The Residential Aged Care Nurse-Led After-Hours Initiative, Enhancing nurse assessment and decision making.

CURRENT STATUS: POSTED

Clint Moloney  moloney@usq.edu.au
University of Southern Queensland Faculty of Business Education Law and Arts
Corresponding Author
ORCID: 0000-0003-2520-1506

Madeleine Van Hunnik
West Moreton Hospital and Health Service

Carol Hope
West Moreton Hospital and Health Service

Victoria Terry
University of Southern Queensland Faculty of Health Engineering and Sciences

Hancy Issac
University of Southern Queensland Faculty of Health Engineering and Sciences

DOI:
10.21203/rs.2.16797/v1

SUBJECT AREAS
Geriatrics & Gerontology

KEYWORDS
Register Nurse Confidence, Residential Care, Emergency Department
Abstract

Background Current staffing levels and current care standards have been linked to negative clinical outcomes for Residents in living in Residential aged care. Low levels of confidence have impounded a Registered Nurses ability to meet many acute challenges found in this environment. The utilisation of Emergency Department transfers for acute ill residents is an increasing epidemic. This research project aimed to contemporise, adapt, implement and evaluate a set of Clinical Practice Guidelines (CPGs) and a Nurse Practitioner Role in Residential Aged Care adapted with permission from Waitemata District Health Board New Zealand [1, 2]. The purpose of the CPGs was to empower clinical staff in Residential Aged Care Facilities (RACFs), to recognise early clinical deterioration, provide safe evidence based care to residents, and prevent unnecessary transfers of residents to an acute hospital emergency departments.

Methods Action research was chosen for this research because it was not only cyclic/participative in nature, but it provided a progressive evaluation of the CPGs implementation and the current context as it related to past, progressive, and post implementation nurse decision making practices. A total of 4 Focus groups with an average of eight respondents were recruited to this study (Total participants, 16 RNs and 16 PCWs).

Results Focus group data showed unequivocal evidence of increased confidence among staff in implementing the care guidelines, communicating with fellow professionals, and assessing incidents. The CPGs and NP intervention was successful in engaging staff and developing their confidence with assessment of acute resident issues. Additional longitudinal research is required to better understand the influences of these interventions on ED presentations.

Conclusions Research needs to better explore the direct correlation between PCW
knowledge, skills, and training, and a failure to rescue residents experiencing an adverse event. This should also encompass more research scrutiny on the impact of poor communication practices between PCWs and the RN. The role NPs play in reducing ED utilisation needs greater long term evaluation to better ascertain clinical care and economic benefits.

Background

Much of the literature surrounding quality and achievement of care standards in Residential Aged Care Facilities (RACF) paints a gloomy picture and what might be seen as risky situations for residents and their relatives [3-6]. Bellis [3] has highlighted that resident autonomy and family advocacy have been misconstrued and unethical dialogues have been evident with relatives needing awareness to ensure standards are being met. De Bellis [4] outlines that current nursing care being provided by registered nurses and personal care workers in many RACF circumstances is documented as failing to meet professional nursing standards. Poor nursing standards are well known to adversely affect the delivery of safe, and effective quality care, thereby compromising a residents’ health [3-6]. This situation has been attributed to residential aged care staffing ratios, whereby registered nurses in many instances have been responsible for the direct care of some 130 residents, which many in the nursing profession consider unacceptable, immoral, and unsafe [7]. Bellis [3] has called for an appropriate knowledge and skill mix as a minimum standard of nursing care for residents. She found many episodes of care involved a lack of communication and assessment from personal care workers (PCWs), registered nurses, and medical practitioners. The disparities exposed by prior researchers like Griffiths et al. (2014), Bellis [3] shows that it is imperative to quantify current staff knowledge deficits and to introduce guidelines which health care professionals agree are essential. What is apparent is that residential aged care is in crisis and the role standards play needs a
rethink [6]. If current staffing levels and current care standards are leading to negative clinical outcomes, surely some well-developed guidelines for care should provide support for a positive learning organisation which results in safe, and effective quality care [8, 10].

Research shows that RNs working in the aged care sector have received hampered opportunities to develop and build clinical competencies [8]. Due to this restriction for growth in knowledge and skill evidence from Nhongo et al. [8] suggests low levels of confidence impound aged care Registered Nurses and they therefore may be ill prepared to meet many acute clinical challenges found in this environment. The aged care act 1997 have iterated terms such as “appropriate” and “skilled” to determine staffing and skill mix [1]. However, lack of quality indicators and dictated standards for staffing and skill mix often leaves facility stakeholders to appoint staff under their discretion to budget and availability [1]. Minimal publications have addressed the importance of clinical confidence in this cohort of RNs. The lack of these clinical attributes greatly affects capacity and capability with assessment and care planning thereby leading to failures in individualized care, continuity of care, rescue from deterioration and gaps in essential health care information [1, 8].

