NATIONAL RURAL HEALTH ALLIANCE

Pre-Budget Submission

2020-21

NATIONAL RURAL HEALTH ALLIANCE LTD

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The Hon Josh Frydenberg MP
Treasurer
Parliament House
CANBERRA ACT 2600

Dear Treasurer

National Rural Health Alliance—2020–21 Pre-Budget Submission

The National Rural Health Alliance (the Alliance) is pleased to provide a submission for the 2020–21 Federal Budget.

The Alliance is the peak body for rural and remote health in Australia. We represent 41 member bodies (see Appendix A) and our vision is for healthy and sustainable rural, regional and remote (RRR) communities.

The Alliance has two proposals targeting rural, regional and remote Australian communities. The first proposal is to create six place-based health and wellbeing networks that will be managed by the National Rural Health Alliance. The second proposal is a comprehensive package aimed at integrating national digital health strategies and increasing the uptake of digital health initiatives, digital health literacy and connectivity; it will have some components delivered by external organisations and others by the Alliance. A summary of each proposal is provided below.

- **Place-based health and wellbeing networks (PBHNs):** There is a desperate need to improve health outcomes for people outside of Australia's major cities. This is largely due to a lack of access to services (such as allied health) and difficulties attracting and retaining practitioners. This project will test the efficacy of alternative funding and service delivery approaches to address under-servicing of health, aged care and disability services in rural and remote communities. The PBHN proposal will help people in rural Australia attain a fairer and more equitable standard of health and wellbeing—one that is more consistent with that of people in the major cities. The proposal has a modest up-front cost that outweighs the long-term costs of not acting, and would provide economic stimulus for regional communities across the country.

- **Rural Digital Health Initiative (RDHI):** Connectivity, reliability, accessibility, affordability and digital health literacy remain ongoing barriers to enabling rural, regional and remote communities' participation in digital health activities. The RDHI is a set of programs that, when applied systematically, will increase digital inclusion, awareness and participation in digital health solutions for health consumers and health practitioners. The RDHI will provide an overarching blueprint for rural digital health, to complement and consolidate existing national digital health strategies, including COAG's National Digital Health Strategy and the Australian Digital Health Agency's National Digital Health Workforce and Education Roadmap.

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The projected cost over the forward estimates is as follows:

Proposal	20–21 ($m)	21–22 ($m)	22–23 ($m)	23–24 ($m)	Total ($m)
Creating place-based health and wellbeing networks in MMM 4–7 areas	2.5	6.0	6.0	1.0	**15.5**
Rural Digital Health Initiative	**5.0**	**4.3**	**4.3**	**–**	**13.6**
Improving connectivity for targeted RRR area health services	1.7	1.8	1.9	–	5.4
Rural Community Digital Health Literacy Training Program	1.7	0.8	0.8	–	3.3
Rural Digital Health Scholarship and Bursary Program	0.6	0.6	0.6	–	1.7
National Rural Digital Health Audit	0.1	0.1	0.1	–	0.3
National Rural Digital Health Network	1.0	1.0	1.0	–	3.0
Total (Note: figures may not sum due to rounding)	**7.5**	**10.3**	**10.3**	**1.0**	**29.1**

This pre-Budget submission has received support from Murray and Gippsland Primary Health Networks, Western Alliance Academic Health Science Centre and a letter of support from the Northern Australia Infrastructure Facility is attached.

The attached submission provides further details about these two priorities. I would, of course, be happy to elaborate or discuss these matters further with you or your Department.

Yours sincerely

Gabrielle O'Kane

Dr Gabrielle O'Kane
Chief Executive Officer

18 December 2019

phn GIPPSLAND
An Australian Government Initiative

Western Alliance
A healthier regional Australia

phn MURRAY
An Australian Government Initiative

Proposal 1: Creating place-based health and wellbeing networks in Modified Monash Model areas 4–7

Summary

This project aims to create six placed-based health and wellbeing networks (PBHNs) in rural and remote communities in Modified Monash Model (MMM) areas 4–7. It will test the efficacy of alternative funding and service delivery approaches to address under-servicing of health, aged care and disability services in rural and remote communities. The proposed networks will be situated in a defined geographic region, where people can receive team-based health care, either through mainstream services or Aboriginal Community Controlled Health Services (ACCHS), within specified travel times. People may also be able to have their social and community needs met by having Centrelink, and employment and disability services—as well as other non-Government organisations (NGOs), such as Anglicare, St Vincent de Paul and the Salvation Army—co-located with the health services, where possible. The intermediate outcome of this initiative will be a clear policy direction for the Australian Government to improve access to health care in rural and remote areas, particularly access to allied health primary care services. The long-term outcome of this initiative will be to provide a blueprint for providing integrated, team-based health care that addresses preventive and primary health care needs and improves the health and wellbeing of those who live in rural and remote communities.

