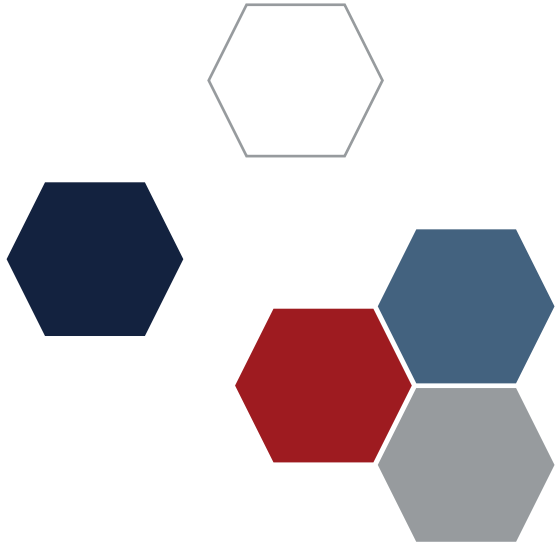
Australian Government
Department of Health



Medical Research Future Fund

MRFF Webinar - How to improve the health of rural, regional and remote communities with an MRFF grant – March 14 2024

Co-hosts
Dr Ruth Griffiths, Principal Research Scientist | Director, Health and Medical Research Office
Prof Ruth Stewart, National Rural Health Commissioner

Agenda

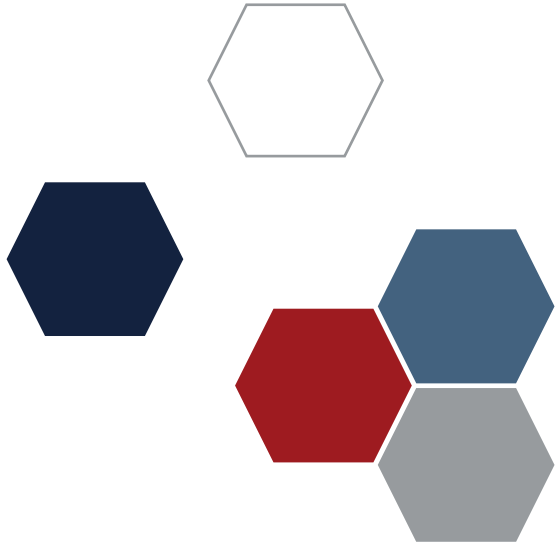
1. **Welcome** – Natasha Ploenges, CEO, Health and Medical Research Office (HMRO)
2. **Research improves rural health outcomes** – Professor Ruth Stewart, National Rural Health Commissioner
3. **Successful research models –**

   Associate Professor Craig Underhill, Director of Cancer Services, Albury Wodonga Regional Cancer Centre

   Professor Sandra Thompson, Director of the Western Australian Centre for Rural Health

   Professor John Wakerman, Remote and Rural Health Services Research, Menzies Institute
4. **Rural and remote focus in MRFF funding** – Dr Ruth Griffiths, Director, HMRO
5. **Sum-up** – Professor Ruth Stewart
6. **Questions and answers**

Australian Government
Department of Health



Professor Ruth Stewart
National Rural Health Commissioner

Australian Government

Office of the National Rural Health Commissioner

Conducting research in rural, regional & remote areas

How to improve the health of rural, regional & remote communities with an MRFF grant

National Rural Health Commissioner

Adj. Prof. Ruth Stewart

14 March 2024

Acknowledgment of Country

I acknowledge the Traditional Custodians of the land,

the Gadigal people of the Eora nation, whose land I am joining you from today.

I pay my respects to the Elders of this land, sea and waterways,

ancestors who have come before us and those who are with us and guide us today.

I would also like to acknowledge emerging leaders within our communities.

I extend my respect to all Aboriginal and Torres Strait Islander people here today.

Summary

- Geographic narcissism
- Seagulls
- Co-design

Geographic narcissism & health system design

Geographic narcissism is a belief that urban reality is definitive

- Malin Fors

Fors, M 2018, 'Geographical narcissism in psychotherapy: countermapping urban assumptions about power, space, and time', *Psychoanalytic Psychology*, vol. 35, no. 4, pp. 446-453.

Geographic narcissism & health system design

Victoria Health 2001, Koori Health Research and Community Development Unit. *Research - understanding ethics*.

The current research environment

FIFO research teams: “seagulls”

Research projects with little local relevance or context

Little value to the community

Findings rarely shared with the community

Little impact on health outcomes for rural & remote Australians

Stewart, R 2020, ‘Enough seagulls! Rural and remote communities need local researchers living, walking and talking with locals’, *Medical Journal of Australia*, vol. 213, no. 11. pp. 514-515.

Researchers who live & work in community can

Respond to local clinical questions & community concerns

Understand local context

Conduct value-based research

Present timely evidence

Which can:

- Inform strategic intervention
- Improve health outcomes for rural & remote Australians

Conduct culturally appropriate research

Communication is key

Take time & build rapport

Informed consent from participants

Research methods that empower & engage participants

McGrail, M, Jones, R, Robinson, A, Rickard, CM, Burley, M & Drysdale M 2005, 'The planning of rural health research: rurality and rural population issues', *Rural and Remote Health*, vol. 5, no. 426, <https://doi.org/10.22605/RRH426>.

Communicate & use findings

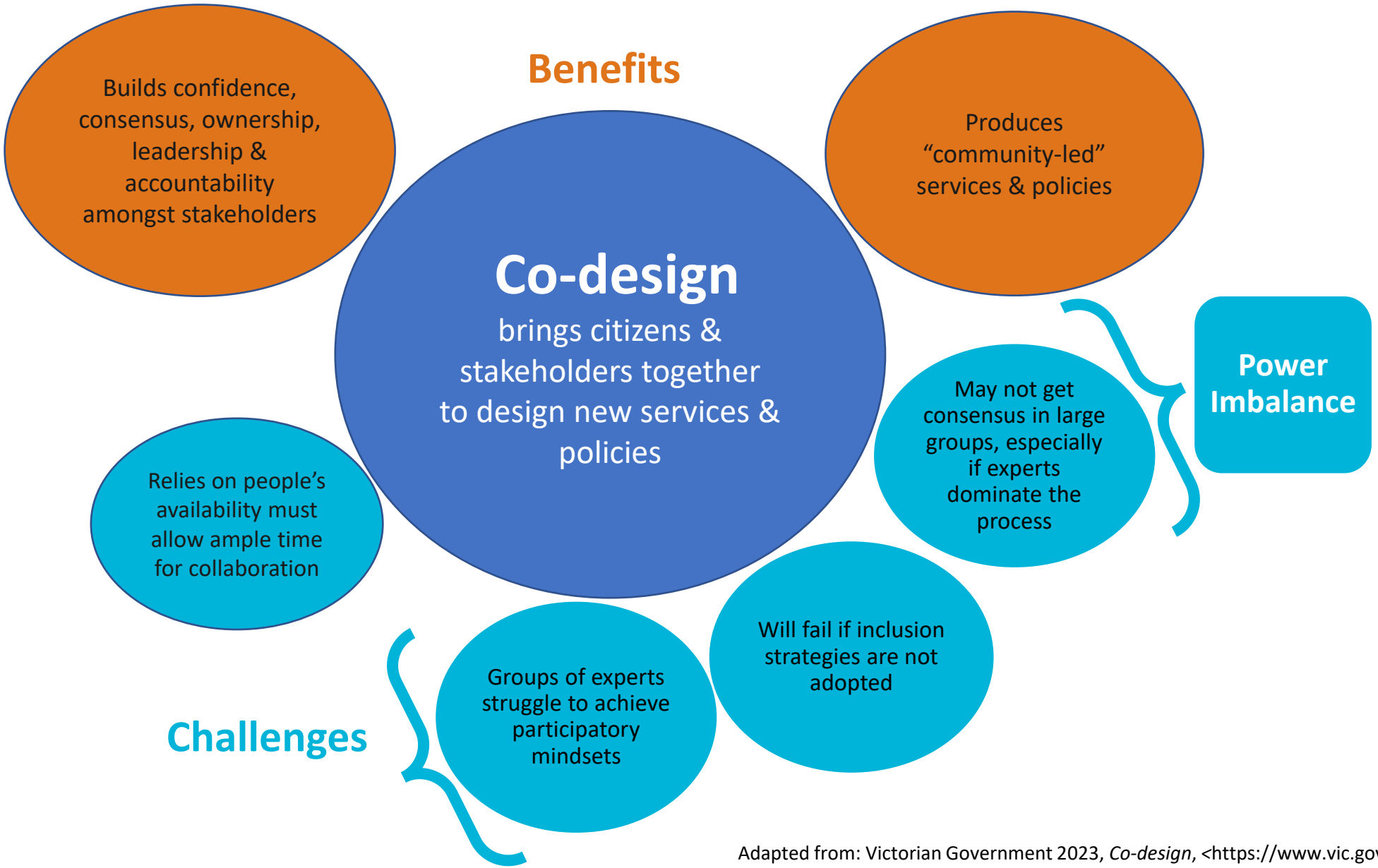
Data return is important

Present your findings to communities & participants

Share with colleagues & networks

Use the evidence

Community (co-design & co-development)



Adapted from: Victorian Government 2023, *Co-design*, <https://www.vic.gov.au/co-design>.

Conducting Research Summary

- Embrace co-design & co-development
- Understand local context
- Challenge conventional urban design principals
- Conduct culturally appropriate research
- Share with colleagues & networks

