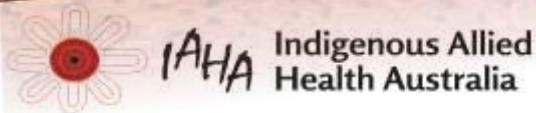


NARN *newsletter*

Dry season, 2025

- ⊙ Children developing well
- ⊙ Young people and adults growing well & staying strong
- ⊙ Older people ageing well in place



From the Leadership Team

Welcome to the 6th Northern Australia Research Network (NARN) newsletter, 2025 dry season edition. This newsletter was collated by our Northern Territory members and highlights some of the fantastic research and practice innovation undertaken by northern Australian researchers.

NARN is a collaborative network of researchers, clinicians, consumers, health managers, health educators, workforce development and policy personnel from northern Australia. Allied health professionals form the majority of the NARN membership with a range of other members who contribute to delivery of disability, rehabilitation and lifestyle services.

NARN works in partnership with Indigenous Allied Health Australia (IAHA), recognising and acknowledging the cultural and diverse needs, beliefs, practices and authority of Aboriginal and Torres Strait Islander people in northern Australia.

Our aim is to conduct research to inform delivery of culturally-responsive and safe, disability, rehabilitation and lifestyle services in regional, rural and remote northern Australia. We apply a strength-based approach to research to support children developing well, young people growing up well, adults staying strong and older people ageing well in place within family and community.

The activities within then NARN Strategic Plan are strength-based and solution-focused. They are based on authentic community engagement and the IAHA cultural responsiveness framework, and aim to strengthen allied health services and providers. The key strategies are Connect, Co-create, Strengthen, Translate and Sustain.

Membership to NARN is free and a great way to connect with other professionals across who are interested in improving access and quality of allied health services across northern Australia. You can sign up here: [Membership | JCU Centre for Rural & Remote Health](#)
Please feel free to share this newsletter amongst your networks and contact us with stories on your research in northern Australia.

Contents

From the Leadership Team	1
Children & Young people	
⊙ Geospatial Mapping of Otitis Media and Social Determinants in remote NT communities	2
Young people, adults & older people	
⊙ FNQ Connect reengages with the community as project ramps up	3
Older people aging in place	
⊙ TRIP: OT led environmental assessment and modification (EAM) for falls prevention	2
Workforce	
⊙ NT Health Allied Health Research Action Plan	4
⊙ Improving access and building capacity: clinical supervision training	5

Contact Us

Northern Australia Research Network



We acknowledge Australian Aboriginal People and Torres Strait Islander People as the first inhabitants of the nation, and acknowledge Traditional Owners of the lands and water where we live, learn and work.





Geospatial Mapping of OM



Gypsy de Jonge, accepting the award



Geospatial mapping of Otitis Media and Social Determinants in remote NT communities

This project pioneers the use of AI-powered geospatial analysis to tackle the highest global prevalence of OM among Aboriginal and Torres Strait Islander children in remote Northern Territory communities. By integrating extensive health records, census data, and environmental datasets, this innovative approach visualises complex social determinants influencing ear health through dynamic heatmaps and spatial clusters from 2008 to ongoing. The project aims to empower health policymakers and providers with real-time, targeted insights to deploy resources where they are needed most, advancing early intervention strategies and optimising health outcomes. Over 90 remote communities are included in the analysis, using advanced machine learning models combined with spatial clustering and time series forecasting. This multi-layered system identifies high-risk areas by analysing poverty, housing, healthcare access, and other critical factors.

This initiative not only improves understanding of OM's social drivers but drives precision public health interventions, reducing health disparities in Indigenous populations. Led by NT Health, Charles Darwin University and the Australian Institute of Health and Welfare, the project fosters collaboration between government, researchers, and communities.