Project cost

$15.5 million over four years, broken down as follows:

- Stage 1: Establishment and planning ($2.5 million in 2020–21 financial year)
- Stage 2: Implementation ($12.0 million in 2021–23 financial years)
- Stage 3: Research and evaluation ($1.0 million in 2023-24 financial year).

The need for PBHNs

Access to health care and social services is fundamental to attaining the best possible health outcomes for all. It is well-established that the supply and distribution of the health workforce is much poorer outside metropolitan areas, with access to care reducing substantially for those residing in remote parts of Australia, leading to higher morbidity and mortality rates.[1,2] In the health and disability sectors, access to allied health practitioners is inadequate in rural and remote areas, and disproportionate to the health and functional challenges experienced by people in these areas.[3] As a consequence, people in remote and very remote Australia access Medicare Benefits Schedule (MBS) services at about half the rate of their metropolitan counterparts.[4] The money 'saved' by the Australian Government through reduced MBS payments could be reinvested through an alternative funding model.

[1] Wakerman J, Humphreys J, Lyle D, McGrail M, Lavey L. Overcoming access and equity problems related to primary health care services in rural and remote Australia. Bendigo: Centre of Research Excellence in Rural and Remote Primary Health Care; 2015.
[2] AIHW. Rural and remote health [Internet]. Canberra: Australian Institute of Health and Welfare; 2019 [2017 May 29]. Available from: https://www.aihw.gov.au/reports/rural-health/rural-remote-health/contents/rural-health
[3] NRHA. Allied health workforce in rural, regional & remote Australia. Canberra: National Rural Health Alliance; 2019.
[4] NRHA. Half the services: Half the workforce. Infographic. Canberra: National Rural Health Alliance; 2019. Available from: https://www.ruralhealth.org.au/content/half-services-half-workforce

At the community level, the health sector is projected to be a large employer in regional Australia in coming decades.[5] There is evidence from Canada that a distributed model of medical education into rural and regional communities can have a positive economic benefit for those communities.[6] The viability of this sector is essential to local people's livelihood, to the livability of places, and to the health and wellbeing of residents.

However, building viable rural and remote health care businesses is challenging in thin market contexts. Many allied health professionals in rural areas frequently work across multiple sectors to earn a livable wage. They may make up a full-time equivalent by working part-time with the local health district, taking on roles in the NGO sector funded by the local Primary Health Network (PHN), working within an aged care facility, or conducting private practice. However, to make a rural public–private partnership model attractive to health professionals, there needs to be incentivised salary packaging options. Currently, there are some Australian Government policy levers available for GPs, but these need to be extended to other health practitioners.

Despite some of the difficulties faced by many health professionals, there are some towns and regions where there are thriving allied health practitioners, enabling rural communities to receive relevant and important health care. In Bowen, Queensland (MMM 4), there is an emerging leadership group consisting of an allied health professional (psychologist), a disability service provider, a local government councillor and others, who are working together to attract more allied health practitioners to the town. They are willing and able to provide alternative incentives to promote social and infrastructure supports for new health professionals interested in rural practice (for example, welcoming committees or subsidised practice rooms and accommodation).

In Mallacoota, Victoria (MMM 6), a regional partnership has been established with neighbouring Bega, NSW (MMM 5), to share allied health professionals, resulting in fortnightly overnight visits to Mallacoota from a psychologist and an accredited mental health social worker. There are also successful models of Multi-Purpose Services (MPS) in rural Australia—such as Alpine Health in Victoria—that use pooled-funding mechanisms which could be applicable for place-based health and wellbeing networks. The NSW Ministry of Health suggests that the MPS model could have the structural capacity to deliver integrated models of care that offer multidisciplinary, coordinated care in rural communities.[7] The health and wellbeing networks proposed here take the MPS model a step further by including a community development and preventive health care approach.

Project description

The project aims to improve access to patient-centred, primary health care that is integrated with community and social services, where possible, as well as with acute care facilities in rural and remote communities. It will undertake a rigorous process to enhance the likelihood of attracting health professionals, maximise the effective use of health and related resources, and ultimately improve health outcomes for people in rural and remote parts of Australia.

