Healthcare assistant decision-making and information behaviour in long-term care settings

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Abstract

Healthcare assistants are an unregulated workforce who provide most of the care to those living in aged residential care in Aotearoa New Zealand. Despite being the essential workforce for the aged care sector, there is a paucity of literature regarding how healthcare assistants (HCAs) make decisions in their everyday work or the types of decisions they find more challenging, for example, when they perceive there is uncertainty or risk. Increased demand for aged residential care (ARC) services and health workforce shortages have led to an environment where HCAs are often working under pressure and required to make decisions about all manner of care. This study explores how HCAs make decisions, every day, when caring for residents, including those who live with dementia, multimorbidity, or have complex medical condition(s) requiring ongoing treatment and monitoring. Determining easy and difficult routine decisions, how information is gained and shared, and the experiences associated with decision-making is described and analysed. Decision branches that result from HCAs' assessments of residents' needs, or when there is uncertainty, support the development of two models that conceptualise what influences HCAs' decisions and their actions.

Critical ethnographic methodology underpinned by Elfreda Chatman's small world theory informed data collection. Specifically, direct observations were conducted at three ARC facilities, semi-structured interviews with 23 HCAs, and experimental vignettes were used to collect data on the characteristics of HCA participants, decision types, the decision-making environment and information landscape, what influenced decisions and how decisions were made when there was uncertainty. Direct observations identified HCA care routines and information sharing practices. Semi-structured interviews with HCAs identified participant social and/or demographic characteristics, including educational background, information preferences, personal beliefs and values that affected care delivery, types of decisions made, social norms related to information sharing and decision-making. Four experimental vignettes explored decision-making in uncertainty by progressively manipulating the factor of knowing. Three dimensions of knowing identified from the review of literature were used to manipulate the factor of knowing - knowledge of the environment of care, knowledge of the resident (familiarity), and knowledge as (HCA) experience.

Small world theory and decision-making theories were used as frameworks for analysing data. Decisions were conceptualised as decision schemas associated with specific care actions. Routine decision schemas were identified, as well as participants describing which decisions were easier or more difficult to make. Decisions were influenced by the institutional schedule, availability of resources, and the rules of work based on the social norms of the ARC facility. Resident attributes, HCA characteristics, and the nature of the care task influenced how decision schemas were actioned. How information was sought and used by HCAs occurred in the practice of formal handover from

registered nurse (RN) to HCA. In addition, informal handovers frequently occurred between HCAs during a shift with the shortest exchange, the fly-by, a way to maintain situational awareness of resident and communal care demands.

Analysis of experimental vignettes revealed the frequency of actioning routine decision schemas, information sharing and seeking practices, and the use of tacit knowledge to inform care decisions in uncertain situations. Data from vignettes provided two compelling findings. First, the more uncertainty in the vignette scenario, the higher the frequency of advice sought from an experienced HCA (by a less experienced HCA). Second, HCAs took an active role in assimilating new residents into institutional care routines.

This research has professional and theoretical implications for practices related to the provision of safe care to residents living in ARC. The importance of HCA derived information and information sharing between HCAs and RNs became apparent. By identifying the types of decisions that HCAs routinely made, and those they found difficult to make, clarified opportunities for the co-creation of strategies to address concerns and better advocate for residents. Nurse educators / managers and RNs working in ARC, most immediately, can improve the support they provide to HCAs by sharing information that HCA consider to be of high relevance to the work and decisions they make. Study findings further highlighted the influence of institutional routines and the value HCAs placed on information held by experienced HCAs that was sometimes available at the time and place it was needed - where care was provided.

The relationship between the factors that influence decisions (influencers) and how a decision is actioned is important to understand by those managing healthcare and clinical services. Outputs from the research include two models that conceptualise the influencers of HCA decision-making. The first model conceptualises the institutional constructs HCAs use to frame care decisions, as well as the attributes and traits used to decide how a decision is actioned. The second model builds a decision-making stream by assembling the relationships between the constructs, attributes, and traits - with tensions created by the epistemic influences of certainty, uncertainty and risk experienced by HCA in decision-making. These models, at the scale of a decision-schema, can accommodate an increase in complexity by stacking, refining or adding components identified in different contexts.

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Chapter 1 Introduction

Introduction

There are 32,000 older people being cared for in Aotearoa New Zealand (NZ) aged residential care (ARC) (Moore et al., 2024). Healthcare assistants, an unregulated workforce, provide most of the twenty-four-hour care required by residents living in ARC. The work of healthcare assistants (HCAs) is to support residents with daily activities, such as eating, dressing, bathing, and walking, as well as their emotional needs including sitting with them at the end of life.

Older people living longer with chronic medical conditions, including dementia, create a growing demand for care that can meet their needs. Population projections suggest a rapidly ageing demographic in NZ with higher rates of chronic conditions and disability creating greater demands for long-term care (Spoonley, 2020). The average age of admission to ARC has increased to 83 years of age with Māori and Pacific peoples on average entering care nine years earlier (Moore et al., 2024).

Healthcare assistants have the closest contact with residents, adapting their care to the changing needs of a resident over the course of their time in ARC, which can vary from months to years. Under the delegatory authority of a registered clinician, HCAs are in the best position to recognise when residents require the skilled clinical attention of a RN or transfer to hospital. However, high workloads, limited resources, and increased care demands can result in HCAs facing practical and ethical issues about when to prioritise care, which can significantly influence a resident’s quality of life (Ludlow et al., 2019). How HCAs make decisions about aspects related to a resident’s care is unclear.

There is a paucity of research that considers decision-making from the perspective of the HCA. Many studies on decision-making in ARC include all staff providing care, making it difficult to parse out HCA decision-making. The few studies focusing exclusively on HCAs are highly contextualised to specific care situations, such as in challenging situations (Naweed et al., 2022) or pain assessments for those with Alzheimers (Vitou et al., 2022). No studies have explicitly described the daily decisions made by HCAs or what has influenced those decisions.

There is no research that has gathered detailed data on the daily decisions made by HCAs. Qualitative methods can provide valuable insight into the types of decisions HCAs make and what influences these decisions. Data collection methods that factor in uncertainty can be used to explore decisions made when responding to unplanned care needs. A clear understanding of the day-to-day decisions that affect the overall quality of care experienced by residents and their families is needed.

This thesis will undertake research to gain detailed insight into the direct care decisions of HCAs. Qualitative methods will be used to identify the types of decisions HCAs make routinely.

Decisions on non-routine or unplanned care will also be explored through methods that appreciate the uncertainty faced by HCAs when caring for residents with changing health needs.

Research Question

The overall research question is: How do HCAs make direct care decisions in ARC facilities? This is addressed through a series of more specific questions:

1. What routine direct care decisions do HCAs make?
2. How do HCAs make routine direct care decisions?
3. How do HCAs make non-routine direct care decisions, especially in uncertain situations?
4. What influences the direct care decisions made by HCAs?
5. How do HCAs accommodate or resist the social norms of ARC facilities when making direct care decisions?

Background and Context

This section provides a detailed description of the complexities of the industry, the resident population receiving care, and the HCA workforce in ARC in NZ. Aged residential care in NZ will first be described within the wider global context of long-term care. Details of NZ national aged care contracts and levels of care service are introduced to illustrate the public-private funding and policy relationships of the ARC industry sector. Profiles of the care population residing in ARC and the HCA workforce offer the necessary detail to the environment in which care decisions are made.

Aged Residential Care and the Growing Demand for Services

Aged residential care provides long-term care in communal institutional settings. In NZ, ARC is defined as age-related services for those assessed as no longer able to live safely at home, including 24-hour provision of hotel services and personal care in the categories of: continuing care or hospital services, specialist dementia services, and rest home care (Central Region Technical Advisory Services [TAS], 2022)[1]. Aged residential care resides within a category of services aimed to provide long-term care to older people with increasing and or disease-related disabilities. The World Health Organization (WHO) defines disability in terms of a person's functional ability to participate in their everyday activities with consideration given to health conditions, physical function, environmental and personal factors (WHO, 2002). However, access to long-term care services, such

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[1] Central Region's Technical Advisory Services Limited (TAS) was consolidated into Te Whatu Ora July 2022. Previously known as DHB New Zealand (DHBNZ) and DHB Shared Services (DHBSS), they coordinated the activities of District Health Boards and industry sector groups. TAS supported the operation of many national health and informatics programmes, such as Health of Older People Programme, InterRAI Assessor and Assurance Compliance Management System, and is a Designated Auditing Agency under the delegation of Director-General of Health auditing hospital, rest home and residential disability services (National Library of New Zealand, 2004; New Zealand Gazette, 2019; New Zealand Government Electronic Tenders Service, 2020).

as home-care or ARC, is based on the complexity of individual care needs (Parsons et al., 2018; WHO, 2021). Long-term care services provided in NZ include homecare services, respite services, drop-in day-care services and ARC (Chapman et al., 2022).

Long-term care services are defined differently across the Organisation for Economic Co-operation and Development (OECD), however, in terms of institutional care, there are similarities. The World Health Organisation (WHO,2015) defines long-term care as “activities undertaken by others to ensure that people with or at risk of a significant ongoing loss of intrinsic capacity can maintain a level of functional ability consistent with their basic rights, fundamental freedoms and human dignity” (p. 127). Long-term care can be provided in the community through at-home support services or in settings where care services are delivered by the housing provider, such as in ARC. Internationally, the diversity and market dynamism of aged care services has resulted in a wide terminology of service types (Howe et al., 2013). However, facilities that provide 24-hour nursing care in non-domestic or institutional settings are commonly differentiated from other types of long-term care services based on mandatory pre-admission criteria. Many countries identify facility types according to the level of nursing care required. The WHO and OCED categorise ARC within two categories, residential nursing facilities and residential facilities (Barber et al., 2021). Residential nursing facilities provide care to older people who need complex medical attention. They may require intensive nursing care and assistance with activities of daily living. Residential facilities may also include specialised units to care for those with cognitive decline. In NZ, complex medical services fall under the category of *hospital level care* and are provided in ARC under terms that reflect the complexity of care needs. Residential facilities aim to sustain and foster independence and can provide support with activities for daily living, but the residents do not require high levels of medical care or supervision. In NZ, residential supportive services fall under the category of *rest home level care*.

Age-related services are provided for older adults at a defined age. An older adult in NZ is considered as being 55 years and older for indigenous Māori and Pacific peoples and 65 years and older for non-Māori and non-Pacific people (Ministry of Health, 1997). The latter is consistent with the OECD, which represents countries with developed health systems, who define the older adult population as those aged 65 years and older (2022). The WHO considers older age to be 60 years and older, the age at which major population burdens of age-related disability and disease occur (WHO, 2017). Socioeconomic, regional, gender and ethnic differences affect heath expectancy differently and have been recognised as a cause of health disparities among Māori and Pacific peoples in NZ (Ministry of Social Development, 2008, 2016). Māori experience greater adverse health conditions earlier in life than non-Māori and can expect to live shorter lives with fewer years without disability

(Ministry of Social Development, 2016; Parr-Brownlie et al., 2020). Life expectancy in NZ is increasing, in 2013 Māori men and women could expect to live 54.3 years and 60.4 years respectively without the burden of a functional limitation, compared to 66.7 years for non-Māori men and 67.4 years for non-Māori women (Ministry of Social Development, 2016). In 2018, life expectancy for Māori men was 73.4 years and 77.1 years for women, compared to 80.9 years for non-Māori men and 84 years for non-Māori women (Stats NZ, 2021). The total number of Māori 65 years or older living in ARC in 2018-2019 was 1,441, or 2.98% of the 65 and older Māori population, an underrepresentation when compared to non-Māori highlighting the inequity of access to ARC services (Hikaka & Ngaire, 2021; Keelan et al., 2024)

Worldwide the population of older people is growing rapidly and increasing the demand for ARC. The 2019 global population of those 65 years and older was reported as being 703 million people and is projected to double to over 1.5 billion by 2050; Australia and NZ will experience an 84 percent increase over this timeframe (United Nations, 2019). The increase of older adults 65 years and older in NZ is projected to increase by 0.79 million in 2020 to 1.51 million by 2048. In addition, those 85 years of age and older are projected to increase from 88,000 in 2020 to between 270,000-320,000 by 2048 (Stats NZ, 2020). Currently, the average age of a resident in ARC in NZ is 85 years of age (interRAI New Zealand, 2020). Older people at advanced ages have higher rates of frailty, which is associated with greater care needs, decreased mobility and higher risks for acute hospitalisations (Bloomfield et al., 2021; Papanicolas et al., 2021)

Between 2017 and 2021, the average number of residents living in NZ ARC were between 32,925 and 34,218, and those 85 years and older accounted for up to 45 percent of the total resident population. In 2022, there were an estimated 32,414 people over the age of 65 living in ARC of which 19,696 (61%) were 85 years or older (Ernst & Young, 2022)[2]. As the number of residents living in ARC is projected to increase yearly between three and four percent, this will result in a projected care population of 51,443 in 2031, of which 28,818 (56%) will be 85 years and older. With increases in adults of advanced age there will be an increased demand for ARC.

Chronic and infectious diseases increase the demand for ARC services. A growing older population combined with the burden of diseases will affect the demand for long-term care and complexity of care offered in ARC. The demand for long-term care will grow as the burden of disease shifts from years of life lost due to premature mortality towards a greater proportion of disease burden and greater years lived with a disability (Koller et al., 2014; Rizzuto et al., 2017; Viljanen et al., 2021; Vos et al., 2020; WHO, 2015). Decreased functional status caused by chronic diseases and multimorbidity is a well-known cause for ARC admission (Koller et al., 2014; Viljanen et al., 2021).

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[2] Ernst & Young Limited (2022).

Current NZ strategies to support older people to stay in their homes longer are able to delay ARC care admission (Parsons et al., 2017; WHO, 2022). However, frailty is a common condition for those receiving home-care services in NZ and a predictor of acute hospitalisations (Abey-Nesbit et al., 2021; Bloomfield et al., 2022). Acute hospitalisations are a common cause of ARC admission due to the need for longer support after an acute illness and hospital-associated disability (Andrew et al., 2021; Brown et al., 2004; Campbell-Enns et al., 2020; Loyd et al., 2020).

Infections, such as lower respiratory tract infections, are a leading cause for hospital admission of older people (Baker et al., 2012; Gjestsen et al., 2018). Baker et al. (2012) found that infectious disease-related hospital admissions in NZ have been steadily rising, with striking increases for Māori and Pacific peoples and adults aged 70 years and older. Recent studies identified Māori and Pacific peoples and older people at greater risk for severe disease and hospitalisation during the NZ Covid-19 pandemic (Jefferies et al., 2020; Steyn et al., 2021). This is consistent with international Covid-19 studies where older people and those living in ARC are disproportionately affected by high mortality and increased rates of hospital-associated disability (Hosoda & Hamada, 2021; United Nations, 2020; Walle-Hansen et al., 2021). For older people admitted to ARC as a result of an unplanned hospitalisation, recovery to pre-hospitalisation functional ability is low (Liu et al., 2017).

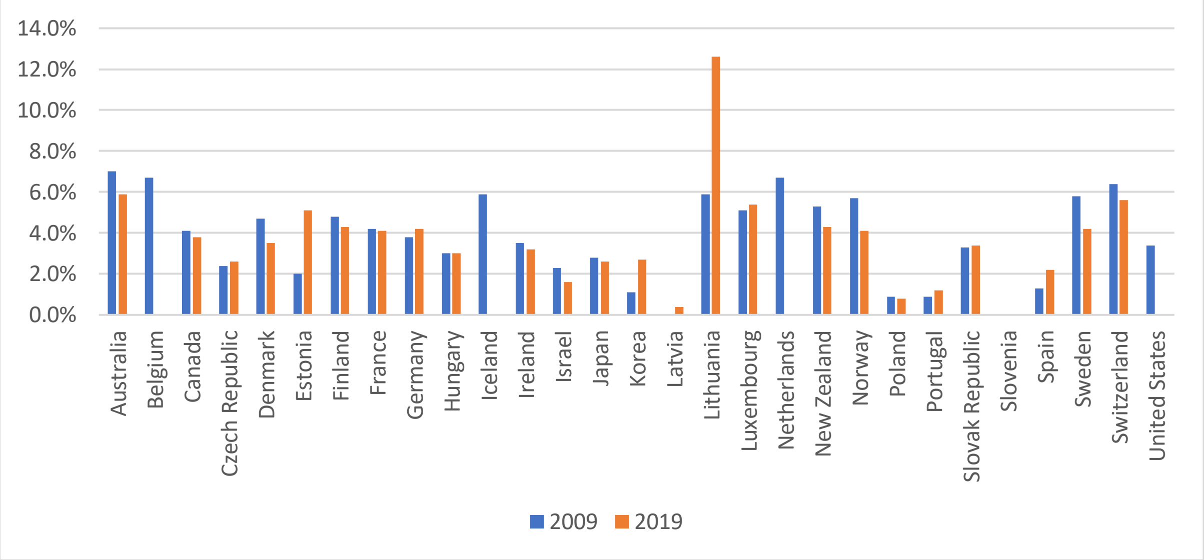
Most OECD countries report that, two to six percent of the population were in ARC between 2009 and 2019 (Figure 1.1) (OECD, 2022). Despite the demand for long-term care, it is estimated that only 5.6 percent of people globally have access to institutional or formalised long-term care services, which are primarily located in high-income or upper-income countries (Arias-Casais et al., 2022; Scheil-Adlung, 2015). Across the OECD nations, an average of 10.7 percent of people 65 years and older are receiving long-term care services and estimates are of 3,922,047 living in ARC (OECD, 2022). The actual numbers of those using long-term care are likely to be much higher. International data collection methods differ across countries, for example, in the United States where long-term care is highly privatised and predominately paid for by individuals, data on ARC recipients has not been reported to the OECD since 2016 (Dyer et al., 2020).

Access to ARC services is determined by the level of care needed by the older person. Denmark, Ontario Canada, and NZ share similar integrated care systems where social insurance schemes and government alliances with care providers are used to support access to ARC (Cousins et al., 2020; Gauld, 2017). Countries considered to provide the greatest access to long-term care services, such as ARC and home care services, have quality regulated long-term care systems that are integrated with other care services and do not rely heavily on out-of-pocket costs by care recipients. Access to ARC in NZ is based on level of need, similar to that of Denmark and Canada (Ministry of Health, 2012; Ministry of Long-Term Care, 2022; WHO, 2019). Cost-sharing assumed by recipients of

ARC differed between countries with NZ and Canada using means or assets testing to determine eligibility for funding or subsidy support for a recipient of care.

Figure 1.1

OCED countries by percentage of population ≥65 years receiving care in institutions in 2009 and 2019



Note: Data source OECD Data Explorer April 19, 2022

NZ ARC Services

The NZ government plays a central role in health care policy and as the primary funder of health care regulation standards and audits for compliance (Gauld, 2020). The criteria for ARC entry are high or very high indefinite needs that cannot be safely supported in the community (Social Security (Long-term Residential Care) Amendment Act, 2004; Te Whatu Ora, 2024). Current healthy ageing strategies aim to support older adults to live in the community longer with home-care and restorative-care support (Ministry of Health, 2019b, 2019c). However, research on the frailty levels of older people receiving care in the community and those living in retirement villages illustrate increased care needs, most notably among Māori and Pacific peoples (Abey-Nesbit et al., 2021; Bloomfield et al., 2021; Parsons et al., 2017).

A growing community-based relationship with ARC services involves the co-location of ARC facilities with retirement villages. Fifty-one percent of ARC facilities were reported to be co-located with retirement village facilities (Chapman et al., 2022). Retirement villages comprise individual units that operate under *license to occupy* arrangements and owners have access to ARC care through Occupational Right Agreements (ORAs) (Saville-Smith et al., 2019). The fastest growing service in ARC is through ORAs which accounted for 10.4 percent of all beds in 2021 increasing to 11.1 percent in 2023 (Chapman et al., 2022; Reid et al., 2023; Saville-Smith et al., 2019).

ARC Contracting and Funding. Aged residential care services are contracted by the government from private or non-governmental care providers. Yearly contracts are negotiated at a national level with ARC sector feedback. The national contracts, Aged-Related Residential Care Services Agreement (ARRC), and Age-Related Residential Hospital Specialised Services Agreement (ARHSS) stipulate the requirements, services, and charges that an ARC provider is contracted to provide to residents. This includes the maximum out-of-pocket costs residents could pay if they are not eligible for funding subsidises. The maximum financial contribution is the most a person can be expected to pay for their care and is for rest home level of care services[3] (Director-General of Health, 2019). Maximum rest home contributions for any ARC service ranged from NZ$1064.56 to NZ$1158.29 per week from 1, July 2019 to 1, July 2020, increasing to NZ$1399.16 to NZ$1511.09 per week for 2024-2025 (Director-General of Health, 2024).

ARC Ownership and Facility Size. Aged residential care facilities in NZ are privately owned[4] and vary in scale ownership holdings, business model, and size of care facility. Within the ARC industry sector, a *major group* is one that supplies over 400 beds across their holdings and "minor groups" comprise six ARC facilities or less (Chapman et al., 2022)[5]. Over 53 percent of ARC beds are supplied by major commercial groups and 21 percent of beds are supplied by major and minor charitable groups. The most common ARC facility size has 61 beds or less (Figure 1.2) (Ministry of Health, 2022)[6]. This is consistent with the ARC industries sector report of the median size of an ARC facility as being 60 beds (Chapman et al., 2022).

In 2021, 664 ARC facilities supplied a total of 40,941 ARC beds to medically complex residents with high or very high care needs (Figure 1.2). Sixty-three percent of these facilities reported 85 to 95 percent or higher rates of occupancy. Research has identified relationships between ownership types and care delivery in NZ ARC. For example, Garratt et al. (2020) found a significant relationship between medication omission rates and corporate ownership and Frey,

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[3] Maximum contributions are set within each territorial local authority which is a city or district council. There are 67 territorial authorities across NZ, each with its own set weekly maximum contribution for ARC services. Maximum contributions are for rest home level care, addition costs occur if higher levels are care are needed based on service type (psychogeriatric, dementia, hospital, rest home). To qualify for DHB/Ministry of Health subsidies a needs and financial means assessment must be completed. (Stats NZ, 2022).

[4] Less than 1 percent of beds were supplied by ARCs owned by District Health Boards owned ARC (Chapman, et al., 2022). *Aged residential care: Industry profile 2021-2022*. New Zealand Aged Care Association.

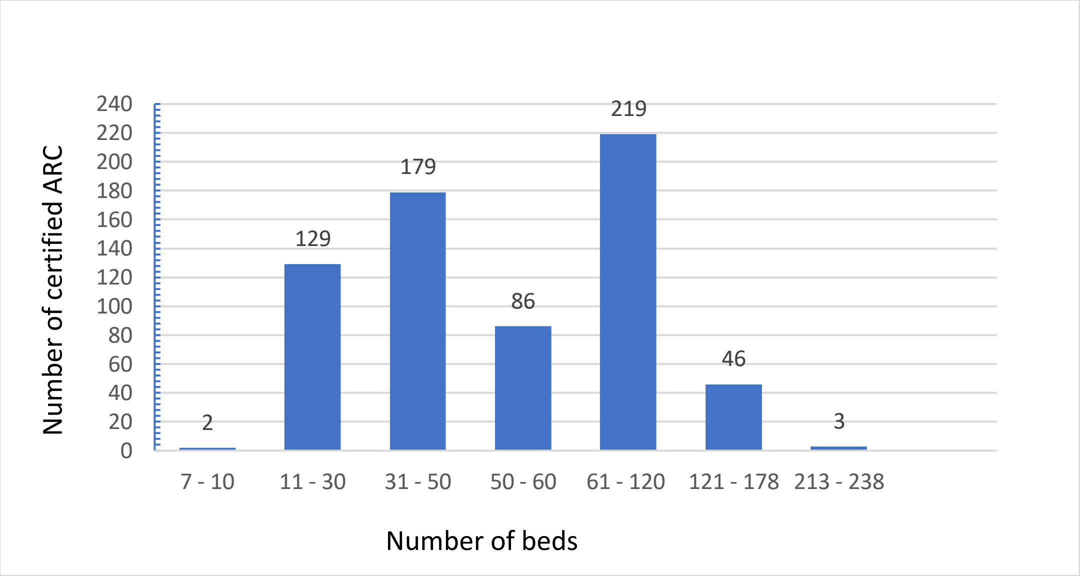
[5] Industry reported data is from the New Zealand Aged Care Association (NZACA) annual ARC Industry Profile reports. The 2021-2022 authored by Chapman et al., (2022) reported that 93 percent of the total 40,941 aged care beds counted on September 30, 2021, were provided by NZACA members.

[6] Ministry of Health publishes current data of all certified rest home providers, services provided, total number of beds per facility, location, auditor and current licence, and legal ownership (Ministry of Health, 2024). *Rest Homes*.

Balmer, et al. (2019a) suggest that residents experience better end-of-life care in charitable ARC facilities with more than 70 beds.

Figure 1.2

Certified ARC facilities (n=664) by number of beds



Note: Data source NZ Ministry of Health Certified Rest home Providers dataset, July 03, 2022

Services Provided in ARC Facilities. Gaining a clear understanding of ARC services and the resident population has improved through contractually mandated data collection and standards auditing. The Health and Disability Services (Safety) Act 2001 was fully enacted in 2004 and required ARC facilities be certified to a set of national standards (Health and Disability Services [Safety] Act 2001, 2001). The Act assisted in providing a national picture of the number, locality, and size of ARC facilities, although data were available on only 80 percent of facilities (Ministry of Health Office of Provider Regulation, personal communication, August 18, 2016). In 2013, TAS began collecting quarterly bed, resident and occupancy rates from providers as required by national contracts. In July 2015, the mandatory assessment of residents in ARC using the interRAI assessment tool was implemented by the Ministry of Health[7]. Residents in ARC require closer monitoring and engagement with specialised interprofessional care due to complex conditions and palliative care needs (Boyd et al., 2019; McKinlay et al., 2019). Between 2015 and 2020 the New Zealand Aged Care Association (NZACA) reported the level of care for dementia, hospital and psychogeriatric services grew by 13 percent whereas rest home level care increased only 1.5 percent (NZACA, 2020). Most ARC facilities

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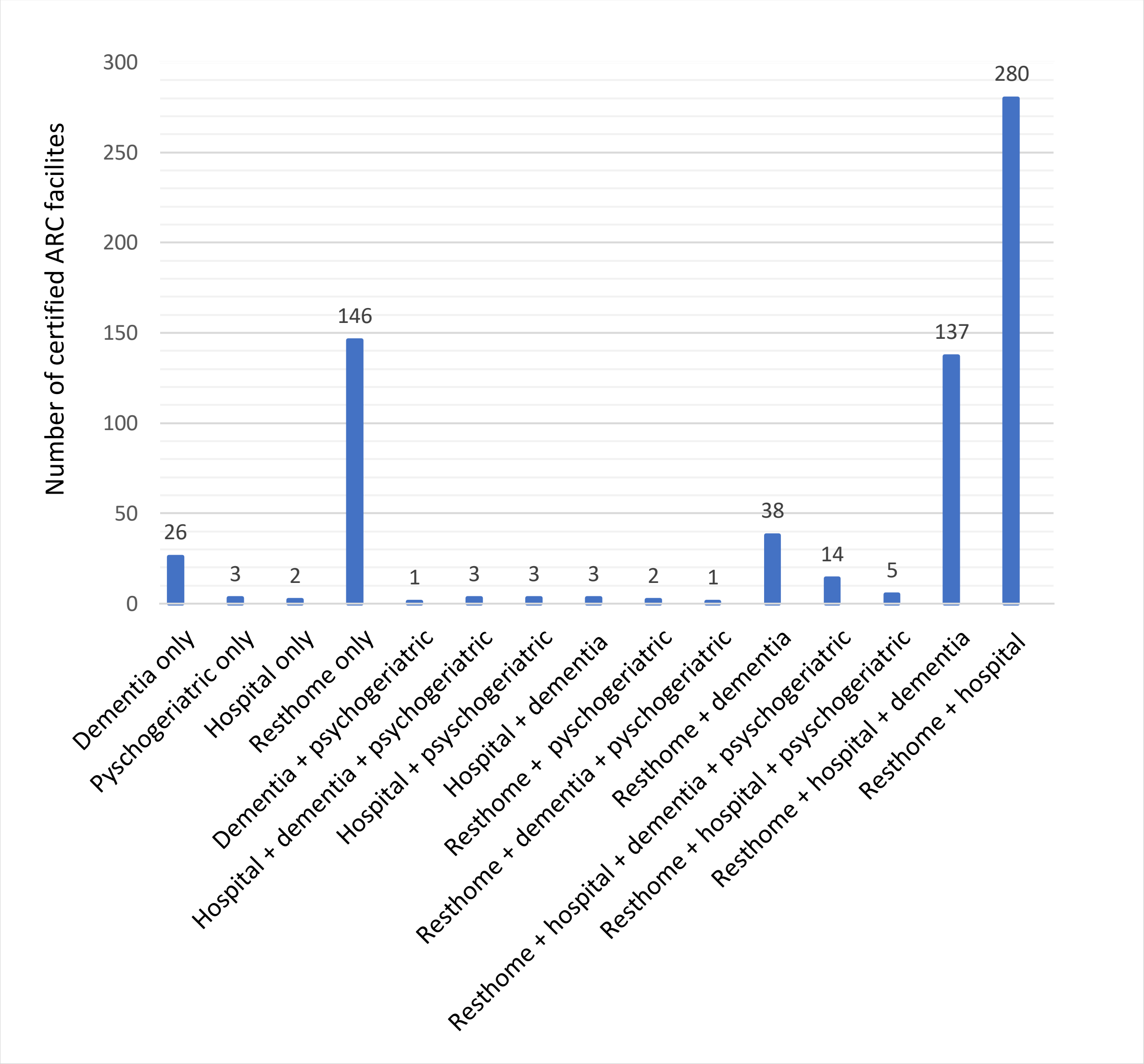
[7] There are six interRAI assessments used in NZ that range from basic screening for service need to comprehensive assessments for specialty care. All residents living in ARC are assessed using the interRAI Long Term Care Facilities Assessment (LTCF) instrument, (interRAI New Zealand, 2024).

provide different levels of complexity of care. Only 21 percent of ARC facilities provide rest home only level care and of those seven have 61 beds or more (Ministry of Health, 2022). Figure 1.3 illustrates the service mix provided across ARC facilities.

Figure 1.3

Certified ARC facilities (n=664) by service mix[8]



Note: Data source NZ Ministry of Health Certified Rest home Providers dataset, July 03, 2022

In NZ, ARC provides accommodation, along with personal, social and medical care for residents who can no longer live at home. There are four levels of full-time care provided in ARC facilities: rest-home, long-stay hospital, dementia care and psychogeriatric care. Rest-home level care

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[8] Nine percent of certified ARC facilities have contracts for care of sensory, intellectual, and physical disabilities

is for those who cannot live at home safely, but who can perform daily tasks, and with assistance, can undertake some personal care (New Zealand Government, 2022). Residents in rest homes receive an estimated 1.53 to 2.35 hours of care from a HCA and between 16 to 35 minutes from a RN each day (McDougall, 2020). Rest-home level care (42.7 %) provides the majority of care within ARC facilities (Chapman et al., 2022). There is a steady decline in rest-home level care, with a corresponding increase for higher levels of care (Moore et al., 2024).

Hospital-level care is for those who cannot live at home due to significant medical or disability issues requiring direct support to move (New Zealand Government, 2022). Residents in hospital-level care receive an estimated 2.27 to 2.95 hours of HCA direct care and 46 – 90 minutes from a RN each day (McDougall, 2020). Hospital level care (41.6%) represents a high proportion of the care provided within ARC facilities (Chapman et al., 2022).

Dementia care is for those with conditions that cause dementia or other similar illnesses that affect cognition and behaviour. Residents in dementia-level care receive an estimated 2.15 to 2.96 hours of care from a HCA and 18 to 31 minutes from a RN each day (McDougall, 2020). Dementia care (12.8%) is a smaller proportion of the care provided within ARC facilities (Chapman et al., 2022).

Psychogeriatric care is provided in secure units that care for those with severe dementia or other cognitive conditions that require specialised care. Residents needing specialised psychogeriatric care services will receive between 1.34 to 3.23 hours of care from a HCA and 17 minutes to 1.42 hours from a RN each day (Chapman et al., 2022). Psychogeriatric care (2.5%) is a very small proportion of the care provided within ARC facilities (Chapman et al., 2022).

In 2004, rest home level care dominated the services being offered by the 530 ARC providers, with only 32 percent of the facilities providing 24-hour hospital level care (Burrow et al., 2017). Since 2004 ARC facilities have increased the number of beds dedicated to higher needs residents. ARC residents receiving hospital, dementia and psychogeriatric level care combined outnumber those receiving rest home level care Chapman et al. (2022). In 2021, only 21 percent of all ARC beds (n = 40,941) were dedicated rest home beds (Chapman et al., 2022). Dual service beds, or beds a provider is certified to offer at either rest home or hospital levels of care, comprise 38 percent of all beds. Dedicated hospital level beds (14.7%), dementia beds (12.3%) psychogeriatric beds (2.4%) and ORA dedicated beds (10.4%), which can be certified for rest home, hospital or dual service care, comprise the remainder of the overall bed types (Reid et al., 2023). A five-year trend of beds by service type report increases in dual service, dementia beds and ORA beds, and decreases for dedicated beds for rest home, hospital and psychogeriatric levels of care (Reid et al., 2023)

ARC Staffing. Aged residential care facilities in NZ and across the OECD face chronic workforce shortfalls and high turnover, which was exacerbated during the Covid-19 pandemic. (Chapman et al., 2022; Ministry of Health, 2020; OECD, 2020). Staffing for ARC facilities in NZ is based on the needs of the residents and their proximity to staff within the layout of the ARC facility (Central Regions Technical Advisory Service, 2021a, 2021b; Standards New Zealand, 2021). For example, facilities providing rest home level care with ≤ 10 residents must have a single care staff[9] on duty at all times; ≤ 30 residents must have a care staff on duty at all times and one care staff on call at all times; > 30 residents must have two care staff on duty at all times; and ≥ 60 residents must have three care staff on at all times (Central Regions Technical Advisory Service, 2021a).

Most ARC facilities provide multiple levels of care (Figure 1.3). Facilities providing rest home level care with other services can share staff across levels of care during the hours 10 pm to 7 am (Central Regions Technical Advisory Service, 2021a, 2021b). For example, one care staff must be on duty in each part of the facility where each service level is provided and one care staff who may be on duty at both rest home and in higher care level units, provided that one of the care staff is an RN.

The Covid-19 pandemic severely challenged ARC and the ability to meet the staffing levels needed to provide resident care (Ministry of Health, 2020). Aged residential care facilities that experienced a Covid-19 cluster, ten or more of confirmed cases, reported a least a 40 percent decrease in their available staff. Unable to backfill rosters with existing staff, casual staff, agency staff, and voluntary staff from district health boards (DHBs) were brought in to care for residents. Replacement staff were often unaware of a resident's specific needs and how care and documentation was undertaken in ARC settings.

ARC Resident Profile

ARC Resident Demographics. Older people living in ARC are often the frailest and most dependent on others for everyday needs. Forty-seven percent of older people in NZ will use ARC services in their lifetime and for those ≥ 85, the likelihood is 66 percent (Broad et al., 2015). Most people entering ARC are over 80 years old (Ernst & Young, 2019; Moore et al., 2024). The average length of stay for a resident in ARC is 18 months with 43.7 percent of those being admitted less than a year before death and 24.3 percent admitted within the last three months of life (McLeod & Atkinson, 2019). However, there are large variations in age of entry and length of stay from a few days, as in the case of respite care, to over 10 years (Knopf, 2022).

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[9] Care staff are defined as a registered nurse (RN), enrolled nurse (EN) or care giver (HCA), including a RN, EN or HCA who is engaged by the provided in a casual basis or is from an agency, bureau or similar organisation see Central Regions Technical Advisory Service. (2021a). *Age Related Residential Care Services Agreement*. see Central Regions Technical Advisory Service. (2021b). *Aged Residential Hospital Specialised Services Agreement*.

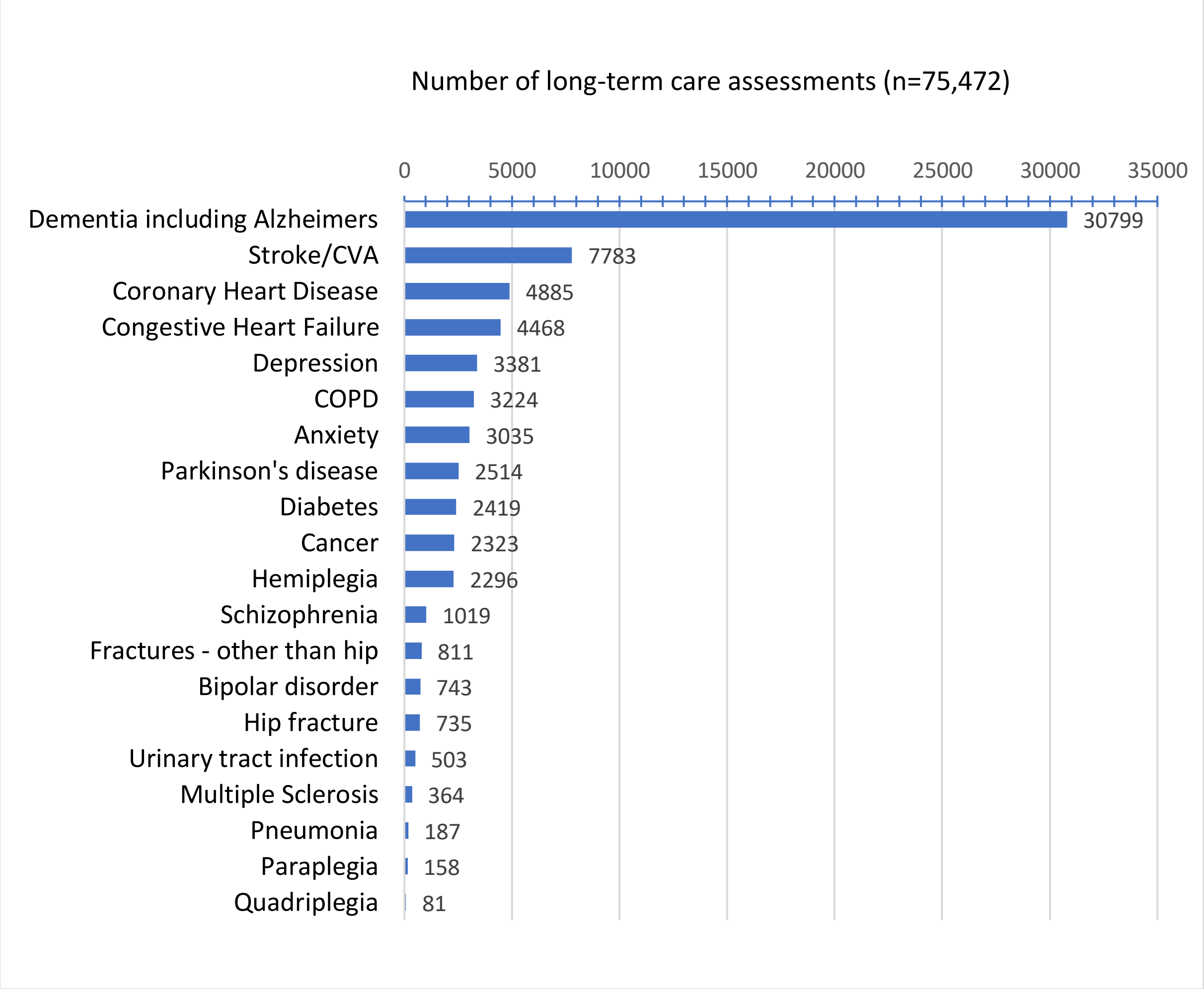
In July 2015, ARC national contracts mandated that residents in ARC be assessed using interRAI assessment instruments. Residents living in ARC are assessed using the interRAI Long Term Care Facilities Assessment (LTCF) (interRAI New Zealand, 2022c). InterRAI LTCF assessments are conducted when an older person enters into ARC and every six months, or when there is a change in their condition (Central Regions Technical Advisory Service, 2021a, 2021b).

The majority of those in ARC (63.39%) are women (interRAI New Zealand, 2022b). The largest age group in ARC are those ≥ 85 years of age (47.15%). The next largest age group are those 75-84 years of age (37.17 %). Nationally, the most represented ethnicity is European, 87.5 percent of the total ARC population (InterRAI New Zealand, 2022a). However, diversity of ethnicities in ARC varies across regions. For example, Tairawhiti DHB reports 71.43 percent European, 26.95 percent Māori, 0.68 percent Pacific People, 0.5 percent Asian, 0.11 percent Middle Eastern/Latin American/African and 0.33 percent other ethnicities. Regional demographics illustrate that the residents of ARC are a multicultural population.

Reasons for Entering ARC. The most common diagnosis for entering ARC for care is dementia, including Alzheimer's (InterRAI New Zealand, 2022d). Figure 1.4 illustrates the wide range of primary diagnosis for entry into ARC. Predictive factors for older persons for entering to ARC differ between Māori and non-Māori older people. Structural barriers associated with accessing care in ARC and service and culturally incongruent service design are contributors to the underrepresentation of Māori in ARC (Keelan et al., 2024). Living alone is a higher predictor for entry into an ARC facility for Māori and greater functional dependence for activities of daily living for non-Māori (Holdaway et al., 2021). Non-Māori with dementia are twice as likely to enter ARC than those without dementia. For older persons with dementia, the predictors for entry in ARC include: the feeling that the older person would be better off living in ARC, lower cognitive function, recent hospitalisations, having depression and being female (Jamieson et al., 2020).

Figure 1.4

Primary diagnosis for entry into certified ARC facilities from July 2020 to July 2021[10]



Note: Data source interRAI Data Visualisation Tool *Disease diagnosis* 2020-2021

In addition to the care needs associated with the primary diagnosis, residents commonly experience multimorbidity and a high level of dependency in to completing activities of daily living (ADL) (Amankwaa et al., 2022; Broad et al., 2015). Figure 1.5 illustrates the common conditions that residents are either actively receiving treatment for or are being monitored for while in ARC. For example, depression, coronary heart disease and diabetes are a few of the most reported conditions being treated or monitored in ARC.

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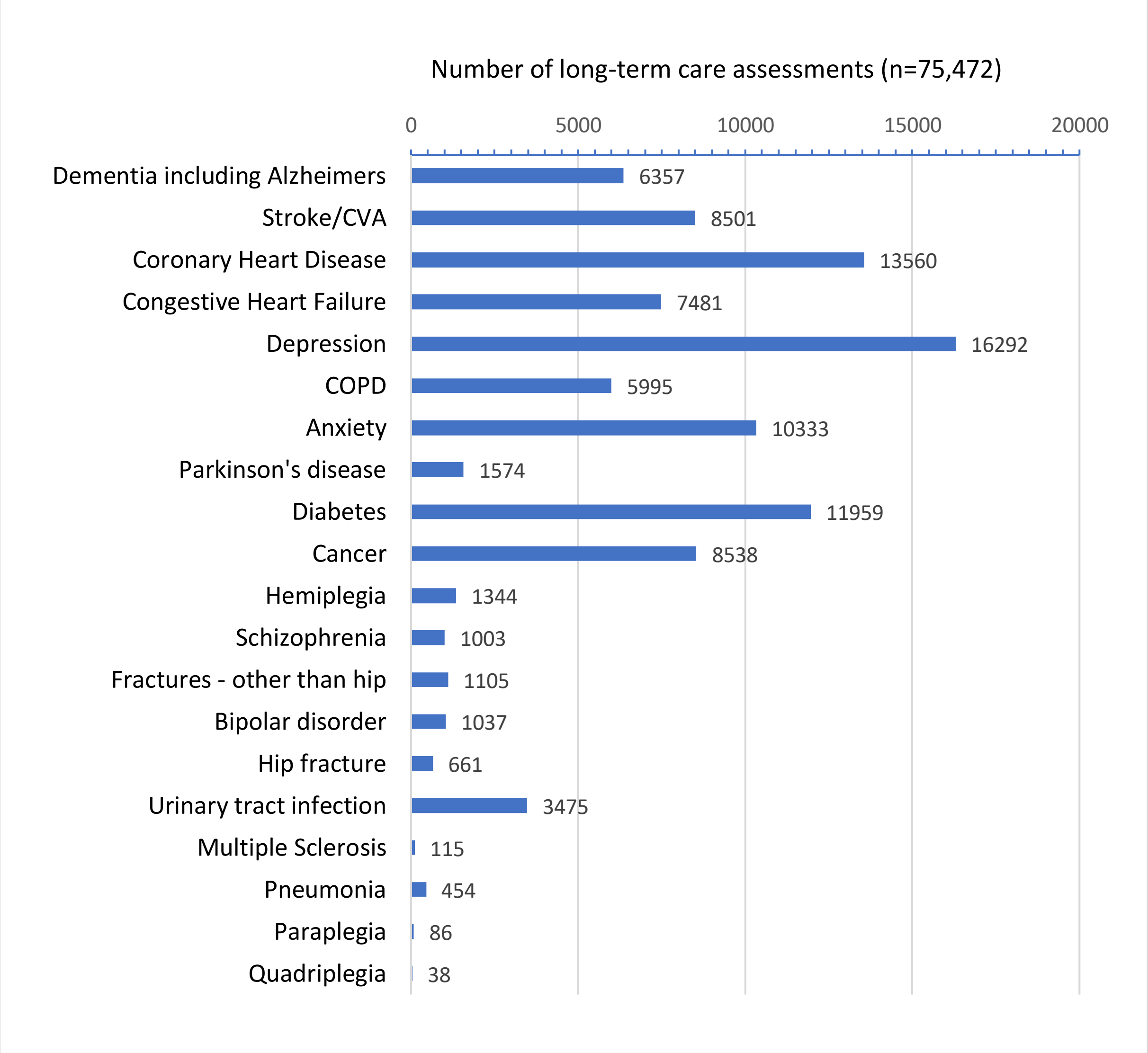
[10] The primary medical diagnosis reflects only those medical conditions of the resident identified as the cause for needing for ARC services (interRAI, 2022d).

Figure 1.5

Co-morbid conditions managed in certified ARC facilities July 2020 - July 2021[11]



Note: Data source interRAI Data Visualisation Tool (2022d). *Disease diagnosis* 2020-2021

Level of Resident Dependence in ARC. Residents in ARC (78%) require some form of direct assistance, often from HCAs, who assist with the ADL. The ADL Hierarchy scale[12] measures a resident's ability to participate in personal hygiene, toileting, locomotion and eating (Morris et al.,

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[11] Ibid. A residents' active medical condition is reflective of all their medical conditions that impact their ability to function and/or require active treatment or monitoring.

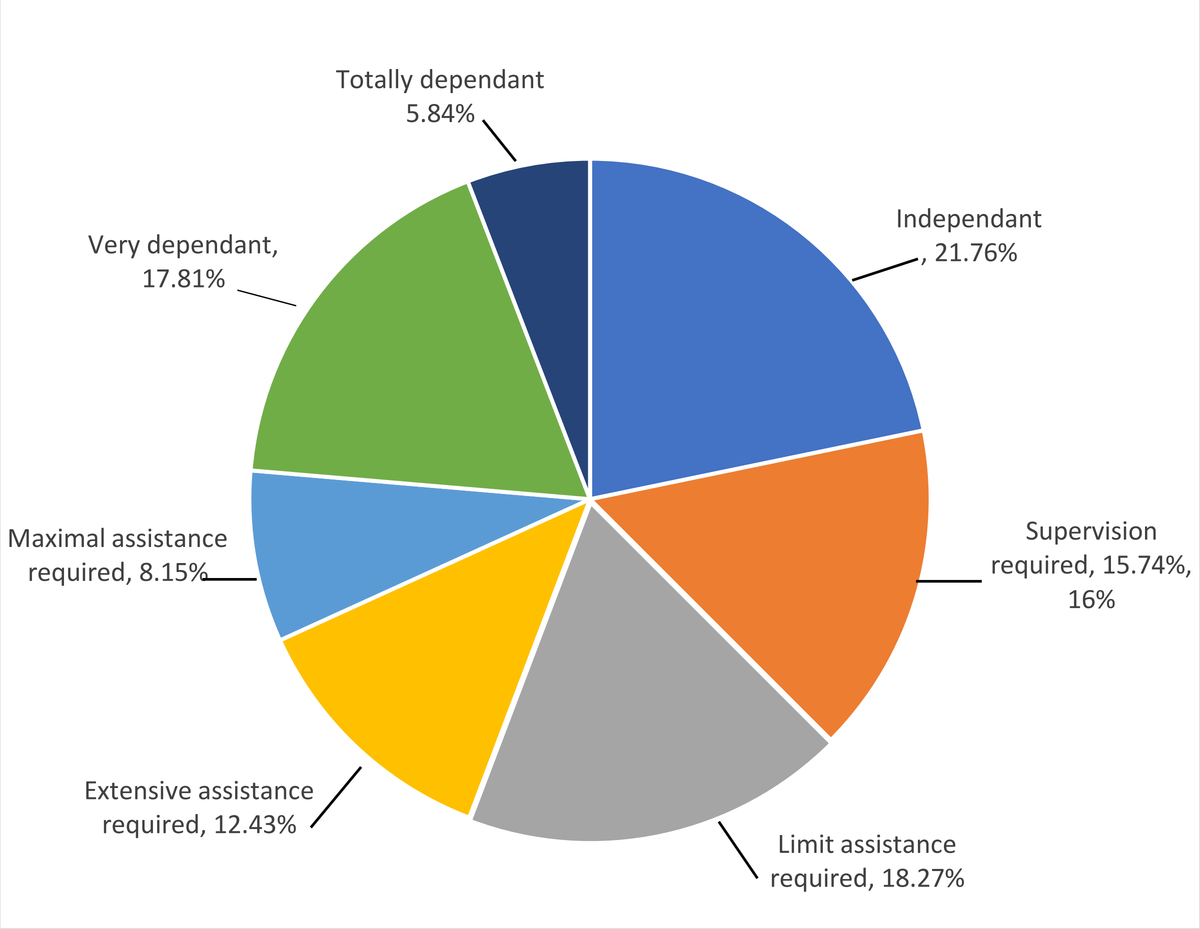
[12] The ADL Hierarchy score is one of three ADL scales embedded in the interRAI-LTCF instrument. The tools together can display the level of a resident's self-performance with ADLs across a continuum. Alone, the ADL Hierarchy tool can depict the level of the resident's overall ability in terms of support needed (Morris et al., 1999)

1999), so that individual care plans can be developed.

Figure ***1.6*** provides detail of the level of support ARC residents require across all age groups (InterRAI New Zealand, 2022e).

Figure 1.6

Level of dependency of ARC residents July 2020 – July 2021



Note: Data source interRAI Data Visualisation Tool (2022d). *Outcome scales* 2020-2021

Profile of NZ Healthcare Assistants

The Work of HCAs. Healthcare assistants are the primary providers of direct care in ARC and represent over half of all those employed in the sector. The HCA role is task driven and comprises highly routinised care, such as: medication dispensing, wound care, meal preparation, setting and clearing tables, personal care (such as showering and shaving residents), laundry and rubbish collection, mopping toilets and shower rooms, handover/shift reports and incident reports, managing falls, behavioural issues and other issues (McGregor, 2012).

The three most common care tasks of HCAs reported by Ravenswood et al. (2021) were to provide personal care, engage with residents and cleaning or housekeeping. The work of HCAs is very physical, which is reflected in the level of dependency of residents (Figure 1.6). The work of the HCAs in ARC is recognised as being undervalued, with high workloads that can be detrimental to personal wellbeing and physical health (Frey et al., 2015; George et al., 2017; Jorgensen et al., 2009; Kiata et al., 2005; McGregor, 2012; OECD, 2020; Parsons et al., 2004; Ravenswood, 2011; Ravenswood & Harris, 2016). There are no requirements for job entry, minimal training, low wages, and limited ability for career advancement. Care work in ARC remains stigmatised as low-level work (Clarke & Ravenswood, 2019; McGregor, 2012; Ravenswood & Markey, 2018). HCAs working in ARC facilities during Covid-19 outbreaks experienced aggression from communities where ARC facilities were located. Some HCAs received personal threats of eviction by landlords or roommates (Ministry of Health, 2020).

HCA Demographics. For the year 2021-2022, the ARC sector reported employing 22,695 people; 68.9 percent (11,292) of the overall workforce were HCAs (Chapman et al., 2022). The ARC workforce is highly feminised (93.3%), ethnically diverse, and older, with the largest age range between 55 and 64 years (54%) (Knopf, 2022; Ravenswood et al., 2021). However, it is not uncommon for HCAs to be over 65 years of age.

In the most recent care workforce survey, Ravenswood et al. (2021) found that 66.1 percent of the 283 respondents working in ARC were born in NZ. Of the respondents not born in NZ, 82.4 percent were permanent residents, and 17.6 percent were on working visas. The majority of the respondents working in ARC identified as Pākehā, NZ European or European (70.2%); Māori (19.8%); and Indian, Samoan and other between two and five percent.

The ARC sector in NZ has an established history of being dependent on migrant workers (Badkar et al., 2009) with 81 percent of ARC providers reporting staff working on some form of visa (Chapman et al., 2022). Twenty-eight percent of all ARC staff are working on visas, half of which are HCAs[13]. The most common countries of origin for HCAs working on visas were from the Philippines (34.8%) and India (40.9%)[14] (Chapman et al., 2022). However, the percentage of the HCA workforce working on a visa varied within geographic regions. For example, Auckland DHB was reported as having the highest number HCAs working on visas (68%), whereas more provincial and rural areas had fewer, such as Mid-central DHB (12%) and Northland DHB (7%) (McDougall, 2020).

HCA Employment Status, Rates of Turnover and Hourly Pay. Healthcare assistants work a

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[13] NZACA reported 3,069 HCAs and 931 Activity Coordinators/Diversional Therapists were working on visas. The most common visa type for HCAs was temporary work visas (57%) followed by resident visas (34.4%) (Chapman et al., 2022).

[14] Ibid. Other countries of origin include Malaysia (0.1%), Singapore (0.1%), China (0.9%), other Asia (0.7%), Pacific Islands (0.1%), United Kingdom and Irish Republic (0.4%), rest of Europe (0.2%), South Africa (0.5%), North America (0.1%), unknown (20%).

variety of shift work, such as standard shift work, split shift and irregular shiftwork (Ravenswood et al., 2021). The most common shifts worked by HCAs in ARC are five to seven hours (42%) followed by eight to ten hours (26.3%). Just over half of HCAs (55%) were employed full time during 2021 (Chapman et al., 2022). It is not uncommon for HCAs to have more than one paid caregiving job in ARC or another care setting. Workforce surveys in 2014, 2016 and 2019 consistently reported that about 15 percent of HCAs had more than one job (Ravenswood & Douglas, 2016, 2019; Ravenswood et al., 2014). During the Covid-19 outbreaks, tensions between ARC employers and HCAs working in more than one care setting occurred due to infection control concerns (Ministry of Health, 2020).

High turnover is a well-recognised problem in ARC due to its negative impact on quality of care (Farr-Wharton et al., 2021; OECD, 2020). Forty percent of HCAs in aged care are reported as having 5 to 15 years of experience in the ARC sector and 35 percent less than 5 years (Ravenswood et al., 2021). In addition to experience in ARC, 20 percent of HCAs working ARC reported as having experience in the disability support, home and community support and mental health and addiction support sectors. The median length of employment at an ARC facility is 5.3 years for HCAs with NZ citizenship and 2 years for migrants on essential skill or temporary visas (Chapman et al., 2022). Ravenswood et al. (2019) reported 36.9 percent of HCAs intended to look for a new job due to stress, burnout and dissatisfaction with employment conditions. However, HCA turnover rates for 2021 were only slightly higher than pre-Covid-19 rates. Turnover for HCA working full time was lower (23%) than for those working part time (29%) (Chapman et al., 2022). However, RNs who provide direction and supervision to HCAs, experienced much higher turnover rates (51% full time employees; 40% part time), which was notably higher than pre-Covid-19 pandemic rates (2019: 34% full time RN; 30% part time RN) (McDougall, 2020).

The average hourly wage for a HCA is legislated under the Support Workers (Pay Equity) Settlements Act 2017 (2022). Minimum hourly wages are based on either length (years) of service with an employer or the level of qualification obtained[15]. The NZACA 2021-2022 industry profile reported that 46 percent of HCAs were in the highest pay bands, Level 4a and Level 4b (NZ$26.00 – NZ$28.50), 23 percent were in band Level 3 (NZ$25.00 – NZ$26.16), 13 percent in band Level 2 (NZ$23.00 – NZ$24.06) and 18 percent in the lowest pay band, Level 0 (NZ$21.50 – NZ$22.49) (Chapman et al., 2022). The set minimum wage per hour for 2021 was NZ$20.00 and 21.20$ for 2022 (Ministry of Business, Innovations & Employment, 2022). In 2019, the year that data was collected

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[15] Two conditions, length of service with an employer and level of qualification contribute to 5 pay-bands used as a basis for hourly wages. Pay bands for level of qualifications achieved refer to levels in the New Zealand Qualifications Framework New Zealand Qualifications Authority. Level 0, < 3 years of service or no relevant qualification; Level 2 ,3+ to 8 years of service or a level 2 qualification; Level 3, 8+ to 12 years of service or level 3 qualification; Level 4a, 12+ years of service; Level 4b, 12+ years of service or level 4 qualification (New Zealand Qualifications Authority, 2022; Ministry of Health, 2017).

for this study, ARC had the highest proportion of HCAs working in the lowest hourly wage bracket (NZ$17.70 – NZ$20.49) when compared to caregivers in other sectors (home and community support, disability support and mental health and addiction support) (Ravenswood et al., 2021).

HCA Education and Training. There are no education or training requirements for job entry into ARC as HCAs in NZ. All ARC providers are responsible for orienting and training HCAs to their role and providing opportunities for further education and training (Central Regions Technical Advisory Service., 2021a, 2021b). All staff providing direct care, such as the HCAs, must complete education on the care of older people as prescribed by the national contracts[16,17] within six months of hire, if they have not completed this prior to employment. ARC providers are required to provide eight hours of staff development annually and ensure that all HCAs achieve a prescribed list of education unit standards[18] within 18 months of their employment, although HCAs working on a short-term basis are not required to complete this training[19].