This gap between planning and delivery also appears to have its origins within the role that PCWs play in assessment and communication of resident issues [9]. These researchers suggest that the growing neglect regarding the value of early clinical cue recognition by PCWs is an unrecognised contributor to adverse events for residents. In fact they suggest this continued neglect is undermining quality care and leading to a failure to rescue [9]. Consequently Kontos et al. [9], recommend greater exploration of PCWs’ core skill and practice within the context of appropriate guideline integration into care delivery by PCW’s. Current knowledge and skill within PCWs may impact on the ability
of these staff to better assess and report issues to RN’s for intervention.

The voices stemming from current evidence clearly highlights the importance of the Nurse Practitioner (NP) role in supporting the growth of clinical confidence for RACF staff [10]. Arendts et al. [10] focuses on the value proposition in capacity building through the NP role for the aged care clinical workforce. These researchers believe that NPs can offer growth in essential knowledge, specifically - what to report, why, and when? A review by Dwyer et al. (11) acknowledges several latent patient and organizational factors that are potentially modifiable through the introduction of a specialist clinician like an NP. They suggest a possible correlation with the reduction of ED transfers as well as improved care standards. Other researchers also listed recommendations regarding facility staffing, and improving advance directives [11]. Additional research supports Dwyer et al. (11) outlining that the nurse practitioner role has real potential to function in an interprofessional manner, thus addressing the missing link manifesting in gaps in care across registered nurse and care worker roles [10].

What is abundantly clear is that the lack of knowledge and skill mix [3], poor clarity or availability of clinical guidelines [6] the neglect towards the value of early cue recognition, care pathways for the PCWs discussed by Kontos et al. [9], and the lack of a NP role as recommended by Arendis et al. [10] are all leading to an over utilisation of emergency rooms and hospitals [12]. Amadoru et al. [12] through qualitative enquiry suggest a stipulation of appropriately skilled nursing care for all residents as per accreditation requirements. They summate that growing RN to resident ratios within an environment of declining clinical skill sets have led to an increased reliance on acute emergency services. They recommend the availability of timely and appropriate medical and nursing care in RACFs as they are viewed as influential to the hospital transfers.

This Nurse-Led After-Hours Initiative adopted a triple strategy of Aged Care Guides
provision, provision of contemporary education and Nurse Practitioner support for Residential Aged Care Facilities (RACFs). Interventions were implemented with an aim to evaluate the impact of these interventions on preventable hospital transfers and enhanced clinical confidence of RACF staff. The foundation of this study was based on the success of New Zealand models which improved outcomes for residents through systemic initiatives and access to clinical support [2, 13].

This research project aimed to contemporise, adapt, implement and evaluate a set of Clinical Practice Guidelines (CPGs) in Residential Aged Care adapted with permission from Waitemata District Health Board New Zealand [1, 2]. The purpose of the Aged Care Guide was to empower clinical staff in Residential Aged Care Facilities (RACFs), to recognise early clinical deterioration, provide safe evidence based care to residents, and prevent unnecessary transfers of residents to an acute hospital emergency departments. The intervention was implemented in two Residential Aged Care Facilities across Ipswich, Queensland. The primary objective was to ascertain an improved experience for RNs and PCWs in assessing, reporting, and managing resident clinical care issues. A secondary objective was to ascertain if there was perceived reduction in the need for resident transfers to the acute hospital emergency department.

Methods

Action research was chosen for this research for its responsiveness and because not only was the cyclic/participative nature appropriate to the study design but it provided a progressive evaluation of the CPGs implementation and the current context as it related to past, progressive, and post implementation nurse decision making practices [14–16]. It is the cyclic quality of action research that was most appealing as the review cycle allows responsiveness to the dynamic of participants needs. This form of research method provided flexibility for vague beginnings while progressing towards appropriate endings
Two private aged care facilities in the Ipswich region of Queensland were chosen as the sites for the triple strategy of Aged Care Guides, education and Nurse Practitioner support for Residential Aged Care Facilities (RACFs).

A total of 4 Focus groups with an average of eight respondents were recruited to this study (Total participants, 16 RNs and 16 PCWs). These were separated into homogeneous groups to foster equal participation so that each group contained staff equal in status, and grade [18]. There were two RN groups, one at each facility, and two PCW groups, also one at each facility.

