Mealtime management in Australian residential aged care: Comparison of documented, reported and observed care

MICHELLE KATHERINE BENNETT¹, ELIZABETH CELESTE WARD¹,² & NERINA AIMEE SCARINCI¹

¹School of Health and Rehabilitation Sciences, The University of Queensland, Brisbane, Australia, and
²Centre for Functioning and Health Research, Queensland Health, Brisbane, Australia

Abstract

Purpose: Mealtime management in Residential aged care facilities (RACFs) should be holistic and comply with the principles of person-centred care (PCC) to ensure residents' medical, nutritional and psychosocial mealtime needs are met. However, this is not always achieved and multiple issues with mealtime management in RACFs exist. The aim of the current study was to compare documented, reported and observed mealtime management to explore factors influencing optimal mealtime care.

Method: Data were triangulated from: (a) review of 14 resident files; (b) observation of 41 mealtimes; (c) questionnaires with 14 residents; and (d) questionnaires with 29 staff.

Result: Results revealed multiple discrepancies between data sources leading to the delivery of sub-optimal mealtime care. Poor documentation impacted staff knowledge of required mealtime practices resulting in occasions of inconsistent and inappropriate care. Observational and interview data highlighted discrepancies between residents' mealtime preferences and actual practice. In many instances observed care was not holistic nor consistent with PCC.

Conclusion: Given the significant medical, nutritional and psychosocial risks associated with poor mealtime management, systematic changes in policy, staff training and multidisciplinary care are needed.

Keywords: Aged care, dysphagia, speech-language pathology, mealtime care

Introduction

Many residents of Residential Aged Care Facilities (RACFs) experience difficulties during mealtimes (Steele, Greenwood, Ens, Robertson, & Seldman-Carlson, 1997). Poor management of these difficulties can have significant negative implications including increased risk of aspiration pneumonia, choking, and malnutrition (Davis & Spicer, 2007; Miller & Patterson, 2014; Steele et al., 1997). Appropriate management of these difficulties involves thorough and careful assessment of residents' mealtime needs, and individualized, evidence-based intervention (Amella, Grant, & Mulloy, 2008; Aselage & Amella, 2010; Miller & Paterson, 2014; Reimer & Keller, 2009).

A variety of service providers are involved in mealtime management in RACFs including assistants in nursing (akin to certified nursing assistants), dieticians, general practitioners, nurses, occupational therapists, and speech-language pathologists (SLPs). Working in RACFs, these professionals must provide mealtime management consistent with a person-centred care approach (PCC) (Australian Government Productivity Commission, 2011; Bundy, Hemsley, Brentnall, & Marshall, 2008). To do this requires equal consideration of residents' psychosocial mealtime needs in addition to their medical and nutritional needs. This involves providing mealtime choices and preferences, supporting independence, showing respect for the perspective of the resident and promoting social interaction during mealtimes (Amella et al., 2008; Aselage & Amella, 2010; Kayser-Jones, 1996; Reimer & Keller, 2009; Sydner & Fjellstrom, 2005).

Many recommendations have been made to optimize mealtimes and mealtime management in RACFs. These recommendations include: facilitating the mealtime environment and enhancing resident–staff interaction (Kayser-Jones, 1996; Kayser-Jones & Schell, 1997; Reimer & Keller, 2009; Sydner & Fjellstrom, 2005); increasing multidisciplinary care (Davis & Spicer, 2007; Steele et al., 1997); and
implementing evidence-based individual intervention (McCullough, Rosenbek, Wertz, Suiter, & McCoy, 2007; Miller & Patterson, 2014). Translation of these recommendations to daily care has, however, been hindered by numerous barriers relating to: staffing (Bennett, Ward, Scarinci, & Waite, 2014; Crogan, Shultz, Adams, & Massey, 2001; Kayser-Jones & Schell, 1997; Simmons & Schnelle, 2006); limited recognition and inclusion of mealtime management in aged care sector and facility specific policy (Sydner & Fjellstrom, 2005); resident ill-health and cognitive deficit (Davis & Spicer, 2007); and poor collaboration and communication among service providers (Bennett et al., 2014; Crogan et al., 2001). Compounding these barriers RACF staff must consider situational variables including staff dynamics, each day’s activities and daily resident status, while also managing inconsistency between facility policy, procedure, resident-specific recommendations and the direction of superiors and specialist staff (Colon-Emeric, Ammarell, Bailey, Corazzini, Lekan-Rutledge, Piven, et al., 2006; Daskein, Moyle, & Creedy, 2009; Mitchell & Pachana, 2013; Ulrich, McCutcheon, & Parker, 2014). As a result, while service providers acknowledge the importance of holistic mealtime management, their ability to provide this care on a consistent basis is challenged (Crogan et al., 2001; Ulrich et al., 2014).

