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Title:

Factors influencing decision-making processes for unwell residents in Residential Aged Care - hospital transfer or Residential InReach referral?
A qualitative analysis

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Factors influencing decision making processes for unwell residents in Residential Aged Care - hospital transfer or RiR referral?

A qualitative analysis

Abstract

Objective

To investigate decision-making around hospital transfer and/or referral of residents to a Residential InReach (RiR) service in north-eastern metropolitan Melbourne, Australia, from the perspectives of residential aged care facility (RACF) staff, general practitioners (GPs), and RiR registered nurses (RNs).

Methods

Thirty-one staff from eight RACFs, five GPs and four RiR RNs participated in individual or group interviews.

Results

RACF staff and GPs valued and relied upon RiR to manage unwell residents. Thematic analysis identified RiR utilisation was driven by: complexity of decision-making processes in RACFs; variability in facility-based medical and nursing care; and impact of RiR service outcomes on patients and referrers.

Conclusions

Availability of timely and appropriate medical and nursing care in RACFs was reported to influence transfers to hospital and/or referrals to RiR. RiR was reportedly used to complement or substitute usual care available to residents. Further research and improvements in RACF and RiR resources are required.

Introduction

The ageing of Australia's population is associated with an increase in health and aged care expenditure [1]. Older people living in RACFs generally have medically-complex care needs and represent 9-18% of Emergency Department (ED) presentations in their age group [2]; are more likely than younger people to be admitted to hospital [3,4]; and consequently experience more distress, discomfort, mortality and morbidity than younger people in hospital settings [5-7], especially if cognitively-impaired and away from their familiar surroundings [8]. Many of these ED presentations are unnecessary, as equivalent nursing and medical management could be offered in RACFs [9, 10]. International [10-14] and national [3, 15-18] hospital RiR initiatives have been developed to provide such services, with demonstrated benefits to the residents, RACFs and health services [3, 13-17, 19].

Austin Health's RiR service, on which this paper reports, operates in north-eastern metropolitan Melbourne. It is geriatrician-led and operates seven days a week, from 9am to 5pm. This service offers RACFs telephone advice, geriatrician or nursing reviews, acute interventions such as intravenous antibiotics and hydration, palliative care, changing or reinsertion of urinary catheters and percutaneous endoscopic gastrostomy (PEG) tubes, managing elective hospital day admissions for blood transfusions and acute medical admissions, discharge follow-up, and coordination of specialist consultations.

Methods

This study investigated factors influencing decision-making processes around resident transfer to hospital and/or use the Austin Health RiR service from the perspectives of RACF staff, GPs providing medical management in these facilities, and RiR service RNs. This included experiences and views about the RiR service, facility staff's

reasons for not using the RiR service, perceived gaps in the service, and advance care planning (ACP) in RACFs. Approval to conduct the research was secured from the Austin Health (LNR/15/Austin/167) and La Trobe University Human Research Ethics Committees. Written informed consent was obtained from all participants.

Study setting

Forty-six facilities were within the Austin Health catchment at the time of this study. Based on presentation rates to Austin Health's ED in the two years preceding September 2015, RACFs were ranked as high, low or middle-band referrers. Sixteen "high" referring RACFs had five or more episodes of residents presenting to ED per month per hundred beds, compared with fifteen "middle" and fifteen "low" referring facilities which had less than four and two episodes respectively. RACF managers from high, middle and low-referring RACFs were invited by telephone to participate, in equal distribution across banding until the maximum possible interviews that research resources permitted were booked. Fourteen managers were contacted, representing 30% of catchment area RACFs, and eight agreed to participate (see Table 1) in group interviews.

Participants

The project used a self-selected convenience sample of RACF staff, GPs providing medical management at the participating facilities, and RiR RNs. Inclusion criteria were the provision of clinical care to RACF residents, and fluency in written and spoken English. The researchers visited sites to provide information about the project and to answer related questions. Written study information was provided to all participants prior to consent and interview.

Forty participants were recruited and interviewed in person or by telephone by SA (male, with qualitative research methods experience) and KC (female) between October 2015 and March 2016; 31 staff from the eight participating RACFs, five GPs (two from high-band, two from middle-band and one from a low-band referring RACF), and all four RiR service RNs. The majority of RACF staff were generally involved in decision-making, including two managers (both RNs); three clinical care coordinators (CCCs) who were all RNs; 17 other RNs, five of whom were nurse unit

managers (NUMs); seven enrolled nurses (ENs), four of whom were NUMs; and one personal care attendant (PCA). The designation of one participant was unavailable. Twenty-seven RACF staff were women, and four men; the RiR service RNs were women; two GPs were men and three were women. The participants had considerable experience in the aged care sector; RACF staff averaged 11 years' experience (range 3 to 25 years), GPs 22 years (range 5 to 30 years), and RiR RNs 19 years (range 5 to 25 years).