Groups were moderated (facilitated) by an experienced qualitative researcher. They acted as group facilitator with the purpose of introducing topics (see table 1) and to guiding discussion around the agreed area of interest [18, 19]. The focus group facilitators always brought the discussion back to the agreed area of interest if discussions between group members went off-track.

Exclusion criteria: Senior supervisors were excluded from focus groups so that participants felt safe to express their honest perceptions, feelings, and any concerns [18].

Recruitment: Convenience sampling was used to recruit participants who are easily accessible to the study and met the inclusion criteria. Organizational permissions were sought, and flyers were distributed to seek participation in this study.

Table 1: Focus group questions

Thematic analysis made use of a manual categorization process to refine down meaningful themes resulting in distinct concepts where there was evidence of some saturation to the data.

Data analysis occurred after each cycle of the action research implementation over a time
period of six months i.e. a three intervals, preliminary/ intermediate/ and post
implementation. All manual thematic analysis was confirmed using Leximancer Software
an analytics technology and text-mining software to automatically analyze the content of
collections of textual documents and display the extracted information [20].

Results

Impact of the CPGs on the level of confidence RNs and PCWs have in providing high
standards of care (Pre-implementation phase)

Early pre-intervention concept generation from preliminary focus group data revealed a
distinct lack of confidence with the treatment being provided to residents within these
facilities. Examples included lack of confidence in provision of effective pain management,
and dealing with family if staff were unable to offer contemporary and effective clinical
care. Issues surrounding pain management related to a delayed response in obtaining pain
relief, the ongoing management of break through pain, or ongoing pain assessment. As
one of the PCWs outlined a resident had ‘been in pain for two months and its getting
worse.’ They further alluded to the fact they had contacted the RN on numerous occasions
saying, ‘Yes a number of times’, and unfortunately ‘it wasn’t until the family member got
involved that they (The Resident) got attention.’ The PCW outlines, ‘I told the RN and so
the RN told the doctor.’ There is an assumed breakdown in communication which occurred
here, possibly between the RN and the Doctor. One RN however offered further insight to
this type of scenario confirming that communication and response from the GP is difficult
at times. This RN was advocating for pain relief saying, ‘that’s what you’ve got to do,
you’ve got to fight’ [for it] and ‘ensure that the resident is pain free and that’s pathetic.’

Prior to the intervention of the CPGs there appeared to be a culture enabling distrust and
lack of confidence by PCW’s in timely RN assessment of residents. This was demonstrated
when some PCWs engaged the family as a means to facilitate action from the RN or Doctor
in response to resident care issues. This type of behaviour had the potential for damaging the clinical reputation of the organisation. PCW staff were acutely aware of this strategy to engage family to catalyse visibility of care need as noted in the following statement by a PCW ‘it wasn’t until the family member got involved that they got attention.’ One PCW admitted to using the family to enable action saying, ‘I can’t do it,’ dealing with ‘what pain she must be going through. I can’t let her suffer like that.’ This then led them to inform the family as a mechanism to enabling action. Clearly linked to the emerging concept of low confidence in the clinical capability was the perception of RN’s as noted in the following statement, ‘I guess some family have a lack of confidence in the nursing care, aged care. News, Four Corners, you know?’ Additional evidence indicating a lack of confidence from the family in the ability of the facility to offer adequate treatment and care also included family insisting on hospital transfer. As one RN outlined, ‘the family will ask the question, if my mum or dad will get better treatment than here, and can you send them to hospital.’

The tendency to use hospital transfers rather than identify deterioration early and manage care in the RACF also demonstrated there was a lack of confidence from RNs that they could facilitate appropriate care. Evident from pre-intervention participant feedback was the notion that a lack of familiarity with the resident may also be a contributing factor to increased numbers of hospital transfers. Where there was no continuity of care or understanding of what is “normal” or baseline biometrics for the resident, a risk mitigation approach in transferring this resident to hospital was an end result. This correlated with a lack of confidence to continue to care for the resident. A team of PCWs expressed their frustration on how they were not involved in handover for resident care.

One PCW says, ‘I can’t remember here, but a few of - there’s no handover for carers. They don’t do a handover between the RNs - the RNs don’t gather them’. ‘It varies, which side,
and it’s all different. So they’re not getting information, they’re just taking handover from the outgoing staff in, which is carer to carer.’ In that facility RN to RN handed over was practiced and PCW’s often did not know changes from previous shifts or post hospitalisation episodes.