Acknowledging the complexity of these challenges and to understand why inconsistencies and inadequacies in mealtime management persist, mealtime management must be examined in context using data from a variety of sources. To date only one study has attempted to use triangulation of data sources to explore issues associated with mealtime care in RACFs. With a specific focus on examining assistant in nursing clinical knowledge about dysphagia, Pelletier (2004) compared data from: staff analysis of a simulated mealtime scenario; individual semi-structured interviews; and observation of mealtime care. Results revealed discrepancies between assistant in nursing knowledge and knowledge translation to daily care and a consistent pattern across data sources strengthening the findings of the study and illustrating the benefit of data triangulation. The aim, therefore, of the current study was to explore factors influencing mealtime management in RACFs by comparing information from documented, reported and observed care. The objective was to increase understanding of these factors to inform practice change and improve mealtime care.

Method

Permission for the study was granted by the Behavioural and Social Sciences Ethics Committee of The University of Queensland, Australia, and the participating RACF providers. This study was based on post-positivist, reality-oriented inquiry (Campbell & Ruso, 1999), using triangulation of data to describe as close to truth as possible, current mealtime management in participating RACFs. Triangulation was used to increase the accuracy and credibility of the findings, exploring current mealtime management considerate of context, resident need and the interplay between documented, reported and observed care (Patton, 2002; Thurmond, 2001).

Two regional RACFs providing high care services were recruited for this study. One was a 56 bed for-profit organization; the other a 61 bed not-for-profit organization. The two facilities were chosen to represent typical aged care services within the local area in which the research was conducted. Each had bed capacity within the average range for Australian facilities (Australian Institute of Health and Welfare, 2012) and each facility was governed by long standing aged care organizations that managed multiple (27 and 35, respectively) RACFs statewide. Within each RACF, both resident and staff participant groups were recruited. Recruitment was a two-stage process with residents recruited first and staff recruited during data collection.

Residents

Due to known challenges in recruiting representative resident samples in RACFs (Worrall & Hickson, 2003; Zermansky, Aldred, Petty, & Raynor, 2007), maximum variation sampling was used to select a diverse cohort (Patton, 2002) ensuring: (1) at least 50% of residents had moderate-to-high mealtime needs determined by a rating of “C” or “D” on the Nutrition sub-scale of the Aged Care Funding Instrument (ACFI) (Australian Government, Department of Health and Ageing, 2008); and (2) at least 50% of residents experienced moderate-to-severe communication difficulties confirmed by RACF staff and/or documented in the summary page of residents’ files. To receive a rating of “C” or “D” on the Nutrition sub-scale of the ACFI, residents must require either: (a) one-to-one physical assistance from another person to eat the majority of their meal (e.g. placing or guiding food to the resident’s mouth); or (b) supervision to eat (e.g. standing by to provide physical or verbal assistance) and one-to-one physical assistance to prepare to eat (e.g. cutting up or vitamizing food). Potential residents were then further categorized based on classification across five ACFI sub-categories: (1) Mobility, (2) Verbal Behaviour, (3) Physical Behaviour, (4) Cognitive Skills and (5) Complex Healthcare. Each of these sub-categories is rated on a 4-point scale (A = least need, D = highest need). Final sampling included variability across these categories (Table I). A total of 14 residents were recruited from the 19 who provided consent for their file and ACFI data to be reviewed for potential inclusion. The final sample included five men and nine women, aged between 60–99 years ($M = 84$ years; $SD = 10.9$ years). Length
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Data collection began with a review of resident files, followed by mealtime observations, then the resident and staff questionnaires. Data collection for the chart review and the mealtime observational assessments was completed by a speech-language pathologist (SLP) with 9 years experience working in aged care. To minimize observer bias the researcher was independent to the setting and unfamiliar to both staff and the residents.

Resident file review
Once residents were selected, a comprehensive file review was conducted to identify (a) the nature of any information relevant to mealtime management and (b) the location of this information in each resident's file. Resident files included the resident's care plan, ACFI summary and progress notes (online and paper based).

Mealtime observations
Each resident was observed during three mealtime sessions including one breakfast, one lunch and one dinner and on different days of the week to allow for variation between meal types and staffing. A total of 41 observations were completed with each mealtime observed in it's entirely from meal set-up to completion. One observation session for one resident could not be completed due to resident illness. All observations were conducted by the primary researcher, who took a passive role in the observations, maintaining a seated position adjacent to the resident and at a distance of between 2-4 metres from the resident. This distance ensured accurate observation of the mealtime, but minimized disruption to the resident and staff.