Procedures

Semi-structured group or individual interviews were conducted in participants' workplaces between October 2015 and March 2016, lasting an average of 33 (range 16 to 52) minutes. Field notes were taken. Interview questions related to factors affecting decision-making when residents become acutely unwell; the respective roles of the RiR services, regular and locum GP care, and hospitalisation in managing residents; and perceived strengths and weaknesses of the RiR service.

All interviews were digitally audio-recorded and transcribed verbatim by an independent transcriber. Identifying data were removed from the transcripts to maintain anonymity. All participants were allocated a unique identifier (ID), which was linked to their RACF's ID. Participant feedback was not sought post-interview.

Analysis

Thematic analysis was used to identify and describe implicit and explicit themes emerging from the interview transcripts [20]. One author (SA) manually coded the transcripts and used a thematic conceptual network to connect derived basic codes into organising categories, which were grouped into global themes [21]. Each transcript was analysed individually, yielding forty codes reflecting participants' experiences of the RiR service. All transcripts were re-read before codes were merged into nineteen broader organisational categories (some overlapping). Transcripts were then systematically checked using these categories. Thematic analysis of organisational categories produced three global themes. The most representative direct quotes were retrieved from the transcripts to illustrate findings. Quotes were edited for readability but not grammar, to retain the diverse voices of participants.

Strategies used to establish methodological rigour included use of the Consolidated Criteria for Reporting Qualitative Data (COREQ) criteria [22], consensus on coding by the researchers [23], and comparing transcripts to recordings for transcription and contextual accuracy, errors and omissions.

Results

Participating RACFs (Table 1) were diverse in terms of bed numbers and service provider type (not-for-profit or for profit). Most had access to either regular or locum GPs after hours. Reported daytime staff-to-resident ratios ranged from 1:5 to 1:9, and six of the eight facilities reported having an RN on duty overnight.

The diversity of participants enabled collection of rich data about factors influencing use of the RiR service. Participants highly valued and relied heavily upon the RiR service to meet residents' needs.

If it's acute and something that requires more urgent intervention, InReach would be called. If family demands a doctor on the spot, if the level of deterioration is rapid and uncontrolled and depending on how many sort of co-emergencies we have going on at the one time because we can't be in all places at all times (GP, #1).

We try to avoid calling ambulances because acute care's not a great place for the elderly. We don't want them to go unless there's going to be a positive outcome for them (RACF RN).

Reasons cited for using the service included assistance with residents who: had a sudden clinical deterioration; or required parenteral antibiotics, palliative care, replacement of PEG tubes, or indwelling or suprapubic catheters. However, assistance with medium- or long-term palliative care, management of behavioural and psychological symptoms of dementia (BPSD) and acute conditions such as fractures and major bleeding were seen by most RACF staff and GPs as outside the scope of the RiR service.

Three inter-related global themes illustrating these factors emerged from data analysis. Complexity of decision-making processes in RACFs; variability in facility-

based medical and nursing care; and impact of RiR service outcomes on patients and referrers. Each of these is explored and illustrated below.

The complexity of decision-making processes in RACFs

This theme is illustrated by several factors including resident and family preferences for treatment, facility policies and procedures, the number of trained and skilled nursing staff on duty and availability of timely medical care. Participants reported that when residents acutely deteriorated, they or the 'person responsible' (usually a family member), were required to choose between available treatment options. Patients and families variably viewed hospital or RACFs as desirable or undesirable treatment locations. Sometimes, treatment requested by family members conflicted with residents' desires and needs.

Sometimes the family or the resident are adamant they want to go to hospital even though it *doesn't warrant it. So we have to respect their rights* (RACF EN).

They [family] don't understand or they can't accept their parent is in that state. Even if we explain. When InReach come they talk to them and they accept that (RACF EN).

RACF staff reported decision-making hierarchies for referral when residents acutely deteriorated. These involved an RN assessment, consultation with or assessment by the GP, then referral to the RiR service or alternatively transfer to hospital by the ambulance service. Some interviewees cited facility protocols mandating hospital transfer in certain circumstances, such as fractures, major bleeding, chest pain, and falls with head-strike.

When making decisions, staff and GPs considered: the nature of the deterioration; the residents' functional status, cognition, quality of life, and prognosis; and probability of complications and superior management outcomes in hospital.