[5] Houghton K, The future of regional jobs. Canberra: The Regional Australia Institute. 2019.
[6] Hogenbirk JC, Robinson DR, Hill ME, Pong RW, Minore B, Adams K. The economic contribution of the Northern Ontario School of Medicine to communities participating in distributed medical education. Can J. Rural Med. 2015; 20(1).
[7] NSW Ministry of Health. Position paper: Reshaping the multi-purpose service (MPS) model in NSW. Health system planning and investment. Sydney: NSW Ministry of Health; 2016.

The project uses a sociological framework developed by Bourke et al[8] that comprises six key concepts:

- geographic isolation
- the rural locale
- health responses in rural locales
- broader health systems
- broader social structures
- power relations at all levels.

The framework uses Giddens'[9] theory of structuration to examine rural health situations in the Australian context. The project takes a collaborative, strengths-based approach[10], bringing together the health, social care, disability, justice, aged care, education and regional planning sectors within local communities to deliver six multi-purpose primary health PBHNs.

It draws on the work of the National Rural Health Commissioner, who recommends Australian Government policy reform and investment for the rural allied health workforce. One of the Commissioner's recommendations is the formation of Rural and Remote Allied Health Networks (RRAHNs) to address the need for sustainable allied health jobs in rural and remote Australia; this forms the basis of the PBHN model. The multidisciplinary RRAHNs are designed to be flexible, allowing clients/patients to receive a range of allied health services, either through face-to-face appointments or telehealth services that will be connected to general practitioners and nurse practitioners, specialists, community pharmacists, dentists and local health district services (including acute care or midwifery).

As all communities have different demographics and health needs, the funding and service delivery model will be sufficiently adaptable to avoid a 'one-size-fits-all' approach to health care in rural and remote communities. Numerous studies have noted the interactive nature of organisational, role-based and social factors on rural workforce retention but, to date, research has primarily focused on organisational and role-based factors. In addressing the need for 'localised' workforce recruitment and retention strategies, concepts such as sense of place, place attachment and belonging in place will be considered in the development of person-centred approaches. In line with this concept, the project will also draw on findings from the implementation of Cosgrave's whole-of-person retention improvement framework incorporating three key life domains (workplace/organisational, role/career and community/place), which was trialled in 2018–19 by two rural public health services in Victoria.[11] To support social connection of health workers, especially newcomers, the project will consider establishing a Recruitment and Community Connector position, in line with the model developed in Marathon, Ontario, Canada.[12]

Training of GPs and allied health professionals in their respective rural generalist pathways, as well as Aboriginal and Torres Strait Islander health practitioners and workers, will be incorporated into these

[8] Bourke L, Humphreys JS, Wakerman J, Taylor J. Understanding rural and remote health: A framework for analysis. Health Place. 2012; 18:496-503.
[9] Giddens A. The Constitution of Society. California: University of California Press; 1986.
[10] Bourke L, Humphreys JS, Wakerman J, Taylor J. From 'problem-describing' to 'problem-solving': Challenging the 'deficit' view of remote and rural health. Aust J. Rural Health. 2010;18.
[11] Malatzky, C, Cosgrave, C, Gillespie, J. The utility of conceptualisations of place and belonging in workforce retention: A proposal for future rural health research. Manuscript submitted for publication. 2019.
[12] Cosgrave, C. A report to the Winston Churchill Memorial Trust of Australia: To investigate new approaches to strengthen social connection of newly-arrived health workers in rural Australia. 2019. Available from: https://www.churchilltrust.com.au/media/fellows/Cosgrave_C_2018_Connection_of_newly-arrived_health_workers_in_rural_Aus_1.pdf

PBHNs. They will have links to University Departments of Rural Health, Rural Clinical Schools, Regional Training Hubs and Aboriginal Community Controlled Health Services, providing professional support and development. It is expected that the PBHNs will operate across the health, community, education, disability and aged care sectors for preventive health and early intervention programs, to address the needs of an ageing population, the epidemic of chronic conditions, and the rising costs of health care.[13]

To address the social and ecological determinants of health, the PBHNs may include a community food hub, similar to The Stop[14] program in Toronto, Canada. Such programs can improve understanding of sustainable food systems, offer practical solutions to food insecurity, increase physical activity and promote social cohesion. It is envisaged that these community food hubs could become thriving centres for community engagement in food production and preparation, involving young children, adolescents and the elderly. In addition to a place-based community food hub, the Orange Declaration suggests that place-based interventions for those with mental health problems—that are holistic, integrated and co-designed by local communities—show promise and could be evaluated through this initiative.[15] The PBHNs will also include ACCHS, either on the same site or nearby, depending on the outcome of local consultations. It may be that bush tucker gardens form part of the community food hub.

