Oct 14, 2024

Lyn Davies, Managing Director at APAC, explores the challenges of delivering care to rural and indigenous communities, and considers what other countries can learn from Australia as we strive to deliver top-notch care to all, regardless of geographical location or localised culture.

Australia is a land of extremes: a vast geographical expanse, with diverse and variable climates. With a population of 27 million, and a population density of just over 3 people per square km (Worldometer)—the country also has one of the world's most culturally and ethnically diverse populations (DiversityAbroad).

As a result of this dispersed and diverse population, Australia faces specific challenges for providing equitable access to aged care. Even though older people make up a greater proportion of the population in rural communities, fewer aged care services are available than in major cities and this is exacerbated by care workforce shortages and can result in premature entry into residential care. This means relocation away from families and community networks.

But as we look across the globe, we can see that even in countries where the geography is less extreme, there are patterns of older populations moving away from urban centres. In the UK, for example, Professor Chris Witty's Annual Report of November 2023 (Health in an ageing society), describes how a large proportion of people migrate away from cities to rural and coastal areas before they reach older age.

The outcome of this 'is that metropolitan areas largely maintain their current demographic, ageing only slowly, while some areas, particularly rural, semi-rural and coastal areas in the periphery, age much faster.'

Telecare and telehealth can make a significant difference to the lives of those living far from major population centres, and to addressing these challenges. However, the implementation of telehealth and telecare also hinges on a number of factors, that often differ regionally: digital infrastructure and access, skills in the workforce and cultural acceptance into daily life by the communities giving and receiving help. It is also important to acknowledge the different roles played by telecare, by which we mean medical alarms, fall detectors and sensors etc. which are linked to a 24/7 monitoring service provider, and telehealth, which covers diverse domains including virtual appointments and remote patient monitoring, facilitating the recording of health metrics and updates to medical records via connected devices.

Australia, with its diverse and dispersed population, is at the forefront of the health and care delivery challenge. At the same time, these challenges can create opportunities for innovation which are then replicable in other countries and regions.

The Challenges and Impacts on Remote Communities

In Australia, older people in remote communities often still lack basic services and have insufficient economic and community resources. The more remote the location, the less likely older people are to access aged care.

There are 4.2 million Australians aged 65 and over (AIHW). 1 in 3 live in rural and remote areas with approximately 13,400 of these receiving assistance from aged care home support programs (AIHW). This is only likely to increase over time, increasing demand on already-stretched services.

Most aged care providers in rural areas are not-for-profit and government agencies, with many for-profit providers exiting the market due to issues with sustainability. Higher operating costs, workforce shortages, travel distances and smaller population sizes limit economies of scale.

Often-cited 2021 research by CEDA has found that Australia faces a lack of 110,000 direct aged care workers by 2030. Policies such as pay rises, training and scholarships aim to attract and retain care sector employees, however workforce gaps remain.

As a result, older people, both indigenous and non-indigenous, living in rural Australia, often experience delays in accessing—or simply do not receive—the care they need. Instead of addressing health issues early, or even on time, this leads to increased frailty, functional decline, increased hospitalisation and premature entry into residential aged care.

Sometimes relocation from their communities is necessary to receive the care they need, despite an established trend for older Australians to receive care in their home and community.

Research shows that Aboriginal and Torres Strait Islander people are more likely to enter aged care at an earlier age than non-Indigenous people (an average of 73 compared to 85 for the non-Indigenous population) (Rural Health Alliance). 88% of Aboriginal and Torres Strait Islander people over the age of 55 years are living with a long-term health condition (Royal Commission), yet despite these higher care needs, only 52% used aged care services for which they were eligible (MJA), indicating a lack of culturally safe and appropriate aged care.

Therefore, there are not just challenges around infrastructure and geography, but also the question of culturally appropriate care. Technology and telecare have a role to play in each of these areas.

Delivering Culturally Appropriate Care for Remote, Indigenous Communities

Remote monitoring technology can play its part in culturally safe care delivery, by enabling Indigenous older people to live in their communities for as long as possible, bringing high quality homecare to remote areas in a way that is psychologically safe and appropriate.

Here in Australia, Tunstall has been involved in projects that delivered Remote Patient Monitoring (RPM). RPM goes beyond a simple

appointment by phone or over video. RPM empowers the patient to regularly take their own health metrics using blue tooth enabled devices, connected to software that tracks and sends results from their unique record to medical professionals or carers, who can then determine whether intervention is necessary.

