Connecting Far North Queensland

An evaluation report of telehealth in two residential aged care homes in regional Queensland

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NARDHC
Northern Australian Regional Digital
Health Collaborative

A partnership between:

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Synopsis

This evaluation report presents the findings from the early-stage implementation of telehealth in two regional Queensland residential aged care homes (RACH). The initiative involved deploying purpose-built telehealth carts designed to enhance healthcare access and coordination for aged care residents, with a particular focus on rural and remote settings.

Adopting a concurrent mixed methods approach, the evaluation drew on document review, direct non-participant observation, and semi-structured interviews with key informants to triangulate insights and build a robust understanding of the implementation process. The study was guided by the Consolidated Framework for Implementation Research (CFIR), which shaped data collection and analysis across all components.

Our findings highlight that successful telehealth implementation was underpinned by strong organisational readiness, workforce stability, and alignment of the technology with existing clinical workflows. At the same time, broader uptake was challenged by ongoing workforce pressures, technical limitations, variable engagement from stakeholders, and the absence of a consistent policy framework.

Despite these barriers, telehealth was widely regarded as a valuable complement to face-to-face care, particularly when in-person service delivery was impractical.

This evaluation offers practical insights to inform the future scale-up of telehealth in residential aged care settings. It also reinforces the utility of CFIR as a structured tool for assessing digital health implementation in complex care environments.

This work forms part of the broader Northern Australian Regional Digital Health Collaborative (NARDHC), which supports digital health innovation and capability-building across Northern Australia to strengthen healthcare delivery in rural, regional, and remote areas.

Key Messages

Workforce stability and digital capability are critical

Successful telehealth implementation in residential aged care relies on a stable, digitally confident workforce. High staff turnover and absenteeism interrupt care continuity, delay training, and hinder uptake of new technologies.

Integration into daily practice must be seamless

Telehealth should complement – *not complicate* – existing workflows. Clear role definitions, structured support, and targeted, task-specific training help reduce burden and boost staff confidence in using virtual care tools.

Leadership and early engagement drive success

Embedding telehealth requires strong, visible leadership and a shared vision. Early staff involvement and collaborative planning foster ownership, build momentum, and support long-term integration.

Trust and acceptance come through communication

Building patient and family trust in telehealth requires clear communication of its benefits - *particularly in palliative care and family-inclusive models*. Sharing real-life stories and positive experiences can help humanise virtual care and encourage broader acceptance.

Long term success depends on support

Sustained telehealth delivery requires stable funding and enabling policy. National reimbursement models and clear standards are key to embedding telehealth as a routine part of aged care.

Contents

The Growing Challenges of an Ageing Population

The global population is undergoing an unprecedented demographic shift, with an increasing proportion of individuals aged 65 and older, presenting significant challenges for healthcare systems worldwide[1]. By 2050, the United Nations estimates that the global population aged 65 and older will reach 1.5 billion, accounting for one-sixth of the world's total population. Additionally, the number of people aged 80 or older is expected to more than triple between 2017 and 2050[1]. These trends present major challenges for healthcare systems globally, especially in terms of service delivery, policy formulation, and care accessibility, particularly for older adults living in rural, regional, and remote areas.

In Australia, this trend is particularly pronounced: as of 2023, more than 4.4 million Australians - approximately 17% of the population - were aged 65 and over, a figure projected to rise to 22% by 2061[2]. Our ageing population places increasing demand on aged care services, chronic disease management, and healthcare workforce planning, particularly in regional and remote areas where service access is already limited.

Australia's aged care system includes a wide range of services, from home support to residential care, to cater to individuals with different care needs. Residential aged care homes (RACH) are vital in providing high-level care for individuals who require more assistance than can be offered at home. In 2023-2024, nearly 76,000 Australians entered permanent residential care, with 90% accessing this type of care for the first time[3]. Notably, the rates of admission to permanent residential aged care were higher in more densely population areas including large and medium rural towns and lower in small rural towns, remote and very remote communities[3]. With more than one-third of older (65+ years) Australians living in rural or remote areas, access to aged care services diminishes as geographical remoteness increases, placing added pressure on existing systems and services to meet the needs of this growing demographic. This trend highlights the urgent need for widespread reform in aged care services.