During the observations the researcher completed a purpose built form to record the mealtime data in detail (see the Supplementary Appendix to be found online at http://informahealthcare.com/doi/abs/10.3109/17549507.2014.987816). Content of the form was developed from a broad-based literature review of factors influencing mealtime function (Amella, 2004; Evans, Crogan, & Schultz, 2003; Miller & Patterson, 2014; Steele et al., 1997). The form categorized the mealtime into eight main sections: mealtime environment; location and seating;
meal presentation; feeding assistance; resident–staff interaction; diet; use of specific mealtime management strategies; and researcher recommendations. The form was designed to be used by any health professional involved in mealtime care to provide a single rater perspective, identifying potential issues in mealtime management for further multidisciplinary evaluation.

Resident questionnaire

Following the observations, residents were asked four questions:

(1) Where do you like to eat?
(2) How do you like your meals to be set-up?
(3) What foods and drinks do you like?
(4) What foods and drinks don’t you like?

The intent of these questions was to understand residents’ mealtime preferences, enabling comparison with staff knowledge of these preferences. Of the 14 residents, five were unable to answer these questions due to severe developmental delay (n = 1), poor medical state with decreased level of alertness (n = 1) and late stage dementia (n = 3). The resident questionnaire was completed after the observations to maintain the researchers’ independence and avoid bias during the observations.

Staff questionnaire

Staff completed a questionnaire to explore their knowledge of the residents’ mealtime needs and mealtime preferences. Staff were initially asked five questions:

(1) Does the resident have any preferences about meal set-up or procedure?
(2) Are there any foods or fluids that the resident prefers or particularly likes?
(3) Are there any foods or fluids that the resident refuses or particularly dislikes?
(4) Does the resident have a specific mealtime management plan or mealtime management recommendations?
(5) Does the resident eat their meals in their bedroom?

Staff then were asked whether the resident required any of four specific types of mealtime assistance to complete their meal: (a) visual supervision, (b) verbal prompting, (c) physical assistance or (d) special positioning. Responses were recorded as “yes” or “no”. Staff responses of “sometimes” were recorded as “yes”.

Data analysis

The content of data obtained from the file reviews and residents’ and staff questionnaires were analysed qualitatively to identify key categories of information from each of these three data sources describing residents’ mealtime needs (Patton, 2002). Identified categories from each of these three data sources were compared to identify similarities and differences between resident and staff responses and documented description of residents’ mealtime needs. Yes/no responses from the staff questionnaires, documentation of specific mealtime management recommendations and items from the mealtime observation form were further analysed using descriptive statistics calculating frequency counts and percentiles across the 14 files and 41 completed questionnaires and observations. Data obtained from the four data sources were cross-compared to complete the process of triangulation. Frequency counts of specific mealtime management recommendations in resident files were compared to staff yes/no responses and observational data to provide a direct comparison of documented, reported and observed use of visual supervision, verbal prompting, physical assistance and special positioning.

Results

Results obtained from each of the four data sources are presented below, followed by cross comparison to triangulate the analysis.

Resident file reviews

Information relating to mealtimes was found in several locations in residents’ files, including in their care plan, progress notes and ACFI summary. Content analysis revealed five key categories of information, but no consistency in the depth of information provided across different residents. The five categories of information were: formal assessment of mealtime difficulties by SLPs and dieticians and resulting recommendations, including recommendations for meal texture and fluid consistency (present in 5/14 files); resident likes/dislikes and preferences for meal set-up and procedure (in 9/14 files); recommended meal texture and fluid consistency without reference to SLP or dietician assessment (in 9/14 files); general report of mealtime difficulties and strategies to assist the resident by facility staff, medical officers, family members and/or the resident (found in 9/14 files). Further analysis of these nine files identified that five of these nine residents required visual supervision, five required verbal prompting, three required full physical assistance and four required special positioning, during mealtimes.

Mealtime observations

Both physical and verbal interaction between residents and staff during mealtimes was observed to be
minimal. During a third (13/41) of the mealtime observations the resident ate alone. For most of these mealtimes the resident ate alone in their bedroom, with no staff interaction other than to deliver and collect the meal.

Across all the mealtime observations there was minimal to no natural ongoing resident–staff communication, with 63.4% of resident–staff interaction coded as “no ongoing interaction” (26/41), 31.7% coded as “minimal appropriate interaction” (13/41) and 4.9% coded as “minimal inappropriate interaction” (2/41). All observations coded as either “minimal appropriate interaction” or “minimal inappropriate interaction” involved residents with moderate or severe communication difficulties. Therefore, for residents with nil or mild communication difficulties, no ongoing resident–staff interaction was noted during any observation.