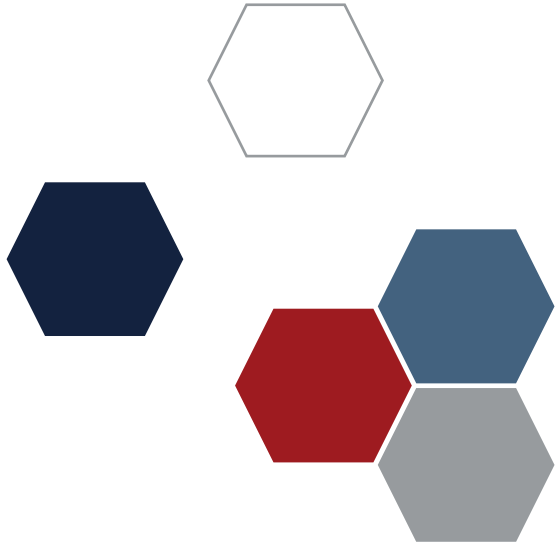
@RuralHC_Aus

@DrFayeMcMillan

@NowlanShelley

Thank you

Australian Government
Department of Health



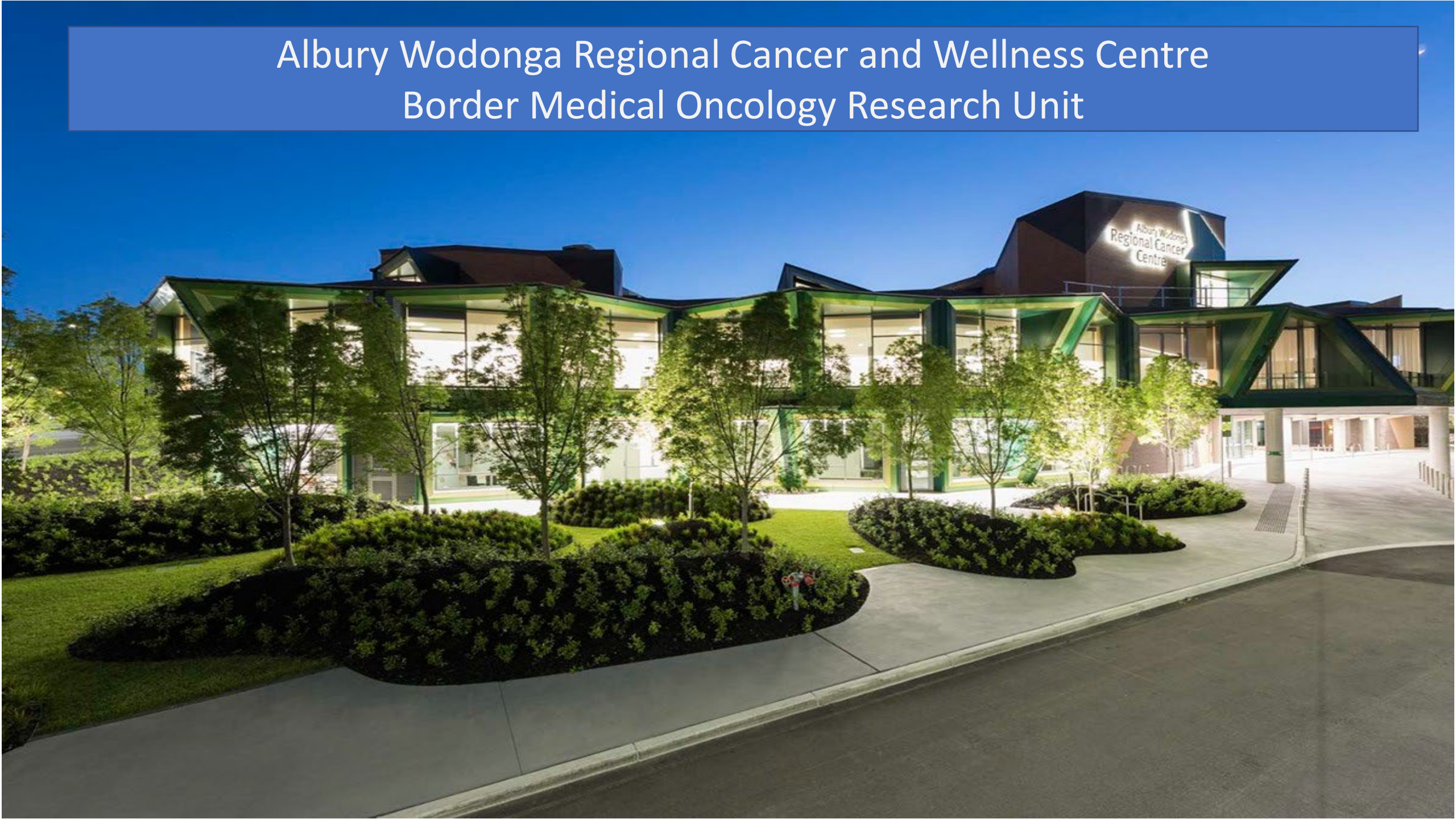
Assc Professor Craig Underhill
Director of Cancer Services, Albury Wodonga Regional Cancer Centre

How to improve the health of rural, regional and remote communities with an MRFF grant

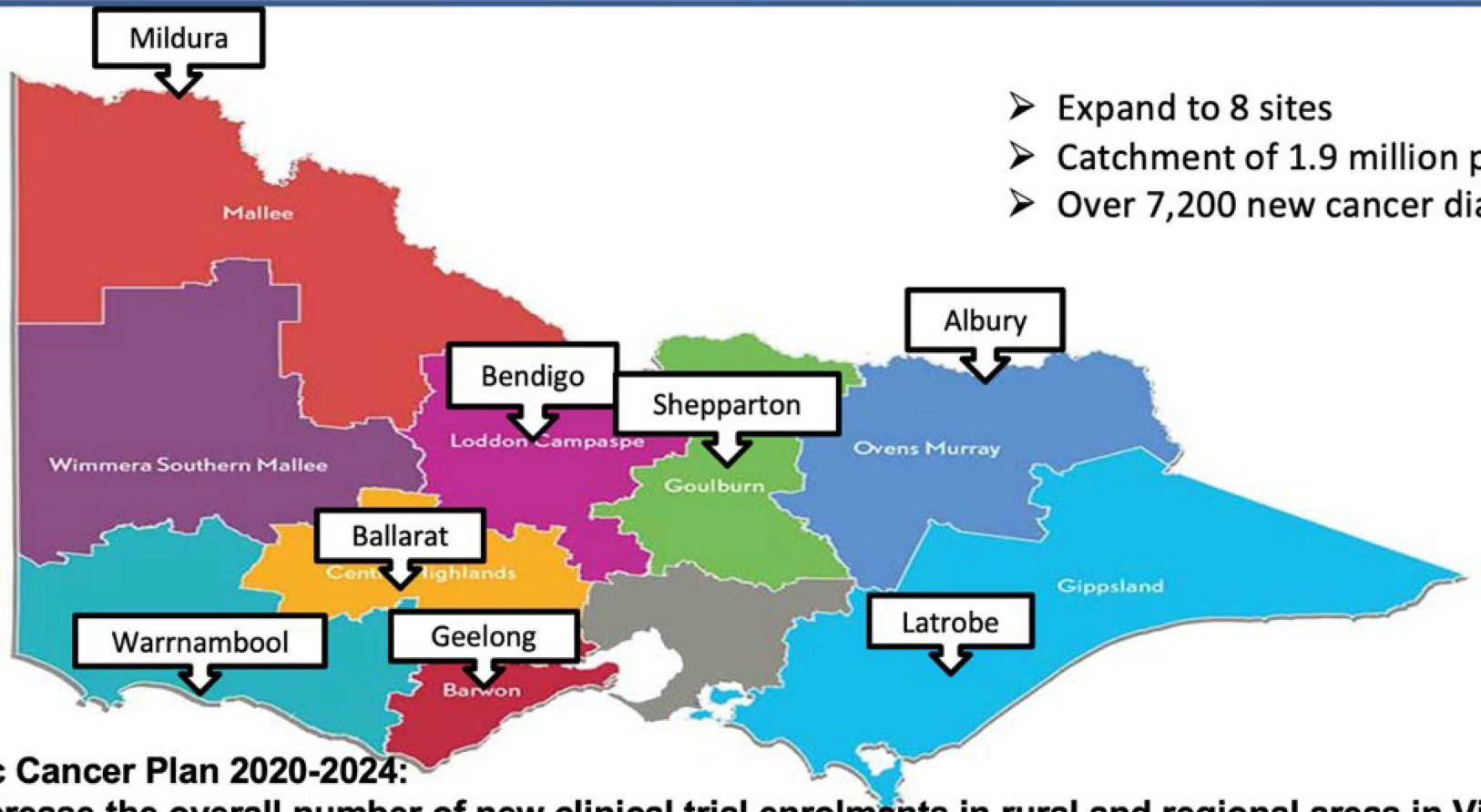
A/Prof Craig Underhill

ReViTALISE program

Albury Wodonga Regional Cancer and Wellness Centre
Border Medical Oncology Research Unit



The Regional Trials Network - Victoria



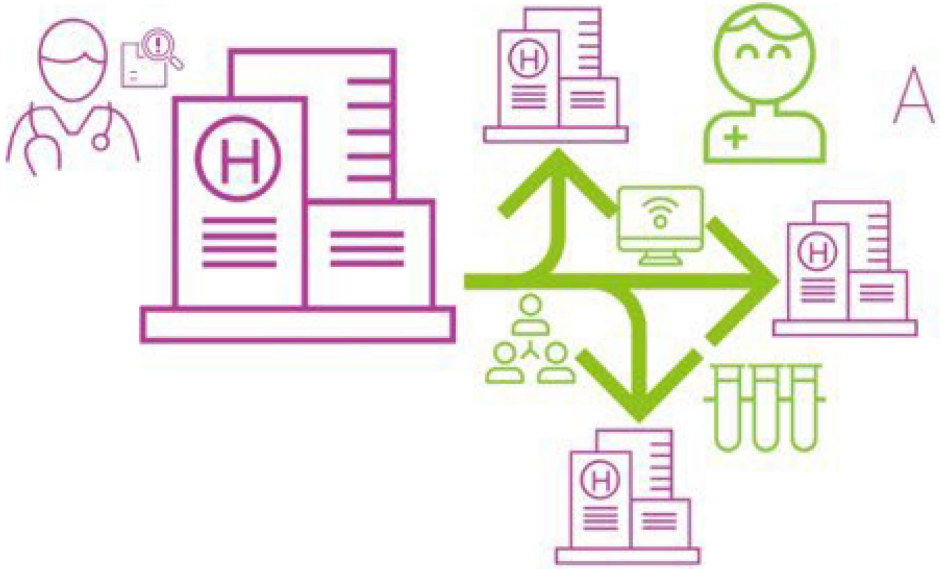
- Expand to 8 sites
- Catchment of 1.9 million people
- Over 7,200 new cancer diagnoses every year

Vic Cancer Plan 2020-2024:
Increase the overall number of new clinical trial enrolments in rural and regional areas in Victoria by 30%

The health of RRR patients

- *On average when compared to people living in metropolitan areas* Australians living in regional, rural and remote areas have:
  - shorter lives
  - higher levels of disease and injury
  - poorer access to and use of health services*
- Face barriers taking part in clinical trials
  - cultural differences
  - geographical isolation.
- Improved survival associated with enrolment on clinical trials *Unger et al 2014*
- Rural and urban patients with equal access to SWOG trials had same survival *Unger et al 2018*

**Commonwealth Australian Institute of Health and Welfare, Rural and Remote Health 2019*



A teletrial is a group of clinical trial sites that work together to conduct a clinical trial under the supervision of a Primary Site.

The Australian Teletrial Program (2022)

Australasian Teletrial Model

Primary site

- Specialists
- Clinical trial coordinators
- Specialist pharmacy, nursing and allied health clinicians
- Administration support officers

Tele-health

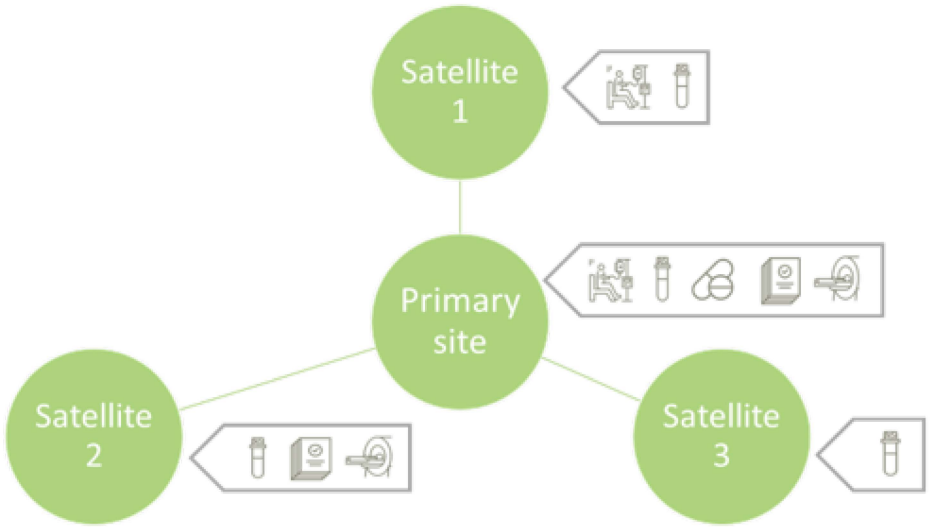
Patients are consented, recruited and managed at satellite sites in partnership between clinicians from satellite and primary sites.