Stage 1: Establishment and planning—July 2020 – June 2021 ($2.5 million)

An important first step will be to identify the six towns or regions in which to develop the PBHNs. These sites will cover off a range of rural and remote community contexts experiencing inadequate access to allied health services. This selection process will be achieved through the weighting of a number of key variables, including:

- geographical location and remoteness (MMM 4–7)
- health profile of the community
- current level of access to allied health services to meet need
- rural health workforce challenges (shortages and high turnover)
- readiness for allied health business development
- level of local stakeholder leadership able to support and leverage the project objectives (for example, engagement and support of existing health and social service providers, government agencies, LGAs and the community).

Following site identification, a services and financial mapping exercise will be undertaken. The aim of this exercise will be to develop a more complete understanding of local health needs through:

- clarifying the current health status of the community
- identifying the services currently available
- identifying gaps in service provision
- assessing the quantum of resources already provided for health services in the catchment.

[13] Commission on Social Determinants of Health. Closing the gap in a generation: Health equity through actions on the social determinants of health. Final Report of the Commission on Social Determinants of Health. Geneva: World Health Organization. 2008.
[14] The Stop. “About Us”; 2019. Available from: https://www.thestop.org/what-we-do/about-us/
[15] Perkins D, Farmer J, Salvador-Carulla L, Dalton H, Luscombe, G. The Orange Declaration on rural and remote mental health. Aust J Rural Health. 2019. DOI: 10.1111/ajr.12560.

This process will also identify the workforce shortages and resource requirements of the catchment.

Stage 1 involves setting up an Expert Advisory Committee in each region with representation from key stakeholder groups.

Planning will involve consultations with primary health and community service providers, medical practices, community pharmacies, local government, PHNs, state and territory governments, and the broader community, to disseminate the information elicited through the previous mapping exercise.

Workshops will then be held with the local community and constituents, asking the simple question: 'If we were designing our local primary health system again, with the resources we already have ($x million), what would it look like?' Through this process, concepts of integrated care, best-practice service models and funds pooling would be explored and explained. In addition, service gaps will be more fully explored. This process may also identify the need for capital resources to develop better facilities for integrated care.

Deliverable 1: An interim report that identifies the rural and remote sites in which to develop the PBHNs, that have been selected according to the criteria outlined above. The report will also summarise the findings of all the consultations and workshops that have:

- explored the pooled-funding model and the role and opportunity for public–private partnerships
- clarified the community's decisions about the best use of local health resources
- examined best-practice service models addressing the physical and mental health needs of the community
- identified the need for capital infrastructure to develop better facilities for integrated care.

Stage 2: Implementation—July 2021 – June 2023 ($12.0 million)

With the knowledge acquired through the previous stages, an implementation plan will be created. This plan will involve creating improved integration and service provision through co-location, pooling of funds, more efficient and effective use of Medicare Benefits Schedule funding, and developing public–private service models.

The project management team will be comprised of the National Rural Health Alliance, the Australian Rural Health Education Network (ARHEN), the National Aboriginal Community Controlled Health Organisation (NACCHO), Rural Health Workforce Australia (RHWA), the Royal Flying Doctor Service (RFDS) and Services for Regional and Remote Allied Health (SARRAH). In addition, the Regional Australia Institute and other suitable research bodies will evaluate and monitor best practice and lessons learnt from the six participating communities. An expert steering committee will be established, which will include expertise from the Australian Institute of Health and Welfare and Australian Government Department of Health—leaders in the HeaDS UPP Tool and the Service Planning and Operational Tool (SPOT) developed by RFDS.

At the implementation stage, the project management team will be in a position to offer financial incentives and funding to facilitate change. This might be in the form of:

- additional funding for needed services, which could occur in conjunction with PHNs and/or state and territory governments
- leveraging capital for improvement to facilities (including transport) to support co-location and integration of services
- providing business and service planning expertise, in order to maximise funding opportunities

- creating partnerships with stronger, more robust services in neighbouring areas.

It should be noted that every catchment will be different and will require different supports to develop better integration and networks, and improve service provision. Through this process, training will occur with local services related to building service and financial modelling capacity. Of relevance here will be the prospective SARRAH project, a blueprint for supporting business and practice development for rural allied health professionals.

Deliverable 2: An interim report that monitors the barriers to, and enablers for, successfully developing the PBHNs.