There also appeared to be inconsistencies in decision making around whether hospital transfer was necessary. As one RN stated in relation to the afterhours doctor, ‘once it gets to afterhours, if we haven’t heard back from them, you’re not able to get that high level intervention.’ ‘In the end you’re concerned about the deterioration, so you’re sending them to hospital where they can get better care.’ Reinforcing the lack of confidence in their own abilities, another RN said, ‘it might take a bit of time negotiating with the family or GP, and liaising with these people to make a decision. The safer side is sending them to hospital.’”

Evidence of care guideline use

Interim Phase

There was minimal reference to the impact of the use of the CPGs in the interim phase of intervention. This is likely due the level of diffusion of the innovation which was yet to reach the majority of staff. Staff had not yet developed confidence with their use, as staff education around the value of the CPGs was still occurring. Examples that did show positive application of the CPGs included one statement from an RN stating ‘It (The care Guidelines) supports us in our decision making - that we’re doing the right thing and that we are capable of managing these people here, rather than sending them off to people that don’t know them. It’s much better’. With reference to one of the key clinical pathways contained in the RN Care Guide [21] one RN fed back that ‘whether the resident has to go for an X-ray or they (The Doctor) want to make a decision, then there is this flow chart (Fractures and Contractures) that can tell us what to do.’ additionally she added, ‘That
Final Phase

Saturation of positive comment related to the impact and utilisation of the care guidelines could be articulated as unequivocal evidence. High-quality, evidence-based CPGs offered a way of bridging the gap between RACF policy, standards for care, and staff knowledge. These care guidelines have been upheld by participants as an essential part of quality care supporting clinical reasoning and impacting patient/resident care and ongoing management.

The CPGs offered a series of goals namely the intent to improve effectiveness of resident quality of care, to mitigate variations in clinical practice, to enhance clinical assessment and early deterioration and to reduce costly preventable hospital admissions. There is clear evidence stemming from this data that staff feel they have intervened in patient care earlier than otherwise anticipated as a result of using these care guidelines. These CPGs have improved clinical reasoning skills confidence and had a major impact in reducing failure to rescue.

Barriers to effective shared decision-making between the RNs and PCWs included lack of time, skills, knowledge, mutual respect and effective communication processes. This research found that the CPGs as a decision making tool positively aided communication process between PCW and RN by legitimising the PCW assessment of residents and being able to translate this into information for RN decision-making.

Clearly visible from this research is the need for ongoing education and training such as an annual refresher and new staff orientation training within and across RACF and the development of an app to improve access to the CPGs. As one PCW advocated, ‘the care guidelines should become part of mandatory training.’ Their rationale for this was that ‘It means that every year we get reminded that there is a guideline’. This staff member also
referred to the benefit of an electronic “app” for the care guides stating, this could be ‘brief information [in the App] different type of wounds, what you have to do in an episode if something is happening.’

Enhancement of clinical reasoning demonstrated the impact these CPGs may have on reducing the likelihood of failure to rescue. One RN supported this notion by stating, ‘it’s probably helped me to identify issues and manage issues on an ongoing basis, forming assessments.’ Another RN outlined that it assisted with problem solving ‘I feel it probably helps me with trying to problem-solve the solution. Because I do remember that we had a particular discussion about people becoming dehydrated.’ ‘In that particular situation, we were able to problem-solve and the outcome was successful.’

One RN endorsed the application of the CPGs through compliance with the information contained within the document by stating, ‘One of the experiences that I’ve had was with a newish RN who rang me on the weekend to say that she had sent somebody to hospital because they had chest pain. I said, did you follow the care guidelines? No they hadn’t, I said, have you attended the training? Yes they had, I said, that’s what you’re supposed to do. Use the caregiver pathway to help you make decisions before you transfer them to hospital.’ This individual further stated, ‘They’re aware, they have attended the training; the switchover hasn’t happened for some of them.’

One PCW referred to the usefulness of the CPGs in addressing gaps in knowledge. They explained, ‘there’s differences between when you know something and when you don’t know something. At the moment, it’s probably what we know from our education and whatever is left in our knowledge. But if we have this (The care guidelines), then it’s probably more of a smooth ride.’ Another PCW added that the CPGs enabled her brush up on knowledge that may have been forgotten due to absence from the workplace as follows, ‘If I’m on holiday and I forget everything, I have this book and I have got my
memory back. That’s why I think you have this.’

Beneficial for New grads (Confidence)

A component directly related to increase in confidence was that of the new graduate RNs experience within the RACF environment. The organisations participating in the research study regularly employ new graduate RNs. Many of the other members of the RN workforce were noted as only having two, or three years postgraduate experience. In pre-intervention findings many of the PCWs expressed their concern that new RNs generally don’t have the experience to deal with the type of medical complications that often arise in the aged care setting. One PCW claimed, ‘Assessment skills are less than excellent in RNs.’ With another PCW noting, yes, ‘knowledge and education, I feel that they have lack of acute experience.’ Yet another PCW added, ‘I find that most of the RNs come straight from being a graduate and then go into aged care first, without experiencing practice in a hospital. They do have clinical practice in the hospital while they’re studying at university, but probably just for three or four weeks each time and I think that’s not enough.’