Satellite site

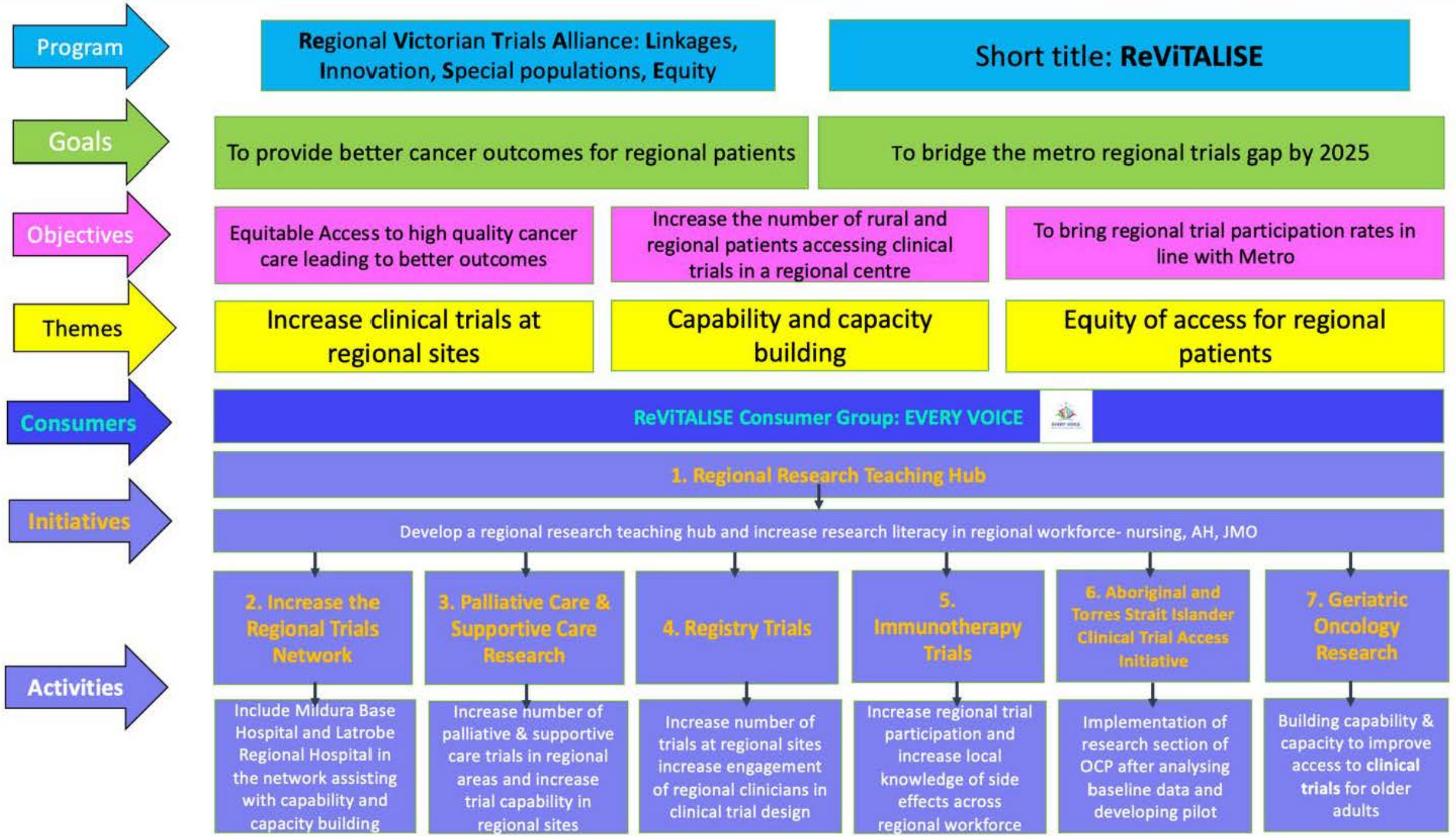
- Patients and families
- Medical officers
- Nursing, pharmacy and allied health clinicians
- With/without trial coordinators

(Larger centres may have specialist doctors, nurses, pharmacies and allied health clinicians)

Sabesan & Zalcberg, EJCC, 2016



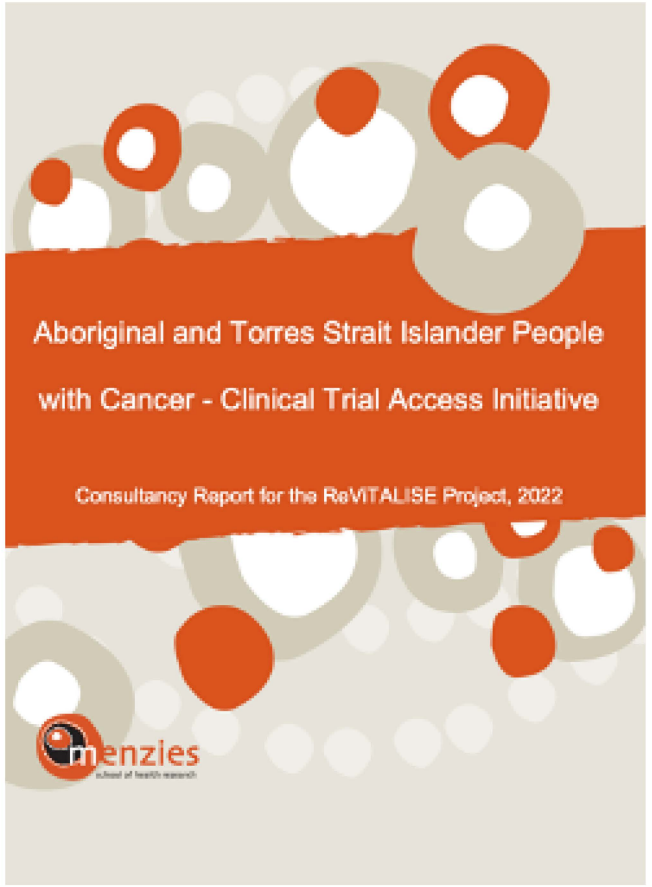
Sabesan S, et al. COSA Australasian Tele-trials Model


Program
Regional Victorian Trials Alliance: Linkages, Innovation, Special populations, Equity
Short title: ReViTALISE
Goals
To provide better cancer outcomes for regional patients
To bridge the metro regional trials gap by 2025
Objectives
Equitable Access to high quality cancer care leading to better outcomes
Increase the number of rural and regional patients accessing clinical trials in a regional centre
To bring regional trial participation rates in line with Metro
Themes
Increase clinical trials at regional sites
Capability and capacity building
Equity of access for regional patients
Consumers
ReViTALISE Consumer Group: EVERY VOICE
Initiatives
1. Regional Research Teaching Hub
Develop a regional research teaching hub and increase research literacy in regional workforce- nursing, AH, JMO
Activities
2. Increase the Regional Trials Network
3. Palliative Care & Supportive Care Research
4. Registry Trials
5. Immunotherapy Trials
6. Aboriginal and Torres Strait Islander Clinical Trial Access Initiative
7. Geriatric Oncology Research
Include Mildura Base Hospital and Latrobe Regional Hospital in the network assisting with capability and capacity building
Increase number of palliative & supportive care trials in regional areas and increase trial capability in regional sites
Increase number of trials at regional sites increase engagement of regional clinicians in clinical trial design
Increase regional trial participation and increase local knowledge of side effects across regional workforce
Implementation of research section of OCP after analysing baseline data and developing pilot
Building capability & capacity to improve access to clinical trials for older adults

Australian Government
Cancer Australia

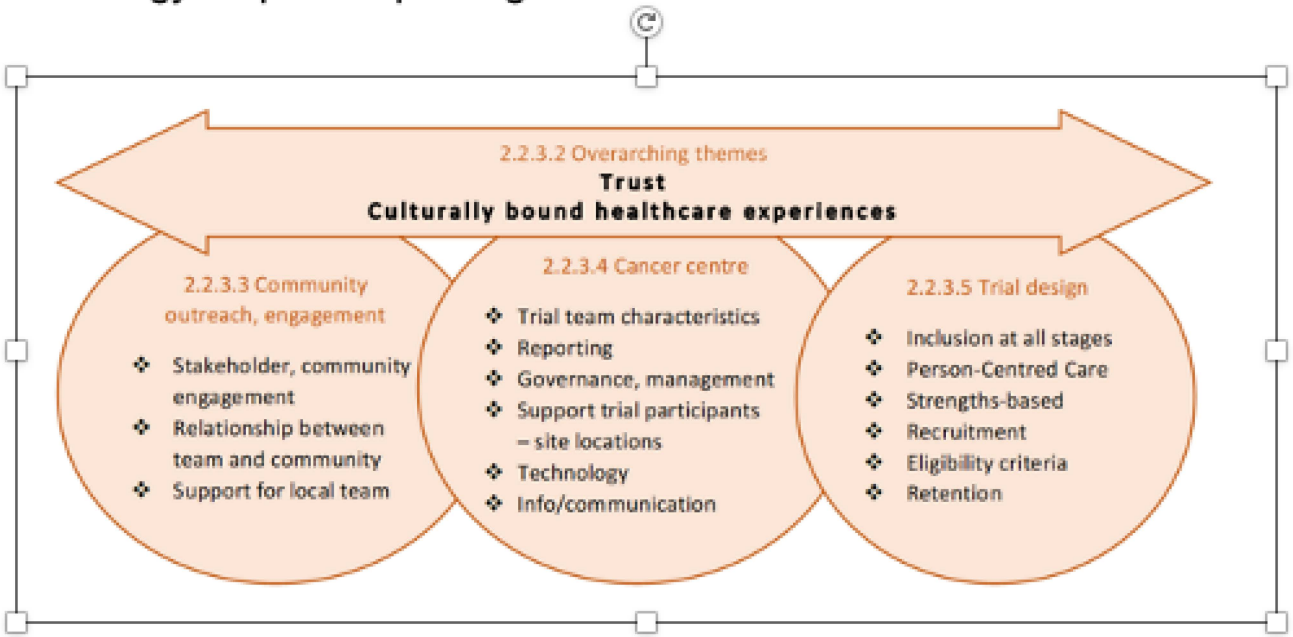
Cancer Australia

A GUIDE TO IMPLEMENTING THE OPTIMAL CARE PATHWAY FOR ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLE WITH CANCER



Literature review of key challenges/barriers impacting access to clinical trials

Strategy map for improving access to clinical trials



www.regionaltrialsnetwork.org

@research

Introducing

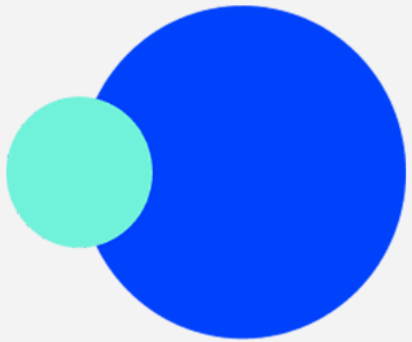
The website

- About us – background and contact info
- FAQ – where do I start & more
- Education & Training – 2 tiers, 200+ links to training options
- Templates & Tools – 2 tiers, 80+ links to resources
- Research Contacts – who's who in the regions
- Regional Research – specific details of regional health services research
- Events - @research upcoming & past, external e.g. conferences
- Opportunities – jobs, funding, scholarships, mentoring
- Contact us – forms, questions, feedback

website sampling

Education & Training

Education



Research Design - Learn The Basics

View resources →

Education

Research Design - Qualitative, Quantitative and Mixed Methods

View resources →

Education

Research Design - Data Collection and Management

View resources →

Education

Education

Education

Back to top

Research Design - Learn The Basics

Research Design - Learn The Basics

Research and its role in healthcare

Chapter 1 in Foundations in Nursing and Health Care, Ed.

Presented by Lynne Wigens

Description

The learning outcomes for this chapter include defining what research is and the key characteristics of research; and identifying the stages of the research process.

Source / Format

PDF reading

Learn more →

Research Design - Learn The Basics

What is health services research?

Health Services Research Association Australia & New Zealand

Description

This short video clip introduces health services research and why it is an important part of health services work.

