

JULY 2019

Second Report: Evaluation of Residential in Reach: the perspective of residential aged care

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Table of Contents

Abbı	eviations	3
1.	Executive Summary	4
1.	Introduction	4
2.	Methodology	4
3.	Key Findings	5
4.	Discussion	7
5.	Conclusions	8
6.	Limitations	8
7.	Recommendations	8
2.	Introduction	11
2.1	International and Australian Hospital Avoidance Programs	13
2.2	2 Victorian Residential In Reach Services	14
2.3	Melbourne Health	15
2.4	4 Melbourne Health RiR Service	16
3.	Method	16
3.	1 Ethics Approval	17
3.2	2 Study Design	17
3.3	3 Data analysis	19
4.	Findings	20
3.	What clinical services does the Melbourne Health RiR service provide?	20
3.2	2 User perspectives of the Melbourne Health RiR service	21
3.3	Factors associated with high use of the Melbourne Health RiR service	22
	3.3.1 Limited access to timely and appropriate medical care	22
	3.3.2 Inadequate RACS staff numbers and skills mix	26
	3.3.3 Deskilling of nurses by RACS policies	26
	3.3.4 Preference of residents to be treated in the RACS	27
3.4	4 What are alternative services to the RiR service	28
	3.4.1 Other Melbourne Health Services	28
	3.4.2 Geriatric General Practices	29
	3.4.3 Private Geriatrician Services	29
	3.4.4 Private Wound Services	30
4	Discussion	30
5	Conclusions	33
6	Limitations	34
7	References	35

Abbreviations

APATT	Aged Psychiatry Assessment and Treatment Team
AV	Ambulance Victoria
ACEBAC	Australian Centre for Evidence Based Aged Care
CCC	Clinical Care Coordinator
BASICS	Behaviour Assessment and Specialist Intervention Consultation Service
CNS	Clinical Nurse Specialist
DBMAS	Dementia Behavior Management Advisory Service
DHHS	Department of Health and Human Services
ED	Emergency Department
EN	Enrolled Nurse (previously known as Division 2 in Victoria)
EEN	Endorsed Enrolled Nurse
EOL	End of Life
GP	General Practitioner
НІТН	Hospital In The Home
HINH	Hospital In the Nursing Home
HREC	Human Research Ethics Committee
IV	Intravenous Therapy
LGA	Local Government Authority
NP	Nurse Practitioner
PCW	Personal Care Worker
PEG	Percutaneous Endoscopic Gastrostomy
PSRACS	Public Sector Residential Aged Care Services
RACS	Residential Aged Care Service
RAPID Assist	Responsive Acute Palliative Intervention and Decision Assistance
RiR	Residential in Reach
RN	Registered Nurse (previously known as Division1 in Victoria)
WREN	Wound Resource Enrolled Nurse

1. Executive Summary

1. Introduction

- 1.1 People living in residential aged care are older, frailer, have multiple comorbidities and are more likely to have dementia than previous cohorts, so the medical and nursing care they require is more challenging and complex.
- 1.2 The Australian Centre for Evidence Based Aged Care (ACEBAC), La Trobe University was commissioned by the Department of Health and Human Services (DHHS) in 2014 to conduct an in-depth evaluation of the Residential in Reach (RiR) service in the Eastern Health region, from the perspective of the users of the service. The aim of the evaluation was to explore and explain why some residential aged care services (RACS) use the RiR service more frequently than others.
- 1.3 A final report on the findings of that evaluation of the Eastern Health RiR service was submitted to the DHHS in October 2017. The findings suggested that the Eastern Health RiR service was used as a substitute for timely access to appropriate medical care, due to general practitioners (GPs) being unavailable. The service was also used to provide clinical nursing care because there were inadequate numbers of skilled staff in RACS to manage deteriorating residents; and because some RACS policies limited registered nurses' (RNs) scope of practice.
- 1.4 Considering these findings, and as the Eastern Health RiR service is considered 'gold standard' i.e. it was geriatrician-led with staff consisting of a geriatrician, a medical register and clinical nurse specialists (CNS), the DHHS extended the evaluation of the RiR services in Victoria to include a different service model (the nurse-led service at Melbourne Health), to provide a better overview of high service use.

2. Methodology

- 2.1 The evaluation of the Melbourne Health RiR service commenced in June 2017, following ethics approval from Melbourne Health (LNR/17/MH/119) including Site Specific Approval (2017.040), and La Trobe University, Human Research Ethics Committees.
- 2.2 A qualitative approach was used to explore in-depth use of the Melbourne Health RiR service from the perspective of those who use it, including RACS staff (nurses and managers), and GPs, who provide medical care to residents in RACS. The Melbourne Health RiR service staff were also interviewed.

- **2.3** RACS that were high and low users of the RiR service were identified in consultation with the manager of the Melbourne Health RiR service.
- 2.4 In-depth interviews were conducted with fifty-six participants, including the Melbourne Health RiR service staff, staff from eight RACS and GPs providing medical care to residents in these RACS.
- 2.5 Interviews were audio-recorded and transcribed verbatim. Content analysis was used to determine the reasons for the use of the Melbourne Health RiR service. Extracts from participants' responses were used to illustrate the findings of the evaluation.

3. Key Findings

- 3.1 The Melbourne Health RiR service is highly regarded by all who use it, with participants reporting they use it for advice, support, and clinical expertise. As was found in the evaluation of the Eastern Health RiR service, RACS staff and GPs use the Melbourne Health RiR service to assist with the review and management of an array of acute conditions among residents including: chest, wound and urinary infections; medication orders; procedures such as change or reinsertion of percutaneous endoscopic gastronomy (PEG) tubes and urinary (urethral and suprapubic) catheters; wound care; insertion of intravenous lines for hydration and antibiotics; and to reduce the inappropriate transfer of residents to hospital.
- 3.2 The RACS staff and GPs participating in this evaluation also use the Melbourne Health RiR service for pain management and palliation at end of life (EoL) and for responsive behaviours management. However, there are Melbourne Health services explicitly designed to assist with these issues, which RACS staff and GPs will use in preference to the RiR service.
- 3.3 This evaluation found the factors associated with the high use of the Melbourne Health RiR service by RACS staff and GPs to be the same as those associated with high use the Eastern Health RiR service. These are: in situations where the resident's GP is unavailable to provide timely and appropriate medical care to residents who are deteriorating or who have acute conditions that require urgent medical management; to access skilled nursing care when it is unavailable in a RACS; or when RACS policies prevent or limit registered nurses' (RNs) scope of practice so that they are unable to provide the care residents require.
- **3.3.1** The first key finding of this evaluation is that access to timely and appropriate medical care in RACS is often difficult, especially when residents are acutely ill or injured,

deteriorating and/or dying. GPs are often too busy (providing primary care) to attend during business hours and most do not provide after-hours services. The locum services are thought to be an inadequate for the medical care needs of resident's after-hours as they cannot respond in a timely manner; many locum doctors do not understand the residential aged care setting and may have little experience managing the medical needs of older and/or dying people.