One RN articulated the situation for the nurses stating, ‘you get a lot of new grads and they go through their orientation and buddy shifts. Then they might be on a shift and whilst there’s other RNs in the facility, they’ve got 30 residents. This means it’s a bit tough to be making those decisions.’ This indicates that RNs are under significant pressure when making decisions as part of the care team.

Post implementation of the CPGs there was a consensus that they aided these new RNs and helped to build skills. As one RN stated, ‘this is a large site and they (New Grads) need to build up their skills.’ Another RN added, ‘I just feel that they (The care Guidelines) are great for them (New graduates) to learn from. For me as a clinical co-ordinator, I mean it’s great and maybe I should know all this, but it does remind me that it’s just good to read it over.’ Another RN endorsed the CPGs saying, ‘We have talked about it in the RN’s
meeting too, to promote (the care guidelines) because I see the benefit of them.’ These nurses viewed the care guidelines as beneficial in situations when they ‘get new graduate RNs and they don’t have the experience to deal with the type of medical complications that we can get.’ Another RN added, ‘I think it’s also helped the new grads to read through it (The care guidelines).’ Supporting this another RN stated that the care guidelines are a useful resource for newly graduating RNs saying they have, ‘got a lot of new grads here and it’s a beneficial resource for new graduates.’

PCW Care Team Experience

The PCWs as core members of the care team expressed frustration about not be able to say something when they were confident there was a clinical issue with the resident. This is an interesting concept as the PCW plays an integral role in identify early clinical cues that something is not right with the resident. Proportionally there are more PCWs than RNs in RACF meaning that the PCWs are better positioned to detect early clinical signs and symptoms regarding clinical changes in the health status of the resident. Recognising that as unregulated health care workers, PCWs do not have a set of governing care standards, many of them still refer to working within the parameters of their role which is dictated by their employer. As one PCW noted, ‘well we deal with dementia, but delirium and depression is not really our section. We look for the signs but if somethings out of the ordinary with a resident, we’re not going to say, oh that’s delirium, because we don’t diagnose it.’ Another PCWoutlined their views regarding pain by stating, ‘so you know their grimacing signs but you’re not going to ask a resident who’s not going to talk and say they are in pain. Because some will say no; you can see it in their face and it’s like hang on, this residents in pain so you’ll get the RN before you actually tend to their care.’ This demonstrates critical thinking by the PCW in noting that there is pain management strategies and medication in place prior to commencing activities of daily living.
What is clear is that the new CPGs have assisted the PCWs in helping to define their role within the care team. PCWs later in the cycle of data collection referred to identifying symptoms such as ‘When residents were dehydrated, what’s the symptom?’ One PCW statement clearly showed that the CPGs assisted them as part of the care team in responding to a Resident’s needs by identifying clinical symptoms such as, ‘what to look for if a resident can’t breathe.’ The care CPGs were noted to provide a pathway for cue detection in clinical deterioration ‘It gives you a starting point and what to look for; it just gives you signs and symptoms, what to look for and look at.’ One PCWs also recognised the key position they have in communicating resident clinical issues, as one PCW outlined, ‘So I was able to use that as a tool (Bristol Stool Chart, Constipation Care Guide) and explain to her what they levels of faeces and the consistencies. What they look like someone’s constipated or they’re not. So I found it better than me waffling on I could just pull this up and it was very self-explanatory.’ This was clear evidence that the care team experience did improve as a result of CPGs implementation and use.

Nurse Practitioner Support

The Nurse Practitioner NP was highly regarded as a key resource in responding to questions or concerns. As one RN explained, ‘so whilst we might not have our Nurse Practitioner come every day, because she’ll be going elsewhere, we will still have that contact.’ The NP was also linked to a reduction in hospital transfers, with one RN outlining, ‘It is good. It gives you a better buffer, I think to make those decisions having the NP here. ‘Several times I’ve been okay, she’s been there to support us most of the time and we’ve been able to keep the resident here, get Hospital in the Home out, rather than sending them through to ED.’

There was a general acceptance that participation in ongoing education was an indication not only for the acceptance of these CPGs, but also for the presence of a NP. One RN
stated, ‘I think moving forward and now that the nurse practitioner is going to be coming in providing good support that we can look at some of the modules and she can keep elaborating on it.’ Another RN explained, ‘Continuous education gives us more understanding, with being able to identify the different things.’