I would say that, if a resident is really sick and the family aren't accepting their condition, and I need to send them to hospital, I bring in the InReach service so I don't have to transfer them to hospital (GP #1).

We had a few experiences of residents becoming very ill, unresponsive and unconscious. So we had to call 000, started CPR, sent to hospital (RACF NUM RN).

Other RACF staff could not clarify the decision-making process behind calling the RiR service as opposed to an ambulance. A small number of RACF staff and GPs mentioned malpractice concerns impacting decision-making.

If the family insist [the resident goes to hospital] then the GPs don't want to take the risk. They want to send [to hospital]. They know the InReach service but they say, 'Just send them to hospital' (RACF RN).

So there's times when we will call InReach or we will call an ambulance, or we'll call a doctor. Not because that's inappropriate in terms of treatment but it's very appropriate that we do that in terms of litigation (RACF CCC RN).

Some participating RACFs had specific policies and procedures which directed the decision-making process, so even if staff thought it better to keep a resident in the facility and call the RiR service, they were beholden to a policy directive.

[We call the ambulance straight away] if it's life-threatening or they've got serious breathing problems or it's obvious that they might have had a fall, they're bleeding from the head, things like that. It's our policy to send them off. Head injuries always go to hospitals (RACF EN).

We do have policy if a resident has a fall. If someone hits their head, we're going to send them to hospital (RACF NUM EN).

Further complicating the decision-making process in the management of acutely-unwell residents is the issue of advance care planning (ACP), which is intended to support an individual's wishes in the event of clinical deterioration. The ACP discussion, ideally conducted with both residents and their families, requires a

clinician who can effectively communicate prognosis, potential management options, and risks and benefits of several scenarios. RACF staff should also be involved, and the ACP should be documented and reviewed periodically.

All participating GPs and RiR service RNs expressed strong views about how ACP was implemented in RACFs, often with opposing views.

[ACP] is extremely hit and miss...erratic, irregular. Sometimes nursing staff do it. The doctors are meant to, but often we don't get around to it. You forget you didn't do it. You do it then don't document it... [Forms completed by nursing staff] just about all say 'wants reasonable treatment' [which is] not helpful (GP #4).

The RiR service is in a perfect position to be able to be a real lead in [assisting families with ACP] but it's a time-consuming process. So more often than not it's encouraging families to sit down with aged care staff to complete the paperwork (RiR RN).

ACP seemed to be poorly implemented in most participating RACFs, with few formal policies governing the process or documentation of this important issue.

Unfortunately, in this facility we don't have a lot of advanced care planning in place. We're trying to improve. Policy is when we admit people, to do it but it hasn't happened, so we're trying to update now. We have been getting the doctors involved with the advanced care directives (RACF CCC RN).

I think advanced care planning on the whole is not very good. A lot of people don't understand that palliative care no longer means the last couple of days. A problem here is that it has to be done on admission, and even though it is discussed, a lot of people don't want to discuss it at admission. Sometimes it says, "To be advised at a later date" (RACF RN).

Whilst RACF staff reported using ACPs to aid decision-making, excessive emphasis on the document alone was criticised by some GPs and RACF staff.

[The ambulance service] will make the decision [to transfer to hospital] based on a piece of paper without reviewing [the resident]. Someone might be 90 [years of age] but they might go to the Returned Services League (RSL) club three days a week. They might have quality of life (RACF RN).

If someone's anaemic and symptomatic they are approaching the end of their life, there's lots of complex discussions with family and patient about what do we do and what do we not do. It's often a very difficult juggle (GP #2).

Variability in facility-based medical and nursing care

The quality of routine care received by residents (excluding hospital or ambulance services) depends on the skill level and quality of the RACF's staff, and on access to timely and appropriate medical care, particularly scheduled GP visits. Some facilities had very good support from GPs.

We're very fortunate. We have five supporting [GPs] who visit the building at least weekly and one fortnightly (RACF RN).

If the GPs are not available, we leave a voice message saying the BGL [blood glucose level] reading is out of range. The GPs here are very good. We can always call or email them (RACF RN).

However, on the whole staff reported difficulties in getting timely medical care during business hours because GPs were busy with clinic patients, and after hours either because GPs did not offer an after hours service or the locum service was often inappropriate or took too long to attend. RACF staff were critical of locum services, reporting that some locum GPs often took several hours to attend referrals, were unfamiliar with residents, and simply transferred residents to hospital. Even a few GPs reported difficulties associated with locum doctors attending unwell residents.

The [regular] GPs are not always available. Most of the time when we need them they rarely come because they have other commitments (RACF RN).

