6 clinical trials for \$9.5 million
- Third round funded 23 clinical trials for \$38.6 million

ICTC:

- First round funded 3 clinical trials for \$4.1 million
- Second round funded 2 clinical trials for \$3.9 million

Expand 2019–20 to 2022–23

RCRDUN:

- \$15 million for reproductive cancers
- \$5 million for childhood brain cancers
- \$20 million for neurological disorders
- \$15 million for general round

Embed 2023-24 to 2027-28

- Increase clinical trial access and participation across Australia
- Ensure better treatments and medicines for patients
- Improve collaboration with international researchers

Measures of success

Increased focus of research on areas of unmet need

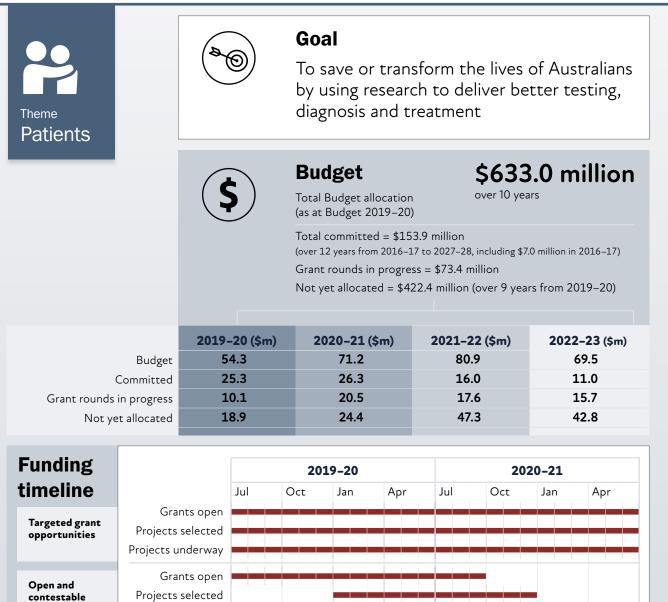
New health technologies and treatments are developed and trialled

More Australians access clinical trials



Emerging Priorities and Consumer-Driven Research

Medical Research Future Fund Snapshot 2019–20 to 2020–21



contestable grant opportunities

Projects underway



See GrantConnect for specific grant dates

Grant process: Multiple open and targeted grant rounds

- Rheumatic heart disease
- Cancer research (eg ovarian, genomics)
- Juvenile diabetes
- Endometriosis research
- Multiple sclerosis
- Male infertility

Current or completed activity

- 25 projects contractually committed to the value of \$153.9 million
- 1 open and contestable grant round for congenital heart disease opened on 16 July 2019 and closed on 12 September 2019
- Projects underway include a clinical trial of a medicine for motor neurone disease using the new Australian Clinical Trials Consortium, this trial has recruited 107 participants across 5 states to address this area of unmet need

Delivery horizons

Establish 0 to 3 years

- Identify areas of priority and unmet need, with a focus on consumers
- Involve consumers in developing research priorities and the research process
- Strengthen researchers' capability and capacity in priority areas

Expand 4 to 7 years

- Address emerging priorities and unmet needs through research and translation
- Embed consumer engagement in research
- Ensure that capability and capacity to support research in priority areas are sustainable

Embed 8 to 10 years

- Improve translation of research into clinical practice
- Ensure consumers benefit from research faster, and that research is more practical for consumers
- Embed sustainable research systems and skills in priority areas

Measures of success

The community accepts and adopts new technologies and treatments

Clinicians adopt best practices more quickly

Increased focus of research on areas of unmet need

New health technologies and treatments are developed and trialled

More Australians access clinical trials

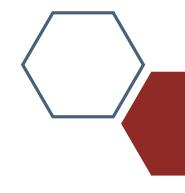


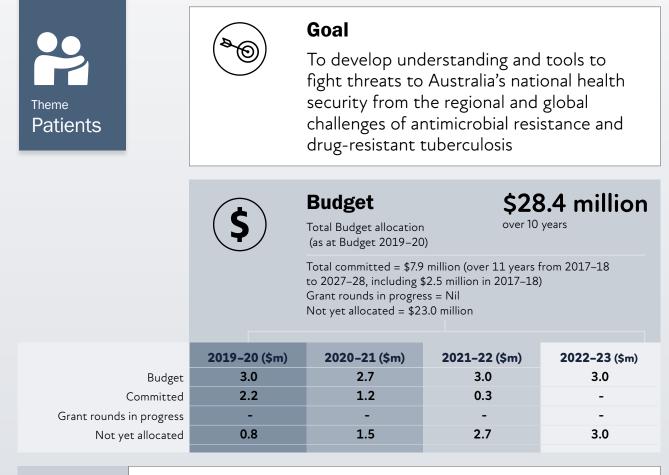
Australian Government

Department of Health

Global Health

Medical Research Future Fund Snapshot 2019–20 to 2020–21





Funding			201	9–20			2020)-21	
timeline		Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr
	Grants open								
	Projects selected								
	Projects underway								
	Grant process: Ope	en and con	npetitive			See Grar	ntConnect	or specific	grant dates

- Research on new and innovative methods to determine antimicrobial resistance profiles and transmission in residential aged care facilities in Australia
- Developing new vaccines that are ready to deploy, to ensure that Australia and the rest of the world are prepared for future epidemics
- New research into the treatment and prevention of drug-resistant tuberculosis in collaboration with Pacific Island countries

Current or completed activity

 4 projects funded from a \$5.9 million targeted opportunity in 2017. These projects focused on antimicrobial use and resistance in residential aged care. Results are expected from 2021–22

Delivery horizons

Establish (1 to 3 years)

- Understand gaps in knowledge and capability
- Increase research on drugresistant tuberculosis and reducing the spread of antimicrobial resistance in Australia and our region

Expand (4 to 7 years)

- Increase research capability in Australia and our region
- Scale up research activity
- Increase collaboration within Australia and in our region

Embed (8 to 10 years)

- Strengthen Australia's health security through research translation
- Develop new products, techniques and processes to manage drugresistant tuberculosis and limit the spread of antimicrobial resistance