Residential aged care - especially in rural and remote locations, offer considerable opportunities to integrate new technologies, such as telehealth, to enhance service delivery. A pivotal moment came in September 2020 when the Australian Government-led

[1] World Health Organization. *The UN Decade of Healthy Ageing 2021–2030 in a Climate-Changing World*; Decade of Healthy Ageing Connection Series; World Health Organization: Geneva, Switzerland, 2022; Vol 3.
[2] Australian Government. (2023). *2024 Population Statement*. Retrieved from https://population.gov.au/sites/population.gov.au/files/2024-12/pop-statement-2024.pdf
[3] Australian Government, Australian Institute of Health and Welfare. *Admissions into aged care*; https://www.gen-agedcaredata.gov.au/getmedia/879b1675-c206-41ad-b05f-0508daaa9ed4/Admissions-into-aged-care-fact-sheet_2023-24.pdf (accessed 19-April-25)

Royal Commission into Aged Care Quality and Safety[4] released a special report on aged care and COVID-19. Among its recommendations, the report called for expanding access to subsidised specialist telehealth services, ensuring every resident is registered with a General Practitioner (GP), and investing in the necessary information and communication technology (ICT) infrastructure to make telehealth a viable option in aged care.

Emerging digital technologies – such as wearable sensors, mobile health apps, and virtual reality - offer significant promise for improving the quality of life, promoting healthy ageing, and enhancing well-being in older adults[5-6]. These technologies enable older individuals to manage their health more actively, engage in preventative care, and benefit from early identification of health risks[7]. Telehealth has seen substantial expansion in clinical care since the onset of the COVID-19 pandemic. Between March and May 2020, the Australian Government introduced 281 new telehealth items to the Medicare Benefits Schedule (MBS), enabling the entire Medicare-eligible population to access a broad range of health services via videoconferencing and phone[8]. By December 2021, over 86.3 million telehealth services had been delivered to 16.1 million patients by more than 89,000 providers, amounting to $4.4 billion in Medicare benefits.

Research consistently shows that telehealth not only matches but, in some cases, outperforms traditional care in terms of clinical outcomes, patient satisfaction, and intermediate health outcomes[9]. The primary advantage of telehealth lies in its ability to offer safe, timely, and continuous healthcare delivery. For rural, regional, and remote communities, telehealth provides additional benefits, including reduced costs, time efficiencies, and improved access to specialist care.

For residents of aged care homes, telehealth facilitates access to medical services from the comfort of their home or RACH, often with the support of caregivers and family members. However, significant challenges persist in the effective implementation of telehealth for this population. These include inadequate ICT infrastructure, limited digital literacy, difficulties in conducting physical examinations remotely, and complexities in interacting with patients who have cognitive, visual, or hearing impairments. These issues are often more pronounced in long-term care settings, where social inequities and existing service gaps can further limit the potential of telehealth.

[4] Royal Commission into Aged Care Quality and Safety. (2021). Final Report: Care, Dignity and Respect. Commonwealth of Australia. Retrieved from https://www.royalcommission.gov.au/aged-care/final-report
[5] World Health Organization. (2024). Ageing and health. Retrieved October 16, 2024 from https://www.who.int/news-room/fact-sheets/detail/ageing-and-health (accessed 4-April-25)
[6] Chen, C., Ding, S. & Wang, J. Digital health for aging populations. Nat Med 29, 1623–1630 (2023). https://doi.org/10.1038/s41591-023-02391-8
[7] Stargatt J, Bhar S, Bhowmik J, Al Mahmud A. Digital storytelling for health-related outcomes in older adults: systematic review. *J Med Internet Res*. (2022) 24:e28113. doi: 10.2196/28113
[8] Australian National Audit Office (ANAO). (2023). Expansion of Telehealth Services. Australian Government. Retrieved from https://www.anao.gov.au/work/performance-audit/expansion-telehealth-services
[9] Daniels and Bonnechere. Harnessing digital health interventions to bridge the gap in prevention for older adults. *Front. Public Health*. (2024). doi: 10.3389/fpubh.2023.1281923