Source / Format

Video, 8 mins duration

Learn more →

Research Design - Learn The Basics

An Introduction to Health Services Research

Health Services Research Association Australia & New Zealand

Description

This webinar introduces HSR in practice; in hospital policy; in primary care policy; in commissioning in primary care; and

Research Design - Learn The Basics

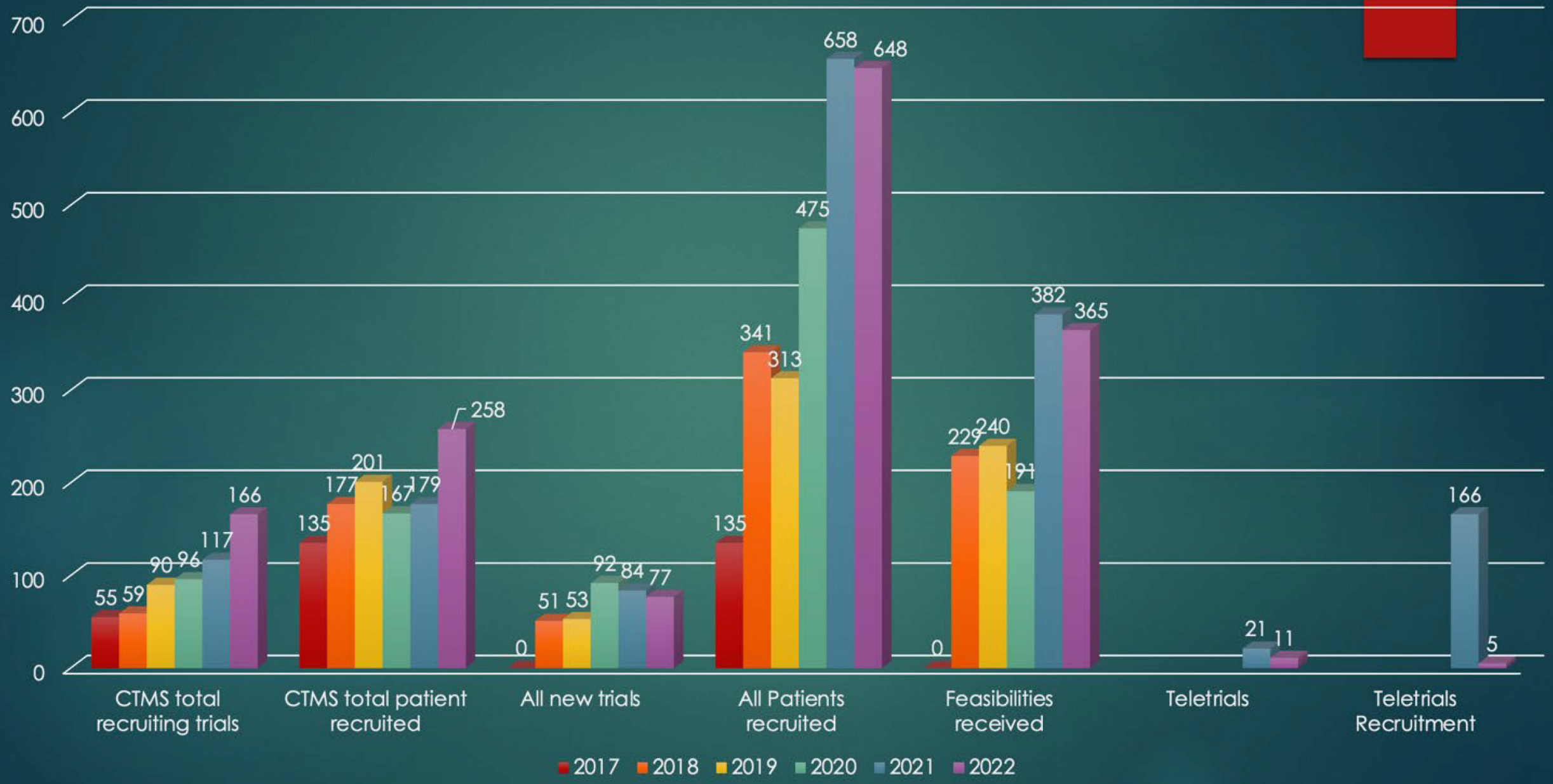
Introduction to Health Research

Western Australia Health Translation Network, Research Education & Training Program

Description

Back to Top ↑

RTN Sites Research Portfolio data 2017 to 2022



Enablers of success to date

- increasing capacity and capability at regional sites
- devolved governance
- utilising Telehealth to conduct clinical trials, HSR and networking
- focus on regional health issues
- effective consumer engagement
- health services research training and implementation

Conclusion:

How can health services effectively collaborate with researchers to improve regional and remote health?

- Build capacity- protected time, training
- Focus on regional health issues and lead on finding solutions
- Work across networks, include consumers
- Digital health is the enabler

RTN-Vic members

Barwon Health

Cancer Trials Australia

Grampians Health

Bendigo Health

Latrobe Regional Health

Mildura Base Public Hospital

Albury Wodonga Health

GV Health

South West Healthcare

Thank you to our partners

Victorian Comprehensive Cancer Centre

TrialHub

Thank you to our funders

Commonwealth Governments Medical Research Future Fund – National Critical Infrastructure Initiative, 2019 Rural, Regional and Remote Clinical Trial Enabling Infrastructure grant for the ReViTALISE Project of $18.6 million

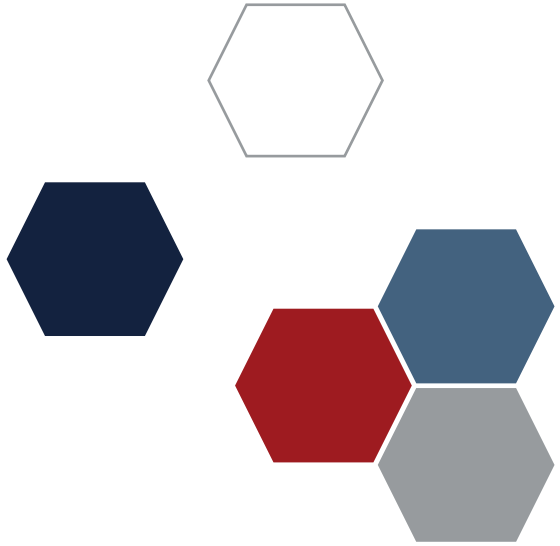
Australian Government
Department of Health

The Victorian Government through the Victorian Cancer Agency grant for the Improving Rural Health Outcomes Initiative of $2.4 million

Victorian Cancer Agency

Victoria State Government

Australian Government
Department of Health



Professor Sandra Thompson
Director of the Western Australian Centre for Rural Health

Conducting research in rural, regional and remote communities

Conducting research in rural, regional and remote communities funded by the Medical Research Future Fund (MRFF). The CEO would like to invite you to participate as a panel member on this webinar and share your experience and insights on:

- addressing health needs in rural, regional and remote communities
- building health research capability and sustainability
- health services conducting research that meets community needs

Focus on practical mechanisms and strategies for successful research in rural regional and remote areas

We hope this webinar will increase understanding of how health and medical researchers and health services can use MRFF funding to build research capability and improve health in rural, regional and remote areas.

Addressing health needs in rural, regional and remote communities

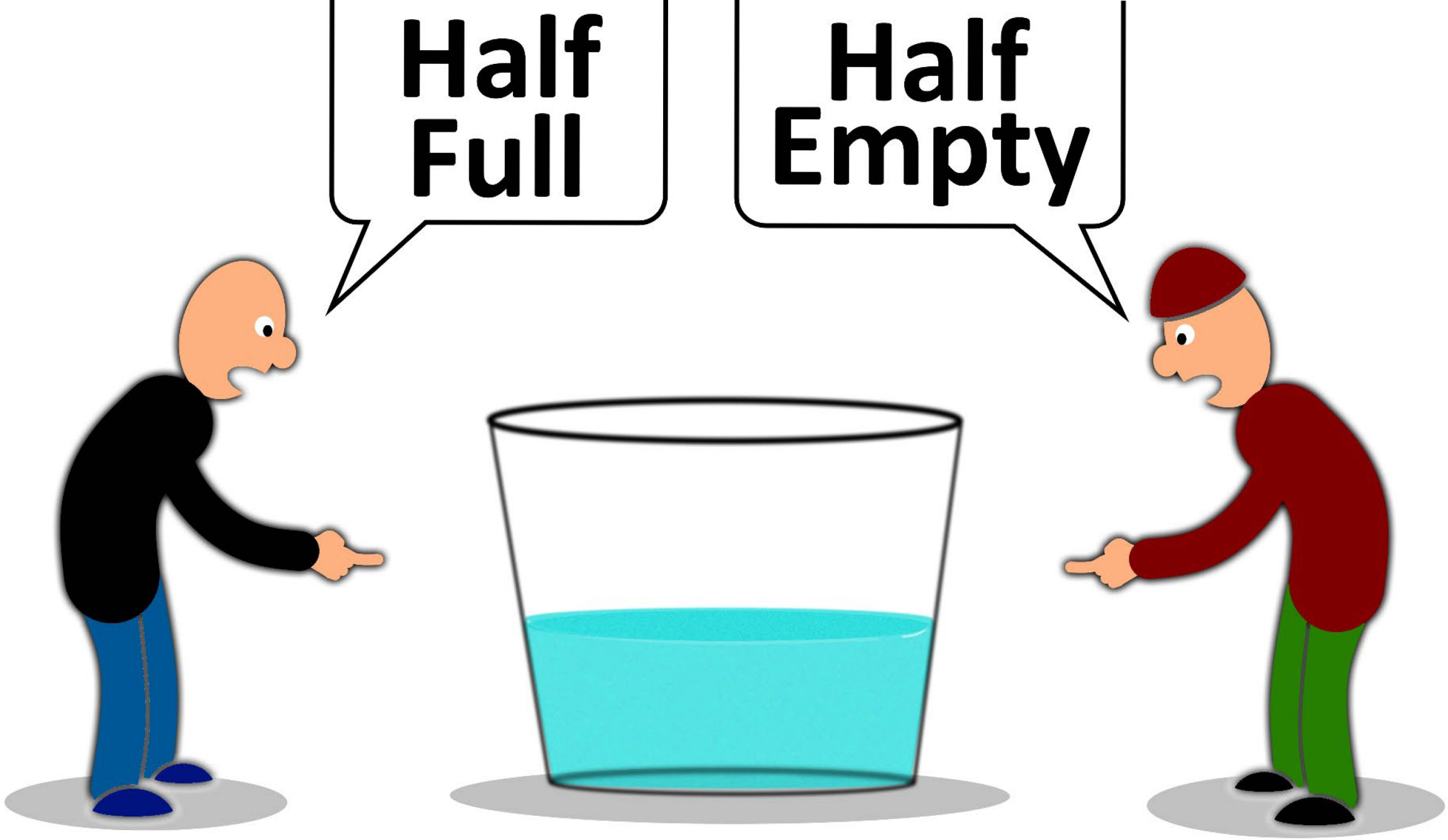
- Diversity *"If you've seen one rural town you've seen one rural town"*
- Australia 7.688 million km², Urban land area 11,946 km^2 = 0.01% of Australia is urban (the World Bank)

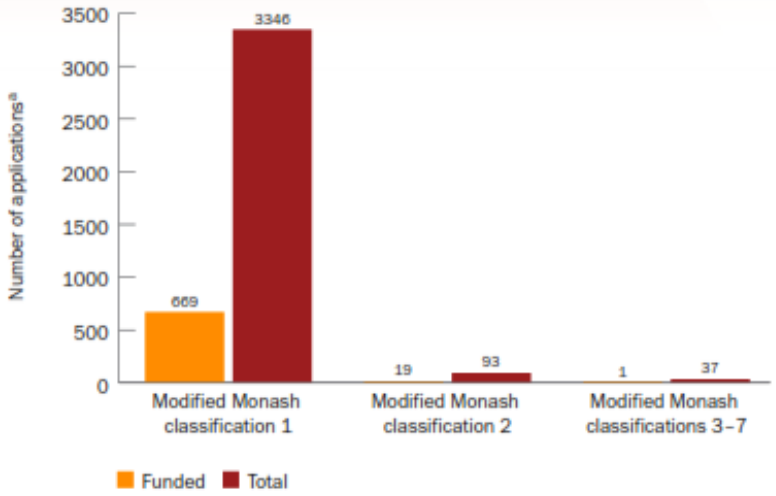
Australia is a landscape of interconnected yet diverse communities, and the nation will benefit when every place is fulfilling its potential. An integrated view is required, as Australia's communities depend on one another, with each supporting and playing a role in their respective regions. Building on the strengths of our communities will also carry benefits for Australia as a whole.

