INTRODUCTION

Residents in residential aged care facilities (RACFs) are amongst the most vulnerable to the negative health impacts of COVID-19. In Australia, by October 2020, RACF residents had comprised 75% of all COVID-19 deaths, and staff working in this setting the majority of healthcare worker infections. RACFs have experienced a similar vulnerability internationally. Based on data available from 21 countries, ‘care home’ residents have accounted for conservatively 46% of all COVID-19 deaths. Whilst data based on the numbers impacted by COVID-19 demonstrate surging demand for palliative care services, less is known about the true burden of morbidity and symptom experience of those in RACFs and how these have been managed nationally or globally.

The aged care sector has been ill-equipped to respond to this pandemic. Limitations have arisen as a result of complex governance structures and staffing factors, including a workforce that is under-resourced, deskilled, with fewer registered nurses, and often working across numerous RACFs. Resident demographics have also posed complexities due to the frequency of dementia, and experiencing delirium in the setting of COVID-19 infection, limiting capacity to follow infection control strategies. Evidence-based models addressing RACF infection...
control and management, and the provision of palliative care in the setting of COVID-19 infection are sparse, and international responses have varied. Australia has responded by establishing a federally funded surge workforce initiative. Clearly, no single discipline or team will be equipped to manage all required aspects in the complex environment of an RACF COVID-19 outbreak, and planning in Australia has favoured resourcing acute treatments such as ventilator beds over funding palliative care expansion.

Never before has comprehensive geriatric and palliative care provision been so challenging, when facilities are ‘locked down’, regular staff furloughed and external service providers including general practitioners (GP), community palliative care services as well as family and friends are prohibited from visiting. COVID-19 has challenged the philosophical stance and practices of providing palliative care, given the numerous social impacts. Some of the constraints compromising care include the rapidity of illness preventing advance care planning; symptom burden (particularly dyspnoea and delirium) limiting communication; social distancing limiting family presence at the bedside and informal caregiving; and isolation limiting the way we communicate and ‘not abandon’ patients.

These constraints and surging needs have challenged us to respond to deliver care in new ways. Telehealth via videoconferencing platforms has never been so important, and the following case series illustrates an innovative and integrated response model between a new tertiary hospital outreach palliative care service, Rapid Response Palliative Care Integrated Community InReach Division (RaPID), Residential InReach (RiR) program and a community palliative care service utilising a videoconferencing platform. RaPID is a highly collaborative, agile service, which in broad terms aims to bridge the gaps in care when patients transition between hospital and community settings. Service descriptions, including staffing and roles, are provided in Figure 1.

### 2 | CLINICAL SCENARIO

The RaPID service was asked to assist a metropolitan RACF experiencing a significant COVID-19 outbreak. All existing staff had been furloughed and the facility issued with an external surge-nursing workforce. Medical governance was referred to the geriatrician-led residential inreach service. The facility was locked down and GPs deferred patient care to the hospital team.

Upon our initial contact, the RACF nursing team were caring for multiple residents receiving active treatment, with steroids and oral antibiotics for COVID-19, and simultaneously providing palliative care for multiple terminal-phase residents. To administer medications for symptom relief, nursing staff were donning and doffing personal protective equipment (PPE) up to hourly to leave patient care ‘red zones’ and enter ‘green zone’ medication rooms, posing significant hazard to themselves and the resident cohort.

Nursing staff were not confident assessing for adequate symptom control amongst residents and expressed uncertainty regarding prognostication, and when individuals’ goals of care should be changed from active treatment to end-of-life care. Despite best care intentions, nursing staff were operating outside their usual scope of practice, which was generalist hospital nursing. There was variation in palliative care medication prescribing patterns, and scope for improved symptom control for patients who were dying, as well as those outside of the terminal phase.

### 3 | THE INTERVENTION

An innovative and collaborative model of care was established between residential inreach, RiR, the RACF nursing team and RaPID. The RaPID service established and led a virtual videoconference upon referral, and each business day thereafter. Subsequently, the local community palliative care service was also invited and joined the daily virtual patient reviews. Figure 1 illustrates the integrative model of care.

Patients identified as having palliative goals of care, and the care needs of deteriorating patients, were reviewed in a daily virtual round. Referred patients were assessed daily in terms of their symptom burden and phase of care, utilising validated Palliative Care Outcome Collaboration tools. The RACF nurse in charge was integral in identifying deteriorating residents, introducing the collaborative service to family members and obtaining appropriate consent. Family members were invited to attend the round for the clinical review and subsequent care planning discussion for their relative if they wished. Family members wishing to attend were added to the group call from the program.
virtual ‘waiting room’ at the correct time and then left the call after their relative’s review and daily treatment plan was completed, and their questions answered.

Key elements included:

1. Education around prognostication and symptom assessment in the dying patient.
2. Use of a standardised palliative care symptom assessment tool, allowing for consistent monitoring and proactive management with as-needed medications.
3. Education regarding palliative care medications, including indications and dosing.
4. Standardisation of palliative care medication prescribing and availability of a medication impress within the RACF.
5. Clarification of team roles, including after-hour contacts for RACF staff and family members.

Retrospective review of this program was deemed a quality assurance activity and exempt from human research ethics committee review by the Monash Health Research Support Services (RES-10-0000-822Q, dated 07/11/2019).

4 | OUTCOMES

The demographics of the seven COVID-19-positive residents cared for by this innovative collaboration, and the clinical contacts are summarised in Table 1. Individual clinical trajectories and interventions provided to these residents identified to be at risk of dying are outlined in Figure 2.