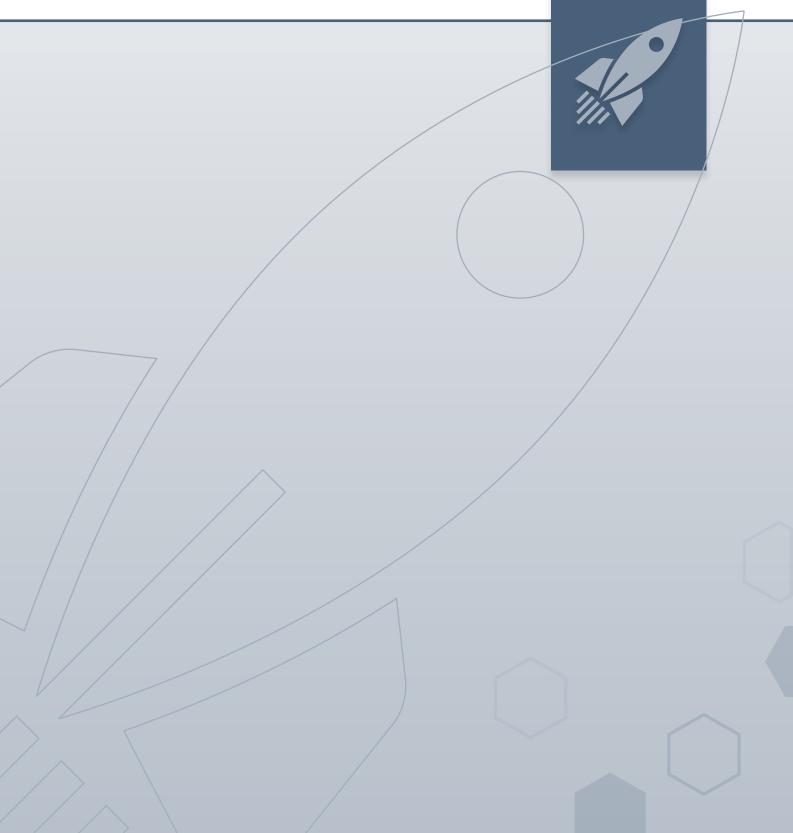
Measures of success

Clinicians adopt best practices more quickly

Increased focus of research on areas of unmet need

New health technologies and treatments are developed and trialled





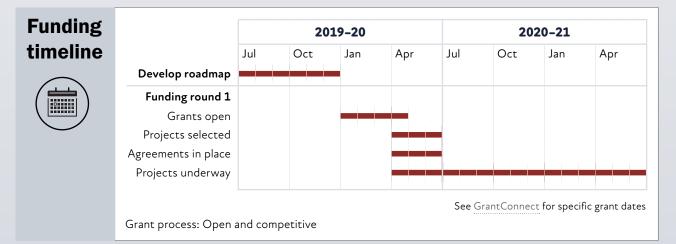


Dementia, Ageing and Aged Care Mission

Medical Research Future Fund Snapshot 2019–20 to 2020–21



Theme Research		Goal To improve qua as they age	ility of life for A	ustralians
missions	\$	Budget Total Budget allocation (as at Budget 2019–20) Total committed = \$10 Grant rounds in progre Not yet allocated = \$15	over 10 ye \$17.5 million bringing the t million ss = Nil	2.5 million ars budgeted in 2028–29, cotal to \$185 million
	2019-20 (\$m)	2020-21 (\$m)	2021-22 (\$m)	2022-23 (\$m)
Budget	17.5	17.5	17.5	17.5
Committed	-	-	-	-
Grant rounds in progress	-	-	-	-
Not yet allocated	17.5	17.5	17.5	17.5



Early funding priorities

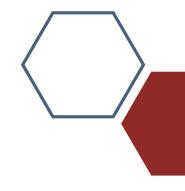
• Roadmap with funding priorities expected in late 2019

Current or completed activity • \$10 million provided in 2018–19 for dementia research (Clem Jones Centre for Ageing Dementia Research at the Queensland Brain Institute) **Delivery horizons** Establish 2019–20 Expand 2020-21 to 2023-24 **Embed** (2024–25 to 2027–28) • Established expert advisory To be guided by expert • To be guided by expert panel advisory panel advisory panel Develop roadmap to inform • funding priorities **Measures of success** The community accepts and adopts new technologies and treatments Clinicians adopt best practices more quickly Increased focus of research on areas of unmet need New health technologies and treatments are developed and trialled Research community has greater capacity and capability to undertake translational research



Australian Brain Cancer Mission

Medical Research Future Fund Snapshot 2019–20 to 2020–21







Goal

To double survival rates and improve quality of life for people with brain cancer over the next 10 years, with the longerterm goal of defeating brain cancer



Budget

\$49 million over 10 years

Total Budget allocation (as at Budget 2019–20)

Total committed = \$11.8 million (over 11 years from 2017–18 to 2027–28, includes \$1 million spent in 2017–18)

Grant rounds in progress = Nil

Not yet allocated = \$34.0 million (includes an underspend of \$4.2 million in 2018-19)

Total funding for this initiative is \$124.7 million, including \$9.35 million from other MRFF initiatives and \$66.35 million from philanthropic contributions

	2019-20 (\$m)	2020-21 (\$m)	2021-22 (\$m)	2022-23 (\$m)
Budget	5.0	5.0	5.0	5.0
Committed	2.0	2.0	2.0	-
Grant rounds in progress	-	-	-	-
Not yet allocated	3.0	3.0	3.0	5.0

	20-21	202)19-20	20			Funding
Apr	Jan	Oct	Jul	Apr	Jan	Oct	Jul	Grants open	timeline
								Projects selected Projects underway	Grant round
								Projects selected	Grant round

- Enable Australian participation in glioblastoma brain cancer research
- Support the ZERO Childhood Cancer initiative to ensure that all Australian children with high-risk brain cancer receive individual treatment for their tumour type (personalised medicine)
- · Establish a contestable grants program to support new and expanded clinical trials and international collaborations
- · Review existing national care standards, decision support and clinical pathways for patients
- Determine if existing brain cancer platforms and technologies are meeting researchers' needs
- Improve access to international clinical trials through the Australian and New Zealand Children's Haematology Oncology Group (ANZCHOG) and the Cooperative Group for Neuro-oncology (COGNO) trial centres

Current or completed activity

- Reviewing national care standards, decision support and clinical pathways for patients, and analysing Australian brain cancer platforms and technologies
- Enabling Australian participation in 2 innovative brain cancer clinical trials through a contestable grant round
- Funded 4 brain cancer clinical trials through a contestable grant opportunity using the Clinical Trials Activity (Rare Cancers, Rare Diseases and Unmet Need) initiative

Delivery horizons

Establish 2018–19 to 2019–20

- Held a roundtable with key experts and consumers
- Developed and endorsed roadmap with prioritised investment strategies
- Initiated partnerships with co-funders
- Funded and started priority activities in roadmap
- Start scoping existing brain cancer platforms and technologies, and analysing patient care standards
- Build partnerships and collaboration between research clinicians, research organisations and clinical trial stakeholders

Expand 2020-21 to 2023-24

- Increase activity in brain cancer clinical trials across Australia
- Help more patients take part in clinical trials
- Reduce time to start brain cancer clinical trials
- Characterise, expand and coordinate existing brain cancer platforms and technologies
- Embed resources and strategies to improve patient experience and quality of life into clinical practice
- Develop collaboration between research clinicians, research organisations and clinical trial stakeholders

Embed 2024-25 to 2027-28

- Double survival rates and improve quality of life for people with brain cancer
- Develop major research and treatment centres, and networks to boost capacity, capability and standards
- Increase patient access to clinical trials, especially for children
- Strengthen Australia's leadership in conducting brain cancer clinical trials
- Tailor patient experience and improve quality of life
- Establish productive and sustained collaborations with research organisations and clinical trial stakeholders

Measures of success

The community accepts and adopts new technologies and treatments

Clinicians adopt best practices more quickly

Increased focus of research on areas of unmet need

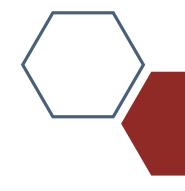
New health technologies and treatments are developed and trialled