Both participating facilities had the capacity to seat all residents in dedicated lounge/dining areas for meals. Observation, however, revealed 70% of residents ate in their bedroom during more than one observation (29/41), with most residents seated in recliner chairs for their meals. Almost all (40/41) meals were presented to residents with all courses on a single tray. Few environmental obstructions to the mealtime due to odours, lighting, noise or physical obstructions were noted during the observations. Despite the majority of residents eating in their bedrooms, level of privacy was rated as minimal or fair during 88% (36/41) of the observations. These ratings were assigned as a result of: (1) the presence of other residents and their family members in shared bedrooms, (2) staff in the room carrying out care tasks unrelated to the meal and (3) observed lack of action to increase privacy for residents positioned in full view of the passing public, such as by drawing a curtain or closing the resident’s door.

Each residents’ regular carer provided mealtime assistance during the majority of observations (39/41), with assistants in nursing delivering and collecting resident meals and providing mealtime assistance during 36/41 observations, family members during three observations and during the remaining observations a registered nurse and a kitchen staff member delivered one meal each.

All residents received thin fluids during all observations. A normal diet was given during 34 observations, a soft diet during one observation and a puree diet during six observations. Modified cutlery was provided during three observations and modified crockery during 21 observations.

Visual supervision was observed during 13 observations (31.8%) and recommended as needed by the researcher during 20 observations (48.8%). Verbal prompting was observed during six observations (14.6%) and recommended by the researcher during 10 observations (24.4%). Physical assistance was provided throughout the entire meal during 14 observations (34.2%) and recommended by the researcher during 15 observations (36.6%). Residents were specifically positioned for their meal during six observations (14.6%), with special positioning recommended by the researcher during 18 observations (43.4%). Four residents in this study were legally required to be fed by an RN based on their ACFI classification. Mealtime assistance for these residents was observed to be provided by assistants in nursing and family members. During two observations no assistance to these residents other than meal-set up was observed. The assistance given to these residents was noted as insufficient in meeting the resident’s mealtime needs during 7/11 observations, with the resident observed to struggle to complete his/her meal (63.6%).

Overall, mealtime management was observed to be consistent throughout the duration of the meal during 80% of observations and sufficient to minimize the resident’s risk of mealtime-related medical and nutritional complications during 61% of observations. Limited explicit management of residents’ psychosocial mealtime needs was observed during any observation.

**Resident questionnaire**

Content analysis of data from the resident questionnaire indicated most residents had a preference for both general food groups (e.g. sweet vs savoury) and specific food and fluid items (e.g. apple juice vs orange juice). Five residents also expressed preferences regarding meal set-up and procedure, such as requesting meal items to be placed in a set position on the table and given in a set order. All nine residents expressed specific opinions about where they would like to eat and their preferred level of privacy during meals; five of the nine residents preferred a high level of privacy during mealtimes.

**Staff questionnaire**

Over half (56%) of staff indicated that to their knowledge the resident participant did not have any mealtime likes/dislikes or preferences. Staff reported that 68% of residents preferred a high level of privacy during mealtimes, with 60% of residents eating in their bedroom at least “sometimes”. Just over half (63%) of staff were not aware that the resident had documented mealtime management strategies. Of the four residents who had previous SLP involvement 33% of matched staff were not aware of these recommendations. Staff reported that 57.5% of residents required visual supervision, 57.5% required verbal prompting, 50.0% required physical assistance and 52.5% required special positioning during their meal.

**Triangulation of data across data sources**

Similar to the residents, staff reported residents preferred a high level of privacy during mealtimes;
however, resident preference for privacy was not documented in any resident file. While all residents who completed the resident questionnaire expressed specific mealtime preferences, over half of the staff were not aware of these. Resident mealtime preferences were documented in only 9/14 resident files, with minimal information provided and limited to resident preference for meal location and one or two specific food likes/dislikes.

During 51% of observations residents received a diet inconsistent with their documentation. In nearly all cases a regular diet was given instead of a soft or pureed diet, representing a discrepancy with the resident’s documented diet. Modified cutlery was supplied to the one resident documented as requiring it during only one of the three observation sessions with this resident. This resident was observed to experience difficulty managing normal cutlery. Modified crockery was supplied to residents as documented during most observations (83%), with the resident observed to use this crockery without difficulty 76% of the time.

Comparison of recommended and observed use of: (1) visual supervision, (2) verbal prompting, (3) physical assistance and (4) special positioning revealed marked inconsistency across data sources. Staff reported need for the use of all four types of assistance was higher than that documented, researcher recommended or observed. Visual supervision, verbal prompting and special positioning were also observed less frequently than documented as needed or researcher recommended.