When staff were engaging in clinical solution generation regarding the medical (GP) response time for clinical issues in the facility one RN asked the question, ‘What about Nurse Practitioner?’ Another RN responded, ‘Yeah, a nurse practitioner with a prescription on site will solve a lot of issues’, implying residents would get the assessment and intervention or medication they require for treatment more quickly. Another RN agreed with this assertion stating, ‘antibiotic orders in the afterhours with a GP or next day clearly delays the decision making’.

Discussion

Analysis of the pre-implementation phase reflected that post hospitalization support was often not forthcoming with poor communication between the health service and many RACFs a contributing factor. Good communication is central to quality healthcare and early findings from this research clearly support published research outcomes demonstrating that the handover of vital resident health status information is often found wanting [6]. What is apparent from this research and supported in the literature [6, 22] is that there is no accord regarding essential hand over practices when residents are transferred from aged care facilities to emergency departments. In addition practices among RACF registered nurses and PCWs tend to vary meaning that the information being communicated up for the hospital transfer can vary from poor to just sufficient. Relevant information which should accompany the resident has been reported by authors like [22] calling for more guidelines and clearly designed methods of communication to reduce vagueness, enhance clarity, and enhance the safety and quality of the transfer. Post
implementation data supports the notion that a different action of communication can stem from improved clinical awareness through structured guidelines. Dayton and Henriksen [22] also suggest that facility contact details are essential for the transmission of effective communication. Without agreement across all parties as to what comprises ‘vital transfer information’, communication standards will vary and resident care will be affected [6]. Results from this research however indicate that this does not need to be the case with early evidence showing improved communication practices between PCWs and RNs can reduce the likelihood of hospital transfer.

Results reflected that using a NP model of care, meant returning residents were able to be integrated back into the RACF more successfully. The impact of a Nurse Practitioner clinical support on reducing presentations to the ED is not well defined in the literature, but is supported by [10], where they demonstrated improved resident quality of life with NP intervention compared to a control group.

During the post-implementation phase, it was noted that despite lower presentations for the Australian Triage Score Category 1, 4 and 5 triages, there was a higher admission rate of presenting residents admitted into the Hospital. It is plausible that the introduction of and engagement with the CPGs has led to an increase in a detection of resident issues otherwise going untreated. Additionally, the reduction in re-presentations suggests that once discharged the NP and RACF staff could provide continued care and reduce likelihood of re-presentation.

Hoben et al [23] outlines that unregulated care workers perform up to 80 % of the direct resident care required by the resident placing the PCW in a prime position to detect changes in a resident’s health status to identify and communicate information to enable early assessment and prevention of deterioration. With little formal training, extremely high workload expectations, and frequent exposure to behaviours from residents, PCW’s
are under pressure but ideally placed to ensure patient safety and care.

The workload of PCW’s in contemporary RACF services is such that it places this cohort at high risk for burnout. This is known to affect the quality of resident care, including the quality of response for emergent health care needs. [23] Poor quality of health care delivery in nursing homes has severe consequences for residents and the health care system. Many of the early perceptions articulated by the PCWs in this study reflected high levels of stressors such as feeling overworked, uncertain, undervalued and unsupported. Many expressed concern around the standard of care and response being provided to meet resident’s needs.

What is clear from this research supported by Arendts et al [10] is that a Nurse Practitioner does offer increased support for the PCW care staff and RNs. This coupled with the care guidelines has shown a change in PCW perceptions who indicated that they were now feeling supported and more certain in their role assessing and communicating resident issues.

The goal of this research was to achieve the triple aim of CPG provision, provision of contemporary education, and Nurse Practitioner support for RACFs. As noted these CPGs were based on the Boyd, Armstrong [1] New Zealand model, and adapted to the Australian context in collaboration with RACFs, nursing and medical gerontology experts.

As evidenced in the literature the use of clinical guides in RACFs can provide staff with additional resources to support clinical judgment and strategies for nursing led care management of residents [9]. This research has highlighted support for the research recommendations from Kontos [9] which advocated for integrating PCW knowledge in assessment and care planning, and examining occupational identity for the PCW role as inter-professional stakeholders in long-term care [9]. Early research data from this study has supported earlier findings that PCWs are infrequently consulted when care direction is
being decided or implemented [9]. What is clear from the PCWs participating in this research is that lack of professional respect, communication, and collaboration among PCWs and RNs was at an all-time low. 