Adequate training and the connections between residents, families and care staff is considered important in the successful delivery of care (Frey, Balmer, Boyd, et al., 2019). However, high staff turnover and insufficient staffing is a barrier to establishing relationships and gaining relevant care education (Frey et al., 2015). Low staffing, time barriers and burnout are known to have a negative impact on the uptake of education or training in ARC (Frey et al., 2015). Ravenswood et al. (2021) reported that 40.7 percent of respondents working in ARC undertook training during work time, however, 18.1 percent had not undertaken any training.

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[16] For those providing rest home level care the education must address: "the ageing process, including sensory, physical, cognitive, psycho-social, spiritual and cultural aspects; practical care skills, awareness of cultural issues, communication, including sensory and cognitive loss and other barriers to communication, communication aids/assistive technology; observing and reporting; promotion of independence and recognition of individuality; understanding of Residents' rights." (Central Regions Technical Advisory Service, 2021a, p. 60).

[17] For those providing hospital, dementia and psychogeriatric care the education must address all education topics listed for rest home level care in addition to "...dementia care; challenging behaviour; mental illness and aging." (Central Regions Technical Advisory Service, 2021b, p. 60).

[18] Ibid, 61-62. Education unit standards must meet the NZ Qualifications Framework. Education units prescribed in the national contracts include: Supporting people with assistive equipment and moving in a health or wellbeing section (27833); Support a person to meet personal care needs in a health or wellbeing setting (23386) and describe the ageing process and its effects on a person's lifestyle and wellbeing (23387) and must be complete no later than 12 months of hire. Education units demonstrating knowledge of support people living with dementia (23920); supporting people living with dementia (23921); and demonstrating knowledge of dementia (23923) must be achieved no later than 18 months of hire.

[19] Neither the ARRC nor ARHSS provide detail on what "short-term" employment is. Those HCAs employed by providers on a contract or short-term basis must be familiarized with the physical layout of the unit where care is provided including the location of emergency exits, emergency protocols and contact details for emergency and senior staff.

ARC Industry and HCAs as Marginalised Workforce. The NZ Human Rights Commission conducted an inquiry into the aged care workforce (McGregor, 2012) and found aged care workers to be a marginalised population. This finding prompted a union-led legal action challenging the Equal Pay Act of 1972 (Doyle, 2018). Kristine Bartlett, a HCA working in aged care, and the Service and Food Workers Union (SFWU) challenged the Equal Pay Act and the historic undervaluing of gendered work in the case of Terranova Homes & Care Limited v Service and Food Workers Union Nga Ringa Tota Incorporated (2014) (Hill, 2013; McGregor & Davies, 2019). Bartlett's ARC caregiving skills and responsibilities were used as evidence of the undervaluing of work done predominately by women.

The Courts ruled in favour of Kristine Bartlett and SFWU. As a result, the Ministry of Health committed to negotiating pay rates for approximately 50,000 care and support workers (Doyle, 2018). The judgment changed the way that the Equal Pay Act was interpreted from pay inequities between genders within a workplace, to acknowledge the value of the caring and emotional work of predominately female workforces (Hill, 2013). Despite the intentions of the Equal Pay Act, benefits have not been appreciated by HCAs across the sector. Changes to ARC funding and increased wages were reported to have resulted in increased workloads, reduced hours for higher qualified HCAs and lower quality of care (Ravenswood & Douglas, 2022)

The Decision-making Role of Healthcare Assistants. Healthcare assistants provide most of the direct care in ARC and have a significant influence on the quality of those living in ARC. The demand for ARC is expected to increase because of population ageing, age-related diseases, and chronic conditions. Across developed countries, 10.7 percent of people aged 65 and older receive long-term care either in their home or in ARC (OECD, 2021). In NZ, the current population of 33,547 residents living in ARC is expected to increase by 61 percent to 54,085 residents by 2031 (Ernst & Young Limited, 2022). In 2019, the median age of a resident in ARC was 85 years, many with co-morbidities and more than half with some form of cognitive impairment (Ernst & Young, 2019). Residents with increasingly complex chronic and palliative care needs require closer monitoring and engagement with specialised interprofessional care (Boyd et al., 2019; McKinlay et al., 2019) including the HCA workforce. Although HCAs work under many diverse titles and contexts, they are a delegatory workforce that is unregulated and whose parameters of work are dependent on their context of employment.

Future Challenges for ARC

By 2032, Government estimates demand for ARC services will exceed current capacity by 12,000 beds (Moore et al., 2024). This is accompanied by a shift in case mix from rest home level care to increased provision for dementia care, with the average time for admission often several months. End-of-life and palliative care services, and the need for Kaupapa Māori (Māori approach to care) services for older Māori adults, helps to illustrate the breadth of care needs in ARC.

In recent years, the ARC sector has experienced growing workforce issues and funding pressures that have directly impacted ARC services. The most recent review of NZ's aged care funding and services models provides evidence of the fragility of ARC services. A strategic assessment of the state of ARC calls attention to: ARC is underfunded, existing funding models are no longer fit for purpose, there are material ethnic inequities in accessing ARC, and there are significant workforce pressures which are exacerbated in rural areas. (Moore et al., 2024). A review undertaken at the request of the Aged Care Commissioner reached the same conclusions (Ferriera, 2024). NZ's aged care sector is "…significantly impacted by chronic underfunding and workforce shortages which have influenced service expectations, access and delivery" (p.5). The government is currently considering case-mix models that recognise resident attributes and resources not considered by the existing level of care bands (nursing home care, hospital care, dementia care and psychogeriatric care). The Office of Seniors has signalled that recommendations from the strategic assessment of ARC will inform the implementation of the Healthy Ageing Strategy (p.38) (Ministry of Social Development, 2024).

The Aged Care Commissioner has recommended that workforce plans should focus on actions that "… contribute to a sustainable aged care workforce, including a focus on the training and retention of aged care nurses, healthcare assistants (HCAs), geriatricians and psycho-geriatricians/psychiatrists, pou tikanga and kaitakawaenga/cultural advisors specialising in the health of older people" (p.16) as a way to improve the sustainability of aged care services and ensure equity to access and outcomes (Health and Disability Commissioner, 2024)

Positionality

In 2003, like many women needing to support a family while trying to get ahead, I worked as a HCA in a secure residential care facility for people with Alzheimer's disease. During this time, I took courses to meet the entry requirements to study nursing. I was making minimum wage – US$7.05 per hour, working eight-hour shifts to supplement the income from student loans and family help. The work was intense and physical, and rules were enforced from within the ranks of the caregivers. Those who had been working longest, had the most say. Completing shift after shift, I worked to the tasks and felt a huge relief when I was accepted into the accelerated nursing programme at the University of Portland, Oregon.

I graduated with a Master of Science degree within which I explored communication between HCAs and RNs in US hospital settings (Burrow, 2008). I became acutely aware of the inivisibilisation of HCA decision-making after repeatedly being told by the registered nurses I interviewed that decision-making was outside their (the HCAs) scope of practice. My study findings revealed that the RNs believed that their delegated authority was to make the decisions that HCAs were required to follow. However, despite this, the HCAs that I spoke and worked with were compelled to make independent decisions in every patient encounter when providing direct care.

Immigrating to NZ in 2012 led to employment with Massey University as a lecturer in the Bachelor of Nursing programme. I enrolled into a doctoral programme and decided to research the work and decision-making of HCAs working in ARC in greater depth. Specifically, I wanted to explore the decisions and actions associated with providing care or 'doing care', in contrast to 'caring for'. Delivering care is socially constructed and the processes HCAs use to arrive at a shared understanding of care within ARC settings is central to this inquiry.

Structure of the Thesis

This thesis departs from traditional formats by integrating findings with relevant literature directly within the two findings chapters. A synthesis chapter further develops these findings to provide a more comprehensive understanding of the results.

Chapter One- Introduction. The introduction identifies, and places in context, HCAs who provide most of the direct care to older adults residing in ARC in Aotearoa New Zealand. The overall research question asks how HCAs make direct care decisions in the context of the care they give each day. A background section details the complexities of ARC service provision, referencing the policy and funding environment within the country, along with the specific influences that affect the typology of HCA decision-making. The author's positionality is presented before a precis of the structure and content of each chapter is provided.

Chapter Two - Review of Literature. The review of literature systematically reviews the international and national literature on HCA decision-making in ARC. This chapter presents the method used to identify and appraise the literature, and the synthesis review findings on what is known on the topic under study revealing gaps in knowledge that have informed the research inquiry. Critically appraised literature draws together specific information on HCA decision-making and locates this research within that extent literature.

Chapter Three - Research Design. Methods outlines the research strategy of inquiry, methodology and methods used to conduct the current research. Critical ethnography offers a methodology and rationale for data collection methods. The theoretical framework, Life in the Round, constructed by Elfreda A. Chatman, is described as the framework applied to analyse study data. An explanation of the approach to data synthesis, using thematic proximity, shows how the study findings are bought together to answer the overall research question.

Chapter Four Study Findings - The Decision-making Ecology. Chapter four provides the participants social and demographic characteristics and addresses the research questions on routine decision-making. Findings relevant to the research questions "What routine direct care decisions do HCAs make?"; and "How do HCAs make routine care decisions?" are discussed by describing the information environment and communication patterns HCAs use to achieve situational awareness, and the role this plays in decision-making. Task based schema are introduced as HCA decision typologies. A decision-making ecology of ARC is presented along with a model that illustrates the relationship of schema to the factors that influence routine decisions and a model of a HCA decision-making stream is offered. Small world and decision-making theory are applied to the social norms that define routine life in ARC and are used as a standard from which deviations in care are accommodated until a threshold of uncertainty is reached.

Chapter Five Study Findings - Decision-making During Uncertainty. Chapter five presents the findings from the vignettes used to explore HCA decision-making by manipulating the vignette design factor of *knowing*. A series of four vignettes were designed to answer the research question about how HCAs make non-routine direct care decisions, especially in uncertain situations. Co-occurrence matrices were used to present the data, identifying decision type frequencies and "if-then" decision arrangements. This chapter focuses on decisions made in the absence of information or relevant care experience. Components of the HCA decision-making stream are used to explicate the role that the information environment plays when there is uncertainty around decision-making.

Chapter Six - A Discussion of the Synthesis of Findings Chapter six brings the findings from the interviews and vignettes together to answer all five research questions. This chapter draws on the data collated from vignettes and semi-structured interviews to uncover the features related to independent decision-making by HCAs. Each research question is independently addressed and positioned within a wider corpus of literature. Methodological and theoretical assumptions are addressed. The HCA decision-making stream introduced in the first findings chapter is offered as representative of the synthesised findings and the limitations of this study are presented.

Chapter Seven - Conclusion. This chapter offers a reflective summary of findings highlighting original contributions of knowledge. Professional and theoretical implications are offered, and future research suggested. This chapter concludes with recommendations considerate of the increased demands for care in ARC, recognition of the role HCAs play in providing care, and their need for information, support and training to aid decision-making and ultimately residents' care.

Chapter 2 Review of the Literature

Introduction

Decisions are commonly identified by the resolution that is aimed for, rather than process used by the decision-maker to reach an acceptable resolution (Eilon, 1969). The relationship between the decision-maker and their environment has been recognised as significant, influencing how decisions are made (Gigenrenzer, 2021; Nordli & Todd, 2021; Simon, 1990). Social norms influence perceptions on the importance of certain types of decisions, what information is used to inform the decision and what can be taken for granted (Chatman, 1999). Whether (or not) a care decision is 'good' is determined by what is considered acceptable within the environment of care and is subject to the various constraints and circumstances of the decision-maker (Falzer, 2004).

Healthcare assistants (HCAs) are responsible for the daily physical and emotional care of those living in aged residential care (ARC). Making care decisions within the immediacy of the caregiving encounter requires a situational awareness of the needs of a resident and the co-occurring demands of the environment of care. Healthcare assistant decision-making is bound to the nature of their work and the layers of complexity that exist in a dynamic care environment. The aim of this chapter is to provide an understanding of decisions made by HCAs as evidenced in existing research.

Rationale for review

A preliminary search of the International Prospective Register of Systematic Reviews (PROSPERO), Open Science Framework (OSF), Figshare and the Cumulative Index in Nursing and Allied Health Literature (CINAHL) Complete databases failed to identify any systematic reviews on the topic of HCA routine decision-making. Nevertheless, ten existing reviews of the literature on related topics were identified with HCA decision-making either as an incidental finding, contextualised as a concept or to a specific event. For example, Shrestha et al. (2021) focused their scoping review on the concept of self-efficacy related to HCAs' ability to make care decisions to meet the personal care needs of residents in ARC. Similarly, Garratt et al. (2021) and Güney et al. (2021) used the concepts of patient-centred care and quality to explore the perceptions and experiences of care delivery decisions by HCAs in ARC. Preshaw et al. (2016) explored ethical issues faced by HCAs highlighting difficult situations they were required to navigate. Specific events such as, pain management (Vaismoradi et al., 2016); transferring a resident to the hospital (Laging et al., 2015; O'Neill et al., 2015); managing dementia-related behaviour (O'Donnell et al., 2022); sexual expression of residents (Ho & Goh, 2021); or the complexities of Covid-19 (Gray et al., 2022) were used to contextualise the exploration of strategies and decision-making used by HCAs.

A review synthesising HCA decision-making occurring in routine-care that encompassed both routine daily care and the accommodation of predictable non-routine care (such as appointments or non-emergent changes in a resident's status) was identified as necessary within the context of institutionalised aged care. A mixed methods review of literature was undertaken to synthesise the existing research and provide an understanding of the scope that HCA decision-making in the literature and to identify any gaps in the current knowledge that might exist.

Aim/Review questions

The aim of this chapter is to provide an understanding of routine decisions made by HCAs in aged residential care made to meet the physical and emotional needs of residents by synthesising concepts found in the extant literature. The questions that guided the review were:

i) What direct care decisions are made by HCAs caring for older people in ARC?
ii) What influences HCA decision-making in ARC?

Inclusion Criteria

The review considers studies that focus on HCAs who provide care to older adults in need of support for daily activities. Because of the diversity of job titles and role definitions used internationally and within ARC institutions, the limiters to the role titles of participants were minimal. Inclusion was limited to studies with participants identified as professional caregivers who were not registered nurses (RN) and who provided care to residents under the delegated supervision of a RN or licensed equivalent. Although many countries and institutions may describe differing level of educational or training requirements, this was not used as a limitation. Studies were limited to institutional aged care settings. Sheltered housing or community-based care were not included because their populations and care practices were known to differ in comparison to those of ARC. Primary qualitative, quantitative, mixed methods research and systematic reviews were included if the focus was on decision-making.

Methods

Search Strategy

This mixed method review considered studies that focused on: the perceptions, values, experiences, knowledge, beliefs, values or self-efficacy experienced or described by HCAs when providing care to older people in ARC. The phenomenon of interest, decision-making, has a wide range of terms that reflect the intention to act. Search terms were tailored to be as inclusive as possible without being an exhaustive search on the many concepts that embody the decisions and decision-making. With the support of research librarians, search terms were identified through a preliminary search for keywords in relevant articles found in EBSCO Discover and CINAHL Complete databases (Table 2.1). An electronic search of three databases from inception to 2022 included

CINAHL Complete, Psych Info and Medline via Discover databases. Articles identified by the databases were uploaded into web-based software Rayyan.ai for deduplication and titles and abstract screening. Selected studies were uploaded into Joanna Briggs Institute (JBI) software JBI System for the Unified Management of the Assessment and Review of Information (SUMARI) for quality appraisal and data extraction. Forward searching of selected research was conducted in Google Scholar.

Table 2.1

Indexed and keyword terms used for database searches

	Databases searched: CINAHL Complete, Psych Info and Medline via Discover)
	aged OR elderly OR senior* OR "old* people" OR geriatric*
and	"Residential care" OR "nursing home*" OR "rest home*" OR "long-term care" OR "long term care" OR "Aged care" OR "Care Home" OR "Nursing Home" OR "assisted living"
and	decision OR decide
and	"self efficacy" OR values OR experience* OR knowledge OR belief* OR perception
and	assistant* OR Aide* OR Attendant* OR "Support Worker*" OR "Care Worker*" OR Caregiver* OR "Nursing Assistant*" OR "Care Technician*" OR "Support Worker*" OR "Assistive Personnel" OR "Nursing Auxiliar*" OR "Nursing Technician*" OR "Auxiliary Nurse*" OR "Nursing Assist*" OR "Health Care Technician*" OR "Support Staff*" OR Kaiawhina OR "Nursing Staff" OR Carer OR "Health Personnel" OR "Care personnel"
Limits	English

Publications were included if they were: peer-review studies, approximately half of the participants were HCAs or had an equivalent role, or results and findings were clearly identifiable to HCAs, explored decision-making from the perspective of the HCA, discussed the experiences or perceptions of decision-making in the role of HCA, were conducted in ARC, used qualitative, quantitative or mixed method research strategies, and were published in English. Publications were excluded if: results were not clearly identifiable to HCAs; were outside the context of ARC or equivalent locality; the HCA role did not focus on care of older people; there was no discussion on decision-making; the study focus was on the evaluation, education, outcomes, or interventions not specific to HCA decision-making; or the study focused on resident, family perceptions of HCA decision-making.

Search Outcome

The Preferred Reporting Items for Systematic reviews and Meta-Analysis (PRISMA) tool (Haddaway, et.al.,2022) was used to report search outcomes (Figure 2.4). The search identified 1,330 studies, and 873 duplicates were removed. Titles and abstracts of 1,014 studies were screened, and

923 studies excluded. Full text records for 91 studies were retrieved and 58 were excluded based on exclusion criteria, resulting in 33 studies for quality review and data extraction.

Quality Appraisal

The selected studies (*n* = 33) were reviewed for methodological validity using the standardised critical appraisal instruments in JBI-SUMARI (Munn et al., 2019). Quantitative studies, analytical cross-section studies (*n* = 4) (Table 2.2) and random controlled trial studies (*n* = 3) (Table 2.4) varied in quality, however provided valuable insight. Only one quantitative study was excluded due to uncertainties on response measurement and statistical analysis. Of the qualitative studies (*n*=26) only fourteen described the influence of the researcher on the research and vice versa (Table 2.3). However, the dependability and credibility of the data was supported in other ways, such as findings being accompanied by rich illustrations or detailed descriptions of data collection methods (Munn et al., 2014).

In only thirteen of the selected studies participants were exclusively HCAs working in ARC. Broader studies included HCAs from different care environments or care staff with other roles, such as RNs. These studies were included as the results specific to HCAs in ARC were analysed separately or the HCAs working in aged care represented 50 percent or more of the total number of participants. The purpose of including these studies was to increase the number of studies available for data extraction and meta-synthesis, on the assumption that the HCA voice would be present as a reflection of being the majority group within the selected participants. There were four studies in which HCAs were a minority, however, in these studies the findings are clearly identified to HCAs.

Data Extraction and Transformation

Thirty-two studies were selected for data extraction and transformation. A mixed method convergent integrative approach was used due the exploratory nature of the aims of the literature review and the intent to gain a broader perspective of the types and influences of HCA decision-making. The extraction tool (Table 2.5) is adapted from JBI's Mixed Methods Data Extraction Form following a convergent integrative approach (Lizarondo et al., 2020). Data extraction included: author, year and country; methodology, data collection methods, analysis; study focus; context in ARC; participant number and characteristics; and description of main results relevant to the review questions. In accordance with the convergent integrative approach (Stern et al., 2020), the quantitative data has been *qualitised* by converting the data into a textual description. Information from quantitative studies included the relevant results, both significant and non-significant with supporting results. Main findings from qualitative data were described using themes and subthemes from the source studies. While direct quotes or other forms of supporting narrative were not included in the extraction table, the credibility and congruency of the qualitative findings were assessed during quality appraisal.

Data Synthesis

A convergent integrated meta-synthesis of pooled findings from selected studies was used to address the exploratory questions (Lizarondo et al., 2020). This review used a three-step process to synthesise the data. The first step was to align the findings to the aims of the review of literature. The second step was to classify study findings into categories with a similar meaning with themes related to types of decisions, and influencers of decisions using NVivo 20. The third step was to synthesise the findings into two common decision type categories within which influences of HCA decision-making were organised.

Results

Characteristics of Included Studies

All selected studies discussed HCA decision-making with some studies reporting HCAs perceptions of care delivery, and other studies reporting observed or described direct care actions, or care delivery preferences. None of the selected studies explicitly described the routine or daily decisions of HCAs. However, aspects of HCA decision-making were identifiable in all studies. Influences on decision-making were commonly found in more conceptualised or discreet findings, often framed as motivators or criteria to base decisions. The data extraction table (Table 2.5) is adapted from presents the general characteristics of the studies, study focuses and care contexts, and the summary of the findings.

Fourteen of the studies were specific to care provided in dementia settings: (Cameron et al., 2020; Cameron et al., 2021a; Cameron, et al., 2021b; Carder, 2012; Fetherstonhaugh et al., 2016; Fitzgerald et al., 2009; Hunter et al., 2016; Hunter et al., 2013; Janes et al., 2008; Janus et al., 2017; Sutherland, 2020; Tarzia et al., 2015; Vandrevala et al., 2017; Vitou et al., 2022).

Other studies were situated in care specific contexts and included:

- Covid-19 pandemic care (Bilal et al., 2020);
- Residents with physical impairments (Blok et al., 2022);
- End-of-life and palliative care (de Voogd et al., 2021; Holmberg & Godskesen, 2022; Holmberg et al., 2020b; Wiersma et al., 2019);
- Control of work demands across practice areas (Eriksen, 2006);
- Medication administration: (Garratt et al., 2021);

- Resident’s medical condition: Heart failure (Heckman et al., 2017), suspected illness (Sund-Levander et al., 2013; Tingström et al., 2010), transferring a resident to the hospital (Tate et al., 2020);
- Pain management (Holloway & McConigley, 2009a);
- Personalised care: consumer directed care (Kalaitzidis & Harrington, 2018), standardised care plans (Kontos et al., 2010), use of restraints (Li et al., 2022);
- Resident refusal of nutrition and hydration (Mattiasson & Andersson, 1994);
- Challenging care situations (Naweed et al., 2022);

The wide-search strategy identified studies featuring care decisions from the perspective of HCAs and yielded ample data for a meta-synthesis through meta-aggregation of concepts.

Thirteen of the studies identified participants who were exclusively HCA’s (Bilal et al., 2020; Carder, 2012; Heckman et al., 2017; Holloway & McConigley, 2009a; Hunter et al., 2016; Hunter et al., 2013; Li et al., 2022; Naweed et al., 2022; Sund-Levander & Tingström, 2013; Sutherland, 2020; Tate et al., 2020; Tingström et al., 2010; Vitou et al., 2022; Wiersma et al., 2019).

In the remaining studies (n=19) HCAs represented a majority group within the selected participants, or the findings were clearly identified to HCAs.

Findings

Influencers of decision-making were identified within studies and varied in terms of HCA-perspective and motivational factors. Methodologies influenced how HCA decisions were represented. Holmberg et al. (2020b), for example, used observational methods to identify HCAs actions associated with dignity during assisted bodily care. Despite an absence of HCA perspective regarding their care actions and the reasoning behind the identified patterns of care, the study provided valuable data. While observation methods were used in a time-motion study of daily tasks conducted by Qian et al. (2014), this study was excluded from the review because it did not provide insight into HCA decisions. In contrast, Holmberg et al. (2020b) framed the concept of dignity using observational methods to identify caregiving actions associated with supporting residents’ dignity as a means to observe HCA value informed care. Other studies using observational methods included interviews (Carder, 2012; Holmberg & Godskesen, 2022) or validated objective measures (Vitou et al., 2022) to explore the influences of HCA decision-making. Vignettes and case studies were used in six studies to explore factors relevant to HCA decision-making (Cameron et al., 2021b; Cameron et al., 2020; Garratt et al., 2021; Hunter et al., 2013; Mattiasson & Andersson, 1994; Naweed et al., 2022).

Quantitative studies brought forward valuable information regarding how ARC environments or HCA attitudes influenced decision-making. Fitzgerald et al. (2009) found that HCA fear that a resident might fall, or experience pain, which were motivators for decisions that limited residents' activity. Hunter et al. (2013), Janus et al. (2017) and Vitou et al. (2022) found that HCA beliefs about a resident's condition, abilities, rights and attitudes about antipsychotics influenced their decisions about the treatment of residents' pain and challenging behaviour. Li et al. (2022) discussed the relationship between practice knowledge, the length of service of HCAs and restraint use. Those with longer lengths of service demonstrated lower practice knowledge scores regarding the safe and appropriate use of restraints. Eriksen (2006) provided important insight into the opportunity for HCAs to engage in care decisions across practice areas, reporting that ARC had the lowest opportunity for HCAs to participate in care delivery decision-making when compared to other practice areas outside of a hospital setting, comparable only to that of somatic in-patient hospital practice areas. The ability to generalise findings on HCAs decision-making from practice areas outside of ARC needs to be undertaken with caution because of the differences in health settings and opportunities.

Qualitative studies explored HCA care delivery and decision-making from a diversity of research aims and provided insights into the complexity and range of care decisions made by HCAs. A suite of publications considered how HCA's used personal experiences, a resident's condition and institutional factors to inform care decisions for non-verbal residents with dementia (Cameron et al., 2020; Cameron et al., 2021a; Fetherstonhaugh et al., 2016; Tarzia et al., 2015). Institutional norms influenced HCAs decisions in studies focused on medication preferences and administration (Carder & O'Keeffe, 2016; Garratt et al., 2021; Hunter et al., 2013), the provision of bodily care (Holmberg et al., 2020b), within care delivery models such as person-centred care (Hunter et al., 2016), and standardised care planning practices (Kontos et al., 2010). HCAs' informed care decisions based on relationships with residents and their personal values were highlighted in studies of different conditions experienced by residents, such as: residents with pain management needs (Holloway & McConigley, 2009a) , heart failure (Heckman et al., 2017), early signs of infection or illness (Sund-Levander & Tingström, 2013; Tingström et al., 2010), end-of-life and palliative care (de Voogd et al., 2021; Holmberg & Godskesen, 2022; Mattiasson & Andersson, 1994; Sutherland, 2020; Wiersma et al., 2019) and sexual expression in the setting of dementia (Vandrevala et al., 2017). How HCAs negotiated difficult or challenging care decisions (Bilal et al., 2020; Naweed et al., 2022) and decided to provide care in the context of the Covid-19 pandemic revealed insights into the reasoning behind decisions that involved risk taking or rule-breaking.

Synthesised Findings

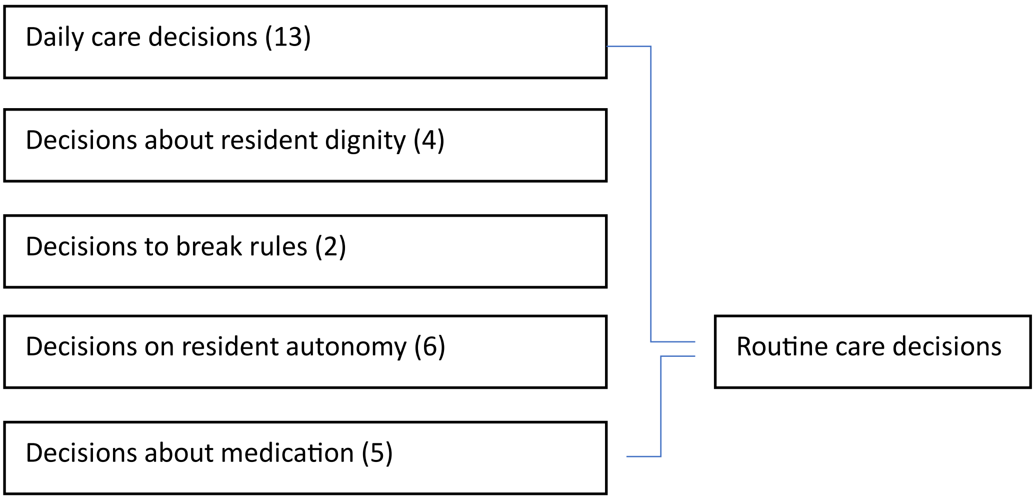
From the 32 selected research studies a total of 183 findings were extracted and organised based on conceptual similarities and then assembled into the categories used to form the three synthesised findings. The findings that construct the categories are summarised and an exemplar extracted from the published text to use as a supporting illustration. Ranking the findings is not recommended because of the complexities of integrating qualitative and quantitative findings (Lizarondo et al., 2020). Credibility for each category supporting illustration is described as: unequivocal (U), evidence that is directly reported or observed, a matter of fact and not open to challenge, or credible (C) interpretations in light of the data, theoretical frameworks, and are logically inferred. Findings not supported (NS) did not inform or illustrate the categories.

The meta-synthesised findings are applicable to all contexts of ARC care delivery. The three meta-synthesised findings include: 'Routine care decisions' derived from 19 findings, 'Discrete care decisions, derived from 10 findings, and 'Influencers of care decisions' derived from 61 findings. The synthesised findings are constructed from categories identified across the studies and provided an understanding of the two identified dominant contexts in which HCA decision-making is considered: routine care decisions and discreet care decisions. The influencers of decisions were not confined to a specific decision type and the categories represent findings from across all studies.

Routine care decisions. Five categories were informed by 30 findings (Figure 2.1). Routine care decisions were identified as those decisions that occurred as a part of the HCAs daily workload.

Figure 2.1

Synthesised Findings Map: Routine decision (number of findings)



Category: Daily care Decisions (U). Daily decisions focus on the provision of basic needs, comfort, expected care task, prevention of resident harm and meeting institutional expectations. *Illustration example: Hunter et al. (2016).*

> "I make sure they're shaved, they're toileted, they're not laying in a mess… I make sure and if I have to spend extra time fitting a battery in a hearing aid because I know it's dead, I could just pop that hearing aid in, the woman doesn't know the difference at the time, but it's whistling, you know, I take the time to go and get the battery and put it in there so she can hear, and she's like, 'oh, well that is better'." (Individual Interviewee 3). (p. 1223)

Category: Decisions About Resident Dignity (U). Decisions about dignity were about privacy, residents' rights and consideration for residents in vulnerable states, such as during bodily care activities. *Illustration example: de Voogd et al. (2021)*

> "We talked about it with the psychologist. She [the patient] often wears a long nightdress. And she loves dolls, because she thinks it is a child. It is helpful to put a doll in her hands. And it helps to cover her with a long nightdress and we can wash her underneath it. To not let her stand there completely naked." (#17 team leader in nursing home). (p. 2826)

Category: Decisions to Break the Rules (U). Decisions to break rules were those made that did not align with known institutional policies or procedural guidelines. These decisions were guided by the perceptions of what is best for a resident or HCA at that time. *Illustration example:* Naweed et al. (2022)

> "The whole time I have been a PCA [Personal Care Assistant], I err on the side of the resident rather than policies and procedures. That may not make me a good worker but it is more important to me that I am a good PCA for the resident than a good employee." (Jacob). (p. 118)

Category: Decisions on Resident Autonomy (U). Decisions to support resident autonomy varied and was represented by decisions supporting resident preferences, limiting autonomy based on cognitive conditions and facilitating a resident's ability to participate in routine care activities independently until they reached the threshold of their ability to cope. *Illustration example:* Holmberg et al. (2020b)

> The assistant nurse approaches the older person, saying: Good morning, how's it going? Comin' up for breakfast? The older person answers: I don't want to . . . I'm about to die. Assistant nurse: No, who's said that? The older person: I did. The assistant nurse leans over the bed, asking: Do you feel sick? Or do you just feel old? She speaks calmly and with a soft voice.

> The older person asks, are they coming to get me? Assistant nurse: Yes, in an hour. That's why I'm here now. She removes the blanket . . . the room is silent. The assistant nurse helps the older person sit up on the edge of the bed. The older person leans back heavily, won't sit up. She says: I want to lay down again. Assistant nurse: Mm, you don't want to come up? The older person: No. Assistant nurse: Then I'll put you back in bed again. I'll get you something to eat in bed. She puts back the blanket and leaves. Later the assistant nurse comments: This is difficult. I had planned for her to be dressed when the daughter arrived, but I'll leave it. I won't force my will on her. (Ruth, observation 17). (p. 1389-90).

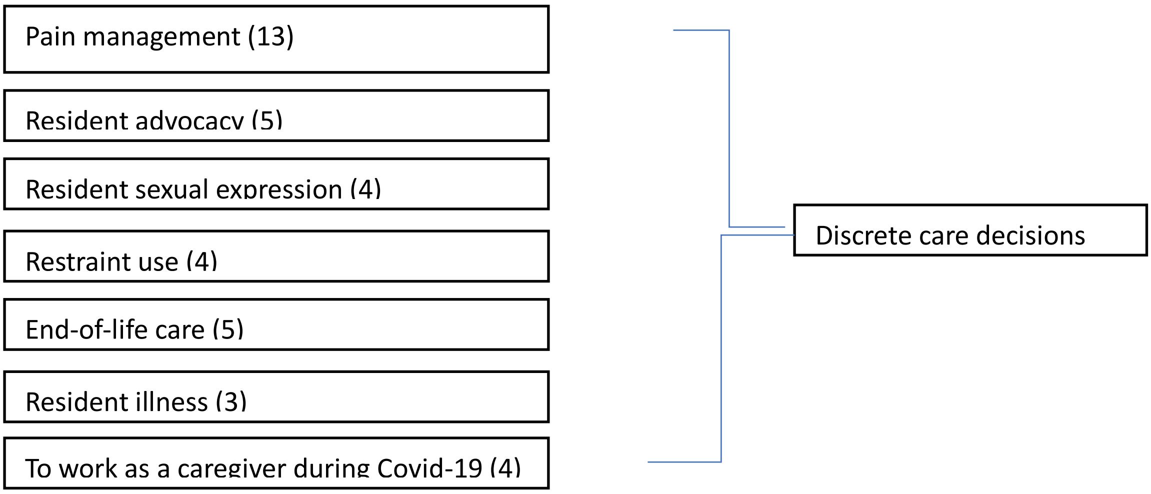
***Category: Decisions About Medication Administration (U)**.* Routine decisions about medication were related to the importance placed on the timely administration of medications and the perceived therapeutic benefit. *Illustration example: Garratt et al. (2021)*

> In contrast, another focus group, made up of Healthcare Assistants and internationally qualified Registered Nurses working in the role of Healthcare Assistants stated that they had crushed medication before, but would 'hand over to the next RN, who needs to know that we crushed the medications because [the resident] didn't want to take it' (HCA12). (p. 7)

Discrete Care Decisions. Discrete decisions are made frequently by HCAs, who consider assessing for a change in a resident's status as a part of their workload. Discrete decisions are those that fall outside routinised care, even though the decisions may be common for a certain care context. Seven categories were informed by 38 findings (**Figure *2.2***). Discrete care decisions were identified as those decisions that occurred as a part of the HCAs daily workload but were presented as being unique from typical care decisions.

Figure 2.2

Synthesised Findings Map: Discrete decision (number of findings)



Category: Pain Management Decisions(C). Pain management decisions included decisions on a resident’s needs, assessing how best to address the issue through the avenues available to them. *Illustration example: Holloway and McConigley (2009a)*

> Once pain is identified by Nas [Nursing Assistants], it is their responsibility to decide on the course of action to be taken. NAs described three options available to them to address identified pain problems. These are to provide NA-driven interventions, communicate the problem to nurses or to ignore the problem. (p. 72).

Category: Resident Advocacy (U). Decisions to act as resident advocate took the form of addressing needs or issues that the HCA felt would otherwise be ignored or dismissed by other staff. *Illustration example: Hunter et al. (2016)*

> I mean, if she wants to phone why wouldn’t you answer her? Please! And I have to go sometimes in there you know, so please, before this lady she gets like that, please just call the daughter please! And I don’t know, but sometimes there is like a reaction, like [they] don’t want to do it, so I say please give me the damn telephone and I will do it! (p. 1221)

Category: Decisions on Resident Sexual Activity (U). Decisions about a resident’s expression of sexual activity ranged from inaction to safeguarding or facilitating a resident to engage in forms of sexual expression. *Illustration example: Vandrevala et al. (2017)*

> “As part of our role we should treat everybody equally and try to maintain their independence and dignity. If they wanted to do something that they used to, we shouldn't stop them, we should encourage and promote it. But when it comes to sexuality, in my option I believe if they wanted to do it then that ́s up to them, but I wouldn't encourage it, I wouldn't say it is a part of my role to let them do that.” (Susan) (p.115)

Category: Restraint Use (C). Restrain or activity restriction decisions made by HCAs as a preventive measure for falls or pain. *Illustration example: Fitzgerald et al. (2009)*

> Our hypothesis concerning the relationship between professional caregiver fears (about the possibility that a care recipient will sustain a fall or experience pain) and caregiver-reported use of restrictions in LTC facilities was supported. The relationship persisted even after controlling for physical risk factors for falling and functional ability at the beginning of the study (as well as for age and sex). (p. 465)

Category: End-of-Life and Palliative Care (C). HCA decisions on end-of-life and palliative care focused on comfort, meeting resident preferences, and fulfilling the role as extended family. *Illustration example: Wiersma et al. (2019)*

> PSWs [Personal Support Workers] identified the “right action” to take but were often constrained from doing so. The moral dilemmas that PSWs experienced typically focused on two areas in providing palliative care – ensuring that residents don’t die alone; and providing the appropriate care based on residents’ wishes. (p. 277)

Category: Resident Illness (U). Decisions about illness focused on confirming and choosing the best course of action which ranged from inaction to wait-and-see, engaging other staff or hospital transfers. *Illustration example: Sund-Levander and Tingström (2013)*

> Although we actually had such a case in our work where [the resident] had a urinary tract infection and the doctor asked if she had a temperature. And the nurse said no. So, then we don’t treat. And the next time we say that she has [a temperature] because she was severely affected. (p. 31)

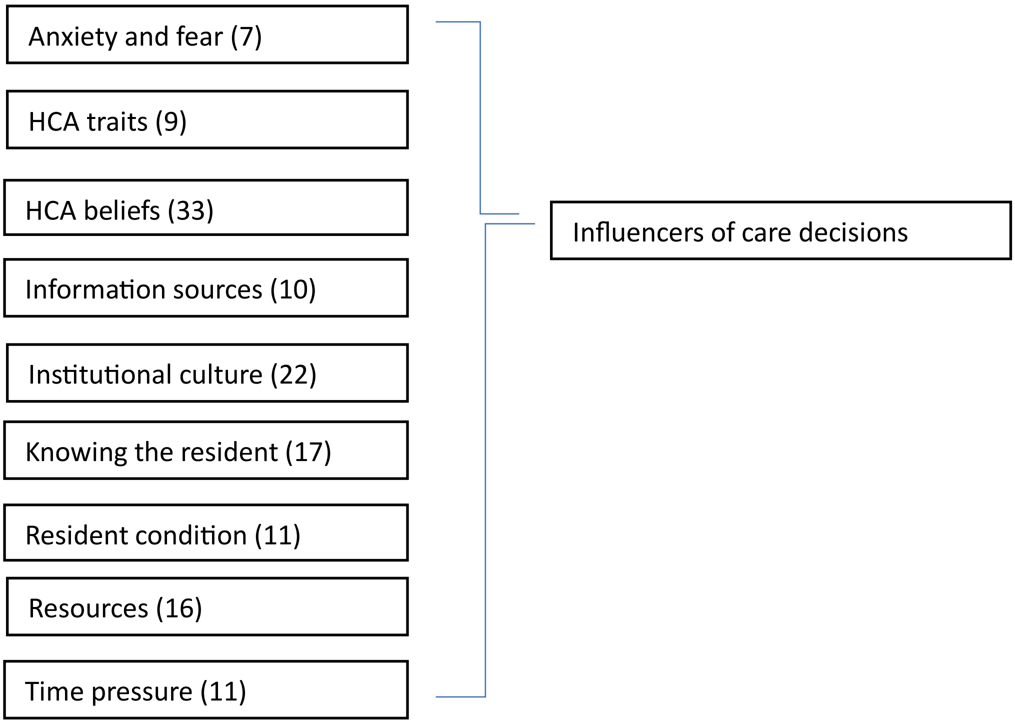
Category: To Provide Care During the Covid-19 Pandemic (C). The Covid-19 pandemic had significant implications for a HCAs decision to continue to provide direct care in ARC. *Illustration example: Bilal et al. (2020)*

> Despite living in anxiety and fear, those caregivers who decided to work did so for their own idiosyncratic reasons like spiritual duty, sympathy for elderly, passion for job, workaholic nature, professional commitment, and concern for humanity. Other forces that kept caregivers at work were governmental and institutional efforts to provide training and protective gear for caregivers. (p. 1446)

Influencers of Care Decisions. Ten categories were informed by 136 findings. How the HCAs made decisions was approached by identifying the basis of care decisions from the selected studies. The influencers of decisions were identified across the decision types (Figure 2.3)

Figure 2.3

Synthesised Findings Map: Influencers of care decisions (number of findings)



Category: Anxiety and Fear (U). Anxiety and fear influenced care decisions when the HCA predicted the possibility of a negative outcome. *Illustration example: Tate et al. (2020)*

> Over the course of interviewing, there was a diffuse, generalized perception that health care providers were vulnerable should families complain about care, and that nurses were more likely to transfer out of concern to protect themselves from family complaints or legal ramifications: They want to be covered. Okay. I send her, and what[ever] else happens—I did my job. I send—and they can do whatever they want. (HCA) (p 850).

Category: HCA Traits (C). Experience, education, training, and an understanding of the residents' medical conditions informed HCA care decisions. *Illustration example: Heckman et al. (2017)*

> UCP [Unregulated Care Provider] training is usually limited to generalised knowledge about Activities of Daily Living (ADL), which is insufficient to allow them to recognise the often nonspecific presentation of illness in frail and complex LTC residents. During the focus groups, several UCPs demonstrated this limited understanding of clinical aspects of resident care. For example, UCPs were asked how they knew if residents suffered heart failure or how they recognised residents with decompensated heart failure. UCPs listed what they considered to be signs and symptoms of heart failure, some correctly, and sometimes not:

> 'Bowels are a big part of it. . . It could actually bring on a heart attack. Some have fallen off the toilet before, from heart attacks' (10-003, lines 76–86). (p.854)

Category: HCA Beliefs and Values (C). Personal beliefs and values influenced decisions on the interpretations of resident's personhood, preferences, medication preferences and administration, pain management, restraint use, sexual expression, basic care needs and resident participation in their care decisions. *Illustration example: Hunter et al. (2013)*

> Our results indicated that having stronger positive beliefs about personhood in dementia increased the likelihood that health providers would select analgesics and non-pharmacological interventions, and decreased the likelihood of selecting psychotropic medication, in response to the vignettes. (p. 285).

Category: Information Sources (C). HCAs' information use was based on its value and ability to reach an acceptable course of action. Information sources used included: other HCAs, residents' families, other clinicians involved in a resident's care, policies, documented resident histories and a residents stated or observed needs. *Illustration example: Cameron, et al. (2021a)*

> Consistent with the varying ideas they held about residents' identities, participants indicated various opinions on the relevance of different types of information to establishing residents' identities. More specifically, they varied in terms of the value they attributed to families' and professionals' accounts of residents versus their own observations. Comments from some participants indicated that their own interactions with residents were sufficient to determine residents' identities. One staff member, for example, claimed that once "you've cared for them for the last six months or a year, or two, whatever, you get to know them really well" [AB/II1]. (p. 1555)

Category: Institutional Culture (C). Care decisions made by HCAs were influenced by the institutional norms and care delivery expectations, reporting hierarchies, policies, relationships between RNs and HCAs and commonly adopted practices. *Illustration example: Kalaitzidis and Harrington (2018)*

> Imposed regulation for care staff featured as an important component of resident choice and control as it directly influenced decision-making. Staff participants spoke of their obligations to their employer in discussing policies, rules and resident care plans, but also identified their obligation to respect the "rights" of the resident. (p. 513).

Category: Knowing the Resident (U)*.* Experience with a resident enabled the HCA to interpret the resident's current situation and decide on appropriate actions. Knowing a resident was relevant for changes in health status, pain management, and the accommodation of resident care preferences. *Illustration example: Cameron, et al. (2021a)*

> Some participants intimated that knowing residents was moderately useful or merely an advantage, commenting, for example, that "there's quite a lot you can do [to help residents], particularly once you know them." [A0/II2]. Other staff commented to the effect that staff need to know residents to help them, with one venturing further that staff should have a true "relationship with each of them." [AA/II6]. Conversely, not knowing the residents well was considered an obstacle to helping residents. Several staff members suggested that they were highly reliant on reading the residents' facial expressions in determining preferences particularly where nonverbal residents were concerned. This was a task that could become challenging where a staff member had not met a resident previously or only a few times. (p. 1554).

Category: Resident Condition (C). How the HCA interpreted the condition of a resident influenced care decisions in terms of diagnosis bias, level of engagement with a resident, what care decisions a resident could participate in, requesting anxiolytics from prescribers and the ability of residents to sexually express themselves. *Illustration example: Cameron, et al. (2021b)*

> Participants were asked whether they believed residents with dementia can make decisions about issues affecting them. Whilst a majority answered in the affirmative, many qualified this response by stating that residents can only make decisions on matters associated with low risk such as what they want to eat or wear, when they want to wash and what scheduled activities they want to do. Others indicated that residents' ability to make decisions is associated with the extent to which their dementia has progressed. (p. 1275-1276).

Category: Resources (U). Resources that influenced care decisions were those considered to be finite, such as access to personal protective equipment, the number of staff, access to doctors or nurses and the constraints of the established care routine on their ability to meet the changing needs of residents. *Illustration example: Blok et al. (2022)*

> "We do have to do it with the resources we have. From me they [the residents] can do anything, really. I want to move heaven and earth, but I have to do it with what my manager provides to me. If she says, 'You have three evening shifts and one living room support person,' I don't have the control that the client can go to bed at the preferred time, or pee one more time. I want to, but I just can't. Yes... that is very difficult." (p.2876)

Category: Time Pressures (U). The time in which HCAs had to complete care routine tasks while simultaneously responding to interruptions and urgent care needs resulted in high tempo work requiring both HCAs and residents to accept the level of attention to care that was possible within the time frame available. While this created tensions between what should be done and what could be done for HCAs, this became an accepted norm in care delivery. *Illustration example: Holmberg et al. (2020b)*

> Furthermore, assisted bodily care was performed at a high tempo (Table 3, excerpt 1B) and without pauses, illustrated by this situation after a shower was performed: Assistant nurse: Now I will comb your hair. Please tell me how you want it. The older person is not given time to answer, and the assistant nurse says to her colleague: Let's do it like this. She brushes the hair, saying: Does this feel good, Verna? Verna answers: Yes. (Verna, observation 31) (p.1388)

Discussion

This convergent integrative review of literature aimed to answer the questions on what types of care decisions HCAs were making and what influenced these decisions. Thirty-two studies were found that addressed the aims of this review, describing different types of HCA decisions and what HCAs drew upon to make them. The studies occurred in a variety of care contexts within ARC settings and a diversity of research aims were represented. Despite the diverseness, all selected studies were suitable for inclusion and provided data to create meta-synthesised findings that could be used to answer the questions identified for this review: What direct care decisions are made by HCAs caring for older people in ARC? What influences HCA decision-making in ARC?

The findings of the review established that HCAs make routine and discrete care decisions as part of their daily work. A finer aggregate of routine care decision, the characteristics that differentiated discrete decisions from routine decisions or the weighting that an influencer has over another or competing influences, were not able to be identified. A potential contributor to this could be the specificity of research aims which resulted in the identification of limited types of care decisions, with routine care activity as a backdrop to the focus of the research. For example, how HCAs managed or assessed pain was a focus of Fitzgerald et al. (2009), Vitou et al. (2022), Holloway and McConigley (2009a), and Hunter et al. (2013). These studies positioned HCAs' assessment and decision-making on residents' pain as part of their routine workload. Other research, however, positioned HCAs' decisions about resident pain as discrete decisions. For example, Tingström et al. (2010) contextualised a HCA's decisions on resident pain within the context of the recognition of early signs of infection and Carder (2012) within the context of *pro re nata* drug administration. No study sought to identify routine decisions made by HCAs from their perspective.

The highly routinised nature of care has been a well acknowledge feature of ARC supported in the extant literature and often described as 'task-based' (Garratt et al., 2021; Gilbert et al., 2021). Holmberg et al. (2020b) identified 26 task types, comprised of 853 action related codes collected from the direct observation of HCAs. However, the weighting of these actions in terms of purposeful care decisions from the perspective of the HCA was not explored. The meta-synthesis of this review has identified that HCAs' care decisions are at the level of routine or discrete, rather than that associated by task. This suggests that the influencers of care decisions may play a significant role in the perception of a decision as routine, rather than discrete. Naweed et al. (2022) found this to be the case when exploring the everyday care challenges experienced by HCAs, as did Vandrevala et al. (2017) when reporting on residents' sexual expression.

The identified influencer categories were found across both discrete and routine care decisions. For example, the category of institutional culture had the greatest number of findings from across the selected literature. Institutional culture influenced: how and what information was disseminated effecting HCAs' ability to make routine care decisions based on a resident's medical condition (Heckman et al., 2017); decisions on the inclusion of resident or family preferences in palliative and dementia care decisions (Cameron, et al., 2021a; de Voogd et al., 2021; Hunter et al., 2016; Wiersma et al., 2019); how HCAs decided what information they could share with residents and families (Blok et al., 2022; Heckman et al., 2017; Wiersma et al., 2019); decisions on how and what types of medications were administered (Carder, 2012; Garratt et al., 2021; Janus et al., 2017); if a resident should be transferred to the hospital (Tate et al., 2020), and if HCAs were included in care delivery decisions (Eriksen, 2006; Naweed et al., 2022). While the influence of institutional culture on healthcare delivery in ARC is recognised (Haunch et al., 2021) this review has found that a HCA's personal beliefs influence care decisions, and they will workaround institutional culture or rules they find to be incongruent with their own beliefs or values. Decision influencers, such as a HCA's professional experience or knowledge of a resident has the potential to transform a discrete decision into a routine decision and vice versa.

Discrete and routine care decisions are based on a constellation of factors, such as, institutional culture, residents' needs, or a HCA's personal beliefs. However, a greater understanding of how influencers are weighted is necessary to best support this workforce to provide safe care for a medically complex and frail population. The culture of an institution and HCA beliefs were influential in what was considered routinised care. For example, a HCA's perception of their role in undertaking routine care tasks was challenged by their belief about what palliative care residents should receive (Wiersma et al., 2019). In this instance, the emotional care of residents receiving palliative care was positioned outside of routinised care. Institutional culture as it relates to professional hierarchies, obligations to employers' preferences, and institutional policies, was also illustrated in the literature as influencers to HCAs' decisions. Rule-breaking (Naweed et al., 2022), acceptance of covert drug administration (Garratt et al., 2021) and preference for anxiolytic use (Janus et al., 2017) were illustrations of how HCA care decisions either embraced or rejected care norms. The discrete decision category of rule-breaking highlights an undiscussed boundary between institutionally defined practice scopes, policies and guidelines and the normalisation of care decisions seen as acceptable by HCAs. Identifying the influencers that move care decisions from routine to discreet for HCA decision makers can provide a greater understanding of the support that should be provided under those circumstances.

These synthesised findings highlight the complexity and breadth of HCA decision-making and bring forward a variety of influencers on routine and discrete decision-making. The questions that have not been answered include: what are the routine, or anticipated, decisions that HCAs prepare for during their daily care delivery; what decisions are considered to be non-routine or discrete decisions; and what influencers are common to routine decisions versus non-routine decisions. These gaps in knowledge can be used to further explore HCA decision-making.

Literature Search and Selection Figures and Data Extraction Tables

Figure 2.4 *PRISMA flow diagram of search and study selection process.*

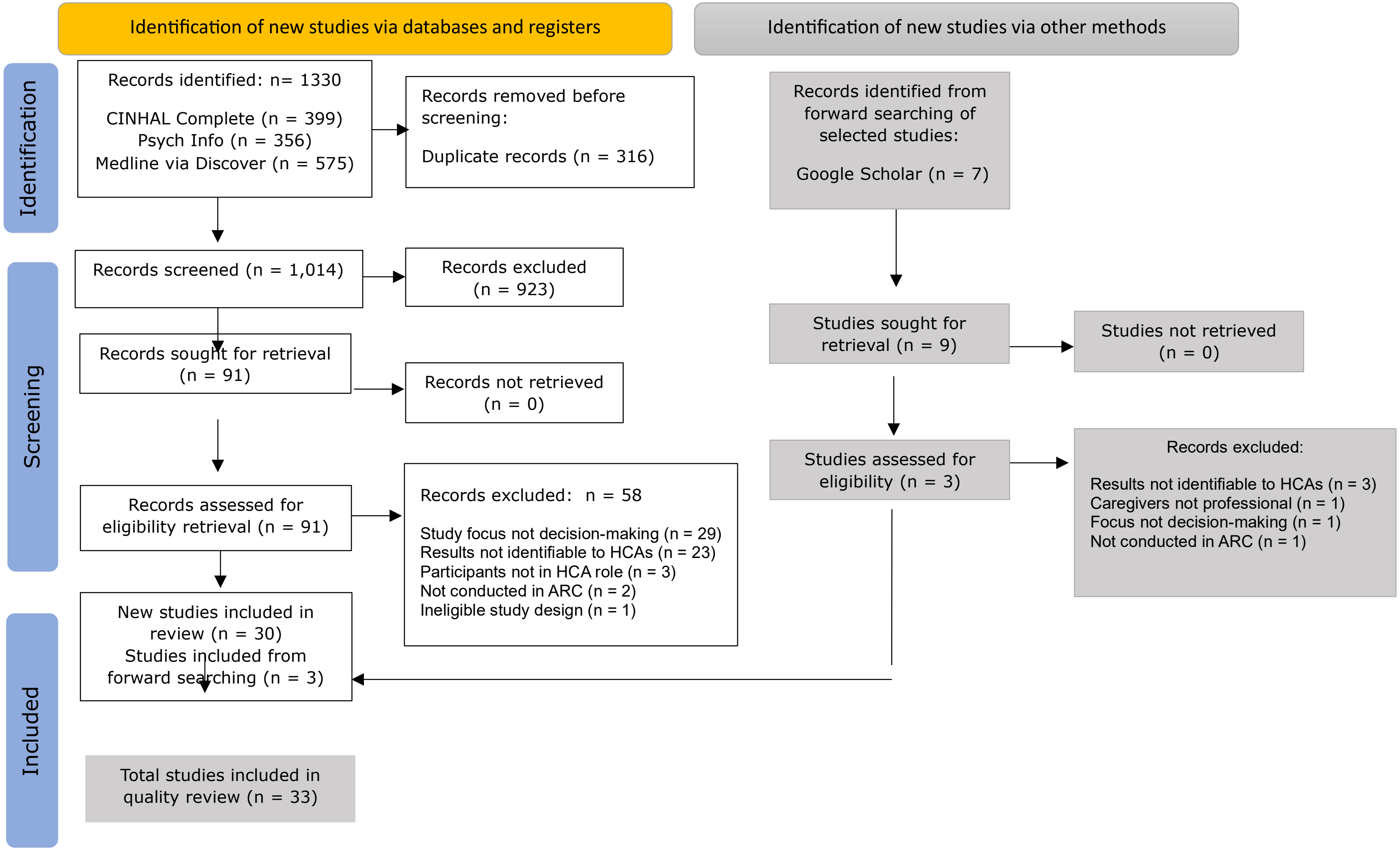


Table 2.2

Critical Appraisal and Data Extraction Tables - Quantitative

Critical Appraisal of Eligible Analytical Cross-Sectional Study using JBI Analytical Cross Sectional Studies Critical Appraisal Tool (Moola et al., 2017)	1. Were the criteria for inclusion in the sample clearly defined?	2. Were the study subjects and the setting described in detail?	3. Was the exposure measured in a valid and reliable way?	4. Were objective, standard criteria used for measurement of the condition?	5. Were confounding factors identified?	6. Were strategies to deal with confounding factors stated?	7. Were the outcomes measured in a valid and reliable way?	8. Was appropriate statistical analysis used?
Eriksen (2006)	Y	Y	Y[1]	Y	Y	N	Y	Y
Fitzgerald *et al.* (2009)	Y	Y	Y[2]	Y	Y	Y	Y	Y
Janus *et al.* (2017)	Y	Y	Y[1]	Y	Y	N	Y	Y
Li *et al.* (2022)	Y	Y	Y[3]	Y	Y	Y	Y	Y
%	100	100	100	100	100	60	100	100

[1] Cross sectional study

[2] Longitudal study

[3] Cross sectional multicentre descriptive

Table 2.3

Critical Appraisal and Data Extraction Tables - Qualitative

Critical Appraisal of Eligible Qualitative Research using JBI Qualitative Critical Appraisal Tool (Lockwood C et al., 2015)	1. Is there congruity between the stated philosophical perspective and the research methodology?	2. Is there congruity between the research methodology and the research question or objectives?	3. Is there congruity between the research methodology and the methods used to collect data?	4. Is there congruity between the research methodology and the representation and analysis of data?	5. Is there congruity between the research methodology and the interpretation of results?	6. Is there a statement locating the researcher culturally or theoretically?	7. Is the influence of the researcher on the research, and vice-versa, addressed?	8. Are participants, and their voices, adequately represented?	9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?
Bilal *et al.* (2020)	Y	Y	Y	Y	Y	N	N	Y	Y	Y
Blok *et al.* (2022)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Cameron *et al.* (2020)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Cameron *et al.* (2021a)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Cameron *et al* (2021b)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Carder *et al.* (2012)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
de Voogd *et al.* (2021)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fetherstonhaugh *et al.* (2016)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y

Garratt *et al.* (2021)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Heckman *et al.* (2017)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Holloway and McConigley (2009a)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Holmberg and Godskesen (2022)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Holmberg *et al.* (2020b)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Hunter *et al.* (2016)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Janes *et al.* (2008)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Kalaitzidis and Harrington (2018)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Kontos *et al.* (2010)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Mattiasson and Andersson (1994)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Naweed *et al.* (2022)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Sund-Levander and Tingström (2013)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Sutherland (2020)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Tate *et al.* (2020)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y

Tarzia *et al.* (2015)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Tingström *et al.* (2010)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Vandrevala *et al.* (2017)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Wiersma *et al.* (2019)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
%	100.00	100.00	100.00	100.00	100.00	96.29	55.55	100.00	100.00	100.00

Table 2.4

Critical Appraisal and Data Extraction Tables – Random Controlled Trials

Critical Appraisal of Random Controlled Trials using JBI Random Controlled Trial Critical Appraisal Tool (Tufanaru C et al., 2017)	**Q1**	**Q2**	**Q3**	**Q4**	**Q5**	**Q6**	**Q7**	**Q8**	**Q9**	**Q10**	**Q11**	**Q12**	**Q13**
Hunter *et al.* (2013)	Y	U	Y	U	U	U	Y	N/A[2]	Y	Y	Y	Y	Y
Vitou *et al.* (2022)	Y	U	Y	U	U[1]	U	Y	Y	Y	Y	Y	Y	Y
Yamada et al. (2017)[3]	*Y*	*U*	*Y*	*U*	*U*	*U*	*Y*	*N/A*[2]	*Y*	*Y*	*U*	*U*	*Y*
%	100.0	0.0	100.0	0.0	0.0	0.0	100.00	50.0	100.0	100.0	100.0	100.0	100.0

[1] Video vignette-based experimental study

[2] Vignette-based experimental survey

[3] Excluded from review not included in final percentages

Q1: Was true randomisation used for assignment of participants to treatment groups?