- 3.3.2 While the residential aged care sector has become more challenging due to the complexity of care required by residents, this evaluation highlights inadequate staffing numbers and skills mix in many of the participating RACS. This has implications for the ability of service providers to provide high quality nursing care as required by residents. In some RACS there is no RN on site overnight which severely compromises assessment of residents' needs and the administration of pain medications. This situation places the staff working overnight with little options other than to transfer residents to acute care or leave the resident in pain or unassessed until the morning when an RN is on duty.
- **3.3.3** Many RACS have policies that reduce the ability of RNs to work to the full scope of their professional practice, effectively deskilling them. Some of the RNs participating in the evaluation expressed acceptance of this, particularly those of non-English speaking background who had undertaken their nursing qualification in another country.
- 3.3.4 There was agreement among most participants, including staff from the RiR service, GPs and some RNs, that nurses working in the residential aged care sector do not have the competence or confidence to adequately assess and make decisions about deteriorating residents.
- **3.4** Several key differences between the Melbourne Health and the Eastern Health RiR services were highlighted by this evaluation.
- 3.4.1 The Melbourne Health RiR service is nurse-led. The CNS in the RiR service assess residents, initiate treatment and if warranted, refer to the Melbourne Health Hospital In The Home (HITH) service which operates 24 hours a day, or other Melbourne Health services. The RiR service provides only one or two visits to a RACS before referral, effectively creating a two-step process of resident care.
- **3.4.2.** Staff at the Melbourne Health RiR expressed concern about those RACS in the health region that did not use their service or were low users, suggesting use of RIR was in the best interest of residents. These views contrast with those expressed by the Eastern

Health RiR staff who expressed the view that low use of their service was an indication of the adequacy of the medical and nursing care available in the RACS. The Eastern Health RiR service actively encouraged RACS to upskill staff through education and better clinical practices thus reducing their dependency on their service for nursing care. The Melbourne Health RiR also offered education and training to RACS staff, but they were constrained by Melbourne Health policies, which meant they could not refuse to assist RACS with simple nursing care such as changing of urethral catheters.

- **3.4.3.** From participant reports, RACS staff in the Melbourne Health region had better access to after-hours and specialist medical care compared to RACS in the Eastern Health region. This was due to several factors:
 - Melbourne Health has several alternative specialist services available to RACS including the Behaviour Assessment and Specialist Intervention Consultation Service (BASICS), which supports residents with dementia living in a RACS and the Responsive Acute Palliative Intervention and Decision Assistance (RAPID Assist), which provides specialist coordination and advance care planning, and symptom management, especially for pain;
 - The emergence of GP practices solely dedicated to residential aged care that provide medical care to residents in several RACS in the Melbourne Health region; and
 - The availability of private geriatricians who provide specialist services to several RACS in the Melbourne Health region.

All these services reduced the dependence of RACS on:

- The individual GPs (who were often unavailable during business hours and did not provide an after-hours service);
- The locum service, (which was thought to be the last option as many of the attending locum medical officers had little experience of caring for older people) to provide urgent medical care;
- The ambulance service to transfer residents to hospital for medical care (when residents preference was to stay in the RACS); and
- The Melbourne Health RiR service (which provides some after-hours coverage (until 2100 hours on weekdays and between 0800 and 1800 hours on weekends).

4. Discussion

The findings of this evaluation into the factors that influence the high use of the Melbourne Health RiR service are consistent with issues identified in the evaluation of the Eastern Health RiR service and the literature, namely: the older age and increased acuity of the residents; limited access to timely and appropriate medical care; RACS staffing characteristics which includes the employment of fewer RNs with the skills required to meet the needs of residents; and the wishes of residents to remain in their 'home' facility when unwell.

5. Conclusions

The Melbourne Health RiR service is highly valued and used by the RACS who participated in this evaluation. The service operates differently to the Eastern Health service, in that is nurseled and primarily an assessment and early intervention service, referring residents to the Melbourne Health HITH service if ongoing care is required. However, as was found with the evaluation of the Eastern Health RiR service, the Melbourne Health RiR service, is used as a substitute for the medical and nursing care that GPs and RNs working in the sector should be providing.

6. Limitations

The findings are limited by three factors:

- The small sample size and the self-selected nature of participation, both of which may have introduced biases;
- The RACS participating which, despite maximum variation according to service provider type and high or low use of the RiR service, may not be typical of all RACS in the Melbourne Health region; and
- The type of RiR service evaluated, which is nurse-led and provides assessment, initial intervention and care, then referral as required. While the majority of regional and all subregional RiR services are nurse-led, as are some other metropolitan services, Melbourne Health RiR service differs from Eastern Health which is a geriatrician-led service.

Despite this, the findings do provide indicative conclusions which reflect the findings of the Eastern Health RiR service and other services reported in the literature.

7. Recommendations

7.1 Changing the staffing characteristics in residential aged care

7.1.1 In line with the findings from the evaluation of the Eastern Health RiR service, this evaluation identified that some RACS have few, or no RNs employed after-hours (night duty and weekends). To reduce the inappropriate transfer of residents to hospital and the increasing reliance on other services, including the RiR service, RNs need to be

competent, available and able to provide appropriate care. The Commonwealth Department of Health as the regulator and funder of the sector should make explicit policy around the minimum staffing requirements in RACS. This would enable RACS to better ensure that wishes of residents to remain in the service when unwell or deteriorating, are adhered to. The increased acuity of older people living in RACS means service providers must provide skilled nursing care, as expressed in the Aged Care Act 1997, with adequate numbers of competent RNs working each shift to provide resident care and supervise less skilled staff.

- 7.1.2 The evaluation also highlighted that some service providers have policies that limit the scope of practice of RNs, thereby deskilling them and increasing the use of alternative services such as the RiR service. As above, the Commonwealth Department of Health as the regulator and funder of the sector should make explicit policy that prohibits individual RACS from deskilling their RNs through their service policies which restrict RNs' scope of practice.
- 7.1.3 These policies that restrict RNs' scope of practice effectively shift the cost of providing care from the service provider to the State Government (using services such as the RiR service, BASIC and RAPID services) or the Commonwealth Government through individual residents' use of private practitioners and services refunded through Medicare.
- 7.1.4 The evaluation also highlights the need for RNs to be competent in the comprehensive health assessment of the older person. Most nursing curriculum does not include this despite population trends. In addition, many of the nurses working in the RAC sector have been educated overseas and are constrained by both language and cultural understandings. There is an urgent need for readily accessible, affordable education programs aimed at upskilling nurses working in the sector to facilitate high quality care, clinical reasoning and critical thinking skills, and understanding of evidence-based practice.
- 7.1.5 There needs to be a career pathway for nurses wanting to work in the sector, supported by tertiary qualifications. This should include a qualification that will progress to nurse practitioner (NP), which will provide the specialist skills and knowledge required by the sector which has become increasingly complex and challenging with the increased medical acuity of the residents. NPs would not replace nurses in RACS, rather act as mentors and advisors. Such models exist internationally.

- **7.1.6** It is vital that the barriers that limit newly graduated nurses from making a career in aged care, be eliminated. This includes: making aged care a priority in undergraduate nursing education; a more transparent decision-making staffing-framework to assign the appropriate numbers of skilled staff, including RNs, to meet the needs of residents; and consistent remuneration for nurses across all sectors.
- **7.1.6** As the largest direct care workforce in the sector, consideration needs to be given to further education and training of personal care workers (PCWs) and the development of an agreed competency framework for this workforce group and registration. This would make them more effective members of the health care team by increasing their ability to recognise any deterioration in the health of residents and enable them to more confidently report to nurses.

2. Introduction

Meeting the care and support needs of an ageing population is a critical challenge for Australia. This is especially true in the residential aged care sector, where compared to older people living in the community, older people living in residential aged care services (RACS) i are frailer (Hillen et al., 2017; Theou et al., 2017), have greater levels of dependency and increased care needs due to high rates of dementia and multiple chronicity that impact on their ability to function (Australian Institute of Health & Welfare [AIHW], 2017). The highest levels of care need relate to: impaired cognition and responsive behaviours (64%); support with the activities of daily living such as feeding, dressing, hygiene and mobility (59%); and complex health care (53%) (Hillen et al., 2017; AIHW, 2019). As over a third of Australians aged over 65 years will die in a RACS, residents also require palliative and end-of-life care (Lane et al., 2015).