Several Australian studies have trialled telehealth models in aged care settings with mixed outcomes. For example, in early 2020, an after-hours telehealth service was introduced across six RACH in the Nepean and Blue Mountains Local Health District of New South Wales[10]. Backed by new MBS items for GP telehealth consultations, the initiative aimed to address after-hours care gaps. Despite efforts, implementation was hampered by workforce turnover, limited uptake, and technical challenges - highlighting the systemic and operational barriers that must be addressed for telehealth to become a routine element of aged care delivery.

Understanding What Influences Telehealth Implementation in Residential Aged Care

This evaluation study aims to contribute to the growing body of knowledge on telehealth implementation in RACH and applies the Consolidated Framework for Implementation Research (CFIR)[11] to identify the facilitators and challenges to telehealth adoption in three regional Queensland RACH. Through this evaluation, we hope to improve the broader understanding of how telehealth can be effectively integrated into aged care services, ultimately contributing to better healthcare access and outcomes for senior Australians, particularly in rural and remote settings.

Project context and setting

This study forms part of a broader NARDHC seed-funded initiative led by the Northern Queensland Primary Health Network (NQPHN) to enhance access to, and coordination of, care for residents in RACH. Central to the initiative is the deployment of virtual care, facilitated through purpose-built telehealth carts equipped with advanced technology to capture high-resolution images, video, and vital signs. In future iterations, this model is expected to expand to support shared care planning and electronic medication management.

In February 2024, three RACH in Regional Northern Queensland were selected as pilot sites for the initial implementation. According to the Modified Monash Model (MMM),

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[10] Trankle, S. A., & Reath, J. (2021). Evaluation of the Nepean Blue Mountains After Hours Telehealth Service in Residential Aged Care Facilities (RACFs). Nepean Blue Mountains Primary Health Network. Retrieved from https://www.nbmphn.com.au/NBMPHN-Library/Evaluation-of-NBMPHN-After-Hours-Telehealth-in-RAC

[11] The CFIR includes five major domains: (1) intervention characteristics, (2) inner setting, (3) outer setting, (4) characteristics of individuals involved in the implementation, and (5) the implementation process. These domains and their associated constructs offer a robust structure for examining the barriers and enablers of telehealth implementation in RACH.

which categorises Australian locations based on remoteness and population size, all three sites are situated in outer regional centres (MM2, ASGS-RA 3) - areas located within 20km of towns with populations exceeding 50,000.

This evaluation project is nested within NARDHC, a cross-sectoral partnership focused on improving health outcomes across rural, regional, and remote communities in Northern Australia. Through collaborative efforts involving academic institutions, healthcare providers, and industry, NARDHC supports the development of a digitally capable health workforce and promotes the sustainable integration of digital health solutions.

Ethics approval for this study was granted by the James Cook University Human Research Ethics Committee (#H9598).

Study design

This evaluation employed a concurrent mixed methods design to examine the early implementation of telehealth in RACH in regional Queensland. The study aimed to triangulate data from multiple sources - document review, direct non-participant observation, and key informant interviews - to enhance the trustworthiness and depth of the findings. The CFIR provided the theoretical underpinning for the study, guiding data collection, analysis, and interpretation of results.

By integrating qualitative insights with observational and documentary data, the evaluation sought to generate a more comprehensive understanding of the contextual and process-related factors influencing telehealth uptake in aged care settings.

Participant recruitment

Key informants were purposively selected to ensure representation across roles directly involved in the pilot telehealth rollout, including registered nurses, facility managers, general practitioners, allied health staff, and implementation leads. Recruitment was facilitated by the NQPHN, who distributed email invitations and study information to eligible individuals. Participation was voluntary, and all participants received a $50 gift voucher in recognition of their contributions.