Staff were observed to follow the resident’s documented mealtime recommendations during 51% of observations, 18% for residents with additional SLP recommendations. Overall consistency in mealtime management across data sources for individual residents is illustrated in Table II. Inconsistency in mealtime management can be seen for all residents; however, greatest inconsistency is seen for the four residents classified with the highest mealtime needs (rating of D) and the one other resident with documented SLP recommendations (i.e. residents 2, 5, 8, 12 and 14). Of these five residents, four were also classified as having severe communication difficulty and one with moderate communication difficulty. For those residents where greater consistency in mealtime management was noted there were no distinguishing demographics other than a pattern of higher cognitive skills.

**Discussion**

This study aimed to compare documented, reported and observed mealtime management in RACFs to explore ongoing issues and interactions in holistic mealtime management for residents with varying mealtime needs. Triangulation of data sources enabled a multi-faceted analysis of current mealtime management identifying inconsistency in mealtime management across staff and residents. Discrepancies were found between what was documented in residents’ files, what was observed and what staff reported residents needed. Past literature indicates mealtimes are highly valued by RACF staff (Crogan et al., 2001; Ulrich et al., 2014) and residents (Chan & Pang, 2007; Crogan, Evans, Severtsen, & Shultz, 2004; Palacios-Cena, Losa-Iglesias, Cachon-Perez, Gomez-Perez, Gomez-Calero, & Fernandez-de-las-Pena, 2013); however, data from this study revealed mealtime management was limited in meeting residents’ holistic mealtime needs.

Many care staff in this study were not aware that residents had documented mealtime management recommendations and most were unable to describe in any detail the mealtime preferences of residents in their care. These preferences were also poorly documented in residents’ files. Lack of detailed information in resident files in RACFs has been

| Resident ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|-------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|
| Management categories |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Diet | ✓ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| Crockery/Cutlery | ✓ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| Meal Set-up | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| Visual Supervision | ✓ | x | ✓ | x | x | x | x | x | x | x | x | x | x | x |
| Verbal Prompting | ✓ | x | ✓ | x | ✓ | x | ✓ | x | x | x | x | x | x | x |
| Physical Assistance | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| Special Positioning | ✓ | x | x | ✓ | x | x | x | x | x | x | x | x | x | x |
| Other Strategies | ✓ | x | ✓ | x | x | x | x | x | x | x | x | x | x | x |
| Resident Preference | ✓ | x | x | x | x | x | x | x | x | x | x | x | x | x |
| Environmental Modifications | ✓ | x | x | x | x | x | x | x | x | x | x | x | x | x |
| Resident-Staff Interaction | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| Total no. Categories Consistent (n/11) | 8 | 1 | 8 | 9 | 0 | 5 | 8 | 1 | 5 | 7 | 6 | 2 | 6 | 2 |
| % Categories Consistent | 73 | 9 | 73 | 82 | 0 | 45 | 73 | 9 | 45 | 64 | 55 | 18 | 55 | 18 |

x = inconsistency between any two or more of the four data sources.
✓ consistency across all four data sources.
noted previously to be particularly problematic (Blackford, Strickland, & Morris, 2007; Pye, Worrall, & Hickson, 2000). Ensuring staff are aware of what is documented for residents is also a challenge, with investigators noting that recommendations are often documented without verbal handover to care staff (Pye et al., 2000). Overall, in the current study observed care did not reflect either documented care or residents’ reported preferences, resulting in mealtime management strategies that were often poorly matched to residents’ needs. This study highlighted a need for change at both management and service levels to facilitate accurate documentation of individual resident’s mealtime needs and better processes to ensure staff understand and address these needs.

Only four of the 14 (29%) residents in this study had previous SLP involvement and any formal diagnosis of mealtime difficulties. Care provided to these residents was found to be less consistent than care provided to residents with lower level mealtime needs, raising concern for the wellbeing of residents at most risk of mealtime complications. However, it is also important to note that, from a SLP’s perspective, mealtime management was limited in meeting the holistic mealtime needs for all residents. Hence, although some residents were identified through documentation to have specific mealtime needs, many others may have also benefitted from greater support. As very few residents had undergone any formal mealtime assessment the true extent of support needs for most residents in this study may be under-identified. To confirm this, multidisciplinary assessment of each resident’s mealtime needs and observation of current mealtime care would be needed. Such assessment would facilitate evidence-based identification of residents’ mealtime difficulties and needs and inform the development of appropriate care plans to support individual residents during mealtimes.

However, more comprehensive resident assessment will only be beneficial if the resulting recommendations are adequately communicated to and followed by all involved staff. Adherence to SLP recommendations in the current study was found to be poor, with staff observed to follow documented SLP recommendations during only two of 11 observations. This finding likely reflects the identified limitations in staff knowledge of residents’ mealtime needs and suggests the need for increased or more systematic communication between specialist health professionals and care staff. The need for greater staff awareness and understanding of mealtime issues has been highlighted numerous times in past literature, with a consistent call for increased training for RACF staff in mealtime care (Aselage & Amella, 2010; Crogan et al., 2001; Pelletier, 2004; Reimer & Keller, 2009).