Interim and post qualitative findings though have shown that the care guidelines have improved professional communication and collaboration resulting in earlier response times due to enhanced assessments preventing exacerbation of clinical deterioration for residents. Registered nurses felt safer about their practice when they transferred patients to the hospitals rather waiting for the after hour’s doctor’s review. Implementation of guidelines has enhanced confidence among registered nurses and a mutual understanding of expected outcomes within the organisation staff, stakeholders and primary health care providers. A combination of the CPGs intervention with that of the availability of a NP has indicated progress in improving the team work of the PCWs and RNs which is anticipated to improve the quality of care for older adults residing in RACF. This research also supported the notion that NP adds significant value clinically in RACF settings as access to Medical Support is often limited to GP availability or after hours services. 

The CPGs hanwere also a valuable asset in providing a platform for PCWs to raise concerns to RNs early using structured evidence. The impact found regarding the confidence of PCWs to escalate early deterioration to RNs was also evident throughout the course of the focus group interviews.

Conclusions

The results of this research provide the potential opportunity for future research on a number of concepts occurring in RACF clinical environments. Further research needs to better explore the direct correlation between PCW knowledge, skills, and training, and a failure to rescue through an inability or unwillingness to advocate legitimately on behalf of RACF residents. This should also encompass more research scrutiny on the impact of
poor communication practices between PCWs and the RN. Longitudinal research is required to better explore the levels of complex care these organisations could accommodate if factors like staff to resident ratios and improved clinical knowledge were further addressed. Future studies examining the direct impact of NP roles on reducing the inappropriate utilisation of EDs should be explored in more depth. The role NPs play in reducing ED utilisation needs greater long term evaluation to better ascertain clinical care and economic benefits.

Abbreviations

RACF: Residential Aged Care Facility

PCW: Personal Care Worker

RN: Registered Nurse

NP: Nurse Practitioner

CPG: Clinical Practice Guideline

Declarations

Ethics approval and consent to participate: Ethics approval was obtained from the West Moreton Hospital and Health Service, Human Research Ethics Committee. Approval Number: HREC/2018/QWMS/44525. Written informed consent was obtained from all participants in this research. Consent for publication: All authors have given their written consent to be included as an author on this paper.

Availability of data and materials: The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing interests: The authors declare that they have no competing interests

Funding: This work was supported by the Darling Downs West Moreton Public Health Network. The funding body play no part in the design, collection, analysis, or interpretation of data, and in writing this manuscript.

Authors’ contributions: CM analysed and interpreted all available transcripts. CM performed the lead role in writing this article. All other authors read, edited, and approved this manuscript.

Acknowledgements: The Darling Downs and West Moreton Public Health Network (DDWMPHN), and Dr Robyn Henderson, the executive sponsor from West Moreton Hospital and Health Service.

References

1. Boyd, M., et al., Do gerontology nurse specialists make a difference in hospitalization of
long-term care residents? Results of a randomized comparison trial. Journal of the American Geriatrics Society, 2014. 62(10): p. 1962-1967 DOI: 10.1111/jgs.13022

2. Connolly, M. J., et al., The Aged Residential Care Healthcare Utilization Study (ARCHUS): A Multidisciplinary, Cluster Randomized Controlled Trial Designed to Reduce Acute Avoidable Hospitalizations From Long-Term Care Facilities. Journal of the American Medical Directors Association, 2015. 16(1): p. 49-55 DOI: 10.1016/j.jamda.2014.07.008.

3. Bellis, A.D., Australian residential aged care and the quality of nursing care provision. Contemporary Nurse: A Journal for the Australian Nursing Profession, 2010. 35(1): p. 100-113 DOI: 10.5172/conu.2010.35.1.100.

4. De Bellis, A., OPINION PIECE: Australian residential aged care and the quality of nursing care provision. Contemporary Nurse: A Journal for the Australian Nursing Profession, 2010. 35(1): p. 100-113 DOI: 10.5172/conu.2010.35.1.100.

5. ANMF, Minimum staffing levels in aged care. Australian Nursing Journal, 2008. 16(3): p. 11-11. Available from: http://anmf.org.au/campaign/entry/ratios-for-aged-care

6. Griffiths, D., et al., Communication between residential aged care facilities and the emergency department: A review of the literature. International Journal of Nursing Studies, 2014. 51(11): p. 1517-1523 DOI: https://doi.org/10.1016/j.ijnurstu.2014.06.002. Available from: http://www.sciencedirect.com/science/article/pii/S002074891400159X.