Q2. Was allocation to treatment groups concealed?

Q3. Were treatment groups similar at the baseline?

Q4. Were participants blind to treatment assignment?

Q5. Were those delivering treatment blind to treatment assignment?

Q6. Were outcomes assessors blind to treatment assignment?

Q7. Were treatments groups treated identically other than the intervention of interest?

Q8. Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analysed?

Q9. Were participants analysed in the groups to which they were randomised?

Q10. Were outcomes measured in the same way for treatment groups?

Q11. Were outcomes measured in a reliable way?

Q12. Was appropriate statistical analysis used?

Q13. Was the trial design appropriate, and any deviations from the standard RCT design accounted for in the conduct and analysis of the trial?

Table 2.5

Data Extraction Table for Convergent Integrated Mixed Methods Systematic Review

Author/year/ country	**Methodology/ Data collection/Analysis**	**Study focus**	**Context in ARC**	**Participants number and characteristics**	**Description of main results relevant to aims of review.**
Bilal *et al.* (2020) Pakistan	Grounded Theory Interviews Inductive coding	Influence of COVID-19 on the decision provide direct care	Covid-19	Caregivers (*n = 27)*	The decision to provide care during Covid-19 was influenced by: a sense of duty to care, beneficence and financial need.
Blok *et al.* (2022) Netherlands	Participatory Action Research Mobile app entries Focus groups Thematic analysis	Challenges that influence engaging residents in care	Older adults with physical impairments	Caregivers (*n* = 20) Residents (*n = 25)*	HCAs' decisions were influenced by: limited autonomy, knowing residents at a personal level, and the need to ensure resident happiness.
Cameron *et al.* (2020) Australia	Grounded Theory Interviews Individual (*n* = 41) Group (*n* = 8) Constant comparative analysis	How non-verbal interaction influences staff decisions on a resident's ability to make decisions and express preferences.	Dementia	Care assistants (n = 42) RNs (*n* = 15) Enrolled Nurse (EN) (*n* = 14) Managers (n = 5) Coordinator (*n* = 1) Diversional therapist (*n* = 3)	Decisions were reliant on a resident's behaviour to infer their ability to participate in care decisions. Care staff's decisions were influenced by: personal assumptions on facial expressions and physical behaviours, a broader knowledge of a resident, and the appropriateness of behaviours in certain contexts.
Cameron *et al.* (2021a)	Grounded Theory Interviews	How do care staff "know" residents and its relevance	Dementia	Care assistants (n = 42) RNs (*n* = 15) Enrolled Nurse (EN)	Decisions were influenced by how care staff conceptualised a resident's identity. Decisions on prioritisation, interpretation of

Australia	Individual (*n* = 41) Group (*n* = 8) Constant comparative analysis	to enacting decisions on their behalf.		(*n* = 14) Managers (n = 5) Coordinator (*n* = 1) Diversional therapist (*n* = 3)	preferences, or to decide on their behalf were influenced by: knowing a resident, beliefs on what constitutes knowing a resident, value placed on information sources, and beliefs about the person's identity within the continuum of dementia.
Cameron *et al.* (2021b) Australia	Grounded Theory Interviews Individual (*n* = 41) Group (*n* = 8) Thematic analysis	Perceptions of decision-making for people with dementia	Dementia	Care assistants (n = 42) RNs (*n* = 15) Enrolled Nurse (EN) (*n* = 14) Managers (n = 5) Coordinator (*n* = 1) Diversional therapist (*n* = 3)	Decisions to support residents' decisions were influenced by: beliefs on a resident's ability to make decisions, "resident rights" and policy, perceived risk and personal values of carer.
Carder (2012) United States	Grounded Theory Observation Interviews	How do unlicensed care staff decide to administer PRN medications.	Dementia	Med aides (*n* = 16)	'Knowing' a resident was an overarching influence. Decisions were influenced by a combination of institutional norms, experience, RN-med aide relationships and interpretation of a resident's needs.
de Voogd *et al*. (2021) Netherlands	Integrated empirical ethics Focus groups (*n* =5) Thematic analysis	Influences on decision-making strategies on end-of-life care.	Migrant residents end-of-life	Care assistant (*n* = 18) RN (*n* = 7) Social Worker (*n* = 2) Team Leader (*n* = 2)	Decisions were influenced by: family members, language barriers, cognitive impairment, personal knowledge of resident and other disciplines. Strategies used to inform decisions included: asking residents wishes in private, use of concealing or acceptable words, cultural knowledge, and family consultation.

Eriksen, W. (2006) Norway	Analytical cross-sectional study Self-report survey Mann-Whitney Rank Sum	How the perception of work demands and control at work vary across practice areas.	Physical work demands; psychological and social work demands	Nurse Aides (NAs): Nursing Home (*n* = 2750) Community (*n* = 1003) Apartment for aged (*n* = 640) Psychiatric (*n* = 672) Other (n = 372) Hospital: Medical (*n* = 840) Psychiatric (*n* = 466) Paediatric (*n* = 115)	NAs working in nursing homes reported higher work demands (P < 0.001), lower levels of participation in decision-making (P < 0.001), and lower ability to control work pace when compared to other groups (P < 0.001).
Fetherstonhaugh *et al*. (2016) Australia	Grounded Theory Interviews Individual (*n* = 41) Group (*n* = 8) Constant comparative analysis	Decisions and action used to support residents with dementia with daily decisions.	Dementia	Care assistants (n = 42) RNs (*n* = 15) Enrolled Nurse (EN) (*n* = 14) Managers (n = 5) Coordinator (*n* = 1) Diversional therapist (*n* = 3)	Care assistants' decisions were focused on daily care, whereas nurses focused on facility level decisions. Decisions were influenced by: personal knowledge of a resident, families, care plans and the time-poor environment. Actions used to support preferences included: simplifying decisions/limiting choices, use of visual cues and simple language, allowing time for decisions, avoiding noisy distracting environments and compromise.
Fitzgerald *et al.* (2009) Canada	Longitudinal study Caregiver questionnaire Resident ADLs at beginning and end of study period.	Investigate the relationship between caregiver's fears about the possibility of pain and falls with	Dementia	Care aides (*n* = 439) RNs (*n* = 68) Licensed Practical Nurse (LPN) (*n* = 27) Psychiatric RNs (*n* = 19) Residents (*n* = 84)	Staff fears of a resident falling can contribute to unnecessary use of restraint/activity restrictions. The fear of resident falling was a significant predictor for staff-imposed activity restrictions/restraints to prevent falls (β = 0.25, 95% CI: 0.12-0.38) and fear of pain was

	Bayesian hierarchal/linear regression	residents' functional ability and falling			a significant predictor for the use of restrictions/restraints to prevent pain (β = 0.29, 95% CI: 0.29-0.52). The relationship between staff fears of a resident falling and the use of restraints remained after the physical risk factors for falling were controlled for. Only the relationship between use of restrictions/restraints to prevent pain was associated with a higher probability of a resident injury/fall (β = 0.64, 95% CI: 0.024 – 1.30).
Garrett *et al.* (2021) New Zealand	Qualitative multi-method using a single vignette. Focus groups: HCA (*n* = 3) RN (*n* = 3) Resident (*n* = 2) Interviews: Managers (*n* = 8) RN (*n* = 1) Thematic analysis	How and why decisions to covertly administer medications are made.	Medication administration	HCAs (*n* = 14) RNs (*n* = 6) Residents (*n* = 12) Clinical managers (*n* = 11)	Decisions to covertly administer medication were influenced by: pressure to ensure residents receive medication promptly, sense of duty to meet clinical needs, moral responsibilities towards resident rights and safety and uncertainty on decision-making authority in the absence of institutional policy.
Heckman *et al.* (2017) Canada	Qualitative Critical realism Focus groups (*n* = 3) Interpretive descriptive analysis	Unregulated care providers care (UCPs) perspective on caring for	Heart failure	UCPs (*n* = 24)	Care decisions for those with HF were influenced by: a lack of working knowledge of the condition, treatment and clinical signs and symptoms, lack of information on residents with and role confusion resulting

		residents with heart failure (HF).			from uncertainty and exclusion from care planning.
Holloway and McConigley (2009a) Australia	Descriptive exploratory Interviews Constant comparison	How Nursing Assistants (NAs) working care for residents with pain.	Pain management	NAs (*n* = 6)	NAs described making clinical decisions as part of their daily workload. Once pain was identified a course of action was decided on: NA-interventions, refer to the RN or ignore the problem. Decision-making on the course of action was influenced by: limited knowledge of assessment methods, clinical signs and symptoms of pain, previous experiences with residents' pain, knowledge of a resident and a responsibility to take action, assess and follow-up.
Holmberg and Godskesen (2022) Sweden	Focused ethnography (FE) Observation Post observation interviews FE based thematic analysis	To understand encounters of Nursing Assistants (NAs) providing bodily care to residents at the end of life.	Assisted body care for end-of-life residents	Nursing Assistant (NA) with ≥ 1 years' experience (*n* = 16) Residents (*n* = 12)	Decisions are framed as 'ethical encounters"; adapting to a resident's needs based on NAs perception. Decisions were influenced by: resources, time, knowledge of a resident and preferences, and communication/social/practice norms.,
Holmberg *et al*. (2020b) Sweden	Qualitative descriptive design Observation Content analysis	Identify what occurs during assisted bodily care (ABC).	Assisted body care for end-of-life residents	Assistant Nurse (AN) with ≥ 1 years' experience (*n* = 22) Residents (*n* = 17)	Observations identified 26 task types assigned to 6 categories: direct ABC (410 codes), ABC preparatory and complimentary work (356 codes), supporting resident self-determination during ABC (179 codes), actions maintaining resident's independence (177 codes), actions exhibiting consideration during ABC (114 codes) and interruptions in ABC (107 codes).

					ANs worked at a high tempo. Care decisions were influenced by: time pressures, organisational expectations or NA perceptions of a resident’s communication abilities.
Hunter *et al.* (2013) Canada	Randomised between-group design Factorial design. Revised Personhood in Dementia Questionnaire (PDQ) Measure of Job Satisfaction Maslach Burnout Inventory Human Services Scale Multiple regression	The influence of a dementia diagnosis on pain management strategies	Dementia	Special care assistants (SCAs) (*n* = 137) RNs (*n* = 41)	SCAs’ beliefs about dementia and personhood in dementia are predictors for how pain is treated for a resident displaying pain-related behaviour. A diagnosis of dementia was significant predictor for not recommending analgesia (β = -2.11, 95% CI: -3.90 to -.32, p < .05) and recommending anxiolytics (β = 2.86, 95% CI: -3.90 to -.32, p < .05). Regardless of a resident’s cognitive status, higher personhood scores were predictive of an increased recommendation for non-pharmacological measures (β = .45 95% CI: -.24 to -3.92, p < .01), analgesia (β = .09, 95% CI .02-.16, p < .05) and less inclination to use anxiolytics (β = -.21, 95%CI = -.30* p< .01). Beliefs about personhood were correlated to the SCA’s sense of personal accomplishment/feelings of competence. *Upper CI not given
Hunter *et al.* (2016) Canada	Qualitative study Interviews (*n = 3*) Group interviews (*n* = 4).	How NAs with no training in person-centred care (PCC)	Dementia	Nursing Assistant (NA) with ≥ 1 years’ experience in dementia care (*n* = 28)	Five general NA strategies for providing dementia care were identified: building relationships (4 sub-codes); accommodating preferences (3 sub-codes); being flexible (2

	Qualitative content analysis	practiced and if organisational factors influenced their caregiving.			sub-codes); cultivating a holistic understanding (3 sub-codes); providing psychological support (2 sub-codes). Decisions were informed by: developing relationships with residents, knowing resident's personal history, NA personal values, considering resident's preferences and most basic needs. Decisions were influenced by: ability to be flexible, lack of time, overwork, staffing, pace of work and routinisation, institutional policy, years of NA experience
Janes *et al.* (2008) Canada	Grounded theory Interviews (*n* = 20)	Factors that influence the utilisation of knowledge about person centred care.	Dementia	Personal Support Worker (PSW) (*n* = 8) Residents (*n* = 18)	PSWs decision process was framed as "figuring it out in the moment" and represented as stages where decisions were based on personal beliefs, resident information and context. Decision-making in the context of the variability of dementia symptoms featured as a "game of chance" where PSWs trialled and assessed decisions for effectiveness. Decisions were influenced by personal ways of knowing a resident and information from those on the care team.
Janus *et al.* (2017) Netherlands	Theory-based Cross- sectional study Online survey Linear multiple regression	Identify the influencing factors and reasons for nurses and certified nursing	Dementia	CNAs (*n* = 50) RNs (*n* = 31)	Positive attitudes about treatment effects ($\beta = 0.85$, $p < 0.05$) and perceived behavioural control ($\beta = 0.38$, $p < 0.05$) were associated with the intention to request antipsychotics from a prescriber. Only the current position as a nurse was associated with the

		assistants (CNAs) to request for antipsychotics for residents with dementia.			behaviour of calling to request antipsychotics (β = 0.66, $p < 0.05$).
Kalaitzidis and Harrington (2018) Australia	Interpretive descriptive Focus groups (*n* = 2) Interviews (*n* = 18) Thematic analysis	Exploration of decision-making, choice and control from the perspectives of Personal Care Workers (PCWs) residents.	Consumer directed care	Personal Care Worker PCWs (*n* = 8) Residents (*n* = 18)	PCWs and residents described the regulatory nature of the NH environment on their decision-making. PCW decisions involved: anticipating resident needs and promoting independence, problem-solving and advocating between the residents and other healthcare professionals. Decisions were influenced by: PCWs perception of their responsibilities; a resident's needs and personality; time limitations; obligation to employer in terms of policies, rules, care plans and scope of practice; safety and duty to care and routine task care.
Kontos *et al.* (2010) Canada	In-depth quality exploratory Focus groups Interviews Thematic analysis	Decision-making and care practices and factors that enable or constrain care.	RAI/MDS standardised processes	Actively employed Personal Support Workers (PSW) (*n* = 26) Supervisors = (*n* = 9)	PSWs rely on their own knowledge of a residents to make care decision. Care decisions influenced by: PSWs exclusion from documentation, care plan development and interprofessional meetings and limited biographical histories and resident preferences included in charts. Care decisions were informed by: personal experience and use of empathy, knowledge gained through familiarity with residents,

					information sought from family, and intraprofessional communication.
Li *et al.* (2022) China	Cross-sectional multicentre descriptive Paper based questionnaires Multiple linear regression	Investigate existing knowledge, attitudes and practice on restraint use and explore factors influencing decision-making.	Restraints	Nursing home workers (NHWs): No professional title (*n* = 132) Junior workers (*n* = 130) Intermediate/senior-workers/technicians (*n* = 49)	NHWs were described as a population that was limited in education and restraint training. Forty five percent of the participants had primary school or below levels of education an 25% junior high school education. Sixty-eight percent had received restraint training. Most NHW (98.4%) lacked an awareness of the harms associated with restraint use. Restraint training was associated with higher knowledge scores (β = 0.129, P = 0.015) and attitudes about restraint use (β = 0.200, P = 0.001). Practice scores were associated with restraint knowledge and length of service, specifically, those with > 10 years of service had lower practice scores (β = -0.224, P = 0.003): authors posited that workers with longer working years had lower education levels and were from less developed rural areas.
Mattiasson and Andersson (1994) Sweden	Qualitative case-study. Self-report questionnaire Content analysis	Nursing home staff's perceptions, attitudes and care decisions for residents who	Refusal of nutrition by cognitively intact residents	Nursing Aide (NA) (*n* = 83) Assistant nurses (ANs) (*n* = 46) Nurses (*n* = 41) Extra staff (*n* = 17)	A lack of agreement between the care expectations compelled by nursing home culture and staff opinion was identified. NAs were overrepresented among those not supporting resident's wishes. While 49% of the staff stated support for residents wishes; 20% believed that a resident's wishes would be supported by the unit. However, 37.5%

		refuse food and drink.			of the participants either did not respond or chose to "not take a stand" when asked for their personal opinion on who should make the care decision.
Naweed *et al.* (2022) Australia	Phenomenological study Interviews Scenario Invention Task Technique (SITT) Phenomenological data analysis	Strategies used by Personal Care Attendant (PCAs) when responding to care challenges.	Rural/regional ARC facilities	PCA with ≥ 1 year experience and actively employed in ARC (*n* = 7)	Care decision adapted to residents needs and were based on: context, knowledge of a resident, personal values, time constraints, ability to judge and navigate risks, professional boundaries and power hierarchies. All participants described routinely breaking rules or transgressing boundaries if they decided the action was in the best interests of a resident.
Sund-Levander and Tingström (2013) Sweden	Qualitative exploratory Focus groups (*n* = 4) Content analysis	Nursing Assistant (NA) actions in response to signs of early infection.	Suspected infections	Nursing Assistant (NA): NA nursing home (*n* = 11) NA home care (*n* = 10)	NAs recognised early signs of infection through personal experiences, knowing the resident, asking and observing the resident, and conferring with others. Actions included: measuring or testing to confirm, reporting to the RN, handing-over all decision-making to the RN, wait and see if the condition changes, and to give-up. Decisions were influenced by: lack of time, mood or level of fatigue, type of relationship with RNs and fear of not being believed. If test result did not support the suspicion of an illness, results may be altered to gain the RNs or physician's attention.
Sutherland (2020) Canada	Interpretive descriptive design Focus group	The perceptions of end-of-life decision-making for residents with	Dementia and end-of-life	PSWs with ≥ 1 year experience in the ARC locality. All participants had received in-service	Tensions between the medical and social dimensions shaped staff attitudes on decision-making. PSWs perceived that they were uniquely positioned to note detailed

	Voice-centred relational data analysis.	dementia by Personal Support Workers (PSWs) and nurses		education related to palliative and dementia care (*n* = 9)	changes. However, they perceived their role as confined to report bodily functions to registered staff. PSWs decision-making with influenced by: problem solving with other PSWs, institutional culture favouring biomedical knowledge, professional hierarchies, exclusions from interprofessional meetings and workloads.
Tarzia *et al*. 2015) Australia	Grounded Theory Interviews (*n* = 41) Focus groups (*n* = 8)	Barriers to decision-making for individuals with dementia	Dementia	Care assistants (n = 42) RNs (*n* = 15) Enrolled Nurse (*n* = 14) Managers (n = 5) Coordinator (*n* = 1) Diversional therapist (*n* = 3)	Decisions were made within the boundaries of the institution and in an informal manner. Decisions were influenced by: lack of time, uncertainty regarding the responsibility of decision-making for a resident, lack of policy and guidance for challenging situations, limited skills and training for care assistants providing the primary care.
Tate *et al.* (2020) Canada	Focused ethnography Interviews (*n* = 6 Joint interviews (*n* = 2) Focus groups (*n* = 1) Inductive constant comparison	The perspectives of Healthcare HCAs role and clinical-decision-making decisions-to-transfer to the hospital in ambiguous cases.	Change of condition situations that lead to ED transfers	HCAs involved ≥ 1 hospital to ED transfer ≤ 6 months prior to recruitment and ≥ 6 months working at the locality. (*n* = 20)	HCAs perceive their role as consistent caregivers and decisions were limited to reporting change of condition to other care providers. Subtle changes in resident behaviour would initiate the decision to report a change and were influenced by: responsiveness of nurses to HCAs, facility culture/staff hierarchy, policies on who and what HCAs could communicate, fear of being held accountable in situations where HCAs were not expected to chart resident changes.
Tingström *et al*. (2010)	Qualitative study Questionnaire	Nursing Assistants (NAs) perceptions	How the decision that a	NAs (*n* = 21)	The majority (*n* = 13) of NAs found evaluating for the presence of infection

Sweden	Focus groups (*n* = 4) Interviews Qualitative content analysis	of evaluating infections in elderly person and how they decide that they are unwell.	resident is not well is made.		difficult. Two types of decisions were identified: the resident ‘is not as usual’ and “seems to be ill’. Is not as usual was based on conclusions from observations of resident behaviour and discomfort that differed from their normal condition. Seems to be ill was based on general physical signs associated with infection.
Vandrevala *et al.* (2017) United Kingdom	Qualitative study Interviews Interpretive Phenomenological Analysis	How HCAs respond and manage sexual expressions of residents with dementia	Dementia	HCAs (*n* = 7) Unit manager (*n* = 1)	Decisions to support or prohibit sexual expression was based on a HCA’s: personal views, their perceptions of duty of care and what would be in the best interest of a resident, sanctity of marriage and severity of dementia. Care staff described adopting roles that facilitated sexual expression or obstructed as an effort to safeguard the dignity of a resident and the moral norms of the HCA and institution.
Vitou *et al.* (2022) France	Randomised between-group Subjective measures: Visual Analog scales Objective measures: Algoplus pain scale MANOVA Mann-Whitney U	Does the diagnosis or severity of Alzheimers influence Certified Nursing Assistants (CNAs) pain assessments.	Dementia/ Alzheimer’s	Study 1: Female CNAs (*n* = 84) Study 2: Female CNAs (*n* = 67)	The stigma associated with the severity of Alzheimers disease can influence the CNAs perception of a resident’s pain. Study 1: A known diagnosis of Alzheimer’s had no significant effect on: CNA perceptions on intensity of pain the person in the video or the level of affective distress the participant was experiencing watching the video (VAS scores) (F = 3.65, $p > 0.05$) or Algoplus pain scores ($U = 762$, z = -0.835, $p = 0.40$). However, in Study 2, the stage of the disease had a significant effect on VAS

					scores: scores for the mild stage were significantly higher scores for VAS scores ($F = 17.45$, $p = < 0.005$, $\eta^2 = 0.133$). The disease stage did not affect Algoplus scores ($U = 527$, $z = -0.44$, $p = 0.66$). The authors attribute the lack of effect on the Algoplus pain tool to its design being based on reporting explicit behaviours reducing contextual or judgemental influences.
Wiersma *et al.* (2019) Canada	Qualitative study Focus groups (*n* = 11) Content thematic analysis	Personal Support Workers (PSWs) moral distress and decision-making in palliative care	Palliative care	PSWs (*n* = 45)	Decisions focused on two areas: ensuring residents did not die alone and providing care based on residents wishes. PSWs decisions were underpinned by their perceptions of being the most aware of care needs and as fictional kin. “Right actions”, such as not allowing a resident to die alone and providing comfort were influenced by: time, institutional hierarchy, and value of their input by registered staff. Decisions on prioritising care were difficult.

Lizarondo, L., Stern, C., Carrier, J., Godfrey, C., Riegar, K., Salmond, S., . . . Loveday, H. (2020). Mixed Methods Systematic Reviews. In A. E & M. Z (Eds.), *JBI Manual for Evidence Synthesis*. doi:https://doi.org/10.46658/JBIMES-20-09

Chapter 3 Research Design

Introduction

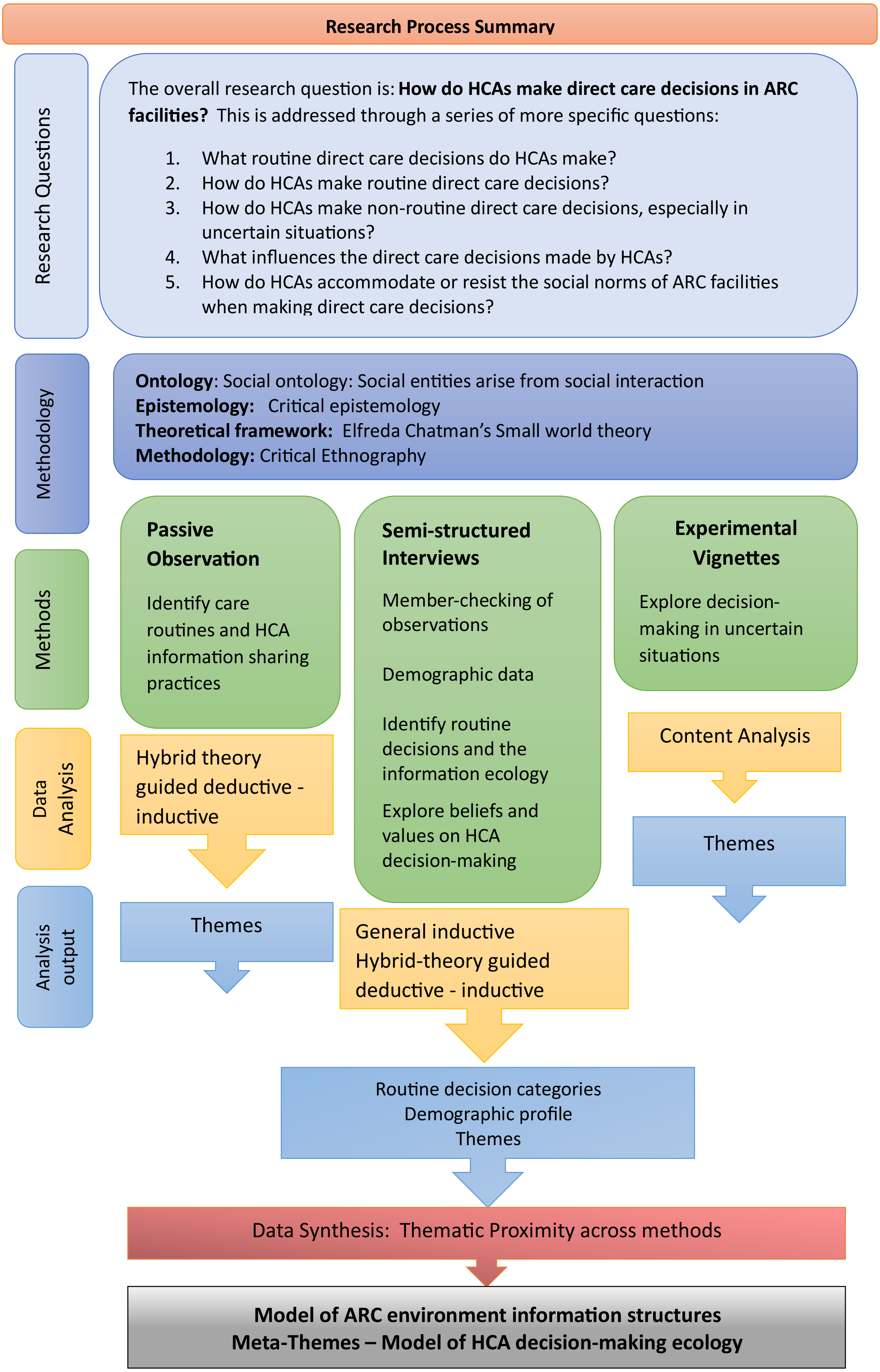
The previous chapters introduced the role of the HCA as the primary providers of direct care in ARC, a sector that is experiencing increasing complexity in the delivery of care. While the HCA role is defined by institutional policy and scope of practice, and there is a growing amount of literature on the tacit knowledge of HCAs as direct caregivers in aged care, there is a paucity of information on HCA decision-making in the planning and delivery of care.

This chapter begins with a summary of the research process (Figure 3.1) and outlines the strategy of inquiry, methodology, and methods used in this research to understand how HCAs make care decisions in ARC. The research questions the methods aimed to answer are: "What routine care decisions do HCAs make?"; "How do HCAs make routine direct care decisions?"; "How do HCAs make non-routine direct care decisions, especially in uncertain situations?"; "What influences the direct care decisions made by HCAs?"; and "How do HCAs accommodate or resist the social morns of ARC facilities when making direct care decisions?".

Research methods related to locality, participant recruitment, and ethical considerations for conducting research in a health worker population who care for older adults residing in residential care. Small world theory, constructed by Elfreda Chatman, provides a theoretical framework for the analysis of the research and is conceptually aligned to the critical ethnographic methodology used for field work and data collection. Data collection required multiple methods to capture HCAs experiences, knowledge, social norms, and resources. The connection between theory and methodology, and a description of the methods surrounding data collection, data analysis, and the overarching synthesis of the findings are described within this chapter.

Figure 3.1

Research Process Summary



Research Process Summary

Research Questions

The overall research question is: **How do HCAs make direct care decisions in ARC facilities?** This is addressed through a series of more specific questions:

1. What routine direct care decisions do HCAs make?
2. How do HCAs make routine direct care decisions?
3. How do HCAs make non-routine direct care decisions, especially in uncertain situations?
4. What influences the direct care decisions made by HCAs?
5. How do HCAs accommodate or resist the social norms of ARC facilities when making direct care decisions?

Methodology

Ontology: Social ontology: Social entities arise from social interaction
Epistemology: Critical epistemology
Theoretical framework: Elfreda Chatman's Small world theory
Methodology: Critical Ethnography

Methods

Passive Observation

Identify care routines and HCA information sharing practices

Semi-structured Interviews

Member-checking of observations

Demographic data

Identify routine decisions and the information ecology

Explore beliefs and values on HCA decision-making

Experimental Vignettes

Explore decision-making in uncertain situations

Data Analysis

Hybrid theory guided deductive - inductive

General inductive
Hybrid-theory guided deductive - inductive

Content Analysis

Analysis output

Themes

Routine decision categories
Demographic profile
Themes

Themes

Data Synthesis: Thematic Proximity across methods

Model of ARC environment information structures
Meta-Themes – Model of HCA decision-making ecology

Localities, Participants and Ethical Considerations

Certified ARC facilities in NZ during the time of data collection numbered approximately 643, with 318 having 50 beds or less. Smaller facilities were considered more suitable as a location for this research because it was easier to observe routine information sharing than in a larger facility. The location where information is exchanged, such as an ARC facility, is influenced by time, activity or event, and can occur anywhere people gather (Fisher & Naumer, 2006; Savolainen, 2006a, 2006b, 2009). Of the ARC facilities with 50 beds or less: 126 provided rest home services only; 87 provided a combination of hospital-medical, hospital-geriatric and rest home services; 26 provided dementia care only; 45 provided dementia care in combination with hospital-medical, hospital-geriatric and rest home services; 34 included care services in addition to rest home care that were not specific to older people, such as maternity and intellectual and physical disability care; and only six offered psychogeriatric care (Ministry of Health, 2019a). Dementia care services ranked as the most common service to be delivered alongside the rest home, hospital-medical, and hospital-geriatric as a suite of services for ARC facilities of this size.

Ethical approval was granted for the inclusion of four ARC facilities (Appendix A). Potential localities for research were contacted by telephone and the details of the research were emailed to the owners/managers of each locality. Locality agreements were established with four ARC facilities; one facility withdrew for reasons unrelated to this research (Appendix B). The three participating ARC facilities ranged in size from 20 to 50 beds and were owned either privately, or by a charitable trust.

Two localities were within the same territorial local authority (TLA) and the third in an adjacent TLA. New Zealand has 61 TLAs which are used by the Ministry of Health to set the maximum costs for ARC services that a resident could be required to pay in that region. The difference between the set maximum contributions of TLAs for the localities in this research was less than $20.00 (Director-General of Health, 2019). All localities provided rest-home care, with two providing geriatric and medical care in addition to rest home care. None of the localities offered dementia care or psychogeriatric care. All localities maintained an active certification as required by the Health and Disability Services Act (2001) and had either fully attained or exceeded standards audited against NZ Health and Disability Services Standards NZS8134.1:2008, NZS8134.2:2008 and NZS8134.3.2008.

Ethical Considerations

The ethical considerations for this research included the implications of conducting research in private care environments where participants are members of a marginalised workforce caring for the everyday personal and emotional needs of non-participants (residents of ARC). Caregiving relationships play are important to the day-to-day quality of life of residents in aged care (Yeung et al., 2017). Central to this study is the reciprocity between the HCA and resident through engagement in direct care activities and their understanding of a resident's needs as a basis for providing relationship-based care. Adams and Sharp (2013) describe this relationship as "professional reciprocity" where connections are deliberately fostered to create shared understandings through communication, resulting in job satisfaction, meaningful information sharing and positive effects for care recipients. It is the researcher's moral responsibility to ensure that research methods do not reinforce stigmas or vulnerabilities of participants (Liamputtong, 2007). The stigma of those working in aged care has been conceptualised as unfavourable and effects aged care workers negatively (Manchha et al., 2020). Throughout all observations, interviews and stories shared by participants, the work that HCAs do to create and maintain care relationships with residents was treated with respect.

Ethical Approval, Locality Agreements and Cultural Consultation. -A formal ethical review was undertaken by The Human Ethics Committee of Massey University who approved this research (HEC: SOA 19/06, see Appendix A). It is the organisational responsibility of the ARC facility to ensure that any research undertaken considers a level of protection or safety within the locality (Henwood et al., 2015). Organisational approval from each ARC facility was acquired independently of the Massey University's Ethics Committee approval. Managers from each of the facilities were met and the study was explained, especially details surrounding data collection. Managers granted permission to access the ARC facility prior to beginning the study and signed locality agreements (Appendix B). Cultural consultation with Māori academic nurse Sandra McDonald (Ngati Whauta, Te Uri O Hau) who advised on the approach to cultural safety and tikanga Māori during the interview process.

Participant Recruitment and Consent. Participants were employed as HCAs at the study localities and were recruited by the researcher through a short introduction to the research study at a staff meeting. Recruitment flyers and information sheets were provided to the HCA facilities during the initial information meetings and during shift handovers to accommodate ARC shift-work schedules and rosters (Appendix C) for recruitment documents. Information sheets about the study were also provided to residents, whānau/family (Appendix E). These were placed on message boards or information folders held by the locality and introduced me as the lead researcher and explained the nature and purpose of the study.

Consent from participants was obtained face-to-face from each person prior to the interview and was reconfirmed at the time of interview (Appendix E). The option for interviews to be conducted in pairs or small groups was offered to those HCAs who for cultural or personal reasons preferred not to be interviewed alone (Appendix F). Although phone or online interviews were an option, all interviews were conducted in person at locations preferred by those being interviewed outside of the ARC facility, or in those cases where HCAs preferred to be interviewed at the locality for convenience, in private areas. In total, 27 HCAs volunteered, 23 participated in interviews, four withdrew because they were unavailable at the time of interview

Participant Safety, Privacy and Confidentiality. Researching a health workforce that is generally considered marginalised in a setting where care is provided to a vulnerable population requires careful consideration. As a RN with a current Annual Practicing Certificate, I am required to meet the Nursing Council of NZ competencies for RN (Health Practitioners Competence Assurance Act, 2003; Nursing Council of NZ, 2012). Observations and interviews were conducted with respect to the safety and individual rights of the participants as well as others who are living or visiting the environments of care. Although data collection was limited to HCAs, observations of HCA information sharing routines occurred in the common areas where residents and non-participant staff carried on their daily activities. Privacy and safety extended to all those in the environment of care. However, a community or public area can rapidly change into a space where private care is delivered due to the needs of those in living in ARC. The HCAs were asked to advise me if my presence might at any time be perceived as intrusive or cause a disruption to care delivery. I sought to build a partnership, characterised by effective communication and transparency with the HCAs and other staff who would be comfortable in directing me as needed. A stated exception to confidentiality was if there was any disclosure, or I observed a situation that was dangerous or eminently harmful. Due to my duty of care as an RN, the person involved would be encouraged to discuss it with the RN or manager, and if necessary, I would inform the manager. This circumstance never occurred. However, during interviews a participant and a non-participant, who had learned of this study through acquaintances, approached me wanting to discuss practice issues causing them distress. These individuals were directed to a professional workforce resource where they could safely follow up with their concerns and seek further advice.

Consideration was given to interview questions that may have been perceived as confronting by participants, such as describing difficult decisions. Participants were made aware that they did not have to answer questions that they did not want to. Privacy and confidentiality were priorities, and the measures used to ameliorate any perceived risk of sharing stories about care decisions was discussed. Participants were assured that their data would be anonymised, and no localities would be named. A digital voice recorder was used to record data. An experienced transcriber from outside of the region signed a confidentiality agreement to undertake the transcription of interviews (Appendix G). All digital files provided to the transcriptionist were destroyed with the completion of each transcription. Study data stored on password-protected data cloud storage is held in accordance with Massey’s Code of Responsible Research Conduct and General Disposal Authority for New Zealand Universities.

Ending the Research Participant Relationship. At the completion of the interviews, participants were thanked for sharing their stories and experiences about the decisions that they made as HCAs. I explained to each participant that the observations and interviews were complete and asked if they would like a copy of their transcripts to review for accuracy. All participants declined the offer to review their transcripts. They were invited to contact me if they had any questions and were told that they would be offered a copy of the study findings once the research had been completed. I confirmed with participants that they had my contact details and that I had their email address to send a copy of the findings too.

Theoretical Framework, Methodology and Data Collection Methods

Decisions are multi-dimensional, influenced internally by a person's experiences and knowledge and externally in the form of social norms and resources (Gigerenzer & Todd, 1999). The research approach was multi-staged, and several qualitative methods were used to collect data. Theoretical concepts guided the focus for observations, semi-structured interview questions, and parts of the data analysis. The research stages were informed using a critical ethnographic methodology by Carspecken (1996). Observations were followed by semi-structured interviews which also contained experimental vignettes constructed to explore decision-making in uncertainty. The following sections detail how the theoretical concepts and the methodology informed each stage of the research design. Details on observations, sequencing of observations and interviewing are provided.

Theoretical Framework

The theory used to frame this research is Elfreda Chatman's suite of mid-range small world theories that included Life in the Round, Normative Behaviors and Information Poverty (Burnett et al., 2001; Chatman, 1996; Chatman, 1999; Chatman, 2000). These theoretical concepts were used to frame data collection and guide data analysis so that the scale and scope of the HCAs information world could be identified; a required step towards understanding their decision-making environment. Chatman's progression of small world theory travelled through the landscape of contemporary information sciences and the information behaviours of marginalised populations in institutional settings, such as women in prison, older women in a low-income retirement community and cleaning staff at a university (Chatman, 1990, 1992, 1999). Through theoretical coalescence the foundational concept of being an *insider* was progressed into the context of institutional information worlds. Identifying the concept of a *life in the round* is a conceptualisation of the influence that a social context has on information behaviours within institutional environments. Chatman's work highlights the importance of situational relevance to information, everyday living and the collective belief that the utility of information is a social construct of the users. Chatman's Life in the Round

(1999) and the theories of Normative Behaviors (2000) and Information Poverty (1996) form a suite of theories that contribute to Chatman's overarching idea of living life in the round (2000). The concepts in Chatman's theories act as bonds between the propositions, linking the theories together. Details on how the theoretical concepts were applied to guide data collection can be found in Appendix H. For practical purposes, in this study, life in the round will be used inclusive of the theories of normative behavior and information poverty.

This research positions decision-making in ARC as occurring within the life in the round, an insulated and tightly bound context where information from outside the boundaries of the small world has little, if any, lasting value (Burnett et al., 2001; Burnett et al., 2008). Decisions made in these environments are bound to the social norms and rules that reflect a collective sense of what is right within the context of the life in the round. Information seeking is a responsive action where an individual uses a range of tactics to access information in response to a goal or intention (Wilson, 2000). Chatman's Life in the Round provides a conceptual framework capable of supporting research that seeks to identify the elements of a highly contextualised institutional environment that influences decision-making. As discussed in the first chapter, HCAs are a gendered marginalised workforce and funding policies are decades behind actual costs for current standards of care. Chatman describes the philosophy that underpins her theories in a keynote address:

> Most of the occurrences in this world are the result of information that holds it together. In this sense, when information does come in it is viewed as appropriate and normal. On the other hand, most information produced outside the small world of marginal people has little lasting value to the reality of their lives. (Chatman, 2001) p. 4

An assumption made at the beginning of this research was that ARC was a closed environment sharing similarities with Chatman's Life in the Round. An important aspect of this research was to determine the information boundaries of the ARC context and its permeability to outside information to test that assumption. The shared beliefs on the value and acceptability of an information resource are reflected in the information networks used by the life in the round insiders to maintain everyday routines (Burnett et al., 2001). Those within the information network actively reinforce values that create meanings used to inform daily care decisions. For example, Caspar et al. (2016) describe how HCAs at a locality placed little value in resident assessment and care plan documentation, regarding the information as irrelevant to residents' immediate care needs; resulting in, a "go with the flow" approach to providing care (p. 958).

A tenet of life in the round is that unless a critical problem arises there is no reason to seek information. Within the conceptualisation of the life in the round is the theory of information poverty. Information poverty has a wide use of application and has evolved into an umbrella term for individuals or communities with limited access to information. A state of being information-poor can be described from three perspectives: technology driven, often described as a *digital divide*; affordability to information sources; and a human approach where the ability to derive a benefit from the information is a requisite for valuing and seeking information (Britz, 2004). Cumulatively, barriers to sources of information and beliefs about the relevance of information create environments where information internally generated is used to make decisions. Information dissemination in clinical environments is often formalised and part of the shift routine, for example change of shift reports. Seeking information not readily available within the life in the round occurs only in a crisis, where there is a shared belief that there is a need to seek information (Chatman, 1999). The threshold of seeking information is socially defined based on agreed the degree of acceptability of deviations from established norms (Chatman, 1996).

A limitation in the use of Chatman's theories involves the absence of addressing newcomer socialisation, focusing on conformity to social norms required for insider membership. To address this limitation, organisational social theory and decision-making theory were used to explore the data. Organisational and institutional research by Aragon et al. (2018), Caspar et al. (2016) and Van Maanen and Schein (1977), decision-making theory, such as the description-experience gap (Hertwig & Wulff, 2021) were also used to explore the data.

The process of socialising to an organisation is the road to insidership (Choi, 2018; Van Maanen & Schein, 1977). Socialising newcomers to established patterns and traditions of information sharing are part of this process. In terms of ARC, a newcomer can be a new HCA, a new resident and their family, a HCA or nurse from a temporary agency, visiting clinicians, or anyone else who Chatman (1999) describes as not being a legitimised member. The concept of social types in terms of Life in the Round theory pertains to the creation of definitions that are applied to a role or person that suggests predictable conduct (Burnett et al., 2001; Pendleton & Chatman, 1998). A senior HCA, med aide or short-shift HCA are examples of social types referred to by HCAs in this research. Individuals identified as an outsider, or lacking insider legitimacy, have difficulties interacting and accessing information with others (Burnett et al., 2001; Burnett et al., 2008). Newcomer socialisation requires sensemaking of the new culture and can be disruptive to institutional routines and an emotional experience for newcomers (Gilmore & Harding, 2021; Matuszewski & Blenkinsopp, 2011).

Consideration of Chatman's midrange suite of theories into the specific context of ARC required a thoughtful approach. The application of Chatman's theories in healthcare related information behaviours are increasing. However, there are no known applications of these theories to guide research on direct care decision-making. Mid-range theories developed outside of nursing or healthcare research provide valuable insight and guidance providing the concepts are congruent with the aims of the research, the population and methodology (Cody, 1999; Lor et al., 2017).

Methodology

This research accepts the claims of social constructivist ontology and critical epistemology (Figure 3.1). Critical epistemological principles are grounded in the assumption that social worlds are created and reinforced through the interactions between members of a social context (Carspecken, 1996; Kincheloe & McLaren 2005). Actions represent the social norms, recognised as patterns of intersubjective behaviour or *action orientations* (Georgiou & Carspecken, 2002). Meaningful actions between members of a social context represent the existing knowledge, normative behaviours, power relations and acceptable inexactitudes. Carspecken (1996) offers an exemplar of critical qualitative research epistemology in the form of a staged ethnographic process. Carspecken (1995) when applying critical ethnography includes features such as body language and bodily actions as part of the intersubjective communication and relationships that create social routines. For example, in this research, prolonged observation was used to observe the variations in the duration of communication and forms of formality used in information sharing by HCAs over all three localities.

Critical epistemology requires a multi-dimensional approach using multiple methods to make validity claims on qualitative data. Carspecken's (1995) staged critical ethnography addresses two social domains: lived culture and the social system (Georgiou & Carspecken, 2002). Data collection and analysis occur in a cyclical fashion. For example, passive observation is followed by researcher reconstruction of the data based on their own understandings. That interpretation is introduced into semi-structured interviews for clarification from the perspective of the participant. Critical epistemology assumes that the researchers use their own ideologies and daily life experiences when reconstructing the data; imbuing these actions with their own references (Carspecken, 1996; Kincheloe & McLaren 2005). Carspecken operationalises the critical epistemological principle that truth is not derived solely from researcher perceptions by embedding member-checking as a necessary component in the data collection. Member-checking during semi-structured interviews occurred by asking the participants to explain the meanings derived from observations. The meanings of the data collected during observation was then co-constructed with the participants. Member-checking for meaning was used as an iterative process across contexts and localities to identify stable meanings and unique occurrences. A detailed process map of research activities can be found in Appendix I.

The use of a staged approach with multiple overlapping methods provides an opportunity for consistency checks between what was observed and what was said, enhancing the dependability of the data (Carspecken, 1996; Lincoln & Guba, 1982; Lincoln & Guba, 1985). Innovation of data collection within Carspecken's staged approach is encouraged through an epistemological mandate to use data collection methods that support gaining an understanding the participants position from a cultural perspective (Georgiou & Carspecken, 2002). This research introduces experimental vignettes as a method to collect data on HCA decision-making during situations of uncertainty.

Chatman's life in the round identifies multiple social domains that influence decision-making, offering a field guide for social elements that influence information seeking and decision-making. Carspecken's critical ethnography offers an epistemic approach to identifying elements from the lived experiences of the participants within their social system. Chatman's theories and critical ethnography share a conceptual foundation that actions are a cultural product that can elucidate social norms. Conceptually, the propositions of the Life in the Round provide focus to the application of the methodology to a small, insulated environment. Chatman's theoretical framework and Carspecken's critical epistemology work synergistically to achieve the research goal of understanding how HCAs make care decisions in the context of ARC.

Assessing the Theoretical Framework for Methodological Congruence

A stepwise approach was used to assess the theoretical framework for contextual suitability and methodological congruence. The first step was to use the theoretical framework as a conceptual lens to reappraise the findings of the review of literature (see Chapter 2). Reading the text through the lens of the theoretical framework enables the reader to see what concepts are brought into focus (Appleman, 2015). This approach provided an opportunity to explicate examples from the review of literature and provide critical insight into the findings that the article did not directly explore. For example, concepts from Chatman's theories were used to consider findings that described how shared beliefs about the risks of a resident falling, normalised decisions to use restrictions or restraints (Fitzgerald et al., 2009). The authors offered beneficence as a value used by the HCAs to make the decision for restraint as a form of injury from a fall and pain prevention, despite the long-term risk of deconditioning. When applying the lens of Chatman's conceptualisation that decision-making is bound by a worldview, contextual values, and beliefs to navigate daily routines, the notion that a HCA's use of restraints can alone be attributed to fear of a resident falling the is challenged.

Chatman acknowledges the political nature of information and how research focused on the users of information ignores the non-users, further marginalising the already marginalised (Chatman, 2001). By engaging with the theory, a critical position that acknowledges the influence of institutional ideologies on the members of a social context was identified.

Aligning Critical Epistemological Principles with Theoretical Concepts

The second step towards assuring congruence between the theoretical and methodological frameworks was to assess the theoretical concepts against methodological assumptions and research aims. A critical ethnographic approach was chosen as the methodology for this research because of its position that institutional norms influence how individuals exist and interact within their environment. Critical theory assumes that social norms create power relations; facts are always imbued with values and ideological influences; and capitalist organization is a factor in the relationships being researched (Kincheloe & McLaren 2005). Gherardi and Rodeschini (2016) and Mol (2008) illustrate these assumptions through the creation of a dichotomy of caring that recognises consumerised care as an object of doing rather than being. The industrial expansion of care services creates care environments bound to standards, efficiency and consumer satisfaction. In their research on care in ARC, Gherardi and Rodeschini (2016) define care as an "emergent capacity of a cultural system" (p. 268). Critical theory assumes that facts cannot be isolated from the values, beliefs or power relations existing in the context (Kincheloe & Berry, 2004; Kincheloe & Mclaren, 2011). That assumption aligns with the theoretical proposition that information and the use of information is bound by a worldview, contextual values and beliefs that are used to navigate everyday life (Chatman, 1999). Epistemological assumptions that underpin the methodology as applied to the current study are detailed in Appendix J.

The intention of the critical research is not to merely increase knowledge, but to expose the contradictions found within the accepted norms of a dominant culture (Kincheloe & McLaren 2005). The dominant culture of ARC is an amalgam of national policy, professional hierarchies, institutionalised rules and defined scopes of practice. In all these arenas, HCAs are seen as nurse extenders, not as decision-makers. This research openly positions HCAs as decision-makers making complex decisions. The principles of critical epistemology encourage methods that emphasise the views and meanings of the participants rather than imposing external interpretations that may misrepresent their lived experiences.

Data collection

This research uses data collection methods to identify and explore the information behaviour routines, social norms, institutionalised rules, values and beliefs that inform HCAs in their actions that represent care decisions. Overlapping data collection methods are used to identify the elements HCA decision-making within the life in the round. Three data collection methods were used in this research: observation, semi-structured interviews and experimental vignettes. These methods and the approach to data analysis are discussed in the sections below.

Observation: Data collection

Information grounds, or the location where information is exchanged in any particular context, is influenced by time, activity or event and can occur anywhere people gather (Fisher & Naumer, 2006; Savolainen, 2006a, 2006b, 2009). The purpose of observation was to gain an understanding of the institutional routines and communication patterns of HCAs. The focus of observations was informed by Chatman's propositions: information behaviours are a construct of what is considered necessary and appropriate to maintain the routines of everyday life; and information seeking is necessary only if a critical problem occurs (Chatman, 2000). Observations were conducted without interrupting the routines and interactions that were the focus of the observation. By observing people in one locality for a prolonged period they become accustomed to a researcher's presence (Carspecken, 1996). Observational data were collected in two phases. First, an understanding was sought of the environment and institutional rhythms, such as when shift changes, medication rounds, or meals occurred. Observations then progressed, and finer details were discerned, such as when and where HCAs would connect allowing styles and patterns of communication to emerge. Structured formal patterns of communication, such as shift reports, were distinguished from informal patterns of communication identifiable by the timing, location, and role of the participant. The process of starting observations at a broad level and then observing specific occurrences and behaviours is described by Baum (2002) as going from 'molar' to 'molecular'; this strategy was considered by Baker (2006) to be effective in determining the best times to observe and was effective in identifying types of communication and constructing the meaning of interactions during member-checking.

The researcher position of *observer-as-participant* acknowledges the background knowledge of a nurse when conducting research in healthcare settings (Baker, 2006; Pearsall, 1965). The researcher maintains an outsider status when observing many people over short intervals and limits the possibility of becoming involved in personal or group concerns (Pearsall, 1965). A primary record was created from thick field notes that included observations of routines, times, places, and types and patterns of communication were recorded. Environmental cues signalling routine changes, such as kitchen sounds or medication trolleys emerging to conduct their round were also recorded. Observations of routine care 'busy' times between shift changes and 'lulls' when the daily work of routine care slowed were used to tailor observation schedules for each locality.

The greatest challenge in maintaining the observer-as-participant position was the HCAs inclination to position me as a peripheral member. Peripheral membership occurs when the researcher participates as an insider in the activities of the population of study but refrains from engaging in any central activities (Adler & Adler, 1987). While I observed insider activities, such as formal shift handovers where confidential resident information was discussed, I was excluded from active participation. I did not provide or advise on direct care. HCAs who sought to engage with me as a nurse in care delivery were redirected to other sources for information. I let staff know when I had arrived, was departing, or would be returning to a facility. These strategies helped to maintain my position as observer-as-participant.

A total of 34 hours of observation was undertaken (Table 3.1) for hours at each facility. Observations were scheduled to saddle shift changes. Observation times were blocked into two-to-three-hour intervals in line with the institutional schedule. For example, if there was a shift change at 7 a.m., observations would occur from 6 a.m. to 8 a.m. or 9 a.m. The following day observations would begin later at 10 a.m. or 11 a.m. depending on institutional routines and/or staff changes. The night-shift hours between 1 a.m. and 6 a.m. were not observed because fewer staff were present and HCAs were focused on the resident-HCA care dyad (not a focus of this research). HCAs on night shift were interviewed to allow for information and decision-making during the often-solitary hours of a nightshift to be explored and compared to shifts with more staff. Observations concluded when institutional communication routines and workflow patterns were able to be predicted with a high degree of accuracy. For example, routines of shift hand-over and the timing of the transition from a private to communal care activity, such as a meal service.

Table 3.1

Total of observed hours

	No. facility beds	Services provided	Total hours (n=34)
Locality 1	20	Rest home	10
Locality 2	30	Rest home; Hospital – geriatric; Hospital - medical	9
Locality 3	49	Rest home; Hospital – geriatric; Hospital - medical	15

Observation: Data analysis

Observational data, along with reflexive notations, was transcribed from handwritten notes into a MS Word document on the same day. The documents were imported into NVivo 20. Initial reconstruction occurred during observations as patterns emerged within and across shifts, and localities, as the number of observations increased. A deductive-inductive approach was used to create a network of themes based on theoretically informed research questions. This approach is useful when exploring themes and patterns within them (Attride-Stirling, 2001; Fereday & Muir-Cochrane, 2006). First-order coding began with *a priori* code for formal communication associated with institutional routines, such as shift handovers, and informal communication patterns. Second-order coding was used to distinguish features of the two communication types and to cluster data forming specific subthemes. The location, duration, role of either active or passive participation within observed communication interactions were included as part of the relevant data within these nodes. These interactions were assumed to have specific meaning for HCAs. The purpose and routine nature of the interactions gave the appearance of normative information behaviours. From the perspective of critical epistemology, the expected outcome of the observed interactions would be some form of knowledge.

Semi-structured Interviews: Data collection

Observation alone was not sufficient to meet the aims of the research. Case (2007) and Chatman (Chatman, 1984, 1992) recognised the importance of using interviews to gain insight into observed information dissemination patterns. Semi-structured interviews were used to gain insight into the meanings of the communication patterns observed; to identify the aspects the information environment relevant to HCA decision-making; and gain insight into the decision makers themselves. The design of the survey instrument was underpinned by Chatman's theoretical framework using propositional statements as a point of entry for the exploration of ideas. During interviews a hermeneutic circle was formed; a description of the HCA's everyday experiences with information and decision-making created a picture of the overall structure of the information environment and how decisions were made.

The original interview guide was peer reviewed by a RN with research experience in RN decision-making in ARC. Recommendations were considered and changes made. The survey was reviewed by a group of HCAs from a non-participating ARC facility to improve clarity (Appendix K). Interviews were conducted during times and locations convenient for the HCAs. A $20 petrol voucher was offered to participants as a koha (gift) to acknowledge their willingness to participate. For interviews conducted in the home of the participant an additional koha of seasonal fruit was offered. Most interviews were conducted with individual HCAs, although pairs of HCAs were interviewed when participants indicated it was their preference to be interviewed with a peer. These interviews ranged from 30 to 85 minutes and were recorded and transcribed. The transcriptions were imported into NVivo 20.

The structure of the information environment has a significant influence on decision-making (Gigerenzer & Gaissmaier, 2015). Being able to describe the information used by HCAs to inform their decision-making is an important step toward understanding how decisions are made. The semi-structured interviews focused on the information environment from three different perspectives: the nature of the decisions HCAs make; the information available to HCAs; and knowledge expectations (Appendix K). Demographic questions collected information about HCA experience and education, and their participation in faith or religious communities. Questions about a person beliefs that guided care decisions were informed by evidence from the literature that identified personal values as an intuitive and pragmatic approach to care to inform care decisions (Anderson et al., 2005; Cameron et al., 2021a; Cameron et al., 2021b; Hunter et al., 2016; Hunter et al., 2013; James et al., 2010; Janes et al., 2008; Kalis et al., 2005; Mattiasson & Andersson, 1994; Naweed et al., 2022; Sund-Levander & Tingström, 2013; Taylor et al., 2014; Vandrevala et al., 2017; Vitou et al., 2022; Wiersma et al., 2019).

Pairing interviews with observations resulted in rich data that supported trustworthiness and opportunities for deeper analysis. Observations were used to provided gain insight into how informal information exchange occurred and the interviews to provide the detail on purpose, content and perceived utility for HCAs of the observed exchanges. Identification of environmental information structures that influenced decision-making, such as the institutional schedule, workload, and the information resources available were needed to be able to understand the influences and motivators for decision-making. Interviews were also used to provide an understanding of the situational relevance HCAs associated with certain information sources, and the types of decisions this information was informing; an attribute identified by Chatman's theory of Life in the Round and considered relevant to the aims of this study.

Semi-structured Interviews: Data Analysis

Themes in this research represent the organisation of data that reflect the social norms, processes and implicit influences. Data originating from questions one through eleven of the semi-structured survey were analysed using a hybrid inductive-deductive approach (Appendix K). The hybrid approach supported the creation of network themes on the basis of theoretically informed research questions and the salient points that arose from the data allowing unique findings to be recognised (Attride-Stirling, 2001; Fereday & Muir-Cochrane, 2006; Hayes, 1997; Nowell et al., 2017). A deductive and inductive approach to data analysis is useful when exploring themes and patterns within them (Attride-Stirling, 2001; Nowell et al., 2017).