In Australia, residential aged care is delivered by service providers in accordance with the provision of standardised minimum care outlined in The Aged Care Act 1997. The sector consists of: not-for-profit providers including religious, charitable, community organisations; for-profit (private) providers; and the public sector which includes State and local government authorities (Department of Health [DoH], 2017). The state of Victoria, where the evaluation was undertaken, has the second largest number of residential aged care places in Australia (DoH, 2017). The Victorian Government is a major provider of Commonwealth funded residential aged care services with 178 public sector residential aged care services (PSRACS) providing 5600 aged care places. Victorian PSRACS are: operated by public health services (n=77), including seven multi-purpose services and four incorporated associations; generally small (89% have less than 60 beds); and concentrated in rural and regional areas (80%) (AIHW, 2017). The proportion of for-profit residential aged care providers has substantially increased Australia-wide, mainly large services (50% have more than 100 beds) located in metropolitan areas. In Victoria for-profit providers now manage over half of all Victorian residential aged care places, followed by not-for-profit providers (36%) and the public sector (11%) (DoH, 2017).

Providing care is a critical challenge for the residential aged care sector, especially ensuring a skilled workforce (Productivity Commission, 2011; Willis et al., 2016; Tune 2017). The literature suggests the additional workload in RACS associated with increased resident acuity

(Chenoweth et al., 2014; Henderson et al., 2016; Montague et al., 2015), leaves many staff unable, or ill-equipped, to provide the care required (Lane et al., 2015; Chenoweth et al., 2014). The Australian residential aged care workforce includes RNs and ENs, both nationally registered and regulated, with a scope of practice outlining their roles and responsibilities; and personal care workers (PCWs) (Mavromaras et al., 2016). While the direct care workforce in RACS has grown by 5% since 2012, the proportion of RNs has fallen to 14.9%, a trend not offset by the employment of more ENs, whose numbers have also fallen (Mavromaras et al., 2016). Australian RACS are increasingly staffed with PCWs (71% of the care workforce) who are unregistered, have no nationally consistent position description and varied educational and skill levels (Mavromaras et al., 2016). There is a growing body of Australian literature (Chenoweth et al., 2014; Willis et al., 2016; Tune, 2017; Henderson et al., 2016) that questions the sectors' dependency on staff with limited skills at a time when the care needs of residents have become more complex.

Exacerbation of existing chronic illnesses coupled with an increased susceptibility to new illness or injury due to age and frailty, means that often residents require prompt medical management (O'Halloran et al., 2007; Reed, 2015; Gordon et al., 2015). GPs working collaboratively with RACS staff play a key role in delivering this care, however, an inquiry into the care of older Australians found aged care residents are marginalised in terms of access to, and quality of, medical care (Productivity Commission, 2011). The complexity of the medical care required by residents means GPs need more time to adequately assess and then consider the options available in RACS (O'Halloran et al., 2007; Charles et al., 2006). GPs are time challenged due to their busy primary care schedules, and the current funding structure for the services they are required to provide to older and frailer residents in RACS is inadequate (AMA Aged Care Survey 2017). The 2017 Australian Medical Association Aged Care Survey found that among the GPs responding (10.9% response rate) two-thirds provide medical care to residents in RACS, however this has declined by 13.5% since 2015. GPs who provide services to RACS tend to be older – close to half were over 60 years of age, and the suggestion is that when these GPs retire there will be even fewer providing services to RACS (AMA, 2017; Lewis et al., 2002). Research suggests that improving access to quality medical care in RACS requires effective models of delivery and better reimbursement (AMA, 2017; Reed, 2015; Gadzhanava et al., 2007).

Lack of access to prompt medical management, and insufficient numbers of skilled clinical nurses working in RACS, means deteriorating or injured residents are transferred to acute care. Presentations to acute care, particularly the emergency department (ED), have increased by close to 13% since 2006, with the greatest presentation rate among people aged ≥85 years (Burkett et al., 2017). This high rate of hospital admissions of older people living in RACS (AIHW, 2014) is associated with longer length of stays, and higher rates of re-admission when compared to older people living in the community (Crilly et al., 2008; Hutchinson et al., 2015); with greater risks for delirium, falls, medication errors and death (Dwyer et al., 2014).

2.1 International and Australian Hospital Avoidance Programs

International hospital avoidance programs for residential aged care, many of them multi-disciplinary, have expanded over recent years (Kane et al., 2003; Kane et al., 2004; Szczepura et al., 2008; Sinha et al., 2010; Surrey and Boarders Partnership, 2014; Rantz et al., 2015; Connolly et al., 2015; Morilla-Herera et al., 2016) since the first program from the United States was reported in the 1990s (Ackermann & Kemle, 1998). Variations in the models introduced to reduce hospital transfers and improve residents' health outcomes include: assigning GPs to RACS (Weatherell et al., 2019); assigning small teams of providers (doctors and nurse practitioners (NP) to cover acute care in RACS (Stadler et al., 2019); and early geriatric follow-up visits after hospital discharge (Pedersen et al., 2018).

Several Australian hospital avoidance programs have been introduced over the past decade (Stokes, 2011; Crilly et al., 2012; Conway et al., 2015; Conway et al., 2015) with reports of more since the completion of the first evaluation in 2016. Australian hospital avoidance programs reported included: emergency nurses providing clinical support to RACS staff over the telephone (Hullick et al., 2016); acute geriatric out-reach services (Amadoru et al., 2018; Chan et al., 2018; Jain et al., 2018); hospital in the nursing home (HiNH) programs (Fan et al., 2016); and upskilling and supporting RACS staff coupled with the use of a decision aid tool to enable them to detect, refer and respond quickly to deteriorating residents (Carter et al., 2019). A literature review examining models of care that avoid or improve transitions to acute care for residents concluded the best evidence supports interventions such as outreach services, especially if they incorporate coordination of care, access to skilled care providers and build RACS staff skill capacity (Testa et al., 2019).

2.2 Victorian Residential In Reach Services

In 2008, the Victorian DHHS introduced a Winter Strategy to prevent a repeat of the extreme pressure placed on acute services during the previous year when illnesses such as influenza were common, particularly from older people. As part of this strategy, a RiR clinical support program for RACS was established. Ten health services were tasked to develop and pilot a model of RiR support to reduce the need for older people living in RACS to be transferred to the ED. The model needed to build on existing staffing and resources and enable assessment and management of residents in collaboration with GPs. A review of the program in 2009 (Dench et al., 2009) found wide support for the services and a reduction in the unnecessary transfers of residents to acute care.

There are now 25 RiR services operating in Victoria - Alfred Health, Austin Health, Bairnsdale Regional Health Service, Ballarat Health, Barwon Health, Bass Coast Regional Health, Bendigo Health, Eastern Health, Central Gippsland Health Service, Echuca Regional Health, Goulburn Valley Health, Latrobe Regional Hospital, Melbourne Health, Mildura Base Hospital, Monash Health, Northern Health, Northeast Health Wangaratta, Peninsula Health, Southwest Health Care, St Vincent's Hospital, Western Health, West Gippsland Healthcare Group, Werribee Mercy, Western District Health Service, and Wimmera Health Care Group. The RiR service is available to all registered RACS located within a health service's catchment in metropolitan areas. In regional and sub-regional areas, the catchment area for the RiR program is determined locally by the health service.

The Victorian RiR program consists of different models and variable service availability e.g. none of the sub-regional health services offer a seven day a week RiR service. However, most provide acute hospital-type care (nursing and/or medical) to older people in RACS in circumstances where the residents' care can be safely and appropriately managed. Most services are available between the hours of 8am to 4.30pm, to provide:

- On-call telephone support and advice to RACS staff when a resident becomes unwell
- Visits to facilities to provide acute nursing and/or medical assessment and care of residents, support for aged care staff, and potentially management of resident transfer to hospital
- Visits to EDs and hospital wards to identify residents and facilitate discharge to RACS through liaison with hospital staff

• On-going education of RACS staff on the acute management of residents.

Recent research demonstrates that the program has not only significantly reduced transfers and hospital admissions but has improved resident outcomes (Street et al., 2015), especially those services that are geriatrician lead (Hutchinson et al., 2015). Most recently, research examining the decisions made by RACS staff to transfer residents to hospital or refer them to the RiR service, found the processes were complex but dependent on the availability of medical and nursing care (Amadoru et al., 2018).