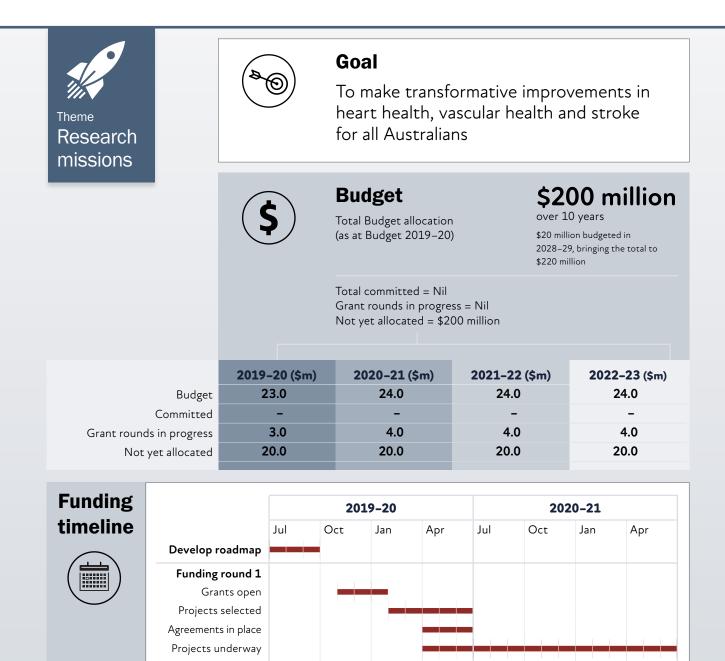
More Australians access clinical trials



Cardiovascular Health Mission

Medical Research Future Fund Snapshot 2019–20 to 2020–21





Grant process: Open and competitive

See GrantConnect for specific grant dates

- · Improving outcomes in women with coronary artery disease and heart attack
- · Improving access and effectiveness of cardiac rehabilitation for all Australians

Current or completed activity

• \$20 million from 2019–20 to 2023–24 for research focusing on congenital heart disease



Delivery horizons

Establish 2018–19 to 2019–20

- Established expert advisory panel
- Develop roadmap to inform funding priorities

Expand 2020-21 to 2023-24

- Increase scale and maturity of research sector
- Improve industry engagement and investment
- Strengthen economic activity in biomedical sector
- Improve access for all Australians to best preventive management or treatment

Embed 2024-25 to 2027-28

- Develop innovative methods to detect disease early and develop targeted therapies
- Develop a cardiovascular research commercialisation hub
- Better predict recovery outcomes after a cardiac event or stroke
- Develop state-of-the-art technology and platforms for collaborative research
- Translate new discoveries and innovations to the clinic through drugs, biomarkers and devices

Measures of success

Precision medicine is embedded in clinical practice

The community accepts and adopts new technologies and treatments

Clinicians adopt best practices more quickly

Increased focus of research on areas of unmet need

New health technologies and treatments are developed and trialled

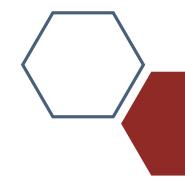
Increased commercialisation of health research outcomes

More Australians access clinical trials



Genomics Health Futures Mission

Medical Research Future Fund Snapshot 2019–20 to 2020–21







Goal

To save or transform the lives of more than 200,000 Australians through genomic research to deliver better testing, diagnosis and treatment



Budget

Total Budget allocation (as at Budget 2019–20) \$500 million over 10 years

over 10 years

Total committed = \$43.9 million Grant rounds in progress = \$65.7 million Not yet allocated = \$390.4 million

	2019–20 (\$m)	2020-21 (\$m)	2021-22 (\$m)	2022-23 (\$m)
Budget	56.6	68.7	69.9	54.9
Committed	14.1	15.2	5.2	0.3
Grant rounds in progress	19.2	19.9	18.6	8.0
Not yet allocated	23.3	33.6	46.1	46.5

Funding
timeline

Projects Grant Opportunity cancers/diseases, paediatric acute care & ethical-legal-social issues

Pathogen Genomics Grant Opportunity

Bioinformatics Fellowships





- Reproductive carrier screening for rare genetic conditions (Mackenzie's Mission)
- Cancer proteomic, genomic and related multi-omic big data analysis to improve diagnosis and treatment (ProCan)
- Pathogen genomics
- Cancers and diseases of high mortality/low survivability
- Paediatric acute care research
- Ethical, legal and social issues related to using genomic information in health care
- · Bioinformatics capability and capacity to support genomic research

Current or completed activity

• 2 projects under contract and progressing – Mackenzie's Mission (Reproductive Carrier Screening) and ProCan (Cancer Proteomics)



- 3 fellowships under contract and progressing to develop bioinformatics capacity and capability
- Projects focusing on cancers and diseases of high mortality/low survivability; paediatric acute care research; and ethical-legal-social issues related to using genomic information in health care. Closed 21 June 2019; outcomes expected to be announced in December 2019–January 2020
- Projects focusing on pathogen genomics. Closed 12 September 2019; outcomes expected to be announced in March 2020

Delivery horizons

Establish 2018–19 to 2020–21

- Established advisory committee/scientific strategy committee
- Pump-primed research into rare cancers and diseases, and ethical-legal-social issues
- Established projects in screening and pathogen genomics
- Targeted funding to strengthen bioinformatics capability and capacity
- Prepare a genomic research gap analysis to guide strategic investment
- Coordinate and align with implementing the National Health Genomics Policy Framework
- Engage strategically with international networks and collaborators
- Engage with the Australian community, clinicians and industry partners

Expand 2021-22 to 2024-25

- Identify new research areas through revised strategic gap analysis
- Increase focus on implementation science to understand and address barriers to clinical uptake
- Build on national and international partnerships
- Ensure consumers are involved in setting priorities

Embed 2025-26 to 2027-28

- Revise strategic gap analysis to inform investment in personalised health care interventions
- Empower more research by making clinical and genomic datasets available
- Integrate genomics into health policy

Measures of success

Precision medicine is embedded in clinical practice

The community accepts and adopts new technologies and treatments

Clinicians adopt best practices more quickly

Increased focus of research on areas of unmet need

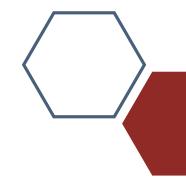
New health technologies and treatments are developed and trialled