The 2018 Staying Strong project is another iteration of this concept. It was a collaboration between integratedliving, Australia's First Peoples, and the Department of Health of the Australian Government to foster practical reconciliation and close the health outcomes gap for Aboriginal people. This unique pilot project was the first of its kind to specifically trial telehealth with older Aboriginal people to improve access to health services and build capacity for self-management of people's own health conditions.

The initial pilot trialled two models of telehealth monitoring of vital health signs: an in-home model and a hub model in a local community space. The project was also developed to determine the acceptance and usability of telehealth systems by Indigenous communities.

There was high acceptance by the project participants, and participants reported feeling more safe and secure with a telehealth system in place. Not only could they see their monitoring results for themselves, but they also had the peace of mind that someone else was keeping an eye on them, such as a registered nurse who would address the situation should the need arise.

One Yarning Circle resident participant said, 'It's nice when the nurse rings me and says, "I think you'd better get to the doctors". Just having someone to talk to helps a lot and knowing that they are there and they will ring you if they think you should go.'

The broadband technology enabled greater nurse caseload; flexible and responsive remote triaging; reduced need for routine GP visits; facilitated accurate and timely medical diagnosis and reduced unplanned hospitalisation; all reducing overall costs and increasing standards of care. These effects contributed to a 40% cost saving compared to the price of face-to-face care as well as showing an increase in timely and accurate diagnosis, and an increase in patient awareness and self-management.

The role of telecare and telehealth in rural emergency response

In remote areas where immediate access to emergency services may be limited, telecare devices like a personal medical alarm can be the difference between life and death. As a result, the reliability of digital networks is a matter of national significance, and the value of investing in digital infrastructure is recognised by policy-makers as a tool for improving health, as well as economic, outcomes.

But a reliable connection is not all that's needed. To provide adequate care, it is essential that these services are connected to a 24/7 Personal Emergency Monitoring Centre, resourced with highly trained professionals who deliver personal care as they access an individual's unique client record, including their health conditions, medical needs, living arrangements and preferred responders.

As a result of the support of a monitored service, a call responder can fill a medical professional in on the patient's medical history, allergies, and even home entry codes as they travel to the patient—so emergency services are fully equipped when they arrive. For geographically diverse areas, where it might take emergency services up to an hour to reach patients, having this information ready prior to arrival can be crucial. Digitalisation of patient data, such as Australia's electronic health records, supports monitored care by acting as a central, national source for patient data.

Investing in monitored solutions and telehealth, over non-monitored can be hugely valuable to any rural or remote community who face extra geographical challenges. The personalisation which monitored solutions provide not only increases the likelihood of positive health outcomes, it also provides greater human interaction; a benefit which is particularly important for vulnerable individuals living far from wider support structures.

How providing care for rural communities drives innovation

The impact of telehealth solutions on rural healthcare extends beyond immediate patient care, towards finding solutions to preserve quality-of-life. Innovation in providing care often comes because smaller facilities in rural areas need to provide a wider range of services. As General Practitioners (GPs) have reduced access to specialist care, the imperative to adopt technology to access that expertise is increased. Necessity breeds invention, and regional GPs may be faster to adopt and encourage patients to accept new technologies to facilitate access to care.

One example is the use of virtual care centres, outlined in the Digital Strategy for Rural and Remote Care produced by the Government of Queensland. Thanks to the existence of digitalised health data, a Virtual Care centre can support local medical professionals to respond to the specific – and known – needs of each patient, irrespective of their geographical location.

Another is the use of drone technology to deliver medical supplies to patients who would otherwise be required to travel long distances. The variance in travel times to access care is a key driver of inequality which greater use of drones would help mitigate. Of course, this innovation is unlikely to be uniform, and different regions have different resources around digital infrastructure and access to data.

The challenge for us as a business and for the wider industry is to recognise where technologies developed to support a specific need can be adapted for more applications and scaled to address challenges nationally and globally. This relies on providers, governments and care delivery organisations sharing their experience and best practice. Along with transparency around what hasn't worked and why.

Ultimately, the design of any country or regions' health system will be shaped by several factors; the proportion of remote and rural communities is just one of them. But by recognising the innovation that can stem from such a challenge, we can learn and develop solutions which support better health and care outcomes for people, wherever they live.