The project was recently recognised by the ITU (International Telecommunication Union – a sub-division of the United Nations) as a winning use case in utilising AI for Good to advance the UN's Sustainable Development Goals, particularly SDG 3 (Good Health and Well-being) and SDG 10 (Reduced Inequality). It is a scalable solution that could be used for global Indigenous populations, solidifying this work as a transformative blueprint for remote healthcare innovation. By combining census socio-economic indicators with deidentified health data, this initiative generates detailed spatial visualisations pinpointing 'hotspots' of OM prevalence and its social determinants. The use of machine learning model predictive analytics and clustering, enables precise identification of communities at greatest risk due to factors

like overcrowded housing, poverty, and limited healthcare access. This granular mapping enhances policymakers' ability to prioritise interventions, direct resources efficiently, and monitor trends longitudinally. The system's adaptability and AI-driven insights foster continuous improvement and responsiveness in service delivery, directly aligning with NT Government priorities to close the gap in Indigenous health outcomes.

The project recently won an Innovate for Impact Use case award from thousands of submissions at the AI for Good Global Summit in Switzerland.

By Prasha Sooful, AI Director Hearing Services

TRIP: OT led environmental assessment and modification (EAM) for falls prevention

Cochrane level evidence indicates that Occupational Therapist led environmental assessment to prevent falls is clinically effective. A national team, of Occupational Therapy researchers (two team members authored the Cochrane Review), is leading an implementation study to support Occupational Therapy services to adopt and embed this evidence-based intervention.

Our project will implement and evaluate the roll out of Occupational Therapy led environmental assessment and modification (EAM) to prevent falls in older people. Focus group discussions and in-depth interviews will explore implementation barriers and enablers for each health setting. We will co-design implementation strategies with consumers (patients and carers) and end users (Occupational Therapists) to support routine adoption of EAM in Occupational Therapy clinical practice, using the Knowledge to Action model and the Consolidated Framework for Implementation Research (CFIR). We will provide tailored training materials and a range of implementation strategies, including resources and managerial support for Occupational Therapy services to embed this evidence-based intervention in a variety of practice and geographical contexts. This design will enable



Implementing best practice occupational therapist-led environmental assessment and modification to prevent falls: A qualitative study of two regional and rural public health services in Australia

Anna Tynan^{1,2,3} | Alison Pighills^{4,5} | Wendy White⁶ | Alicia Eden⁷ | Sharon Mickan⁸

investigation of implementation strategies across public, private and non-government health services of an already established clinically effective intervention. We will provide this intervention to sites that meet a pre-defined organisational readiness for change score.

We will carry out a pragmatic cost analysis to estimate the system level cost of each implementation strategy, to enable decision makers to assess the resources required to implement this approach within their organisations. The project will cumulate in a set of resources and tailored implementation strategies.

We are seeking sites to participate in this national Occupational Therapy implementation study

Benefits of participating:

- Potential 38% reduction in falls for consumers
- Improved individual wellbeing
- Occupational Therapy services enabled to meet falls prevention governance requirements
- Support from experts to implement the evidence-based intervention
- Structured implementation process
- Individual and collective increase in knowledge, skills, expertise, insight and understanding

We are seeking Occupational Therapy services, that provide intervention to older people who may be at risk of falls and are able to carry out a home-based falls prevention assessment, to participate in this study.

If you are interested in finding out more about participation, please contact:

Professor Alison Pighills, Chief Investigator (A)

Email: alison.pighills@health.qld.gov.au

Mobile: 0467 456 081



Environmental interventions for preventing falls in older people living in the community (Review)

FNQ Connect reengages with the community as project ramps up

Connecting people and connecting care' is at the forefront of our ambitious community-led initiative, intended to streamline care and support services in Far North Queensland (FNQ) by connecting care and support, strengthening the local workforce and continuing to build an inclusive community.

Recently, we re-engaged with our FNQ Collective with the first round of Reference Group meetings for 2025.

Three community groups including Service Providers, Aboriginal and Torres Strait Islander Peoples, and those with Lived Experience of Disability met separately. With each group we revisited FNQ Connect's shared agenda and explored ways to bring it to life through local action.