By Australian law, residents of RACFs rated as D (Australian Government, Department of Health and Ageing, 2008). However, this was not observed to occur for the four residents in this study with this rating. This finding most likely reflects resource limitations, particularly limitations relating to time pressure and staffing (Bennett et al., 2014; Crogan et al., 2001; Kayser-Jones & Schell, 1997; Simmons & Schnelle, 2006). Of further concern was poor adherence to documented food texture. Texture modification is used as a therapeutic treatment for dysphagia, with the prescription of specific foods or fluids dependent on the nature and severity of the difficulty. Non-adherence can place individuals at increased aspiration risk (The Dieticians Association of Australia and The Speech Pathology Association of Australia, 2007). These findings suggest residents’ with mealtime difficulties in this study were at-risk for medical and nutritional complications and possible unplanned hospitalizations. Such consequences can affect facility funding and accreditation.

There has been long standing discussion about the importance of mealtimes as an opportunity for social interaction (Amella, 2004; Kayser-Jones & Schell, 1997; Philpin, Merrell, Warring, Hobby, & Gregory, 2014). Further, high quality resident–staff interaction during mealtimes has been found to positively impact resident food and fluid intake and resident satisfaction during mealtimes (Amella, 2004; Coyne & Hoskins, 1997; Evans et al., 2003; Hung & Chaudhury, 2011; Ulrich & McCutcheon, 2008; Van Ort & Phillips, 1995). Despite this, in the current study minimal resident–staff interaction was observed, with most interaction during mealtimes being task-focused, consistent with past studies of resident–staff communication in RACFs (Carpiac-Claver & Levy-Storms, 2007; Savundranayagam, 2014).

Most residents ate in their bedroom, limiting opportunity for social dining. This finding is consistent with resident preference for increased level of privacy during mealtimes, but inconsistent with the concepts of group and social dining (Amella, 2004; Barnes, Wasielewska, Raiswell, & Drummond, 2013). This finding suggests further research is needed to explore how residents define the concept of social dining in RACFs. This suggestion is supported by the findings of Adams, Anderson, Archuleta, and Kudin (2013) in comparing resident mealtime preferences in the family home prior to admission and the RACF post-admission. The authors found that, regardless of where residents ate at home, most residents preferred a quiet dining experience in the RACF, with the value of social interaction during mealtimes in the RACF limited compared to eating with one’s family and loved ones at home. The authors recommended further exploration of resident mealtime and dining style preferences and further involvement of residents in mealtime preparation and planning. Philpin et al. (2014) again support this need, discussing the complexity of the construct of mealtime experience in RACFs, including the interplay between physical and
sociocultural elements of the mealtime and the importance of shared understanding about mealtimes between residents and staff.

Achieving shared understanding requires effective communication. In this study, minimal resident–staff interaction, either verbal or physical, was observed, with the least resident–staff communication noted with residents with minimal communication difficulty. While it is acknowledged that these residents often required less mealtime assistance and as such may have been inaccurate for staff during mealtimes, they were the residents most capable of carrying an ongoing conversation. Hence, while limited resident–staff interaction during mealtimes may not have a significant impact on meal intake for these residents, it may have a significant impact on their psychosocial mealtime needs. Barnes et al. (2013) found similar results, noting that residents who were independent in meal intake were generally left to themselves. Pelletier (2004), however, found contrary results, with staff noted to initiate more ongoing and varied communication with residents with better communication skills. Neither of these studies examined the nature of resident–staff communication as a major factor in their research. Exploration of resident–staff communication in this study, although adding valuable data, was also limited. Investigation of resident experience of resident–staff interaction and the mealtime care they receive, as well as exploration of resident–resident interaction during mealtimes was not included. Classification of resident mealtimes difficulties in this study was based on the ACFI sub-category of Nutrition. Although this measure is used in RACFs to determine residents’ mealtimes needs and, therefore, directly mediates assistance given to the resident during mealtimes, the ACFI is not a diagnostic tool (Australian Government, Department of Health and Ageing, 2008). Assessment on the ACFI is limited in scope and cannot determine the nature or severity of the resident’s specific mealtime difficulties, nor does it provide recommendations for individualized mealtime management. Further analysis of mealtime management for residents with differing mealtime needs would require thorough multidisciplinary assessment. Classification of resident communication difficulty in this study was largely subjective and, therefore, also problematic. Again, comprehensive multidisciplinary assessment of residents communication needs would be ideal; however, the suitability of use of many commonly used communication assessment tools with the RACF population and in the RACF setting has long been questioned (Hopper, Cleary, Oddson, Donnelly, & Elgar, 2007; Pye et al., 2000; Worrall & Hickson, 2003). Although measures were taken to reduce observer bias, including independence of the researcher to the setting and participants and the use of a rigid procedure and data collection protocol, future research would be strengthened by the inclusion of multiple raters from different professions.