In 2014, the increased use of the RiR services by RACS prompted the DHHS to undertake further evaluation of the program, to explore and explain why some RACS use the RiR service (Eastern Health RiR) more frequently than others. ACEBAC undertook the evaluation between 2014 and 2017 and a final report was submitted to the DHHS in 2018. The findings of the evaluation indicated that high use of the service was associated with RACS staff being unable to access appropriate medical care in a timely way, due to GPs being unavailable and a belief that the locum medical services are unsuitable. In addition, the findings indicate that the service is used as a replacement for clinical nursing care, due to the limited number of nurses with the appropriate education and skills to manage deteriorating residents employed in RACS or the policies within RACS that limited nurses to work within the scope of their practice.

As the Eastern Health RiR service was consider 'gold standard', i.e. it was staffed by a geriatrician, medical register and CNSs, it was thought that the findings may not truly represent the use of these services across Victoria. As such, evaluation of another service with a different staffing model was suggested to confirm the findings, and the Melbourne Health RiR service, which is nurse-led, was selected for evaluation.

2.3 Melbourne Health

Melbourne Health is a leading public health service in Victoria, providing the communities in the north and west areas of metropolitan Melbourne, a population of over 1 million, with a comprehensive range of acute, sub-acute, aged and community public health services, delivered through the Royal Melbourne Hospital and North Western Mental Health. The Melbourne Health region takes in several large local government areas (LGA) including inner metropolitan LGAs such as Melbourne and Yarra, and outer metro LGAs of Whittlesea and Hume.

2.4 Melbourne Health RiR Service

The Melbourne Health RiR service is a specialist team of highly skilled CNS with extensive clinical experience in emergency departments intensive care units and other areas, including HiTH. The RiR service nurses liaise with geriatricians from the Royal Melbourne Hospital if specialist medical management is required and when the resident's GP cannot be contacted. To reduce the need for unwell or deteriorating residents to be transferred to hospital, the RiR service has the capacity, following assessment of a resident, to:

- initiate treatment as needed
- manage and change urinary catheters, which may include bladder scanning
- administer intravenous (IV) fluids and medications
- support, advise and educate staff following a resident's discharge from acute care
- refer to the Melbourne Health HiTH
- manage and change percutaneous endoscopic gastrostomy tubes
- manage wounds
- provide palliative care services
- take bloods and electrocardiograms at the bedside
- remote access hospital pathology and medical imaging records
- collaborate with GPs and consult with family.

The service operates 0730 to 2100 hours Monday to Friday and 0800 to 1800 hours weekends and public holidays. The RiR service provides assessment, initial treatment and referral rather than ongoing management. Despite the service being limited to one CNS per shift, which does reduce the number of residents able to be assessed in a single day, in 2018-19 the average number of RiR episodes per week in the Melbourne Health region was comparable to those in the Eastern Health region, 38 and 39 respectively (personal communication DHHS).

3. Method

This evaluation employed a qualitative approach to explore in-depth factors that influence the high use of the RiR service from the perspective of users of the service including RACS staff and GPs, and the RiR service team. This same method was used in the Eastern Health evaluation.

3.1 Ethics Approval

Ethics approval to undertake the evaluation was obtained from the Melbourne Health Research and Ethics Committee (LNR/17/MH/119 including SSA 2017.040), and La Trobe University Human Research Ethics Committee (HREC). As a requirement of the ethics approval a letter of agreement to support the evaluation was obtained from each of the eight services prior to recruitment of participants and written informed consent was obtained from each participant before interview.

3.2 Study Design

The evaluation employed a qualitative study design and data collection that included interviews with RACS staff involved in decisions about the transfer of unwell residents, GPs who provide medical management to these facilities, and CNS and geriatricians working in the Melbourne Health RiR service.

The sample of RACS selected to be approached for participation included high and low users of the RiR service, and were representative of all provider type – PSRACS, for-profit and not-for-profit (community, religious and charitable). In early 2017, the research team approached the manager of the Melbourne Health RiR service team to determine high and low users of the service. Two PSRACS were included, however the third PSRACS in the catchment area was not included as none of the residents were aged over 65 years (Table 1).

The recruitment strategy used at all sites included liaison with a single staff member, usually the manager or clinical care coordinator (CCC), and the provision of information about the evaluation and what participation involved. Site visits were made by the research team to further elaborate on the evaluation and clarify any queries prior to participation.

The service liaison assisted with identification of potential participants (staff and GPs) and in consultation with the research team organised possible interview dates and times. Interviews commenced in June 2017 and were completed in February 2019. A total of 56 interviews were conducted (Table 2).

Site ID	Type of Provider	No of Beds	Level of care	*Use of RiR	*Use of AV/Locum	Staffing Characteristics	After Hours Medical Cover
2000	Public Sector	45 (a third with neurological issues)	High	4-5 times per month	Once a month (AV)	~65 care staff, 15 RNs (12 EFT) & 50 EENs/ ENs No PCWs 1 RN every shift	GP has own locum service
3000	Public Sector	30	High	6-7 times per month	8 times per month (LS)	36 care staff – 6 RNs (4.96 EFT), 30 EENs/ENs 1 RN every shift	Locum service
4000	NFP - Community	92	Mixed	Twice per month, more over winter	Rarely	70 care staff, 14 RNs AM: CCC/RN x1, RN x1, ENs x4, PCW x1 PM: RNs x3, ENs x3 or (ENs x2 & PCW x1) ND: RNs x2, ENs x2, PCW x1 W/E: CCC on call, ENs x3 or (RN x1 & ENs x2)	GPs and occasional locum service
5000	NFP - Charitable	45	High, 80% with dementia	5-6 times per month	Often	RN/Manager on call all time AM: RN x1, PCW x3 PM: RN x1, PCWs x2 AH & WE (each shift): EN x1, PCWs x 2 RN for telephone advice Often RN/manager and RN called back after shift	Locum service or ambulance service
6000	NFP - Charitable	60	High. 85% with dementia	12 times per month	Use locum frequently	AM: NUM x1, RN x1, EEN x1, PCWs x3 PM: RN x1, EN x1, PCWs x3 ND: RN x1, PCWs x3 W/E: the same	GPs and locum service
7000	For Profit	75 with 16 dementia specific	High, 60% with dementia	5 times per month, more over winter	Once or twice month	AM: CCC/RN x1, RN x1, PCWs x 11. PM: RN x2, PCWs x 8 ND: RN x1, PCW x 4 W/E: CCC/RN on call, RN x1, PCWs x 8	GPs and locum service
8000	NFP - Religious	73	High, 85 % dementia	Once a month	4 times per month (AV)	AM: NUM x1, RN x1, EN x1, PCW x3 PM: RN x1, EN x1, PCW x3 ND: RN x1, PCW x3 W/E: the same	GPs have own locum service
9000	NFP - Community	30	High, 100% dementia	Once a month	Rarely	AM: RN, EN, 2 PCW PM: RN, 2 PCW ND: RN, PCW W/E: the same	GPs and locum service

Table 1: Characteristics of participating RACS

Participants comprised: 44 RACS staff (a manager, five RN managers, four clinical care coordinators (CCCs), 16 RNs, 16 EEN or ENs, a PCW and a physiotherapist); the RiR service staff (one RN manager, five CNS and two geriatricians); and four GPs who manage residents' medical care in most of the services. One GP provided medical care to residents at sites 7000 and 8000 and was part of a medical practice focused on residential aged care; another provided care at sites 2000, 7000 and 8000; another at sites 2000, 5000, 6000 and 8000; and the last GP provided medical care at sites 2000, 4000 and 7000. Six of the participants were male (three GPs, one geriatrician, one CNS and two RACS staff). Overwhelmingly the RACS staff interviewed were born overseas (70.5%).