Stage 3: Research and evaluation—July 2023 – June 2024 ($1.0 million)

The National Rural Health Alliance will work closely with researchers within their membership, particularly the University Departments of Rural Health and ARHEN, as well as other key research groups, to deliver a robust evaluation of the project. The research and evaluation methodology will be planned and embedded into the project from the outset, using process, impact and outcome measures. The process evaluation that is collected as the project rolls out in each region will enable the research strategy and interventions to adapt in response to feedback.

Impact and outcome evaluation will assess the quadruple bottom line: consumer reported experiences; consumer reported outcomes; health professional experiences, work processes and satisfaction; and, at the system level, cost/efficiency/value for money. There will be a mix of quantitative and qualitative data collected across the life of the project. The qualitative data will be collected through interviews and focus groups with the full range of stakeholders, which will include consumers, allied health professionals, local government officials, PHNs, local health districts and health departments. This data will be analysed using the sociological framework outlined by Bourke et al.[16]

A range of measures will be used to monitor and evaluate the project:

- Baseline data that describes the current health profile and measures access to health care will be collected using the HeaDS UPP and SPOT tools, and any other tools identified by the Regional Australia Institute or other stakeholders (which may, for example, relate to a town's livability). In addition, data on access to disability support and services, and aged care programs, will be collected.
- Data on the success of pooled-funding mechanisms between different jurisdictions will be employed, which will be a mix of quantitative and qualitative data.
- Where possible, an assessment of business success for allied health professionals will be undertaken. The key reasons for business success will also be examined.
- Health professional satisfaction surveys, patient-reported experience measures (PREMs) and patient-reported outcome measures (PROMs) will be completed.
- Qualitative data will be collected from interviews or focus groups of consumers, health professionals, community and social services, local government officials, PHNs, local health districts, health departments and other stakeholders, about the process and outcomes of the PBHNs model.

[16] Bourke L, Humphreys JS, Wakerman J, Taylor J. Understanding rural and remote health: A framework for analysis. Health Place. 2012; 18:496-503.

Deliverable 3: Final evaluation report written and disseminated to the Australian Government and all interested stakeholders.

Outcomes

The intermediate outcome of this initiative will be a clear policy direction for the Australian Government to improve access to health care in rural and remote areas—particularly access to allied health primary care services. This outcome will be informed by the pooled-funding models employed and the success or otherwise of the public–private partnerships that emerge.

The long-term outcome of this initiative will be to provide a blueprint for providing integrated, team-based health care that addresses preventive and primary health care needs, and improves the health and wellbeing of those who live in rural and remote communities.

Proposal 2: Rural Digital Health Initiative

Summary

The Rural Digital Health Initiative (RDHI) is a three-year strategy to increase participation in digital health in rural, regional and remote communities in Modified Monash Model areas 4–7. It will align with national, state and local digital health system reform strategies, including COAG's National Digital Health Strategy and the Australian Digital Health Agency's National Digital Health Workforce and Education Roadmap.

The RDHI has five activity areas aimed at increasing digital health literacy, connectivity, awareness of digital health services, and participation in digital health solutions for consumers and health practitioners. Key elements are:

1. **improving connectivity** for targeted rural, regional and remote area health services
2. **increasing digital health knowledge in rural communities** through a community awareness campaign and digital health literacy training
3. **building capacity in the rural health workforce** through knowledge and skills, by increasing access to professional development via funding from the Rural Digital Health Scholarship and Bursary Program; and improving capacity within a rural health service by creating the Rural Digital Health Champions Program
4. **conducting a national rural digital health audit**, which will act as a baseline needs assessment to increase understanding of where digital health services are being provided (to whom, how often and by whom) and barriers and enablers to implementing digital health services
5. **improving coordination and collaboration** through the creation of the National Rural Digital Health Network.

The intermediate outcome of this initiative will be:

- a better understanding of scale and geographical distribution of digital health service provision in rural, regional and remote communities
- improved coordination and collaboration for key stakeholders
- increased community digital health literacy and awareness of digital health services
- improved access to health care in rural, regional and remote areas through better connectivity
- increased availability of digital health services through the activities of the program.

The long-term outcome of this initiative will be to develop innovative digital health solutions that demonstrate they are a sustainable and effective mode of health care delivery that improves team-based health care, decreases health care costs, and improves the health and wellbeing of those who live in rural, regional and remote communities.

Project cost

$13.627 million over three years.