First-order coding used a deductive process by applying an *a priori* coding frame informed by the theoretical concepts of Chatman's Life in the Round. The use of predetermined themes, represented by nodes in NVivo 20 provided a structured approach to manage the large volume of descriptive data from interviews and observations. Use of a deductive theory to guide thematic analysis providing a manageable and structured approach anchored into extant research is well recognised (Hayes, 1993). Because critical ethnography explores social factors within ideologically defined environments, themes underpinned by a theoretical framework provided the flexibility to identify contextually relevant themes, avoiding theme creation based on random social factors (Hayes, 1993). For example, the theoretical concept that life in the round is demarcated by predictable routines, social norms and acceptable inexactitudes (Chatman, 1999) was the basis for the first-order *a priori* coding of daily decisions, compliance with social norms, and information poverty. Second-order coding used an inductive process within those themes. Second and third-order inductive thematic analysis resulted in the themes that representing the information ecology that informs HCA decision-making, such as normative information behaviours, the institutional routine, and rules of work. In the absence of theoretical concepts, the complexity of social dynamics would be diminished.

To answer the research question “What care decisions do HCAs routinely make?” a general inductive process (Thomas, 2006) was used to explore the data for decisions HCAs described routinely making. First-order coding used the goal of the decisions made by HCAs to create the basic themes. Basic themes relate to the simple characteristics of the data (Attride-Stirling, 2001). For example, the theme of ‘showering’ contains the informational and environmental elements used when deciding on the task of showering a resident. These themes were used to identify the decisions routinely made by HCAs and are referred to as ‘task schema’ in Chapter Four. Second order coding explored the decision themes for the information and environmental elements used to inform the decision. For example, the timing of communal meals and resident’s physical condition are examples of information used when deciding to shower a resident. The information and environmental elements used to make decisions were coded based on characteristics shared across the basic decision-making themes. For example, the timing of scheduled meals, medication rounds, and shift schedules featured across numerous decision-making themes and were organised using the theme institutional schedule. The second-order themes identify the institutional elements that influence HCA decision-making and help to answer the research question “How do HCAs make decisions in routine and non-routine situations?”.

Experimental Vignettes: Data Collection

To understand how and why HCAs made decisions it was necessary to explore the data for underlying patterns that depicted the beliefs and values of HCAs and uncertainty. Vignettes were designed to explore HCA decision-making in non-routine or uncertain situations. The vignette design was guided by Aguinis and Bradley (2014). Information behaviour in a small world that falls outside established daily patterns can challenge the normative behaviours around decision-making (Chatman, 1999). Vignettes depict situations that lie outside everyday routine and provide the opportunity to safely explore how the HCAs navigate paths of uncertainty and can reveal the limit to which the social norms around decision-making supported them. Four small vignettes were designed to explore the types of information sources that the HCA relied upon when having to provide care where there was uncertainty.

Scenarios depicting specific situations are commonly used to explore causal relationships of a process or seek explicit responses to hypothetical scenarios (Aguinis & Bradley, 2014). Depersonalising the vignettes and allowing for storytelling provides the opportunity to gain insights into attitudes and behaviours on topics that a participant may find confronting (Schoenberg & Ravdal, 2000). This study borrows concepts from experimental vignette methodology in an effort to gain insight into HCA decision-making during non-routine situations, by making manipulated factors obvious and limiting the number of variables to decrease the complexity (Wason et al., 2002). As a singular method for research, vignettes can be incredibly complex with many factors and high levels of experimental realism to increase the confidence of internal and external validity. Experimental vignettes are most frequently applied within quantitative or mixed methods aimed to answer a hypothesis; however, they can be used to collect rich qualitative data (Jackson et al., 2015).

This study used a within-person vignette design where all the participants view the same vignettes, allowing for comparisons to be made between responses (Aguinis & Bradley, 2014; Atzmüller & Steiner, 2010). A *paper-people* approach asked participants to make explicit decisions about the situation of the HCA in the vignette (Aguinis & Bradley, 2014). The vignettes resembled situations familiar to the HCAs and employed variables in a manner that the response could be attributed to a variable in the vignette design (Evans et al., 2015). The number of the vignettes used was based on the number of variables to be manipulated (Aguinis & Bradley, 2014; Weber, 1992). Experimental vignettes have three components: experimental, contextual, and constant (Atzmüller & Steiner, 2010). The constant for the vignette was that the resident in the scenario was not a source of reliable information to the HCA in the scenario. This purposefully eliminated the use of the resident as a source of information and encouraged participants to consider potential resources within information ecology. The contextual component provides enough background for the vignette to offer a realistic scenario but does not confound the responses. The vignettes provide background information that describes a sudden change in a resident’s health status and described how it was affecting them. Because the purpose of the vignette was to explore HCA decision-making in uncertainty, the concept of knowing was used as the experimental component of the vignettes. Knowing in terms of familiarity with a resident or experience as a HCA is used to tacitly inform decisions (O’Neill et al., 2017; Reddy & Spence, 2008; Sund-Levander & Tingström, 2013). Three dimensions of knowing were chosen as the experimental variables: knowledge of the environment of care; knowledge as familiarity of the resident; and knowledge as experience of the HCA role. Two levels were applied to these factors and the HCA in the vignette had (or did not have) knowledge pertaining to the dimension. The three-dimension two level vignette ‘universe’ creates the possibility of eight vignettes (2^3). These were constrained to four by considering the real-life plausibility of combinations (Table 3.2). The full text for the vignettes can be found in the Vignette Section of the Interview Schedule in Appendix K.

Table 3.2

Vignette factor combinations

Vignette 1	Vignette 2	Vignette 3	Vignette 4
A0, B0, C0	A1, B0, C0	A1, B1, C0	A1, B1, C1
A0 = The HCA knows the resident			
A1 = The HCA does not know the resident			
B0= The HCA knows the ARC facility			
B1 = The HCA does not know the ARC facility			
C0= The HCA has experience as a HCA in ARC			
C1 = The HCA does not have experience as a HCA			

Each of the interviews concluded with the participants either reading or listening to the vignettes and providing a response to the situation described. Participants were instructed that they could provide advice to the HCA within the scenario or position themselves as the HCA in the scenario if they preferred.

Experimental Vignettes: Data Analysis

Data from the vignettes were included as part of the interview recordings, which were transcribed and entered into NVivo 20. Data were first organised by vignette so that all responses to any one vignette were organised under a single node. An inductive content analysis approach was used to analyse the data which resulted in three analytic units across all four vignettes. The analytic units were used as organising themes that co-occurred across the vignette as well as the other data sets, such as interview data (Armborst, 2017). Because the vignettes progressed in complexity as each dimension of knowing was manipulated, the data within each of the analytic units also shifted. For example, the analytical unit *task schema* in vignette one had more data occurrences than in vignette four. The co-occurrence of the analytic units across the three methods provided the insight needed to meaningfully synthesise the qualitative findings into a clear overview.

Synthesising Findings: Complementarity and Meta-themes

The data collected through observations, interviews and vignettes worked synergistically to create a network of thematic relationships. “Complementarity” is the use of one or more methods to explore different but overlapping features of a phenomenon (Green, 1989). Complementarity is not a form of triangulation which uses different method to assess the same phenomenon to validate findings. Rather, the intent is to use multiple methods that expand the scope of exploration or elaborate and clarify the findings of one of the methods with the other(s) (Green, 1989).

Complementarity in this study was achieved using experimental vignettes to explore HCA decision-making in parallel with critical ethnographic methods of semi-structured interviews and observations

Findings from interviews, observations and vignette response were analysed, and similarities from across the methods were used to identify meta-themes. Meta-themes are identified by similarities or relationships between themes identified across different datasets (Wutich et al., 2021). The themes identified in each method were used to inductively identify meta-themes and discussed in terms of a synthesis of findings.

Reflexivity as a Method

With a growing landscape of reflexive practices used to support the trustworthiness of the qualitative research, and legitimacy of the data, it is important to define the reflexive approach taken in this research. Pillow (2003) describes a reflexive approach as challenging the self-disclosure of the researcher or achieving a degree of *reflexive discomfort*. This approach helped me to recognise those times during the research when my positionality shifted in directions that affected the power relations between myself, the environment of the locality and with the participants. For example, I had assumed that maintaining my position as an observer would have been easy. From the perspective of my theoretical framework, I was not a legitimised member of the HCAs' life in the round. What I was not prepared for was the awkwardness felt at times by participants and residents at having a person present who was not family or a staff member. At first, HCAs wanted to make me feel comfortable, and residents wanted to know who I was waiting for. It did not take long before the novelty as a visitor wore off and those living and working in the facility began to engage with me as a member participating in the life in the round with them. This often took the form of HCAs or staff asking me for my advice or opinion as well as residents asking me for help. The desire to pull me into their heavily routinised small world was very strong. Throughout my data collection I became more aware of this change and identified these attempts to engage me as a cue to wrap-up observations. This was a process of discovery, and sometimes my nurse-ness would slip out. When I found I was using my nursing lens to observe, I would move to another area in the locality and resume the role of observer-participant.

I did, however, leverage my insider knowledge as an experienced RN and past HCA to emphasise my comfort with bodywork and the challenges of a busy care environment. This supported a level of conversation that wasn't burdened with the need for participants to defend, justify or provide explanations for the work they do. Being honest with my outsidership and genuinely positioning the HCAs as the knowledge bearers was confronting for some who assumed that a nurse-HCA hierarchy would frame the researcher-participant relationship.

Discussing aspects of ARC decision-making with participants brought forward the contradictions of providing care and 'caring' and how powerless they sometimes felt. Reflexive self-questioning during and after observations and interviews helped to maintain my position as the researcher and the authenticity of the HCAs relationship as participants. HCAs described uncomfortable situations such as feelings of powerlessness or how the care decisions they made contradicted with values held outside their work. Critical reflexivity was a useful method to recognise the veracity of uncomfortable tensions as part of decision-making in environments.

Summary

While the purpose if this research is to gain insight into how HCAs make direct care decision in ARC, additional aims include: identifying what routine care decisions HCAs make and how routine care decisions are made; gaining insight into how HCA's make care decisions in uncertain situations; identifying what influences HCA direct care decisions; and discovering how HCAs accommodate or resist social norms in ARC facilities when making care decisions. To answer these questions, this study takes a social ontological stance bringing together the small world theoretical framework of Chatman's life in the round with critical ethnography methodology informing data collection methods across the multiple methods. The next two chapters comprise study findings from interviews, observations and vignettes which are followed by a synthesis of the findings to address the research questions.

Chapter 4 The Decision-making Ecology of HCAs

Introduction

The ecology of the decision-making environment is defined by a collective awareness of the social norms and routines that create the context of care. Within a decision-making ecology, the shared understanding of what is considered acceptable is defined by the social norms and established cues, such as the accepted use of restraints to constrain a residents activity caused by the fear of resident falling or experience pain (Fitzgerald et al., 2009). Institutionalised shared beliefs are used as criteria to inform decisions to reach accepted outcomes and reinforce existing routines (Cooksey, 1996). Shared beliefs also include acceptable sources of information sharing and are bound to the norms of a small world, where value is placed on information types and sources (Chatman, 1999).

Despite the insular nature of an institutional environment, personal experiences influence how small-world norms are negotiated by individuals (Luckmann, 1970). Healthcare assistants bring their own perceptions, experiences, and values to direct care decisions. Healthcare assistants are required to make care decisions that are tailored to a resident’s immediate and shift-long needs within a communal care environment. Ways of caring in the ARC institution differ from care experienced by staff as the carers of family members. However, HCAs reframe their caring experiences to align with standardised practices, efficiency of care, and communal care routines that are unique to ARC (Egede-Nissen et al., 2017). For example, Tarzia et al. (2015) discovered that HCAs assumed the role as decision-makers for residents because of the limited amount of time they had to complete scheduled tasks and the limited options available to them outside communal schedules. Available resources within the environment of care, such as staffing, also influenced HCA decision-making and the ability to provide person-centred care (Kadri et al., 2018) leading to a prioritisation of care by queuing or stacking activities.

The first half of this chapter introduces the research participants, and answers the research question: What routine care decisions do HCAs make? In line with the findings of the review of literature that highlighted routine and discreet decisions, this chapter introduces routine care decisions in terms of decision type: decisions HCAs described as being easy (or difficult) to make and core task decisions used to frame shift-long work that acted as an index for accommodating routine decisions encountered during the delivery of individual care. These findings illustrate the layers of practical, moral, and emotional aspects described by HCAs when making routine care decisions. The routine care decisions described by the HCAs are organised into basic themes and illustrated using examples from the research data; the findings are situated within the extant literature and unique findings are highlighted.

Within the illustrations describing routine care there are many examples of *how* HCAs make routine decisions. In the second half of the chapter the perceptions and motivators that HCAs used to make and action routine decisions are discussed. The information and environmental characteristics shared across basic decision-making themes were used to identify the elements of the decision-making ecology of ARC. This chapter offers two models of the ARC decision-making ecology where constructs and elements that influence HCA decisions are illustrated and positioned to enable a better understanding the influences HCA direct care decisions. The ARC decision-making ecology foregrounds the influences of HCA decision-making that furthers the discussion on non-routine decisions in following chapters.

Study Participant Characteristics

Participants in this study included older and more experienced HCAs and younger less experienced HCAs with higher levels of education. Some HCAs were in their last week of employment after decades of professional caregiving and others were just beginning their work in ARC and had little or no prior caregiving experience. Participants also differed in age, ethnicity, values and beliefs, and employment histories. As HCAs are not a registered workforce and national data is not collected, Ravenswood et al. in a national survey undertaken in 2015 (n=1500), and repeated in 2019 (n=1000), described the characteristics of the HCA workforce (Ravenswood & Douglas, 2016; Ravenswood et al., 2021). These surveys offer the most comprehensive data to make comparisons against. Overall, the characteristics of participants in the current study were similar to those of HCAs described by Ravenswood et al. (2016;2021) in the following ways: highly feminised, ethnically diverse, and the majority were born in NZ.

Participant characteristics included: highest level of education, values and beliefs used to inform or direct care, age, ethnicity, relevant care certification, education, experience and the personal values and beliefs and are detailed in the following sections.

Age

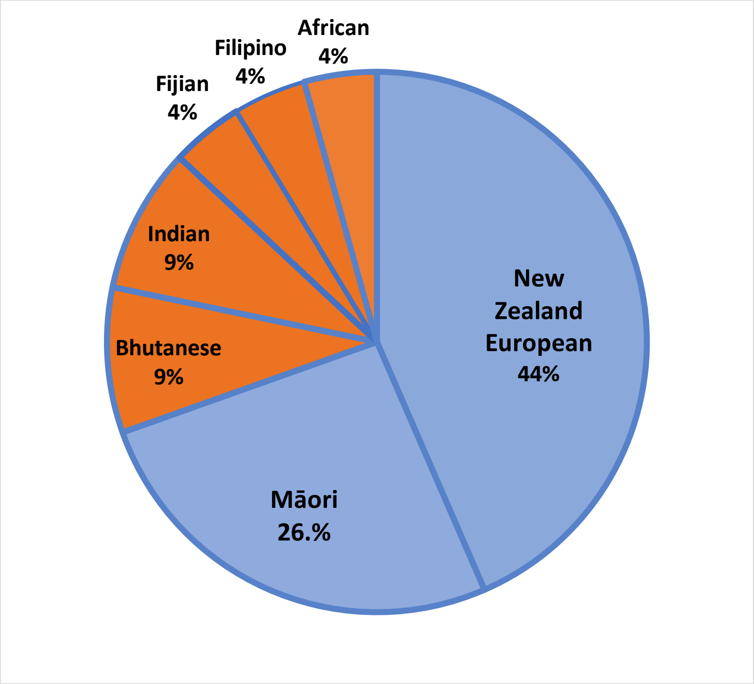
Of the participants (n =23) in the current study, nine were aged ≤34 years, eight were aged between 35 - 54 years, and six were aged 55 years or older.

Ethnicity

The majority of participants (n =16) were born in NZ. Six participants identified as indigenous Māori, and seven participants were born overseas in a diverse range of countries (Figure 4.1). While some participants mentioned their visa or citizenship status during interview, this was not explored further in the current study. Earlier research on ARC workers born overseas found different ethnic groups often settled in different regions (Callister et al., 2014; Kaine & Ravenswood, 2019). In the current study, several participants described their ethnic communities, cultures, and through stories that drew on their national identities, immigration, vocational and educational experiences.

Figure 4.1

Ethnicity of study participants

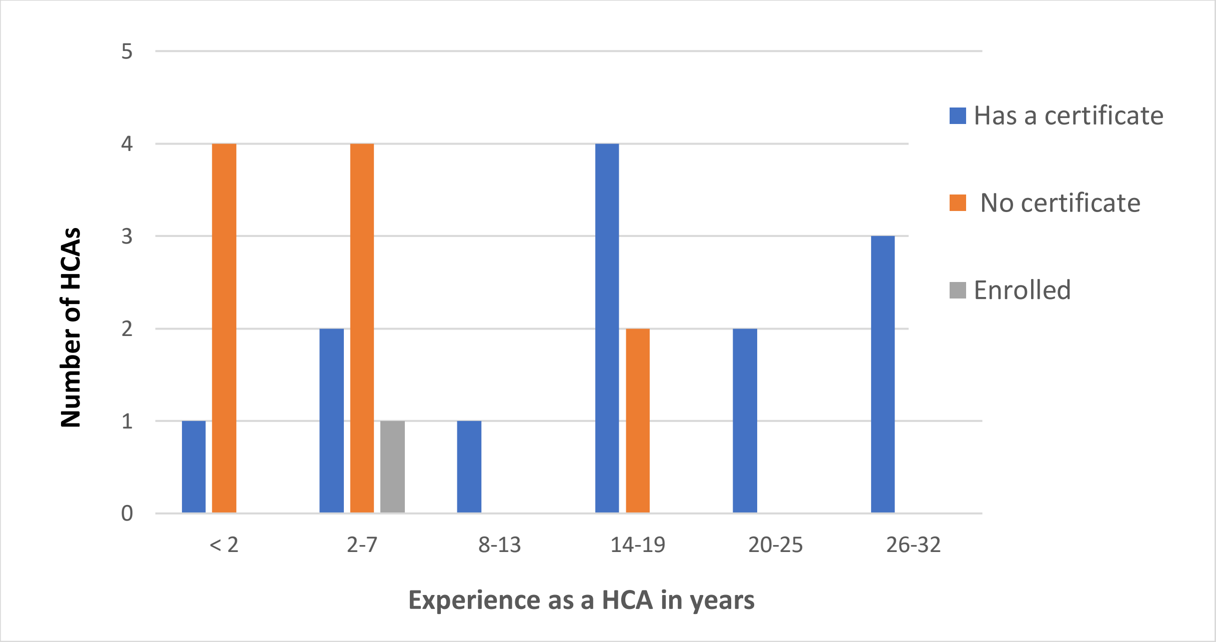


Certification and Qualifications

Thirteen HCAs reported having an ARC related certification and 15 had an NCEA or other qualification (Figure 4.2) Older HCAs described holding certifications no longer recognised by the Ministry of Health in the Support Workers (Pay Equity) Settlements Act of 2017. About one third of participants did not hold a certification or qualification. In contrast only seven percent of HCAs nationally did not hold a qualification of any type (Ravenswood et al., 2021). One possible explanation is that the HCAs did not report certifications that did not meet the pay scale criteria set by the Ministry of Health in the Support Workers (Pay Equity) Settlements Act. Certification was described by participants in terms of professional qualification type and national certificate levels. Some participants held more than one qualification or certification.

Figure 4.2

HCA certification and years of experience in aged residential care

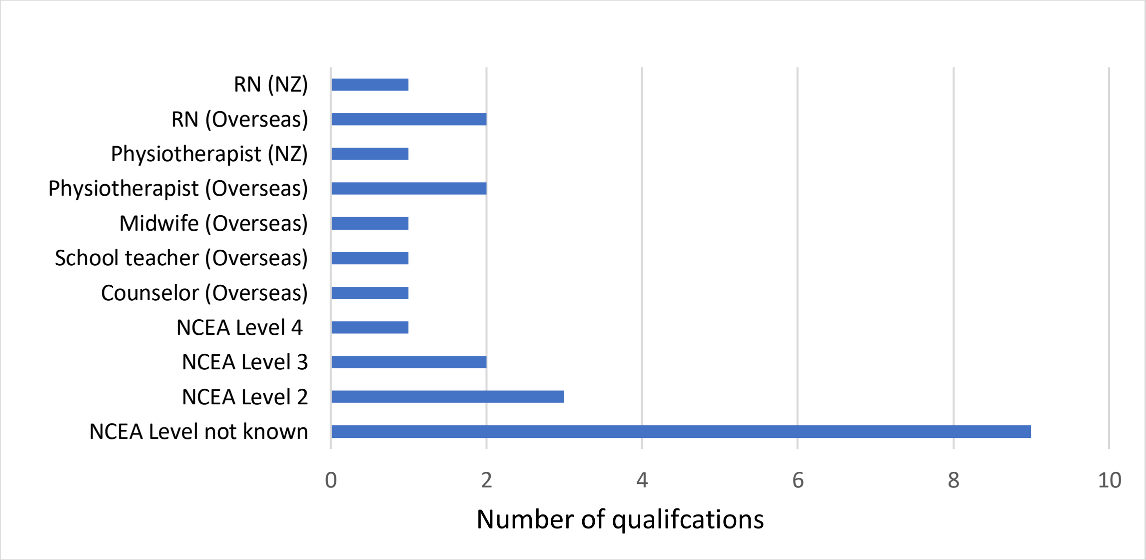


Qualifications were reported in terms of National Certificate of Educational Achievement (NCEA) level or registration type (Figure 4.3). Qualifications obtained in NZ as well as those obtained from overseas were reported. Most of the participants reporting overseas qualifications (n = 4) obtained them through tertiary academic degree completion (Figure 4.3) were enrolled or preparing to enrol in nurse registration programmes (n = 3). No participant born in NZ reported obtaining a qualification through completing a tertiary academic programme; one participant was enrolled in an undergraduate nursing programme.

The migration pathways for essential skills are complex and designed to channel frontline workers into temporary employment (Howe et al., 2019). The participants with an overseas RN qualification were either working to enter a nursing competency assessment programme or completing a programme in order to obtain NZ nursing practicing certificates. Overseas HCAs described aged care as their first job in NZ and those with refugee backgrounds described completing work programmes in aged care before entering employment as a HCA.

Figure 4.3

Qualification type completed by participants



Education

Most participants (n=17) reported high school certificate as their highest educational qualification. Four participants reported having completed an undergraduate university degree and three reported completing a postgraduate degree. Those with tertiary education qualifications were migrants and immigrants. The lack of recognition of some overseas qualifications, however, has resulted in many migrants working in low skilled roles (Kumar et al., 2022).

Experience

Personal experience effects decision-making and is a key factor when responding to risk (Hertwig et al., 1997). In the current study, nine participants aged 34 years or younger reported the least work experience in ARC which ranged from four weeks to five years with a median of 2.2 years. Participants aged 35 to 54 years (n = 8) reported the widest range of work experience, from eight weeks to 30 years, with a median of 17 years. Participants aged 55 years and older (n= 6) reported the most experience ranging between 19 to 24 years, with a median of 19 years' experience.

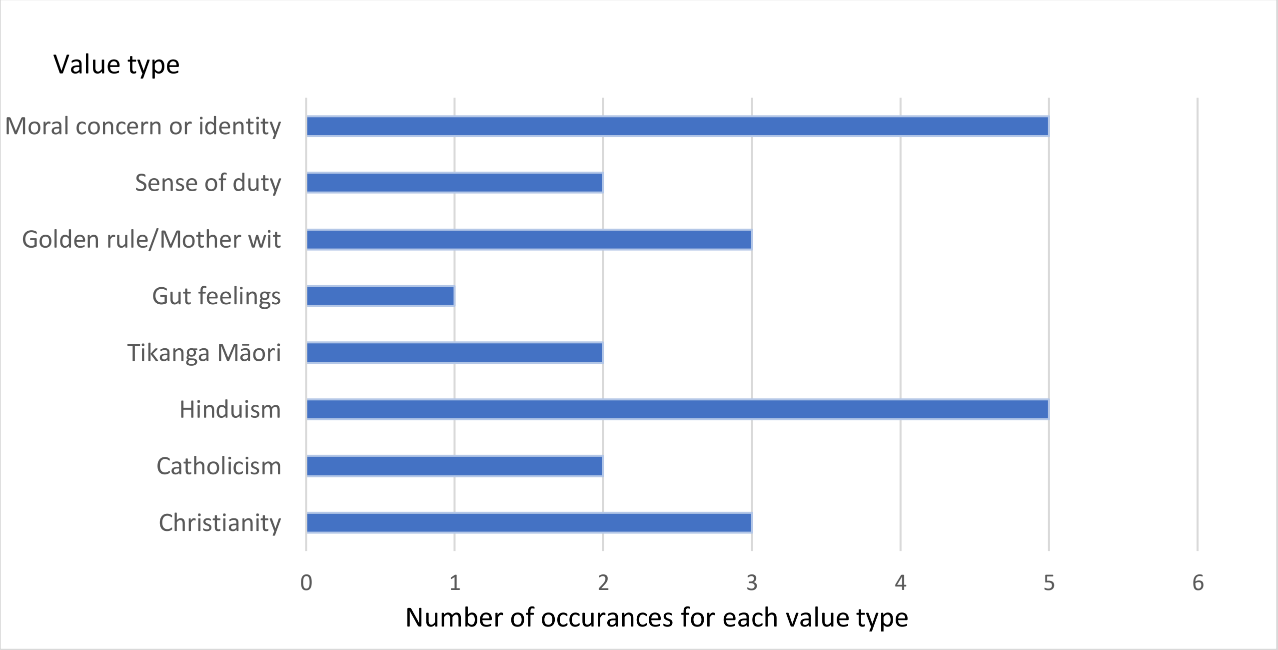
Values and Beliefs Directing Care

Values and beliefs are motivational factors that influence decision-making (Burnett et al., 2001; Verplanken & Holland, 2002). Eighteen HCAs described the values or beliefs that informed their attitudes about their caregiving (Figure 4.4) and what motivated the way they cared for residents. Many participants referred to their religious beliefs as a guide to the way they cared for residents. Other participants described values that were specific to older people. For example, Interviewee 9 described their approach to care as to, "treat residents like my grandma". Other participants described culturally informed beliefs, "our culture is a big thing, our children always come first and our elders", or "respect the old". Participants also described more general principles. Interviewee 5 described their caring as being informed by "just my heart".

Anderson et al. (2005) discusses *the Golden Rule* as treating a person "right" or *Mother-wit* as knowledge gained through caring experiences with family (pp. 1011-1012). There is considerable literature describing how individuals use their personal beliefs, values, and social experiences, including intuition and sense-making, are used to inform care decisions (Anderson et al., 2005; James et al., 2010; Kalis et al., 2005; Mattiasson & Andersson, 1994; Mattiasson & Andersson, 1995a; Mattiasson & Andersson, 1995b; Naweed et al., 2022; Sund-Levander & Tingström, 2013; Taylor et al., 2014).

Figure 4.4

Values or beliefs guiding care

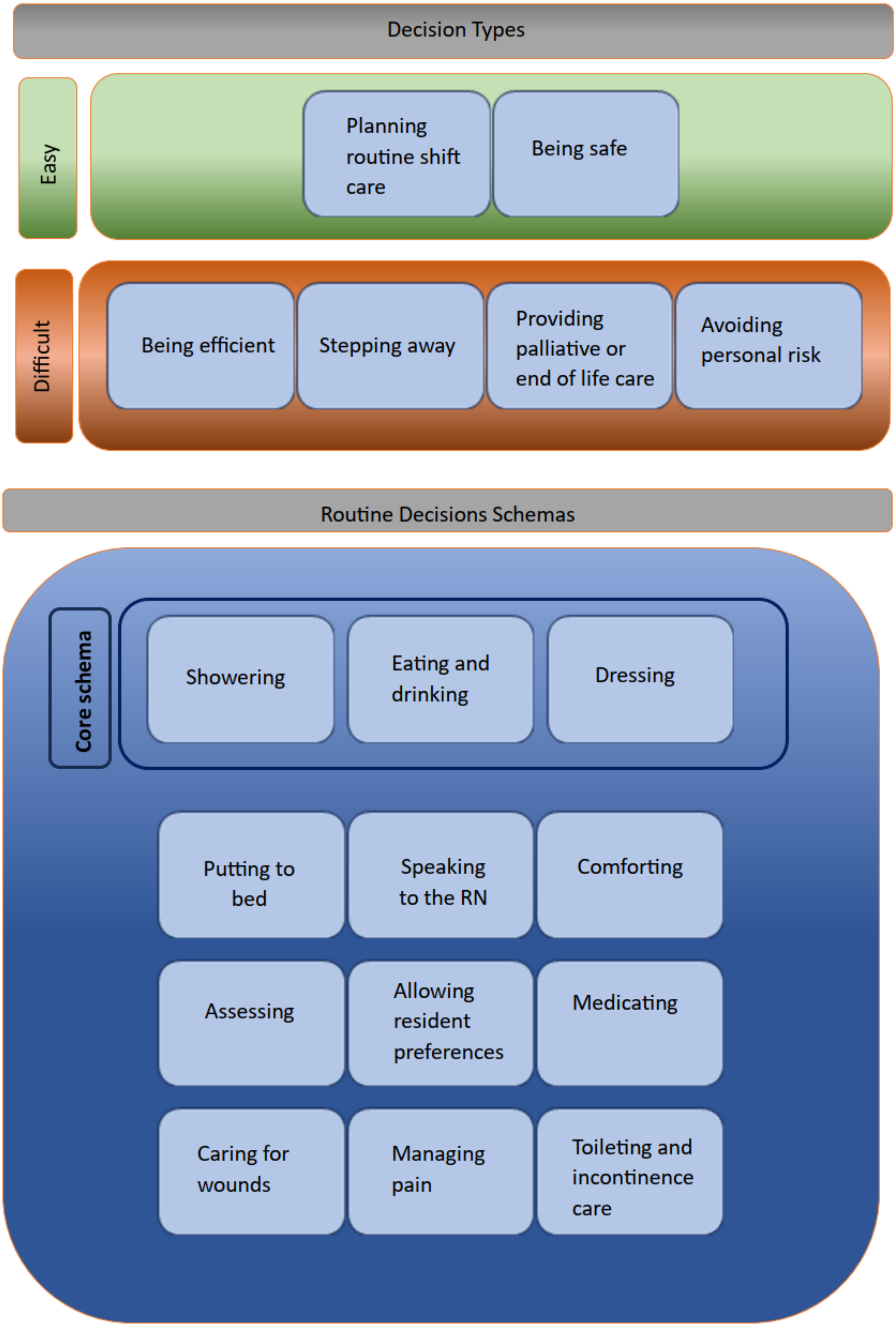


Decision types

This research specifically sought to identify the types of routine care decisions HCAs made. Task categories (**Figure 4.5**), or *task schema*, were used to organise HCA decisions when caring for a resident. Task schema represents the end-goal that the HCA conceptualised as part of everyday routine decisions, providing a template for developing care decisions that would meet an individual residents' specific needs or abilities. In addition to gaining an understanding on what care decisions are routinely made, HCAs were also asked about which decisions were easy or more difficult to make. Interviews provided insights into routine decisions by describing the direct care goals used to organise HCAs plans for a shift.

Figure 4.5

Task Schema



Easy and More Difficult Decisions

Participants from all localities were asked to describe care decisions that they thought were easy to make, and those that were more difficult. While it was not uncommon for perspectives to vary on easy or more difficult decisions, increased difficulty was related to care needs distanced from routine care. Routine care provided HCAs with the ability to approach care tasks as taken-for-granted practice and afforded a sense of predictability, efficiency, and productivity. More difficult decisions occurred when deviation from anticipated routine care delivery was required to meet a resident's care needs. Pennestrì et al. (2022) contend that task-driven routine care based on models of efficiency, such as those common in hospital settings are incongruent with the needs of residents in long term care who require ongoing social and psychosocial support in addition to physical care.

Easy Decisions*.* Providing routine care tasks based on experience, making decisions to ensure resident safety and comfort, and following established rules around scope of practice was described by HCAs as being easy decisions to make. These decisions were often made within the usual practice approach to care, based on how HCAs worked within the boundaries of acceptable variation of existing routines and shared understandings of care by residents and themselves.

Planning routine care**.** Participants from all three localities organised their care delivery activities to meet the needs of the residents within the scheduled tasks of the institution (Table 4.1). Care was provided primarily at the HCA's discretion (Table 4.2). Cremer et al. (2023) contends that the paradox of routine care in ARC as highly complex, requiring skilled decision-making to manage potentially risky care situations that occur in 'high throughput' organisational routines. Knowing residents' needs and institutional routines was requisite to providing routine care effectively and efficiently.

Being safe**.** Decisions regarding resident safety were considered one of the easiest to make and were discussed by many of the participants as an aspect of routine care (Table 4.3). The safety of a resident and HCA was a motivator for decisions that challenged routine care within the permissible boundaries of acceptable norms. For example, the use of restraints to prevent injury (Fitzgerald et al., 2009) and covert drug administration (Garratt et al., 2021) were influenced by facility-level norms and a sense of duty to ensure that residents were safe from injury or the complications of their condition.

More Difficult Decisions Providing personalised care during times of limited resources or limited caregiving knowledge resulted in HCAs feeling conflicted between limited options. A scoping review focusing on ARC residents' perspective of quality care identified how routine care was contextualised within rigid routines designed to meet the convenience of the facility rather than the preferences of residents (Gilbert et al., 2021).

***Personalised vs efficient care delivery*.** Participants described the contextual and structural constraints that challenged their ability to make decisions when resident care needs conflicted with their ability to meet care routines or adhere to their personal belief or values (Table 4.4). Care decisions in these circumstances were influenced by the level of acceptability to variations in care within existing norms and the ability of the HCA to navigate situations.

***To step away*.** Naweed et al. (2022) described a threshold of capacity to make difficult care decisions when HCAs found themselves in positions requiring skills outside their skill set or in or challenging situations. The decision to step away from the care situation as a form of decision-making was described by HCAs (Table 4.5).

***Palliative or end-of-life care*.** End-of-life care decisions were described as difficult by eight of the participants in the current study (Table 4.6). Sutherland (2020) found that decisions made during end-of-life care occurred in the intersection of values, emotion, and institutional demands. Studies by Holmberg and Godskesen (2022) and Wiersma et al. (2019) found routine centred care, institutional resources and policies could conflict with the personal expectations of end-of life or palliative care. In the current study, HCAs reported drawing heavily on their personal beliefs, values, and experiences when making decisions during end or life care. They often wanted to spend more time with residents who were dying but found this difficult because the care of other residents competed for their time.

***Avoiding personal risk*.** Participants reported more difficult care decisions were made at times when they perceived a risk to themselves (Table 4.7). For example, when concerned a decision may be challenged or disapproved of by management or the RN. Studies by de Voogd et al. (2021) and Tate et al. (2020) found that institutional hierarchies, policies and social norms played a significant role in how care decisions were made.

Examples from interviews: Tables 4.1-4.7

Table 4.1

Examples from interviews: Planning routine care

Researcher: How would you describe that strategy? ***Interviewee 15:*** *After handover I'll go in and look at the shower list and see who I've got to shower and I'll do the easiest person first, and then I'll do the hardest person after breakfast, and then from there I'll just figure out who out of the other residents that need to be done. I'll just try and figure out this person needs this, this person needs that.* **Researcher**: Okay, so that's your structure for getting through the day? ***Interviewee 15****: Yeah.* **Researcher:** I imagine you have to support them [agency staff]. ***Interviewee 15:*** *Yeah, they don't even know where a towel or flannel or anything is. We've quite often said, "oh for Christ sakes, I'd rather just do the both the wings by myself than have a agency [HCA]" and that would depend on how experienced that agency worker is. I would actually be quite scared to be a agency worker, jumping in from one place to another place, to another place and not knowing a single resident or not even where the towels are.*	***Interviewee 14:*** *Everybody's level of care is different. But there is always different standards to each shift so how me and [Interviewee 13] work, it runs like clockwork, because we are focussed and we're very organised.* **Researcher:** How long does it take for a new HCA to learn the routine? ***Interviewee 14:*** *Well, it all depends, how long is a piece of string. Because it just depends on their ability to move fast, their ability with time management, their ability with everything. It's about their ability. I mean, we can only do so much as carers to teach the next people - because there's three areas. So, there's the area of looking after and doing cares for the residents. There's to get them organised to get them to places on time. So, you've got to try and get all those all in and that's very hard for a new person to try and manage.* **Researcher:** So, you've got three areas? ***Interviewee 14:*** *And doing their cares, that's one in itself. And then getting them to places. Like, for morning tea or lunch or breakfast or whatever, you've got to get them up and out and ready. And to organise them if they've got to go anywhere. So, when they've got to organise them for anywhere, like if they have to go to an appointment. You've got to do all that, plus.. [their cares]*

Table 4.2

Examples from interviews: Easy decisions meeting routine care expectations.

Interviewee 15: *You are running the wing, so the decisions that you make is I suppose fitting in with their routine, what time this happens, what time that happens. Sometimes they're not even decisions, they're just like how you would run your day.*	**Interviewee 25:** *Most of the decisions we make on their [the residents’] behalf, like for example their shower day, if they don't like to shower, sometimes they say, “ I don't feel good today so can I have shower tomorrow?” Then we say “oh, it is fine, we just give you a wash and moisturise and dress up”, and tomorrow we give shower to them. And sometimes, they say I want to go dining room [for their meal], we bring them to the dining room. Sometimes [they say] “oh, I don't feel good, I want to stay in room”. We'll arrange with the kitchen, and we leave them [to have meal in their room].*	**Interviewee 10:** *With me it might be knowing when to change a person's product when I'm not in the kitchen; when I hear a noise, get up and check it because you don't know whether they've fallen or not, so you've got to be on your [toes], and then - yeah, ‘cause most times it's very quiet. If it's one [decision] that I've got to make not as often as the others, they're still within my routine. So, if we have a new person coming in, until it gets into my routine, I may have to decide what they want in the way of drinks and stuff and so you go and ask and yeah, it’s more time consuming, but you've got to make that time. If someone's feeling sick and if I'm in the kitchen I can't deal with that. I've got to make that decision and say, “right, the four o'clock staff have to go and do that” because, otherwise I could be spreading it [illness] through the food and stuff.*

Table 4.3

Examples from interviews: Easy decisions, being safe.

Interviewee 1: *[The physio] had changed this resident from walking to a - I think it was a stand-up hoist, but the resident was always drowsy, was always drowsy…[because of] medication and they weren't safe enough or strong enough. They were just too drowsy, and I thought, I am not going to do that. It was my first thing, I'm not going to do this because the patient had no strength to hold on and you could see that she was slipping down and out, and the shoulders were lifting.* *I said, "no, stop. Stop, stop, stop!" I went back [to the physio], had a little bit of an argument.* *[The physio] sort of made me feel like this is what I've put in place, and this is what you're going to do. And I said, "no, I'm not. I'm sorry, I'll have to go through the big boss". So, I went higher, and I said, that lady nearly slipped out of the machine because she was so drowsy, and we were told that this is her new way of transferring her and I refuse to do it. It was very unsafe. If she had fallen that most likely would've been probably back on me or you know, because I was [the caregiver]. It was written in her care plan and so that all got changed. And then she went to sling hoist. I said I think a sling hoist is much safer.*	***Interviewee 19:*** *Like same yesterday, one resident, when she get up, she was really sleepy and didn't eat anything lunchtime and two o'clock, I said no, she's really sleepy and I - normally we don't put that resident on the bed, 'cause she'll be awake all night otherwise. But I said "no, we can put [her to bed]". Even though I was a health care assistant, I told the RN, "She's really sleepy in that chair, I'm going to put her in the bed."*

Table 4.4

Examples from interviews: Difficult decisions, personalised vs efficient care delivery.

Interviewee 3: *Well, I wouldn't say difficult, more time consuming. For instance, a man over in the hospital, when he gets quite agitated it's really hard to like get him to focus and then like trying to put him to bed where he can be safe and he's, you know, sort of trying to hit out at you and, and it's - yeah. I find that quite hard, just personally for myself. Because I feel like I'm restraining him, but it's for his safety and he's not being restrained.* **Researcher:** Where do you seek support when you get into these situations? ***Interviewee 3:*** *From my co-workers. They just back me up and say, "yeah, what you're doing is totally right, like there's no way that he can be there standing up, walking around by himself, while we're trying to do 20 other people's cares. It's just - it's not safe, so what you've done is cool" and - yeah… …but it still doesn't feel right.*	***Interviewee 16:*** *And there's been a couple [of residents] that have refused their showers, and you know, we can't force them because it's you know, elder abuse. But we've also been told that they can't refuse [to take a shower]. So, how are we supposed to be like right, you need to have a shower right now without abusing them, but still giving them freedom of choice? You're wanting to advocate for this person's ability to choose.*

Table 4.5

Examples from interviews: Difficult decisions, to step away.

Interviewee 16: *I had this one lady who for two weeks, two and a half weeks just abused me, just abuse...verbally. Yeah, verbally, just, just abused me and for nothing, and I was telling my RN, "Oh my God, this lady, you know, she's batshit crazy. I'd just have to go into her room, and she starts stomping her feet and you know, screaming at me". And they, especially the manager, was like "you know they're in here for a reason, they've all got their own issues", and I was like "well I get that, okay. I understand that they're all in here for a reason, but when it's a continual thing for two and a half weeks, no". So, one day she wanted to ring her doctor to get the lady across from her moved to a different room, so she's like you tell the RN... ...blah, blah, blah". I was like, "All right, I will leave your room and I will go tell her now". So, I went and told my RN. And the RN and I went back to her room and in front of the RN she had a go at me again. I ended up walking out of her room crying... and said to my RN," I refuse to do her cares. I said for two weeks, two and a half weeks I've been telling you about this lady and none of you have taken any notice, and now that you've seen it..."*	***Interviewee 20:*** If it gets too much just walk out of the door, breathe, and then go back in. **Researcher:** So, do you mean if there's a situation in the room? ***Interviewee 20:*** *Yeah, just walk - step out for two seconds, breathe and walk back in more calm and collected. They pick up on your stress levels... and they know that if you're stressing out...'Cause, I had one situation where I managed to get this lady into bed - oh no, get her into her night pad and into her nightie, but she would not let me put her into bed. She was that agitated, she started trying to slap me and everything. So, I just stood there. I was like okay, I need to breathe, because she is picking up that I'm getting agitated. So, I walked out of the room, just stood at the doorway where she couldn't see me. I just stood there and took a few breaths and then like, it's like yep, I can do this. I know what I have to do. I just need to be calm and collected, and she will see that I'm calm. And then, I walked back in a few minutes later and I go to her, "Are you okay darling? Can we put you into bed now? Is this okay to do this?" And she's like, "I'm sore." It's like, "I can see you're sore. I will put you into bed and then I will tell the RN that you're in pain and we can get something for you". And she goes, "okay, thank you for listening. It's like that's all I needed".*

Table 4.6

Examples from interviews: Difficult decisions, palliative or end-of-life care

Interviewee 8: *The hardest part for me is when they're dying. That is really, really hard for me. I know it's my job, but I still get things that you have to do when they're dying and things like that, or when they're sick and they want something, and you know that you've got to say "no" 'cause I haven't got the authority. And even if I do ring [the RN], I still haven't got the authority. I have to alleviate their panic, pains or anything like that, or something they want, and I can't give them at that time. Medication or they want to have their daughter to come in. I can't ring up and say oh can you come in or something like that, because they're a bit frightened. So, I have to become like their substitute.* **Researcher**: So, you have certain nighttime restrictions? ***Interviewee 8:*** *Yeah, 'cause I haven't got the qualifications. There's things I can't do and things I'm not allowed to do. There's things I can do, and things I want to do that I'm not allowed to do.* **Researcher:** What would be the things that if you could do them you would? ***Interviewee 8:*** *If they were frightened and they had a, a daughter close by, I would like to be able to ring that daughter, with their permission and say could you just come in for five minutes just to comfort them? But most of the time, the family don't want to know sometimes.*	***Interviewee 16:*** *Probably about the gentleman that passed away. I just needed to know what I had to do, because I'd never had to deal with that before. So, when I spoke to my RN I was like, "what do I need to do? Do I stay with him? Do I leave him? Do I sit here and hold his hand, even though I've got 20 other residents to deal with?" And she [the RN] just said "do what feels right." And I felt that I had to stay with him. I couldn't just let him pass away on his own, like I would've felt like even more shit if I had have left him and his family found out that he was left.* ***Interview12:*** *Okay. For me, my hardest is when - once they go into palliative [care]. I can see a deterioration, but because I don't have that clinical background, I just base it on what I see and my experience. But there's been many times when I've discussed with our nurses that they [the resident] need more, you know, they need palliative care, and it wasn't until recently that I understood the process of them going into palliative care. It's just not okay, we'll put them on [palliative care]. We've got to go through doctors and family, and I didn't really understand that. But that's a really hard decision for me, because I feel once they start suffering, like yeah, that's the hardest part of my, my job and when I'm pushing the nurse for more, more for them and for me they're not listening...*

Table 4.7

Examples from interviews: Difficult decisions, avoiding personal risk

Interviewee 19: *In weekdays you can send a resident to the hospital any time. But, in weekends, there's little bit difficulty and especially after five o'clock also in weekdays. Then you have to send to them to [urgent care] and the resident has to pay for that. So, one of the residents, were so confused. She was not well. Obs were up/down, but her normal obs is sometimes like that. Her blood sugars will go up and down, 'cause she eats sweet stuff without asking us. So, after five o'clock we were making the decision whether to send or not to the doctors, 'cause we have to send before eight o'clock, if not by eight, then by ambulance [to ED]. So, we were thinking where to send, [urgent care] or hospital? And that was a hard decision. But we made the decision to send her to urgent care with care staff. I think because of the policies and procedures you can say it is stressful. For me, I'm scared actually because I don't want to do anything wrong and especially when you are on visa. You don't want something to happen wrong and then they will decline your visa, you know? If I will do something wrong, it will go in my file, like my visa is from [ARC facility] and she [the manager] liked my work and she said yes for another visa too, so second time also she helped me. So, if in that time I do something wrong or I was not dealing with the residents, the way I have to do it, she will not help me with the visa. Yeah, it is stressful for us, especially for the internationals, 'cause we came from overseas here and for a citizen to do the same thing, it won't effect that person [the same way].*	***Interviewee 9:*** *We had a resident whose wife used to always come in and say I'm going to go do this with [friends and family] today, and in his [the residents'] mind he'd think, "oh I'm going to come too and do it" and then she'd [resident's wife] be like, "you're not coming". I used to feel so bad for him, just 'cause he was getting all excited and wanted to do all these things. I said to [the manager] who's the boss, I said, " you know, I actually feel bad, and I know I shouldn't be eavesdropping, but I kind of feel bad that she keeps on saying this [to the resident]. And she [manager] actually said to his wife, "oh, you're getting his hopes up and we have to deal with him when he's sad" and she's [residents' wife] said, "I didn't even realise I was doing that".* **Researcher:** Did you find making that decision easy? ***Interviewee 9:*** *I found that really hard. I found that personally really hard, just because I knew that all of us carers and a lot of the nurses that work on the rest home side felt the exact same way, but no one else would say anything because they were a bit, you know, they weren't scared - they were just a bit nervous, because we're not supposed to be eavesdropping. So, I found it really hard, then I thought, this poor guy - he's going to get his hopes up every day…*

Routine Decision Schemas

The current study sought to discover the types of routine decision-making that HCAs were involved in. While many of the task schemas can be found in the extant literature as specific care interventions, incidental findings, or as an example of the work of HCAs, this study focused on the types of routine care decisions made daily from the perspective of HCAs in the three localities. Interview data offered rich illustrations of the complexity of each schema and how knowledge of a resident, institutional norms, and personal perceptions influenced care decisions. Each schema is illustrated with an example from the interview data and positioned within the context of the extant literature. The first three schema form the core care tasks around which HCAs described tailoring personalised care. Routine care schemas represent decision types that feature within their day, in and around decisions that are specific to stipulated routine care expectations.

Eating and Drinking. The primary motivation for dietary decisions by HCAs was to facilitate oral intake based on a resident's preferences and the food choices available (Table 4.8). There was no mention by participants of dietary or nutrient goals when supporting residents with either food or fluids. Changing preferences by residents, cognitive changes, and limited menus were factors that had to be considered by HCAs in their attempts to encourage residents to increase their food intake. System-level barriers such as menus that did not align with residents' food preferences required HCAs to problem solve within the limitations of the foods available. In addition, HCAs often had competing demands on their time. Recent research by Liu et al. (2020) identified similar barriers to care, specifically competing caregiver work demands, time pressure and knowledge of a resident's food preferences.

The prevalence of malnutrition and risk for malnutrition is very high (93%) for those living in ARC in NZ (Darroch et al., 2022). Most residents enter ARC malnourished or at risk of malnourishment and are frail (76%) (Chatindiara et al., 2020). Healthcare assistants are commonly assigned mealtime duties as part of their direct care duties. This task schema centred on the practicalities of assisting residents to attend communal mealtimes, supporting residents to eat independently, and encouraging food intake. For example, supporting residents to either go to a communal dining room for breakfast or receive breakfast in their room would be negotiated around medication administration rounds and the task schemas of dressing, toileting and ensuring resident safety. Within the literature reviewed there were no findings that specifically addressed HCA involvement in assisting residents to meet their nutritional needs.

Showering. About three-quarters (74%; n =17) of the participants mentioned showering as part of daily decision-making and as influencing the planning of routine care. Participants discussed the efficiency of bodily care in terms of scheduling and providing showers to residents, with aspects of comfort and safety also featured as an aspect of showering and the responsibility of the HCA (Table 4.9). Holmberg et al. (2020b) observed how the efficiency of bodily care compromised privacy as part of the relinquishment of bodily care to HCAs. Similarly, a recent review of literature by Rosendal et al. (2023) exploring the underlying assumptions of bodily care found this was an ethical practice that focused on residents' needs. However, despite bathing being a task primary delegated to HCAs, there was little literature on bathing assisted by HCAs or similar delegated care staff.

Dressing. Dressing a resident was discussed by the HCAs in this study as a routine care task. In many instances the HCAs would choose clothing for a resident as a means of efficiency (Table 4.10). Similar, to the findings from this research regarding care decisions about residents eating and drinking, the HCAs focused on the practicalities of dressing along with the competing responsibilities of routine communal care. Fetherstonhaugh et al. (2016) found that activities of daily living provided the context for HCA decision-making and within communal care routines could diminish a resident's autonomous decision-making. Lee and Bartlett (2021) have demonstrated how material possession, such as clothing and dress, constitute a form of social citizenship achievable by those living in institutional care settings, and where a tension within the intersection of being at home and the regulated workplace can exist

Putting to Bed. The decision to put a resident to bed was influenced by a resident's preferred bedtime or a resident's condition (Table 4.11). Decisions involving sleep were not featured in the findings of extant literature, however the HCAs in this study discussed care decisions involving bedtime as being an important part of routine and responsive care. Residents in aged care facilities are more sedentary and have earlier bedtime and awakening times than older people living in the community (Conte et al., 2019). When healthy participants were rigorously selected, Conte et al. (2019) reported that living in a nursing home did not affect residents' quality of sleep or alertness. Disorders and conditions commonly experienced by residents, such as co-morbidities, dementia, incontinence, pain and use of medication that effect sleep and alertness are significant contributor to sleep disorders in ARC (Alessi & Schnelle, 2000; Kim & Yoon, 2020). A duty of care to complete tasks included visually assessing residents' breathing, repositioning for pressure injury prevention and frequent incontinence checks, which could contribute to sleep disruption (Eyers et al., 2012; Langemo & Brown, 2022)

Speaking to the RN. Deciding when to speak to the RN outside of routine handovers occurred when resident needs deviated from predicted care needs or were outside the perceived scope of the HCA (Table 4.12). Decisions to engage with RN were influenced by experience, social norms, rules on the HCA's scope of practice and their ability to recognise the need for engaging with the RN. The findings described by Holloway and McConigley (2009a, 2009b) and Janes et al. (2008) in regard to the importance of the HCA's relationship with the RN, their clinical assessment knowledge, previous experiences and perceived responsibility to take action influenced their decision to speak with the RN.

Comforting. Providing comfort to residents in terms of both physical and emotional comfort was discussed by research participants as part of the role of HCAs (Table 4.13). For example, to interrupt routine care delivery to provide emotional or physical comfort to a resident was described as acceptable if comforting did not disrupt routine care delivery. Participants described the tensions felt between meeting a resident care need and completing care tasks. Similar to findings of Wiersma et al. (2019), participants saw themselves as fulfilling a role beyond routine care tasks, such as being surrogates for family.

The act of providing comfort to a resident is positioned in the literature within the intersection of morals and values, routine care task, institutional norms and the severity of a residents condition (Bilal et al., 2020; Cameron et al, 2021a; Carder, 2012; de Voogd et al., 2021; Fetherstonhaugh et al., 2016; Holloway & McConigley, 2009a; Holmberg & Godskesen, 2022; Holmberg et al., 2020b; Hunter et al., 2016; Hunter et al., 2013; Kalaitzidis & Harrington, 2018; Kontos et al., 2010; Naweed et al., 2022; Sutherland, 2020; Vitou et al., 2022; Wiersma et al., 2019). Providing emotional support is a reasoned heuristic, motivated by the HCA's perceptions and rationalised within the context of the social norms found within the care setting. This research positions the action of comforting as a form of culturally bound decision-making, motivated by personal beliefs or morals, and regulated and rationalised by perceptions of acceptable care within the institution's norms and rules

Assessing. Participants described assessing residents to decide if they could manage a resident's condition or if they needed to refer to the RN. Within this research, the HCAs assessed residents within the boundaries of their routine care experiences through the lenses of their own personal experiences and knowledge. The illustrations (Table 4.14) provide insight into how participants approached a similar issue regarding the assessment and management of a resident's suprapubic catheter.

Healthcare assistants often have information about the residents they care for as a result of established care relationship created during routine care delivery. The tacit knowledge gained through practical experience of routine care delivery over time is commonly described in the literature as knowing a resident (Cameron et al., 2021a; Carder, 2012; Fetherstonhaugh et al., 2016;

Holloway & McConigley, 2009a, Holloway & McConigley, 2009b; Holmberg & Godskesen, 2022; Hunter et al., 2016; Kontos et al., 2010; Naweed et al., 2022; Sund-Levander & Tingström, 2013; Tate et al., 2020; Tingström et al., 2010). However, despite close and frequent contact with residents, HCAs applied differing criteria when seeking advice from an RN and did not always understand the complexities of a resident's condition. Heckman et al. (2017) identified institutional barriers and HCA knowledge as a further barrier to monitoring and managing complex health conditions, such as heart failure

Allowing for Residents Preferences. Participants discussed residents' preferences in terms of scheduled routine care tasks (Table 4.15). Accommodation of residents' preferences, such as when to shower or where to take meals was described within the confines of triaging the care demands of other residents. Participants described multi-tasking between the physical needs of multiple residents limiting their ability to predict windows of opportunity to support residents' preferences. Tensions between the institutional schedule and resources can be seen in the illustrations provided as well as in the illustrated examples for eating and drinking (Table 4.8) and dressing (Table 4.10).

Holmberg and Godskesen (2022) reported barriers to accommodating resident preferences were staffing, time, multi-tasking, and a limited understanding of their personal preferences. The limitation of preferences in terms of autonomy was explained by Fetherstonhaugh et al. (2016) through the concept of 'pseudo-autonomy', when HCAs assumed that they already knew a resident and were able to base care decisions on this knowledge without consultation. The effect of the institutional rules of work, schedule, limited time and resources on personalised care decisions are common within the extant literature.

Medicating. Many of the participants in the current study were responsible for administering medications as part of their role and/or assessing the therapeutic effects or side-effects of medications when providing direct care to a resident. Participants described how a residents medications influenced care decisions (Table 4.16). The act of administering and monitoring the effects of medication was discussed by the participants as part of routine care. Observations made during the current study noted that medications administered during the shift was commonly focused on during formal shift handovers. Although the literature does discuss medication, this was in the context of pain management (Holloway & McConigley, 2009a; Hunter et al., 2013; Vitou et al., 2022), covert drug administration (Garratt et al., 2021) and use of benzodiazepines (Janus et al., 2017). Literature was not identified regarding how a resident's medication influenced HCA decisions made when providing routine care.

Managing pain. Pain management was discussed by participants in terms of prevention and their responsibilities to act within their role as a HCA or through collaboration with RNs (Table 4.17). Participants discussed their approach to managing a resident's pain as being within their scope of practice, based on their personal experience with a resident, and the types of medication and strategies used to prevent pain caused during routine care. Participants also discussed the barriers encountered when approaching RNs for pain medications for residents. Carder (2012), Fitzgerald et al. (2009) and Holloway and McConigley (2009a) reported how a HCA's previous experience with a resident's pain, their personal perceptions of pain and supportive relationships with RNs informed treatment and pain prevention strategies. These findings, alongside the findings of assessing (Table 4.14) and medicating (Table 4.16) illustrate how HCAs are relied upon to assess and manage the clinical care of residents. Healthcare assistants may feel compelled to manage the pain of a resident, for example, utilising HCA directed interventions prior to engaging a RN (Holloway and McConigley, 2009a) or limiting potential risks that might result in a resident experiencing pain (Fitzgerald, 2009).