Data collection

Three sources of data were collected concurrently:

- Document review: Project documentation, planning materials, and internal reports were reviewed to contextualise the rollout process.

- Non-participant observation: Site visits and observational field notes were used to capture real-time interactions with telehealth equipment and workflows within the RACH settings.

- Semi-structured interviews: Interviews were conducted with two key informants via Microsoft Teams, audio-recorded with consent, and transcribed verbatim. The interview protocol (Appendix I), co-developed with research staff and piloted for clarity, aligned with CFIR domains to explore implementation readiness, experiences, perceived outcomes, and future opportunities.

Data analysis

Data from all sources were analysed using a directed content analysis approach, with CFIR constructs serving as an a priori coding framework. Interview transcripts were coded by a member of the research team, and themes were extracted into a master spreadsheet for synthesis. Observational and documentary data were integrated during analysis to triangulate findings, corroborate emerging patterns, and strengthen the validity of conclusions. Each coded insight was assessed for valence to determine whether it acted as a facilitator (positive) or barrier (negative) to implementation.

Evaluation Findings

Implementation experiences

Our evaluation of telehealth implementation across two RACH in regional Queensland, identified several important insights. Although the sample size was limited to two sites, the findings highlight critical themes around both the barriers and enablers of telehealth adoption in these settings. These insights reflect the complexities of integrating telehealth into aged care environments, where staffing limitations, technological constraints, and the diverse needs of residents present ongoing challenges.

Site A: enthusiastic adoption with operational challenges

- The introduction of telehealth was championed by internal advocates who recognised its potential to enhance access to timely and quality care.

- The implementation process involved collaboration with IT teams and external providers to procure and install the necessary telehealth cart equipment.

- While integration into medical workflows required only minimal adjustments, nursing staff assumed new responsibilities, including managing the telehealth equipment and facilitating consultations.

- Despite these changes, the site reported early signs of positive impact, particularly in reducing unnecessary transfers and supporting timely reviews.

Site B: gradual uptake and mixed engagement

In contrast, the second site experienced a more measured approach to implementation.

- Although the telehealth cart was well introduced, uptake among staff remained inconsistent.

- Some team members expressed a preference for more familiar tools, such as tablets for virtual consultations.

- Engagement from healthcare providers was limited during the initial stages, which affected the perceived utility of the system.

- However, telehealth still demonstrated value in key moments - most notably during palliative care situations, where families appreciated the ability to connect with residents remotely.

Cross-cutting challenges and considerations

- Both sites encountered similar systemic and operational challenges. Workforce shortages, high staff turnover, and limited early involvement from healthcare providers emerged as key challenges.

- Technical issues, ranging from audio failures to internet connectivity also hindered smooth operation but were not significant. Additionally, the size and mobility constraints of the telehealth carts sometimes presented logistical difficulties within working environments, particularly when navigating resident rooms or narrow corridors.

Emerging value and recommendations for scaling

- Despite these challenges, telehealth was viewed as a valuable adjunct to care - particularly for after-hours services and in circumstances where in-person visits were not feasible.

- Training and ongoing support for RACH staff were identified as critical to building confidence and ensuring sustained use.

Recommendations include:

- engaging healthcare providers earlier in the process

- integrating telehealth into routine care workflows

- tailoring training programs to reflect the realities of aged care settings.

Enablers to telehealth implementation

The successful adoption of telehealth within residential aged care is supported by a combination of organisational, technical, and cultural opportunities. These factors, spanning across implementation contexts, help establish a foundation for sustainable and meaningful integration.

Organisational readiness and staff engagement

Proactive involvement of key personnel
Successful implementation hinges on the active participation of key individuals - including GPs, nursing leads, and IT support. Their early and sustained engagement ensures alignment with organisational priorities and facilitates smoother coordination, signalling readiness for innovation within the facility.