Regional Strengths & Infrastructure Gaps

"Place-based approaches are **collaborative, long-term** approaches to build thriving communities delivered in a **defined geographic location**. This approach is ideally characterised by **partnering and shared design, shared stewardship, and shared accountability** for outcomes and impacts. Place-based approaches are often used to respond to complex, interrelated or challenging issues—such as to address social issues impacting those experiencing, or at risk of, disadvantage, or for natural disasters.

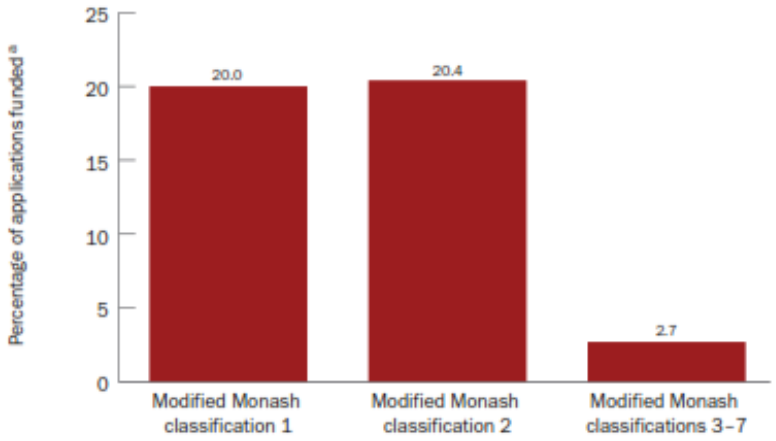
Place-based approaches provide **community members and stakeholders** (citizens, industry, diverse non-government organisations and all levels of government) with a framework for **identifying and responding to local needs** and improving social, economic and physical wellbeing in a particular location.


Half
Full
Half
Empty



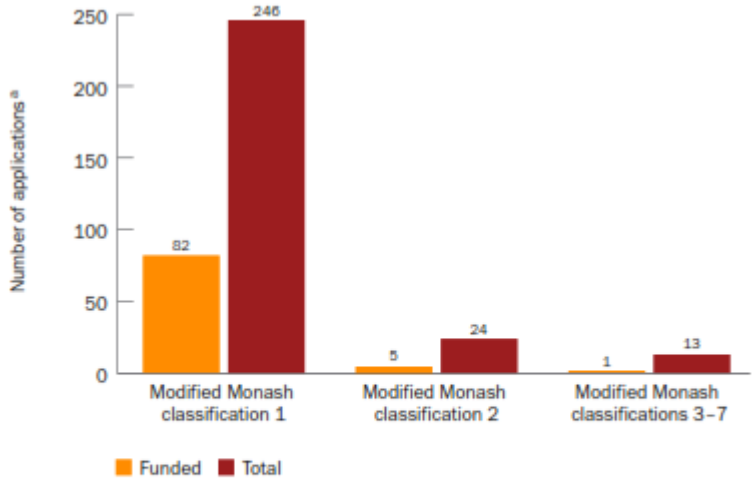
a A total of 3476 applications were analysed. See Limitations for further details.

Figure 4 Number of applications received and funded for all research, by Modified Monash classification



a A total of 3476 applications were analysed. See Limitations for further details.

Figure 5 Funded rates for all research, by Modified Monash classification



a A total of 283 RRR applications were analysed. See Limitations for further details.

Figure 6 Number of applications received and funded for RRR-focused research, by Modified Monash classification

Limitations noted in the report

- RRR projects were analysed based on the project summary, not the full grant application.
- Analysis of funded rates was conducted only on applications data for MRFF competitive grant opportunities with complete address data for the lead or administering organisation for categorisation into MM classifications
- Only the lead or administering organisations were considered when determining whether research was primarily conducted in an RRR area

A few comments

Telehealth "hollowing out communities"

Processes and approach is not empowering our communities

Rural context – lack of resources to take up the role

We partner but we don't get to lead and the resources are elsewhere

Grants come out at short notice, feels like it's a done job

Scheme is built for metro trialists

Not designed around the needs of rural communities or researchers

Interventions are metrocentric, more around data collection via an APP, RAs based in the city

Supplementary File 1: Timeline of the establishment of the University Departments of Rural Health

Year	Centre, Administering Institution and Main Location	Number of UDRHs
1997	Broken Hill University Department of Rural Health, NSW University of Sydney, Broken Hill, New South Wales	1-4
	Mt Isa Centre for Rural and Remote Health (Murtupuni), Qld, James Cook University (JCU), Mt Isa, Queensland	
	University of South Australia, University Department of Rural Health, Whyalla, South Australia	
	Centre for Rural Health, University of Tasmania, Launceston, Tasmania	
1998	Centre for Remote Health, Flinders University, Alice Springs, Northern Territory	5
1999	Western Australia Centre for Rural Health, University of Western Australia, Geraldton, Western Australia	6-8
	University Department of Rural Health, University of Melbourne, Shepparton, Victoria	
	Greater Green Triangle University Department of Rural Health, Flinders and Deakin Universities, cross border SA and Vic	
2001	University Centre for Rural Health, Northern Rivers, New South Wales	9
	Australian Rural Health Education Network (ARHEN) formally established	
2002	University of Newcastle Department of Rural Health, Tamworth, New South Wales	10
2006	School of Rural Health, Monash University, Warragul, Victoria	11
2016	*Greater Green Triangle formally divided to establish...* Deakin Rural Health, Warrnambool, Victoria	12
	Flinders Rural Health, Renmark, South Australia	
2017	Kimberley Rural Health Alliance (Marjalin), Broome, Western Australia	13-15
	Southern Queensland Rural Health, University of Queensland, Toowoomba, Queensland	
	Three Rivers Department of Rural Health, Charles Sturt University, Wagga Wagga, New South Wales	
2019	La Trobe Rural Health School, Bendigo, Victoria	16
2022	JCU Central Queensland Centre for Rural and Remote Health, Emerald, Queensland	17
2023	Department of Rural Health, Edith Cowan University, Bunbury, Western Australia	18-19
	Goldfields Department of Rural Health, Curtin University, Kalgoorlie, Western Australia	

ARHEN: 19 University Departments of Rural Health

1. Marjalin Kimberley Centre for Remote Health (Broome WA)
2. Western Australian Centre for Remote Health (Geraldton and Karratha WA)
3. Department of Rural Health, Edith Cowan University (Busselton WA)
4. Department of Rural Health, Curtin University (Kalgoorlie WA)
5. Flinders University Rural and Remote Health NT (Alice Springs NT)
6. Department of Rural Health, University of South Australia (Whyalla SA)
7. Flinders University Rural and Remote Health SA (Renmark SA)
8. JCU Centre for Rural and Remote Health (Mount Isa QLD)
9. JCU Centre for Rural and Remote Health, Central QLD (Emerald QLD)
10. Southern Queensland Rural Health (Toowoomba and Charleville QLD)
11. Centre for Rural Health, University of Sydney (Lismore NSW)
12. Department of Rural Health, University of Newcastle (Tamworth NSW)
13. Three Rivers Department of Rural Health, Charles Sturt University (Wagga Wagga NSW)
14. Broken Hill University Department of Rural Health, University of Sydney (Broken Hill NSW)
15. Department of Rural Health, University of Melbourne (Shepparton VIC)
16. Monash Rural Health, Monash University (Bendigo VIC)
17. LaTrobe Rural Health School, La Trobe University (Bendigo VIC)
18. Deakin Rural Health, Deakin University (Warrnambool VIC)
19. Centre for Rural Health, University of Tasmania (Launceston TAS)

ARHEN's Strategic Priorities

1. Building the future rural and remote health workforce by providing rural training opportunities for health students from a wide range of disciplines.

2. Supporting the current rural and remote health workforce with continuing professional development that is locally relevant and accessible.

3. Building the evidence base on rural health issues through high-quality research and knowledge translation that addresses the priorities and needs of local communities.

4. Promoting Aboriginal and Torres Strait Islander health and wellbeing and supporting the local Indigenous health workforce.

5. Advocating nationally on rural and remote health issues to address health inequities and promote better health outcomes for people in rural and remote areas.

Research Priorities

- Capturing the value of the UDRHs in rural and remote Australia
- Strategies for building rural and remote research capacity
- Promoting Aboriginal and Torres Strait Islander health and wellbeing
- Rural and remote health knowledge translation

ARHEN PRIORITIES 2013-14

- **PRIORITY: ABORIGINAL AND TORRES STRAIT ISLANDER HEALTH ACADEMIC PROGRAM**
- Developed by the Aboriginal Staff Alliance (ASA) of ARHEN and supported by high profile Aboriginal leaders such as Mr Mick Gooda, this proposal's vision is for a generation of rural and remote Aboriginal and Torres Strait Islander leaders in academia. They would work with communities and regions to build a health workforce, and support and lead educational activities, research activities and community capacity building to ensure the delivery of culturally appropriate health care and increase the use of culturally safe practices.
- ARHEN calls for government funding to support the ASA proposal for 11 Aboriginal and Torres Strait Islander academic leaders in rural and remote areas over 10 years.

- **PRIORITY: BUILDING RURAL HEALTH RESEARCH CAPACITY**
- The McKeon Report notes that, given that rural and remote communities experience significantly worse health outcomes than metropolitan populations, research capacity should be built to better understand and address this gap with **a national integrated network or virtual Integrated Health Research Centre (IHRC)** to lead these efforts. The virtual rural and remote IHRC would have 'links to other IHRCs and leverage national data platforms for research, streamlined clinical trials processes, and patient record management', with building Indigenous research capacity as a core role (Recommendation 7).
- University Departments of Rural Health (UDRH), located in rural and remote areas in every State and the NT, are uniquely embedded within the health systems in which they work and are able to address health outcomes at community level in ways that are relevant to the health professional and health service patterns of those communities. UDRHs are well positioned to join with other established organisations to form a virtual IHRC. This opportunity would take advantage of the UDRHs demonstrated track record in research, with several punching well above their weight in relation to health research effort.
- ARHEN calls for the establishment of a rural and remote IHRC that is formed by rurally based organisations, has an emphasis on translational research and research capacity building, and is focused on achieving improvements in rural and remote health.