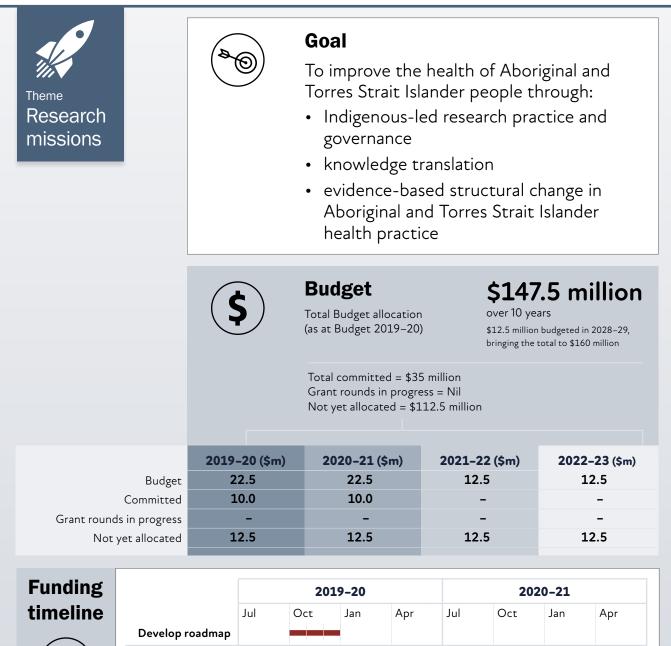
More Australians access clinical trials



Indigenous Health Research Fund

Medical Research Future Fund Snapshot 2019–20 to 2020–21







Jan	Jan	Apr	Jı	ul	Oct	Jan	Ap	r	
			_						

Grant process: Open and competitive

See GrantConnect for specific grant dates

- Avoidable deafness
- Rheumatic heart disease
- Chronic kidney disease
- Youth mental health, including suicide prevention

Current or completed activity

• \$35 million over 2018–19 to 2020–21 for research on a vaccine to prevent rheumatic heart disease

Delivery horizons

Establish 2019-20

- Established expert advisory panel
- Develop roadmap to inform funding priorities for the short, medium and long term
- Develop new research models that enable innovative methods that drive improvements in health service delivery and patient outcomes

Expand 2020–21 to 2023–24

Embed 2024–25 to 2028–29

- To be guided by expert advisory panel
- To be guided by expert advisory panel

Measures of success

The community accepts and adopts new technologies and treatments

Clinicians adopt best practices more quickly

Increased focus of research on areas of unmet need

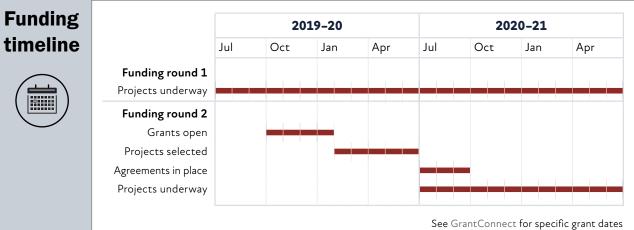
New health technologies and treatments are developed and trialled



Million Minds Mental Health Research Mission

Medical Research Future Fund Snapshot 2019–20 to 2020–21

Budget Committed Grant rounds in progressConsistent Solution Solutio	Theme Research missions	(Del)	Goal To help an extr part of new app health preventi treatment and	oroaches to me on, detection, c	ntal
Budget 5.0 15.0 15.0 25.0 Committed 5.0 5.9 5.8 4.6 Grant rounds in progress - - -		(S)	Total Budget allocation (as at Budget 2019–20) Total committed = \$27. Grant rounds in progre	over 10) .5 million ss = Nil	
	Committed	5.0	15.0	15.0	25.0



Grant process: Open and competitive

- Suicide prevention (grant opportunity opens in late 2019)
- Eating disorders
- Child and youth mental health
- Aboriginal and Torres Strait Islander mental health

Current or completed activity

• 7 projects funded in June 2019 under funding round 1 for \$27.5 million over 5 years:



- 3 projects on mental health of Aboriginal and Torres Strait Islander people
- 2 projects on mental health of children and young people
- 2 projects on preventing, identifying and treating eating disorders
- 1 of these projects is 'The Kids are Not Okay: emergency department management of acute mental health crises in children and young people'. This project is receiving \$5 million over 5 years to understand why there has been an increase in children and young people presenting to emergency departments for mental health issues, and how care can be improved. The team includes emergency physicians, psychiatrists, psychologists, paediatricians and research experts. The research is being done through Monash University, University of Melbourne, University of Western Australia, Murdoch Children's Research Institute, Deakin University, and hospitals throughout the PREDICT (Paediatric Research in Emergency Departments International Collaborative) network

Delivery horizons

Establish 2019-20

- Second grant round to open focusing on research into suicide prevention
- Expert advisory panel to recommend priorities for future grant rounds

Expand 2020–21 to 2023–24

 To be guided by expert advisory panel **Embed** 2024–25 to 2028–29

 To be guided by expert advisory panel

Measures of success

The community accepts and adopts new technologies and treatments

Clinicians adopt best practices more quickly

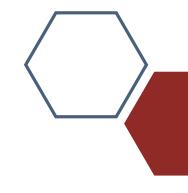
Increased focus of research on areas of unmet need

New health technologies and treatments are developed and trialled



Stem Cell Therapies Mission

Medical Research Future Fund Snapshot 2019–20 to 2020–21





		201	9–20		2020-21			
	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr
Develop roadmap			•					
Funding round 1								
Grants open								
Projects selected					-			
Agreements in place					-			
Projects underway								

Early funding priorities

• Roadmap with funding priorities expected in late 2019

Current or completed activity

· This mission has not yet had any funding rounds

Delivery horizons

Establish 2018–19 to 2019–20

- Established expert advisory panel
- Develop roadmap

Expand 2020–21 to 2023–24

- Increase scale and maturity of stem cell research sector
- Improve manufacturing capability with global and interdisciplinary connections
- Improve preparedness of health system funders and purchasers for future stem cell technologies, including increasing awareness of technology pipeline
- Increase awareness of evidence standards of health system funders by researchers and health technology sector

Embed 2024-25 to 2028-29

- Develop innovative, safe and effective treatments that improve the lives of patients with incurable or chronic disease
- Develop innovative stem cell treatments with community support and engagement, and by facilitating sector capacity for both clinical and commercial translation

Measures of success

Precision medicine is embedded in clinical practice

The community accepts and adopts new technologies and treatments

Clinicians adopt best practices more quickly

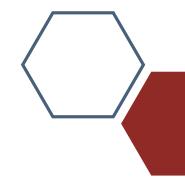
New health technologies and treatments are developed and trialled

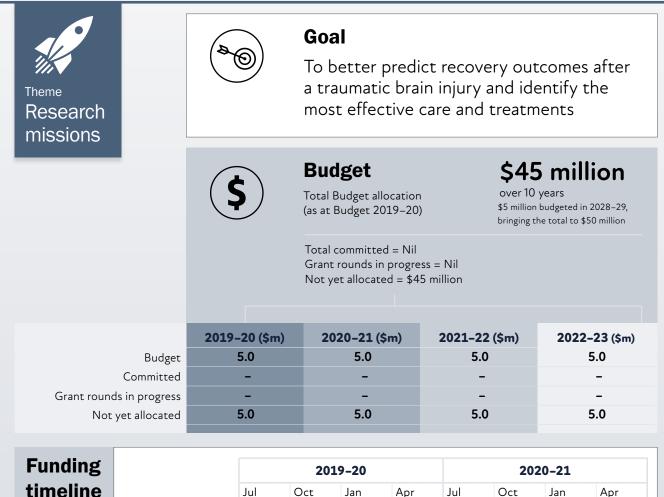
Increased commercialisation of health research outcomes