Long-term staff presence and workforce stability
A stable workforce serves as a cornerstone for continuity in care and systems adoption. When experienced staff remain embedded within the organisation, they provide the consistency needed to sustain telehealth initiatives and embed new practices into routine service delivery.

Openness to continuous improvement
Residential care that fosters a culture of ongoing learning and reflection is better positioned to adapt telehealth practices over time. This adaptability enables RACH to respond to changing needs and feedback, ensuring that telehealth remains both effective and relevant.

System compatibility and minimal disruption

Minimal workflow changes
One of the key enablers from an operational perspective was the ease with which telehealth can be incorporated into existing workflows. When minimal disruption is needed, staff are more likely to engage with the technology, accelerating adoption and normalisation.

Integration of telehealth carts into current routines
The telehealth cart's compatibility with existing systems - requiring only minor

adjustments - further supports seamless uptake. This enables staff to incorporate telehealth consultations without significant changes to their daily operations, preserving workflow efficiency.

Dual-screen setups for remote chart access
The use of dual monitors enhances the practicality of telehealth consultations, allowing clinicians to access electronic health records while engaging with residents. This configuration improves both the flow and effectiveness of virtual assessments.

Enhanced care delivery and technological advantage

Availability of complementary tools
Supplementary telehealth tools improve the adaptability and clinical utility of remote consultations. With access to such devices, healthcare professionals can conduct more comprehensive assessments, increasing the overall effectiveness of telehealth interactions.

Improved access to care and reduced time commitments
Telehealth presents a clear advantage in terms of access and efficiency. By reducing travel time for clinicians and alleviating the logistical burden of in-person appointments, it allows care to be delivered more flexibly - particularly in after-hours or geographically isolated contexts.

Patient receptiveness and positive engagement
Willingness from residents to engage with telehealth significantly eases the transition. When patients respond positively to the experience, it reinforces clinician confidence and helps normalise the use of telehealth as a legitimate alternative to face-to-face interactions.

A viable alternative when in-person visits are not feasible
In situations where physical visits are challenging - due to mobility limitations, illness, or geographic distance - telehealth offers a practical and valuable substitute. Its reliability in these contexts strengthens its role as a vital tool within aged care delivery.

Challenges to telehealth implementation

Despite the potential of telehealth to enhance care in RACH, several challenges continue to impede its widespread adoption and sustainable integration. These challenges span across multiple domains, including policy, staffing, technical infrastructure, and individual engagement.

Policy and system-level constraints

Lack of clear policy direction and external incentives
A key barrier is the absence of defined policies or funding mechanisms to support telehealth in aged care. Without strategic direction or financial incentives, RACH face difficulties prioritising telehealth, which limits institutional buy-in and consistent uptake.

Uncertainty regarding long-term sustainability
Concerns around the ongoing viability of telehealth - due to unclear infrastructure support or future funding - deter residential care facilities from making long-term investments. This systemic uncertainty fosters hesitation and contributes to fragmented implementation efforts.

Organisational challenges and workforce pressures

High staff turnover affects continuity and training
Frequent workforce changes disrupt telehealth training efforts, resulting in knowledge gaps and reduced confidence among new staff. This undermines continuity of care practices and inhibits the consistent use of telehealth systems over time.

Staffing shortages constraining capacity for telehealth delivery
Structural limitations, particularly staffing shortages and unplanned absences, constrain the ability of RACH to dedicate personnel to manage telehealth appointments. As a result, telehealth becomes an added burden rather than a streamlined part of routine care.

Technical difficulties reducing confidence in telehealth systems
Connectivity issues, unreliable audio, and other equipment-related problems frequently hinder effective telehealth delivery. These issues erode staff and patient trust in the technology and discourage consistent use.

Gaps in knowledge, training, and engagement

Limited initial staff education and telehealth familiarity
Inadequate exposure to telehealth during onboarding or ongoing training leaves staff ill-equipped to use the systems confidently. This barrier leads to hesitation, poor uptake, and inconsistent service delivery.