7. Holmes, B., Make aged care ratios law now! Lamp, 2018. 75(5): p. 5-5. Available from: https://www.nswnma.asn.au/make-aged-care-ratios-law-now/

8. Nhongo, D., et al., Leadership and registered nurses (RNs) working after-hours in Residential Aged Care Facilities (RACFs): A structured literature review. Journal of Clinical Nursing (John Wiley & Sons, Inc.), 2018. 27(21-22): p. 3872-3881 DOI: 10.1111/jocn.14565. Available from:

9. Kontos, P. C., K.-L. Miller, and G. J. Mitchell, Neglecting the Importance of the Decision
Making and Care Regimes of Personal Support Workers: A Critique of Standardization of Care Planning Through the RAI/MDS. The Gerontologist, 2009. 50(3): p. 352–362 DOI: 10.1093/geront/gnp165. Available from: https://doi.org/10.1093/geront/gnp165.

10. Arendts, G., et al., A clinical trial of nurse practitioner care in residential aged care facilities. Archives of Gerontology & Geriatrics, 2018. 77: p. 129–132 DOI: 10.1016/j.archger.2018.05.001.

11. Dwyer, R., et al., Unplanned Transfer to Emergency Departments for Frail Elderly Residents of Aged Care Facilities: A Review of Patient and Organizational Factors. Journal of the American Medical Directors Association, 2015. 16(7): p. 551–562 DOI: 10.1016/j.jamda.2015.03.007.

12. Amadoru, S., et al., Factors influencing decision-making processes for unwell residents in residential aged care: Hospital transfer or Residential InReach referral? Australasian Journal on Ageing, 2018. 37(2): p. E61-E67 DOI: 10.1111/ajag.12512.

13. Boyd, M., et al., Do Gerontology Nurse Specialists Make a Difference in Hospitalization of Long-Term Care Residents? Results of a Randomized Comparison Trial. Journal of the American Geriatrics Society, 2014. 62(10): p. 1962–1967 DOI: 10.1111/jgs.13022.

14. White, A.M., Lewin’s Action Research Model as a Tool for Theory Building: A Case Study from South Africa. Action Research, 2004. 2(2): p. 127–144 DOI: 10.1177/147675030403727. Available from: https://doi.org/10.1177/147675030403727.

15. Sankaran, S. R., M., Implementing organizational change using action research in two Asian cultures. Paper presented at PMI® Research Conference: Defining the Future of Project Management. 2010. Available from: https://www.pmi.org/learning/library/organizational-change-projects-action-research-6483.

16. Boyle, M., Research in Action: A Guide to Best Practice in Participatory Action Research: Department of Families, Housing, Community Services, and Indigenous Affairs..
2012. Available from: https://www.dss.gov.au/sites/default/files/documents/06_2012/research_in_action.pdf.

17. Goldkuhl, G., From Action Research to Practice Research. 2012, 2012. 17(2) DOI: 10.3127/ajis.v17i2.688. Available from: http://journal.acs.org.au/index.php/ajis/article/view/688/536

18. Boddy, C., A rose by any other name may smell as sweet but “group discussion” is not another name for a “focus group” nor should it be. Qualitative Market Research: An International Journal, 2005. 8(3): p. 248–255 DOI: 10.1108/13522750510603325. Available from: https://doi.org/10.1108/13522750510603325.

19. Denise Threlfall, K., Using focus groups as a consumer research tool. Journal of Marketing Practice: Applied Marketing Science, 1999. 5(4): p. 102–105 DOI: 10.1108/EUM0000000004560.

20. Penn-Edwards, S., Computer Aided Phenomenography: The Role of Leximancer Computer Software in Phenomenographic Investigation. Qualitative Report, 2010. 15(2): p. 252–267.

21. Henderson, R., C. Hope, and M. Van hunnik, RACF CAREGIVER CARE GUIDE. 2019(1). Available from: https://racfcareguide.westmoreton.health.qld.gov.au/.

22. Dayton, E. and K. Henriksen, Communication Failure: Basic Components, Contributing Factors, and the Call for Structure. The Joint Commission Journal on Quality and Patient Safety, 2007. 33(1): p. 34–47 DOI: https://doi.org/10.1016/S1553-7250(07)33005-5. Available from: http://www.sciencedirect.com/science/article/pii/S1553725007330055.

23. Hoben, M., et al., Barriers and facilitators in providing oral health care to nursing home residents, from the perspective of care aides—a systematic review protocol. Systematic Reviews, 2016. 5: p. 1–7 DOI: 10.1186/s13643-016-0231-7.

Tables 1
Due to technical limitations, tables are only available as a download in the supplemental files section.

Supplementary Files

This is a list of supplementary files associated with the primary manuscript. Click to download.

Table 1.pdf