Staff reported greater confidence identifying residents approaching end of life and an ability to provide excellent symptom management and palliative care. The use of a Surefuser device was incorporated when required, to deliver continuous subcutaneous infusions of palliative care medications. This improved symptom management and reduced nursing infection risks, associated with removing PPE, by reducing movement between red and green zones.

Joint virtual rounds facilitated efficient and safe patient reviews. Maximising communication between services, these rounds allowed for clear definition of each service’s role, improved clarification of goals of care and a consensus regarding active or palliative-intent treatments prescribed. Inviting family members to join the virtual review for their loved one aimed to promote inclusive discussions and needs assessments, and improve family understanding and confidence in the care provided.

Inclusion of the community palliative care service allowed increased scope to assess family caregiver needs, provision of bereavement support, which has been recognised to be ‘an integral part of health and social care provision’, offered the facility 24-hour specialist palliative care telephone support and provided ongoing monitoring for surviving residents.
The recovery of the remaining COVID-19-positive resident saw the close of this collaboration. No new residents became infected during this period. The RACF clinical nursing lead provided the following feedback:

**TABLE 1** Patient demographics and service delivery snapshot

| Variable | Demographics (n = 7) | Clinical contacts (n = 36) |
|----------|----------------------|---------------------------|
|          | Age in years, mean (range) | 92.14 (83–96) | Points of clinical contact with two or more services, n (%) | 30 (83.33) |
|          | Female, n (%) | 4 (57.14) | Days from referral to first review, mean (range) | 0.14 (0–1) |
|          | Birth country—Australia, n (%) | 4 (57.14) | Days from referral to discharge, mean (range) | 4.71 (1–9) |
|          | Relationship of primary next of kin—offspring, n (%) | 6 (85.71) |
|          | Relationship of primary next of kin—spouse, n (%) | 1 (14.29) |

The model presented is scalable and mitigates risks towards professionals and patients, potentially working across multiple sites, through the use of telehealth modalities and well-defined collaborative links. Supporting Their expertise and the way they all worked so well together as a team, but also with the Medical InReach doctor and myself, was second to none. I can ‘hand on heart’ say that we could not have provided the standard of end of life care that we did without the input and direction they provided. The ease with which we were able to access these services, and the seamless communication made it seem like this was a planned relationship, not one that was borne from an emergency situation. This service was an integral part of the support that we provided...and should a situation like this ever occur again in the future, I know that we could not do it without this support.... It simply ‘worked’.

**5 | DISCUSSION**

The model presented is scalable and mitigates risks towards professionals and patients, potentially working across multiple sites, through the use of telehealth modalities and well-defined collaborative links. Supporting
both the terminal and symptomatic patient, the collaboration was comprehensive and complimentary, with each service contributing different resources and staff mix, including geriatricians, palliative medicine specialists and 24-hour RACF and community palliative care nursing support.

Grief and bereavement support needs for family members post a COVID-related death are significant, and this collaboration was able to provide family support whilst residents were receiving care, after death and also ongoing support and monitoring for a resident who recovered and their family.

The COVID-19 pandemic has highlighted the increasing need for accessible specialist palliative care to the RACF sector. Imposed restrictions and need for social distancing have meant the medical world has had to adapt in rapid ways. Telehealth is not new, but within palliative care, it has been under-utilised, likely out of speculative beliefs that high-level palliative support may only be provided in-person.

Telehealth restrictions include initial cost of equipment, technology familiarity of residents or staff assisting, Internet connectivity and cybersecurity. In metropolitan Melbourne, we were fortunate to have reliable Internet connections, and our hospital provided a secure telehealth platform. This may not be equivalent in other locations. Occasionally video signals were delayed, possibly related to larger numbers of participants dialling in; however, this was managed by staff turning off video functions when not directly involved in conversations. Time was required to provide information to family members about the purpose and structure of the daily virtual round and to provide invitations and log-in instructions for those who wished to participate. Likewise rotating hospital staff, RACF staff and community staff also required instructions regarding how to join the virtual round. If patient numbers or facility and staffing numbers were greater, administration support would be crucial to facilitate this on a larger scale. Choice of technological device made a difference, with fewer participants being visible at one time on smaller smartphone screens, and larger numbers of participants visible if using computer or tablet devices. This collaboration was established using pre-existing technology within days. Our actions were not extraordinary; in fact, they were simplistic once lines of communication and routine had been established. Increased access to palliative care does not need to be complicated but requires willingness to continue to work towards meeting the challenge.

Aside from technological limitations, the team faced other hurdles, such as the availability of palliative care medications within the RACF and minimal opportunity for GP engagement. Such limitations would be important to pre-empt and overcome in future responses.

Strengths of this service and facilitators included pre-existing working relationships between residential inreach and RaPID, as well as RaPID and community palliative care services. This ensured quick, seamless and efficient coordination of acute, community and RACF workforces to meet the needs of patients and their families.

The potential of this model is not limited to COVID-19 pandemic outbreaks, but can be applied where a shortage of specialist geriatricians or palliative care services exist, or rapid responsiveness is crucial.

6 CONCLUSIONS

The global COVID-19 pandemic has highlighted deficiencies amongst RACFs regarding infection control, communication, supportive and palliative care provision with devastating consequences. This collaborative model was reactive and proactive in caring for a number of residents at different stages of illness secondary to COVID-19. It is crucial that our most vulnerable residents are provided with the highest quality of care and have ready access to specialist geriatrician and palliative care services. This innovative and nimble model of integrating services, through the utilisation of telehealth platforms, allows for the provision of care, and crucial interaction with loved ones in such unprecedented times.

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CONFLICTS OF INTEREST

No conflicts of interest declared.

DATA AVAILABILITY STATEMENT

Data available on request due to privacy/ethical restrictions.

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