Low uptake of telehealth training among GPs
Where GPs are not actively engaged in training opportunities, their confidence and willingness to incorporate telehealth into clinical practice diminishes. This significantly hinders the integration of virtual consultations as a regular care pathway.

Delayed staff engagement in telehealth education
Slow involvement of staff in early training efforts results in missed opportunities to build competency and momentum. This delayed engagement creates patchy implementation and inconsistent standards of practice.

Intervention-specific considerations

Preference for face-to-face consultations in specific contexts
In some scenarios, the perceived benefits of in-person care outweigh those of telehealth, particularly for complex assessments or relationship-based care. This perception (which may have clinical grounding) limits the perceived relative advantage of telehealth and contributes to provider reluctance to use it as a primary mode of service delivery.

Actual implementation outcomes

- The interviews highlighted the challenges faced in implementing and adopting telehealth in RACH. Ratings of implementation success indicated limited success to moderate progress, with room for improvement.

- Perceptions of telehealth's effectiveness as a virtual care model also varied and reflected some benefits but a lack of full integration.

- Views on sustainability were mixed, ranging from uncertainty about its long-term viability to optimism, suggesting that with continued effort, telehealth could be sustained.

- Overall, while telehealth has potential value in RACH, its success has been hindered by challenges such as staff engagement, workflow integration, and technical challenges.

- Continued efforts and targeted strategies will be essential to enhance its long-term impact.

Key Insights

Workforce challenges and turnover

Staff turnover and absenteeism emerged as significant barrier to the successful implementation and sustained use of telehealth within residential aged care. These challenges are particularly acute in environments where continuity of care and consistent staff presence are vital for high-quality service delivery. Frequent changes in personnel disrupt workflows, delay training, and hinder the normalisation of telehealth practices.

To address this, RACH could adopt a multi-pronged approach that strengthens workforce stability and builds digital capability across all levels of staff. Strategies to improve working conditions, offer meaningful incentives, and boost job satisfaction can help retain skilled personnel. Importantly, investing in consistent, high-quality training ensures that both new and existing staff are equipped and confident in using telehealth technologies from day one.

Workplace integration and workflow disruptions

Telehealth's integration into existing workflows had minimal disruption when the system was designed to complement, rather than disrupt, existing practices. This is particularly true for healthcare providers who did not need to make significant adjustments to their daily tasks.

However, some staff found that managing telehealth carts during consultations added extra responsibilities. To address this, RACH can ensure that nursing staff are well-supported, with clear guidelines and training on how to use telehealth equipment effectively. Creating clear roles and responsibilities for telehealth-related tasks can help to avoid staff burnout and ensure that the technology does not become a burden.

Gaps in knowledge, training, and engagement

Inconsistent and limited training may create significant knowledge gaps in telehealth delivery. Delayed engagement in telehealth education has led to variable confidence levels and patchy implementation. Building digital health capability requires consistent, high-quality education that reaches all relevant roles - including nurses, care workers, GPs, and administrative staff. Training should be ongoing, practical, and tailored to specific roles and digital maturity levels.

Clinical preferences and intervention–specific considerations

In some scenarios - particularly those requiring physical assessment or sensitive communication, staff and providers continue to prefer face-to-face interactions. This clinical requirement can reduce the perceived value of telehealth and inhibit its routine use, particularly when the advantages are not clearly articulated or understood. To address this, RACH should adopt a flexible, blended care approach that acknowledges the strengths and limitations of both in-person and virtual consultations. Clear guidelines and decision aids can help clinicians choose the most appropriate mode of care delivery.

Patient and family acceptance

Positive feedback from patients and families has underscored the important role telehealth can play in enhancing care experiences within RACH, particularly in the context of palliative and end-of-life care. Remote consultations not only increase access to timely specialist input but also enable families, especially those who live at a distance or cannot visit regularly, to stay engaged in care planning and decision-making.