Site	2000	3000	4000	5000	6000	7000	8000	9000	
Participants									
Manager/RN	1	1		1			1	1	5
Manager			1						1
Clinical Care Coordinator/ CCC/RN	1		1		1	1			4
Registered Nurse	2	1	2	1	3	4	1	2	16
Enrolled/Endorsed Enrolled Nurse	7	5	1	1	1		1		16
Personal Care Worker				1					1
Physiotherapist							1		1
Total per site	11	7	5	4	5	5	4	3	44
Melbourne Health RiR service									
Manager/RN									1
Clinical Nurse Specialist									5
Geriatrician									2
General Practitioners									4
Total interviewed									56

Table 2: Participants (n=56)

3.3 Data analysis

All the interviews were digitally audio-recorded and transcribed verbatim by an independent transcriber. All names of individuals and organisations were removed from the transcripts to maintain anonymity, and all participants were allocated a unique identifier. As this was an exploratory study, content analysis, a method for analysing text data by counting various aspects of the interview transcripts, was used.

Qualitative content analysis was used to analyse the interview data. Content analysis is more than merely counting words, it examines the language intensely to classify large amounts of data into categories that represent similar meanings (Hsieh & Shannon, 2005) providing a more objective evaluation of the overall content. The interview transcripts were analysed individually with the main ideas of the text as delineated as primary content and the context information as latent content (Mayring, 2000). Content analysis involves inductive identification and description of explicit and implicit themes emerging from the data (Daly, Kellehear & Gliksman, 1997). Direct quotes were retrieved from the transcripts to illustrate the findings. Strategies used to establish rigor included checking of transcripts against recordings for transcription errors and omissions, and analysis by several members of the research team (Guba & Lincoln, 1989).

4. Findings

The findings of this evaluation suggest that use of the Melbourne Health RiR service among the participating RACS is variable but driven by two overriding common factors.

3.1 What clinical services does the Melbourne Health RiR service provide?

The various clinical issues reported by staff for using the RiR service were:

- complex wound management
- initiation of IV antibiotics to treat infections, including urosepsis associated with progressive neurological diseases like multiple sclerosis (MS)
- management of aspiration pneumonia associated with progressive, neurological diseases like MS
- initiation of IV therapy for dehydration
- management and replacement of urethral catheters, particularly male catheterisation, and supra-pubic catheters (SPC)
- management and replacement of Percutaneous Endoscopic Gastrostomy (PEG) tubes
- palliative and EoL care in some RACS, especially review of medications for pain relief.

As the following participant quotes reveal:

Infection not responding to oral antibiotic; deterioration in general condition without obvious cause, in someone who's not for transfer (Female GP attending RACS 4000 & 7000).

A resident deteriorating or becoming semi-conscious. On a day-to-day basis, they might not be eating. In-reach can do more things here than a locum or

GP. For example, they can take bloods and things like that. Rather than they [resident] go to hospital and must wait a long time (RN/Manager, Not-For-Profit Community).

Usually a cough and fever, so possible pneumonia. If someone's... acute delirium of some sort; someone's agitated and confused (Male GP attending RACS 2000, 4000 & 7000).

3.2 User perspectives of the Melbourne Health RiR service

All participating RACS staff and the GPs interviewed, highly valued and relied on the Melbourne Health RiR service for assessment, initiation of treatment and referral to other services to meet the needs of deteriorating residents. RACS staff and GPs reported that they could not do without the service for information, advice and support, as well as clinical expertise and management of ill and dying residents.

The RiR service is very much part of our team (NUM, PSRACS).

I think it's an excellent service. It's something that can be done in their home, rather than suffering with the pain and stress (RN, Not-For-Profit Community).

Having the access to perform baseline pathology, be able to do interventions like putting up a drip, giving an IV, changing catheters and getting access -because I think some of them can get access to clinical advice over the phone. They [RiR staff] are better at being able to manage situations in the aged care than some of the aged care clinicians, well, clinical staff, because they're doing it all the time (Male GP attending RACS 2000, 5000, 6000 & 8000).

All the participants interviewed would like the RiR service to have extended hours because most need is after hours (overnight), and to have more staff, as having only one CNS per shift limits the RACS access to the service.

Sometimes the RiR nurse is fully booked and we must wait until the next day (RN, PSRACS).

I think the In-Reach is excellent for when the GP is absent or not able to care for the residents. There is no comparison to any other after-hours services. I would recommend if the Government could push towards increasing In-Reach services, especially during the after-hours period (Male GP working in practice specialising in aged care, attending RACS 7000 & 8000).

I think availability always a problem. So there have been a couple of occasions where they're too busy, or they can't get there (Female GP attending RACS 4000 & 7000).

Besides referral from RACS staff and GPs, participants also reported that the RiR service received referrals from family members and Ambulance Victoria, a phenomenon not reported in the evaluation of the Eastern Health RiR service.

We are just starting to get a few patients' relatives ring us. Like today was one. I got a note last night asking, 'Ring family with blood test'. It is infrequent, but it happens maybe about once a month. In my experience, this means that the facility and the family aren't working together. It means that there's a communication breakdown and there's issues there, which makes it quite tricky for us (CNS RiR service).

I think the reason the family call Melbourne Inreach because [resident name] - because this resident has been with the Inreach before. So, the family know that's the service, so sometimes they call them directly as well (RN, Not-For-Profit Charitable).

It's not that uncommon to get Ambulance Victoria to ring. They usually ring because either they get a dispatched call or when Ambulance Victoria attend the facility they think that a transfer to hospital isn't required. And, most of those calls that we receive are quite appropriate. So, most of the phone calls received from Ambulance Victoria are appropriate, but we don't always, we can't always action their request to review the person that they're asking us to (CNS, RiR service).

3.3 Factors associated with high use of the Melbourne Health RiR service

The high use of the Melbourne Health RiR service by some RACS was characterised by several factors related to individual services but also by the increasingly complex and challenging care needs of the residential aged care population.

The four key factors associated with high use of the RiR service are:

- RACS staff having limited access to appropriate and timely medical care for acutely ill, deteriorating and/or dying residents
- the staffing numbers and mix in some RACS being inadequate to provide the nursing care residents require
- some RACS having policies that prohibit nurses from working within their scope of practice, effectively deskilling them
- residents preferring to stay in their 'home' (RACS) and be treated there when unwell rather than be transferred to hospital.

3.3.1 Limited access to timely and appropriate medical care

The RACS staff who participated in this evaluation reported difficulties in accessing timely and appropriate medical care when residents deteriorate, became acutely unwell or required

medication and/or palliative care. The increased complexity of the residents' care needs means they require more frequent and specialised medical care, which staff had difficulty accessing, especially after-hours. GPs are often unavailable on weekdays because of their busy primary care commitments and most do not provide clinical services after-hours. Staff reported various instances when they could not get medical assistance for residents, especially when it is urgent.

It takes a while for the GP to come if urgent" (EN, PSRACS).

It took days, it took days calling the doctor, come on doctor please you need to come and review this resident. Okay nothing. Okay get a locum (RN, not-For-Profit Charitable).

It [referral to inReach] was usually one of two ways. I would just suggest that they [staff] ring Inreach if I am unavailable or sometimes if on my usual visit, I see someone, and I institute some management. I might say to the nurses, "If things turn pear-shaped, or if they get any worse, just give inreach a call" (Female GP attending RACS 4000 & 7000).

We also utilise the RiR service for management of supra-pubic catheters, placement of SPCs, because the GPs just can't get in or if there's an issue. If there's urosepsis, quite often they'll change the catheter as well (RN/Manager, PSRACS).

Some GPs will not come; most of them, because they work in their clinics. Some will say, "I'll come in tomorrow," if the resident can wait. But they will still give you guides and say, "If symptomatic do this and that and that. If not can wait until tomorrow". Otherwise most of them say, "Just book a locum. I'm not going to be coming" (RN, Not-For-Profit, Community).