Conclusion

By comparing data across multiple sources this study revealed inconsistency in mealtime management in two RACFs, limitations in addressing residents’ holistic mealtime needs and lack of compliance with the principles of PCC. The study design and findings reiterate the complexity of achieving optimal mealtime management for residents in RACFs. Barriers and challenges identified in the two facilities in this study were not singular, simple problems, rather they were complex and arising from breakdowns and interactions at multiple levels from documentation to implementation. Facility management, specialists, researchers and policy-makers must acknowledge this complexity and work together to find sustainable solutions to further support residents and staff during mealtimes. Priority must also be given to comprehensive investigation of residents’ psychosocial mealtime needs, incorporating the perspective of the resident and exploration of resident–resident mealtime interaction.

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References

Adams, K., Anderson, J. B., Archuleta, M., & Kudin, A. (2013). Defining skilled nursing facility residents’ dining style preferences. *Journal of Nutrition in Gerontology and Geriatrics*, 32, 213–232.

Amella, E. J. (2004). Feeding and hydration issues for older adults with dementia. *Nursing Clinics of North America*, 39, 607–623.

Amella, E. J., Grant, A. P., & Mulloy, C. (2008). Eating behavior in persons with moderate to late stage dementia: Assessment and interventions. *Journal of American Psychiatric Nurses Association*, 13, 360–367.

Aselage, M. B., & Amella, E. J. (2010). An evolutionary analysis of mealtime difficulties in older adults with dementia. *Journal of Clinical Nursing*, 19, 33–41.

Australian Government, Department of Health and Ageing. (2008). *Aged Care Funding Instrument*. Commonwealth of Australia, Canberra, ACT. http://www.health.gov.au/acfi.

Australian Government Productivity Commission. (2011). *Caring for Older Australians*, Report No 53, Final Inquiry Report. Canberra: Australian Government Productivity Commission.

Bennett, M. K., Ward, E. G, Scarrinchi, N. A., & Wait, M. C. (2014). Service providers’ perceptions of working in residential aged care: a qualitative cross-sectional analysis. *Aging and Society. Early online doi: 10.1017/S0144686X14000853*

Blackford, J., Strickland, E., & Morris, B. (2007). Advance care planning in residential aged care facilities. *Contemporary Nurse*, 27, 141–151.

Bundy, A., Hemsley, B., Bruntnall, J., & Marshall, E. (2008). *Therapy Services in the Disability Sector: Literature Review*. NSW...
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Department of Ageing, Disability and Home Care, Sydney NSW. https://www.adhc.nsw.gov.au/__data/assets/file/0007/228139/10_Therapy_Services_Disability_Sector.pdf.

Campbell, D. T., & Russo, M. J. (1999). Social Experimentation. Thousand Oaks, CA: Sage.

Carpaci-Claver, M. L., & Levy-Storns, L. (2007). In a manner of speaking: Communication between nurse aides and older adults in long-term care settings. Health Communication, 22, 59–67.

Chan, H. Y. L., & Pang, S. M. C. (2007). Quality of life concerns and end-of-life care preferences of aged persons in long-term care facilities. Journal of Clinical Nursing, 16, 2158–2166.

Colon-Emeric, C. S., Ammarlel, N., Bailey, D., Corazzini, K., Lekan-Rutledge, D., Piven, M. L., et al. (2006). Patterns of medical and nursing staff communication in nursing homes: Implications and insights from complexity science. Qualitative Health Research, 16, 173–188.

Coyne, M. L., & Hoskins, L. (1997). Improving eating behaviours in dementia using behavioural strategies. Clinical Nursing Research, 6, 275–290.

Crogan, N. L., Evans, B., Severtsen, B., & Shultz, J. A. (2004). Improving nursing home food service: Uncovering the meaning of food through residents’ stories. Journal of Gerontological Nursing, 30, 29–36.

Crogan, N. L., Shultz, J. A., Adams, C. E., & Massey, L. K. (2001). Barriers to nutrition care for nursing home residents. Journal of Gerontological Nursing, 27, 25–31.

Daskein, R., Myole, W., & Creedy, D. (2009). Aged-care nurses’ knowledge of nursing documentation: An Australian perspective. Journal of Clinical Nursing, 18, 2087–2095.

Davis, L. A., & Spicer, M. T. (2007). Nutrition and dysphagia in older adults. Topics in Geriatric Rehabilitation, 23, 211–219.

Evans, B. C., Crogan, N. L., & Shultz, J. A. (2003). Quality dining in the nursing home. Journal of Nutrition for the Elderly, 22, 1–17.