The medical practitioners don't cover each other if they are not available. Most of the time we have to wait to book the locum service. We can't book them until after four o'clock so if you need a doctor and the doctor's not available, that's when you're stuck (RACF RN).

[Locum GPs] don't know the resident. They might send someone to hospital but if InReach comes they know their story, they won't do that (RACF EN).

Lack of timely access to GPs, locums and the RiR service when residents deteriorated unexpectedly was commonly raised as a factor in hospital transfer. Some RACF staff mentioned access to doctors for phone orders as being problematic, especially with symptom relief in terminal care, and visits being cursory.

It's hard sometimes, you're trying to really hold out for the InReach service. You can't get to the GP and you get a locum middle of night saying, 'Send to hospital' (RACF EN).

It is really helpful to have an InReach service *because we're often in a clinic booked from dawn to dusk and we cannot get out there (GP #2).*

Staffing issues in RACFs were prominent and raised by GPs, RiR nurses, and RACF participants: particularly, a perception that nursing skills had progressively deteriorated and, more generally that staffing levels were too low, which reduced continuity and increased the reliance on agency staff.

The aged care sector over the last 10 or 15 years [has] become quite deskilled (GP #1).

It's not uncommon to come across nurses that have only just finished their training, and this is their first job working in aged care. And they'll be in charge of 40 residents! (RiR RN).

I think it would be very hard to manage unwell residents because of the small number of nurses we have on the floor. The personal care staff are only trained to a certain level. (RACF NUM EN).

[The facility] recently changed from a privately-owned facility to a corporation and there's no RNs in low care through the day. So they've cut back from one in low and one in high care to one covering the entire facility, which is just ridiculous. It is chronically under-resourced with qualified staff and it's noticeably worse. They've cut back on RN staff to more PCAs and ENs (GP #4).

Limited skills and confidence in changing male catheters, suprapubic catheters and PEG tubes, as well as in managing dementia-related behaviours and giving intravenous antibiotics was raised by participating RACF RNs themselves, many citing limited access to further training and facility policies as issues.

We need more training on behavioural management (RACF CCC RN).

I hadn't given an IV antibiotic for years. Recently the RiR nurse who came spent time teaching me how to do it the next day. I felt comfortable to do it because I didn't have anybody else who'd done more recent training (RACF RN).

I believe we could do with some clinical education with catheters. *It's always the same staff who do this and that makes others feel inadequate that they can't do it (RACF RN).*

Impact of RiR service outcomes on patients and referrers

Facility staff placed high value on clinical management of unwell residents, and support for RACF staff themselves. Most GPs and RiR staff, as well some RACF staff, noted that clinicians, residents and their families, valued the RiR service in providing a second opinion. Almost all participants praised the quality of communication between the RiR service and residents, families, RACF staff and GPs.

The service has always gone over and above to engage with the relatives and that can stop a hospital admission (RACF RN).

[I call RiR for] confirmation when the family can't accept my version of the event (GP, #4).

Their [RiR] approach is good. They always approach the family member or get on the phone and talk with a family member (RACF PCA).

User awareness of the scope and hours of the RiR service affects referrals made to it. In particular, a few RACF staff reported that residents and families did not understand what the RiR service entailed, assuming it would be inferior to hospital care or not involve a doctor. Whilst some RACF staff reported that the RiR service contact details were readily available, none reported referral to the RiR service being formally included in any RACF policies. A minority of GPs and RACF staff incorrectly believed that the RiR service did not operate on the weekends.

Suggestions for improvement to the RiR service from a minority of RACF staff included being able to request phone orders and the provision of in-service education. The overwhelming view from all RACF staff and GPs was that extending the RiR service hours into evenings, and increasing the doctor presence on weekends and during phone referrals, would be beneficial.

In a perfect world InReach would operate 'til about 11pm and start up again at 7am the next morning, seven days a week...a lot of the times we get locums on Sundays for things that InReach could do (RACF RN).

I just feel that you need more, especially on weekends... [InReach] said, "Look, we may not get there 'til three o'clock in the afternoon" and we've had to send them off to hospital (RACF RN).

Discussion

The Austin Health RiR service was largely perceived by participants to positively contribute to the broader needs of RACF staff and residents, within the familiar constraints of resource limitations. This study has yielded valuable insights into the factors that influence the use of the RiR services by RACFs and, importantly, has highlighted significant issues in the current model of care provision in the RACF sector.