Traumatic Brain Injury Mission

Medical Research Future Fund Snapshot 2019-20 to 2020-21





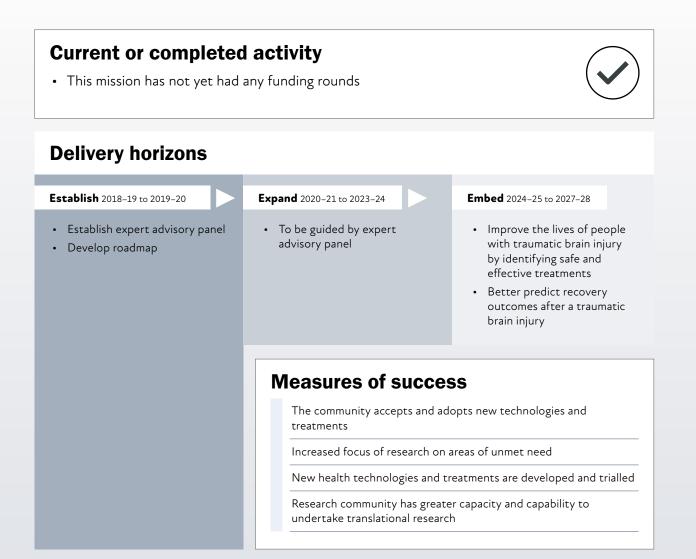


		203	19-20		2020-21				
Develop roadmap	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	
Funding round 1									
Grants open									
Projects selected									
Agreements in place									
Projects underway									

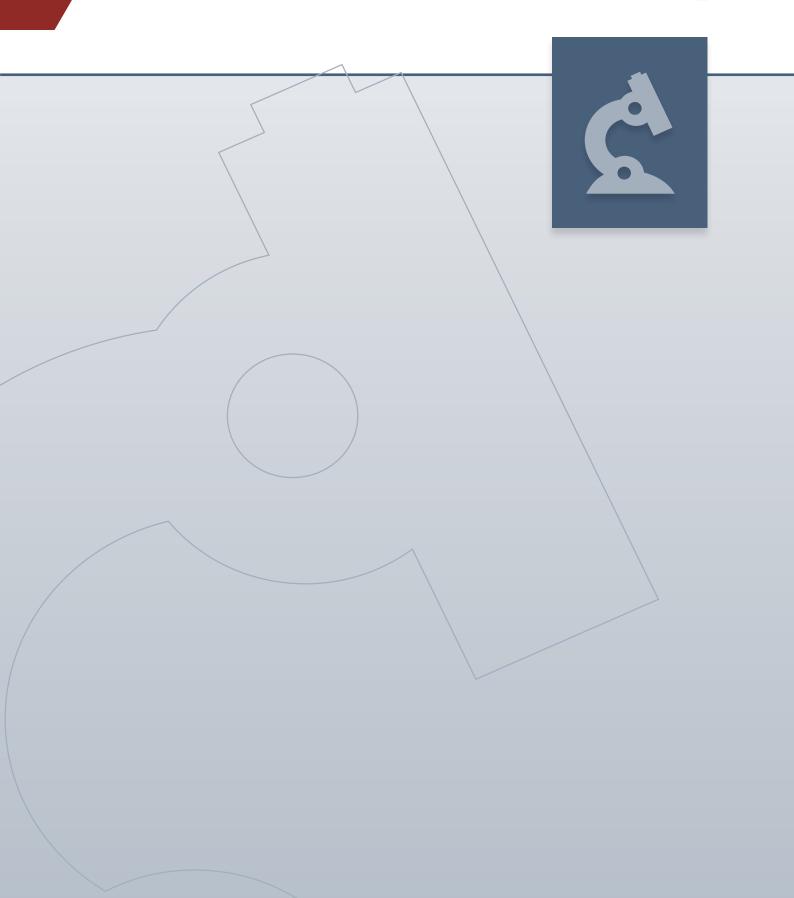
Grant process: Open and competitive

Early funding priorities

• Roadmap with funding priorities expected in early 2020



Theme **Researchers**



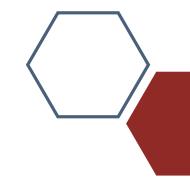


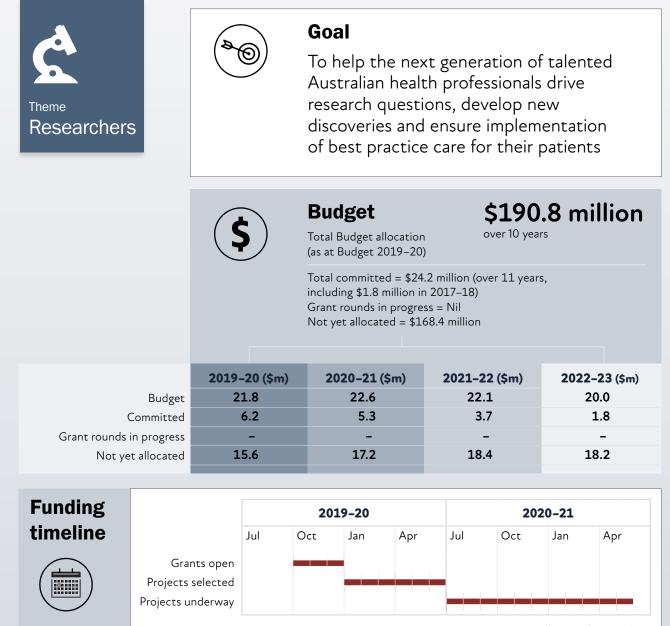
Australian Government Clinician Re

Department of Health

Clinician Researchers

Medical Research Future Fund Snapshot 2019–20 to 2020–21





See GrantConnect for specific grant dates

Grant process: Open and competitive. Applicants can defer their start date to January 2021.

- Investigator Grants: MRFF Priority Round (open 2 October to 27 November 2019) will fund 5-year grants for outstanding early to mid-career clinician researchers focusing on research translation in the following MRFF initiatives:
 - Australian Brain Cancer Mission
 - Million Minds Mission
 - Genomics Health Futures Mission
 - Dementia, Ageing and Aged Care Mission
 - Indigenous Health Research Fund
 - Stem Cell Therapies Mission
 - Cardiovascular Mission
 - Traumatic Brain Injury Mission
 - Preventive and Public Health Research
 - Primary Health Care Research
 - Global Health

Current or completed activity

- 67 active grants; 74 grants offered
- \$24.2 million contractually committed; \$8.3m expended to date
- Projects underway include work to eliminate hepatitis C as a public health threat, and a project to develop next-generation nanoparticles for cancer therapy

Delivery horizons

Establish (0 to 3 years)

 Increase engagement of research-focused clinicians, and health administrators or policy makers, to undertake projects focused on translating research evidence into practice

Expand (4 to 7 years)

• Strengthen clinical researchers' skills in research translation

Embed (8 to 10 years)

• Build Australia's capacity for health and medical research and research translation into clinical practice