I can't be accessed during those periods or it happens after six, the nursing staff during the day will think about getting In-Reach. I'll tell them that I probably can't make it today, that we may be able to put things in place to manage this patient at the facility, so, it's worth getting In-Reach to come (Male GP working in practice specialising in aged care, attending RACS 7000 & 8000).

The challenging nature of residential care, where residents are older, more frail and have multiple chronic diseases means that sometimes the RACS staff use the RiR service because they want a second opinion about existing medical care or they cannot get appropriate medical management for a resident.

It's really challenging in aged care because people are living with so many chronic illnesses that there's so many shades of grey as to what you sit on and observe before you, you realise this person's more unwell or not, not recovering as we expected day-to-day and shift-to-shift. We were called in because of unresolving chest sepsis. The resident had been treated for bacterial bronchitis for several weeks with oral antibiotics by the GP. We

were called because the resident was persistently unwell and flu-swab positive. I think with prolonged symptoms that's often a time when the inReach staff are called in to get a second opinion or support in complex matters. Another client yesterday with apparent leg cellulitis that hadn't resolved after what would seem normal course of antibiotic treatments. So as a second opinion because I heard the facility staff were increasingly concerned. And I think staff sometimes use us as a backup when they feel that GP-level care isn't turning the corner (Geriatrician, RiR Service).

Staff also reported that GPs often refer the residents, via the staff member, directly to the Melbourne Health RiR service so the resident does not have to wait for medical care.

A lot of the GPs have said, "Can inReach go and review them?" So sometimes the nurses talk to the GP to get oversight of what they've been thinking (CNS, RiR service).

If the GP can come, we basically will wait for the GP to come on the day. If not, the GP might say, "what are your concerns?" and then the GP will say, "Contact inReach if someone will be able to come or get the locum" (NUM, PSRACS).

If they're (GP) available they'll come, or they send other doctor who works in their surgery. Otherwise they'll tell us to book In Reach or locum (NUM, Not-For-Profit, Community).

If a resident requires medical care overnight or in the evenings on weekends, RACS staff often must rely on a locum service, because the GP and the Melbourne Health RiR service is unavailable. However, many participants thought that the locum service was inappropriate for the management of ill, deteriorating and/or dying residents. Reasons cited for this include:

- the wait waiting at least four to six hours for a locum to attend was thought to be unacceptable when an older person is deteriorating rapidly
- locums were generally thought to be unfamiliar with the residential aged care sector or the medical management of older people
- locums do not know the resident or family and were therefore unfamiliar with their individual needs
- they often did not assess the resident, before ordering treatment or referral, taking the
 easiest option, which was to recommend transfer to hospital rather than manage the
 resident in the facility, especially if palliative or EoL care was required.

When we use locum services, we often find that they're unwilling to prescribe antibiotics or pain relief well. That can be really very challenging. It's not their ongoing patient. They're not prepared to do that in a lot of instances. So, in a lot of, a lot of those cases, those residents end up waiting until the

next day to have treatment for things like, in that instance where it's a simple antibiotic (RN/Manager, PSRACS).

If I had my preference I would call In Reach over a locum to come out to assess people in that setting, whether it be acute respiratory problems or unrecognised sepsis or an assessment, for instance, for pain management or something of that nature (Male GP attending RACS 2000, 5000, 6000 & 8000).

It's (Locum service) not my first preference. Normally the locum – I don't know how to say it. I don't want to be critical of them. They don't know the patient very well, like the GP, and they can't spend as much time like inReach can, who have more time and resources with them. The locum will only focus on what information we give them and the issue, whereby in-reach will look holistically (RN/Manager, Not-For-Profit Charitable).

My experience with the locum service has been mixed. It depends what you've called them for. I have had experiences where they get a bit annoyed that you've called them for certain things (RN, For-Profit).

The honest answer it's [use of locum service] hit and miss. Sometimes, things aren't always appropriate. One of the classic examples is seeing someone with a suspected urine infection being put on antibiotics, but, the catheter has not been changed. You're supposed to change the catheter if you suspect it's a urine source, otherwise you get super infection. Those kinds of things happen when shortcuts are taking (Male GP working in practice specialising in aged care, attending RACS7000 & 8000).

Other RACS staff reported that many of their GPs are their own locum service, and the staff have more confidence in this arrangement as the doctors know the residents and the service.

We're very fortunate one of our GPs is a bit of a locum service on his own so he'll come in. Pretty much either himself or one of his registrars will come in every night and see whoever needs seeing. And his receptionist will call up in the afternoon to see if there's any bookings that need to be made and, you know, they're very efficient. And he will act as a locum for many other GPs (RN, Not-For-Profit, Community RACS).

We've got two GPs that come twice a week from different clinics. One GP offers a very good locum service (RN, For-Profit RACS).

On rare occasion, RACS report not being able to access any medical care, resulting in the only option available – transfer to acute care via ambulance. However, some RACS staff report that Ambulance Victoria is unwilling to transfer residents.

We have had some issues, but they've been rare. We've had situations where we've had ambulance officers come and say, "We're not taking them," only to be reminded of the fact that we're asking them to take a patient who is significantly unwell, and this is in line with their advance-care plan. they don't think they should be going. They don't think that it's necessary and they should just probably see their GP (RN/Manager, PSRACS).

3.3.2 Inadequate RACS staff numbers and skills mix

This evaluation found staffing numbers and skills mix in participating RACS was an important indicator of the use of the Melbourne Health RiR service. Many participants commented on the low number of RNs working in some RACS, including the Melbourne Health RiR staff, who report that they often attend some services because there is no one on-site who can properly assess or manage a resident's condition.

The nurse in charge asked inReach to review a wound. When I walked into the resident's room she was unconscious. Two PCWs were turning the resident and I said, "How long has she been like this?" They said, "What do you mean?" I said, "Well she's not responding?" and they said, "Oh, she's normally fighting us, we thought she was a bit quiet." There was a GP in the service and he wrote up some palliative medications. They were very nice PCWs, but they didn't have the knowledge, they couldn't recognise deterioration, that the resident was unconscious. The nurse in charge was so fixated on ticking that wound she hadn't even seen the resident. I went and told the nurse, and she said, "What do you mean?" I said, "Have you rang the family? Have you rung the GP?" She said, "No, I didn't realise that she was unwell. I was just ringing you about the wound" and I said, "That's the least of her problems." That woman died three hours later (CNS, Melbourne Health RiR service).

RNs working in RACS have a lack of confidence in making decisions. No critical thinking skills, so if in doubt they will send a resident to hospital as they fear the consequences of making a decision (NUM, PSRACS).

I find that in aged care there's a high turnover of staff. I guess there's several reasons behind that, but some - some facilities where you've got stable staff and they're prepared to back their clinical judgement, then they're more confident to do that. Others, if they are new, don't know the patient, or don't have the confidence to be able to make decisions will often refer on rather than consider In Reach. Sometimes it's just the fact that they don't know about it (Male GP attending RACS 2000, 5000, 6000 & 8000).

3.3.3 Deskilling of nurses by RACS policies

Participants reported that in some RACS there were policies governing how staff/nurses respond and make decisions about residents who have deteriorated. This was especially the case if a resident had a fall or required IV antibiotics. RNs reported that these policies in the RACS limited their scope of practice and in many instances, they were not allowed to insert and maintain IV lines for hydration or antibiotic therapy or, insert or change male urethral catheters.

Often, there's instructions often from the facility and there's pressure on the nursing staff to transfer them to hospital because either it's a dictum from the facility or the confidence of the clinician or the clinical nurse on duty may

not feel comfortable with keeping them there. Maybe they expedite it because it's easier for them to call an ambulance and let someone else decide for them (Male GP attending RACS 2000, 5000, 6000 & 8000).