Need for the Rural Digital Health Initiative

The way in which health care services are delivered is rapidly changing due to digital health innovation. However, rural communities have many barriers to overcome to be able to participate equitably in digital health strategies. Remoteness has been identified as an indicator of digital inequality.[17] The Australian Digital Inclusion Index measures digital access, affordability and digital ability, to give a score out of 100. The 2018 and 2019 reports show that significant differences in digital inclusion still persist between rural (regional and remote) and urban areas.[18,19]

Barriers to digital inclusion are broad and include higher costs of deploying infrastructure, poor internet connectivity (unreliable service and/or low bandwidth limiting the use of certain digital technologies, such as telehealth via video conferencing or internet-enabled diagnostic tools), lower education levels and digital literacy, geographical divide, differences in cultural and information needs[20], an older demographic, higher prevalence of chronic disease, more complex co-morbidities, lower life expectancy and lower socioeconomic status.[21]

There are also barriers to health professionals participating in digital health. These include:

- the lack of consistent clinical, technical and professional standards
- low levels of confidence in the ability to assess safety, quality, privacy and security
- clinician concern around liability
- the efficacy of digital health services
- a lack of financial benefits for referring patients (including the lack of awareness of available telehealth and other digital health tools, referral pathways, and availability of locally based digital health infrastructure)
- lack of training and support for implementing new services[22,23]
- no national digital health agency dedicated to knowing and understanding both the various service pathways and appropriate digital solutions.

There is also a need to develop locally tailored solutions that are appropriate for rural, regional or remote communities, rather than attempting to implement a service designed to meet the needs of city residents.[24]

In addition to the barriers identified to community and health professionals participating in digital health strategies, the NRHA—through consultation at a rural digital health workshop co-hosted with NBN Co—has also identified a significant gap in national coordination for rural digital health. Although national, state and local digital health strategies and policies are in place, the people on the

[17] Park, S. Digital inequalities in rural Australia: a double jeopardy of remoteness and social exclusion. Journal Rural Studies. 2017; 54:399-407.
[18] Thomas, J, Barraket, J, Wilson, CK, Cook, K, Louie, YM & Holcombe-James, I, Ewing, S, MacDonald, T. Measuring Australia's Digital Divide: The Australian Digital Inclusion Index. 2018, RMIT University, Melbourne, for Telstra.
[19] Thomas, J, Barraket, J, Wilson, CK, Rennie, E, Ewing, S, MacDonald, T. Measuring Australia's Digital Divide: The Australian Digital Inclusion Index. 2019, RMIT University and Swinburne University of Technology, Melbourne, for Telstra.
[20] Park, S. Digital inequalities in rural Australia: a double jeopardy of remoteness and social exclusion. Journal Rural Studies. 2017; 54:399-407.
[21] Speyer et al. Effects of telehealth by allied health professionals and nurses in rural and remote areas: systematic review and meta-analysis. Journal Rehab MED.2018; 50:225-253.
[22] Speyer et al. Effects of telehealth by allied health professionals and nurses in rural and remote areas: systematic review and meta-analysis. Journal Rehab MED. 2018; 50:225-253.
[23] Iacono et al. A scoping review of Australian allied health research in ehealth, BMC Health Services Research. 2016; 16:543.
[24] Erdiaw-Kwasie & Alam. Towards understanding digital divide in rural partnerships and development. Journal rural studies. 2016; 43:214-224.

ground are working in silos. There are a variety of platforms, digital health systems and tools in use within and between jurisdictions, that make interoperability problematic. Connectivity (including affordability, quality, reliability, and bandwidth) remains an ongoing issue. Funding models, service design, digital literacy, and health professionals' education and training are also key issues that the rural digital health sector would like to address.

Another key issue that emerged from the workshop is the need for national coordination to bring together the rural digital health sector to mobilise, partner and collaborate, learn, educate, and measure and collect data together. As part of the RDHI, the establishment of a national body—the Rural Digital Health Network—is proposed to fulfil this function.

In summary, the RDHI seeks to increase participation in digital health strategies in rural, regional and remote communities by:

- improving remote health services' connectivity
- increasing digital health literacy in rural communities
- building capacity of the rural health workforce through education and training
- auditing availability of digital health services
- improving national coordination through the establishment of the Rural Digital Health Network.

Project description

The Rural Digital Health Initiative is a comprehensive suite of programs as outlined below.