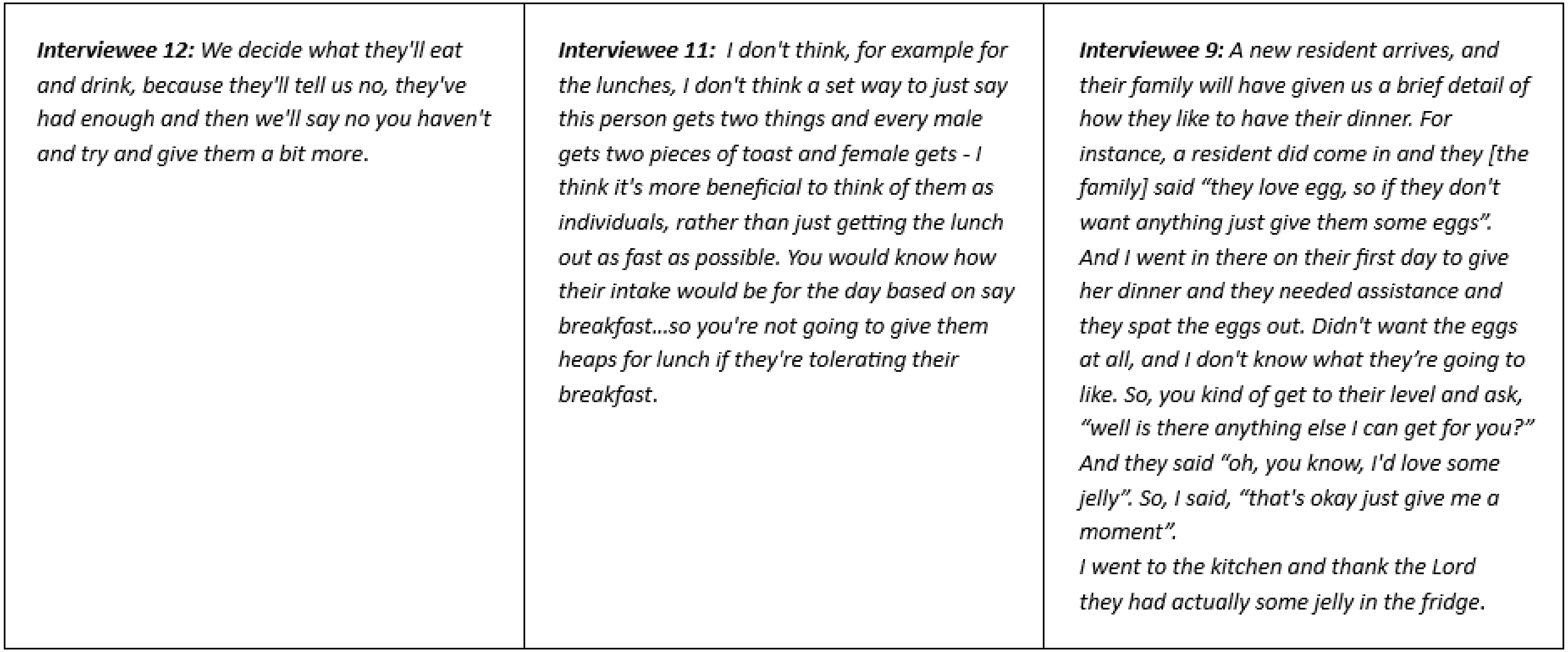
Caring for Wounds. Participants discussed providing care for wounds and changing dressings as part of routine care (Table 4.18). The decisions made were influenced by existing knowledge and the types of products available, especially in situations when there were limited supplies. Literature reviewed for the current study found HCA decision-making for wound care was only discussed in terms of HCAs working outside their delegated role (Naweed et al., 2022). Parker et al. (2020) found that those with cognitive impairments or dementia living in ARC were underrepresented in research into evidence based wound care. Pagan et al. (2015) conducted research in NZ ARC settings and found HCAs were actively engaged in wound care and pressure injury prevention. Wound care knowledge and having appropriate wound care supplies were identified as common barriers to adequate care (Pagan et al., 2015).

Toileting and Incontinence Care. Like showering and eating, toileting and incontinence care was described by participants as routine care tasks around which other tasks would take place (Table 4.19). Participants described how meeting a residents' basic needs, such as toileting, are influenced by a constellation of factors that include knowledge of a resident, experience as a HCA, and available resources, such as time and staffing. Assisting residents with bodily care, as discussed by Holmberg et al. (2020b), and supporting residents with activities of daily living represents a large proportion of the work of HCAs. The bodily care of residents as a routine care task is driven by efficiency and multi-tasking. Despite the impact on a residents' dignity, the aim was to complete all assigned tasks within a shift

Examples from interviews: Tables 4.8 – 4.19

Table 4.8

Examples from interviews: Eating and Drinking



Interviewee 12: *We decide what they'll eat and drink, because they'll tell us no, they've had enough and then we'll say no you haven't and try and give them a bit more.*	***Interviewee 11:*** *I don't think, for example for the lunches, I don't think a set way to just say this person gets two things and every male gets two pieces of toast and female gets - I think it's more beneficial to think of them as individuals, rather than just getting the lunch out as fast as possible. You would know how their intake would be for the day based on say breakfast…so you're not going to give them heaps for lunch if they're tolerating their breakfast.*	***Interviewee 9:*** *A new resident arrives, and their family will have given us a brief detail of how they like to have their dinner. For instance, a resident did come in and they [the family] said "they love egg, so if they don't want anything just give them some eggs".* *And I went in there on their first day to give her dinner and they needed assistance and they spat the eggs out. Didn't want the eggs at all, and I don't know what they're going to like. So, you kind of get to their level and ask, "well is there anything else I can get for you?" And they said "oh, you know, I'd love some jelly". So, I said, "that's okay just give me a moment".* *I went to the kitchen and thank the Lord they had actually some jelly in the fridge.*

Table 4.9

Examples from interviews: Showering

Researcher: What decisions do you find really easy to make, like they're just almost automatic? ***Interviewee 1:*** *Something that I could do to make it easier for myself or make it easier for the resident or…and safer and so they are feeling safe and not scared and stuff like that. I think yeah, I'd say some of the care givers that probably don't have much experience would do things sort of a bit more awkward than us, knowing to keep - like you know - in the shower, making sure that they're kept warm all the time and stuff like that and working quite quickly.*	**Researcher:** What decisions do you seem to make a lot of? ***Interviewee 12*** *:Okay, I decide when they're going to have their showers, or they might want it now and I'll say, 'no, Ill come back in half an hour', because I can get that person done before that person. And then the shower will run a lot smoother because he won't ring, and she won't ring while I'm in the shower.*	***Interviewee 18:*** *But when it comes the decision making as you said, I can only make the decision for them for [when to] shower. I'm the one who decides when, what time [the resident is showered]. I always give them - first thing first, I - before I start, I always give them the shower, whoever [is] on the shower list that day. Because I know, they feel cold and that, so that's the first thing…I don't try to avoid it. That's why I always, after the shower, put their jersey on to keep them warm, yeah. And of course, they are already old, easy for them to get [cold].*

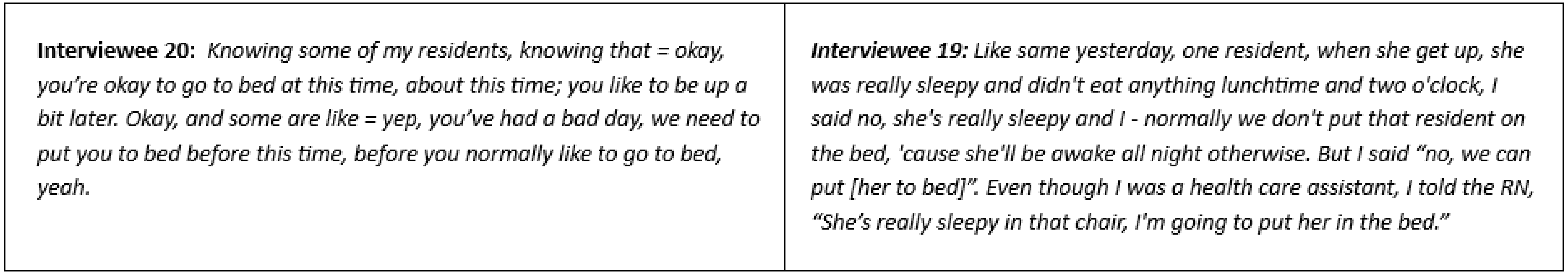
Table 4.10

Examples from interviews: Dressing

Researcher: Can you give me an example of the types of questions, or the types of advice you, you're needing? ***Interviewee 17**: What they eat, or what they - mostly the food is - or their drinks, how we do their cup of tea. So usually what they drink, how much sugar they want in their tea or they want tea or coffee. Apart from that, might be shower time, what they use, how they shower. Yeah, not everyone prefers to be showered the same way. Yes, and what they wear, the clothes they wear, what kind of - because my culture is totally different from here, so yeah.*	**Researcher:** Are there any decisions that you find difficult or stressful to make? ***Interviewee 25:** Oh sometimes. Sometimes when we are [busy] some resident, they'll take long time. So, [I ask], "this clothes?" [The resident] says, "no". We show all the clothes, but the resident says "no." Everything, "no". Then later on they choose the first clothes that you show them. We show nearly 20 clothes, but they choose the first clothes that we show them. So, if they say "yes" in the first time, that can save my time. But they choose it last, the same clothes that I show the first. So that [gives me] stress. Again, the second thing is that they are old people. So, it will take time for them to make a decision. So that is fine. I can't take that seriously because when I am in their age I [will] also do the same because I will not think how I think now...*

Table 4.11

Examples from interviews: Putting to bed.



Interviewee 20: *Knowing some of my residents, knowing that = okay, you're okay to go to bed at this time, about this time; you like to be up a bit later. Okay, and some are like = yep, you've had a bad day, we need to put you to bed before this time, before you normally like to go to bed, yeah.*	***Interviewee 19:*** *Like same yesterday, one resident, when she get up, she was really sleepy and didn't eat anything lunchtime and two o'clock, I said no, she's really sleepy and I - normally we don't put that resident on the bed, 'cause she'll be awake all night otherwise. But I said "no, we can put [her to bed]". Even though I was a health care assistant, I told the RN, "She's really sleepy in that chair, I'm going to put her in the bed."*

Table 4.12

Examples from interviews: Speaking with the RN.

Interviewee 18: *...because I work in dementia floor. He's [the resident] is a big man and he used to be in, in the army. So, I gave him a cares in his room. All of a sudden, he becomes ooh [agitated], I said "oh!". That was the first time to ever happen to me, that was my first experience, so what I did - I don't want to leave him- but what I did was I put the razor away and anything that he could use to harm himself. Anything that can harm himself, I put it away before I leave him. ...safety first before I leave him there [in his room], because I cannot control him. Even I talk to him, I can't control him. He's thinking that he's in war, war zone. That's what he was thinking about, because he kept saying "I'm going to hide" and like "they were coming, they were coming!"* ***Researcher:*** *That sounds like that would be quite stressful.* ***Interviewee 18:*** *Mm, they [the incidents] were at first. I said, "oh my God, what I'm going to do?". I'm in training when it comes to that, but when it happened that instantly you cannot really think clearly. So, I said "oh my God". So, I just move back, move away from him, because he's a big man. So, what I think about is just to hide whatever that can harm him. That's all I did. Even the chair, I move it out, everything, just the bed [was left] there. Make him safe and then I went and then I told the nurses straight away.*	***Interviewee 9:*** *I was toileting [a resident] by myself one day and he was not talking. Usually whenever you're in front of him he makes some sort of comment. I'm thinking, oh well, you know, you're not saying anything. I said, "are you okay?" He said "yeah". I said, "Oh righto" and so I was continuing doing my own thing and I was going come back to him 'cause I could smell that he'd done something, and I went back to him and put him on the toilet and this whole side was just down. It [a side of his body] wasn't doing anything. I said, "you know, I'm not a nurse but I know that something's wrong". I mean I've had grandparents that have had a stroke, and he couldn't say anything. He was not able to talk. I could've made the decision just to put him back in his chair and be like, "oh nah, you'll be okay". Then I thought no! So, I had hoisted him onto the toilet 'cause he was desperately needing to go. I locked him [the hoist] down and I kind of made a decision just to, like we didn't have those emergency bells right then... so I went - I knew exactly where the senior care giver was, so I said just wait there. Not that he could move at all - and I kind of - I tore out and I ran to her, and I said, "you need to come to me now 'cause something's wrong". I said, "I know I'm not a nurse, but he's had a stroke I reckon". And she came in and she took one look at him and ran, rung on her [senior nurse] portable phones and said, " you need to get down here now", and she came out and they were all worried about him ...*

Table 4.13

Examples from interviews: Comforting

Interviewee 8: *They're human and I'll give them that hug. They'll snuggle down with after a cup of tea or something like that and they'll just say thank you, and they'll go to sleep. That's it. That's all they need is human touch.* **Researcher:** Is it something that you encounter every night? ***Interviewee 8:*** *Yeah. Sometimes they'll be restless or something, or they might be hungry. I'll make them something to eat. Sometimes they're just laying there, and I'll look at them and I'll say, "are you okay?" I said, do you want one of these [a hug]? And they're like a child, they'd climb into my arms, and I would just hold them for a little while and they'll just drift off. I said, "I love you and you're safe". You must reiterate, let them know, "you're safe. I'm here for you, you're safe", and they'll go to sleep. And, they need that touch, because I think a lot of people [besides] family, they forget to touch them.*	**Researcher:** So, when you noticed the two Māori residents that your family knew... ***Interviewee 4:*** *Yeah.* **Researcher:** Did that help you care for them? ***Interviewee 4:*** *Oh, totally and it sort of like okay, I know why she's [the resident]* *like how she is, why she wants to be around. She just wants to be loved and because they don't get many family coming in, so they lean on the workers a lot, which I don't mind. I go to their room, sit down and hug them and have a bit of a laugh. But then, " oh, I better get back to work and you get oh, my body's aching because I've sat down too long."* *But yeah, it's just that they hardly see their family and then I always say, "how's your blah blah blah [family member]? [The resident says] "They're good. Oh, they're coming [to visit]". But I know they're not coming...*

Table 4.14

Examples from interviews: Assessing

Researcher: Are there decisions you find difficult? ***Interviewee 23:*** *A resident the other week was not very well. She had high blood pressure and what not. I took her obs, temp. Her blood pressure was still a bit high, and she was still not quite right, but she was okay. So, I umm'd and aah'd whether I ring the RN and say to her, "Look, [the resident's] blood pressure's still a bit high, she's not quite right, but she seems okay". And, in the end I decided not to [call], I just recorded it and kept an eye on her, and she came right anyway. So, I find it bit tricky, but the blatantly obvious like [a resident] ripped out his catheter tubing the other night and I had to ring the RN because he can't go without suprapubic. So, that I had no problem. That was a snap decision, I've got to ring her [RN]. So yeah, that's yeah, where I'm at with that. I just instantly know I've got to contact the RN. But if it's something a bit grey like you say, then I umm and aah a bit.* **Researcher:** Do you depend on your experience for that? ***Interviewee 23:*** *I have feelings or intuition maybe. I can sense that they're okay or not and whether I need to take it further or not.*	**Researcher:** What have you had to figure out for yourself? ***Interviewee 4:*** *Catheter bags, we've two residents with catheters. One's vaginal and the other one's a SP [suprapubic]. I went to go do his cares and it [suprapubic catheter bag] was just full of blood and I was like, "okay, what do I do?" I looked at it and I thought okay, take it [the dressing] off, see what kind of damage is underneath. I actually took a photo first, I sent it to the RN and then pulled it apart and it was oozing, the catheter tube sort of was out. So, I applied pressure, rung the RN, told her, then she had to come in and put it back in. But that was it, and I was like we're not allowed our phones on us, but when I'm doing the cares at night by myself, I always have something on me in case I need ring someone. But yeah, that's what I had to do the other night. And, and again last night. It looked like raw meat. I was like okay, this don't really look really good, and he was in agony, so I rung [the RN] straight away. There was no fixing, I just put my hand on it with a cloth trying to stop the bleeding and she [the RN] took over from there.*	**Researcher:** Are there decisions you find easy? ***Interviewee 21:*** *Yeah, sometimes I've made really good decisions, and the RN has praised me for it and said, "well that's good thinking". I won't mention the name, but one person it was to do with he had a catheter, but he had what they call the night bag and I said to the RN, "well, he's never ever had a night bag and when he was turning over in his bed, he was pulling the thing with him and that's why he was bleeding in the stomach". [The RN] said, "yeah, that's right, he's never ever had a night bag". I don't know who gave it to him, but we got it sorted and we taped it round his leg and now there's no bleeding.* **Researcher:** So, explain to me what the night bag does? ***Interviewee 21:*** *He wears a catheter, it's just below his belly button. He's supposed to have it taped round his leg to stop it from pulling out, because the more you turn at nighttime you can pull on it and it can actually come right out. We were having bleeding, but we fixed that now. It's all fixed, cause we taped it, and I hadn't moved it and I hadn't had to change the dressing.*

Table 4.15

Examples from interviews: Allowing for resident’s preferences.

Interviewee 9: *The main decision is just the getting up before breakfast. That's like the one decision that keeps on popping in my head that can be a bit stressful. It's the schedule, I just find that for the morning, you get there at 6:45 you have a 15-minute handover. Sometimes it can go over seven o'clock and you're there 'til like 10 past and we really need to be on the floor at seven o'clock, cause you have got one hour to get as many people up as you can, cause like some on [nursing home] wing like to get up for breakfast. So, I kind of just feel like it's very stressful and it's just the time, because you're given basically one hour to have five or six people up before breakfast. [Resident A] likes to get up, [Resident B], [Resident C], [Resident D] and [Resident E]. They all like to get up before breakfast and sometimes you only get three of them done [dressed/showered] and then you kind of feel like you've let them down 'cause you've said to them, “Yeah, I'll come to you before breakfast”. I've learnt not to say that I'm going to get you up before breakfast 'cause sometimes you can't. In that way it’s stressful that you can't do what you want to do and what the residents expect you to do as well.* ***Researcher:*** *Do you have to negotiate half-way?* ***Interviewee 9:*** *Yeah, so for instance I had a man, and I was supposed to shower him before breakfast, but I had three [residents] to do before him and I said, “I'm sorry, I can't, I don't have enough time to squeeze your shower in before breakfast”. And he's a lovely man anyway and he said to me, “how about you come to me first thing after breakfast?” I said, “that's fine” you can only just compromise with them so that you're not letting them down. You've said to them, “I'll come back to you” and you do.*	***Researcher:*** *What are the types of things that you've just had to figure out for yourself?* ***Interviewee 5****: Quite a lot really. There is a lot. Well, what people like, how they want to be dressed, what they like to eat, things like that, what they like to do.* ***Researcher:*** *Are those things written down anywhere?* ***Interviewee 5****: No.* ***Researcher:*** *So how did you figure that out?* ***Interviewee 5:*** *Because my residents, I can sit and have a conversation with all of them and they tell me. Sometimes it's things that aren't even in the file. For example, the other day [a resident] was talking to me and she told me why she has sore feet, and it's not in the file. So, it was my first-time hearing about what happened to her feet.* ***Researcher:*** *Did you share that information with others?* ***Interviewee 5****: No, not really. Because nobody's worried.* ***Researcher:*** *What types of decisions do you make?* ***Interviewee 5:*** *Not much really. Because everything is so straight forward, I've got everything down pat. I don't even - I know exactly who needs what even whether they sit at the lunch table, I know exactly who likes this and who doesn't like and who wants this and how much they have to have. I know all that.*

Table 4.16

Examples from interviews: Medicating

Researcher: What type of decisions do you make as a med aide [com]? ***Interviewee 19:*** *For medication we have to make decisions; for example, if the person is on tablet digoxin, you have to check the heart rate. If the heart rate is less, we are not giving [the tablet]. Same with the lactulose. We'll ask, if he's [the resident] on regular lactulose, and [the resident] says that "oh I've been to toilet two times", then you are definitely not giving the lactulose.* **Researcher:** So, what are the decisions you find easy to make? ***Interviewee 19:*** *Oh, that's a tricky question. According to your job description. For example, as a med com if someone wants extra Panadol, I can't make that decision. I need to talk to RN. For PRNs, we are not allowed as a med com to give PRNs. We need to ask the RN and then we can administer, but we can't take it out ourselves.*	**Researcher:** So, you had your formal handover, can you tell me a bit about that? ***Interviewee1:*** *We were sort of kept a little bit in the dark with the medical side of things, but I think if we are aware of that then we can make it a lot easier. I mean things, you know, they're not going to go through, but even the nurses on the night shift will say how much, when and what sleeping medication they've had, so that makes us aware that when we go in there and they're drowsy, that's a safety thing; to leave them there and not to try and get them up, because that's a risk of them falling. If they're too sleepy we don't feed them if they've just had a night pill because they could choke. It's great that they do tell us.*	***Researcher:*** *Have your every received bad advice?* ***Interviewee 15:*** *That can sometimes happen. It's usually between maybe RNs, seniors and care givers. We as care givers sometimes think we know a little bit more 'cause we are what I call frontline. We might have an RN that's got a penchant for a certain cream for under breast care and then the next month she'll have a penchant for a different type of cream, and everyone will be going doing on that cream and then she'll discover a new cream and then all of a sudden everyone's on that. We as caregivers know that that's not going to work and that's not going to work, but we know that the cornflour works. But we're not allowed to use the cornflour, so the poor resident has to put up with these creams that aren't doing her any good, whereas we could have it fixed in about three or four days with the cornflour.* ***Researcher:*** *Why did they did stop the cornflour?* ***Interviewee 15:*** *They can't give me a reason that makes any sense to me.*

Table 4.17

Examples from interviews: Managing pain.

Interviewee 10: *I was just thinking of [resident]. We can't get him up off the floor if he falls, but he's also, he can't tolerate pain, so you've got to decide - he always wants pain killers, so you say, “no, how about we try this and this and see if that works”? And nine times out of 10 it does, so it's - with him it's a bit of attention.* **Researcher:** I imagine it's urgent for him? ***Interviewee 10:*** *It is because he can't tolerate the pain. Doesn't matter how severe the pain is, he just can't tolerate pain. Last night just before I left, he rang. I went down, he wanted pain killers, I says, “no, sorry, you had some at nine o'clock, so you've got to wait your four to six hours”. And he says, “but my rheumatism's playing up”. I said, “where's your Anti-Flamme?” it relieves pain, muscle pain and stuff like that. So put that on and he went to sleep. I think it's not so much the pain with him. It's him letting us know that he is uncomfortable with the pain and just that little bit of time to say, “well hey, we can do this”; just talk to him, just to know that he is getting help and I think that helps a lot.*	***Interviewee 17:*** *Might be lifting of patients and main thing is pain. So, we have to be careful and how to handle them, might be I'll need assistance with them. I always think back, we had one client here, whenever we turning her, we make sure we don't cause any pain to her. So, there are equipment to lift her rather than turning her or lifting her here and there*	**Researcher:** Do they [RNs] ever ask you for information? ***Interviewee 9:*** *The nurses do sometimes. We had a lady, she's passed now, and she was in quite a bit of like agitated stage, the nurses would always be like oh, “how is she today? Does she need anything?” So, we’d [HCAs] be like, “oh, give her some of this so she's not in pain anymore”, 'cause……it's awful to see them in that situation and the nurses would go and have a look themselves and actually find out that they [the resident] do need some pain relief or something to settle them. So, yeah, the nurses do listen to you. You don’t say, “oh go give them that sort of thing”. You've got to approach them nicely and be like, “Hi, I believe that this person needs some help, can you……can you go [see the resident]” and they're like, “yeah, absolutely”. So yeah, they're good. They're good nurses and they listen to you.*

Table 4.18

Examples from interviews: Caring for wounds.

Interviewee 7: *Decisions that are easy ones to make. Wound cares.* **Researcher:** What's easy about them? ***Interviewee 7:*** *Depending on what it is and what we do about it, like I enjoy that stuff. I enjoy wound care and I love the nitty-gritty things, so if it's a skin care, easy fix.* **Researcher:** And that, is that based on just your knowledge? ***Interviewee 7:*** *Pretty much. Training that we've had, that we do, you know? We, we practice with that sort of stuff all the time. That's like piece of cake decision to make. We just fix it up. That's my thing, like I love skin tears like…* **Researcher:** You've studied skin tears in [the ARC facility]? ***Interviewee 7:*** *Yeah. Rolling them back, like - easy decisions.*	**Researcher:** I had the benefit of sitting down with you one evening when you were trying to suss out wound care strategies. ***Interviewee 10:*** *Yeah, and as you noticed, there wasn't the stuff we actually needed so we had to sort of compromise and find stuff that we could use.* **Researcher:** Could you get new supplies? ***Interviewee 10:*** *No, but like I said, I, I always try and carry a little bit of extra stuff [wound care supplies] because I don't know when I'm going to need it, as well as the resident. I feel they shouldn't…I mean they're paying big money. They shouldn't have to go without.*	**Researcher:** In a typical shift, what types of decisions do you make? ***Interviewee 4:*** *Everything. Whether they're the wrong ones, but for me I think it's right. For instance, I would just do what I have to do, refer back to the notes, then I'll let [the RN] know what I've done and then she'll probably tell me the right way.* **Researcher:** Do you have an example? ***Interviewee 4:*** *When I first started, I did the three to 11 shift and one of our ladies got up and walked and she ended up skin tearing about part of - from [the wrist]. So, I was trying to bring back the skin as much as I could, and I told [the RN]. She told me to put blah blah blah bandage on so and so; but wait for the next shift. So, I did what I could do as best as possible, but I actually put on the wrong gauze. It wasn't the non-stick one…so that was my mistake and then I learnt from that.*

Table 4.19

Examples from interviews: Toileting and incontinence care

Interviewee 16: *Yesterday was working by myself. Hoped like hell it all went well. When we first walked into handover and I see nobody else from the rest home, I was shitting my pants. I was like how am I going to do this? Really, like how am I going to do this? I got 90 per cent of what I had to do done. There were three beds that weren't made, one of them was because [resident] had pooped everywhere I just didn't have time to change his bed. I cleaned him up, I sluiced everything that needed to be done. There was another bed that didn't get made because [resident's bed] was a linen change, but with everything else going on……I couldn't do it. By the time the afternoon shift started, you know, the RN had explained to them that I was by myself and for that entire shift they [other HCAs] just whinged and moaned because I didn't get all my jobs completed. I was so mad. Yep. I was so mad, I was like by myself, I'd like to see one of you do a morning shift by yourself. I wanted to go home and cry, but I didn't. I was like you know what? I'm really proud of what I did today. But everything else was done, you know, all the residents were up. They all had their lunch. They were toileted. They all had their cares done. I didn't empty all the resident's rubbish bins, which is the [work of] weekend morning staff. The morning staff, we have the hardest shift because we have to get everybody up. We also have to make sure everything's done, beds are made and then we have to make time to go round and empty all the rubbish bins, so that's the toileting, that's the residents and we have to take that rubbish out to the bin.*	**Researcher:** What types of things have you had to figure out for yourself? ***Interviewee 25:*** *Like bells going together, so we can't do the three peoples together. I give priority, like who is really in need first? I'll answer all the bells and say, "I'll be back quickly", within two minute or as soon as possible. Then, when I answer all the bells, I know that among these three people, who is the first priority I have to do, who is the emergency, so I just do it like that. I do the priority [care], who is really in need, who is……second priority, like that. Otherwise, we can't do all the people together. Most of the time, soon after breakfast and early in the morning most of the people, they like to go toilet, Oh it's very hard to make a decision like from where shall I start, but I'm very familiar, so I know which residents really need it.*

The Decision-Making Environment for HCAs

The assumptions that underpin this research are derived from Chatman's propositions and accept the significant influence that predictable routines, social norms, and social roles have on the seeking, acceptance and dissemination of information when faced with the need to decide. The central tenet for Chatman's propositions focuses on the social constructs that bind information and decision-making which includes what information and sources are considered relevant to maintaining the predictable business as usual routines.

Care decisions made by HCAs exist within a decision-making ecology where routine care planning requires degrees of flexibility to absorb unpredictable care needs within the existing routines. This research identified three decision types: easy, difficult and routine decisions. Easy decisions identified the institutional structure and rules used to frame care planning decisions. Difficult decisions illustrated those aspects of direct care delivery that challenged the HCA's ability to maximise efficient care delivery within the acceptable approximations of routine care delivery. Three core routine task schemas were identified, showering, eating and drinking, and dressing. These core schemas were often used as predictable care tasks around which the routine care tasks were organised.

Research on short-term planning decisions of HCAs working in inpatient care conducted by Aragon et al. (2018) identified that care environments with unpredictable care demands required flexibility when sequencing care actions in order to respond to individual care needs within the context of shift-long care expectations. They also concluded that a greater understanding of how care staff prioritise tasks is needed to gain insight into the predictability of task stacking and restacking. The second half of this chapter discusses the influence of the decision-making ecology on HCA decision-making by detailing the information sources and sharing preferences of HCAs, the nature of information used by HCAs and identifying the constructs that influence how decisions are made.

The Decision-Making Ecology of HCAs

This study positions ARC as the overarching context, or small-world, where decision-making occurs through an interaction between the care environment and the HCA as a decision-maker. How HCAs make routine care decisions is dependent on many factors within the care environment, such as accessibility to information sources, the perceived relevance and utility of the information, and the social norms that generate the rules on who can receive and disseminate information within and outside and the care environment. The parameters in which information is bound to collective normative behaviours has a significant influence on how care decisions are made (Anderson et al., 2003; Chatman, 1996; Cranley et al., 2023). Data from this study identified that information informing HCA care decisions was created from within the boundaries of ARC, and external information was believed to have little relevance to routine care provided by HCAs. Spatial and temporal similarities found across the localities created comparable decision-making ecologies. When considering the influence that physical location and social norms have on information, Savolainen (2009) asked the question: “Would an information grounds become stabilised and grow into a small world due to the fact that the same people frequent these grounds and form a clique?” (p. 44). Based on the findings from this study, the answer would be not only “yes” but that it’s possible to identify similar information practices and decision-making constructs across different ARC localities, reflecting the position that epistemic, social and contextual similarities can create a people-in-practice information landscape (Lloyd, 2012; Savolainen, 2020).

Across the localities, participants were asked about how, where and with whom information was exchanged to understand the dynamics and permeability of the information boundaries of each locality. The survey instrument included questions designed to assess the breadth of information sharing and dissemination and who or what HCAs identified as being preferred sources for care information. Interview data describing the participants sources of information revealed that RNs (n=14; 39%), care plans or resident notes (n=8; 22%), other HCAs in the facility (n=5; 14%), scheduled shift handovers (n = 8; 22%), the residents (n=3; 8%) and policy or procedure documentation (n=2; 6%) were sources of information used to inform care. These findings are common in the extant literature (Caspar et al., 2016; Cranley et al., 2020) and serve to demonstrate the insular nature of ARC, supporting the assumption that decision-making in ARC occurs in a small world with clear boundaries. External information sources were few. The use of printed references such as training manuals, friends who were RNs or the internet were rarely mentioned (n=1; 4%). Other external sources of information were selected to meet information needs specific to resident care, such as medication administration (General Practitioners, n=2; 6%) or for resident preferences not documented in care plans (families, n=3; 8%).

Chatman’s small world theory suggests that insular decision-making ecologies are dependent on the predictability of routines, and that there is no point in seeking information unless a critical problem arises (Chatman, 1999). The participants in this study were asked if they had sought caregiving advice in the 30 days prior to the interview, and if so, from whom. Seventeen of the 23 participants reported seeking or needing to seek advice and preferred sources were confined to RNs (50%), RNs and HCAs (44%) and HCAs (6%). The sources of the information were notably those working within what Caspar et al. (2016) identified as microsystems where the flow of information was within a select group and defined by specific oral processes, and ad hoc and formal exchanges, such as shift handovers.

The role that hierarchies, personal beliefs and social norms play in the creation of information boundaries are discussed in research as barriers to potentially relevant information. For example, the information needs of single women living in a retirement community, cleaning staff of a University (Chatman, 1990, 1992), and ARC working conditions, environments and, organisational culture (Caspar et al., 2016; Cranley et al., 2023; Forbes-Thompson et al., 2007). The small world boundaries of ARC information were not impermeable to external information sources and the exchange of information with members outside of the ARC care staff occurred. However, seeking or using information outside of the established microsystem was limited to circumstances when specific information or detail was needed by the HCA to inform a direct care decision was not otherwise available and the perceived risk of going to an external information source was low; both are premises of Chatman's small world theory and information poverty.

> ***Interviewee 1:*** *"You can actually get a lot of information from the, from the families, because they know a lot about their mum or dad; mum likes this, or mum likes her hair done this way, or mum likes to wear make-up. That's great because a lot of that little stuff is not in their care plan."*

In terms of information sharing, HCAs identified the RN as fulfilling the role of disseminating information to families or engaging with clinicians in care conferences. Unless disseminating information was seen as part of the HCA's role, such as faxing a clinic for medications, information exchange with those other than ARC staff was seen as being outside the HCA role. These beliefs are exemplars of social rules that reinforced the boundaries of information seeking and sharing. Non-compliance with the rules had real or perceived risks with negative consequences outweighing the benefits of information sharing outside of the established microsystems (Chatman, 1996; Forbes-Thompson et al., 2007).

> ***Interviewee 3****: … about 10 years into my caregiving career, I had a [resident] and her daughter would come in every night and massage her feet and I'd actually been out to the nurses and said, "look, have you actually told the daughter that her mother's toe is necrotic and that she may take her sock off and it'll fall off?" And they're like, "oh um no", and I was like, "oh okay then". So, I went in there and the daughter asked me and she's like, "oh you know, what's up with mum's toe?" and I'm like, "oh, maybe you should talk to the nurses". And she's like oh, "they never answer my questions". So, I told her and I almost lost my job over it. But she fought and she said look," I've been asking you guys [RNs] for months and months and months, because it was slowly going black" and it got to the point where it was shrivelled and two days later the toe fell off in her hand.*
>
> **Facilitator:** I'm assuming you got to keep your job?

> ***Interviewee 3**: I did, yes. I got suspended for two weeks while they investigated and yeah, she [the daughter] took it way, way higher than I thought she would.*
>
> **Facilitator:** Has that, has that affected how you share information with families now?
>
> ***Interviewee 3**: I'm probably a bit more reserved now and probably sort of put more pressure onto the nurses, saying you know, "this is what's happened to me in the past, you need to be saying something or else you know, I will," sort of thing. But yeah, I'm yeah, very reserved.*

Information: Routines, Sources, and Motivators. Sources of information for HCAs were explored as part of answering the research question focused on how HCAs were making their care decisions. From the perspective of Chapman's small world theory of life in the round, the motivators for HCAs' care decisions and how they identify information resources is influenced by the social norms of the care environment. A primary assumption of small world theory lies in the permeability of the information boundaries and what types of externally created information is deemed as acceptable by social norms. The position of insider and outsider within the context of ARC is well considered in the literature, from the perspective of families who have experienced the transition of family members into ARC (Holmberg et al., 2020a; Shaw, 2021) and within the ARC workforce by Caspar et al. (2016). Observation of HCAs communication patterns was used in this study to identify patterns of information sharing and informed interviews to gain an understanding of what was being shared for decision-making purposes. Field observations of HCA communication patterns identified types of information dissemination norms and shift care planning communication. Interview data strengthened the observational data by providing the detail needed to understand how the different information sharing patterns observed were essential for supporting routine shift planning and rolling decision-making by HCAs. Institutional care routines cultivated a pattern in which information was disseminated, creating normative communication and information behaviours aimed at maintaining and accommodating the institutional schedule. Two types of dissemination patterns of information were identified, each valued by HCAs for different reasons:

> **Formal handovers**: Planned or scheduled communication in which two or more people gather and discuss the care of a resident or resident(s). Institutional rules would dictate who was able to attend, what information would be shared or presented and by whom.
>
> **Informal handovers**: Informal handovers were observed as routine information sharing occurring outside of formal handovers by two or more people. These handovers occurred at any time or any place, although most often occurred in areas where HCAs were commonly found. Informal handovers were distinct in their duration:
>
> > **Flybys**: A 'flyby' is seconds in duration.

> **Moments**: A ‘moment’ can be minutes in duration but less than 5 minutes.
>
> **Meetings:** A ‘meeting’ exceeds the moment in duration and often occurs during time where there is a natural break in the rhythm of direct care activities.

The nature of the information in each of the dissemination types was confined to spatial and temporal factors associated with shift work and the durability of the information - the degree to which the information remained relevant over time and to specific situations. The flow of routine information dissemination in clinical environments was guided by the institutional schedule, such as the change of shift or transition between private care tasks and communal care. For example, information that is anticipated to remain relevant for the entirety of the shift is commonly shared in the formal handovers, timed to saddle the beginning of one shift and ending of another and at an identified location, such as an office space.

Formal Handover. Information presented in formal handovers commonly focused on the attributes of residents and their state of health which influenced task completion. Formal handovers provided an entry point for the oncoming HCAs to decide how to plan their shift work by providing a 24-hour snapshot of a resident’s condition and highlighting specific tasks needing to be completed that were not part of typical daily care, such as obtaining a resident’s monthly weight. Formal handovers were often approximate, informing the HCAs of what to be aware of over the period of a shift. Healthcare assistants would commonly comment that the formal handovers frequently did not contain the type of information or level of detail needed for direct care. The formal handovers observed during field observations were led by the RNs, not longer than 15 minutes in duration and organised by a roster of the residents.

> **Interviewee 14:** *It’s very important that the handover's clear and that we know what's happening, so then we can organise ourselves to do what we have to do first. If someone has fallen or something, then we know how to do care properly to them. It [the handover] helps to organise our day and synchronise everything that has to be done. For instance, who was not well overnight, who's got to go out [for an appointment]? This one's doing this, that one's doing that. Then we'll get a plan with our partner [another HCA] and work out that we'll do this, this, this, and this*.
>
> ***Interviewee 3****: The information that the care givers need is good, but we don't need to know what drugs they've had and when they've had them. That can be a secondary thing to the nurses because we don’t administer the drugs. But when we get new residents it's nice to get a bit more in depth of what they're up to. But for the people that we know, like yeah, we don't need to know that Mrs Jo Bloggs had paracetamol at this time.*

Informal Handovers. It was not uncommon for relevant information to be dropped from the formal oral handover cycle. Relevant information was described as having left verbal circulation but not updated in written sources, such as care plans. The purpose of the informal handover was to seek or exchange detailed care information between HCAs relevant to the dynamic nature of resident care needs and task stacking. Informal handovers occurred in places where HCAs were most likely to encounter each other either by chance or during scheduled activities such as mealtimes. Informal meetings occurred areas where communal care activities occurred, such as hallways, sluices, or dining rooms. In all localities where formal handover was directed by RNs; the HCAs beginning the shift would meet with those HCAs coming off shift in search of specific information.

> ***Interviewee 9:*** *Usually they [the HCAs finishing their shift] just wait in there, like in our [HCA] office. So, in the rest home wing you come off and they'd be like 'oh you know, this happened', so they kind of tell you again anyway. But you definitely do see them [off-shift HCAs] because they're not supposed to leave until you come onto the floor.*
>
> **Researcher:** Do you get more information than you do in the formal handover?
>
> ***Interviewee 9:*** *You kind of actually do, because maybe the nurse might not have asked someone, 'oh, did anything happen with that resident today?' And they [the RN] might've said 'oh no, nothing happened'. But then you're coming on and into the office and they're [the HCAs finishing their shift] are like 'oh God, we forgot that. That resident had a fall…' or something like that and they completely forgot to tell the nurse. So yeah, you kind of do get more information [more] than what the nurses tell you at handover.*
>
> ***Interviewee 15:*** *The health care assistants that have been working for that whole shift are more in touch…and they have more knowledge. They have more to pass over if you like. We used to read notes as well, so it would be handover with everybody included and read notes, so there was no way that you couldn't get information or that any misinformation was passed on. What we're finding is that we like to, once we get back from handover, get back to the office and the previous shifts are still there, there is still information, little bits are being passed over.*

Meetings, moments, and flybys were more nuanced forms of communication. Meetings of longer duration would occur in areas where HCAs would naturally group because of tasks or communal care. The seconds long touch-and-go flybys often occurred as HCAs crossed paths during care work to update and coordinate with other HCAs and was essential to maintaining the routines of care. An active approach to information to maintain or restore the normal routines is described by Pang et al. (2020, p. 624) as "checking-in" and during crisis situations or "monitoring" as described by

Savolainen (1995, p. 272) who contends adaptive approaches for seeking practical information. The information used by HCAs for long-term or shift-level planning can lose its durability over the duration of the shift due to changes in the needs and conditions of residents. Meetings, moments, and flybys were described by the participants as being essential for successfully accommodating the unpredictable nature of daily care and to prevent disruption in the shift routine. Information seeking by the HCAs served two main purposes: to fill knowledge gaps surrounding for unfamiliar issues, and to support the flow of the institutional schedule.

Meetings: The focus of meetings, which commonly occurred when direct care demands were less, was to discuss the progress of a resident's condition, consider available resources, and decide the best approach for planning work during the shift.

> ***Interviewee 14*** *So when we're [HCAs] all together, then we can sort of work out who's doing what and who's not done what, and then we can talk to each other to say you know, how's this one or how's that one.*
>
> ***Interviewee 25*** *So after that [the formal handover] also we talk with, with each other, because like we are two people are working so we say which part you like to work? If one of my friends say I work this side, then I'll work this side and we say you start, if you need a hand let me know, "If you need me, I'll be there, okay?". Then we start our work, and we know that our co-team is working in that place, so when if they need me, I'll go. And, sometimes we also tell them, "that if you need, just ring the bell [room call bell]"…*

Moments: There are predictable periods of time where task-related natural groupings bring HCAs together spatially. For example, in dining rooms or dirty utility rooms. Moments were shorter in duration than meetings and were focused on within-shift situations, specific situations, or resident's conditions.

> **Researcher:** Can you tell me a little bit about the information that is exchanged during those moments where HCAs would exchange information in work areas, like in the sluice room, and what you find helpful or important?
>
> ***Interviewee 15:*** *I guess we use those moments to share information. We're bouncing ideas off of each other, supporting each other and like I said, just sharing information so that we're constantly topped up with knowledge, or what's happening with a particular person or a particular situation. Its support for each other.*
>
> ***Interviewee 17:*** *Yeah, mostly if the resident has, has told you something about his family or he was disoriented or he said something which is unusual, usually we talk about that,*

> *and how it might be their behaviour is not right, or might be their behaviour is abnormal compared to other days, his behaviour is different today. So yeah, we might discuss that.*

Flybys: Hallway flybys appeared to be the dominant form of information behaviour found in the ARC facilities participating in this research. The hallway conversations using flyby exchanges were described as very important to the maintenance of routine work and were seconds in duration and embedded within the flow of care tasks. The information resources were most commonly other HCAs or RNs working in the immediate vicinity.

> **Researcher:** In the past month or so have you had to ask someone for advice or information?
>
> ***Interviewee 10****: I'm always asking for advice, because that helps me decide what I'm going to do.*
>
> **Researcher:** What kind of advice?
>
> ***Interviewee 10:*** *What, what products maybe, so that I know that - to make them comfortable, yeah. Just general bits*
>
> **Researcher*: …***we talked about the fly-by conversations and…
>
> ***Interviewee 10:*** *And, that's part of it. I could be going down to a resident's room and someone's just come out of there and I say, " well, what have you done?" Have they done anything that's going to help me or hinder me, you know, so that I know what [to expect]…*
>
> **Researcher:** Those times where you're doing those quick fly-by meetings, I saw them in the hall, over the tea trolley, can you tell me more about those, what's going on there?
>
> ***Interviewee 12:*** *Oh, those are the best, yeah. That's more about the behaviour from what they had to deal with and what I might possibly face, like in here it's just in general how the day's been for that HCA.*
>
> **Researcher:** Even though you do it really fast, I've watched people just kind of do touch and goes. Are you still getting quality information from each other?
>
> ***Interviewee 12:*** *Yeah, we kind of have our own little language where we understand what we're talking about and what we're trying to relay to each other.*
>
> **Researcher:** Do HCAs pick it up really quickly? How quickly does it take for the new HCAs coming into figure that out?

> ***Interviewee 12:*** *Me personally, I give a new caregiver two months. It depends on them. Yeah, my patience is about two months, and after that… it gets a little short. Yeah, like someone from off the street can pick it up in five minutes and then someone with experience can take a little longer, so I try not to expect too much from a person, 'cause really – it's an overwhelming place to start off or come into.*

Situational Awareness to Inform Care Decisions

Situational awareness is defined as an awareness of current or immediate events within a dynamic environment and the precursor for responsive decision-making (Endsley, 1995; Walshe et al., 2021). The concept of situational awareness has been applied in dynamic high-risk work contexts, such as operating rooms, aviation, and emergency care. For those working in healthcare environments where care is accomplished through coordinated efforts, communication is essential for situational awareness for (Hazlehurst et al., 2007). Active information seeking for the purpose of maintaining or returning to normal everyday routines has been observed in natural disasters (Pang et al., 2020) and for accommodating variations in everyday life (Savolainen, 1995). Healthcare decisions in this study were informed by actively seeking and sharing information during routine care in a cyclical pattern. Observational and interview data provided insight into preferences for oral exchanges and within the microsystem that HCAs and RNs working in proximity to. Meetings, moments, and flybys were found to be the normative information behaviours used by HCAs across all three localities to achieve situational awareness and inform their care decisions.

Cyclic monitoring has been found to be used to maintain a form of shared awareness amongst care team members so coordinated care can occur (Cristancho et al., 2016). Orally based information is rich in detail and the content is important, making these exchanges highly valuable and irreplaceable in any other form (Turner, 2010). For example, participants in this study followed institutionally scheduled shift handovers with self-organised meetings where they actively sought detailed resident information to anticipate residents' needs and plan the order of their direct care tasks. Cohen et al. (2012, p. 2) describe this as getting the "big picture".

Aged residential care requirements are similar to hospital inpatient care in terms of capacity resource planning and the need for those providing direct care to be able to flex with changing care demands within a routine schedule (Aragon et al., 2018; Hulshof et al., 2012). Due to the dynamic nature of care delivery in ARC, HCAs employed a cyclical approach to information seeking over the course of the shift using iterative informal communication patterns, book-ended by end-of-shift formal handovers. This active iterative process of confirmation and responsive adaptation has been described by Cristancho et al. (2016, pp. 65-66) as the "reconciliation cycle". The cycle is a process that positions the experts or knowledge bearers, such as the HCAs, as essential for translating challenging situations into appropriate actions through the active engagement with other experts within their microsystem. The utility of a cyclic process is its ability to help maintain care routines while also adapting to changes in care needs. For example, in the event of a crisis, HCAs can quickly reorganise and accommodate essential work when key staff are engaged in the response to a resident emergency or unanticipated need. Unless the care situation is outside their prescribed scope, HCAs support each other through collective expertise to accommodate the necessary changes in a resident's care delivery.

This chapter has discussed the breadth of decisions that HCAs make; the schemas used by HCAs to organise and forecast care to a population with varying, often complex needs; and the way cyclic information seeking is used by HCAs to achieve situational awareness to assimilate or accommodate care that meets a resident's immediate needs as well as shift long requirements. However, care decisions based on the collective expertise of a microsystem are bound to the information resources, social norms, values, skill mix and knowledge pool available to the HCAs. Social norms that prioritise specific aspects of care, such as monitoring for safety and medication management (Ludlow et al., 2020) can instil a form of tunnel vision for preferred care actions that maybe blind to events outside of routines that require discrete decision-making.

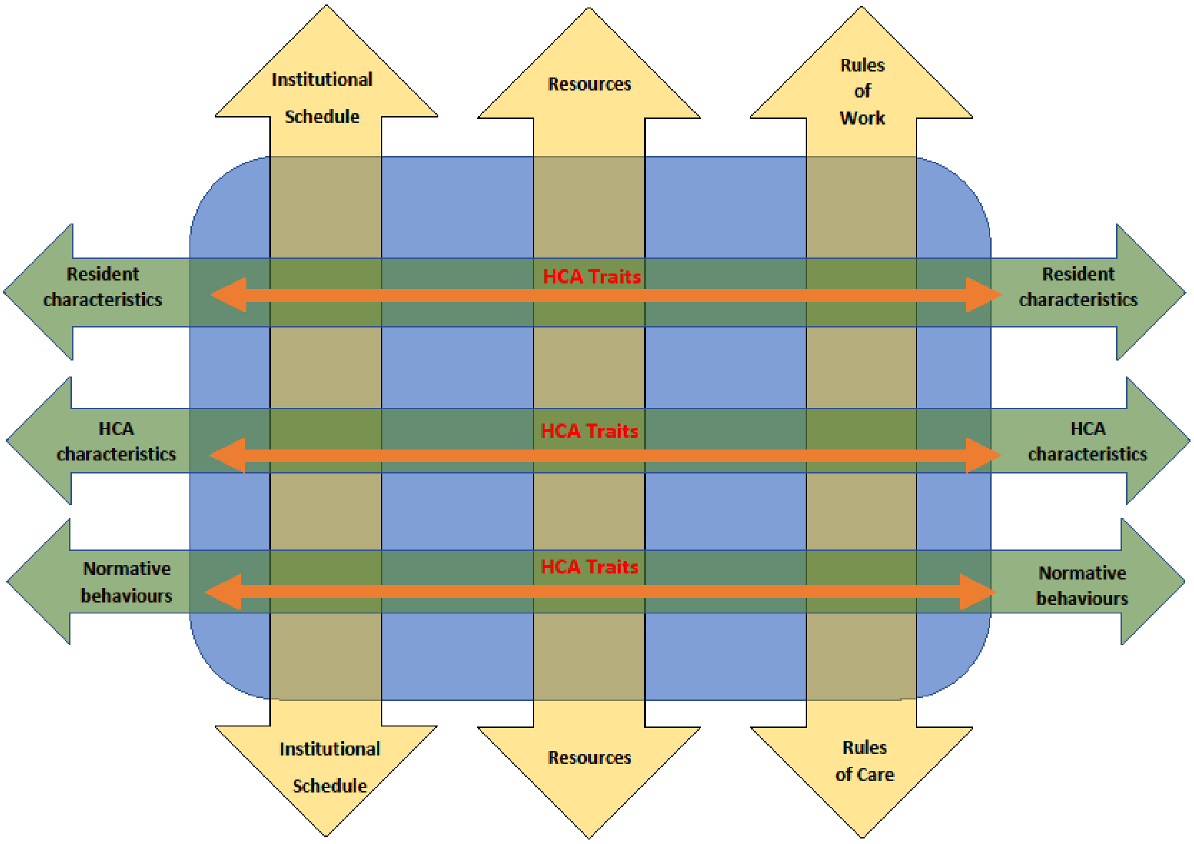
Influencers of HCA Decision-making

Routine decision schemas are adaptable mental models made up of associations specific to the work of routine care but have the capacity to integrate new elements (assimilation) or be altered in response to pressures within the environment (accommodation) (Ghosh & Gilboa, 2014). Decision-making is a process of schema activation, assimilation and accommodation requiring situational information and working knowledge of the characteristics that influence achieving a targeted goal (Seel et al., 2009). A HCA's ability to accommodate variations requires a working knowledge of acceptable alternatives, consequences, and the probabilities of flow on effects of changes. For example, if a resident is unable to safely mobilise, the probability of timely and safe task completion may decrease. Acceptable alternatives, such as using transfer equipment, engaging the RN for direction, or modifying a resident's routine can have associated consequences to the routine care of other residents, such as scheduled showers. Situational awareness of the current workflow can minimise the disruption that accommodating a resident's needs may have on the overall shared work of the shift through informed collaboration.

Routine decision schemas illustrate the targeted decision-making of HCAs supported through situational awareness achieved through cyclic information seeking within their role related microsystems. The data used to arrive at these findings was further analysed for common factors that influenced how routine decision schemas were actioned. Factors identified are framed as constructs, attributes, and traits used by HCAs to inform choices, connect actions and reveal the cumulative intentions of the "plan" (Schank & Abelson, 1977, p. 70). These factors are modelled as overlapping relationships that influence HCA decisions in the context of a routine decision schema (Table 4.6). Constructs, attributes and HCA traits were described against the backdrop of task schema. Although the influence of each factor would vary based on the care situation, the constructs were used to frame the care expectations and the decisions going forward.

Figure 4.6

Model of factors influencing HCA decisions.



Legend of factors in decision-making

🟦	Schema
↕	Constructs
⇔	Attributes
↔	Traits

Factors that influence HCA decision-making are pooled together based on the linkages between resources and context (Langley et al., 1995). Institutionally derived constructs (institutional schedule, resources, and rules of work) are pooled with the socially derived attributes (resident characteristics, HCA characteristics, normative behaviours) and individual traits, which are expressed by the HCAs through their own experiences, beliefs, and values. Institutional constructs form the rationale for why HCAs stack routine care, attributes influence the way decisions are stacked, and traits form a discrete but significant influence on how HCAs assimilated, accommodated, or rejected routine care schemas. The shared worldview of ARC is underpinned by the expectations of the institutional constructs; care-decisions emerge as a result of contextual decisions based on shared expectations and the aims of reducing uncertainty and supporting predictable routines (Chatman, 1999; Fredrickson & Mitchell, 1984). However, within the HCA micro-strategy of resident care, decisions were revealed to be loosely coupled networks where constructs, attributes and traits were based on the care situation and time.

Institutional Constructs

Throughout interviews, participants described the institutional schedule, available resources, such as supportive and sufficient staffing, and shift rules prescribing care task expectations, as the guardrails for care decisions. Healthcare assistants described shifting their care responses based on their ability to meet shower schedules or their ability to fulfil urgent care needs or residents' preferences within available staffing resources. Examples regarding the influence of constructs on HCA decisions are illustrated in the decision-making categories of easy and difficult decision types. For example, in Table 4.1, Interviewee 15 and Interviewee 14 describe the factors they use to plan their care. The shower schedules, mealtime schedules and achieving the completion of care (toileting, hygiene, and dressing) for their assigned residents framed their care decisions. In contrast, the difficult decisions, such as the tensions described in Table 4.4 by Interviewee 3 and Interviewee 16 when residents refuse a shower or resist care due to cognitive conditions. The interviewees describe how they reconceptualised acceptable care practices when the demands for person-centred care exceeded their capacity to meet one or more of the institutional constructs.

The influence of the institutional constructs identified in the current study has been referred to in the extant literature. Institutional policies and rules of work as a basis for care decisions are described in the findings of Carder (2012), Cameron et al., (2021b), Fitzgerald et al. (2009) Garratt et al. (2021), Kalaitzidis and Harrington (2018), Naweed et al. (2022), Sutherland (2020), Tate et al. (2020), and Wiersma et al. (2019), as are the effects of the absence of constructs by Tarzia et al. (2015). Resources such as time, control over the work pace, staffing and expectations on care task completion are described as influencing care and care decisions (Eriksen, 2006; Holmberg & Godskesen, 2022; Holmberg et al., 2020b; Hunter et al., 2016; Tarzia et al., 2015). Although much of the literature mentions institutional policy as a basis for HCA care decisions, findings in this study indicate that the rules of work, as interpreted and enforced by care staff, is the construct influencing decisions rather than formal policy. Cameron, et al., (2021b) found that their participants, “demonstrated scant familiarity” with institutional policies or questioned the practicality of them (p.1275). Ludlow et al. (2020) reported that policies designed to promote residents’ choice for care were ignored in favour of the completion of assigned care duties. Findings from the current study identified policy and procedure documents were not a primary source of information, only eight percent (n = 2) of the participants identified these as a source for informing care decisions. More commonly, learning about the policy and guidelines was a component of orientation rather than a resource for routine care decisions. For example, Interviewee 15 described learning about the policy folder at orientation, but said that, after six years they were no longer aware of where the folder was kept or of any updates it contained, “…I quite honestly couldn't tell you where they are. But it's probably me - I need to go back to that folder on a regular basis. But I don't, I don't get time.”

Naweed et al. (2022) contend that risk assessment, practicality of achieving task defined goals, and weighing consequences are the basis for HCA decision-making. A vivid illustration from the current study can be found in Table 4.19, where Interviewee 16 describes the care expectations that compete with a resident’s basic need of toileting and how social pressure from the other HCAs enforced the rules of work. Even though institutional schedules, resources and rules are acknowledged influencers of care decisions, there is very little understanding of the weight constructs exert on HCA decisions, or how they impact resident outcomes or Long-Term Care Facility interRAI quality indicators.

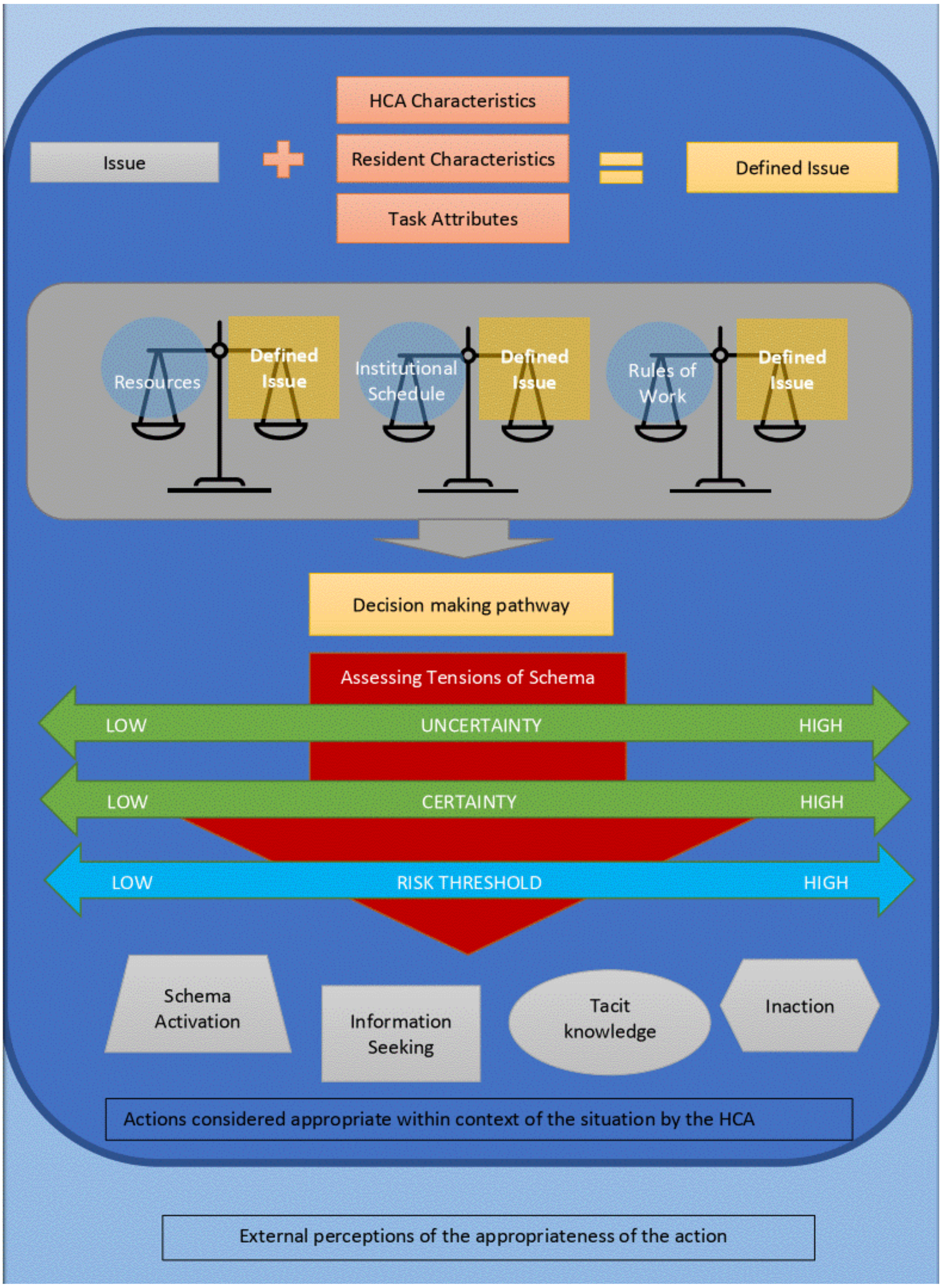
Attributes and Traits

Constructs contributed to the HCAs’ motivations, or what HCAs saw as important to pay attention to. Attributes and traits acted to inform perceptions about how decisions were actioned. This resulted in variations depending on how HCAs made sense of the situation. In the current study, the three conditions that influenced how the constructs were considered in direct care decisions were: resident characteristics, HCA characteristics, and task attributes. The traits had a discrete but significant influence on how HCAs assimilated, accommodated or resisted the social norms of ARC facilities when making direct care decisions (research question 5). Figure 4.7 presents a ’flow’ or stream of HCA decision-making in context with the constructs, attributes, and traits. Informed by Langley et al. (1995) the issue-stream model of decision-making acknowledges the intertwined linkages between issues occurring over time: issues are persistent and a decision on one issue affects future issues on other issues; decisions on the same issue remain inter-related over time; and concurrent decisions are linked through the sharing of resources in the same context (p. 270). Figure 4.7 includes epistemic influencers such as certainty, uncertainty and risk that will help to answer the research question; How do HCAs make non-routine decisions, especially in uncertain situations?