This enhanced connectivity can be deeply meaningful, fostering reassurance and trust in the quality of care provided. However, for telehealth to be fully embraced, its benefits must be clearly communicated and normalised among residents and their families.
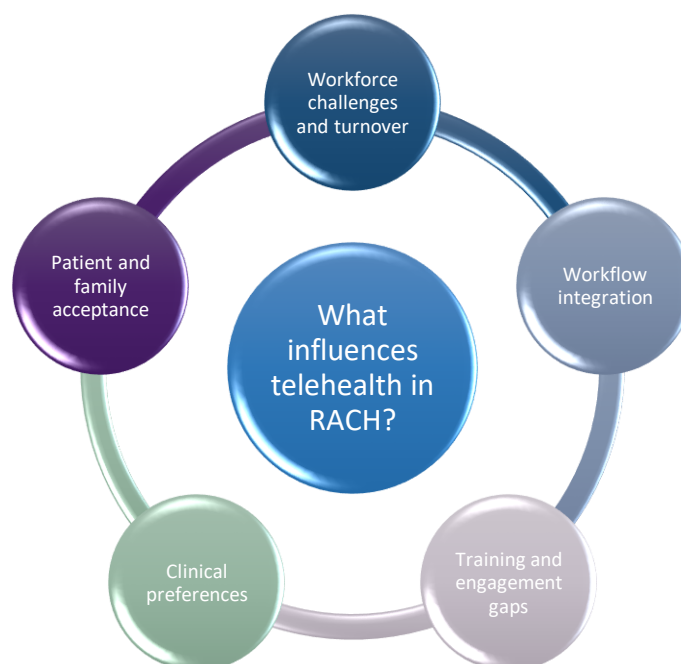
Strengthening Implementation of Telehealth in Residential Aged Care

The findings from this evaluation point to several critical areas where strategic action can strengthen the implementation and sustainability of telehealth in residential aged care. While participants generally recognise the value of digital health in improving access and efficiency, challenges persist around workforce capacity, training, and integration into daily practice. To support a more consistent, confident, and connected approach to virtual care, the following opportunities to strengthen telehealth implementation could be considered.

Implement targeted workforce retention strategies: Improve working conditions, offer competitive remuneration and benefits, and create opportunities for professional growth to enhance staff satisfaction and reduce turnover.

Establish consistent, high-quality telehealth training: Deliver onboarding and ongoing professional development in digital / telehealth tools and protocols. This ensures that all staff – regardless of when they join – are confident and competent in delivering care via digital platforms.

Appoint a Digital Health Champion: Introduce a dedicated Digital Health Champion or Telehealth Liaison Officer role within each facility to maintain continuity, oversight, and enthusiasm for digital health initiatives. This individual would:

- Act as the central point of contact for all telehealth-related queries and issues.
- Provide on-the-ground support and troubleshooting during consultations.
- Lead peer-to-peer learning, coaching, and knowledge-sharing sessions.
- Liaise with internal/external IT teams and clinical partners to ensure smooth coordination.
- Monitor uptake and usage patterns to identify gaps or training needs

Embedding this role would help foster a digitally enabled culture, support new staff integration, and ensure that telehealth remains a consistent and effective mode of care delivery.

Deliver structured, role-specific telehealth training: Design and implement training pathways that match the roles and needs of different staff groups, from basic usage to advanced troubleshooting and digital workflow integration.

Promote early and ongoing engagement in digital learning: Integrate digital health training into induction processes and provide regular refresher opportunities to reinforce capability and keep pace with system changes.

Encourage GP participation through incentives and inclusion: Offer CPD-accredited training and promote telehealth's relevance to collaborative care models to increase GP buy-in and engagement. This will ensure virtual consultations are valued and routinely used.

Support clinical decision-making on telehealth appropriateness: Develop and distribute clear guidance on when telehealth is suitable, helping staff and clinicians to make informed decisions that balance quality of care with efficiency.

Showcase examples of effective telehealth in aged care: Highlight case studies, testimonials, and peer experiences where telehealth has added value - especially in time-sensitive, multidisciplinary, or routine care scenarios.