1. Improving connectivity for targeted rural, regional and remote area health services

A barrier for remote health services, in implementing and accessing digital health technology, is the inability to obtain adequate internet connectivity for telehealth. To date, Sky Muster services have proven inadequate for telehealth. Additionally, the up-front cost to purchase the appropriate infrastructure can be prohibitive. For example, it costs approximately $40,000 to purchase a mining grade satellite dish and associated infrastructure, as well as annual costs of approximately $100,000 per seven sites.

If deemed adequate for telehealth, Sky Muster Plus could be used, with a cost of $200 a month per site for the ongoing connectivity costs. Researchers are currently working with NBN Co and SkyMesh to develop an affordable Sky Muster product suitable for telehealth.

Improving connectivity funding for targeted rural, regional and remote area health services will provide up-front costs for eligible health services to enable them to purchase appropriate digital health infrastructure, and cover (or contribute to) the ongoing connectivity costs to run the digital health service.

Funding will be made available for up to 100 remote health service providers over three years. The program would be administered by the Australian Government.

Program cost: $5.367 million over three years.

2. Rural Community Digital Health Literacy Training Program

One of the most significant barriers facing the digital health agenda is how to engage those hardest-to-reach and introduce them to digital health services. However, for rural communities to use digital

services it requires basic digital skills and online access. The Be Connected program, implemented by the Good Things Foundation, is an Australian Government funded initiative that delivers basic digital skills programs to older Australians through a national network of over 3000 community organisations. The Be Connected program has been successfully implemented in rural, regional and remote communities.

The new program will build on the success of the current Be Connected program and build capacity to expand to additional rural, regional and remote communities. Given the significant health inequities that exist between Aboriginal and non-Aboriginal people, priority will be given to remote Aboriginal communities. Of all people living in remote areas, the proportion who are Aboriginal or Torres Strait Islander is relatively high. In 2011, 45% of people living in Very remote areas and 16% of people living in Remote areas were Indigenous.[25]

The funding will be provided to the Good Things Foundation and will support:

- **a co-designed approach** to upskilling rural, regional and remote people to increase their digital health literacy. By locally co-designing the project with the community, this ensures that the project is developed to accommodate the needs of the target community
- **community capacity building** with the engagement of 15 supporting organisations, focused on training local communities in digital health, and digital health mentoring in each state and territory—train the trainer. This would be supported by $50,000 grant funding for a 12-month project
- **a rural community digital health training network** of 50 community-based trainers (supported by the capacity-builder organisations) in rural, regional and remote areas to deliver digital health programs that build confidence and skills. This would be supported by grant funding of $10,000 per organisation per year
- **central administration and coordination**, including program management, grant allocation, the training of 100 digital health mentors, as well as monitoring and evaluation of programs
- **evaluation** of the effectiveness of the pilot to identify digital health literacy resources and what works for specific cohort groups, and document the impact of digital health literacy provision provided in a community-based setting
- **scale** to ensure that all resources and learning are available across the Be Connected Network of 3000 community organisations, and to support the delivery of digital health programs to people in rural and regional areas across the country.

Program cost: $3.31 million over three years.

3. Rural Digital Health Scholarship and Bursary Program

The Rural Digital Health Scholarship and Bursary Program will provide scholarships and bursaries to help health professionals in rural and remote Australia develop skills and knowledge in digital health technology, health informatics, or ehealth strategies, and develop and enhance their skills, capacity and scope of practice to design and deliver digital health services in rural, regional and remote communities.

[25] Australian Institute of Health and Welfare, 2015, "The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples: 2015"

Scholarships or bursaries will be available to Aboriginal and Torres Strait Islander health workers and Aboriginal and Torres Strait Islander health practitioners, medical, nursing/midwifery, dental and allied health professionals providing health care services to locations in MMM 4–7.

Scholarships will be a payment of up to $10,000 for accredited digital health courses and/or a bursary payment of up to $5,000 to cover course fees, training-related expenses, or attendance at a Health Informatics Conference (convened by the Health Informatics Society of Australia).

The National Rural Health Alliance will administer the program. It has been managing scholarships for over 20 years and has a track record of providing a high quality service to scholars and bursary recipients.

Program cost: $1.65 million over three years.

4. National Rural Digital Health Audit

The National Rural Digital Health Audit will be administered by the Australian Government and will act as a baseline needs assessment. This knowledge will increase understanding of how digital health is defined and put into practice, where digital health services are being provided (to whom, how often and by whom), and barriers and enablers to implementing digital health services.

There is limited information on digital health technologies in terms of the types of technology in use, the location, aspects relating to barriers and facilitators uptake, and implementation of technology in rural and remote settings. Going forward, any audits should focus on all of these aspects and consider them in relation to a number of different groups and sub-groups. For example, focus should be given to consumers, patients and medical professionals and also, within these groups, focus on sub-group analysis.