The figure illustrates a decision pathway within contextual boundaries. A defined issue is representative of a synthesis of constructs, attributes and tensions that lead to HCA decisions to activate a routine schema, seek information, use tacit knowledge or to do nothing.

Figure 4.7

HCA Decision-Making Stream.



The influence that resident attributes have on decisions can be seen throughout the routine decision schemas. For example, Interviewee 19 and Interview 20 describe how a resident's condition led to decisions to assist them to bed, despite it not being at the scheduled bedtime based on perceptions of risk and the HCAs knowledge of the residents' normal routines (Table 2.1). Interviewee 25 describes how they supported residents with toileting needs during times of high demand by prioritising the resident's urgency (Table 4.19) and Interviewee 15 describes how their shift-long care planning began by prioritising showers based on the residents' abilities, or the ease by which the care task of showering could be undertaken (Table 4.9). The magnitude of influence that the constructs had over how resident attributes are considered in care decisions is illustrated in Table 4.15 by Interviewee 9's explanation of the reasoning behind excluding residents from morning care planning as necessary and Interviewee 5's seemingly static view of resident preferences as a basis for a business-as-usual approach to care.

Experience in caregiving and knowledge of the residents appeared frequently as an influential HCA characteristic. Knowing a resident as a basis for care decisions is well substantiated in the literature. Although values and beliefs were an aspect of this study, how they influenced a HCA's routine care decision appeared constrained by the rules of work and the normative behaviour attribute. Interviewee 3 described how breaking the norm of sharing information with a family member resulted in a temporary suspension and has subsequently influenced how, and to whom, she shares information on a resident with, despite maintaining values that support family members to be informed. Interviewee 1 described how past training and care experiences were used as a basis for actioning routine decision schemas.

> ***Interviewee 1:*** *Yeah, yeah, because when you - you know, there's always going to be things missed, like when you're training someone or showing them what the resident's needs are, there's always going to be something not there - but I suppose, with my experience I've come into, this facility and needed what, two days orientation. I know how to wash somebody and I know how to dress somebody. I know how to attach a catheter bag and I know how to make a bed. I know how to do all the little things and checking in between toes, checking the redness on their heels, on their hips and bottom and all that sort of stuff. I know what to look for. So, it was quite a breeze for me to just get in there and do it, so anything that I had to sort of figure out for myself was quite easy*.

Traits acted as discrete influences on individualised HCA decision schemas. Healthcare assistants' thresholds of acceptable levels of uncertainty, risk and preferred adaptive strategies were noted as being influential on care decisions. Difficult decisions identified in this study illustrated instances when a HCA's personal schema was challenged by common or collective schemas, such as routine decision schemas. For example, Interviewee 16 and Interviewee 20 described stepping away from a care situation (Table 4.5). However, the reasons for stepping away and how the decision was actioned differed between the two HCAs; one HCA engaged with the RN and left the care dyad and the other stepped away as a means to reset and return to complete routine care. Vandrevala et al. (2017) identified a spectrum of care actions reflecting a diverse range of HCAs beliefs on sexual expression of older people and dementia and their duty-to-care within the boundaries of a nursing home setting.

Summary

This study has positioned attributes and traits as the basis for adaptive decision-making through loose connections with constructs, recognising the importance of traits as an influencer on care decisions. However, the methods of data collection and survey design did not allow for sufficient specificity to be able to understand the breadth and nuances of traits. There is a need to understand how institutional motivators and socially derived perceptions influence HCA direct care decisions in ARC and affect outcomes related to the quality of life of residents. Sawatzky et al. (2021) calls for attention to the use of patient reported outcomes without direct engagement, which can result in a mismatch of direct-care goals as a result of patient's reprioritising what is important to them based on their health experiences. Resident goals of care, such as end-of-life decisions (de Voogd et al., 2021; Mattiasson & Andersson, 1994; Sutherland, 2020), sexual expression (Vandrevala et al., 2017), pain management (Carder, 2012; Fitzgerald et al., 2009; Holloway & McConigley, 2009a; Hunter et al., 2016), and day to day preferences (Blok et al., 2022; Cameron, 2021a; Cameron et al., 2020; Janes et al., 2008; Kalaitzidis & Harrington, 2018; Kontos et al., 2010; Tarzia et al., 2015) are interpreted by HCAs based on their personal relationships and knowing the residents. Healthcare assistant decisions may or may not factor in the residents' preferences, creating mismatches between planned care and what is important to the resident. The findings of this study support the position that HCA decision-making has a significant influence on residents' quality of life and their ability to maintain or achieve personal goals. However, the following question emerges from this study: What exerts greater influence on HCA direct care decisions - the institutional constructs or the residents' assimilation into institutional communal care?

Chapter 5 Decision-Making During Uncertainty

The overall research question, “How do HCAs make direct care decisions in ARC facilities?” was addressed through a series of more specific questions, such as, “How do HCAs make non-routine direct care decisions, especially in uncertain situations?”. When faced with making decisions in unexpected or vague situations, where knowledge is lacking or in conflict with personal values, existing routines or social norm, decision-makers draw on experience and environmental cues (Wulff et al., 2019). Whilst the environment of ARC is complex it is important to understand which cues HCAs value over others and how their experience informs decisions. Tacit or intuitive knowing and reasoning based on objective judgements is common in clinical decision-making (Marcum, 2012). However, the basis for HCA care decision-making has not been discussed, particularly in the context of uncertain situations where knowledge might be lacking. Participants commonly used their own experiences to frame their responses to the vignettes. Examples from vignette interview data are provided to illustrate the rationale used by HCAs when describing the actions they felt were an appropriate response to the vignette in question. The analysis of findings from four vignettes in which three dimensions of HCA knowing were manipulated: knowing the resident, experience working in care facility, and experience as a HCA sought to assist in understanding HCA decision-making. To control for complexity in the vignettes, a change from the baseline behaviour of a resident was used as a constant when depicting a situation that called for a non-routine decision to be made by the HCA.

Each vignette progressed in complexity, increasing the degree of uncertainty through each of the dimensions of knowing. Four organising themes and eleven basic themes were identified across the responses to the vignettes. Basic themes represent the actions participants identified as appropriate within each vignette. Pairwise co-occurrence of action themes is presented in a table for each vignette, highlighting if-then decision arrangements and the influence of uncertainty on decision-making. Participants commonly used personal experiences to illustrate and provide the rationale behind their responses. This provided a finer granularity to perspectives and motivations for decisions, and while that did not affect the relational proximity of basic themes within the organising themes, nuances identified are discussed within each of the findings of each vignette.

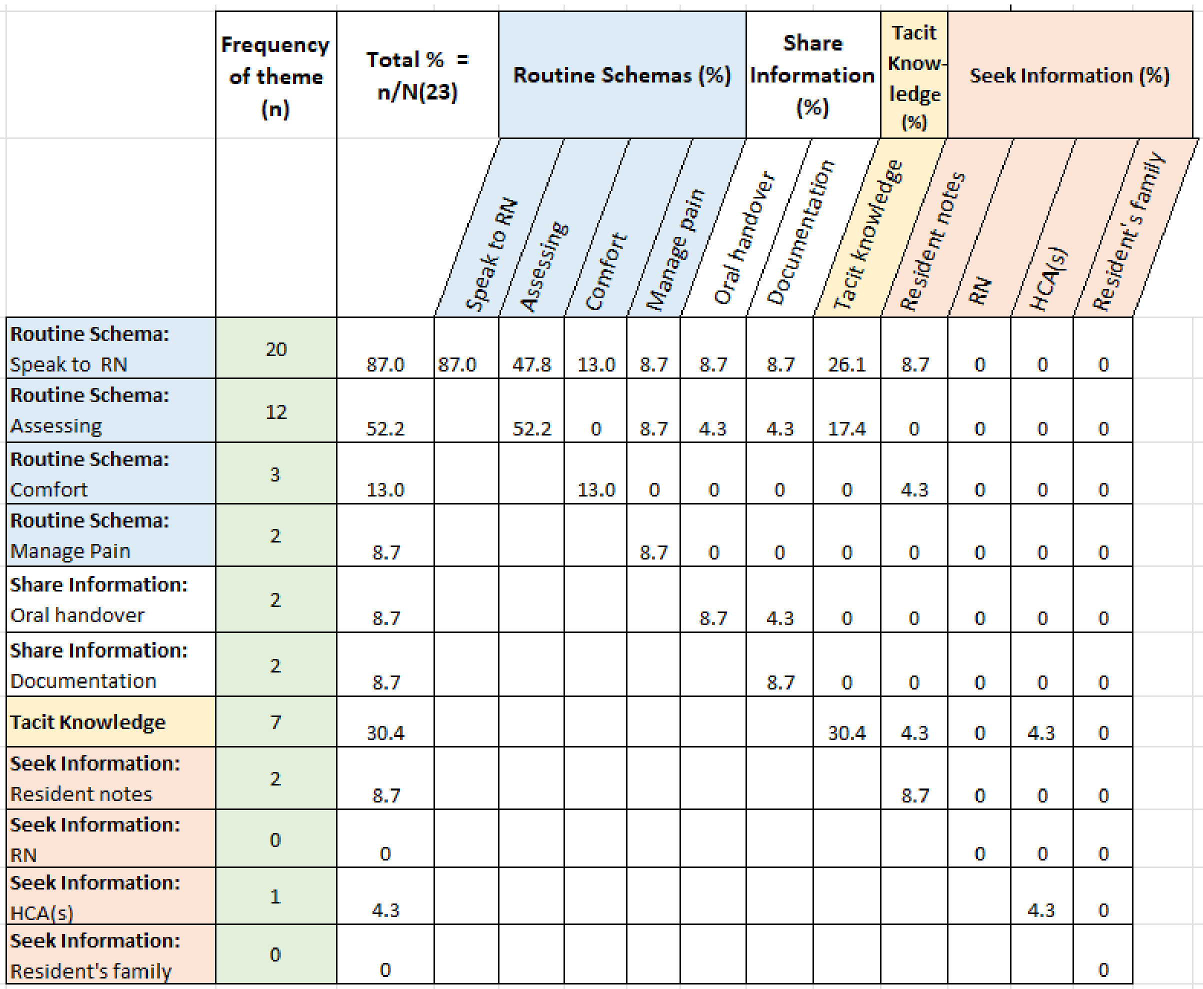
Vignette One: Certainty In Knowing the Resident, the Care Environment, and the Role of the HCA

The first vignette in the series was designed to act as baseline by providing the greatest degree of certainty in all three dimensions of knowing. The change in the health status of the resident is the only variable that creates uncertainty.

Vignette One: A resident has lived at the facility for 1 year and is well settled into the daily routines. They have multiple illnesses and are generally not well. Unexpectedly, they complain of pain, but because of their progressive dementia they are unable to give any detailed information about how they feel or their health status. The healthcare assistant caring for this resident has been working with them for the past year.

Table 5.1

Vignette One: Percentage of pairwise co-occurrence of HCA actions.



	Frequency of theme (n)	Total % = n/N(23)	Routine Schemas (%)				Share Information (%)		Tacit Know-ledge (%)	Seek Information (%)			
			Speak to RN	Assessing	Comfort	Manage pain	Oral handover	Documentation	Tacit knowledge	Resident notes	RN	HCA(s)	Resident's family
Routine Schema: Speak to RN	20	87.0	87.0	47.8	13.0	8.7	8.7	8.7	26.1	8.7	0	0	0
Routine Schema: Assessing	12	52.2		52.2	0	8.7	4.3	4.3	17.4	0	0	0	0
Routine Schema: Comfort	3	13.0			13.0	0	0	0	0	4.3	0	0	0
Routine Schema: Manage Pain	2	8.7				8.7	0	0	0	0	0	0	0
Share Information: Oral handover	2	8.7					8.7	4.3	0	0	0	0	0
Share Information: Documentation	2	8.7						8.7	0	0	0	0	0
Tacit Knowledge	7	30.4							30.4	4.3	0	4.3	0
Seek Information: Resident notes	2	8.7								8.7	0	0	0
Seek Information: RN	0	0									0	0	0
Seek Information: HCA(s)	1	4.3										4.3	0
Seek Information: Resident's family	0	0											0

Routine Schema

A total of 51 action themes were identified, most belonging to the organising theme of routine schemas (n=37; 73%) (Table 5.1). Four routine schemas were discussed by the participants. Speaking to the RN, Assessing and comforting were discussed most frequently. Speaking to the RN occurred with the greatest frequency. The HCA described in the vignette had the most experience as a HCA and knowledge of the resident.

Speak to RN. Actioning this routine schema occurred most often (n= 20; 87%) when the participants described the decisions that should be used to address the resident's situation. *Speak to RN* was the most frequent routine schema decision (n = 20). Speaking to the RN was considered by participants as an expectation of their role as a HCA when a change in the resident's condition occurred. They described knowing the resident was a basis for this decision. The expectation that it was the RNs role to diagnose and treat the resident was commonly shared by participants.

> ***Interviewee 5*****:** *You go and you tell the nurse and the nurse is the one to assist them, check them out and see and then according to their history or whatever, they'll see what they're suffering from and check those areas first and see what's going on.*

Assessing. Just over half of the participants described *assessing* the resident (n = 12). The co-occurrence of speaking to the RN and assessing was 47.8%, meaning that nearly half of those choosing to speak to the RN were also assessing the resident. Knowing the resident as a basis for either actioning HCA led interventions and/or speaking to the RN were described in terms of an 'if-then' decision arrangement. If the HCA was unable to identify the reason for the resident's issue and address their condition within their role, they would then speak to the RN.

> ***Interviewee 14:*** *…so with [non-verbal residents] there's, there's a couple of things. She might want to go to the toilet, so you go take her to the toilet, eliminate that. She's always sore, she's sore everywhere, so we put the cream on her arms her legs, you know, just to help that. Then she has regular Panadol, but anything different, if we see anything different, then we will relay back to the nurse to have a look at her to make sure that everything is all in line…and that we know we've eliminated what her normal calling out is because she wants to move her bowels, or she wants to go to the toilet. So, if we can eliminate the stuff that we know, then they [RN] can have a look for anything else that we don't know*.

Assessing could also be collecting subjective and objective information as an antecedent to speaking to the RN.

> ***Interviewee 7:*** *So, if I was that caregiver I would be looking out for - obviously I know that resident quite well, so I'd be looking out for what's different in them, what is not normal for them. So, obviously they're in pain, obviously that's normal - or well, they're obviously not well which is normal for them, but if they're complaining of pain and they're not able to verbally or show me where they are in pain, I have to look for signs. So, are they limping? Is it their hand weak or their shoulder is frozen, something like that? First of all, I'd take obs, monitor them, tell [the RN] and yeah.*

Comfort. Providing comfort (n=3) co-occurred with speaking to the RN (n =3) was a strategy described by participants to address the needs of the resident within their role when handing the situation over to the RN. Although this decision did not occur as frequently as other routine schema, the rationale for this decision choice provided insight into how the HCAs perception of the resident's condition influenced decision-making pathways.

> ***Interviewee 1:*** *I'd get the RN straight away. I've, I've worked in dementia. I've worked in lock-up dementia. Why don't I know this? And just wait for the RN to come. I suppose just calm the resident, just…*

Pain management was considered the role of the RN while comforting the resident. Making a resident comfortable was the responsibility of the HCA.

> ***Interviewee 12:*** *All we can do in that situation is really go to the nurse and say they're in pain but they can't say where…and depending on if they're in bed or if they're in the chair, then we can put them into bed or try and make them comfortable in that way; offer them a drink, or if they're hungry or - yeah.*

Share Information

Despite the preference for verbal handover identified in this study, the decision to share information about the residents change in condition with others during shift handover was only discussed by two participants, equally co-occurring with written documentation (n=2) and discussed in terms of work expectations and supporting the continuity of care between shifts.

> ***Interviewee 8:*** *Say I was coming on as a second care giver, the information that she gives me, I will ask her what has changed, why do you think that is happening? Have you rung [the RN] or whoever it is to explain what is going on? And I throw the ball back at her; what would you like me to do, or what do you want to do? Do you think that [resident] needs help…straight away? Do you think you are doing the right things? Can you give me a list of what's changed in your eyes? And she'll tell me. I'll say well now what do you think you should do before you leave the facility? If she says, "well get help", I said, "that's right, get the help". But I said what else have you have, have you done and she might look and go what do you mean? Documentation. Have you written it down?*

Tacit Knowledge

A third of the participants (n = 7) described using tacit knowledge. Tacit knowledge in this first vignette presented as knowledge of the resident and past professional and personal experience. Tacit knowledge was used to make judgments related to risk and as a basis for the decision to speak to a RN. The co-occurrence of speaking to the RN and using tacit knowledge was identified in 26.1% (n=6). The following illustrates the participants use of previous professional experience to inform decision actions.

> ***Interviewee 13*****:** *Like one day I used my physio experience. I am working with [Resident] mostly three days, from Monday, Friday and Saturday, so after my Saturday shift, I came on another [shift] - not Monday, he's okay. Then another [shift] - then on Friday when I came, I feel he is dragging his leg more and he's taking a little bit more time to stand up……and his hand, he is not using more, because he got little bit of that side affected……before he came here.*
> **Researcher:** Oh, so was that from a past stroke?
>
> ***Interviewee 13*****:** *Yeah. but it's getting little bit more [affected], according to my physio experience, I just……I feel like maybe he got another stroke or something……but he don't know. Nobody knows, because he don't know - he got dementia, he never tell anyone. If it is mini [stroke] then definitely he don't fall or nothing, it's just happen. I just inform the nurse, then on, on the third day also I watch. We just keep eye on them and when doctor came, they just tell doctor about that. So, [the RN] said maybe he got mini stroke, yeah and that's right.*

Intuitive decision-making can narrow perceptions, resulting in favouring decisions based on past care experiences. The following illustrates how personal care experiences informed the participants response to the vignette. The decision action for routine pain management foregrounds subsequent decisions which are mapped to their experiences with other residents.

> ***Interviewee 4*****:** *All my shift yesterday [the resident] stayed in her room. She didn't even come out and I was like okay, she is sick.. Got her into her pyjamas and put her to bed. She stayed there for the whole three and a half hours. But she was like - you know when you're full of phlegm and you want to cough and that really rattly cough? And I was like, aww, I don't want to put stuff down her mouth or give her some drinks in case it just lingers. But [the RN] said, "it's okay, her breathing's fine, it's just her having a cold. She's got nothing wrong with her breathing." So, that was okay. But she [the resident] looked at me and I was like, oh gosh, she must be in pain. I'd never seen her like that, so we ended up giving some liquid paracetamol. I told [another HCA] that she was okay, but we had laid her on her side so that she didn't choke on her phlegm or whatever she had down there; tilt her to her side and boom, it all just came out …even the medication. So, lucky we did, because if I had left her like that, I was like no, I better tilt her before I leave…so I turned her on her side and yeah, it just all came out. I told [the other HCA], do not leave her or put her on her back just in case she chokes, just keep turning her side to side like what we do with [another resident].* But yeah…
>
> **Researcher:** So that was just really your own experience that helped you navigate that?

> ***Interviewee 4:*** *Yeah. Because I was like - because I've never seen her like that and I sort of freaked out, because [the Resident] is very vocal, telling you blah blah blah blah blah and you're like, "come on [resident]", but with her dementia, yeah…just have to be gentle with them aye.*

Seek Information

Few participants (n = 2) mentioned seeking information from the residents' notes. Seeking information from written sources was discussed when information sources were limited, such as on nightshift or an off-site RN.

> **Interviewee 8:** *For information it would be the resident's files, communication book, their medical - their own personal files. So, if I think, "oh, something's not right" and I, I've got no one to fall back on…I'll bring down their file and I will read their history. By reading their history and their medical [notes], what's what and what's not, I can learn from there. If I'm in doubt and I'm not too sure about it, say look, then I will ring [the RN] I'll say, "look, such and such is happening. It's bugging me. Can you advise me what I can do?" Most of the time I can cruise through, it's not a problem. But if I think I'm going to put that resident at jeopardy or anything like that, then I will ring [the RN] just to make sure I'm doing the right thing before I proceed.*

Vignette One Summary

This first vignette provides a baseline for decision-making in an uncertain situation where the HCA has experience as a HCA and knowledge of the resident to draw from. When faced with a change in a resident's health, the decision to speak to the RN was identified most, 87% (n=20) of the participants. Just over half (n=12) of the participants also identified the routine schema assessing, and many of these occurrences (n=11) co-occurred with speaking to the RN.

Participants discussed a decision-making pathway where knowledge of the resident and role expectations acted as motivators for speaking to the RN. Participants described transferring decision-making to the RN when the HCA assessed the resident and was certain that the resident's situation was outside the HCA role, which varied. Holloway and McConigley (2009b) found that personal judgements about a resident's condition, such as pain, influenced HCAs decisions on care pathways which were narrowed by perceptions of acceptable risk and the resident's condition (Fitzgerald et al., 2009; Francis-Coad et al., 2019).

Caspar et al. (2016) identified one-way bottom – up information gates where HCAs took a hierarchal approach to the dissemination of information for the purpose of communicating a change in the resident's condition. The role of assessing and reporting residents' needs to the RN is seen as a primary role by the HCAs based on their knowledge of a resident gained through providing care. Tate et al. (2020) identified HCAs as the “eyes and ears” of the RN and that information provided to the RNs was used to inform clinical courses of action.

Vignette Two: Uncertainty In Knowing the Resident; Certainty In Knowing the Care Environment and the Role of the HCA.

The second vignette in the series introduces uncertainty by (not) knowing the resident while maintaining a sense of certainty about the environment of care and the role as and HCA.

> *Vignette Two: A resident who has lived at the facility for several years enjoys and participates in the daily social activities. Suddenly, the resident appears to be overly excited and not wanting to participate in any of the diversional activities. The healthcare assistant caring for this resident has worked at the facility for the past year but doesn’t know this resident.*

Table 5.2

Vignette Two: Percentage of pairwise co-occurrence of action themes.

	Frequency of theme (n)	Total % = n/N(23)	Routine Schemas (%)				Share Information (%)		Tacit Know-ledge (%)	Seek Information (%)			
			Speak to RN	Assessing	Comfort	Manage pain	Oral handover	Documentation	Tacit knowledge	Resident notes	RN	HCA(s)	Resident's family
Routine Schema: Speak to RN	8	34.8	34.8	26.1	4.3	0	0	4.3	0	4.3	4.3	13.0	0
Routine Schema: Assessing	12	52.2		52.2	4.3	0	0	0	0	13.0	13.0	26.1	8.7
Routine Schema: Comfort	4	17.4			17.4	0	0	0	0	4.3	8.7	4.3	0
Routine Schema: Manage Pain	0	0				0	0	0	0	0	0	0	0
Share Information: Oral handover	0	0					0	0	0	0	0	0	0
Share Information: Documentation	1	4.3						4.3	0	0	0	0	0
Tacit Knowledge	0	0							0	0	0	0	0
Seek Information: Resident notes	1	4.3								4.3	4.3	0	0
Seek Information: RN	6	26.1									26.1	13.0	0
Seek Information: HCA(s)	11	47.8										47.8	8.7
Seek Information: Resident's family	2	8.7											8.7

Routine Schema

Actioning routine schema occurred for just over half of the responses (n= 45; 53%) (Table 5.2). Assessing was the most frequently occurring routine schema (n=12) with half of the responses co-occurring with speaking to the RN (n=6) and seeking information (n=12). Comforting the resident (n=4; 17.8%), co-occurred with seeking information (n=4).

Assessing. Assessing the resident was discussed in term of identifying the possible cause of agitation (n = 12; 52.2%). "If – then" decision arrangements were described by participants and illustrated by a co-occurrence of assessing with seeking information which was undertaken by half of the participants who decided to assess the resident (n=6) and then to seek information from the RN (n = 3) *if* the information from another HCA was not available or adequate.

> ***Interviewee 4:*** *I would probably pull [the resident] to the side and ask if they're okay and is there anything I could help with, and if I'm unable to get anything from them I would probably ask a staff member that's been there or known that person longer, or the RN.*

Speak to RN. The decision to speak to a RN occurred 34.8% (n=8) of the time. This decision co-occurred with assessing (26.1%) and seeking information from another HCA, 13% (n=3), or reading the residents notes (n=1).

> ***Interviewee 16:*** *I would recommend talking to the RN and actually going through their history, like I've had to try to do, and looking at - so he used to do this, but he's not doing it anymore. That's concerning. Yeah. We have one resident who is like that the moment. You know, he was quite social, quite enjoyed a lot of things, but there's something going on with him. We're not sure whether it's he's really depressed, or there's something else health-wise going on, because he can't get up. He can walk 10 steps, but then he starts dry retching and vomiting... and you know, the doctor's been in. He's had blood tests and nothing's showing on anything but, getting him to the shower and his room is only like 20 steps, and you get him five steps out of his room and he's dry retching. And you know, I had said to the RN, "that's really concerning". He can't walk that far. And he refuses to get in a wheelchair to do anything.*

Comfort. Comforting the resident occurred in 17.4% (n=7) of the responses, co-occurring with seeking information from either the RN (n= 1) or another HCA (n=2). The motivation of comforting the resident was discussed as an immediate response, to be followed by assessment and information seeking pathway.

> ***Interviewee 12****: First remove them from their environment that's agitating them, ask them or talk to them if they haven't got dementia or anything, talk to the nurse; ask another care*

> *giver……you know, this behaviour's not normal, they're not normally like that. Do they think - do they have any suggestions what's happening with that person and yeah, probably - I would probably remove them and take them to their room and see how they are, if they settle in there.*

Seeking Information.

Two information seeking schemas were discussed by the participants. Seeking information from another HCA and seeking information from the RN. Seeking information from the HCA was the second most frequently occurring theme (n=11; 47.8%), following the routine schema assessing (n=12; 52.2%) The HCA described in this vignette had the same experience as the HCA in vignette one, however did not know the resident.

Seeking Information from Another HCA. Almost half of the participants sought information from another HCA (n = 11; 47.8%). Participants described an if-then decision arrangements, seeking information first from another HCA and then from an RN if needed. Knowing the resident was described as the basis for making appropriate direct care decisions:

> ***Interviewee 14****: "…find out the knowledge about him [the resident] first and such - like maybe [a resident]. …you know, if, if we tell people about [the resident], what his pattern is, what his routine is, and you know, if he's not doing this and he's not doing that, you know, tell somebody and… …then we can work out what best approach to take. No, don't wing it. Well, there's some things you can wing, but you can't wing that."*

The preference for seeking information from another HCA was based on the belief that an experienced HCA will have a better working knowledge of the resident in terms of knowing the resident's traits and care needs.

> ***Interviewee 9:*** *Okay. I'd go get another care assistant. I'd probably get like my buddy. I'd be like, "hey, [the resident] isn't feeling too flash, - I haven't worked with her before. Can you tell me, is she usually like this?" And if the care giver says this isn't her, you know, like [normal]- then I'd probably get that caregiver who's been there for a long time and has done this resident mostly to kind of see if she can assess what's happened, because obviously she knows them and like does them regularly. And if she can't figure it out, I'd - I'd probably say you look after her, I'll go get the nurse, because I don't know what I'm doing. I don't look after this person at all…*

Seeking Information from a RN. Seeking information from the RN occurred 26.1% (n =6) and differed from speaking to the RN where the HCA decided that the situation required the authority of the RN. Seeking information from the nurse was aimed at ascertaining if the resident's behaviour was usual, and commonly co-occurred with seeking information from another HCA 13.0% (n=3) in the form of an if-then decision arrangement if the HCA was unable to provide adequate insight.

> ***Interviewee 7:*** *Okay, so I would probably get a care giver. So, for me, I would probably go to another caregiver who's been here for longer, that might know the resident better… and I'd just have a quick word and say, "hey look, you know, she seems a bit off, not her normal self. Can you just go and have a conversation with her, go and have a look, see what you think?" And then I'd get a report back obviously and we'd either consult with each other and if it's fine we'll just okay, leave it. Or if there's an actual issue we'll go to RN, yeah.*

Vignette Two Summary

Just over half of the participants described assessing the resident to ascertain the cause for their change in behaviour. Half of the responses to assess the resident co-occurred with seeking information from a HCA. Not knowing the resident was perceived by participants as a barrier to making direct care decisions without first seeking information, with a preference for a HCA who knew the resident.

Themes associated with sharing information were minimally represented (n=1) and tacit knowledge was not represented in the findings of this vignette. However, seeking information, specifically from a HCA who had knowledge of the resident demonstrated the value of tacit knowledge, specifically the knowledge about the resident from HCAs who were experienced with their care.

Law et al. (2017) found that HCAs in ARC described seeking advice and support from colleagues as crucial to providing person-centred care, resulting in HCAs feeling supported and not needing to seek information elsewhere. In the context of home health services, Manthorpe et al. (2019) reported that the home health carers described that information exchanged through informal teamwork enabled them to provide person centred care, discuss client-related challenges and allowed them to undertake their role more effectively.

Vignette Three: Uncertainty in Knowing the Resident and the Care Environment

The third vignette increases uncertainty by eliminating knowledge of the resident and knowledge of the care facility while maintaining knowledge in terms of HCA experience.

> *Vignette three: After a serious fall, a resident has moved into the facility where their spouse has been living for several years. They made the transition very well. One day, uncharacteristically, the resident is not with their spouse for meals and wants to stay in their room. They are complaining of not feeling well but are unable to provide any further detail. The healthcare assistant who is caring for this resident is an experienced caregiver but is recently hired and has been working at the facility for a week.*

Table 5.3

Vignette Three: Percentage of pairwise co-occurrence of action themes.

	Frequency of theme (n)	**Total % = n/N(23)**	**Routine Schemas (%)**				Share Information (%)		**Tacit Knowledge (%)**	**Seek Information (%)**			
			Speak to RN	*Assessing*	*Comfort*	*Manage pain*	*Oral handover*	*Documentation*	*Tacit knowledge*	*Resident notes*	*RN*	*HCA(s)*	*Resident's family*
Routine Schema: Speak to RN	9	39.1	39.1	21.7	13.0	0	0	0	21.7	17.4	0	4.3	4.3
Routine Schema: Assessing	10	43.5		43.5	21.7	4.3	0	0	17.4	17.4	4.3	8.7	4.3
Routine Schema: Comfort	7	30.4			30.4	4.3	0	0	21.7	4.3	4.3	4.3	4.3
Routine Schema: Manage Pain	1	4.3				4.3	0	0	0	4.3	0	4.3	0
Share Information: Oral handover	1	4.3					4.3	0	4.3	0	0	0	0
Share Information: Documentation	0	0						0	0	0	0	0	0
Tacit Knowledge	13	56.5							56.5	8.7	8.7	13.0	4.3
Seek Information: Resident notes	6	26.1								26.1	8.7	8.7	8.7
Seek Information: RN	5	21.7									21.7	8.7	0
Seek Information: HCA(s)	6	26.1										26.1	0
Seek Information: Resident's family	3	13.0											13.0

Routine Schema

Assessing and speaking to the RN were frequently mentioned routine schema (Table 5.3). However, the total frequency the decision group of routine was less than 50 percent of all organising themes. Routine schemas were discussed as if-then decision arrangements, for example, speaking to the RN and comforting were equally frequent when co-occurring with assessing.

Assessing and Speak to RN. Assessing the resident was the most frequent routine schema (n=10; 43.5%), followed by speaking with the RN (n=9; 39.1%). An if-then decision arrangements between assessing and speaking to the RN is illustrated in the following example:

> ***Interviewee 9:*** *Oh, that's actually really tricky actually, makes me think. I'd go talk to the resident and see if you can find out why doesn't she want to come out and have dinner with her partner and - I don't actually know. That's really tricky. I would go to the resident first and say why don't you want to come out, you know? There's a lovely dinner out there." Try to like work them out to see," oh, it's really exciting", and if not, I'd probably go to the nurse and say I don't know this resident. I don't know this - I haven't worked here. I'm new to the place. I don't know why she doesn't want to come out, and probably just get the nurse to help me, just because you're in a territory that you don't know*.

Comfort and Speak to RN. To comfort the resident was the third most frequent routine schema discussed by seven participants (30.4%). Similar to the if-then decision arrangement between assessing and speaking to a RN, the inability to resolve the resident's behaviour with HCA initiated actions was the motivator for then speaking to a RN.

> ***Interviewee 18:*** *I could probably - if they live the same facility, I could probably get the spouse to come over and talk to them, you know? If that's the case [spouse unable] - me, I always talk. I always talk to them calmly really. If it doesn't work, I always go to the nurse. That's, that's me really*.

Tacit Knowledge

The use of tacit knowledge as a basis for the decision was described by 13 (56.5%) of participants. Tacit knowledge in this vignette was described as the HCA being able to perceive and act based on previous experience as a HCA in ARC. Deciding to speak to the RN (n=5; 21.7%) and provide comfort (n = 5; 21.7%) co-occurred equally with the tactic knowledge.

The constant factor for all vignettes was a resident who is familiar with daily life in ARC but experiences a noticeable change in their behaviour. This vignette was written with the intention of maintaining that constant by introducing the resident as having recently transitioned into the ARC environment as the spouse of an existing resident. However, during interviews the transition from visitor to resident was considered by the participants as important, providing unique findings in terms of the role that the HCA plays in the enculturation of a new resident into the life in the round of ARC.

> ***Interviewee 10:*** *The care assistant should be able to handle the problem, once again by sitting, talking. Yeah, 'cause it could be, a thing with husband and wife and then again it could be with other residents. I mean it takes up to about three months for a person [resident] even if they've been coming in all the time, to actually settle into their own routine being there. Having a husband can hinder it because he wants her to care for him while they're in there. You've got to break that tie, just that little bit so that she understands, and he understands that it's the caregivers that are doing the caring, not the wife or the husband.*
>
> **Researcher:** So, you figure that the health care assistant who has got experience…*?*
>
> ***Interviewee 10:*** *Yeah, she should be able to handle that. But if she can't, we're - everyone's there to help.*
> **Researcher:** So that would be a situation that health care assistants would probably - or something like it, would've gone through at some point in their career?
> ***Interviewee 10:*** *Yes*

Healthcare assistants described how they guided new residents into the daily life of ARC, with the intent to align them with the constructs of ARC in the role of a resident.

> **Researcher:** … the process of learning the resident?
>
> ***Interviewee 15:*** *That takes about two weeks for us to get to know a resident and for the residents to get to know us and our routine. Basically, when they come into a rest home they have an idea and it's up to us not to break down the idea. But, to just gently guide them with respect into the routine, so that they fit in with all the other residents…and the routine of the workplace. Yes, and it is, it is a strategy. A new person comes in and - I mean we don't know them in any way, shape or form and it's, it's just gently guiding them and they're gently guiding us - sometimes not so gently, but… …yeah, it's, it's a work in progress.*
>
> **Researcher**: And then your point of negotiating them into the routines of the facility… I would imagine that takes a great deal of understanding?
>
> ***Interviewee 15:*** *A lot of patience, a lot of understanding, a lot of I guess mothering/nursing. You're forming a relationship and it's got to be - and it's absolutely frightening for them… …terrifying sometimes.*
>
> **Researcher:** Is there anything, other than that relationship building?

> ***Interviewee 15:*** *Yes, 'cause you have to earn their trust… cause that is not given.*

Additionally, the assumption was that an experienced HCA would be able to accurately assess the resident's current situation.

> ***Interviewee 14****: Oh, shall we say like [HCA]? So, like [HCA], she's only new but she's experienced.*
>
> ***Interviewee 13:*** *Yeah, that's right, [HCA]. Maybe I think she will figure it out, yeah, because she got lots of experience, so she definitely go there and see if there is a real [concern] - they are ill, and that is the reason they don't want to talk or don't want to stay at the meal, or maybe there is something happen between them (the spouse) or whatever is the reason.*
>
> ***Interviewee 14:*** *But I think from their experience, if the care giver has enough experience, they would find out what the story is and then she'll work it out from there really. Because there's no other way to do it, because you just have to work out how you're going to do it…*
>
> ***Interviewee 13:*** *Yeah, yeah, figuring out.*

Seeking Information

Seeking information from resident notes (n= 6; 26.1%), the RN (n=5; 21.7%), another HCA (n= 6; 26.1%) or the family, such as the spouse (n= 3; 13.0%) was discussed in terms of collecting information to assimilate their working knowledge of routine care to meet the resident's needs and preferences. Seeking information from a RN or a HCA were equally frequent when co-occurring with seeking information from the HCA (n= 2; 8.7%), the RN (n= 2; 8.7%) and resident notes (n=2; 8.7%). Seeking information from residents' notes was mentioned with a slightly greater frequency (n=4; 17.4%) when co-occurring with speaking to the RN.

> ***Interviewee 3****: So is the spouse that's been living there a while, are they compos mentis or…*
>
> **Researcher**: No, the spouse isn't able to provide you with any information.
>
> ***Interviewee 3:*** *Then I would go to the nurse or caregivers that have been looking after the spouse because they would have interacted with the other person when they were coming in to visit and if I couldn't find anyone, then I'd go back through their progress notes, the new resident's progress notes, because that should give you a bit of information about what their normal would be. And it may be a fact that you know, their previous fall, they're on some high medication so they don't want to be with their spouse and show them like weakness so to say, because they may have always been the stronger part of the partnership. Or, you know, they [the resident and their spouse] may have had a fight. And they just don't want to see each other for a little while. But you know, I'd find someone that actually knew, knew them because*

> *yeah, it's always really hard. But, but on the other hand I'd probably go into the person that doesn't want to come out anymore and just have a wee chat to them about you know, how's your day and just try and niggle out a few of the possibilities of why they don't want to come out and possibly where the pain is …*

Similar to the findings from vignette 2, needing information about the resident was the primary motivation for seeking information from someone who knew the resident. This response brings forward an additional dimension of knowing; connections made prior to becoming a resident. This type of knowing was also described by Interviewee 4 when describing how cultural and familial connections helped to inform the care decision to provide comfort (Table 4.13)

> ***Interviewee 7:*** *I think I'd just do obs on them and then I would probably encourage them. I mean if the - if the obs were okay, I think I would still encourage them as much as I could to come out, or get, or get another care giver - obviously that care giver is new, so that resident might not feel comfortable yet with that caregiver. So, there could be other things going on; they might just be feeling really down. They're not sure. They don't want to particularly be there. So, I think I would get a caregiver that they know previously from their spouse being here. Obviously, they've come in and visited so you know, we obviously talk to the spouses and stuff, so……I think I would get a caregiver that's been there for longer, that knows or has had conversations with that person due to the spouse being there, to see if they can - they feel more comfortable discussing any issues with that caregiver.*

Healthcare assistants discussed seeking information as part of their process before engaging with a new resident. However, the role of the HCA orienting the resident to the available options and routines was discussed further.

> ***Interviewee 25:*** *Oh, like though we are very experienced, but a new resident is very new for us. First thing is that we'll read their profile, and we also talk to the RN. The RN will explain to us [the resident's situation and preferences] before we work with them. But still we ask to them, like, "how can I help you?", and like some residents they prefer a female caregiver. We ask them, "are you happy if, if I am doing your cares? Or, if you like a female care giver, I can send a female for you." We can also explain to them there's our dining room, there are lots of other resident if you want to go there, you get chance to socialise with many of them at the table for you. But if you want you bring lunch in the room, that's also fine. So, we can talk to them......and we get all information what he or she wants and start working from there.*

Vignette Three Summary

The findings from this vignette provide additional depth to previous vignette findings about the motivations for seeking information and the value and use of tacit knowledge. Routine care schemas, assessing and speaking to the RN, were discussed in if-then arrangements similar to the findings in previous vignettes. Participants placed value in the knowledge gained from the experience as a HCA in ARC that provided them with insight to assess and problem solve.

Similar to the findings of vignette one, intuitive decision-making in situations with limited cues resulted in participants assimilating or accommodating existing care strategies informed by their experiential knowledge of ARC work. Participants considered there were contextual similarities in ARC and that their experiential knowledge enabled them to provide care with an acceptable level of approximation. However, participants also described that seeking information about the resident was necessary to address the care situation. For those who worked between care contexts, such as agency nurses, experience has been described as the basis for a common ground understanding of the practical work of nursing, but not the cultural aspects of daily work specific to a locality (Berg Jansson & Engström, 2022). Burnett and Lloyd (2019) discussed the information-seeking pathways used by individuals when transitioning to a new environment, such as a new job, as reliant on social interaction. The pathways to obtain information reflect the accepted social interactions for information seeking. In the case of vignette three, the resident was unknown to the care staff as a resident, despite having known them as a visitor. Participants suggested seeking information from staff who knew the resident as the visiting spouse prior to becoming a resident. This finding helps to highlight the value placed on informal and incidental learning used to support decision-making.

Findings unique to this vignette were participants' identification of the resident's unfamiliarity with the role of a resident as a motivator for tacit knowledge sharing. The participants discussed the HCA's responsibility of introducing a new resident to the practicalities of living in ARC; providing insight into the care decisions made when transitioning residents into communal care routines. Laird et al. (2022) and Heliker and Scholler-Jaquish (2006) describe the adaptation phase for residents as a 5–6-week process of learning the 'ropes' of institutionalised care, achieved through interaction with care staff. The findings of this vignette provide greater understanding to the motivators and strategies used when integrating new residents into the social norms of ARC.

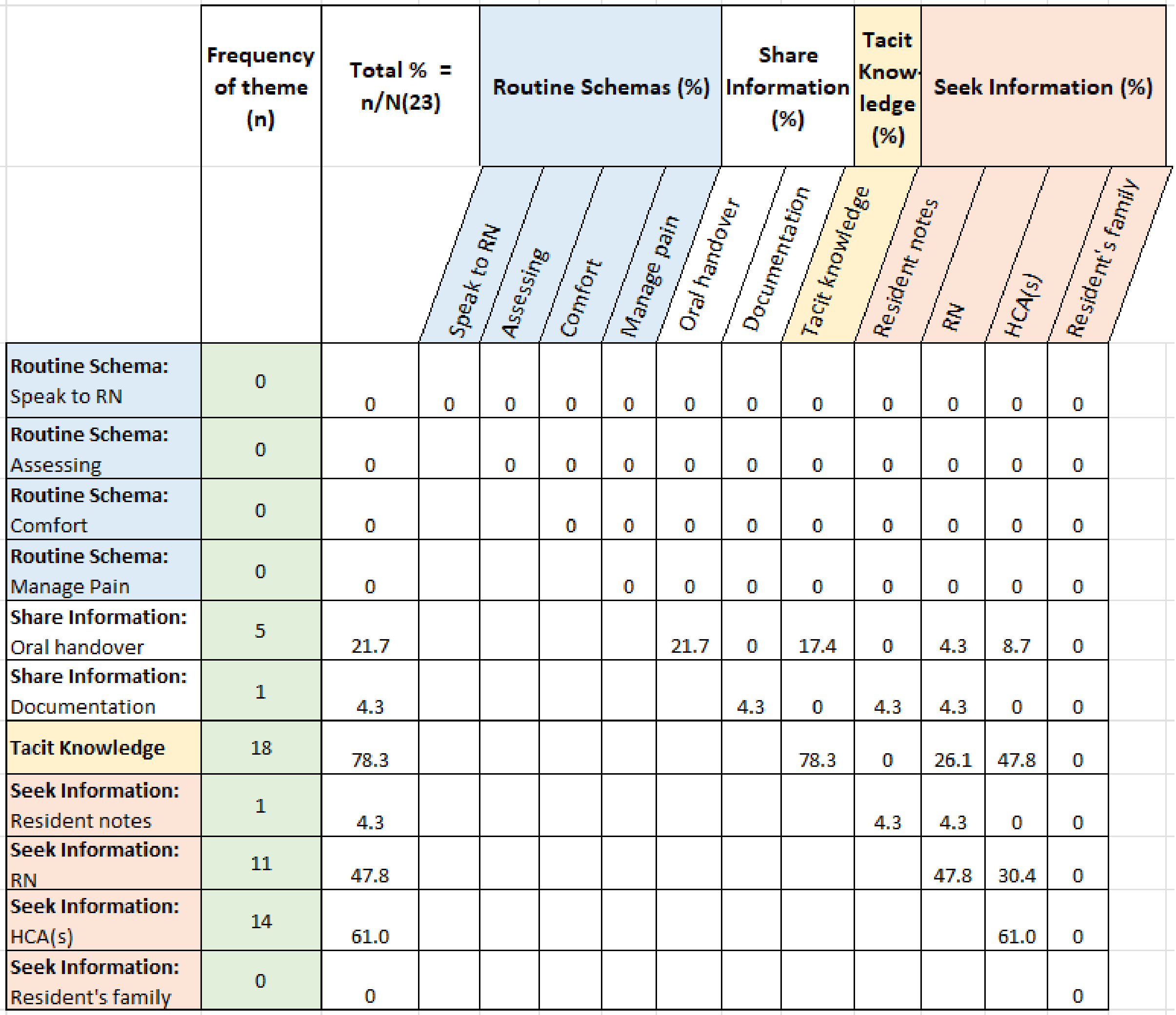
Vignette Four: Uncertainty In Knowing the Resident, the Care Environment, and the Role of the HCA

The final vignette progressed uncertainty to all variables; the HCA had no experience as a caregiver or with the ARC facility and they did not know the resident.

> *Vignette four: A resident who has been living at the facility for a while and used to the daily routines appears anxious and does not want to be part of their normal routine cares. Because of a past stroke they are unable to provide any information about how they are feeling. The healthcare assistant caring for this resident is a new and inexperienced HCA and is also new to the facility.*

Table 5.4

Vignette Four: Percentage of pairwise co-occurrence of action themes.



	Frequency of theme (n)	Total % = n/N(23)	Routine Schemas (%)				Share Information (%)		Tacit Know-ledge (%)	Seek Information (%)			
			Speak to RN	Assessing	Comfort	Manage pain	Oral handover	Documentation	Tacit knowledge	Resident notes	RN	HCA(s)	Resident's family
Routine Schema: Speak to RN	0	0	0	0	0	0	0	0	0	0	0	0	0
Routine Schema: Assessing	0	0		0	0	0	0	0	0	0	0	0	0
Routine Schema: Comfort	0	0			0	0	0	0	0	0	0	0	0
Routine Schema: Manage Pain	0	0				0	0	0	0	0	0	0	0
Share Information: Oral handover	5	21.7					21.7	0	17.4	0	4.3	8.7	0
Share Information: Documentation	1	4.3						4.3	0	4.3	4.3	0	0
Tacit Knowledge	18	78.3							78.3	0	26.1	47.8	0
Seek Information: Resident notes	1	4.3								4.3	4.3	0	0
Seek Information: RN	11	47.8									47.8	30.4	0
Seek Information: HCA(s)	14	61.0										61.0	0
Seek Information: Resident's family	0	0											0

Participants discussed the limited ability for the new HCA to be able to provide direct care, stack tasks and predict care demands. Values used by the HCAs to streamline decisions were derived from the social norms and rules of the life in the round. The inexperienced HCA lacks an understanding of the accepted motivators and values used in the decision-making ecology to inform decisions and maximise the return on their care efforts.

The use of tacit knowledge was the most frequent theme (n=18; 78.3%) (Table 5.4) and was described by participants in terms of accessing the tacit knowledge of other HCAs. Seeking information from another HCA (n=14; 60.9%) co-occurred with tacit-knowledge (n=11; 47.8%) and seeking information from the RN (n=7; 30.4%). Seeking information from the HCA or the RN was discussed in terms of finding someone who knew the resident, with a preference for a HCA who was considered to have more hands-on experience.

Sharing Information

Participants discussed the importance of information sharing from the perspective of an experienced HCA. Examples included orienting the new HCA to the existing routines and rules of work and modelling personal care practices.

> ***Interviewee 4****: So, she needs to be orientated… Right, a newbie. Hm, because I'm the newest member at work. I would show the newbie everything that I know and having this resident that doesn't like participating…I would sit with that resident [and] with the newbie and ask why they don't like coming out. We've had one [resident], just passed recently, and he was one of those ones that didn't like coming out and participating. He was very, very difficult, but we were very, very patient…and there was always something why he didn't come out. It was more of attention. Yeah, showed him love, he'll come out. And then, if you sort of like twist it and he'll go oh okay, he'll come out, so we were sort of like not tricking him but going yeah, okay, yeah, no, come on… But with a newbie, oh, just like the last question [vignette 3], I'll be there to support and help because we're a team. We don't leave anyone on their own to figure out for themselves - well that's not what I would do anyway. And we all do the same work, but we all have our own different way of doing things, yeah.*

Participants discussed the importance of sharing information on how to provide efficient care to support routine shift work demands. A three-shift shadowing period before new HCA assumed their own roster of residents to care for was commonly referred to, along with the need for continued support for the new HCA by experienced staff.

> ***Interviewee 23****: So, orientation, maybe buddying them up with an experienced caregiver. They [ARC management] normally only do it for two or three shifts, which really isn't enough, but*

> *that's normally all they get. Probably observing her [the new HCA] and seeing what she does and doesn't do, and advising her. But, I think buddying them up with someone experienced is better, because if you're just standing there observing them while they're trying to do what they're trying to do, it's too nerve-wracking for them. So, if they watch the senior caregiver doing their cares and stuff, they can pick up tips and routine and stuff from observing. And training, encouraging them to do - or encouraging management or whoever - to get them into some training. Yep, because there's so many little tricks and, and little quirks and things that you learn as a caregiver to do to make your job easier and stuff and...*
>
> **Researcher:** Like what?
>
> ***Interviewee 23:*** *Like multitasking when you're - multitasking to have time, like encouraging them [the resident] to maybe wash their face and like gauging what they [the resident] can and can't do, making sure they're safe, whether it be sitting in a chair or whatever, encouraging them [the resident] to do for themselves what they can do like washing their face, shaving, whatever. While they're doing that, [the new HCA], making the bed and doing a quick tidy up.*
>
> **Researcher:** The idea of multitasking and being able to pick up the resident's cues...would a new care giver, especially an inexperienced one being able to do that?
>
> ***Interviewee 23****: Yeah - oh that's right, yeah. So, like teaching them tips and tricks and all the rest of it is a huge help...*

Tacit Knowledge

Reflective responses highlighted the values participants used to streamline decision-making in uncertain care situations. Nuanced care specific to the resident's condition was negotiated against routinised care, work rules and social norms. Participants discussed the impossibility of a new and inexperienced HCA being able to acquire this insight without the tacit knowledge sharing of experienced HCAs. Participants discussed a reliance on sharing knowledge of the resident's care needs and preferences available only through interaction with experienced HCAs.

> ***Interviewee 18:*** *If that caregiver is brand new to that facility, I don't think that care giver can manage, 'cause no experience at all. So, I would probably go in there and help, probably the 'cause of the anxiety of that resident is because of new face. Because you're new. You're new to me. I do not know you, the cause of that [residents' refusal] is probably the caregiver. Sometimes it depends how you approach the residents... especially if they have the dementia. They [the resident] really become aggressive, but sometimes the residents, they get anxiety. You have to be careful how you approach them, this triggers their anxiety sometimes, if you just go in there [resident's room] without knocking on the door, asking or saying hello first.*

> **Researcher:** This information that's not in the care plan?
>
> ***Interviewee 18:*** *No, not in the care plan, but if you can see the person, you know, the way that the resident acts.*
>
> **Researcher:** But it's not, it's not something that you could read about?
>
> ***Interviewee 18:*** *No, no... ...no. I encountered too many residents [who are deaf] and as I said, every individuals are different. I heard it through someone else, from the other colleagues said, "oh, you know this [resident]?", and I said "so, you have to be careful what you do ...before you enter the room." They [the colleagues] were talking in the nurse's station about it; I said, " what happened?" Oh my God, it become very abusive. Oh, probably the way you [the HCA] do it is not right.*
>
> **Researcher:** A new caregiver would need to go get help?
>
> ***Interviewee 18:*** *Oh, we have to tell her.*
>
> **Researcher**: She wouldn't figure it out?
>
> ***Interviewee 18****: Yes, she wouldn't, she wouldn't know. So, after that had happened, I would probably tell her, "okay, come on, you go out...and then I'll take over."*

Participants without experience working in ARC described their dependence on the microsystem and the rules of work to provide a frame for caregiving.

> **Researcher:** If you had to give a new international nurse coming from India advice, what would it be?
>
> ***Interviewee 19:*** *Yeah, I will tell them don't use your mind. What we have learnt, like not in that way, but what you have learnt, don't go for that. Just read the policies and ask the other colleagues before you go do anything.*
>
> **Researcher:** Because it's so much different?
>
> ***Interviewee 19:*** *It's so much difference here. Here you have to inform each and everything to the resident. In India you don't tell the patient so much. Once they have admitted you can do anything.*
>
> **Researcher:** Is that in a hospital setting? is there any aged care?
>
> ***Interviewee 19:*** *No. We have one aged care where I live in [location], but very few and they are not sick. They are walking ones.... definitely we don't have, because it was a new thing when I came to New Zealand...*

Seeking Information

Seeking information was underpinned by the need to know the resident's preferences and capacity to participate in routine care. Participants discussed how information seeking is essential for the new HCA to be able to provide routine care as expected. Sources of information were identified based on their knowledge of the resident with a preference for HCAs who were seen as having greater knowledge of the residents in terms of routine care needs.

> ***Interviewee 16:*** *Talk to whoever you can, you know, whether it's the manager, the RN, the other caregivers who have been there for a while. Talk to them. Find out what the situation is and you know, how best to work around what they [the resident] need, instead of just going in there and being thrown in the deep end and expected to know......which is pretty much what I was - you know, I had a week of orientation pretty much and thrown, thrown into it and expected to know what I was doing......straight away. Yeah, they just left me on my, you know, by myself.*
>
> **Researcher:** Is this the advice that you would give to a HCA three days into their role?
>
> ***Interviewee 16:*** *Yeah. Talk to whoever you can. Get as much information as you can. Because you, you can't go in there blind...and that's exactly what I did. I went in there blind, you know, - the first three days was, you know, what do I do? Yeah, and I've just had to pick it up slowly as, as I go. You know, make sure that you do have that person to go back to..., and can hold you accountable, you know, if you're doing something wrong you need to ask, "so what can I do to change what I'm doing to make sure that they're more comfortable?" Instead of just being like oh well, I'll do it how they've shown me...which is what I did, you know and half the residents didn't like it.*
>
> **Researcher:** That approach didn't necessarily fit?
>
> ***Interviewee 16:*** *One thing doesn't fit everyone. You know, you have to adapt to the resident; go and ask them, "do you like your back scrubbed hard, or do you like it softly?" and "would you like your legs moisturised?", some of the residents don't. And that's it, it's the small things that make the biggest difference for the residents. You know, a majority of it is, is the decisions are made for them, you know, like they can't tell you, "well, I want fish and chips for tea today"*

Vignette Four Summary

Findings provided insight into the uncertainties faced by new HCAs and how they learnt to provide direct care to residents. The results from vignette four were often reflective in nature. Seeking information from an RN or another HCA was discussed in a broader sense about of how care should be provided to the resident. Uncertainty and tensions experienced by participants as new HCAs provided valuable insight into how uncertainty was addressed by following routines, work rules and the social norms of ARC. Patynowska et al. (2023) reported that newly hired HCAs working in community settings preferred support from experienced HCAs rather than formal training by RNs which they felt did not meet their needs. Peer support was highly valued for reassurance, guidance and to alleviate decision-burden.

Participants described information behaviours from the perspectives of experienced HCAs reflecting on past experiences as a new HCA entering ARC. Uncertainty and resident care challenges were described as triggers to seek information from experienced HCAs. Sharing information was described in terms of the role expectations of experienced HCAs to “orient” a new HCA to the care routines. Passing down experiential knowledge such as “tips and tricks” and nuanced care approaches through social information pathways was described by participants as essential for new HCAs to learn how to deliver care. Benchmarking individual practice against what is role modelled can lead to the identification of larger knowledge gaps and the adoption of new techniques (Joynes et al., 2017). Seeking information was considered the role of the inexperienced HCA as they faced new or unusual challenges exposing gaps in their knowledge.