They just don't have the confidence, and they'll say, "Oh no, we're not allowed to do it [insert and manage IV or give IV antibiotics] in ..." Or there's, there's always a reason why they can't do it. There's not one facility that would do it (CNS, RiR service).

There are things that we can't do here, you know, so for example, this resident is totally dehydrated, he or she needs some IV treatment, then of course we can't do that here, so we need some help. Also, with infection that we think really needs some IV treatment, that the oral antibiotics cannot address. There are policies around it, plus we don't have the equipment, and plus we don't have the competency now (CCC/RN, Not-for-Profit Community RACS).

Lots of them [RNs] don't have those skills. I think in the daytime, many do, or sometimes feel uncomfortable doing it [changing urethral catheters]. Yet, I was at this facility and the nursing staff were saying we can't change this because our trained nurse is not available (Male GP working in practice specialising in aged care, attending RACS 7000 & 8000).

However, some of the nurses interviewed accepted these policies, arguing that aged care was 'different' to other areas of nursing practice or that it was a general policy for nurses working in aged care.

The aged care facilities I've worked at have never really looked at doing IV antibiotics, it's more the hospital will do it, there's more risk, especially with cannulas. A lot of aged care nurses don't do a lot of cannulas, in case something goes wrong with the cannula. It's different skills you must use in aged care. You can't really compare that to a clinical hospital setting. Our skills are a lot different than a hospital nurse (RN/Manager, Not-For-Profit Community RACS).

We don't do IVs here, no. That's a policy, no IV. And no catheterisation, we just ring the in-reach. IV antibiotics we can't do here. We must book the HiTH to do that. it's a policy that we can't do it. Every aged care. It's a policy that we can't do it. We are not allowed to give the IV antibiotics, or anything (RN, For-Profit RACS).

3.3.4 Preference of residents to be treated in the RACS

All RACS staff and GPs interviewed reported that residents do not want to be transferred to hospital when they deteriorate, preferring to stay in the service - 'their home'- with staff they know and trust, rather than spend hours on an uncomfortable trolley in a hospital emergency department.

If we can get enough more resources and enough more support to do IV fluids here, I think if we are in good communication with the doctor, we do IV fluids here, we do IV antibiotics, if we can keep them here, treat them here (RN, Not-For-Profit Charitable).

I think a lot of the time these patients are treated in the facility, and that's becoming more common. We often ask patients if they're happy to be treated by the GP, or in-reach, or Hospital in the Home in the facility, rather than being transferred; and most families and residents are happy with that (Male GP attending RACS 2000, 4000 & 7000).

3.4 What are alternative services to the RiR service

Several key differences between the Melbourne Health and the Eastern Health RiR services were highlighted by this evaluation. The Melbourne Health RiR service is a nurse-led, assessment and referral service, providing one to two visits to assist with diagnostic procedures before referring the resident to an appropriate service for ongoing care. The Melbourne Health HiTH service also provides specialist review and ongoing care to residents in the RACS, like the geriatrician-led Eastern Health RiR service.

The RACS staff and GPs participating in this evaluation also reported using other RiR services, namely Western, Northern and St Vincent's, depending on their geographic locality, and additional palliative care services such as Melbourne City Mission. After residents are discharged from hospital, the RACS staff will use the RiR service of the discharge hospital for follow-up but they will also use other RiR services if the Melbourne Health RiR service nurse is unavailable.

In addition, the RACS in the Melbourne Health region have access to other services, public and private, that reduce their dependency on the RiR service.

3.4.1 Other Melbourne Health Services

Melbourne Health has additional services available which are utilised by many RACS. Some staff in the PSRACS have access to the Melbourne Health Wound Resource Enrolled Nurse (WREN) group for wound advice and support. The Melbourne Health podiatry service helps with chronic wounds and will review any wounds below the ankle. RACS staff can refer residents to the North-Western Mental Health Behaviour Assessment and Specialist Intervention Consultation Service (BASICS), which provides assessments, and assistance with management and care planning including behavioural management techniques for residents with dementia; and they can also use the Responsive Acute Palliative Intervention and Decision

Assistance (*RAPID Assist*), which provides specialist coordination and advance care planning, and symptom management, especially for pain.

We tend not to use inReach for palliative care. We rely a lot on Mercy Palliative Care and more recently we have contacted the RAPID Assist team out of Royal Melbourne as well. And that's just for support. We find quite often, particularly where family are concerned about the use of opioids that we get them in for a second opinion, for the family to ask questions and to make sure that what we're saying is what's happening (NUM, PSRACS).

We only get the palliative care services, like a RAPID team if we are having issues. Number one we're having issues with their families - so then all of us are on the same page. Number two, whatever we are using like pain relief is not working, so we get the RAPID team to come and talk to us (. And yeah that's it, because most of the time we do everything in here (EEN, Not-For-Profit Charitable).

Sometimes if I refer them to BASICS I call Dementia Support Australia, because they give you oh have you tried this, have you tried this, have you tried this? And then they give you an idea of what you need to do (RN, Not-For-Profit Charitable).

3.4.2 Geriatric General Practices

GP practices solely dedicated to the medical care and management of older people living in RACS were found in the Melbourne Health region and were used by several of the RACS participating in the evaluation of the Melbourne Health RiR service.

We've got a good doctor that's in place and he's quite good (NUM, For-Profit RACS).

We've got a variety of GPs here, because some people want to stick with their one from before they came in, which is fine. Those GPs generally, don't come as often. We've got two GPs that come twice a week from different clinics. Both offer very good locum services. The first GP, if he's in the area, he will pop in (RN, For-Profit RACS).

There are times where patients have had a fall or had something happen to them at six in the morning, and there's no GP available. I see that gap in some nursing homes and that's how we get involved (Male GP working in practice specialising in aged care, attending RACS 7000 & 8000).

3.4.3 Private Geriatrician Services

RACS staff interviewed also reported using private geriatricians who provided specialist medical care to residents in several of the participating services.

We have a geriatrician that comes in on a regular basis. If it's urgent, he will come straight away. He is quite good with the behaviours and he comes back to review the changes and everything like that. It's harder to get the

Aged Psychiatry Assessment and Treatment Team (APATT) to come. We've tried to do the bloods and everything like that. We've sent the fax referral through with no response for a long time. So, it's harder... when I call Dementia Behaviour Management Advisory Service (DBMAS) they just give us paper things or baby doll therapy or this therapy – just pamphlets of information (NUM, For-Profit RACS).

For many residents we get [geriatrician], he comes in and he changes the medication. If we highlight it as urgent he comes. He's quick when he comes. I've sent a referral that was nominated 'as soon as possible' and he did come in the next morning. He's independent (NUM, Not-For-Profit Community).

We've got [geriatrician] who comes here. This area is mainly his area (RN, Not-For-Profit, Community).

We do have our own geriatrician. We do, we have one as part of the providers organisation (NUM, Not-For-Profit Religious).

3.4.4 Private Wound Services

Besides the use of private geriatricians, several of the participating RACS also reported the use of private specialised wound consultants. This use was also reaffirmed by the staff in the Melbourne Health RiR service.

We [RiR service] used to do a lot of dressings but not so much now. When I first, I've been doing it for nearly six years and initially there was an awful lot of dressings but now they're referring a lot, the RACS are referring a lot more to private wound consultants (CNS, RiR service).

All these services reduced the dependence of RACS on:

- the individual GPs, who were often unavailable during business hours and did not provide an after-hours service
- the locum service, which was thought to be the last option as many of the attending locum medical officers had little experience of caring for older people
- the ambulance service to transfer residents to hospital for medical care when a GP was unavailable, and the resident's preference was to stay in the RACS
- the Melbourne Health RiR service, which had limited staff and did not operate overnight or in the evening at the weekend, and the HiTH service.

4 Discussion

The findings of this evaluation indicate that the Melbourne Health RiR service is primarily an assessment and initiation of treatment service with referral to the Melbourne Health HiTH

service when residents require acute medical care including specialist geriatrician services. The RiR service is as a substitute for limited access to:

- timely and appropriate access to medical management
- skilled nursing assessment and care in RACS.