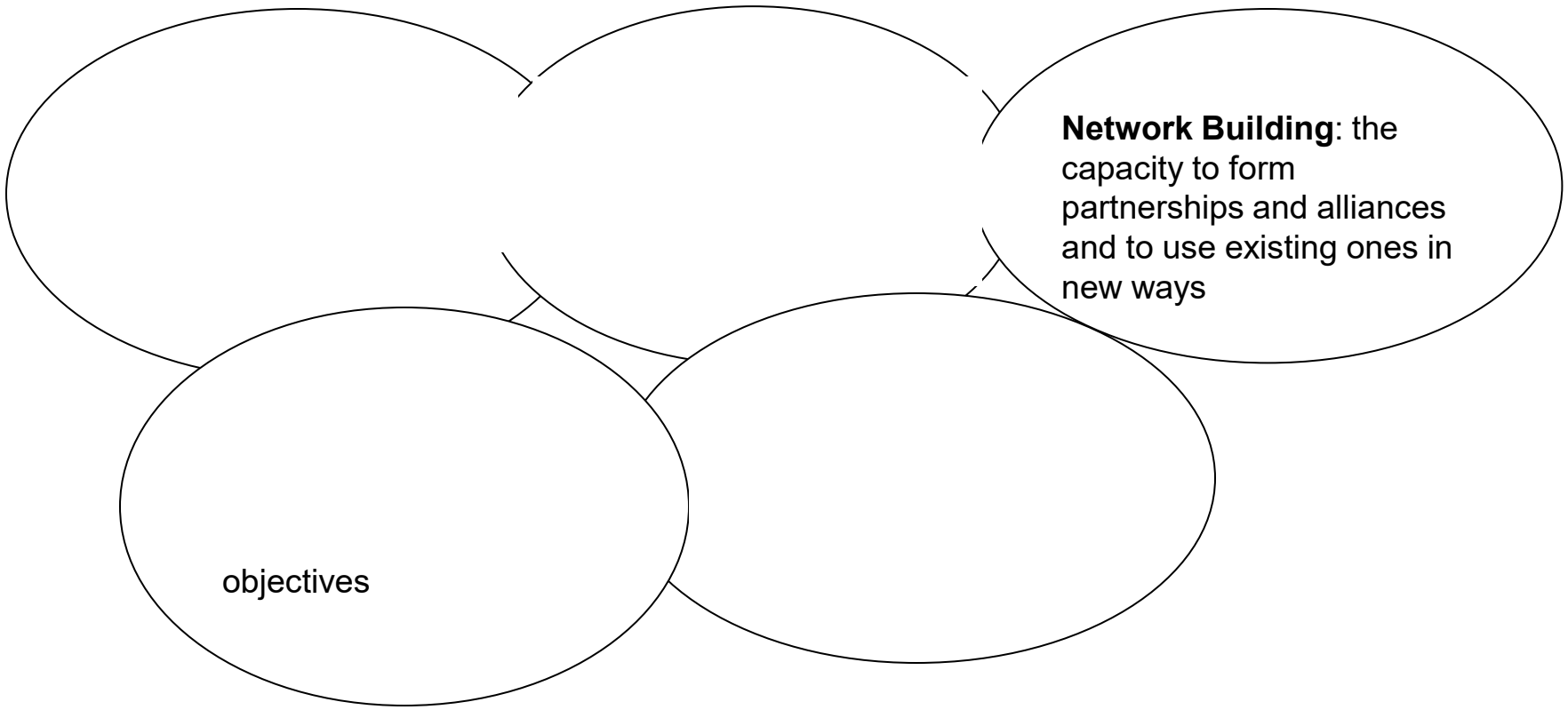
Number of UDRH Indigenous health research publications by type of original research, 2010-2015 and 2016-2021

	Time Period			
	2010-2015	2016-2021	2010-2021	Change between 6-year periods
Original Research total	**148**	**206**	**354**	**1.39**
Health Services Research	57	80	137	1.40
Epidemiology	40	46	86	1.15
Indigenous Culture and Health	25	15	40	0.60
Workforce total	14	31	45	2.21
Health Professional	*4*	*12*	*16*	3.00
Student	*8*	*9*	*17*	1.13
Indigenous	*2*	*10*	*12*	5.00
Other	12	34	46	2.83

Conclusions

- Under investment in rural health research and in rural health services impacts upon capacity in RR
- Consistent contributions by UDRHs to rural research and to Indigenous health research – substantial diversity
- Predominance of descriptive research (83%)
- Health services research increased over the time period by 35% over the two periods of assessment
- Unclear if the 5% of funding committed by NHMRC went to support Indigenous researchers in rural areas
- Under investment in rural health research and in rural health services impacts upon capacity in RR

THE ELEMENTS OF CAPACITY - Adapted from Garlick (1999). Capacity Building in Regional WA



Supporting researchers: Support staff and students with facilities, resources, finances and professional development; ensuring critical mass to prevent isolation

What has worked to build capacity?

- Dedicated funding
  - e.g. CARG

  - Capacity building grants – dedicated support in a high priority area
    - a number for Indigenous health research
      - Not Just Scholars but Leaders: Learning Circles in Indigenous Health Research
      - Making a difference: building research capacity for health interventions to improve Aboriginal health
      - Building Mental Wealth: Improved mental health for better health outcomes among Indigenous Australians

- Rurally based academic research centres, networked and collaborating

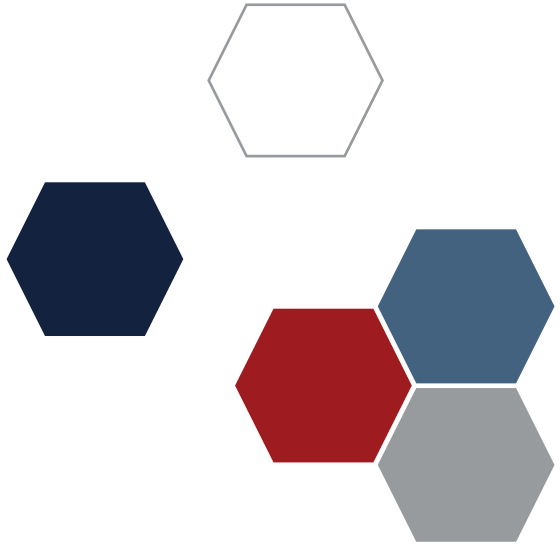
Relevant issues for consideration

- MM classification
- The disconnect between community priorities in the most underserved areas and research funding calls
- The onerous nature of grant applications, short time frames for submission
  - Rural researchers lack the research machines of big metro universities
- Challenges with and time-consuming nature of ethics and governance
- The inherent nature of competitive approaches; how time consuming it can be engaging community and rural stakeholders (and failure to deliver on consultations is not helpful)
- The solutions to the health challenges of RR do not always sit at a local level

We need dedicated funding for building research capacity across rural and remote Australia to create and ensure sustainability of a critical mass of researchers to address rural health challenges.

Why not a Rural and Remote Research Mission?

Australian Government
Department of Health



Professor John Wakerman
Menzies School of Health Research, Charles Darwin University

Building research capacity ‘in the bush’

John Wakerman
Deb Russell

Four key issues

- Long-term, trusting relationships with local services, communities & other key stakeholders
- Local critical mass of experienced researchers
- Institutionalisation of partnerships between health services & research organisations
- Programmed communication with funders, including site visits.

Four key issues

- Long-term, trusting relationships with local services, communities & other key stakeholders
- Local critical mass of experienced researchers
- Institutionalisation of partnerships between health services & research organisations
- Programmed communication with funders, including site visits.

Long term relationships & trust

Received: 18 November 2022 | Revised: 1 October 2023 | Accepted: 15 October 2023
DOI: 10.1111/ajr.13057

ORIGINAL RESEARCH

AJRH National Rural Health Alliance WILEY

The efficiency, timeliness, health outcomes and cost-effectiveness of a new aeromedical retrieval model in Central Australia: A pre- and post-implementation observational study

Deborah Jane Russell PhD[1] | Yuejen Zhao PhD[2] | Supriya Mathew PhD[1] | Michelle Susannah Fitts PhD[1] | Richard Johnson FACEM[3] | David Mark Reeve DrPH[3] | Bridget Honan FACEM[3] | Petra Niclasen FACEM[3] | Zania Liddle M Ed[1] | Danielle Green FAFPHM[2] | John Wakerman FACRRM[1]

Received: 21 February 2022 | Accepted: 16 November 2022
DOI: 10.1111/ajr.12954

ORIGINAL RESEARCH

AJRH National Rural Health Alliance WILEY

Evaluation of a new medical retrieval and primary health care advice model in Central Australia: Results of pre- and post-implementation surveys

Danielle Green FAFPHM[1] | Deborah Jane Russell PhD[2] | Yuejen Zhao PhD[1] | Supriya Mathew PhD[2] | Michelle Susannah Fitts PhD[2] | Richard Johnson FACEM[3] | David Mark Reeve DrPH[3] | Bridget Honan FACEM[3] | Petra Niclasen FACEM[3] | Zania Liddle MEd[2] | Graeme Maguire PhD[4] | Marc Remond PhD[5] | John Wakerman FACRRM[2]

[1]Northern Territory Health, Top End Health Service, Darwin, Northern Territory, Australia

[2]Menzies School of Health Research, Charles Darwin University, Alice Springs, Northern Territory, Australia

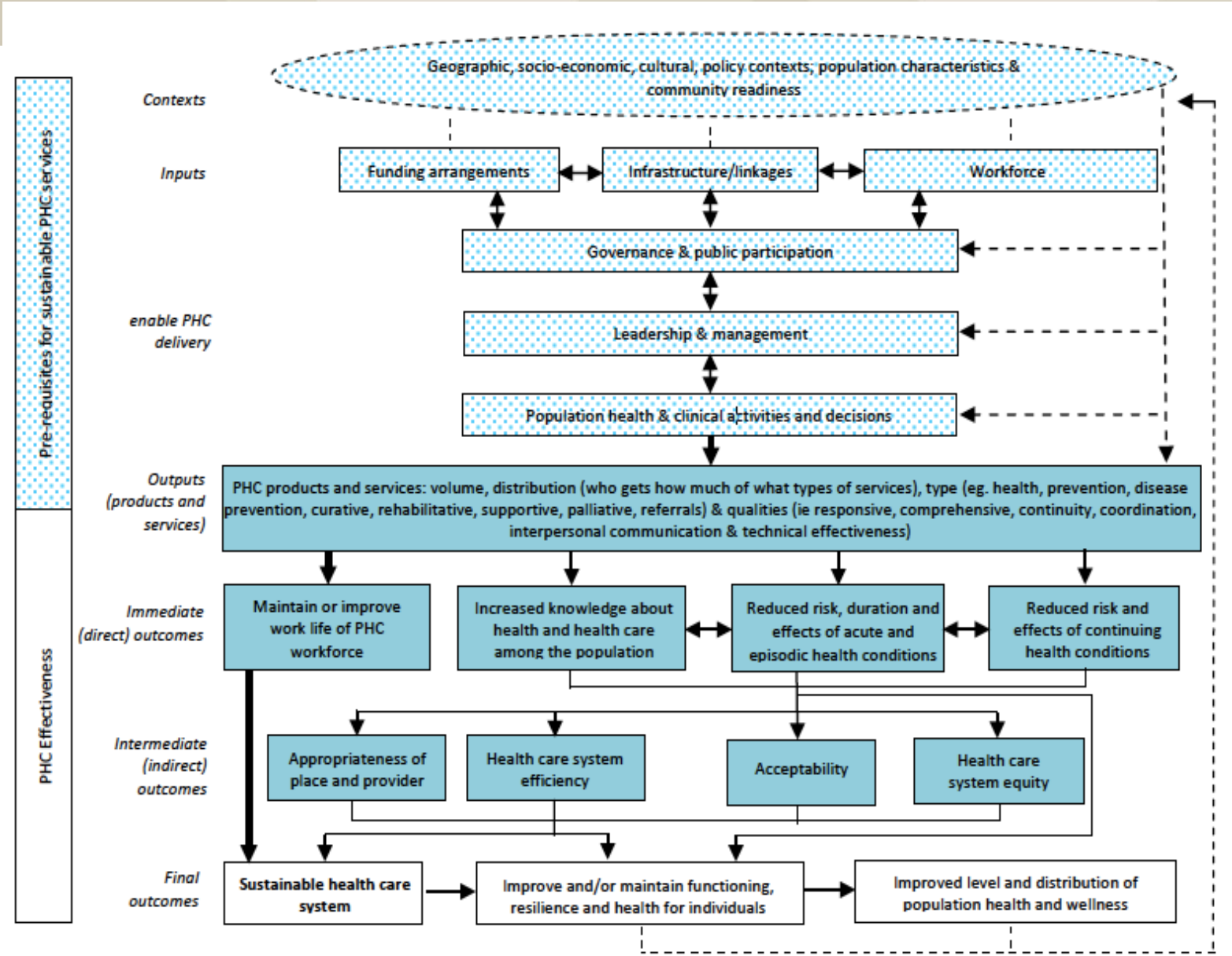
Abstract

Introduction: In February 2018 the Remote Medical Practitioner (RMP)-led telehealth model for providing both primary care advice and aeromedical retrievals in Central Australia was replaced by the Medical Retrieval and Consultation

Four key issues

- Long-term, trusting relationships with local services, communities & other key stakeholders
- Local critical mass of experienced researchers
- Institutionalisation of partnerships between health services & research organisations
- Programmed communication with funders, including site visits.