Hopper, T., Cleary, S., Oddson, B., Donnelly, M. J., & Elgar, S. (2007). Service delivery for older Canadians with dementia: A survey of speech-language pathologists. Canadian Journal of Speech-Language Pathology and Audiology, 31, 114–126.

Hung, L., & Chaudhury, H. (2011). Exploring personhood in dining experiences of residents with dementia in long-term care facilities. Journal of Aging Studies, 25, 1–12.

Kayser-Jones, J. (1996). Mealtime in nursing homes: The importance of individualized care. Journal of Gerontological Nursing, 22, 26–31.

Kayser-Jones, J., & Schell, E. (1997). The effect of staffing on the quality of care at mealtime. Nursing Outlook, 45, 64–72.

McCullough, G. H., Rosenbek, J. C., Wertz, R. T., Suiter, D., & McCoy, S. C. (2007). Defining swallowing function by age: Promises and pitfalls of pigeonholing. Topics in Geriatric Rehabilitation, 23, 290–307.

Miller, N., & Patterson, J. (2014). Dysphagia: implications for older people. Reviews in Clinical Gerontology, 24, 41–57.

Mitchell, L. K., & Pachana, N. A. (2013). Rehabilitation in Residential Aged Care Facilities: Barriers and facilitators in a dementia context. Australian Journal of Rehabilitation Counseling, 19, 57–63.

Palacios-Cena, D., Losa-Iglesias, M. E., Cachon-Perez, J. M., Gomez-Perez, D., Gomez-Calero, C., & Fernandez-de-las-Pena, C. (2013). Is the mealtime experience in nursing homes understood? A qualitative study. Geriatrics Gerontology International, 13, 482–489.

Patton, M. Q. (2002). Qualitative research and evaluation methods (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Pelletier, C. A. (2004). What do certified nurse assistants actually know about dysphagia and feeding nursing home residents? American Journal of Speech-Language Pathology, 13, 99–113.

Philpin, S., Merrill, J., Warring, J., Hobby, D., & Gregory, V. (2014). Memories, identity and homelessness: The social construction of mealtimes in residential care homes in South Wales. Ageing & Society, 34, 753–789.

Pye, D. J., Worrall, L. E., & Hickson, L. M. H. (2000). Assessing and treating functional communication in an extended care facility. In L. Worrall, & C. Prattali (Eds.), Neurogenic communication disorders: A functional approach (pp. 312–328). New York: Thieme.

Reimer, H. D., & Keller, H. H. (2009). Mealtimes in nursing homes: striving for person-centred care. Journal of Nutrition for the elderly, 28, 327–347.

Savundranayagam, M. Y. (2014). Missed opportunities for person-centered communication: Implications for staff-resident interactions in long-term care. International Psychogeriatrics, 26, 645–655.

Simmons, S. F., & Schnelle, J. F. (2006). Feeding assistance needs of long-stay nursing home residents and staff time to provide care. Journal of American Geriatrics Society, 54, 919–924.

Steele, C. M., Greenwood, G. C., Ens, L., Robertson, C., & Seldman-Carlson, R. (1997). Mealtime difficulties in a home for the aged: Not just Dysphagia. Dysphagia, 12, 43–50.

Sydner, Y. M., & Fjellstrom, C. (2005). Food provision and the meal situation in elderly care - outcomes in different social contexts. Journal of Human Nutrition and Dietetics, 18, 45–52.

The Dieticians Association of Australia and The Speech Pathology Association of Australia. (2007). Texture-modified food and thickened fluids as used for individuals with Dysphagia: Australian standardized labels and definitions. Nutrition & Dietetics, 64 (Suppl. 2), 553–576.

Thurmond, V. A. (2001). The point of triangulation. Journal of Nursing Scholarship, 33, 253–258.

Ullrich, S., & McCutcheon, H. (2008). Nursing practice and oral fluid intake of older people with dementia. Journal of Clinical Nursing, 17, 2910–2919.

Ullrich, S., McCutcheon, H., & Parker, B. (2014). Nursing practice in nutritional care: A comparison between a residential aged care setting and a hospital setting. Journal of Advanced Nursing, 70, 1845–1855.

Van Ort, S., & Phillips, L. R. (1995). Nursing interventions to promote functional feeding. Journal of Gerontological Nursing, 21, 6–14.

Worrall, L., & Hickson, L. (2003). Communication disability in aging: From prevention to intervention. Clifton Park, NY: Delmar Learning.

Zermansky, A. G., Allred, D. P., Petry, D. R., & Raynor, D. (2007). Striving to recruit: The difficulties of conducting clinical research on elderly care home residents. Journal of the Royal Society of Medicine, 100, 258–261.

Supplementary material available online

Supplementary Appendix.