Use of the Melbourne Health RiR service is associated with decisions made by RACS staff and GPs related to:

- the care needs of residents (deterioration/injury/acute exacerbation of chronic condition)
- limited access to skilled nursing care
- RACS policies that direct the care and management of residents and limit the scope of nursing practice effectively deskilling nurses
- limited access to timely and appropriate medical care for deteriorating residents
- the desire of residents to remain in the RACS.

These findings suggest that in many instances the intention of the Aged Care Act 1997, and Quality of Care Principles 2014¹ which form the basis of the aged care accreditation standards and outline specific care requirements and services to be made available to residents by RACS, are possibly not being met.

As older Australians are now encouraged to remain at home longer, those entering RACS are older and frailer, and most have multiple chronic illnesses associated with ageing including dementia. Consequently, there is increasing demand for high care residential places. The increased higher dependency and clinical complexity of residents means their medical management and nursing care needs have also intensified (O'Halloran et al., 2007; Andrews-Hall et al., 2007). All older people should have access to medical care when they need it irrespective of whether they live in their own home or in a RACS, yet an inquiry into the care of older Australians identified people living in RACS as being marginalised in terms of access to and quality of appropriate medical care (Productivity Commission, 2011). GPs play a key role in delivering high quality health care to older people living in RACS. Not only can they improve the quality of life of older residents, research has shown that unnecessary transfers and hospitalisation can be avoided when residents have access to GP services (Mazza et al., 2018; Morphet et al., 2015). However, in line with the literature (Amadoru et al., 2017; O'Halloran et al., 2007; Reed, 2015; Gordon et al., 2015; Taylor et al., 2013; Hillen et al.,

31

¹ Aged Care Legislation Amendment 2016, Quality of Care Principles 2014, Federal Register of Legislation, at https://www.legislation.gov.au/Details/F2016C00451/CanPrint

2016) and the evaluation of the Eastern Health RiR services, this evaluation found RACS staff report problems in getting timely and appropriate medical care for deteriorating residents. Besides the complexity of the medical care required by residents, the demands of a busy general practice, means RACS staff often are unable to get the GP to visit a resident and must rely on the locum service or the RiR service. The Australian Medical Association (AMA) Aged Care Survey (2017) found that while GP visits to older people living in RACS have increased from 7.4 visits per month in 2015 to 8.6 visits per month in 2017, the number of residents seen has remained the same, indicating increased demand for medical care in RACS. The survey also found that since 2015 the proportion of GPs providing medical care to RACS has decreased and over a third of GPs currently providing medical care in RACS have indicated they will not visit new residents, reduce the number of visits they currently make or, stop visiting altogether. The reasons cited by GPs for not providing medical care in RACS included: medical reimbursement for visits were inadequate and do not compensate for lost time in the general practice (33%); unpaid non-face-to-face time was increasing (34%) and being too busy (41%). The GPs providing medical management to residents tend to be older (41-60 years), suggesting that unless something changes the provision of GP services to RACS will continue to decline. Other challenges to GPs working in RACS noted in the literature and reported in this evaluation, are the low numbers of nurses, especially skilled nurses who have the capacity to assess residents and relay accurate information to doctors verbally and in documentation; and the use of casual or agency staff who do not know the residents – continuity of staff facilitates trust and makes it easier for GPs to treat residents (Gadzhanava et al., 2007; Pond, 2016).

The locum service is increasingly used by older Australians for medical care (Joe, 2016; Pond, 2016) including for medical care in RACS. This evaluation found, as did the evaluation of the Eastern Health RiR service, dissatisfaction with the use of medical locum services for deteriorating and acutely unwell residents. Locums differ from GPs in that they are not required to have vocational training or postgraduate training, they do not know the resident and in many RACS they are not supported by nursing staff who are skilled and familiar with the resident. Locums are therefore often challenged by many of the same staffing issues experienced by GPs providing medical management in RACS (Stokoe et al., 2015; Pond, 2016; Taylor et al., 2011).

In this evaluation participants reported inadequate numbers of skilled staff, especially nurses, to assess and manage the clinical care required by residents, especially if their condition was deteriorating, and specifically, after-hours. In those participating RACS with the highest bed numbers (Table 1) the ratio of RN to residents over-night was 1:75 and 1:46 and at the

weekends 1:92 and 1:75, and one RACS had no RN on site over-night. The latest aged care workforce survey indicates the proportion of nurses working in RACS has declined (Mavromaras et al., 2016) meaning that residents' access to quality nursing care has reduced substantially. As was reported in the AMA 2017 Aged Care survey (AMA, 2017), GPs in this evaluation report occasions when there is no nurse available to administer medication afterhours or for GPs to provide a clinical handover to, posing a serious risk to residents. This issue was highlighted in the evaluation of the Eastern Health RiR service and cited in the literature (Amadoru et al., 2017). The declining number of RNs with the ability to assess and manage the complex needs of residents, especially at night, places residents at risk. Besides insufficient numbers of staff, especially nurses, another issue emerging from this evaluation was the deskilling of nurses through RACS policies limiting their scope of practice. Some of the nurses interviewed in this evaluation acknowledged that there were policies in RACS that deskilled them, however, many of them qualified this by suggesting that the aged care setting was 'different' to acute care and therefore the skills they required were different. A recent study highlighted nurses' commitment to the provision of quality aged care but also their lack of confidence to provide care when residents are deteriorating or acutely unwell (Stokoe et al., 2015).

While the reasons for high use of the Melbourne Health RiR service are the same as those found in the evaluation of the Eastern Health RiR service, there are differences. The differences relate to the type of service i.e. the Melbourne Health RiR service is nurse-led and primarily an assessment and referral service for the HiTH service; and the availability and use of other public sector and private nursing and medical services to provide the care required by residents. The latter of which reduces the reliance of RACS on the Melbourne Health RiR service.

5 Conclusions

Meeting the complex health care needs of people living in RACS is a health system priority. People entering residential aged care now are older with multiple chronic illnesses including dementia, which require more nursing care and medical management than previous generations. A new model of medical care is urgently required for this sector, including financial incentives, to address the limited access to timely and suitable medical management currently experienced. The sector requires more RNs and all nurses employed in residential

aged care need to have the educational background and clinical skill set to comprehensively assess and manage older residents when they become acutely ill. An aged care career pathway for RNs should be considered, as should the involvement of nurse practitioners (NPs) working as geriatric consultants in the residential aged care sector, to support and educate other nurses. Service providers (organisations and managers) need to reconsider policies and protocols that prevent RNs from working within their full scope of practice.

6 Limitations

This evaluation provides further evidence of the impact of the introduction of the RiR program on RACS from the perspective of users of the service. However, findings are limited by the sample size, the self-selected nature of participation, and the type of service - the Melbourne Health RiR service is nurse-led and therefore difficult to compare to the Eastern Health service which is geriatrician-led. These limitations have the potential to introduce biases and reduce the generalisability of the findings.

The evaluation collected qualitative data from staff at eight RACS, four general practitioners providing medical care in these RACS and the staff of the Melbourne Health RiR service. In some RACS despite numerous efforts, we were unable to interview more staff, particularly night duty and weekend staff who have less access to medical care when a resident deteriorates therefore possibly having more need for the RiR service. In addition, the presence of more senior staff such as managers and CCC in some of the small group interviews may also have inhibited free and frank discussion of the issues. Recruitment of GPs who provide medical management at the participating RACS also proved to be extremely difficult, despite participation by GPs via practice managers and receptionists included that they 'were too busy' and 'do not participate in research'. Recruitment of doctors as research participants is known to be difficult (Cook et al., 2009; van Geest et al., 2007; Johnston et al., 2002), especially when the research is qualitative.

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ⁱ Also known as nursing homes, or long-term care homes