Certainty, Uncertainty, Risks and Tensions

The vignette responses provided insight into the influence of the social norms within the decision-making ecology and the dependency that HCAs have on the microsystem for addressing uncertainties. Across the vignettes, participants described how roles, tacit knowledge, and a sense of knowing the resident were essential to their decision-making. Unanticipated findings included the role of the resident from the perspective of the HCA, and how HCAs actively worked to integrate a new resident into the daily care routines and institutional schedules. The findings from the vignette introduced an aspect of decision-making associated with ambiguity in addition to uncertainty. Work experience was valued as a basis for addressing uncertainty but did not alleviate the ambiguities and perceived risk associated with not knowing the resident.

Uncertainty, ambiguity and risks are terms that are commonly interchanged; however, in decision-making the meanings differ. In ambiguity, the decision-maker is missing the information relevant to making a prediction (Frisch & Baron, 1988). Fundamental uncertainty is the lack of knowledge about options, the potential outcomes and probable outcomes (Hertwig et al., 2019).

Risks are hazards, threats or unexcepted outcomes that the decision-maker has awareness of and wants to avoid. The probabilities of the risk may be known, or unknown and result in ambiguity. Risks and their magnitude are learned through either description, such as reading evidence-based literature, and experience (Hertwig & Wulff, 2021). Healthcare assistants described making decisions from either personal experience or the experiences shared by other HCA, and the social amplification of risk (Kasperson et al., 1988). For example, the social amplification of risk, such as the fear of residents falling, was a product of personal experience and the social norms within life of the round. The flow of information about risk and risk events are subject to worldview and values, which can amplify or attenuate a risk response. A significant predictor of the use of restraints by HCAs was the fear that a resident might be experiencing pain or a fall (Fitzgerald et al., 2009). The risk aversion was amplified such that declines in a resident's functional ability resulted. The perceptions of risk can also be attenuated. For example, positive beliefs about the use of antipsychotics for controlling resident behaviour diminished the risks associated with medication side effects, resulting in increased use and request for prescriptions (Janus et al., 2017).

The vignettes cannot provide a weighting associated with perceived risk during uncertainty. However, Chatman's small would theory and decision-making theories suggest the decision-experience gap (Hertwig & Wulff, 2021) social amplification (Kasperson et al., 1988) and the relationship between risk awareness and the social norms and values of the life in the round in ARC have a significant influence on decision-making. It is from this position that the results are discussed.

Certainty

Chatman (1999) described life in the round as having a significant imprecision and accepted levels of uncertainty. Nuanced care was described by the participants as being informed by knowing the resident and the routines, rules and norms found in ARC. Communal care required a degree of flexibility when unexpected resident issues presented. However, in the absence of experienced based cues, the participants described the impossibility to meeting HCA role expectations. For example, the new HCA in vignette four, lacked the knowledge required to distinguish contributors to the resident's issue and how it should be managed with any certainty.

Certainty in complex clinical situations, such as a change in the health or behaviour of an older person in ARC, is described by Ilgen et al. (2019) as being less about certainty as a precursor for action and more about comfort with uncertainty. Comfort in uncertainty occurs when the decision-maker has the confidence to act, such as in vignette one when most (n=20; 87%) of the responses were to speak to the RN and just under half (n=12; 52.2%) of those responses co-occurred with assessing the resident (Table 5.1). Vignette One was the only vignette where routine schemas had the highest frequencies and seeking information the lowest. The HCA in that vignette was both experienced and knew the resident through an established care relationship. Experience caring for a specific resident as a form on "knowing" is well represented in the existing literature. Within the literature reviewed, the majority of studies identified knowing the resident as a basis for HCA decision-making (Blok et al., 2022; Cameron et al., 2020; Cameron et al., 2021b; Carder, 2012; de Voogd et al., 2021; Fetherstonhaugh et al., 2016; Holloway & McConigley, 2009a; Holloway & McConigley, 2009b, Holmberg & Godskesen, 2022; Holmberg et al., 2020b; Hunter et al., 2016; Janes et al., 2008; Kontos et al., 2010; Naweed et al., 2022; Sund-Levander & Tingström, 2013; Tingström et al., 2010; Wiersma et al., 2019).

Like the if-then decision arrangements identified in vignette two, the findings in Vignette Three present a high occurrence of routine schema, tacit knowledge, and an almost even occurrence between seeking information from the resident notes, RN or HCA. Participants' experience as a HCA enabled them to provide care with greater efficiency and supported intuitive decision-making. HCAs described gaining their experience within the small worlds of the ARC facilities within which they worked, unlike clinical professions where registration is gained through academic achievement and supervised clinical placements. The participants described how an experienced HCA would enable them to respond to an uncertain situation based on their tacit knowledge - gained from the experience of providing care to residents in ARC. The dimension of knowing as experience provides insight into the assumptions that HCAs have of those with ARC caregiving experience.

An unexpected finding was the high occurrence of tacit knowledge sharing in Vignette Four. Reflecting on their own experiences, the participants described the improbability of a new and inexperienced HCA being able to make informed care decisions. The orientation period, which introduced a new HCA to the institutional schedule and routine task expectations, was not sufficient to show how care was provided and how work to the rules of the shift. Participants reflected on the importance of passing on the 'tips and tricks' they learned to provide efficient care to the new HCA. The absence of representation of any occurrence of routine schema in Vignette Four provided some insight into the value of experiential learning amongst HCAs.

Uncertainty

The participants in this study described two decision pathways when confronted with uncertainty: the use of tacit knowledge to inform assessments and to seek information from within the microsystem. Grenier et al. (2005) offers temporal distinction between ambiguity and uncertainty that provides a structure to discuss the findings of the vignettes. Ambiguity involves the immediacy of the situation, whereas uncertainty refers to future oriented unpredictability (Grenier et al., 2005). For example, in Vignette Three, experience working in ARC was considered by the participants to provide the necessary frame of reference to interpret the care situation, but not sufficient to accurately anticipate how the resident would respond to a care action. Participants described this level of detailed information as being relationship based and not something found in written care plans. Finding someone who knew the resident was needed to avoid a care decision that could conflict with a resident's care needs and potentially complicate the situation.

Uncertainty presented in the vignettes was mitigated by seeking information from reliable sources of relevant information. Other HCAs, RNs and written sources were used to understand the resident's situation and decide the next care action. For example, participants responding to Vignette Two described how the HCA in the vignette should be able to figure it out based on experience and resident care notes and on shift staff would be able to provide them with the necessary detail, if needed.

Risks

Risk identification was drawn exclusively from the life in the round and considered within the constructs and attributes of the environment of care. Risk amplification and thresholds for seeking information were informed by social norms and past personal experiences. For example, in Vignette Four, Interviewee 16 reflected on how providing care based on what was modelled by another HCA during orientation resulted in uninformed care that residents disliked. Although literature discussed work experience, role hierarchies, relationships with RNs, knowledge of polices and established practice habits as influential to care decisions, the risk of providing care that was incongruent with a resident's needs was described by participants as a primary motivator for seeking information (Carder, 2012; Caspar et al., 2016; Garratt et al., 2021; Holmberg et al., 2020b; Hunter et al., 2016; Li et al., 2022; Naweed et al., 2022; Sund-Levander & Tingström, 2013; Sutherland, 2020; Tate et al., 2020; Wiersma et al., 2019).

Decision-makers use social norms and work rules of the care environment to understand their role expectations and what acceptable information options are available to them (Burnett et al., 2001; Chatman, 1996; Chatman, 1999; Chatman, 2000; Savolainen, 2020). Seeking information from a HCA for resident information was described as a preferred pathway for information about residents when providing care in uncertain or ambiguous care situations due to their knowledge of the resident's preferences. Information seeking pathways informed by social norms, such as assessing or comforting the resident was discussed as a pre-cursor for seeking information or speaking to the RN. For example, although the HCA in Vignette Two has experience in the ARC facility and as HCA in the resident's facility, not having an established care relationship with the resident created uncertainty. Seeking information from a HCA with knowledge of the resident in the context of routine care delivery was considered necessary to address the knowledge gap on residents' condition, capacity and care preference to make care decisions within an approximation considered acceptable by social norms.

Assessing the resident as part of a risk avoidance pathway was described by many of the participants. Except for Vignette Four, assessing the resident occurred with notable frequencies (Vignette One; 52.2%; Vignette Two; 52.2%; Vignette Three: 43.5%; Vignette Four: 0%) (Table 5.1; Table 5.2; Table 5.3; Table 5.4). Assessments were informed by tacit knowledge gained through work experiences, routine practice and assumptions based on knowledge of the resident and then used to inform care decisions. Heckman et al. (2017) discussed the HCA knowledge gap when caring for complex needs of residents with heart failure. Participants in that study described assessment strategies informed by experience working in ARC and the boundaries formed by role accountability between a RN and a HCA. For example, in Vignette One, pain assessments and treatments were identified as the role of a RN. Assessments by the HCA were used to decrease ambiguity, however, were exclusively experienced based, lacking information from description based (written or verbal) information commonly used when clinically assessing and diagnosing, such as an established pain scale. Participants discussed possible if-then decision arrangements, similar to the decision choices described by Holloway and McConigley (2009a, 2009b) to provide HCA-driven interventions, speak to the nurses, assess and monitor the resident's situation, or to ignore the problem. Although no participants discussed ignoring the resident in any of the vignettes, risk is framed within the confines of routine-care and the values informed by social risk-amplification and attenuation.

Risk can be amplified or attenuated based on the preferred source used as a frame of reference. Decisions made exclusively from personal experience are subject to weighting risk based on exposure to the same or similar events (Hertwig & Wulff, 2021). Residents in ARC are commonly frail with complex comorbidities; a HCA's experience caring for residents with complex medical conditions is certain. However, HCAs maybe unaware of when medical attention is needed due to lack of experience. For example, Interviewee 9 described how experience with a grandparent having a stroke informed the decision to seek help from a RN (Table 4.12). Hertwig and Wulff (2021) illustrated how information sources and experience weight the perception of risk by using vaccine reactions as an example. In the context of having the experience of either administering or receiving a vaccine, the perceived risk for a reaction can be attenuated through "underweighting" when there has been no experience with a vaccine induced reaction (p. 638). The decision-making frame of reference for HCAs in the current study is experiential and based on the capacity of a resident to participate in the routines of the institution and what is considered normal for that resident by the HCA. Experience gained from caring for residents or family as a reference for care decisions occurs frequently in the current study. For example, the decisions made on catheter related issues by different HCAs (Table 4.14), helps to illustrate the experiences used by HCAs to inform decisions.

Tensions

Participants described tensions in decision-making as practical conflicts, such as when they feel that action ought to be taken, but for a reason(s) can't be (Kiesewetter & Gertken, 2022). Much of the literature describes the barriers created by workload, staffing or time. However, results from the vignettes described a tension between the personal and the social epistemologies of ARC. Interviewee 18, in Vignette Four, reflects on being a new HCA from a different country and offers the differences between how care is provided from a cultural perspective and how that informs their decisions to adhere to the policies and norms of the ARC where they work. Van Maanen and Schein (1977) assert that it's becomes the role of more experienced colleagues to teach the newcomers traditions of organisation to prevent disruptions. Chatman (1999) described the role of information as playing a part in influencing behaviour to "fit the environment" (p. 208). One-on-one role modelling can enable a newcomer to quickly gain skills and appreciate the complexities of direct care associated with the role of HCA, but also be introduced the attitudes and values accepted as being "correct" (Van Maanen & Schein, 1977). Healthcare assistants have a significant social epistemic dependence on the microsystem to understand how their values, beliefs or practice preferences align with the norms and rules of the life in the round.

Summary

The vignettes provided insight into how HCAs make decisions in situations of uncertainty and offer summative findings on the epistemic properties of certainty, uncertainty, risks and the tensions caused by personal practical conflict. Healthcare assistants find certainty in the predictable routines and role definitions existing in the ARC decision-making-ecology. Comfort with uncertainty is tolerable up to a certain point, at which time information seeking from within the microsystem occurs. Comfort with uncertainty is a HCA specific trait, influenced by experience as a HCA and knowledge of a resident. In ambiguous situations, experience as a HCA was described as not equivalent to knowing the resident, requiring information seeking preferably from a HCA with an existing care relationship with the resident.

Vignettes introduced tensions as practical conflicts, actions felt that ought to be taken, but for a reason(s) can't be. Personal beliefs and values incongruent with the life in the round effect HCA's perceptions of certainty. The dependency that the HCA has on the microsystem to gauge their beliefs against the rules of work and social norms is significant.

A unique finding was the importance knowing the resident had on HCA certainty. The less a resident conforms to the institutional routines, rules and norms the greater the ambiguity and uncertainty perceived by HCAs. Healthcare assistants identified their role as instrumental to the transition of a resident into the patterns of care of ARC. A goal of the HCAs was to expedite the new resident into institutional routines which did not always align with the longer resident transition timelines reported in the literature, bringing forward questions on the parameters of personalised care

The findings from this vignette provide insight into how HCAs navigate uncertain care situations as well as aspects of routine decisions discussed in the previous chapter. Participants described routine schemas, such as assessing, as part of managing uncertain situations. Decisions identified as difficult by participants in the previous chapter also manifest conditions of uncertainty and tensions, such as palliative care or decisions to step-away from care. The next chapter will synthesise the findings from the different sources of data using the lens of Chatman's small world theory and decision-making theory to answer to the research questions posed by this current study.

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Chapter 6 A Discussion of the Synthesis of Findings

Introduction

This chapter summarises study findings presented in Chapters Four and Five and addresses the overall research question: How do HCAs make direct care decisions in ARC facilities? The key findings of specific research questions that sought to inform the overall question are highlighted and discussed in relation to relevant literature. Each section below presents the research question as a sub-heading.

Findings have been shaped by Carspecken's critical ethnographic methodology and Chatman's suite of small world theories both of which recognise the significance of social context. In the current study the institutional rules and social norms of ARC are seen as influential factors on HCA decision-making. As a result, the types of routine decisions made by HCAs were identified, as well as the key institutional constructs, attributes and information behaviours of HCAs. Chatman's theories provide a lens for inquiry and understanding. However, decision-making theory is also needed to conceptualise how discrete or non-routine HCA care decisions are made. Structural factors, such as staffing intersects with processual demands such as routine care schedules, role expectation, and HCA experience and ability to stack and re-stack task demands.

Semi-structured interviews and observations identified the types of decisions HCAs made routinely and those they found easy or more difficult. Patterns of information seeking and sharing were identified through observations, and details on the types of information used to inform care and maintain routines were revealed during interviews. The use of vignettes provided additional data on HCA decision-making in non-routine or uncertain situations. Understanding how HCAs accommodate or resist the social norms found in ARC required an appreciation of the epistemic states that HCAs are making their decision within, such as certainty or uncertainty and the tensions created by practical conflicts. Although the influence that uncertainty has on HCA decision-making is apparent throughout the data, vignettes allowed for insight into the logical structure of HCA decision-making.

Question One: What Routine Direct Care Decisions Do HCAs Make?

Direct care decisions made by HCAs reflect the division of labour and rules of work found in ARC. Time-motion studies conducted in ARC detailed an intensive information sharing and seeking environment where RNs care time was focused on medication administration and preparation and HCAs on the provision of routine personal care to residents (Gibson et al., 2023; Qian et al., 2016). The current study provides a finer granularity of the work of HCAs, identifying types of decisions about care and types of communication used to support decisions.

Routine Decisions

Routine decisions were discussed by participants in terms of scheduled tasks or care activities that they would typically be engaged in (Table 6.1). The identified task schema's, the goal of the direct care, were used to organise the discrete decisions made by HCAs to achieve the task:

Table 6.1

Routine Decision Schemas

Routine Decision Schemas	
Eating and drinking	Decisions to assist at communal mealtimes, eating independently, and encouraging food intake with available food choices
Showering	Decisions to determine when a resident showers within communal care demands.
Dressing	Decisions to support residents' preferences for dressing.
Putting to bed	Decisions about preferred resident bedtimes or assessment of resident condition.
Speaking to RN	Decisions to notify RN in situations outside HCA knowledge or role responsibility.
Comforting	Decisions to provide physical and emotional comfort within communal care routines
Assessing	Decisions about immediate care needs and when there was a need to speak to an RN.
Resident preferences	Decisions to accommodate preferences within routine task demands.
Medicating	Decisions made about the effects of medications and implications for routine care.
Managing pain	Decisions made to address resident's pain within scope of practice and experience.
Caring for wounds	Decisions made to care for wounds and choosing wound care products.
Toileting and incontinence care	Decisions to prioritise toileting support between residents and routine task expectations.

This current study highlights context specificity in the types of routine care decisions made by HCAs. It is within the routine task schemas (Table 6.1) that motivators and strategic decision-making occurs to achieve the care task described by the participants. Holmberg et al. (2020b) used the concepts of autonomy and dignity as the basis for identifying the discrete decisions made during care. These authors considered the HCA's decisions to support resident autonomy as distinct observable actions, influenced by a resident's ability to participate in the care task at the tempo required to achieve care tasks within the time demands of communal care.

Some of the routine decisions identified in this current study were also identified by Ludlow et al. (2020) and Holmberg et al. (2020b), albeit from different perspectives. Ludlow et al. (2020) sought to understand missed care by asking ARC staff how they prioritised a list of pre-defined tasks and found tasks did not reflect many of the decisions HCAs made in relation to pain-management, preferred timing of care, decisions on safety, cultural diversity and communicating with family. In this current study, these types of decisions were described as contextually bound to routine care delivery.

Discrete decision-making within routine care was undertaken to accommodate residents' unique needs and characteristics. Discrete decisions identified in the literature (Figure 2.2) are those common to a specific care context but were described as unique from typical care decisions. Participants in the current study identified pain management as a routine decision highlighting residents' needs and characteristics as influencing what is a routine or discrete care decision.

Although role hierarchies within ARC are commonly discussed in the literature, the findings from vignettes revealed how institutional role expectations affected how HCA understood role boundaries. For example, the decision to speak to the RN was largely determined by the division of labour associated by role expectations. Participants in the current study described "if-then" decision arrangements, such as, first assessing a resident to determine within whose role the residents' needs fall; if the need was perceived to be outside that of the HCA role, then, they would then speak to the RN. The expected role of the RN was to perform assessments with the aim to provide treatment. Research exploring organisational influencers on access to information in ARC also identified nurse's role as having a different focus (Caspar et al., 2016), which was consistent with the findings in the current study.

In addition to routine-task schemas, findings unique to the current study include the identification of easy and difficult decisions and their relationship to established care routine. The theory of Life in the Round posits that routine decision-making is self-sustaining until the situation requires a response outside of the familiarity of the routine (Chatman, 1999). Participants in the current study described how the more removed a care task was from a predictable routine; the more difficult decision-making was.

Easy and Difficult Decisions

The current study explored the institutional ideologies and rules of work that directly influenced HCA decision-making. There was an assumption that the relationship between the participants and the residents was mediated by the institutionally driven constructs of communal care and reinforced by accepted social norms and the normative behaviours of those working and living in ARC (Carspecken, 1996; Chatman, 1999; Kincheloe & Mclaren, 2011). The multiple methods used to collect overlapping data provided insight into understanding the decision-making ecology of ARC and what contributed to the ease or difficulty of making decisions. Findings unique to the current study include the identification of easy and more difficult decisions and the relationship of those decisions to the established care routines. Easy decisions had clear aims to meet the institutional schedule and rules of work. Easy decisions included:

Planning routine care. Decisions to organise care tasks with the greatest efficiency.

Meeting routine care expectations. Decisions to fulfil tasks within scheduled times.

Being safe. Decisions to reduce risk and prevent injury to resident and HCA.

Easy decisions were those directed by established institutional routines and fell within the role expectations of the HCA. For example, organising routine care activities was based on the shared understanding of the institutional schedule for routine care tasks (Chapter Four, Easy Decisions**.**). A shared worldview that prioritised task completion influenced decision-making aimed at efficiency to meet institutional schedules. Healthcare assistants described a degree of acceptable approximation within routine care that was not present in more difficult decisions, such as accommodating resident preferences within the rhythm of the care routines. More difficult decisions were described as those that were more distant from routine care, involved tensions between task efficiency and HCA values, and were shrouded in feelings of uncertainty. More difficult decisions included:

Personalised vs efficient care delivery. Decisions to constrain choices or press a resident to meet the expectations of routine care efficiency and task completion.

To step away: Decisions to leave care situations or refuse to provide care.

Palliative or end of life care: Care decisions that conflicted with residents' needs, routine role expectations, or HCA values.

Avoiding personal risk: Decisions to avoid conflict with institutional or social norms or rules of work.

Participants described experiencing tension when faced with making decisions that did not align with institutional norms, rules of work and their beliefs about good care. Tensions were flashpoints of uncertainty where personal values conflicted with the rules of work and normative behaviours. For example, the dilemma encountered when faced with a resident who does not want to shower (Interviewee 16, Table 4.4). The participant described the dilemma between their role responsibility to shower a resident as conflicting with their ability to provide the resident with their freedom to choose. In a different instance, a participant described how speaking to the daughter of a family member who asked about her mother's necrotic toe resulted in a temporary suspension. As a result, became reticent to engage with families (Interviewee 3, The Decision-Making Ecology of HCAs, p. 122). Chatman (1999) describes how worldviews, social norms and role definitions of the small world aim to maintain business-as-usual. Situations that challenge norms introduce uncertainty and risk (Chatman, 1992). The vulnerability to risk was described by a participant when making the more difficult decision to send a resident to urgent care by ambulance. They described the many factors that went into making the decision, including the risk of making a decision that might not meet with managerial approval (Interviewee 19, Table 4.7).

Greener et al. (2012) and Sutherland (2020) described the complexity of value-based decisions as occurring in the intersections of conflicting discourses: rational versus emotional decision-making, resident autonomy verses risk, system demands versus person-centred care and biomedical versus social. They also noted the plurality of approaches used to assess whose best interest will be given greater weight. Participants in the current study often discussed the tensions created by values associated with personalised care and system demands and the social norms associated with being a HCA. They described risk-preference decision-making, where minimal risk was considered acceptable as a means to maintain business-as-usual and to avoid conflict with social norms and rules of work. For example, participants described putting a resident to bed to maintain safety (Table 4.11). Fitgerald (2009) details how HCAs' fear of residents' falling or being in pain resulted in risk amplification and the overuse of restrictions or restraints that increased the risk for a fall due to deconditioning.

Communication and Information Seeking Decisions

Experiential learning and direction from other HCAs were described by participants as the primary means for learning how to meet the HCA role expectations and guide care decisions. Chatman (1999; 1991) contends decisions are influenced by information sources and reflect what matters most to those participating in the everyday activities within the small world. The ARC environment requires shift-long task planning and the ability to sequence unpredicted work by identifying feasible work arounds within the flow of existing care (Aragon et al., 2018). The current study found that the usefulness of the information to solve problems and guide decisions that were acceptable to HCAs within the norms of the rules of work was uniquely positioned with the HCAs.

Participants in this study identified communication with other HCAs as the preferred method for sharing information. Observation studies in ARC identified verbal communication as the most frequent activity in ARC (Gibson et al., 2023; Qian et al., 2016). Communication, less than a minute, for non-medication related issues was identified by Qian et al. (2016) as the most frequent form of staff-to-staff communication. This is consistent with the findings of the current study, which identified *flyby* communication as being seconds in duration and essential routine for care delivery. Flyby communication provided participants with situational awareness and enabled HCAs to rapidly resequence routine care tasks based on residents' needs and within the demands of the institutional schedule and available resources.

Although Caspar et al. (2016) identified a hierarchal boundary between RN and HCA communication, this study found that the expertise and capabilities associated with the role of the HCA and RN were motivators for who to seek information from. For example, when a resident complained of pain (Vignette 1, Table 5.1) the most frequent response was to speak to a RN. Whereas a change in resident behaviour (Vignette 2, Table 5.2) prompted the decision to first assess the resident and then seek information from other HCAs. Participants perceived managing a resident's pain as the role of the RN and managing resident personal needs and behaviour as the role of the HCA. When HCAs perceived a care situation fell outside of their role of routine care, decision-making was referred to the RN. Similarly, within the theme of *Speaking to the RN*, participants described the points at which resident care decisions became the domain of the RN (Table 4.12).

Healthcare assistants as the knowledge bearers for resident needs is well represented in the literature (Category: Knowing the Resident (U)., p. 49). Participants identified HCAs as the primary source of information on direct care delivery, viewing them as being more knowledgeable in routine care activities. Chatman (1996) suggests that not all information has value within a social system. Relevance of the information to the work of the HCA acts as a motivator for decisions on who to seek information from. Trustworthiness of information on routine care provided by those outside of the role of HCAs was described as limited by the participants. In the current study, HCAs shared examples of how families may not have had an accurate understanding of the resident's dietary preferences (Interviewee 9, Table 4.8) or a RN may not have understood a residents response to treatments (Interviewee 15, Table 4.16) or the reasons for behavioural issues (Interviewee 16, Table 4.5). The dichotomy of insider and outsider is a concept Chatman used to highlight the relationship between information seeking and acceptance within small worlds (Chatman, 1996). Rejecting information sources that are not based on shared understandings of the working culture and constructs found in ARC and HCA work are evident in the findings of the current study.

A concept within Chatman's theories is information poverty (Chatman, 1996; Chatman, 2000). The small world of ARC contextualises how, when, and who, HCAs interact with hindering access to relevant information by either rejecting or diminishing the usefulness of information outside sources. Dankasa (2017) describes this as seeking information in circles, locking members of a small world into a highly curated information landscape. Cyclical information behaviours used by participants in this study supported HCAs to meet their role expectations. However, the decision to avoid potentially valuable sources of information is a trait of a closed and self-protective small world. Vignette findings revealed HCA experience was perceived as an intrinsically trustworthy source for information. When faced with little or no knowledge of a resident or their care routines the participants found other HCAs as being a trustworthy source of information (Vignette Four, Table 5.4). In comparison, families and RNs were viewed as being unable to provide the most relevant information. The degree of relevance can be described in three levels: generalised information that supports engagement in everyday activities; information that pertains to individualised coping within the existing standards and norms; and information that is highly selective to individual needs (Chatman, 1996). Professional hierarchies are commonly attributed to how resident information is disseminated. However, the current study found that perceptions of information relevance strongly influenced where HCAs sought and shared information. Healthcare assistants believed they had the best understanding of the resident care relationship.

Findings unique to this study are the identification of the thresholds that motivate HCAs to seek information outside of the established HCA microsystem. Perceived risks of providing care incongruent with a resident's care needs and personal experiences were drivers for decisions to seek or share information outside of the HCA microsystem. Healthcare assistants described engaging with nurses when the care situation fell outside their scope or of the role of responsibility or when there was a lack of HCA experiential knowledge. Two propositions of Chatman's Life in the Round are that members will not seek information outside the boundaries of their small world (Proposition 5); unless the information is critical, the information is believed to be collectively relevant, or that there is the perception that the life in the small world is no longer functioning (Proposition 6) (Chatman, 1999). While the current study uncovered examples that support these propositions, an understanding of the perspectives of other members of the ARC small world from within which the HCA's worldviews are explicated would be valuable to gain a wider overall understanding.

Question Two: How do HCAs Make Routine Direct Care Decisions?

There is a need to understand the decision-making capabilities of healthcare workers to analyse care work for infeasibilities and proactively develop practical work plans (Aragon et al., 2018). Participants in the current study described organising care within the many intersections that exist in the decision-making ecology of ARC - through communication with other HCAs, knowing the rules of work, and understanding the needs and characteristics of the residents.

The Institutional Schedule

Meeting the institutional schedule was a motivator commonly described by participants when making decisions. Planning routine care for the shift was considered an easier decision because of fixed-time tasks, such as showering and assisting with meals, that provided a structure for organisation. Observational and interview data found the structure of the shift directed care schedules and information sharing patterns. Showers, meals, toileting schedules and bedtimes were described as points in work shifts where care was tactically organised. Participants described routine decision-making as aimed at meeting assigned tasks with maximum efficiency. Information sharing provided HCAs with the situational awareness necessary to reduce completion tardiness of fixed time tasks, such as showers and mealtimes, and to prepare for frequency-based tasks, such as toileting, comforting and managing pain. Tacit knowledge, knowledge of the resident and experience within institutional constructs was described by participants as essential to performing routine tasks efficiently. This knowledge and experience enabled them to increase efficiency by compressing the time to complete a task and tactically stacking and queuing tasks around competing demands. Examples of this included organising showering and dressing residents based on knowledge of their capabilities (Table 4.9) or providing morning toileting support through an awareness of the residents' needs or urgency (Interviewee 25, Table 4.19).

Meeting the institutional schedule efficiently was achieved by the HCA having a knowledge of the resident and experience of providing care in the ARC setting. Chatman described a certain amount of approximation allowable within the life in the round. These approximations were found in the HCAs ability to predict the resident's capacity to undertake care tasks and to accommodate their needs within the routine care schedule. It was when the resident was either unable or unwilling to participate in a routine care activity that shifted the work of the HCA from task completion to making decisions that were considered appropriate within the context of the situation. For example, when deciding to step-away from care (Table 4.5) Interviewee 20 did so to reset the stage, allowing the resident time to accept the offer of care, whereas Interviewee 16 did not perceive an action appropriate to the situation was available.

The dilemma between providing personalised care and meeting expected care tasks requires HCAs to prioritise based on perceived risk (Ludlow et al., 2021a). There is substantial literature that discusses the effects of time and low staffing on missed or rationed nursing care (Ludlow et al., 2020). However, the current study finds that rules of work and a worldview normalising trade-offs and risk-taking influence prioritisation-decisions for HCAs. For example, Interviewee 3 described seeking and receiving validation for making the decision to put an agitated resident to bed so they could complete their care tasks (Table 4.4). While the participant described the decision as conflicting with their values of personalised care it was seen as appropriate by the other HCAs on shift, reinforcing the priority of timely completion of care tasks as a HCA responsibility. Work-arounds are actions perceived as necessary to bypass workflow barriers and are used either collectively or by individuals (Debono et al., 2013). Workarounds to address the complexities of care are common in ARC, such as covert drug administration (Garratt et al., 2021). Rule-breaking, workarounds and safe-enough decision-making are adaptive strategies used to comply with work task completion expectations in environments limited by resources, time and competing demands (Bianchi & Ghirotto, 2022; Naweed et al., 2022; O'Keeffe et al., 2015). Navigating the boundaries of acceptability of risk taking is defined by the rules of work and social norms, suggesting that risk normalisation and workaround culture is bound to the context of the life in the round.

Seeking and Sharing Information

A central tenet of Chatman's small world theories is that life proceeds as usual, and information is sought from trusted members of the small world to maintain the status quo (Chatman, 1999). The current study identified a *people-in-practice* information landscape (Lloyd, 2012) where information sharing was a socially enacted practice constructed from role-based microsystems (Caspar et al., 2016). Participants discussed and were observed seeking and sharing information to plan predictable tasks at the beginning of the shift and throughout the shift in shorter more focused exchanges. Interviews and vignettes provided greater insight into the motivators and value of information seeking and sharing in the ARC environment of care. Two types of communication patterns were identified from observations and interviews - formal handovers and informal handovers. Formal handovers were spatially and temporally bound, scheduled at the end of one shift and the beginning of the other and held at locations where both RNs and HCAs would meet. The formal handover was a performative act rather than one of deep information sharing. Participants had mixed views on the relevance of formal hand-over to their work. Medically centred handovers, such as having a focus on types and times of medications provided to residents by RNs, were considered as ancillary to HCAs real information needs (Interviewee 3, Formal Handover. p.129).

Informal information exchanges were described as essential to promote routines and prevent disruption. Informal information exchanges occurred in three forms:

Meetings. Before or between times of high care demand were used to refine the planning of care tasks between HCAs based on the most current conditions of residents and staffing.

Moments. During predicable times where communal care activities naturally grouped the HCAs together, for example, in dining rooms at mealtimes. Shorter in duration than meetings, taking less than 5 minutes and during care tasks, (i.e. when serving tea). Participants described seeking information and support with problem-solving for specific situations or resident conditions.

Flybys. Seconds in duration, with the greatest utility to maintain routine care. During care activities, only HCAs or RNs were engaged in flybys with support, advice and information rapidly exchanged.

The aim of formal/informal information sharing was to maintain the business-as-usual routine care. Informal meetings supported situational awareness to meet the fixed and as-needed care tasks; stacking, restacking and compressing care activities based on communal and resident conditions. HCAs' preference for seeking information from other HCAs was identified in interviews and vignettes. During interviews participants described their preferred source of information as being from other HCAs, valuing the information for its relevance. Vignette findings revealed increased co-occurrence in seeking information from HCAs as scenarios increased in uncertainty. Participants described engaging with the RN when it was perceived appropriate, such as a concern for managing pain, or when seeking information that was not available from other HCAs, such as new admission information.

Although residents and their families were not considered as primary sources of information, participants described seeking clarification when there was a need for understanding a resident's care preference. Information exchanges about the condition of the resident with the family were seen to be the role of the RN. Families were identified by participants as being able to fill information gaps created by missing detail on resident care preferences from nursing care plans. However, Chatman (1991,1992) and Garner (2023) discuss how overtime, information external to the life in the round becomes irrelevant, and even disruptive to members of a small world. Information about family and friends provided to a resident from a family member was described as upsetting to the resident and disruptive to the HCAs (Interviewee 9, Table 4.7). Food preferences, too, can be limited within the ARC setting when foods preferred at home are not accepted in ARC (Interviewee 9, Table 4.8). Chatman's life in the round exists against the backdrop of legitimised insiders and outsiders whose role classifications influence information sharing (Chatman, 1990, 1996), a practice that can create a state of information poverty for HCAs, RNs and family. Social norms and rules of work informed by institutional norms and rules of work can conflict with the expectations of family members who are unaware of institutionally derived motivators, such as towel rationing, or as Shaw refers to it, the "battle of the towels" (p. 247).

Experience and Knowing

Participants described making decisions to complete the schedule of tasks within their shift. The shift is considered to be a finite horizon for task completion (Aragon et al., 2018; Davarian &

Behnamian, 2022). Planning scheduled tasks and providing support when rescheduling care tasks around unplanned cared needs was possible using the knowledge of residents' preferences and capacities. In addition, experience as a HCA enabled participants to quickly assess the care situation and decide on the best way forward. For example, Interviewee 25 described how they assessed and prioritised residents during times of high demand for toileting care (Table 4.19). However, participants described feeling exposed to the flow on effects of decision-making around unscheduled care needs. Interviewee 16 described a situation in which limited staff resources prevented the completion of tasks within the shift despite their knowledge and experience. As a result, they were not able to meet the rules of work; unfinished work was passed on to the next shift and met with disapproval from other HCAs.

Routine decisions were bound to the institutional constructs of the ARC facility (Figure 4.6). Motivators for decisions were identified from participants' descriptions of routine care decisions through interviews and vignette responses. Decision-making used for task sequencing and compression, as pointed out by Aragon et al. (2018) lies in the realm of interruption psychology (Knight et al., 2023) but, also in intersections of mindset (Kunz et al., 2020); decision-making theory (Carbone et al., 2019; Corazzini et al., 2004; Hertwig & Wulff, 2021; McCutcheon & Pincombe, 2001); artificial intelligence research (Kurchyna et al., 2024; López et al., 2002); and operations planning research, where task scheduling in fixed time horizons under uncertainty, such as operating room schedules, is modelled for resource planning (Addis et al., 2016; Davarian & Behnamian, 2022). In answering the research question on how HCAs make routine decisions, the findings of the current study highlight the role of the institutional schedule, opportunities for group decision-making and information sharing, experience as a HCA in ARC, and knowledge of the resident as important factors used in decision-making. Understanding how, or if, these features are considered by ARC industry preferred activity times (Dieleman et al., 2023) or are used to inform estimated care-times for rest home, hospital, dementia or psychogeriatric levels of care (McDougall, 2020) is important for robust ARC resource planning.

Question Three: How do HCAs Make Non-Routine Direct Care Decisions, Especially in Uncertain Situations?

When feeling uncertain, participants described using tacit knowledge as a basis for decision-making, seeking and sharing information within the microsystem of HCAs, and reaching out to RNs if the decision fell outside their jurisdiction to act. Unanticipated and unplanned needs of residents, new admissions with limited information relevant to the care provided by HCAs, and changes in a resident's condition, were all common occurrences in ARC. The current study identified more difficult decisions as distinct from routine or easy decisions due to their deviation from the expected business-as-usual daily care tasks. Chatman's theories describe how social norms and roles direct how the life in small worlds function and from whom information is sought when situations no longer align within acceptable approximations of routine life. This study found that within the small world of ARC, each member established their own threshold of acceptability based on rules, social norms, experience, knowledge and personal values, as illustrated in the difficult decisions identified (Chapter 4, More Difficult Decisions).

Vignettes provided insight into decisions with increasing uncertainty, a feature of not-knowing. Knowing in terms of HCA work is associated with knowledge of facility bound norms and rules, the role of the HCA through work experience, and the resident through an established care relationship. Findings from vignettes with more uncertainty, such as Vignette 3 where the HCA had experience as a HCA, but was new to the facility and did not know the resident, identified tacit knowledge as a basis for decisions during uncertain care situations.

Work-Related Boundaries and Routine Schema

Work-related boundaries formed the basis for decisions in non-routine or uncertain care situations. Role-based information seeking and sharing is common to the life in the round, however, thresholds for seeking information or referring decisions to the RN by the HCA has not been closely considered as part of the HCA-RN delegatory relationships. The decision-making culture identified in this study is one of episodic relationships with more experienced HCAS or RNs based on the type of decision, the context of the situation and the authority of the role of the decision-maker. Scope is discussed in this study in terms of rules of work and described by participants as what is and is not allowable in the role of the HCA, such as providing medications to residents for pain. An important finding of this study is that HCAs can experience uncertainty in many ways, such as a lack of certainty of routines, roles and existing knowledge of the resident. Uncertainty can present when a resident is unable to participate in routine care or their needs deviate from routine care schema. This care remains within the HCA's responsibilities, unless assessed to be the role of the RN. Vignette findings illustrate how if-then relationships are bound to a HCA's certainty of about which role the resident care need falls under. Although there is growing literature about the limitations of HCAs' ability to assess more nuanced changes against a backdrop of complex medical conditions, this study highlights the importance of understanding the context and accepted norms within which HCAs are assessing resident change.

Role definitions informed decisions during uncertainty. Ludlow (2020) described how HCAs in ARC prioritised residents' daily needs compared to RNs who focused on managing residents medical care needs. When a residents' condition was assessed as being outside of their defined role, such as a need for medical assessment or a pain medication, participants described entrusting the decision-making to the RN. Assessing residents, comforting, wound care, medicating, supporting eating and drinking and managing pain were all considered routine schemas by participants. Participants described using adaptive strategies to assimilate routine schemas to non-routine situations, similar to those found in the literature: initiating care within the scope of the HCA, speak to a nurse, ignore the problem (Holloway & McConigley, 2009a); facilitate a residents preference, empathise, be ambivalent, reinforce social norms care, divert and distract, use personal values to inform acts of beneficence (Vandrevala et al., 2017) and break the rules of work (Naweed et al., 2022). The threshold between a routine schema and decision-making in uncertainty was described by participants in terms of risk. Risk was considered in terms of providing care incongruent with resident needs and rules of work. Risk was negotiated through information seeking and support with other HCAs, or if the care was perceived as being outside of the role of the HCA, then the routine schema speaking with the RN was actioned.

Tacit Knowledge

Tacit knowledge was apparent in decision-making in two experiential forms: knowledge that enabled a HCA to autonomously make decisions, and knowledge that enabled a HCA to provide direction to others. Experience was not discussed in terms of certification, but in terms knowing the job, and knowing the resident. The less experience the fictive HCA had been in a vignette, the more frequently the participants described the need to seek information and direction from more experienced HCAs. These findings are visible in the vignette results where autonomously activating routine schemas, such as speaking the RN in the most certain vignette (Vignette One, Table 5.1) progresses to dependence on experienced HCAs to manage the care situation for them (Vignette 4 Table 5.4).

Participants described needing to know how to recognise and engage with the social relationships within ARC decision-making ecology in order to perform their role as a HCA. Patterns of information sharing, such as flybys, were used as effective means to manage uncertainty within the routine. The difficult decisions identified in this study provided a means to understanding the intersection of knowing, experience and decision-making in an environment where motivators are bound to norms and rules of work. However, participants described tensions when they were expected to adhere to the institutional schedule, rules and established norms and this conflicted with their understanding of person-centred care. The tensions were often caused by conflicts created when care situations called for a decision(s) that could not be achieved without challenging the institutional constructs or personal values. This tension can be described as product of a system that delegitimises the information created by members within the life in the round in favour of existing rules used hold the life in the round together (Gray, 2021).

Question Four: What influences the direct care decisions made by HCAs?

Institutional constructs (schedule, resources, rules of work), attributes (residents' capabilities and preferences, HCA experience and social norms) and HCA traits (personal beliefs, values) acted as influencers and motivators for routine care decisions (Figure 4.6). Healthcare assistants navigate the complex intersections of certainty and uncertainty through risk mitigation and efforts to reconcile value-based tensions to arrive at care decisions acceptable to the life in the round (Figure 4.7). Findings from the current study highlight the importance of context-dependent elements such as identifying task priority levels and being able to incorporate task variability and unpredictable work into work planning strategies. Knowing the resident and the rules of work were subject to normalised beliefs and shared understandings. How resident needs are assessed, understood and responded to\or when to engage the registered nurse are influenced by existing care norms and the way the HCA conceptualises the resident's needs (Cameron et al., 2020; Cameron et al., 2021b).

Experienced HCAs

Healthcare assistants have a significant influence on how new HCAs and residents are introduced to the norms and culture of ARC. Although it was common for new HCAs to spend a period of three days shadowing an experienced HCA, findings from Vignette 4 provided insight into the time and experience needed to understand the rules of work and needs of each resident. A study by Wareing and Sethares (2021) found HCAs were key to assimilating new residents into ARC because they provided emotional support, listened and sought to get to know the resident and worked with them on routines. Assimilating new HCAs into ARC routines outside of stipulated education requirements offered by national policies appears to be poorly understood (Chapter One, HCA Education and Training.)

The current study identified experienced HCAs as a primary influence on new HCAs learning about life in the round. Experienced HCAs mentored newer HCAs by sharing tips and tricks and guided them on effective resident interactions and appropriate times to consult with RNs. A NZ study about student nurses' perspective of working in ARC described HCAs providing care autonomously and RNs with high resident loads focused on medication administration with "no patient interaction or actual care" (Heath et al., 2024, p. 52). However, the findings of the current study suggest a more nuanced relationship between HCAs and RN exists to meet the needs of both HCAs and residents.

Shared Prioritisation

Shared prioritisation of tasks occurs in groups where the importance of a task is shared by the members of a group (Berggren et al., 2017; Ludlow et al., 2020). For example, of the routine schema identified in the current study, about three-quarters of the participants discussed showering residents in terms of efficiency of bodily care, scheduling, safety and comfort. Shared prioritisations influence the relevance of information used to achieve situational awareness and is a motivator for care decisions. Healthcare assistants described information sharing patterns aimed to meet the shared priorities of routine care and accommodate unplanned care demands to meet task expectations within the time constraints of the institutional schedule.

Planned care tasks functioned as priorities around which unplanned or non-routine care was accommodated within (Core schema, Figure 4.5). A report by Willis et al. (2016) on aged care staffing identified tasks such as hygiene cares and preparing residents for mealtimes as tasks undertaken, in contrast to supporting residents' interests which was frequently missed, as was missed oral care and not moving residents who were unable to walk. The findings of the current study provide insight into prioritisation culture, where routine schemas such as showering and meeting mealtime schedules are aimed to be achieved within a shift timeline (Ludlow et al., 2021b). The tensions described by participants – when residents' care needs challenged their ability to meet scheduled care demands – illustrates the expectations placed on HCAs by institutional constructs (Chapter Four, Institutional Constructs).

Culture of ARC: Life in the Round

A tenet of the life in the round is that incoming cultures and norms are ignored, creating a culture of its own. Participants described decision-making with a focus on norm compliance and risk avoidance. Vignette results illustrated how risks associated with not knowing a resident's care needs acted as a frequent motivator for seeking information from other HCAs. Kurchyna et al. (2024) and López et al. (2002) describe decision-making as a form of norm compliance and risk aversion underpinned by protection-motivation theory. López et al. (2002) describes the difference between the adoption of social norms and compliance. To adopt norms means to recognise that they are part of the society, the decision maker is the intended recipient of the norms and has the jurisdiction to act on them. Compliance is the commitment of the decision maker to obey the norms. López's list of motivators for norm compliance echo the sentiments found in Chatman's propositions that adoption of norms through compliance is required to support business-as-usual in life in the round. However, there is a need to acknowledge how discreet care decisions aim to accommodate institutional norms through acts of non-compliance or by prioritising personal beliefs and values. Examples that illustrate this level of complexity include the contrast between easy and more difficult decisions and the routine schema of comforting where the interplay between care prioritisations, resource availability and personal values and beliefs are illustrated.

Shared prioritisation of certain tasks or types of care can illustrate the adoption and compliance to institutionally driven norms. However, how compliance is achieved requires a greater understanding of the context within which decisions are being made. Research into the influencers of quality care and quality frameworks have identified workplace culture and the environment of care as a significant factor in how quality goals are achieved (Ostaszkiewicz et al., 2016; Wells et al., 2019). This study provides the insight and rationale for seeking a better understanding of the complex relationships between institutional constructs and attributes and direct care decisions, such as task compression, sequencing or omission.

Question Five: How Do HCAs Accommodate or Resist the Social Norms of ARC Facilities When Making Direct Care Decisions?

The current study discusses how participants provide care as a representation of the existing life in the round in ARC. Critical theory and the methodology of critical ethnography require a considered inquiry into the institutionally driven values that influence what it means to be a HCA. Kincheloe and Mclaren (2011) describe this as dealing with the double ontology of complexity; that of the subjects of inquiry as well as the complexities of the world that they are in. The world, in terms of the current study, is the decision-making ecology of ARC and decision-making as a manifestation of the complexities of a HCA in that small world. Normative information behaviours, as-needed relationship with RNs and micro-resistance as a form of delivering person centred care have been revealed as acts of accommodating and resisting institutional social norms in ARC.

Accommodating ARC norms: Assuming Care Authority

The findings of the current study reveal a complex care environment within which the role of the HCA in ARC has expanded to meet the technical, conceptual and unique functions of nursing (Garratt et al., 2021; Gibson et al., 2023; Henderson, 2006). The role of a HCA is seen as a delegatory role by professional organisations, requiring the oversight of a RN. Within the literature, how this oversight is enacted is less considered. Instead, discussion centres on an increasing gap between the division of labour of RNs, and HCA role responsibilities with the subsequent need for HCA clinical education (Foster et al., 2019). Healthcare assistants often act in the capacity of preceptors for nursing students in ARC (Heath et al., 2024), further blurring the boundaries of a purely delegatory role to one of knowledge bearer.

This current study has found that HCAs have accommodated ARC industry demands through role-based identities that can be observed as within-role information seeking and sharing behaviours and as-needed relationships with nurses. Iterative forms of communication used by HCAs to maintain care routines and accommodate unplanned care needs create an important space where relevant information to routine care is used to achieve shared priorities. Vignette findings identified an if-then as-needed relationship with RNs is initiated when a care situation was assessed by a HCA as being outside their role. These findings challenge the notion of hierarchal barriers between RNs and HCAs, suggesting institutionally developed role identities act as the motivators for HCA and RN collaborative care. This finding highlights the conflict between the breadth of the RN delegatory responsibility when the HCA role in ARC has progressed to be authoritative within the scope of routine supportive care.

The finding of an assumption of authority in routine care decisions supports the increasing need for education and training of HCAs in ARC. Participants described being aware of the tensions and trade-offs associated with the adhering to rules of work without the benefit of a clinically critical eye. For example, recognising emergent care needs (Interviewee 9, Table 4.12), decisions to send residents for urgent care (Interviewee 19, Table 4.7), and medicating (Table 4.16). Healthcare assistants are accommodating the norms of ARC by assuming the authority to make routine and discreet care decisions during routine resident care, including the decisions about when to initiate as-needed RN engagement.

Resistance: Micro-resistance as a Form of Person-Centred Care.

Participants shared stories of difficult decisions where choices to meet the rules of work conflicted with their own belief and values. When the rules of everyday routines conflicted with a resident's needs HCAs were motivated by values and beliefs to resist the rules of work. General principles, such as a sense of duty, cultural respect for older people or assuming the role of fictive kin were described by participants (Chapter Four, Values and Beliefs Directing Care). How participants resisted institutional norms to support residents can best be described as micro-resistance, a concept associated with professional identity.

Micro-resistance is an emancipatory act where the moment of vulnerability is a marker of courage, allowing individuals to reframe struggles as personal choices. This process plays a vital role in the development of professional role identity (Zielke et al., 2023). Limited staffing, time, equipment and supplies are well represented in the literature as barriers to person-centred care (Johnson, 2023; Ludlow et al., 2021a; Ludlow et al., 2020; Ostaszkiewicz et al., 2016). Healthcare assistants act creatively to support person-centred care through knowing the resident and leveraging available resources within a tightly bound schedules and rule of work (Eaton et al., 2020). Naweed et al. (2022) described how HCAs transgressed professional boundaries, time constraints and broke rules to meet their perception of a resident's best-interests. The participants in the current study described decisions to resist the rules of work as being informed by personal values, beliefs in the importance of person-centred care and resident autonomy. Conversely, participants also described the tensions when unable to resist work rules within the demands of communal care. For example, in the context of end-of-life care. Although palliative care is becoming increasing common in ARC, end-of-life care needs are often not met within the existing routine care. McKinlay et al. (2019) identified that the specific needs of end-of-life residents admitted to ARC were unable to be proactively planned for within the existing flow of routine care demands of the existing long-term residents. Participants in the current study described the difficulties when the personalised care of the end-of-life resident conflicted with the demands of providing routine care for a group of residents (Table 4.6). In this instance, the participant made the decision to stay with the dying resident, resisting the rules of work and offloading their rostered care to other HCAs. Participants described end-of-life as a more difficult direct care decision and described how personalised care of the resident conflicted with the demands of providing routine care for a group of residents (Table 4.6).

More subtle acts of micro-resistance were described within the context of the routine schema. HCAs described how they supported residents drawing on their own beliefs and values of culture and care for older people. Interviewee 4 described caring by connecting through shared family/whanau (Interviewee 4, Table 4.13). The tensions between the time to connect and support a resident and the rostered work demands were described, but opportunities to connect were not ignored. Other participants described acting as fictive kin (Interviewee 8, Table 4.13) or extending their cultural belief of respect for older people (Table 4.10). Keelan et al. (2024) identifies the structural barriers within ARC that impact Māori and their whanau, highlighting the cultural disconnect occurring in ARC. This current study offers a supporting position from the perspective of HCAs with an important facet: HCAs recognise their role as influential in normalising the culture of ARC to residents and new HCAs entering ARC; and the need to recognise and support the culture and diversity of the residents within routine care.

Participants described tensions when making decisions to adhere to rules of work when there was a recognition that their care decision had violated the concepts of person-centred care and autonomy. For example, the inability to accommodate a residents preferred food or time to shower (Interviewee 9, Table 4.8; Table 4.15); difficult emotions created by restraining or coercing a resident in order to meet routine care expectations (Table 4.4) or making-do when wound care supplies were not available (Interviewee 10, Table 4.18). Although the decision to comply with rules of work was made, HCAs acknowledged the violation of a belief associated with providing person-centred care. It is within this reflective space that professional identities, workarounds and acts of resistance can emerge (Pratt et al., 2006; Waring et al., 2023).

Limitations

The current study has limitations in the scope of inquiry, the localities of data collection and the theoretical framework bias. The focus of this study centred on HCA decision-making and did not seek the perspectives of other members of the ARC small world from within which the HCA's worldviews are explicated. Inclusion of these perspectives would be valuable to gain a wider overall understanding of the decision-making ecology in ARC but is beyond the scope of this study.

There is an increasing body of research that calls attention to the ARC attributes of size, location, service models, ownership model and chain affiliation effecting the quality of care. Research on ARC in NZ, Frey, Balmer, et al. (2019b) have identified that size, ownership model and chain affiliation do influence the quality of end-of-life care. Service care models based on Eurocentric approaches that lack cultural safety training create structural barriers to caring for indigenous resident populations and influence direct care decisions (Keelan et al., 2024; Sivertsen et al., 2019). This research did not address the structural influencers on decision-making ecologies such as facility size, ownership and service models. This limitation may challenge the transferability of study findings in other ARC settings.

Elfreda Chatman's theories used as the theoretical framework for this study are criticised as having a deficit perspective on information created and used within the life in the round. Gray (2021) argues that this bias minimises the value of the information created within these communities. To address this, Chatman's framework was paired with a critical ethnographic methodology, which emphasis the value and richness of information created by participants and recognises the power that they have.

Summary

This chapter draws together the findings from Chapter 4 and Chapter 5, synthesising findings to answer the research questions. Routine decisions have been identified, answering the first research question about what routine care decisions HCAs in ARC make. How HCAs make routine decisions has been answered by identifying the construct of the institutional schedule, normative information seeking and sharing behaviours and the HCA attribute of experience as a key contributor to HCA routine decisions. More nuanced findings of work-related boundaries and tacit knowledge are offered to answer the questions about how HCAs make decisions in uncertain or non-routine situations. Influential to direct care decisions is the HCA attribute of experience, shared priorities and the culture of life in the round; providing an answer to what influences HCA direct care decisions and reflects the complexities of HCA decision-making. To answer the final research question about how HCAs accommodate or resist the norms of ARC, findings reveal three key aspects: the complexity and conflict experienced by HCAs who have accepted an authority to make routine care decisions; their role in filling a gap created by the pressures on RNs; and their resistance to the rules of work with acts of micro-resistance providing opportunities aimed to support person-centred care and resident autonomy. Cumulatively, this chapter answers the overall research question: How do HCAs make direct care decisions in ARC facilities?

Chapter 7 Conclusions and Recommendations

This thesis aimed to answer the question: How do HCAs make direct care decisions in ARC facilities? Aged residential care environments are complex and include scheduled and unscheduled care to meet residents' individual needs and communal care demands. Because of this complexity, a series of more specific questions were asked to include decision-making in uncertainty, a common state when caring for older people with high levels of dependency, multimorbidity and cognitive issues requiring active treatment or monitoring. This chapter offers a reflective summary of findings highlighting original contributions of knowledge. The significance of this research to the field of health and care is outlined. Theoretical innovations and areas for potential future research are suggested. The chapter concludes with recommendations considerate of the increased demands for ARC and the decision-making expectations experienced by HCAs uncovered in this research

Reflective Summary of Findings

Healthcare assistants described making many care decisions. Decisions about a resident's care and decisions about how to organise care for a group of residents across the timespan of a shift. This research builds on a growing body of literature about how HCAs provide care in ARC. However, much of the extant literature is contextualised, often describing a specific condition, such as dementia. In addition, few studies focus exclusively on HCA decision-making. Many of the studies critically reviewed included HCAs along with other members of care staff. Although aspects of HCA decision-making were identifiable, no study described the everyday or routine decisions made by HCAs who provide most of the direct care in ARC.

Routine Decision Schemas and Easy/More Difficult Decisions.

Semi-structured interviews revealed twelve routine decision schemas. Each routine decision schema was associated with a care action; the most frequently mentioned was showering a resident. Healthcare assistants assimilated routine decision schemas to meet a resident's specific care needs. If a greater change in how the routine schema was actioned was required, decisions were informed by assessing the resident, seeking information, or using experiential knowledge to accommodate or modify the schema. The routine schemas were constantly being attuned to meet residents' needs and communal care demands.

Participants described how they made decisions based on knowledge of the resident, experience as a HCA and information from within the microsystem of HCAs. Included as routine schemas, but unique in its purpose, was the routine schema of assessing. Assessing was actioned by the HCA to determine a way forward, either by actioning routine schema, seeking information, using tacit knowledge to accommodate the resident's needs, or taking no action.

There is ample argument in the extant literature that HCAs lack the clinical expertise to recognise the signs and symptoms of an imminent need for medical care. Although the HCAs in the current study discussed taking a blood pressure or temperature, the motivation behind the routine schema of assessing was to ascertain if the resident could continue to be cared for by the HCA, or if speaking to a RN was required. Assessing was associated with branching decision-making and if-then decision arrangements. For example, if the resident could not be cared for using available routine decision schema, then speaking to a RN was the next step. Or, if the rules of work required the attention of a RN, such as if a resident needed pain medication, then speaking to a RN was required to inform subsequent care.

The institutional schedule, available resources and rules of work influenced routine care decisions. Rules of work reflected how institutional policies and care guidelines were interpreted and enforced by care staff and might vary between ARC facilities. Intersecting these influences were the attributes of the residents, such as their level of dependency, a HCA's experience in ARC, and knowledge of residents and normative behaviours or what might be considered acceptable behaviour within the culture of ARC. A common illustration of how the constructs and attributes intersected to influence decisions was when participants described how they made planning decisions for a schedule of routine care tasks, such as completing a list of rostered showers by a set time. Efficiency of care was achieved through being knowledgeable in acceptable workarounds, a resident's ability and willingness to engage in the care, and the ability to plan and manage unscheduled interruptions.

This current study also identified easy and more difficult decisions. As a category of decision types, these are not discussed in the literature and warrant further investigation. Easy care decisions were representative of business-as-usual care provided at the discretion of the HCA. Easy decisions were associated with the ability to predict the flow of care and the effect of decisions on future scheduled care with accuracy, such as resident A will be showered first so Resident B can be showered without interruption.

More difficult decisions were those where routine care was incongruent with the resident's immediate care needs, accommodating routine schema was too costly in time or resources, or the next care action was not able to be predicted. Healthcare assistants described situations where resident conditions, behaviour and limited resources eliminated the actioning routine decision schemas. During difficult situations, participants described the tensions between their personal beliefs and values about providing person-centred care and the expectations of the institutional rules of work. Personal values and judgements were used to snap decisions into place: to step away from providing care to an agitated resident, to wait and watch a resident for a bit longer before sending them to urgent care by ambulance, or to transfer work to other HCAs in order to sit with a dying resident. More difficult decisions involved risk. To step away from caring for an aggressive resident meant resisting the rules of work, for instance, the scheduled shower must occur. Sending a resident to urgent care by ambulance meant risking disapproval from management. To focus on a single resident during their last hours meant the risk of disparagement from other HCAs.