Place is central



Different models of service delivery

1 Typology of rural and remote primary health care service delivery models

Context: rural–remote continuum	Model category	Health service examples	Rationale for model
RURAL Characterised by larger, more closely settled communities	Discrete services	• Walk-in/walk-out models • Viable models • University clinics	Discrete health services exist where population catchments meet essential service requirements (although some supports may be needed to address workforce recruitment and retention)
	Integrated services	• Shared care • Coordinated care trials • Primary health care teams • Multipurpose services	Service integration maximises access to locally available services. Local point-of-entry to the health system helps to coordinate patient care and reduces the need for travel
	Comprehensive primary health care services	• Aboriginal-controlled community health services	Access to services in small, isolated, high-need communities is critical where few alternative ways of delivering appropriate care exist. Community participation and service flexibility are essential to meet local needs and circumstances
REMOTE Characterised by small populations dispersed over vast areas	Outreach services	• "Hub and spoke" models • Visiting services • Fly-in/fly-out models • Telehealth/telemedicine	These models provide access through virtual or periodic visiting services to communities too small to support permanent local services. Outreach models often coexist with other models

menzies school of health research

Community-based researchers

Correspondence

Mathew et al. BMC Health Services Research (2023) 23:341
https://doi.org/10.1186/s12913-023-09265-2

BMC Health Services Research

RESEARCH Open Access

Telehealth in remote Australia: a supplementary tool or an alternative model of care replacing face-to-face consultations?

Supriya Mathew[1*], Michelle S. Fitts[1,2], Zania Liddle[1], Lisa Bourke[3], Narelle Campbell[4], Lorna Murakami-Gold[5], Deborah J Russell[1], John S. Humphreys[6], Edward Mullholand[7], Yuejen Zhao[8], Michael P. Jones[9], John Boffa[10], Mark Ramjan[11], Annie Tangey[12], Rosalie Schultz[12] and John Wakerman[1]

Co-design of digital health technologies in Australian First Nations communities

In *The Lancet Digital Health*, Israel Júnior Borges do Nascimento and colleagues[1] analysed current evidence of effects relating to several digital health technology (DHT) solutions, and health-care workers' performance and professional competencies. One of the unintended consequences of telemedicine was that it might increase health-care workers' burden and burnout (relative frequency of mentions in reviews 2·2%, 95% CI 0·3–7·9).[1] Recent findings from remote First Nations primary health-care providers showed that telehealth was associated with increased administrative and clinical workload because of the necessity to attend consultations with providers not on site, who were usually non-general practitioner (GP) medical specialists.[2] This necessity took local primary health-care clinicians away from their regular clinical work, especially from the management of complex chronic diseases.

In remote Australian First Nations communities—where the burden of disease is high, turnover of staff is extremely elevated, and health services are under-resourced—excessive workload and resultant burnout is widespread.[3,4] Interventions that inadvertently increase burnout and turnover threaten the quality and safety of all health care for people living in the remote communities. We share early learnings from a digital health implementation project that is currently underway in a remote community in Australia.[5] This Digital Health Cooperative Research Centre project is unique because it co-designs DHT solutions with both consumers and health-care workers, which is anticipated will minimise unintended consequences while optimising uptake by meeting the prioritised needs of both groups.

Initial engagement included workshops with remote health professionals; meetings and interviews with senior health executives, visiting clinicians, local health-care staff, and managers; and yarning (ie, informal and formal discussions) with First Nations people and community leaders. These discussions identified—from both community and service providers' perspectives—the most important access issues to primary health care that DHTs could address.

One example of a high priority for both consumers and health-care staff was effectively addressing the intermittent access to GPs who were known to the patients and health-care workers and who knew the community well, but only visited the community clinic 1 day each week. Remote primary health-care staff indicated that the added value of having telehealth access to a familiar GP in between face-to-face visits would greatly support provision of primary health-care services, including their ongoing management of chronic diseases, thereby assisting them with managing their workload, rather than being an added burden. For patients, being cared for by a GP who knew them well was important.

The co-design of DHTs, by taking into account consumers and providers' preferences, is a promising approach that is anticipated to improve access to primary health-care services.

We declare no competing interests. The project described in this Correspondence is funded by the Digital Health Cooperative Research Centre, and is a collaborative project among multiple partners in Australia: Australian Government, Department of Health and Aged Care; Department of Health, Northern Territory Government; Northern Territory Primary Health Network; Aboriginal Medical Services Alliance Northern Territory; Healthdirect Australia; Menzies School of Health Research; and The University of Sydney.

*Vishnu Khanal, Timothy Shaw, Elaine Wills, John Wakerman, Deborah J Russell
vishnu.khanal@menzies.edu.au

Menzies School of Health Research, Charles Darwin University, Alice Springs, NT 0871, Australia (VK, EW, JW, DJR); Charles Perkins Centre, School of Medical Sciences, The University of Sydney, Sydney, NSW, Australia (TS)

1 Borges do Nascimento IJ, Abdulazeem HM, Vasanthan LT, et al. The global effect of digital health technologies on health workers' competencies and health workplace: an umbrella review of systematic reviews and lexical-based and sentence-based meta-analysis. *Lancet Digit Health* 2023; **5:** e534–44.
2 Mathew S, Fitts MS, Liddle Z, et al. Telehealth in remote Australia: a supplementary tool or an alternative model of care replacing face-to-face consultations? *BMC Health Serv Res* 2023; **23:** 341.
3 Zhao Y, Wakerman J, Zhang X, et al. Remoteness, models of primary care and inequity: Medicare under-expenditure in the Northern Territory. *Aust Health Rev* 2022; **46:** 302–08.
4 Wieland L, Ayton J, Abernethy G. Retention of general practitioners in remote areas of Canada and Australia: a meta-aggregation of qualitative research. *Aust J Rural Health* 2021; **29:** 656–69.
5 Digital Health Cooperative Research Centre. Optimising digital solutions to improve access to comprehensive primary health care services in remote Indigenous communities. 2023. https://digitalhealthcrc.com/projects/optimising-digital-solutions-to-improve-access-to-comprehensive-primary-health-care-services-in-remote-indigenous-communities/ (accessed Sept 25, 2023).

Four key issues

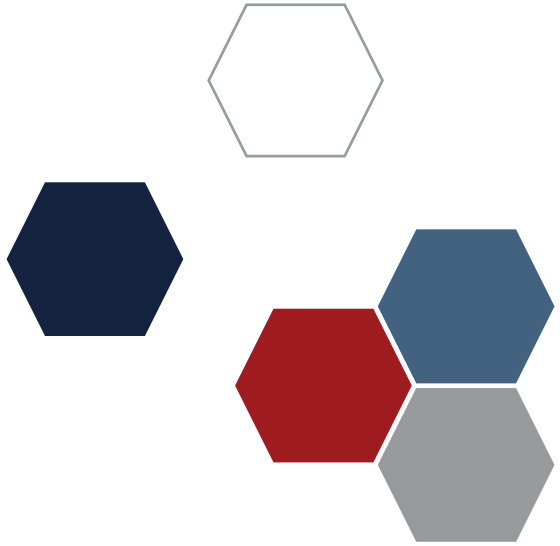
- Long-term, trusting relationships with local services, communities & other key stakeholders
- Local critical mass of experienced researchers
- Institutionalisation of partnerships between health services & research organisations
- Programmed communication with funders, including site visits.

Four key issues

- Long-term, trusting relationships with local services, communities & other key stakeholders
- Local critical mass of experienced researchers
- Institutionalisation of partnerships between health services & research organisations
- Programmed communication with funders, including site visits


AMBULANCE
813142

Australian Government
Department of Health



Rural and remote focus in MRFF Funding
Dr Ruth Griffiths, Director, HMRO

Rural focus in MRFF Priorities and Funding

- **Australian Medical Research and Innovation Priorities 2022-2024**
  - **Priority populations** - ensure equitable health outcomes for all people living in Australia by targeting funding towards biomedical discovery and health service innovation to address specific and unique health challenges for priority populations, **including people in remote/rural communities**
  - Research to address differences in health and healthcare needs is needed to **reduce inequities** in health outcomes
- **Assessment** of MRFF grant applications
  - Includes involvement of **priority populations** as a specific element of the assessment
- Some MRFF grant opportunities have a particular **rural, remote, regional (RRR) focus**
  - specific **funding streams**
  - specific **eligibility criteria** (e.g. location of organisation/investigators)
  - has resulted in an **increase of awarded funds** to support projects that are undertaken in RRR areas, as well as **projects that address health topics of significance** to RRR areas of Australia

Medical Research Future Fund

Refining eligibility criteria for MRFF rural research streams

- To **support research that addresses specific health and healthcare needs** of people living in RRR communities
- To date: **separate streams of funding** for RRR research topics and promoting RRR research led by organisations and researchers who reside in RRR areas
  - Eligibility requirements for these streams based on Modified Monash (MM) classification
- **Consultation** with RRR stakeholders has suggested opportunities for improvement:
  - The **organisation** leading the research, Chief Investigator A, 50% of the **research team**, and all **research participants** should be primarily resident in a location based on a MM classification of 2 and above
  - The project activity should include **capacity building** for MM classification of 3 and above
  - Applicants should be **assessed** against the RRR focus of the research questions by an independent Grant Assessment **Committee that is composed of RRR researchers**
  - RRR Grant Assessment Committees should assess applications to RRR streams and RRR focussed grant opportunities.

Medical Research Future Fund

For example - Primary Health Research Plan

The Government has also recently committed $50 million over 4 years from 2024-2025 under the MRFF to drive innovation in primary care.

Overview

The following aims and priority areas for research investment have been identified to achieve the objectives under this 4-year Research Plan.

Aim	Priority areas for investment
1. Patients can access multidisciplinary team-based care	**1.1** Articulate components of comprehensive, accessible, equitable, safe and efficient multidisciplinary team-based primary care
	1.2 Promote multidisciplinary team-based primary care that improves health outcomes, increases workforce satisfaction and meets patients' needs
2. Integrated health services provide patient-centred care	**2.1** Specialist, hospital and primary care services working together to deliver multidisciplinary person-centred care and improve workforce satisfaction
	2.2 Priority populations receive person-centred care addressing their health and wellbeing needs
3. Use data to improve patient care	**3.1** Locally integrated information is used to promote high-quality care

E.g. from Aim 1:

Two streams of funding are available based on the geographic location of the organisation undertaking the majority of the research:

- **Stream 1:** the organisation undertaking the majority of the research is based in any area according to the Modified Monash Model locator (MM 1–7)
- **Stream 2:** The organisation undertaking the majority of the research, the Chief Investigator A and 50% or more of all Chief Investigators, and all research participants are primarily based in a rural, regional or remote area according to the Modified Monash Model locator (MM 2–7)