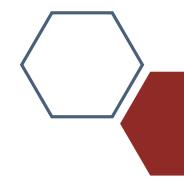
Measures of success

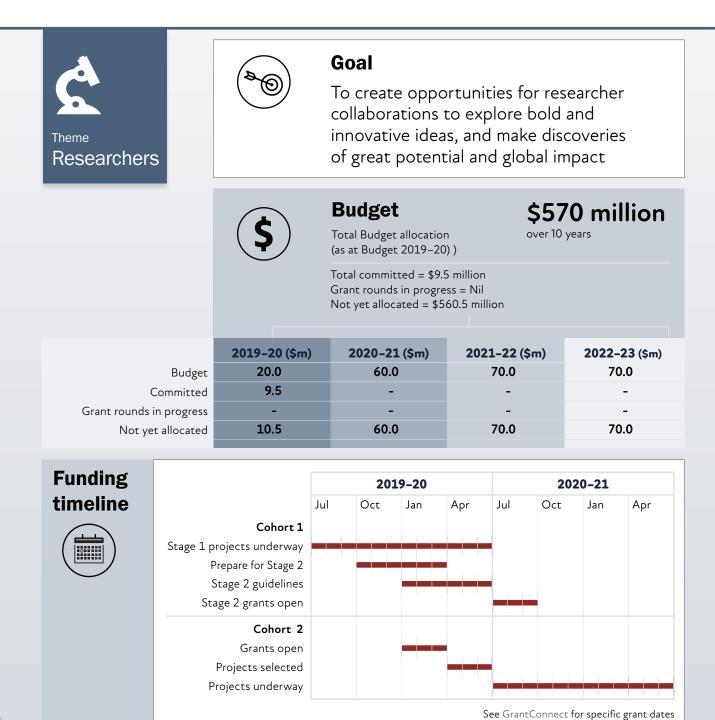
New health technologies and treatments are developed and trialled



Frontier Health and Medical Research

Medical Research Future Fund Snapshot 2019–20 to 2020–21





Grant process: Open and competitive

Early funding priorities

• Enable transformation of care through discovery and innovation

Current or completed activity

10 projects funded under Round 1, Stage 1; \$9.5 million spent to date:

- harnessing next-generation brain imaging technology to diagnose and treat epilepsy (\$1 million)
- developing a new interface between the brain and a machine, to help people regain eyesight, movement or other nerve functions (\$0.9 million)
- developing a national database of antibiotic resistance, to allow resistant strains to be traced, isolated and treated (\$1 million)
- investigating large-scale use of an Australian method for controlling the spread of Zika virus, dengue fever and other mosquito-borne diseases (\$1 million)
- developing new technologies to improve women's sexual and reproductive health (\$0.9 million)
- using 4D diagnostic technology to accurately assess lung function in people of all ages, including the very young and old (\$1 million)
- using the latest genome editing technology to rapidly detect and identify infectious disease and antimicrobial resistance (\$1 million)
- using therapeutic ultrasound to treat brain disorders, including dementia (\$1 million)
- testing a new technology that stimulates the spinal cord to treat cerebral palsy (\$0.7 million)
- developing new technologies to care for people who have had a stroke before they reach hospital (\$1 million)

Delivery horizons

Establish (1 to 3 years)

- Identify viable innovative research programs
- Initiate multidisciplinary partnerships between researchers

Expand (4 to 7 years)

- See real outcomes from innovative research programs
- Identify medical research with potential global impact
- Stimulate new research in existing fields

Embed (8 to 10 years)

- Develop new health and medical technologies
- Establish new research fields
- Bring new technology and innovative treatments into practice

Measures of success

Precision medicine is embedded in clinical practice

The community accepts and adopts new technologies and treatments

Increased focus of research on areas of unmet need

New health technologies and treatments are developed and trialled

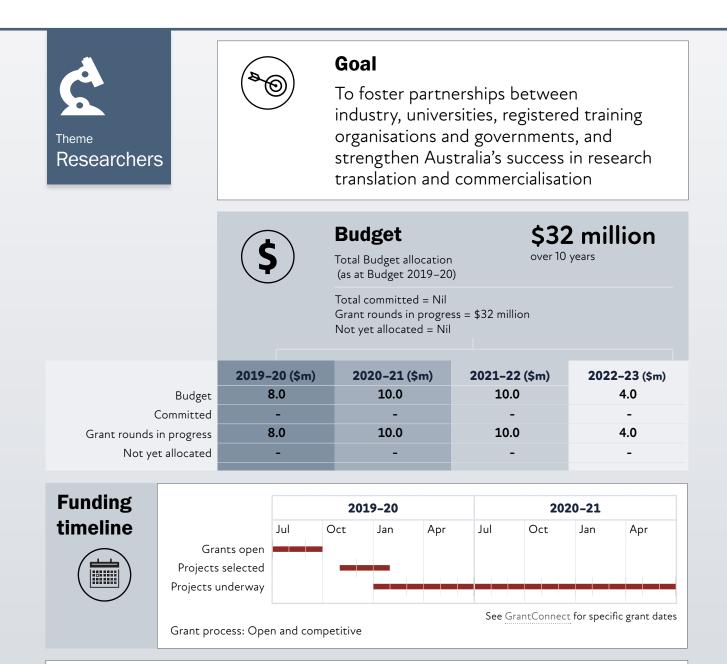
Increased commercialisation of health research outcomes





Researcher Exchange and Development within Industry

Medical Research Future Fund Snapshot 2019–20 to 2020–21



Early funding priorities

• Exchanges between academia and industry to foster collaboration and the translation of discovery into practice

service provider will be chosen to deliver the initiative **Delivery horizons** Expand (4 to 7 years) Embed (8 to 10 years) Establish (1 to 3 years) • Strengthen Australia's • Increase researchers' skills and • Increase Australia's experience in translation and capacity to translate and success in translation and commercialisation of health commercialisation commercialise new and existing research and medical research • Establish more partnerships between researchers and • Strengthen sustainable industry medical research partnerships between researchers and industry **Measures of success**

• Funding round opened on 18 July 2019 and closed on 19 September 2019. One

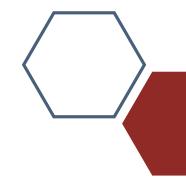
Current or completed activity





Medical Research Commercialisation

Medical Research Future Fund Snapshot 2019–20 to 2020–21







Goal

To support early-stage health and medical research and innovation in Australia through to proof-of-concept and beyond, providing opportunities for commercialisation



Budget

Total Budget allocation from 2018–19 (as at Budget 2019–20) \$311.3 million

Total committed = \$67.3 million (for 2017–18 to 2021–22) Grant rounds in progress = Nil from the Australian Government, but applications for BioMedTech Horizons Round 3 are administered by MTPConnect and open until 16 December 2019 Not yet allocated = \$254.0 million

	2019-20 (\$m)	2020-21 (\$m)	2021-22 (\$m)	2022-23 (\$m)
Budget	15.3	35.3	35.3	35.0
Committed	15.3	25.3	1.3	-
Grant rounds in progress	-	-	-	-
Not yet allocated	0.0	10.0	34.0	35.0

Funding			201	9-20		2020-21			
timeline		Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr
BioMedTech	Round 1 projects underway								
Horizons	Round 2 EOI Round 2 projects selected Round 2 projects underway Round 3 EOI Round 3 projects selected Round 3 projects underway								
Biomedical Translation Bridge	Round 1 Projects selected Round 1 projects selected Round 1 projects underway								



Grant processes: Open and competitive

MTPConnect is the lead entity for the BioMedTech Horizons and the Biomedical Translation Bridge initiatives. Applications for funding under these initiatives will be selected by MTPConnect.