The quality of nursing care in RACFs and access to timely and appropriate medical care, especially scheduled GP visits, seem to be key determinants of need for emergency care or out-of-hours consultations. To illustrate, staff from one RACF with better-than-average staffing ratios, an RN overnight, and close support from regular GPs, were able to more clearly articulate their decision-making processes around seeking medical assistance than others interviewed. Additionally, staff at this facility voiced a strong preference for prioritising and advocating for the resident's best outcomes during decision-making around hospital transfer, rather than simply the nature of the acute problem in isolation. This RACF was exceptional, as the low RACF staffing levels and limited GP accessibility identified in this project have also been identified as contributing to potentially avoidable ED transfers in the Australasian and international literature [6, 24-29]. Most study participants unequivocally commented on the dwindling numbers of RNs, worsening standards of RACF staff qualification and training, and limited access to timely medical care.

Responses were mixed regarding RACF approaches to decision-making around transfer to hospital when residents unexpectedly deteriorate. Timely access to medical assessment and assistance with clinical decision-making are crucial in optimising quality and outcomes of care. The availability of after hours contact with GPs may improve continuity of medical care, and reduce the use of locum services and the RiR service. Carefully performed ACP can assist staff with decision-making and reduce anxiety when a resident deteriorates. Improving staff capacity to engage in ACP opportunities in the RACF setting may therefore improve the variability in ACP practice observed in this study and elsewhere [26], and provide clarity in times of uncertainty. Implementation of the Victorian Medical Treatment Planning and Decisions Bill 2016 on 12 March 2018 will require widespread monitoring of: the accuracy and quality of ACP; ongoing education of patients and families, medical and

RACF staff (considering RACF staff turnover rates); and impact on consequent hospital and RiR referrals.

Limitations

This study is limited by potential for sampling bias, as those staff who were disinclined to assess and refer appropriately to RiR may have not volunteered for interview, or have been rostered on overnight or weekend shifts. The group interview setting (with peers and led by a RiR service registrar) may also have limited disclosure of opinions. Despite being approached, few RACFs identified as low-band ED referrers agreed to participate. These facilities may have had different processes, care models and perspectives on RiR than those that participated. Findings may not apply equally to other RiR services whose operational models differ from that at Austin Health or that practice in regional or remote areas.

Conclusions

This study raises important themes influencing decision-making around management of acutely unwell residents. The findings regarding the availability of the RiR service to RACFs and GPs may assist consistency of referrals and reduce avoidable ED presentations. Informing non-weekday staff and GP locum services about the RiR service represents an opportunity for intervention to improve residents' outcomes. Broader issues, including RN-to-resident ratios, nursing care standards in facilities, and access to GPs for decision-making and management, are also relevant to quality of care provided in RACFs. Further qualitative and quantitative research across more diverse participant groups (e.g. public sector RACFs, those RACFs with onsite doctors, and RACFs outside RiR catchment areas), RiR operational scope (extended hours, proactive rather than reactive assessments), and quality of ACP around upcoming Victorian legislative change is needed.

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Policy Impact Statement

- Much of the reliance on RiR, locum, and Ambulance Victoria services is related to inadequate access to timely and appropriate medical care. As already highlighted by the RACGP, consideration of a new model of care with appropriate

funding is urgently required for the RACF sector, to improve access to GP care and reduce the number of unnecessary resident transfers to hospitals.

Practice Impact Statement

- The provision of appropriate skilled nursing care to all residents is a requirement of accreditation. Diminishing numbers and decreasing skillsets of RACF RNs increases RACFs' reliance on RiR services to manage acutely unwell residents. Mandatory RN-to-resident ratios for all service providers, and supported education opportunities for existing RACF staff should be considered.

Site	Provider	Beds	% High Care	Dementia Beds	A/H Medical	RN Staffing	Use of ED
1	NFP*	130-150	30	30	GP/Locum	2-3 AM/PM 1 ND	High
2	NFP	80-100	90	18	Locum	1 AM/PM/ND	High
3	FP	40-60	Majority	0	GP/Locum	1 AM/PM 0 ND	High
4	FP	80-100	Majority	10	GP/Locum	1 AM/PM/ND	Low
5	FP	130-150	>80%	0	Locum	1 AM/PM/ND	High
6	FP	40-60	Majority	0	Locum	1-2 AM 0 PM/ND	Medium
7	FP	80-100	Majority	0	GP/Locum	2-4 AM/PM 1 ND	High
8	FP	80-100	Majority	29	Locum	4 AM/PM 1 ND/weekends	Medium

Table 1: Participating RACFs

*Not-For-Profit (Community, Religious or Charitable); #For-Profit (Private); A/H = after hours; RN = Registered Nurse; AM = morning shift; PM = afternoon shift; ND = night duty; ED = emergency Department.

Facilities without RN staffing during a shift would be staffed by an EN and/or PCAs.