FNQ Connect's Principal Research Officer Nicole Ramsamy (pictured second from left) in discussion with members of the FNQ Connect Service Provider Reference Group. Two other Reference Groups also met from the Aboriginal and Torres Strait Islander Group, as well as the Lived Experience of Disability Group.

One of the common threads observed within the group conversations was that they would like to work towards a 'one-stop-shop' for information relating to disability and rehabilitation services. They would also like to explore how our services could work better together. They noted that in FNQ we are able to work well together, across sectors to find solutions for FNQ, particularly during disasters. However, we need to work out how to sustain our collaborative efforts.

Participants within the Reference Groups have agreed to

to meet four times per year to contribute to the agenda and to discuss FNQ Connect’s overall progress towards our shared goal of strengthening and integrating disability, rehabilitation and lifestyle services across FNQ.

To date, FNQ Connect has received 4.5 million dollars from the Queensland Department of Families, Seniors, Disability Services and Child Safety - with the funds provided by the Commonwealth Department of Health Disability and Ageing allowing us to recently engage a ‘backbone team’. This team will bring people together, coordinate efforts, and drive the work of the FNQ Collective.

To road test our ways of working, FNQ Connect will work with three communities (separate Local Government Areas) including Cairns, the Tablelands and Kowanyama to eventually form a ‘network of hubs’. We will begin by working with pre-existing services and infrastructure wherever possible; allowing us to focus on strengthening and connecting services within communities; to increase access and reduce fragmentation.

As a collective impact project we will continue engaging directly with the community to establish the best ways of working, as well as the priorities for each of the communities with whom we are working.

For more information about the project visit <https://researchonline.jcu.edu.au/72985/1/72985.pdf>

By Professor Ruth Barker, FNQ Connect Project Lead, James Cook University

NT Health Allied Health Research Action Plan

The vision of the NT Health Research Action Plan 2024-2026 (the Plan) is: “Allied health care provision is high quality, equitable and contributes to improved health outcomes through embedding research and evaluation as core business.”

The Plan, officially launched in May 2024 is the first formal step towards increasing the allied health research footprint within NT Health. It aligns with the NT Health ‘One Allied Health Plan 2023-2028’, which includes a goal to ensure research is embedded within all allied health practice.

The Plan was developed based on information generated from an allied health ‘Think Tank’ in 2022, a literature review, and significant consultation led through a working group consisting of senior staff with expert knowledge relevant to research. The Plan has three overarching themes:

1. Strategic Embedment
2. Capacity and Capability
3. Partnerships and Collaboration

These apply across all service levels as research capacity building is most effective with a ‘whole of system’ strategy.^{1,2} This includes support from the organisation, active contribution by local work units, and participation from individuals in research and quality initiatives.

The Plan recommends initial steps in strengthening allied health research activity and provides direction and support for decision making related to research activities at all levels of the organisation. Throughout the Plan, the

Allied Health Research Action Plan 2024-2026

NT Health
2024 - 2026



importance of continuous quality improvement (CQI) is recognised as essential for improved service delivery and provides the building blocks for staff to engage in research and larger CQI projects.

Implementation of the Plan is being driven by a working group consisting of allied health and other key staff from across the NT who have experience or interest in research and CQI. The first key deliverable has been a Position Statement on research and CQI for allied health.

The Plan is a commitment to increasing our allied health research footprint and will undergo evaluation after two years. If you would like a copy of the Plan, please contact chiefalliedhealthoffice.health@nt.gov.au

By Lauren Toll, Senior Allied Health Advisor, NT Health

References

1. Matus J, Walker A, Mickan S: Research capacity building frameworks for allied health professionals – a systematic review. BMC Health Services Research, 2018, 18:716 [https://doi.org/10.1186/s12913-018-3518-7]
2. Raschke N: The Perceived Research Capacity and Culture within Non-Metropolitan Local Health Districts in NSW. Rural Research Capacity Building Program, 2017.