The Value and Relevance of Information

Healthcare assistants informed care decisions by seeking information relevant to the work demands and care decisions they made. Participants described seeking and sharing information within the microsystem of HCAs as essential to meeting the needs of residents. Situational awareness of work demands at the level of individual resident care, and facility-level communal care was essential to meeting the work expectations of a shift. Although communication as a common activity between care staff in ARC has been discussed in the literature, the motivations and detailed content and types of communication specific to HCAs has not.

The types of communication patterns used by HCAs, why they are used, and what is being discussed, are unique findings from this research. Valued most by the HCAs were the informal handovers, which comprised: meetings, moments and flybys. Meetings occurred during times of lower care demands, at shift change or after mealtimes, and were valued for information supporting care organisation within the time horizon of the shift. Moments of information sharing occurred within the tempo of routine care during natural groupings where HCAs met, such as sluice rooms. Moments were valued for information to maintain the predictable rhythm of care delivery through shared problem-solving and situational awareness. However, flybys were described as of greatest value because of the immediacy with which information was exchanged and the way interactive exchanges could occur even during the highest tempo of care work. Flybys were valued for the information used to pre-empt disruption to routines and to inform decisions that helped to assimilate routine schema and accommodate variations to care. This finding emphasises the dynamic information landscape of HCAs and the importance of having shifts rostered with an appropriate HCA skill mix and levels of experience.

An important finding is the reliance on information created by HCAs within the information microsystems of the ARC facility. Healthcare assistants in the current study valued information created and shared by other HCAs because of its relevance to maintaining care routines. While this information was valuable, such reliance may distort perceptions – either amplifying, attenuating or creating blind spots regarding residents' actual care needs. This finding highlights the need for of careful attention to decision-making ecologies in small worlds where valued information may be plentiful but can vary in its degree of importance to overall care.

***Decision-making in Uncertainty*.**

Aged residential care is an environment of predictable unpredictability, and this research explored how HCAs made decisions in uncertain situations. Adapting experimental vignette design methods for qualitative data collection provided data that identified the strategies, practicalities and role boundaries when making decisions. Results from the vignettes provided nuanced responses about making decisions in times of uncertainty. The themes identified highlighted the importance of the HCA microsystem and the value of information created within it. As the vignettes progressed with increasing uncertainty, participants responded by discussing the ambiguities created by not knowing the resident and inexperience as a HCA. The greater the ambiguity, the more frequently participants identified the need to seek information from a HCA who may know what to do. The data collected from the vignettes resulted in two interesting findings: reflective responses to vignettes designed to have the most uncertainty, and a unique finding on the decisions made when enculturating new residents to the culture of ARC.

The vignette with the most uncertainty, vignette four, introduced a new HCA with no prior experience as a HCA into the scenario. Participants discussed the impossibility of caring for a resident without any HCA experience to inform care decisions, reflecting on their own experiences of dependence on experienced HCAs to guide and teach them how to provide care in ARC. This finding reinforces the HCA microsystem's important role in the advice-seeking and adaptive goal setting of HCA decision-making. Analysing the data through the lens of Chatman's theoretical framework supported the identification of information boundaries. The progression from higher frequencies of routine schema activation to information seeking as uncertainty increased was a natural progression supported by the propositions of the theoretical framework. However, the finding of tacit knowledge support from almost exclusively within HCAs helped to further illustrate the relevance and value that HCAs placed on information created within the HCA microsystem and challenges findings from the extant literature that asserts information dissemination in ARC is based on professional hierarchies.

The second finding of interest from vignette data was a result of how the vignette scenario was phrased. Vignette three inadvertently introduced an unintended dimension of knowing into the constant: the new resident. The fictive resident in the scenario was the newly admitted spouse of an existing resident. The scenario was intended to increase uncertainty by decreasing the possibility of the fictive HCA knowing the fictive resident or depending on other fictive HCAs who may have known the resident. However, participants identified the resident in the vignette as being new to the role of a resident. Participants described decisions and strategies on how the HCA could introduce and acclimatise the resident into the role of the resident. Although the theories used to underpin this research recognise the process of socialising a newcomer into the role of insidership, how residents were transitioned into ARC was outside the scope of the study. This finding provides a compelling glimpse into how HCAs may introduce new residents to living in ARC and merits further exploration when considering how culturally safe care is provided.

Accommodating and Resisting Institutional Norms.

Throughout the data, HCAs described ways in which they either accommodated or resisted the institutional norms of ARC. Healthcare assistants assume responsibility for residents' daily routine and supportive care. The findings from the data depict an as-needed relationship between the HCAs and the RN. Healthcare assistants described making routine care decisions independently and have been identified by NZ nursing students as knowledge bearers on residents' care in ARC. As increasing demands are placed on HCAs to assume more complicated care, the role of the HCA merits more consideration in terms of where it is positioned in the health and well-being outcomes of residents.

Resisting institutional norms associated with high-throughput care provision meant finding workarounds that aligned with the spirit of the rules of work but might not align with policy or protocols, such as making do with what wound-care supplies were available. In some cases, rules of work were overtly resisted, such as sharing information directly with family members or focusing on one resident's needs despite the pressing demands of the many residents rostered in their care. Many acts of resistance were small but identifiable in the descriptions of the efforts taken to support residents' choices within the limited time and resources, such as helping residents decide on clothing or finding food they would prefer to eat.

Professional Implications

Nursing has a collaborative and delegatory relationship with HCAs in ARC. Care decisions significantly impact the resident's quality of life and outcomes of care. The types of direct care decisions made by HCAs are especially relevant to meeting the complex needs of ARC residents. This study makes two significant contributions to RNs and nurse educators, managers, leaders and practitioners who support and work with HCAs in ARC. First, the findings provide insight into the decisions that HCAs routinely make, providing a better understanding of the situations in which collaborative care with RNs can occur. Knowing the types of decisions that HCAs routinely make provides valuable information on how the HCAs can be supported to provide best-practice care and obtain the skills required for an increasingly complex population. Difficult decisions provide insight into needed professional development, such as palliative and end-of-life care and providing care to residents with challenging behaviours. Secondly, the findings highlighted the importance of the institutional routines and information created within the HCA microsystem. Because HCAs value information when it is received from sources familiar with the realities of providing direct care to residents in ARC and has relevance to their daily work, having more experienced knowledgeable HCAs available in areas where information exchanges occur can encourage information sharing and collaborative decision-making.

Theoretical Implications

Understanding the relationship between the influencers of decisions and how a decision is actioned has relevance for those interested in healthcare operations and clinical decision-making. Two models conceptualise the influencers on HCA decision-making identified in this research. The first model (Figure 4.6) conceptualises the institutional constructs that HCAs see as an important frame for decisions, and the attributes and traits that inform the perceptions of how a decision is actioned. The second model (Figure 4.7) conceptualises a HCA decision-making stream. Decisions are a synthesis of constructs, attributes and epistemic influences and tension created by personal practical conflicts. The model assembles the relationships between the constructs, attributes, and traits conceptualised in the first model with certainty, uncertainty and risk. Although the models are scaled to a single decision schema, these can be stacked and to become representative of a series of queued decision schemas waiting to be actioned.

This study has applied Chatman's theories as a unified mid-range theory and identified inherent limitation. Chatman's theories – Information Poverty, Life in the Round and Normative Behaviors - were applied to this current study a suite of interconnected concepts. When considered together, their propositions overlap, providing greater conceptual depth. Additionally, this study found a key limitation to Chatman's theories was insufficient attention to newcomers entering established small worlds. Participants in this study emphasized this gap, highlighting how long it took new HCAs to learn appropriate communication patterns and engagement practices and the significant role HCAs play in enculturating new residents to ARC routines.

Implications for Future Research

The current study argues that HCA decisions influence residents' quality of life. However, the relationship between HCA direct care decisions and resident outcomes merits further attention. The methods of data collection and survey design used in the current study were successful in identifying the types of decisions made by HCAs and how they were made. However, there is a need to understand how institutional motivators and socially derived perceptions influence HCA direct care decisions in ARC and affect outcomes related to the quality of life of residents. Further research is needed to the identify HCAs' preferred information networks and to evaluate the types and quality of information they value, and need in to know, in relation to meeting an older person's care needs. The latter

Research into HCA decision-making emphasises the critical role HCAs play in ARC and is essential for supporting the workforce with the needed education and training, targeting quality improvement initiatives and informing policy in national aged care contracts and industry standards. Many of the routine schema may be generalised to other ARCs, however, the list cannot be considered exhaustive. Healthcare assistants in areas of specialised care, such as dementia care, may work at greater levels of task specificity. Healthcare assistants working in larger or more rural regions may work more broadly and with a resident population with more diverse needs. The methods used to identify routine schemas and easy and more difficult and decision-making in uncertainty are transferrable and can be used to help understand the care and decisions made by HCAs across different contexts.

Findings that described the care decisions made when transitioning a new resident into ARC call attention to the influence HCAs have on how residents learn to engage with care and services provided in ARC. Considering these findings, the question of what influences HCAs' decisions when caring for a newly admitted resident are proposed. The decisions made during the transition of care can have implications on how culturally safe and person-centred care is delivered and how a resident becomes known to care staff.

Further study into the decisions made by HCAs can support efforts to enhance resident care, optimise HCA care practices and provide the ability to assess HCA workforce education/training needs. A question identified as a result of this research is: How do HCA decisions influence a resident's health and well-being outcomes?

Recommendations.

National Contract Policy:

(1). Acknowledge the role of HCA mentors and require training and education that incorporates current best practice care and mentoring pedagogies.

> This study revealed the limitations of rapid onboarding of new HCAs. Findings demonstrated that HCAs relied heavily on information from peers to inform direct-care decisions and highlighted the value of experience. Providing HCA mentors with training and educational opportunities will help them to support less-experienced HCAs to deliver best-practice care as well as to understand how to prioritise person-centred care in the context of ARC.

(2). Encourage the development and uptake of integrated educational programs for HCAs and RNs to promote collaborative care and decision-making in ARC.

> This study has identified as-needed relationships between HCAs and RNs based on institutional role definitions. Integrated educational/training programmes can enhance collaboration within healthcare settings. Bringing HCAs and RNs together for ARC specific

education/training creates better understanding of roles and responsibilities, fosters communication and behaviours that support collaborative decision-making.

Nurse Manger:

(1). Establish routine meetings with HCAs to understand the situations they are navigating daily.

Asking healthcare assistants about the decisions they are routinely making and what decisions they find difficult and easy can provide valuable insight into the complexity of direct care. Although the complexity of a resident's care needs can be achieved through clinical assessments such as interRAI LTC and other relevant scales, mismatches between care plans and delivery of direct care can occur. Factors introduced by the environment of care and HCA experience and knowledge can contribute to the level of care complexity and risk.

Direct-care goals may be reprioritised based on the ability of the HCA to meet the expectations of the institution and the characteristics of the resident. Care decisions may or may not factor in the residents' preferences creating mismatches between care provided and what is important to the resident.

Healthcare assistant led resolutions to issues or may vary in degrees of approximations to institutional expectations or core principles. Difficult situations may highlight the need for HCA support or education, additional resources or resident reassessment. Proactively connecting with HCAs can identify situations before they reach the point of dysfunction or distress.

(2). Foster collaboration with HCAs in the co-design of ways to improve the delivery of care.

Planning for the complexity of care delivery requires an understanding of the resident's clinical, behavioural, psychosocial and cultural needs as well as an understanding of the factors associated with the environment of care that can create barriers and introduce risk. Solutions to issues experienced when providing routine care are frequently addressed through the sharing of information or experiences between HCAs.

Decisions identified as difficult by participants can manifest conditions of uncertainty and tensions, such as in situations of end-of-life care or challenging behaviour. The information created by HCAs has value in terms of knowing how residents are engaged with care, and the adaptations and accommodations HCAs are making to achieve the expected care tasks. Healthcare assistants are in an ideal position to recommend effective and efficient ways to promote person-centred care.

(3). Promote a "no-blame" culture that encourages and supports HCAs to advocate for residents.

No-blame cultures foster shared accountability among all engaged in the community of the care environment. Cultivating norms that encourage person-centred care decisions can support HCAs in advocating for residents and resisting care decisions that may diminish their autonomy. No-blame cultures create an environment where individuals feel safe to express ideas and concerns without fear of retribution.

No blame cultures support collegial problem solving and shared responsibility for the care of residents. Tensions created by conflicts between resident needs and HCA work responsibilities and/or personal values can be openly discussed. Candid discussions and team problem solving can help to address safety and wellbeing concerns of residents.

(4) Support the dissemination of information relevant to the work of the HCA.

Healthcare assistants value information sources that have relevance to their daily routines and the realities of providing direct care to residents. Iterative forms of communication create an important space where information relevant to routine care is used to achieve shared priorities and address uncertainty. Information created during routine care is shared by HCAs to maintain care routines and accommodate unplanned care needs.

Knowing how to reorganise routine care to accommodate unanticipated care needs is a skill gained through experience as a HCA and knowing the residents. Seeking information from other HCAs and knowledgeable staff is needed when in uncertain or ambiguous care situations. Comfort with uncertainty is a HCA specific trait, influenced by experience as a HCA and knowledge of a resident. However, experience as an HCA is not equivalent to knowing the resident. Seeking information from an HCA with an existing care relationship with the resident can provide important information. This information can be equally valuable to RNs and others who support residents' wellbeing.

Supporting the dissemination of information relevant to HCA decision-making is essential to pre-empt disruption to routines and to inform direct care decisions made to adapt routine care schema to meet specific needs of residents. Providing opportunities to share information and ensuring shifts are rostered with an appropriate HCA skill mix and levels of experience is important to the safety and wellbeing of residents and care staff.

Healthcare Assistant:

(5). Speak-up when there are concerns about a resident's wellbeing as an act of care, to be transparent and to maintain personal integrity.

Speaking up recognises the significant impact that small scale interventions can have on improving residents' quality of life in ARC. It emphasises, the capacity of the individual to empower and engage with others to support residents' needs. Healthcare assistants are assuming more complicated care and have an important role in the health and wellbeing of residents. Limited time and resources may mean that supporting a residents preferences require resisting the pressing demands of communal routine care.

The tensions experienced when a type of care action ought to be taken, but for a reason(s) can’t be, need to be discussed. Healthcare assistants are in the position to identify when caregiving norms or institutional policies are felt to be incongruent with resident’s needs. Speaking-up provides valuable opportunities to create care plans that support resident autonomy, safety and wellbeing.

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Appendices

Appendix A: Ethical Approval

Human Ethics Application SOA 19/06 Approved

From humanethics@massey.ac.nz <humanethics@massey.ac.nz>
Date Mon 4/8/2019 3:35 PM
To Burrow, Marla < Marla.Burrow.1
@uni.massey.ac.nz> Cc Human Ethics
<gmhumeth@massey.ac.nz>

HOU Review Group

Reviewer Group

Dr Catherine Cook

Researcher: Marla Burrow

Title: Healthcare assistant decision-making and information behaviour in long-term care settings

Dear Marla

Thank you for the above application that was considered by the Massey University Human Ethics Committee: Human Ethics Southern A Committee at their meeting held on 08/04/2019. On behalf of the Committee I am pleased to advise you that the ethics of your application are approved.

Approval is for three years. If this project has not been completed within three years from the date of this letter, reapproval must be requested.

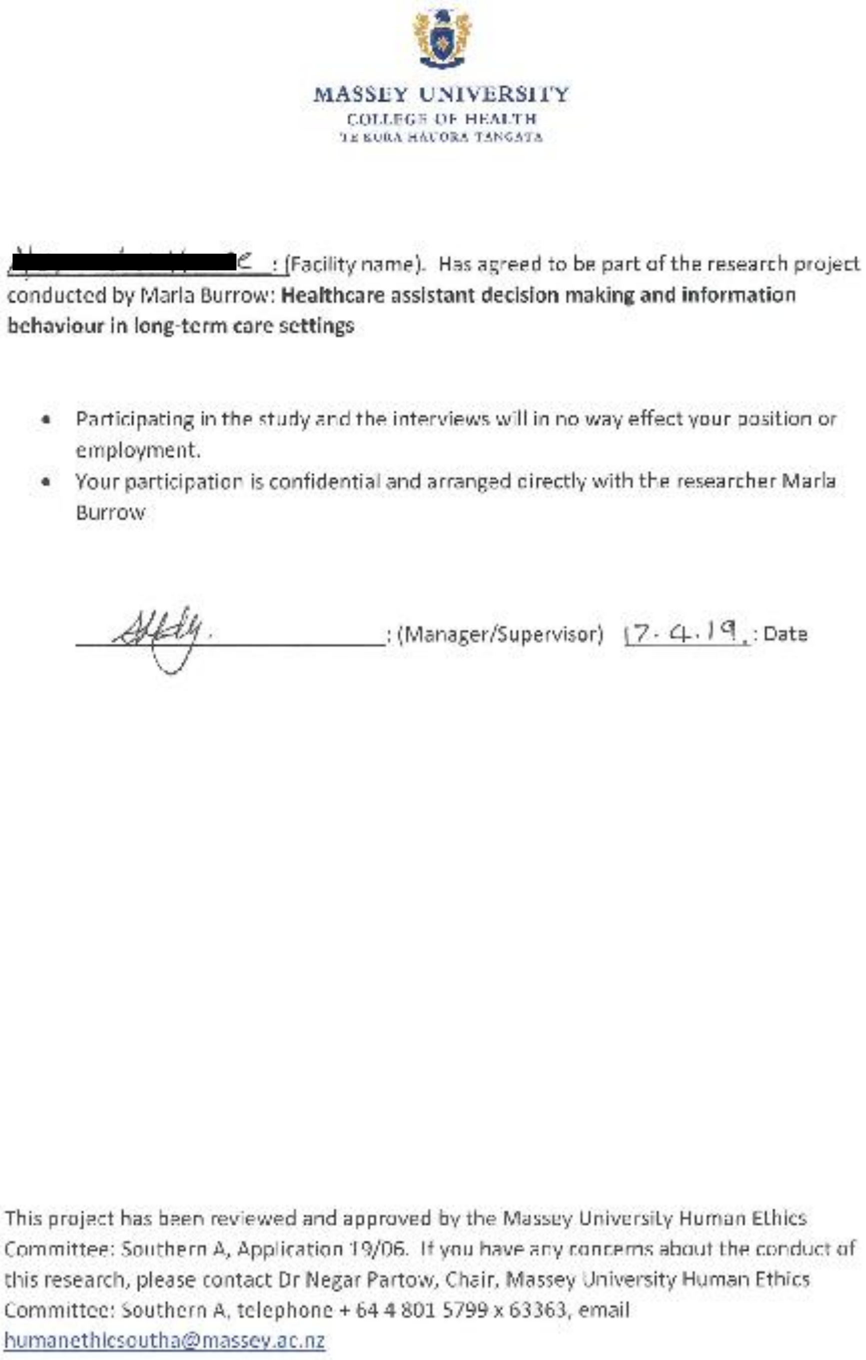
If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

If you wish to print an official copy of this letter, Please logon to RIMS (http://rims.massey.ac.nz) , and under the Reporting section, View Reports you will find a link to run the Ethics Committee Report.

Yours sincerely

Professor Craig Johnson
Chair, Human Ethics Chairs' Committee and
Director (Research Ethics)

Appendix B: Locality Agreements



MASSEY UNIVERSITY
COLLEGE OF HEALTH
TE KURA HAUORA TANGATA

[redacted] : (Facility name). Has agreed to be part of the research project conducted by Marla Burrow: **Healthcare assistant decision making and information behaviour in long-term care settings**

- Participating in the study and the interviews will in no way effect your position or employment.
- Your participation is confidential and arranged directly with the researcher Marla Burrow

______________: (Manager/Supervisor) 17·4·19. : Date

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 19/06. If you have any concerns about the conduct of this research, please contact Dr Negar Partow, Chair, Massey University Human Ethics Committee: Southern A, telephone + 64 4 801 5799 x 63363, email humanethicsoutha@massey.ac.nz

MASSEY UNIVERSITY
COLLEGE OF HEALTH
TE KURA HAUORA TANGATA

Centre
[redacted]: (Facility name). Has agreed to be part of the research project conducted by Marla Burrow on Healthcare Assistant decision making and information use.

- Participating in the study and the interviews will in no way effect your position or employment.
- Your participation is confidential and arranged directly with the researcher Marla Burrow

_______________: (Manager/Supervisor) 2/5/19.: Date
A. Blackwell
(owner/RN).

MASSEY UNIVERSITY
COLLEGE OF HEALTH
TE KURA HAUORA TANGATA

[redacted] (Facility name). Has agreed to be part of the research project conducted by Marla Burrow: **Healthcare assistant decision making and information behaviour in long-term care settings**

- Participating in the study and the interviews will in no way effect your position or employment.
- Your participation is confidential and arranged directly with the researcher Marla Burrow

: (Manager/Supervisor) 18/4/2019 Date

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 19/06. If you have any concerns about the conduct of this research, please contact Dr Negar Partow, Chair, Massey University Human Ethics Committee: Southern A, telephone + 64 4 801 5799 x 63363, email humanethicsoutha@massey.ac.nz

Appendix C: Healthcare assistant recruitment information

MASSEY UNIVERSITY
COLLEGE OF HEALTH
TE KURA HAUORA TANGATA

To Healthcare Assistants

A study about healthcare assistant decision making and information use in long-term care settings

Kia ora, I would like to introduce myself and the research that I am conducting in your aged care facility.

My name is Marla Burrow. I am a registered nurse undertaking a PhD at Massey University. I am interested in the types of decisions that healthcare assistants make and the information that they find helpful.

I would love to talk with you! Anything you tell me is confidential. *Very little is known about the decisions healthcare assistants make every day in aged care.*

If you are interested in talking with me, please feel free to contact me directly. I will make a time that suits you

Marla Burrow
Email: m.s.burrow@massey.ac.nz
Phone: 06 356 9099 extn 85344
Cell: [redacted]

MASSEY UNIVERSITY
COLLEGE OF HEALTH
TE KURA HAUORA TANGATA

To Healthcare Assistants

A study about healthcare assistant decision making and information use in long-term care settings

Kia ora, I would like to introduce myself and the research that I am conducting in your aged care facility.

My name is Marla Burrow. I am a registered nurse undertaking a PhD at Massey University. I am interested in the types of decisions that healthcare assistants make and the information that they find helpful.

I would love to talk with you! Anything you tell me is confidential. *Very little is known about the decisions healthcare assistants make every day in aged care.*

If you are interested in talking with me, please feel free to contact me directly. I will make a time that suits you

Marla Burrow
Email: m.s.burrow@massey.ac.nz
Phone: 06 356 9099 extn 85344
Cell: [redacted]

MASSEY UNIVERSITY
COLLEGE OF HEALTH
TE KURA HAUORA TANGATA

INFORMATION SHEET for healthcare assistants

Healthcare assistant decision making and information behaviour in long-term care settings

Principal Researcher

Marla S Burrow

Private Bag 11 222

Palmerston North 4442

Phone (06) 356 9099 extn 85344 or [redacted]

Email: m.s.burrow@massey.ac.nz

Introduction: You are invited to take part in a study about the decisions that healthcare assistants make every day. This study aims to better understand the types of information that healthcare assistants use to help make decisions. Participation in this study means talking to me about the types of decisions that you make and the information you find most helpful. Please contact me if you have any questions.

Organisational support: Your facility has agreed to be part of this research. Your participation is totally voluntary. Your participation is confidential and arranged directly with the researcher Marla Burrow.

Who is the researcher?: My name is Marla Burrow. I am a registered nurse in both New Zealand and the United States. I am a graduate student enrolled in a PhD at Massey University's School of Nursing. I have been working as a nursing lecturer at Massey University's School of Nursing for 7 years. Prior to that, I worked in as an RN in an American hospital and volunteered at free urgent care clinic. This study comes from my interest in the important work of healthcare assistants in aged care. My supervisors are Dr Jean Gilmour and Dr Catherine Cook. They both share a great interest in aged care.

What do you do if you want to participate?: If you agree to take part in this study it will involve you:

- talking with me about the decisions you make and what you take in account when making them.
- allowing me make observations in community areas and areas where HCAs commonly share or look for information. Before I begin any observation, I would briefly ask you if it was all right to do so. I would rely on you to ensure that any residents in the area would not be disturbed by my presence and that you consider it appropriate.
- agreeing to one or more interviews, based on the time that is convenient to you. Interviews can be face-to-face, over the phone or computer call based on your preference.
- If you agree, the interview will be digitally recorded for accuracy. The interview will be transcribed and you are entitled to a copy if you wish. You will have the opportunity to go over the transcribed interview and make any corrections, add details or include more comments. The time needed for the interviews will take around an hour.
- signing a consent form. I will have a consent form for you to sign and we will arrange a suitable time for me to speak with you.

Benefits and risks:

By participating in the interview you will have the opportunity to talk about your work and the things that you do. There is very little known about the decisions that healthcare assistants are making in aged care. You will be adding knowledge to an important part of New Zealand healthcare delivery. To thank you for participating in the interview a 20$ petrol voucher will be offered as a koha. I do not anticipate any risks with being involved in this study. If you do agree to take part, and then change your mind, you are free to withdraw from the study for any reason. If any adverse events occurred, you would be able to contact the appropriate person in your organisation or your professional organisation for support. If I were to observe any instance of risk of health or safety to yourself or others, I would discuss this with you with the purpose of being supportive.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 19/06. If you have any concerns about the conduct of this research, please contact Dr Negar Partow, Chair, Massey University Human Ethics Committee: Southern A, telephone + 64 4 801 5799 x 63363, email humanethicsoutha@massey.ac.nz

Details about your rights as a participant: Your participation is totally voluntary. You are under no obligation to accept this invitation. If you decide to participate, you have a right to:

- Ask any questions about the study at any time (of me or my supervisors)
- Decline to participate and to withdraw from the study at any time without giving a reason.
- Refuse to answer any particular question and stop any digital recording or note taking.
- Review any of the transcriptions or recordings that are made from the interviews
- Refuse to allow me to observe any of your activities
- Be given a summary of main findings of the study when it is concluded if you wish, either mailed or emailed to you directly
- Contact your professional organisation or employer if you have any questions or concerns regarding your rights as a participant in this study.

What will happen to the information that you provide? :

- Information will be kept in the form of notes, digital recordings and typed transcripts of interviews. All information will be made anonymous, kept confidential and will only be discussed with my two supervisors.
- The digital recordings may be typed up into a transcript by a typist. The typist will not know your real name or where you work. The transcription typist will be bound by a confidentiality agreement not to discuss any details about the information they are transcribing.
- Your real name will not be used. Instead, you will be asked to choose a made up name or code name which will be used on the digital recording, the transcripts and the final written thesis. If you agree, I will share some of the insights that you give with other participants in order to talk about ideas and encourage discussion; this will be done anonymously and your name or workplace will not be used.
- All research material will be kept securely by Massey University for 10 years as recommended by the Massey University General Disposal Authority, after which it will be destroyed.
- The findings will be written up in my thesis, publications and presented in conferences for the benefit of furthering research and interest in the study topic.

Supervisor contact details

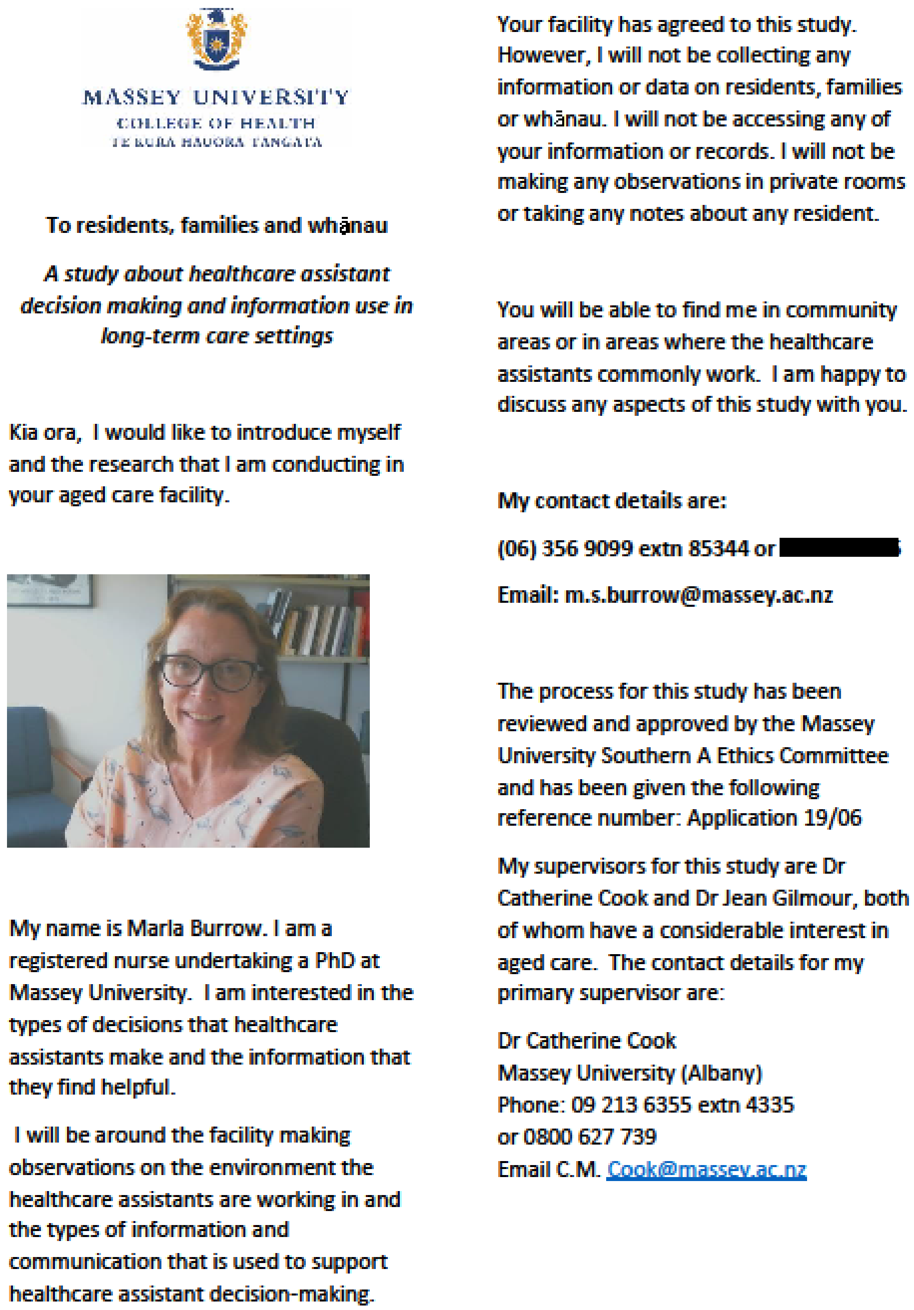
Dr Catherine Cook

Massey University (Albany)

Phone: 09 213 6355 extn 4335 or 0800 627 739

Email C.M. Cook@massey.ac.nz

Appendix D: Resident, family and whānau information



MASSEY UNIVERSITY
COLLEGE OF HEALTH
TE KURA HAUORA TANGATA

To residents, families and whānau

A study about healthcare assistant decision making and information use in long-term care settings

Kia ora, I would like to introduce myself and the research that I am conducting in your aged care facility.

My name is Marla Burrow. I am a registered nurse undertaking a PhD at Massey University. I am interested in the types of decisions that healthcare assistants make and the information that they find helpful.

I will be around the facility making observations on the environment the healthcare assistants are working in and the types of information and communication that is used to support healthcare assistant decision-making.

Your facility has agreed to this study. However, I will not be collecting any information or data on residents, families or whānau. I will not be accessing any of your information or records. I will not be making any observations in private rooms or taking any notes about any resident.

You will be able to find me in community areas or in areas where the healthcare assistants commonly work. I am happy to discuss any aspects of this study with you.

My contact details are:

(06) 356 9099 extn 85344 or [redacted]

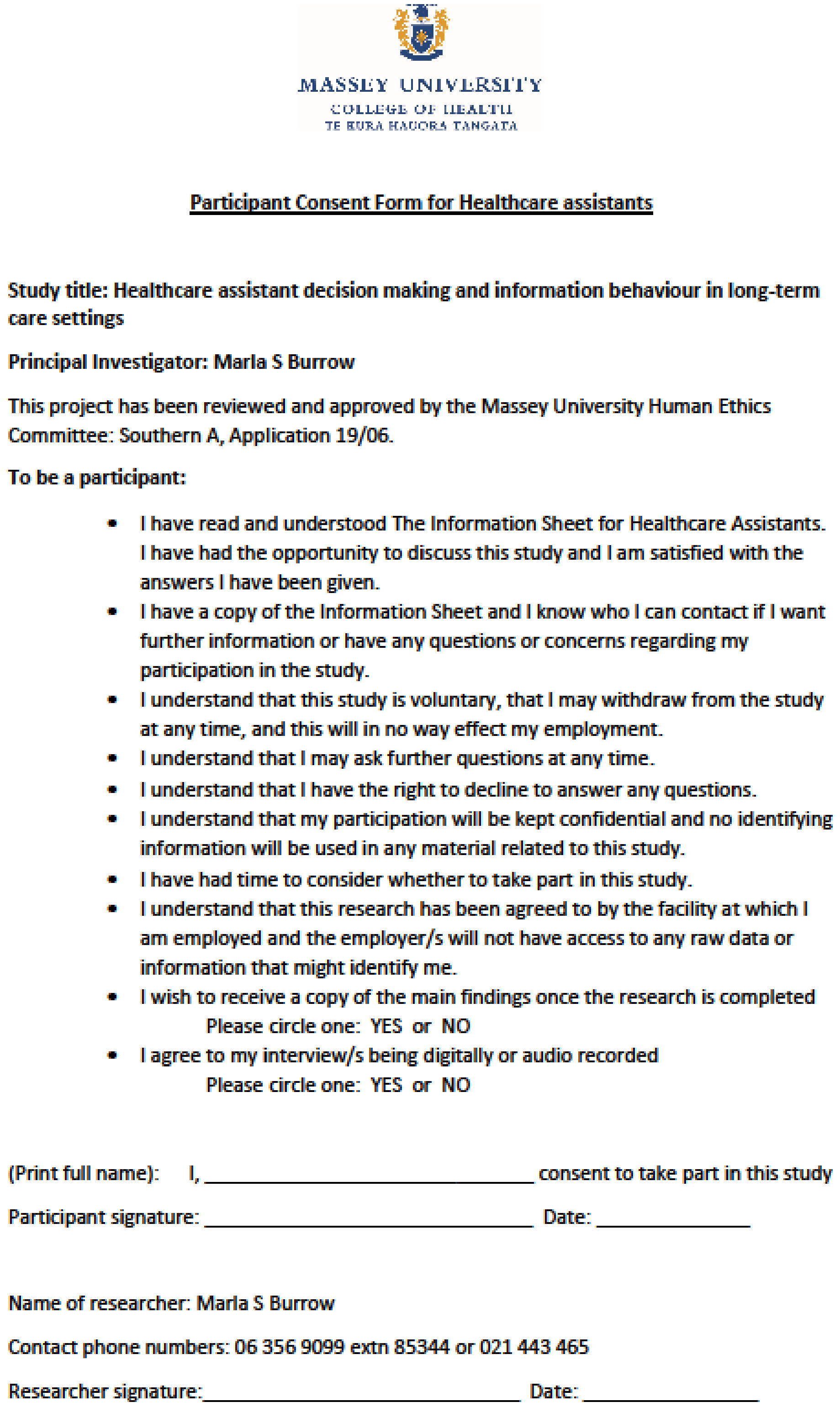
Email: m.s.burrow@massey.ac.nz

The process for this study has been reviewed and approved by the Massey University Southern A Ethics Committee and has been given the following reference number: Application 19/06

My supervisors for this study are Dr Catherine Cook and Dr Jean Gilmour, both of whom have a considerable interest in aged care. The contact details for my primary supervisor are:

Dr Catherine Cook
Massey University (Albany)
Phone: 09 213 6355 extn 4335
or 0800 627 739
Email C.M. Cook@massey.ac.nz

Appendix E: Participant Consent Form



MASSEY UNIVERSITY
COLLEGE OF HEALTH
TE KURA HAUORA TANGATA

Participant Consent Form for Healthcare assistants

Study title: Healthcare assistant decision making and information behaviour in long-term care settings

Principal Investigator: Marla S Burrow

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 19/06.

To be a participant:

- I have read and understood The Information Sheet for Healthcare Assistants. I have had the opportunity to discuss this study and I am satisfied with the answers I have been given.
- I have a copy of the Information Sheet and I know who I can contact if I want further information or have any questions or concerns regarding my participation in the study.
- I understand that this study is voluntary, that I may withdraw from the study at any time, and this will in no way effect my employment.
- I understand that I may ask further questions at any time.
- I understand that I have the right to decline to answer any questions.
- I understand that my participation will be kept confidential and no identifying information will be used in any material related to this study.
- I have had time to consider whether to take part in this study.
- I understand that this research has been agreed to by the facility at which I am employed and the employer/s will not have access to any raw data or information that might identify me.
- I wish to receive a copy of the main findings once the research is completed
  Please circle one: YES or NO
- I agree to my interview/s being digitally or audio recorded
  Please circle one: YES or NO

(Print full name): I, ______________________________ consent to take part in this study

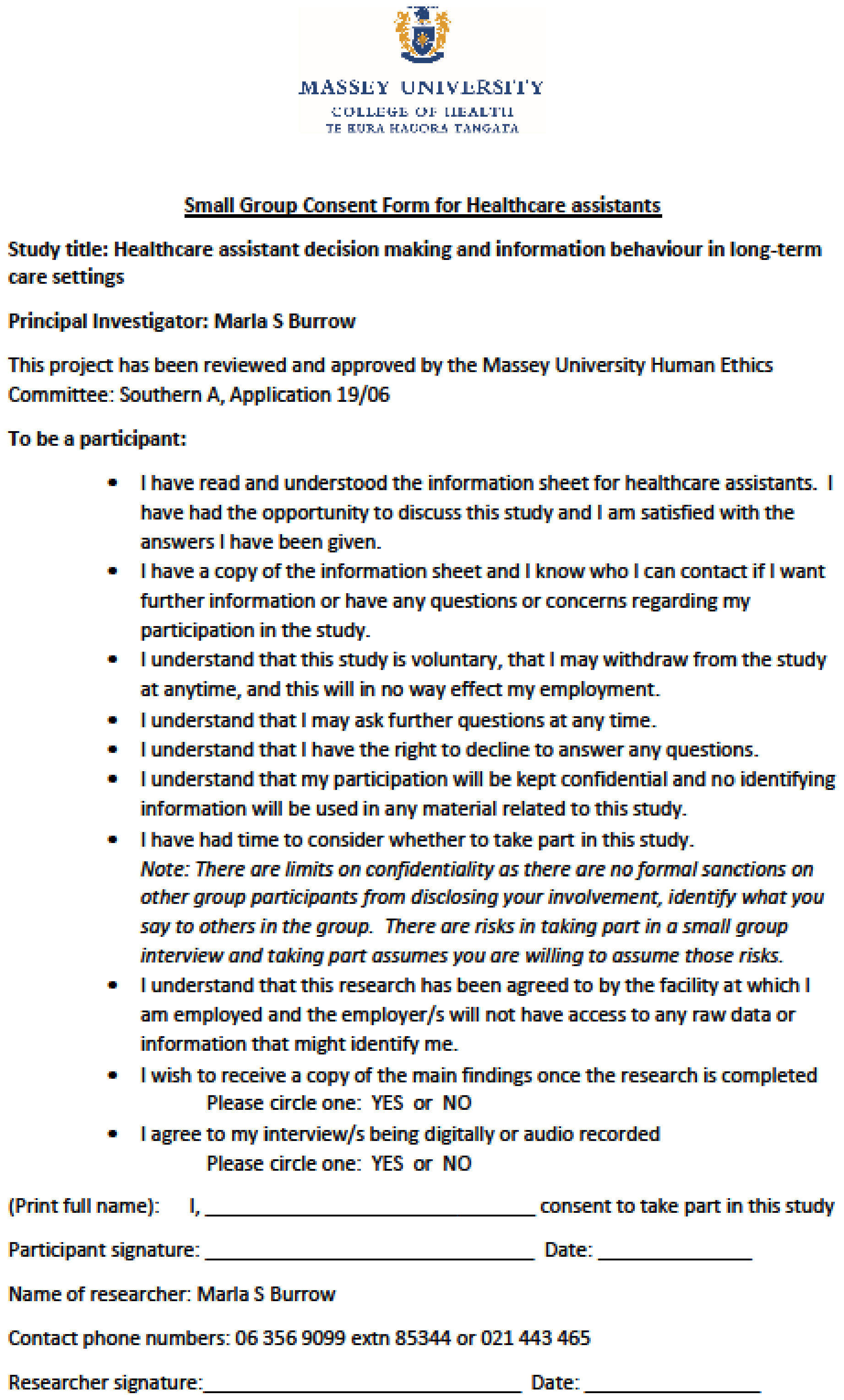
Participant signature: ______________________________ Date: ______________

Name of researcher: Marla S Burrow

Contact phone numbers: 06 356 9099 extn 85344 or 021 443 465

Researcher signature:______________________________ Date: ________________

Appendix F: Small group consent form



MASSEY UNIVERSITY
COLLEGE OF HEALTH
TE KURA HAUORA TANGATA

Small Group Consent Form for Healthcare assistants

Study title: Healthcare assistant decision making and information behaviour in long-term care settings

Principal Investigator: Marla S Burrow

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 19/06

To be a participant:

- I have read and understood the information sheet for healthcare assistants. I have had the opportunity to discuss this study and I am satisfied with the answers I have been given.
- I have a copy of the information sheet and I know who I can contact if I want further information or have any questions or concerns regarding my participation in the study.
- I understand that this study is voluntary, that I may withdraw from the study at anytime, and this will in no way effect my employment.
- I understand that I may ask further questions at any time.
- I understand that I have the right to decline to answer any questions.
- I understand that my participation will be kept confidential and no identifying information will be used in any material related to this study.
- I have had time to consider whether to take part in this study.
  Note: There are limits on confidentiality as there are no formal sanctions on other group participants from disclosing your involvement, identify what you say to others in the group. There are risks in taking part in a small group interview and taking part assumes you are willing to assume those risks.
- I understand that this research has been agreed to by the facility at which I am employed and the employer/s will not have access to any raw data or information that might identify me.
- I wish to receive a copy of the main findings once the research is completed
  Please circle one: YES or NO
- I agree to my interview/s being digitally or audio recorded
  Please circle one: YES or NO

(Print full name): I, ______________________________ consent to take part in this study

Participant signature: ______________________________ Date: ______________

Name of researcher: Marla S Burrow

Contact phone numbers: 06 356 9099 extn 85344 or 021 443 465

Researcher signature:______________________________ Date: ________________

Appendix G: Transcriber’s Confidentiality Agreement

MASSEY UNIVERSITY
COLLEGE OF HEALTH
TE KURA HAUORA TANGATA

Transcriber’s Confidentiality Agreement

Study title: Healthcare assistant decision making and information behaviour in long-term care settings

Principle Investigator: Marla S Burrow

(Print full name) I, Debra Gaye Pugh, agree to transcribe the recordings provided to me.

I agree to keep all the information provided to me.

I will not make any copies of the transcripts or keep any record of them, other than those required for this project.

Signature: ____ **Date: 6 September 2019**

Appendix H: Theoretical framework: Application of theoretical concepts

1. A small world conceptualization is essential to a life in the round because it established legitimized other (primarily “insiders”) within that world who set boundaries on behaviours. (Chatman, 1999)

Application: Identification of those HCAs considered insiders was assessed through data collected on observations of routine communication, responses on preferred sources of information and vignette data on information seeking in uncertain situations. The network of insiders was used to conceptualise the boundaries of the HCAs information world.

2. Social norms force private behaviour to undergo public scrutiny. It is the public arena that deems behaviour -including information seeking behaviour – appropriate or not. (Chatman, 1999)

> **2a.** Both secrecy and deception are self-protecting mechanism due to a mistrust regarding the interest or ability of others to provide useful information. (Chatman, 1996)
>
> **2c.** A decision to risk exposure about our true problems is often not taken due to the perception that negative consequences outweigh benefits. (Chatman, 1996)

Application: The data was explored for beliefs and values of information seeking and sharing with those who are not part of routine daily care. HCAs were asked about information seeking or sharing with visiting clinicians (GPs), the internet, family members, or friends. This data helped to further conceptualise the permeability of the information boundary and identify values and beliefs had on information sources.

3. The result of establish appropriate behaviour is the creation of a worldview. This worldview includes language, values, meaning, symbols and context that holds the worldview within temporal boundaries. (Chatman, 1999)

> **3a.** Social norms are standards to which members of a social world comply to exhibit desirable expressions of public behaviour (Burnett et al., 2001)
>
> **3b.** Members choose compliance because it allows for ways in which to affirm what is normative for a specific context at a specific time. (Burnett et al., 2001)

Application: The use critical ethnography methodology to collect data and employs methods tailored to discover the meanings and values from the position of the HCAs. Data collection and analysis collective values and beliefs within and across shifts and across localities that help to define worldviews that inform information behaviours and decision-making within and across localities and across all participants.

4. For most of us, a worldview is played out as life in the round. Fundamentally, this is life taken for granted. It works most of the time with enough predictability that unless a critical problem arises, there is no point in seeking information. (Chatman, 1999)

> **4b.** Worldview is shaped by normative values that influence how members think about the ways of the world. It is a collective, taken-for-granted attitude that sensitizes members to be responsive to certain events and to ignore others. (Burnett et al., 2001)

Application: Observation of institutional routine, routine information behaviours, identification of the focus of routine decision-making and exploration of decision-making through the use of vignettes helped to conceptualise the information and environmental elements that contributed to maintaining routines for HCAs. Questions that focused difficult or stressful decisions, urgent decisions and vignettes in uncertain situations today helped to understand the qualities of the thresholds of inexactitude and predictability that HCAs used before seeking information outside of either routine sources or outside the information boundary.

5. Members who live in the round will not cross the boundaries of their world to seeking information. (Chatman, 1999)

> **5a.** People who are defined as information poor perceive themselves to be devoid of any sources that might help them. (Chatman, 1996)
>
> **5b**. Information poverty is partially associated with class distinction. That is, the *condition* of information poverty is influenced by outsiders who withhold privileged access to information. (Chatman, 1996)

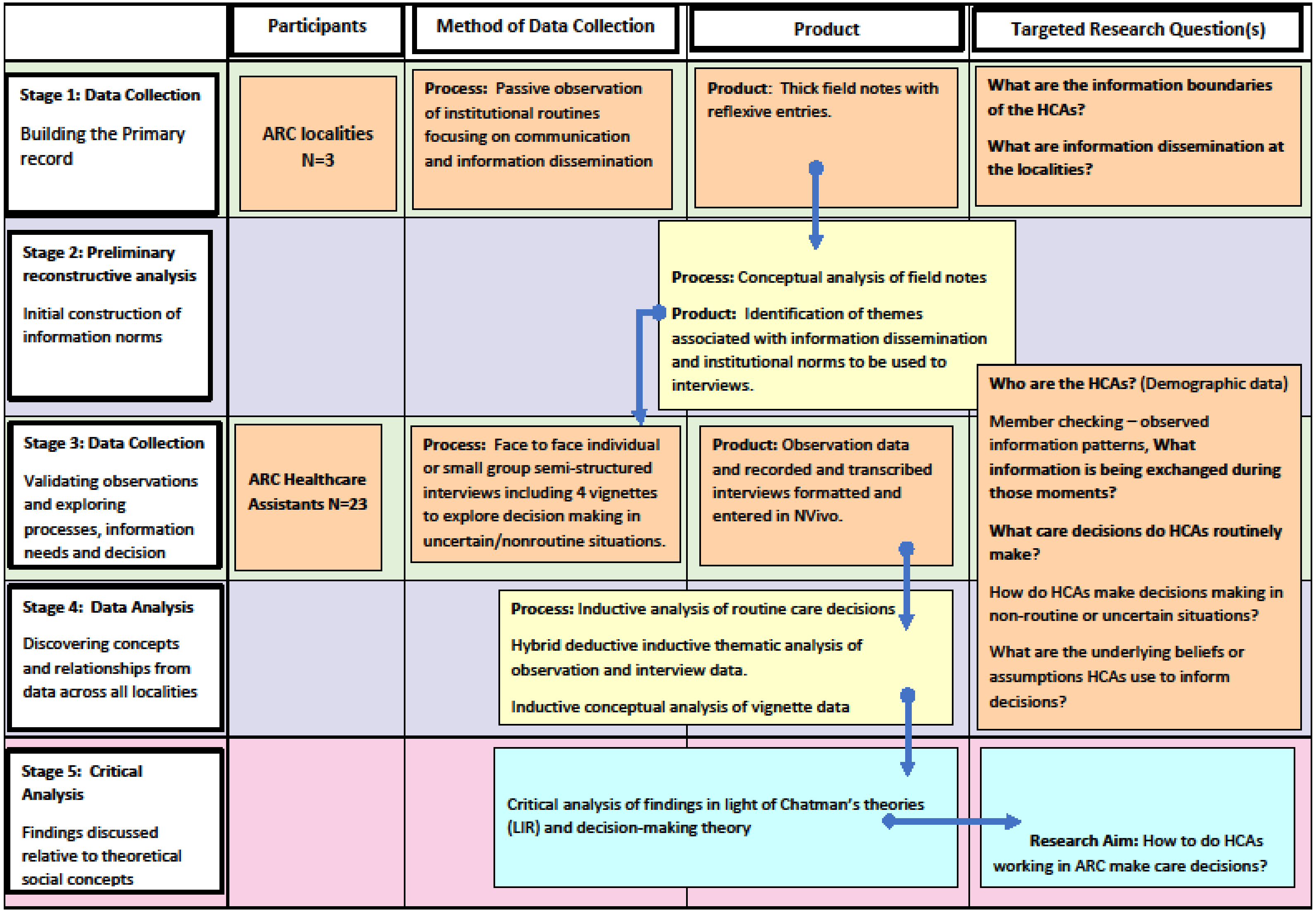
Application: Data collected on decisions that HCAs felt had to be decided without the support of routine or preferred sources, were stressful or difficult or challenged social norms associated with information seeking help to identify factors that were used to establish the norms of information and limit information seeking and sharing outside of routine information sources.

6. Individuals will cross information boundaries only to the extent that the following are met: (1) the information is perceived as critical, (2) there is a collective expectation that the information is relevant, and (3) a perception exits that the life lived in the round is no longer functioning. (Chatman, 1999)

> **6a.** Information behaviour is a construct through which to approach everyday reality and its effects on action to gain or avoid the possession of information. The choice of an appropriate course of action is driven by members' beliefs concerning what is necessary to support a normative way of life. (Burnett et al., 2001)

Application: Routine care decisions based on the expected task goals were identified. Vignettes identified information sources and information seeking responses in non-routine situations. These provided insight into how risk and uncertainty influenced information seeking.

Appendix I: Research process activity map



	Participants	Method of Data Collection	Product	Targeted Research Question(s)
Stage 1: Data Collection Building the Primary record	ARC localities N=3	**Process:** Passive observation of institutional routines focusing on communication and information dissemination	**Product:** Thick field notes with reflexive entries.	What are the information boundaries of the HCAs? What are information dissemination at the localities?
Stage 2: Preliminary reconstructive analysis Initial construction of information norms			**Process:** Conceptual analysis of field notes **Product:** Identification of themes associated with information dissemination and institutional norms to be used to interviews.	
Stage 3: Data Collection Validating observations and exploring processes, information needs and decision	ARC Healthcare Assistants N=23	**Process:** Face to face individual or small group semi-structured interviews including 4 vignettes to explore decision making in uncertain/nonroutine situations.	**Product:** Observation data and recorded and transcribed interviews formatted and entered in NVivo.	Who are the HCAs? (Demographic data) Member checking – observed information patterns, What information is being exchanged during those moments? What care decisions do HCAs routinely make? How do HCAs make decisions making in non-routine or uncertain situations? What are the underlying beliefs or assumptions HCAs use to inform decisions?
Stage 4: Data Analysis Discovering concepts and relationships from data across all localities		**Process:** Inductive analysis of routine care decisions Hybrid deductive inductive thematic analysis of observation and interview data. Inductive conceptual analysis of vignette data		
Stage 5: Critical Analysis Findings discussed relative to theoretical social concepts		Critical analysis of findings in light of Chatman's theories (LIR) and decision-making theory		**Research Aim:** How to do HCAs working in ARC make care decisions?

Appendix J: Methodology – Application of epistemological assumptions

1. All thought is fundamentally mediated by power relations that are social and historically constituted. (Kincheloe & Mclaren, 2011)

Application: This research used methods that explored the institutional ideologies and rules of work that directly influence HCA decision-making. What elements were considered when deciding an action provided insight into the power-relations of all those living and working within the ARC LIR.

2. Facts can never be isolated from the domain of values or removed from some form of ideological inscription. (Kincheloe & Mclaren, 2011)

Application: Exploring types of decisions that HCAs found difficult or challenging allowed for individual values and beliefs on care decisions to be explored. How, when and why HCAs resisted or conformed to institutional ideologies when making decisions helped to identify the role that individual values played in direct care decision-making.

3. The relationship between concept and object, between signifier and signified is never stable or fixed and is often mediated by social relations of capitalist production and consumption. (Kincheloe & Mclaren, 2011)

Application: The use of observation and semi-structured interview that integrated member-checking provided insight towards understanding the decision-making environment of ARC and why care-decisions caused tensions between HCA values and beliefs.

4. For all kinds of truth claims it is the consent given by a group of groups, potentially universal in membership, that validates the claim (Carspecken, 1996).

Application: Multiple methods were used to collect overlapping data and member-checking so tacit levels of interaction, such as communication patterns, could be understood by co-constructing the meanings with participants. Exploration of difficult decisions provided the opportunity identify how risk featured in decision-making when HCAs consented to conceptualisations of institutionalised care but did not agree with it.

5. Meaning is an embodiment of intersubjective understanding (Carspecken, 1996; Kincheloe & Mclaren, 2011)

Application: The decision-making of HCAs an action that results from a collective, almost tacit, understanding of the normative behaviours and shared understandings that inform decisions. Decision-making is informed by meanings created by the of the normative behaviours in the care context.

Carspecken, P. (1996). *Critical Ethnography in Education Research*. New York: Routledge.

Kincheloe, J. L., & Mclaren, P. (2011). Rethinking Critical Theory and Qualitative Research. In K. Hayes, S. R. Steinberg, & K. Tobin (Eds.), *Key Works in Critical Pedagogy* (pp. 285-326). Rotterdam: Sense Publishers. 10.1007/978-94-6091-397-6_23

Appendix K: Data collection: Interview guide

Semi-structured Interview questions

1. I noticed that communication was happening during certain times or that certain documents were being used. Can you tell me about what is being discussed or what types of information you are looking for?

2. In the past month or so, have you had to ask someone for advice or information?
    - Have you ever gotten advice that did not seem to fit or work-out?

3. Have you ever asked family members, visiting GPs, internet sources – or other people– for information or advice on caring for a resident?
    - If yes, how were they able to help you?

4. What types of things have you just had to figure out yourself?

5. Who told you about where to find information sources, such as care plans or practice policies, or other resources like that?
    - Have you shared this information about these sources with other healthcare assistants?

6. What is your best source of information? Why?

7. What type of decisions do you make as HCA during a typical shift?

8. Are there any decisions that you seem to make a lot of? Can you give me an example?

9. Are there any decisions that you find easy to make? Can you give me an example?

10. Were there any times when a split second or urgent decision needed to be made and there was no one there to get advice from? Can you give me an example?

11. Are there any types of decisions that you find stressful or difficult to make? Can you give me an example?
    - What makes these decisions difficult?
    - What support do you seek when you need to make these decisions?
    - What documents do you find helpful with these decisions?

Vignettes

I have four short scenarios that I would like for you hear one at a time and after hearing each one, to get your opinion on them. All of the scenarios include a situation in which the HCA will likely need to make some decisions and faces some level of uncertainty.

Vignette 1: A resident has lived at the facility for 1 year and is well settled into the daily routines. They have multiple illnesses and are generally not well. Unexpectedly, they complain of pain, but because of their progressive dementia they are unable to give any detailed information about how they feel or their health status. The healthcare assistant caring for this resident has been working with them for the past year.

> So, If this scenario were to happen (to a resident), how could you help another healthcare assistant sort it out?

Vignette 2: A resident who has lived at the facility for several years enjoys and participates in the daily social activities. Suddenly, the resident appears to be overly excited and not wanting to participate in any of the diversional activities. The healthcare assistant caring for this resident has worked at the facility for the past year but doesn't know this resident.

> If this scenario happened (to a resident), how could you help another healthcare assistant sort it out?

Vignette 3: After a serious fall, a resident has moved into the facility where their spouse has been living for several years. They made the transition very well. One day, uncharacteristically, the resident is not with their spouse for meals and wants to stay in their room. They are complaining of not feeling well but are unable to provide any further detail. The healthcare assistant who is caring for this resident is an experienced caregiver but is recently hired and has been working at the facility for a week.

> If this scenario happened (to a resident), how could you help another healthcare assistant sort it out?

Vignette 4: A resident who has been living at the facility for a while and used to the daily routines appears anxious and does not want to be part of their normal routine cares. Because of a past stroke they are unable to provide any information about how they are feeling. The healthcare assistant caring for this resident is a new and inexperienced HCA and is also new to the facility.

> If this scenario happened (to a resident), how could you help another healthcare assistant sort it out?

Demographic information

Finally, I would like to ask you a few questions in order for me to be able to determine how other HCAs like yourself find out useful things that help them with their caregiving work. Please remember that no names will be used and all of your answers are confidential.

How old are you? ___________

How many years have you worked as a healthcare assistant (even if you have changed employers)?

What is the highest level of academic qualification you have completed? _________________

Are you currently enrolled in any educational or certification programme? ________________

How do you describe your ethnicity? (You can be as specific as you would like)

What is your country of origin? New Zealand or another country?

What is you first or preferred language? ____

Are you active in any religious or faith or spiritual communities? ___________________________