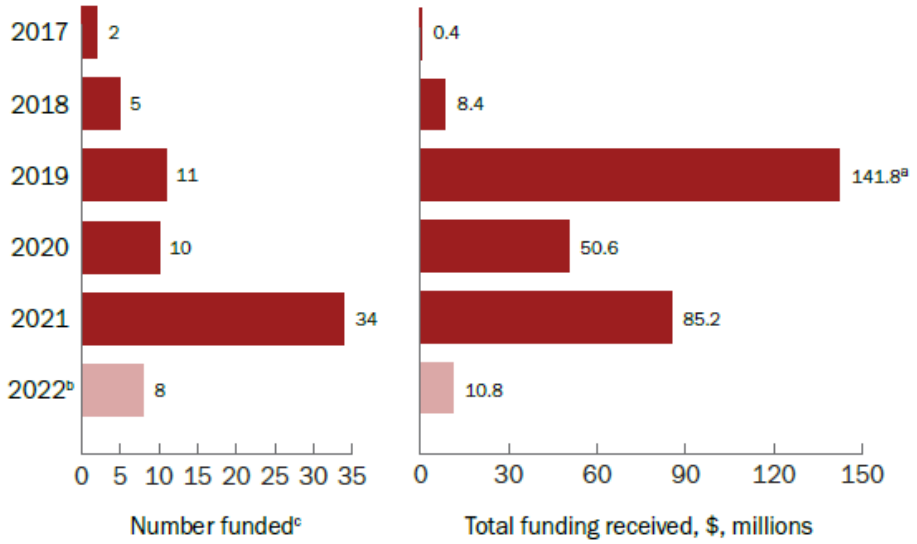
Medical Research Future Fund

Currently open grant opportunities including a rural focus

- **2023 Multidisciplinary Models of Primary Care**
  - Stream 2 (closes 10 April 2024): **prospectively evaluate patient registration** (using new and routinely collected data, quantitative and qualitative approaches) and how effective it is in different settings
  - Stream 4 (closes 7 August 2024)**:** develop and implement **multidisciplinary, collaborative, regional consortia** that design, implement and evaluate (including cost-benefit analyses) system level reform strategies for local health system integration
    - For applications to Stream 2 Topic B and Stream 4 Topic B, the organisation undertaking the majority of the research, the Chief Investigator A and 50% or more of all Chief Investigators, and all research participants, must be primarily resident in a **rural, regional or remote area** according to the Modified Monash Model Locator (MM2-7)
- **2024 Dementia, Aging and Aged Care**
  - Stream 1 (closes 7 August 2024): conduct implementation research focused on **addressing inequalities in access to high-quality care for older Australians** from diverse and disadvantaged backgrounds including **people who live in rural or remote areas**
- **2023 Post-Acute Sequelae of COVID-19 [PASC]**
  - Stream 4 (closes 30 April 2025): accelerating the identification of **optimal management approaches for people living with PASC.**
    - For applications to Stream 4 20% or more of all Chief Investigators must be clinician researchers who are primarily resident in a **Modified Monash Model 3-7 (MM3-7) location**.

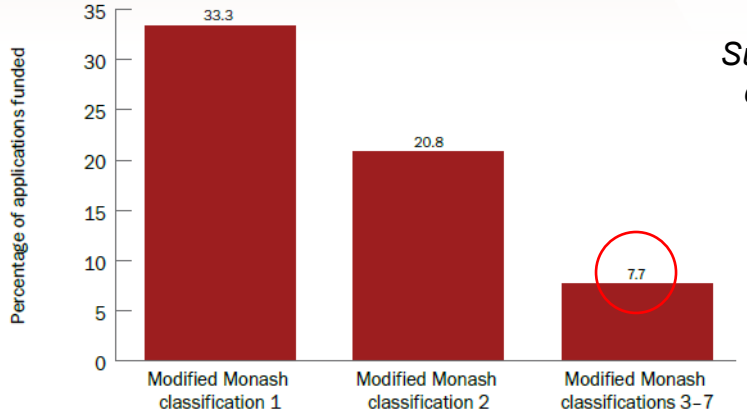
Excerpts from MRFF Rural and Remote Report – Location

MRFF investment into RRR focused projects has increased since inception



a The total for 2019 includes the 2019 Rural, Regional and Remote Clinical Trial Enabling Infrastructure grant opportunity ($124.4 million awarded).
b The dataset for 2022 is not yet complete and does not include data for grant opportunities that opened in 2022 and for which outcomes are not yet available or have not been announced.
c The number of projects funded includes grants with payments that commenced before or on 30 December 2022.

MRFF application data by location of administering organisation



Success rates for research located in MMM3-7 can be improved through dedicated funding through a rural specific stream.

Example of rural research focused Grant Opportunity

2021 Improving the Health and Wellbeing of Aboriginal and Torres Strait Islander Mothers and Babies

Two streams of funding were available :

Stream 1: The **lead organisation** is based in **any area** according to the Modified Monash Model Locator (MM1-7)

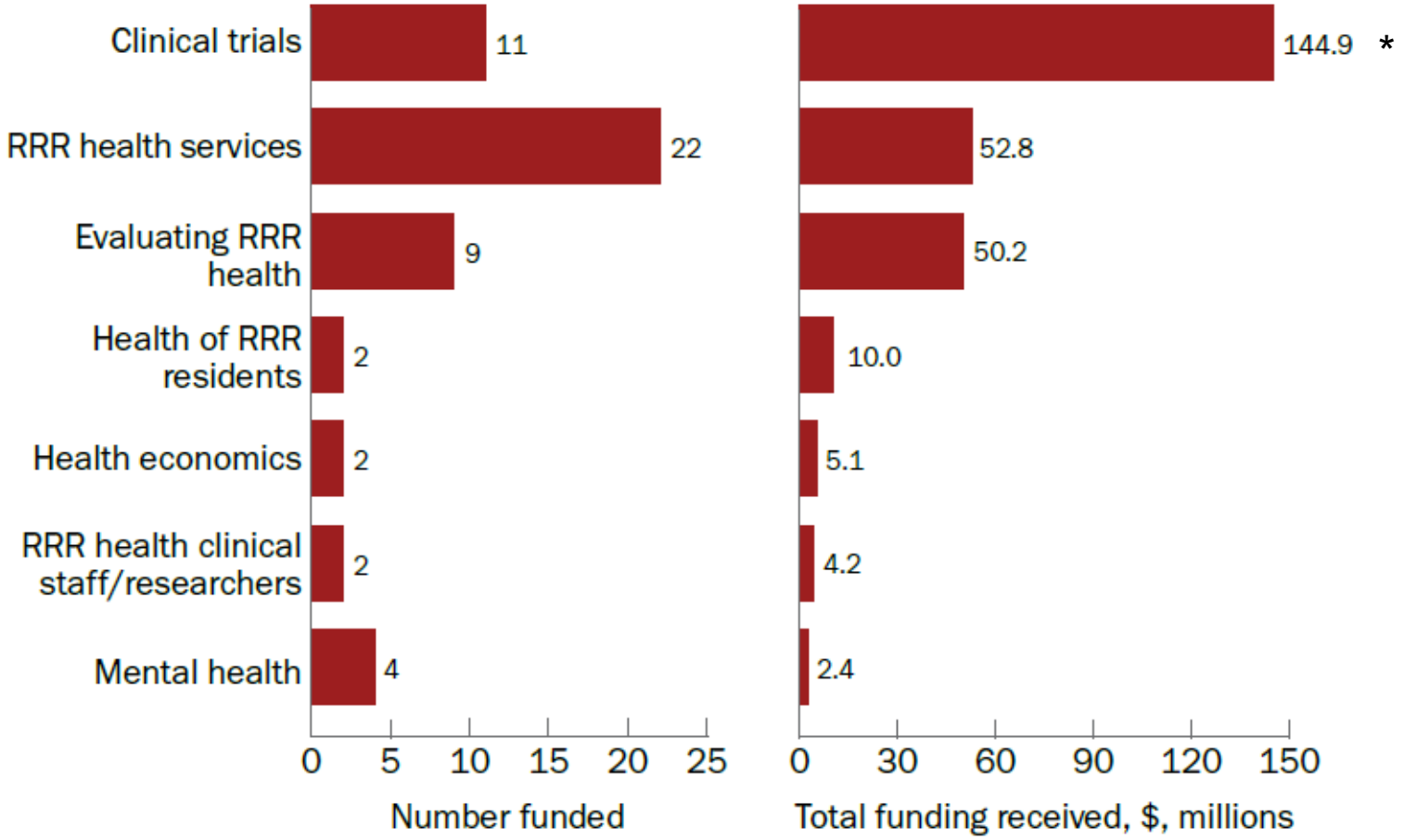
Stream 2: The **lead organisation** and **Chief Investigator A** and **more than 50% of all Chief Investigators** must be **primarily based in a rural, regional or remote area** according to the Modified Monash Model Locator (MM3-7).

Stream	Number of applications	Number of applications funded	Funded rate within stream	Total value applied	Total value funded
Stream 1	12	3	25%	$47,701,730.00	$14,997,601.00
Stream 2	4	2	50%	$13,229,848.00	$3,236,071.00

Medical Research Future Fund

Excerpts from MRFF Rural and Remote Report – Research Themes

MRFF investment into research with a focus on RRR research and/or conducted in RRR areas - Research Themes



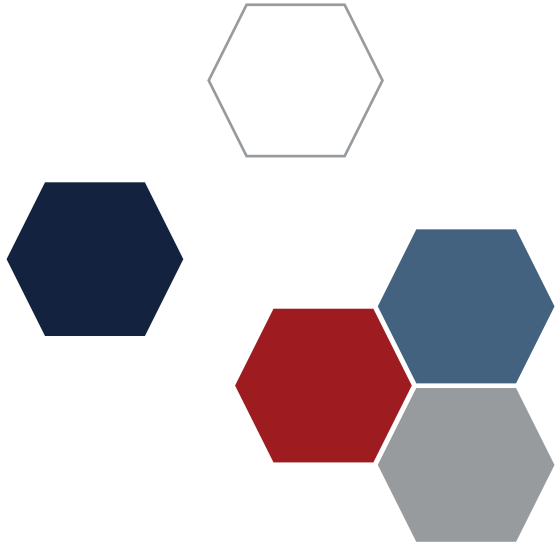
* Includes 2019 Rural, Regional and Remote Clinical Trial Enabling Infrastructure grant opportunity. $124.4 million was awarded to three programs to make sure patients can access clinical trials where they live.

Medical Research Future Fund

Excerpts from MRFF Rural and Remote Report – Opportunities

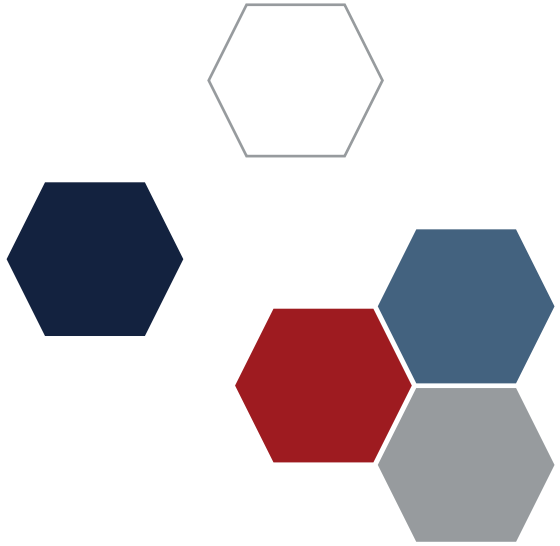
- **High burden areas / low investment to date**: mental health and suicide prevention; preventive health
- Creating **opportunities for RRR research** through a range of approaches, e.g.
  - separate streams of funding for research that is important to RRR communities
  - continuing to ensure eligibility criteria for RRR grants maximises applications from locally based RRR researchers and organisations
- Increasing **awareness** of these opportunities by advertising them through peak bodies (as well as MRFF newsletter, Department social media)
- Encouraging **collaboration** through networks of RRR researchers/research organisations (including through the RRR research translation centres) to facilitate networking and capacity building
- Encouraging **health services** to take the lead on research to meet local health needs
- Increasing engagement of RRR researchers and health workforce in **grant assessment** processes
- **Visiting** key stakeholders on the ground to fully understand the challenges and opportunities in RRR areas

Australian Government
Department of Health



Sum-up – Professor Ruth Stewart

Australian Government
Department of Health



Questions and answers

Medical Research Future Fund

Keep connected

Subscribe to MRFF News

www.health.gov.au/initiatives and programs/medical research future fund/mrff news

Nominate for an MRFF Grant Assessment Committee (GAC)

www.nhmrc.gov.au/2021 22 medical research future fund mrff grant opportunities

Register for MRFF grants opportunities

www.grants.gov.au/

Check out the grant opportunity forecast

www.health.gov.au/our work/medical research future fund/mrff grant opportunities calendar

Follow Health X (Twitter) for MRFF updates

@healthgovau
#MRFF

Send any questions to

MRFF@health.gov.au