Another thing to consider is how to change behaviour around the use and uptake of digital health technologies. Evidence shows that barriers include time and confidence, so how do we support communities and individuals to engage with digital technology?

Program cost: $300,000 over three years.

5. National Rural Digital Health Network

A recent workshop co-hosted by NBN Co and the National Rural Health Alliance has identified the need for closer collaboration and partnership in the digital health space. The National Rural Digital Health Network will be a national network of rural digital health practitioners, researchers, service providers, community representatives and policy makers. The network will work in partnership with the Australian Digital Health Agency to design and implement tailored solutions for rural, regional and remote communities to implement the National Digital Health Workforce and Education Roadmap and other national digital health policies.

The network will focus on connectivity and interoperability, as well as developing education and training models of care, and new ways of working that meet the needs of rural communities. Funding for the network will also support an annual rural digital health symposium to enable network stakeholders to share and disseminate their knowledge and the coordination of the network.

The National Rural Health Alliance will act as the network's lead agency, to provide a national governance structure and central point for governments to liaise with on rural digital health issues.

Program cost: $3.0 million over three years.

… healthy and
sustainable rural,
regional and remote
communities

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Appendix A
National Rural Health Alliance 2019

41 organisations with an interest in rural and remote health and representing service providers and consumers

- Allied Health Professions Australia Rural and Remote
- Australasian College for Emergency Medicine (Rural, Regional and Remote Committee)
- Australasian College of Health Service Management (rural members)
- Australian and New Zealand College of Anaesthetists
- Australian Chiropractors Association (Aboriginal and Torres Strait Islander Rural Remote Practitioner Network)
- Australian College of Midwives (Rural and Remote Advisory Committee)
- Australian College of Nursing (Rural Nursing and Midwifery Community of Interest)
- Australian College of Rural and Remote Medicine
- Australian Healthcare and Hospitals Association
- Australian Indigenous Doctors' Association
- Australian Nursing and Midwifery Federation (rural nursing and midwifery members)
- Australian Paediatric Society
- Australian Physiotherapy Association (Rural Advisory Council)
- Australian Psychological Society (Rural and Remote Psychology Interest Group)
- Australian Rural Health Education Network
- Congress of Aboriginal and Torres Strait Islander Nurses and Midwives
- Council of Ambulance Authorities (Rural and Remote Group)
- Country Women's Association of Australia
- CRANAplus
- Exercise and Sports Science Australia (Rural and Remote Interest Group)
- Federation of Rural Australian Medical Educators
- Isolated Children's Parents' Association
- National Aboriginal and Torres Strait Islander Health Worker Association
- National Aboriginal Community Controlled Health Organisation
- National Rural Health Student Network
- Paramedics Australasia (Rural and Remote Special Interest Group)
- Pharmaceutical Society of Australia (Rural Special Interest Group)
- RACGP Rural: The Royal Australian College of General Practitioners
- Royal Australasian College of Medical Administrators
- Royal Australasian College of Surgeons Rural Surgery Section
- Royal Australian and New Zealand College of Psychiatrists
- Royal Far West
- Royal Flying Doctor Service
- Rural Dentists' Network of the Australian Dental Association
- Rural Doctors Association of Australia
- Rural Health Workforce Australia
- Rural Optometry Group of Optometry Australia
- Rural Pharmacists Australia
- Services for Australian Rural and Remote Allied Health
- Society of Hospital Pharmacists of Australia
- Speech Pathology Australia (Rural and Remote Member Community)

Australian Government | NAIF Northern Australia Infrastructure Facility

16 December 2019

Ms Gabrielle O'Kane
Chief Executive Officer
National Rural Health Alliance
PO Box 280
Deakin West ACT 2600

Dear Gabrielle

Thank you for the information you provided to NAIF on your proposal for health precincts, that you are calling place-based health and wellbeing networks or 'PBHN's for short.

Health infrastructure is important social infrastructure under the NAIF investment mandate and the provision of regional and rural health services is critical to the development and social amenity of Northern Australia. We noted with interest your proposal for the development of hub services to provide these regional and rural health services.

We understand an evolution in thinking is currently underway around alternative funding models for rural and remote health.

We wish you success in your process and look forward to talking further around NAIF's interest in assisting the development of regional and rural health services in northern Australia.

Yours sincerely

Amanda Copping
Acting Chief Executive Officer