- BioMedTech Horizons round 1 priority areas: precision medicine and 3D anatomical printing
- BioMedTech Horizons round 2 priority areas: cardiovascular, orthopaedics, emergency medicine/trauma and ophthalmology
- BioMedTech Horizons round 3 priority areas:
 - digitally enabled medical devices in mobile health, health information technology, wearable devices, telehealth and telemedicine, and digitally enabled personalised medicine
 - implantable digitally enabled medical devices addressing unmet needs in any therapeutic area
 - general medical devices in the areas of regenerative medicine, women's health, cardiovascular, orthopaedics, neuroscience, general surgery and oncology

Current or completed activity

• 11 projects funded under BioMedTech Horizons Round 1. Round 2 closed and under assessment. Round 3 open for applications, closing 16 December 2019



• Biomedical Translation Bridge Round 1 closed and under assessment

Delivery horizons

Establish 0 to 1 years

 Establish commercialisation initiatives, including BioMedTech Horizons and Biomedical Translation Bridge

Expand 1 to 3 years

Assess the first initiatives

 Refine initiatives or establish new ones to increase the number and effectiveness of commercialisation investments

Embed 4 to 10 years

 Embed MRFF-funded pathways for investing in ideas and innovations to increase commercialisation opportunities and improve patient outcomes

Measures of success

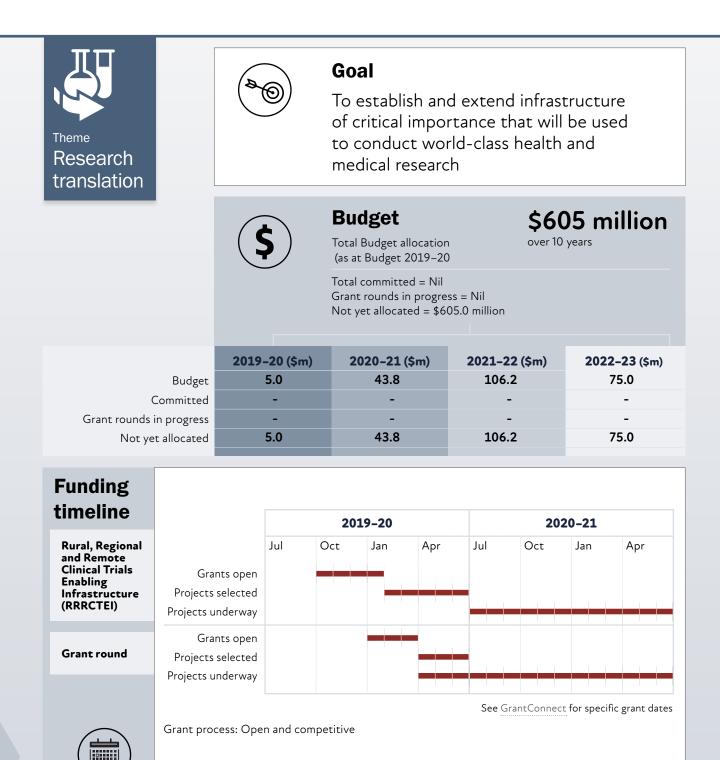
New health technologies and treatments are developed and trialled

Increased commercialisation of health research outcomes



National Critical Research Infrastructure

Medical Research Future Fund Snapshot 2019–20 to 2020–21



• The RRRCTEI Program will provide \$100 million for facilities, research equipment, systems and services in rural, regional and remote areas

Current or completed activity

 Guidelines for RRRCTEI grants are being developed to align with broader sector initiatives



Delivery horizons

Establish (0 to 3 years)

- Complement the \$614 million in funding for clinical trials under the MRFF
- Expand clinical trials to rural, regional and remote sites
- Conduct a gap analysis and needs assessment to help develop other investment strategies
- Develop processes that are consumer/end-user driven, including co-design where appropriate to ensure new AI technologies respond to a clinical need and are fit for purpose

Expand (4 to 7 years)

 Develop infrastructure that supports a stronger health and medical research sector including the use of new technologies

Embed (8 to 10 years)

 See the outcomes from research infrastructure contributing to new cures and treatments for Australians

Measures of success

The community accepts and adopts new technologies and treatments

Clinicians adopt best practices more quickly

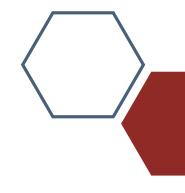
New health technologies and treatments are developed and trialled

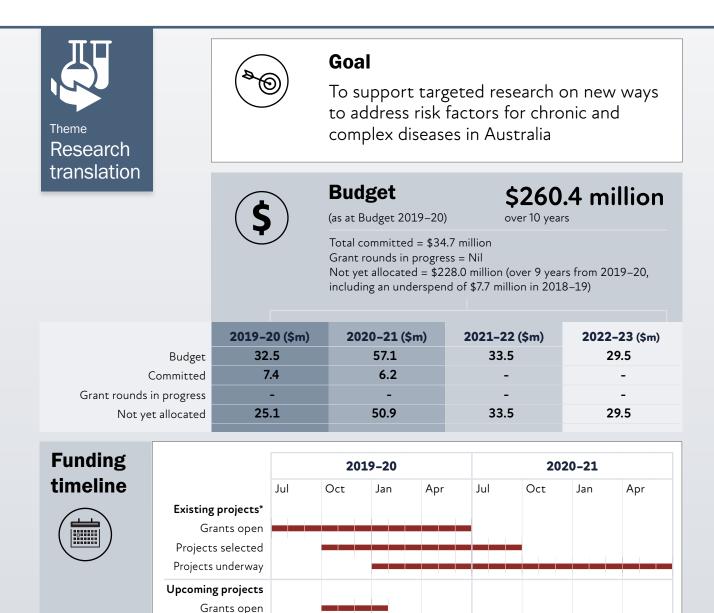
More Australians access clinical trials



Preventive and Public Health Research

Medical Research Future Fund Snapshot 2019–20 to 2020–21





Organisation Research rounds 1 and 2

Projects selected Projects underway

Grant process: Open and competitive

See GrantConnect for specific grant dates

* Keeping Australians Out of Hospital, and Targeted Health System and Community

- Maternal Health and the First 2000 Days
- Early Childhood
- Exercise and Nutrition
- Targeted Health System and Community Organisation Research

Current or completed activity

 \$13.3 million committed in 2019–20 and 2020–21 for Keeping Australians out of Hospital (\$9.4 million) and Targeted Health System and Community Organisation Research (\$3.9 million). \$11.4 million spent in 2018–19 on these 2 initiatives



- Priorities from Medical Services Advisory Committee being developed for next round of Targeted Health System and Community Organisation Research
- Current projects include:
 - developing an early detection program to prevent unnecessary hospital admission in aged care residents (Queensland University of Technology)
 - assessing diagnostic accuracy for melanoma with or without melanoma surveillance photography in high-risk people (Monash University)
 - transforming pulmonary rehabilitation to reduce hospital admissions for people with chronic obstructive pulmonary disease (La Trobe University)
 - translating best practice in preventing osteoporosis refracture to keep Australians out of hospital (University of Technology Sydney)