Adopt a blended model of care: Position telehealth as a complementary tool within broader models of care, enabling flexibility while building normalisation and trust in virtual delivery methods.

Communicate the value of telehealth in enhancing care and connection: Highlight the practical and emotional benefits of telehealth, particularly in improving access to specialists and involving families in real-time, person-centred decision-making.

Leverage stories and testimonials to build trust: Share success stories and personal experiences from patients, family members, and care staff to humanise telehealth and demonstrate its impact. This helps reduce apprehension and builds familiarity with digital care models.

Appendix I: Interview Guide

The following questions serve as a guide. Not all questions were asked of participants if they have already provided relevant detail, to avoid repetition and maintain the flow of the conversation.

Introduction to telehealth integration

- Can you describe your role in the telehealth implementation at [site]?

Prompt - How long have you worked at [site]? / How has telehealth been integrated into the existing work processes?

Prompt - Did you have anything similar at [site] already in place?

- Before the implementation, was there any opportunity to:
    1. trial or pilot telehealth at [site] (on a smaller scale)?
    2. implement it in phases or small steps to test and refine the process?

Prompt – Tell me more about this

Organisational Context and Readiness

- How would you describe the infrastructure at [site] as it relates to implementing and/or delivering telehealth?

Prompt - physical features (space, layout of rooms, equipment); existing technology infrastructure (EHR systems, internet); organisation of tasks and responsibilities among staff

Prompt - What aspects have supported or hindered the implementation of telehealth?

Prompt - What kinds of changes will be needed to accommodate the intervention?

- Were there any technological conditions in the local healthcare environment that supported or hindered the successful delivery of telehealth in your facility?
- What about any policy or local regulations?

Prompt - internet access, tech infrastructure, family or patient consent.

- Was the implementation of telehealth prioritised (or delayed due to competing demands in [site])?

Prompt - What factors influenced whether telehealth was considered a high/low priority?

Experiences with Telehealth Implementation

- What kinds of changes did you have to make so that telehealth could work in [site]?

Prompt - technological issues, training requirements, coordination among staff, adjusted to fit existing workflows

- What kinds of training, support, or incentives were available to help you implement and deliver telehealth at [site]?

Prompt - Which of these was most helpful? / Which of these was least helpful?

Prompt - Were there any disincentives or barriers you encountered?

Prompt - Were there any incentives or disincentives that motivated [you] to support the implementation of telehealth?

- How does telehealth compare to other [traditional face-to-face] care models used in [site]?

Prompt - What advantages / disadvantages does it have?

- How has telehealth impacted the quality of care for residents at [site]?

Prompt - Are there any specific examples of improvements in care or challenges that you've observed? (advantages / disadvantages)

- What specific features of the telehealth system have been most beneficial or challenging for residents and staff?

Prompt - How do these features impact your ability to deliver care effectively? (technological issues, training requirements, coordination among staff).

Reflection and Future Considerations

- How does the telehealth cart fit with the existing workflow at [site]?
- If you had the opportunity to revise or modify how telehealth is used at [site], what changes would you make?

Prompt - What would you have done differently during the initial implementation?

Prompt - What did you learn that would be relevant to another site implementing the practice?

- Overall, from a scale of 1 to 5, where 1 is unsuccessful, and 5 is successful, how successful was [site] in adopting telehealth?

Prompt - Why did you choose that number? / What would it take to increase that number

- Overall, from a scale of 1 to 5, where 1 is unsuccessful, and 5 is successful, how successful was [site] in implementing telehealth?

Prompt - Why did you choose that number? What would it take to increase that number

- Overall, from a scale of 1 to 5, where 1 is unsuccessful, and 5 is successful, how successful was [site] in sustaining telehealth?

Prompt - Why did you choose that number? What would it take to increase that number

- Based on your overall experience, from a scale of 1 to 5, where 1 is unsuccessful, and 5 is successful, how successful is telehealth as a virtual and connect model of care for [site]?