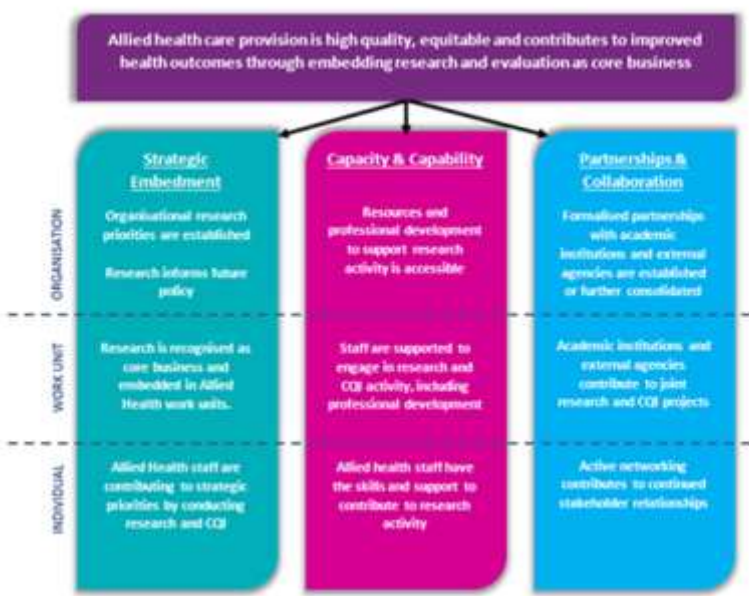
Improving access and building capacity: clinical supervision training

Since 2012, our NT University Department of Rural Health (UDRH) has offered 2-day training in clinical supervision to healthcare professionals who educate and support learners in the workplace. Historically, this training workshop has been run out of Darwin by a team of two academics and one professional staff member. As awareness and popularity of the workshops grew, capacity to deliver became more challenging and the costs involved continued to rise.



Nhulunbuy Workshop

In 2023, we began to make some changes to allow more staff to deliver the workshops, more frequently, and in more remote areas. All materials were added to a shared Teams site with clear instructions for facilitators and professional staff. We also decided this was the perfect time to review teaching material and resources to make them more user friendly, to include Indigenous actors in supervisory roles in videos and to improve accessibility to meet the diverse learning needs of participants. Signposting and subtitles were included in videos, workbook text was reduced and, in recognition of rostering issues, an option to attend only day one was offered. A webpage was developed to list available dates in each site and to simplify registration. Additional educational value for participants was added in 2025 through streamlined entry into postgraduate award courses in clinical education with Flinders University.



These changes have meant that our team have been able to deliver training to 171 participants in 2024. Three workshops were run in Darwin (100 participants), one in Katherine (19 participants), one in Tennant Creek (8 participants), one in Nhulunbuy (6 participants) and two in Alice Springs (38 participants). This represents an increase of 70% in participant numbers compared to previous years. The ability to run the workshops in our more remote sites has increased as we are able to utilise more local staff as facilitators, avoid excessive travel and accommodation costs, and be more flexible around unforeseen community events or unexpected staff unavailability.

The 2025 year is following the same trajectory for participant

numbers and two participants have now taken the streamlined pathway to enrol in a postgraduate course in clinical education.

We are pleased to be able to offer this low-cost face-to-face training to health professionals across the NT and look forward to continuing to support the NT's remote and rural health workforce.

Information about the workshops is available [here](#).

By Leigh Moore, Senior Lecturer in Remote Health, and Melba Ridd, Lecturer in Remote Health, Flinders University Rural and Remote Health.

Scenario 2. With OMP

Observe the teaching and learning



New resources



Darwin workshop

About NARN

NARN Vision for Northern Australia

A good life for all Northern Australians while recognising the unique culture and lifestyle and addressing health inequities for Aboriginal & Torres Strait Islander peoples

NARN Research Strategies

Connect Strengthen Drive Translate Sustain

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We acknowledge Australian Aboriginal People and Torres Strait Island People as the first inhabitants of the nation, and acknowledge Traditional Owners of the lands and water where we live, learn and work.