Delivery horizons

Establish (0 to 3 years)

- Implement priorities of Maternal Health and the First 2000 Days, Early Childhood, Exercise and Nutrition
- Support Australian Government health technology assessment committees by addressing key comparative assessment and clinical practice questions

Expand (4 to 7 years)

- Support research translation to develop new preventive and public health measures
- Identify new priority areas for research
- Continue support for health technology assessment committees to address key questions

Embed (8 to 10 years)

- Help translated research become common practice in public and community health settings
- See new practices improve the quality and costeffectiveness of preventive health care interventions

Measures of success

The community accepts and adopts new technologies and treatments

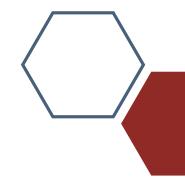
Clinicians adopt best practices more quickly

New health technologies and treatments are developed and trialled



Primary Health Care Research

Medical Research Future Fund Snapshot 2019–20 to 2020–21



Theme Research translation		Goal To increase Australia's evidence base primary health care through research to improve service delivery and patien outcomes, and translate this knowled into action									
		\$	S Budge Total Budg (as at Budg			19–20)	5 million years				
		Total committed = Nil Grant rounds in progress = Nil Not yet allocated = \$45.0 million									
		2019-2	0 (\$m)	2020-21 (\$m) 2021-2				2 (\$m)	2–23 (\$m)		
	Budget	5.0			5.0			0		5.0	
C	ommitted	-		-				-	-		
Grant rounds in		-		-				-	-		
Not yet	allocated	5.	0		5.0		5.	0		5.0	
Funding				20	19-20			20	020-21		
timeline			Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	
	Project	rants open ts selected s underway									
	Grant process: Open and competitive See GrantConnect for specific grant dates										

Early funding priorities

• Priorities in 2019–20 will align with those being developed as part of the Primary Health Care 10-year Plan through a \$5 million targeted call for research

Current or completed activity

• Applications for the 2019–20 grant opportunity open in late 2019

Delivery horizons

Establish 2018–19 to 2020–21

 Engage with the Primary Health Reform Steering Group on the Primary Health Care 10 year plan regarding priorities for research

Expand 2021–22 to 2024–25

- Increase the primary health
 care research workforce
- Identify new priority areas for research

Embed 2025-26 to 2027-28

- Help translated research become common practice in primary health care settings
- See new practices improve the quality and accessibility of primary health care interventions
- Strengthen Australia's primary health care research capacity and production

Measures of success

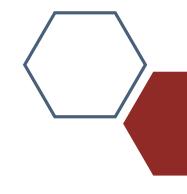
The community accepts and adopts new technologies and treatments

Clinicians adopt best practices more quickly



Rapid Applied Research Translation

Medical Research Future Fund Snapshot 2019–20 to 2020–21



Theme Research translation		æ	9	trans patie of ca These of Health	ipport forma ents ca re. entres ha and Med	tive t in ber ave beer ical Rese and Tra	nefit naccrea earch C	latio from dited for ouncil. n Cent	nal re bett or excelle They in res (AHF	nat con search, er qual ence by th clude Adv. RTCs) and	SO ity e National anced
				Budget\$218 millioTotal Budget allocation (as at Budget 2019–20)over 10 yearsTotal committed = \$60.9 million Grant rounds in progress = \$4.1 million Not yet allocated = \$160.6 million							llion
			-20 (\$m)	202	2 0-21 (\$ 20.0	m)		1-22 (22.0	(\$m)		–23 (\$m) 2.0
(Budget Committed	20.0 16.6 2.1		16.6 2.1						2	-
Grant rounds i										-	
Not ye	t allocated	1.3		1.3			22.0		22.0		
Funding				2019-20			202			20-21	
timeline			Jul	Dct	Jan	Apr	Jul		Oct	Jan	Apr
		reements in place underway					S	ee Grar	tConnec	t for specifi	c grant dates
	Grant process: Open and competitive										

- Improving clinical pathways and care by building collaboration across the care continuum
- Addressing clinical variation by driving data linkage and integration to understand and reduce unwarranted variation in clinical care and outcomes
- Improving the health of vulnerable groups, including people with chronic conditions; people at the end of life; disadvantaged and ethnic groups; and Aboriginal and Torres Strait Islander people
- Addressing the capacity and production gap in primary care research, with an emphasis on multidisciplinary, adaptive research methodologies and clinical capability support
- Testing innovative public health approaches to addressing modifiable risk factors for chronic and complex disease

Current or completed activity

• In the 8 translation centres funded, researchers and health service providers work together to generate evidence, translate research and improve health care delivery. This will improve patient outcomes and experience by using innovative approaches to health care and treatment



- The centres also work together on national system-level initiatives to improve health services and health systems sustainability. They also find ways for patients and communities to be involved in prioritising research
- \$28 million contractually committed under this initiative in 2017–18 and 2018–19

Delivery horizons

Establish (1 to 3 years)

- Funding agreements in place with all AHRTCs and CIRHs to support research that will improve care and patient outcomes
- Identify priorities for next funding round

Expand (4 to 7 years)

 Improve collaboration between researchers and health care services on health professional education

Embed (8 to 10 years)

- Ensure that translated research becomes common practice in primary care, and public and community health settings
- Improve benefits to patients, quality and safety, and health system performance

Measures of success

The community accepts and adopts new technologies and treatments

Clinicians adopt best practices more quickly

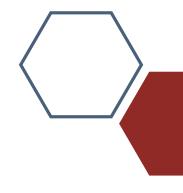


Australian Government

Department of Health

Research Data Infrastructure

Medical Research Future Fund Snapshot 2019–20 to 2020–21



Theme Research	Goal To establish and extend research data infrastructure to support world-class h and medical research									
translation	\$	Budget\$80 mTotal Budget allocation (as at Budget 2019-20)over 10 yearsTotal committed = Nil Grant rounds in progress = Nil Not yet allocated = \$80.0 millionitem over 10 years						llion		
Budget Committed Grant rounds in progress Not yet allocated	2019-20 (\$m) - - - -	2020-21 (\$m) 10.0 - - 10.0			2021-22 10.0 - - 10.0	(\$m)	2022-23 (\$m) 10.0 - - 10.0			
Funding timeline	Jul	2019–20 2020– Oct Jan Apr Jul Oct Ja						Apr		

Projects selected Agreements in place Projects underway



Grant process: Open and competitive

Grants open

Early funding priorities

• This is a new initiative and early funding priorities are under development

Current or completed activity

• This initiative has not yet had any funding rounds



Delivery horizons

Establish (0 to 3 years)

 Work with governments and industry to scope gaps and opportunities for registries, biobanks and linkage platforms

Expand (4 to 7 years)

- Refine priorities and review implementation
- Continue with grant rounds

Embed (8 to 10 years)

• Ensure that access to health data facilitates evidencebased care, drives efficient use of resources and allows new advances in health care

Measures of success

New health technologies and treatments are developed and trialled

More Australians access clinical trials