The design and feasibility pilot of a model to guide continence care in Australian residential aged care homes

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ABSTRACT

To co-design and pilot test a best practice model of continence care and knowledge translation resources for Australian residential aged care, a mixed methods study was undertaken. The study had four stages: (1) a scoping review of literature; (2) a survey, interviews and co-design workshops with residential aged care stakeholders; (3) the co-design of a draft model and knowledge translation resources; and (4) a pilot trial of an education program and qualitative interviews with residents. The pilot trial involved a convenience sample of 22 staff (registered and enrolled nurses and personal care assistants) from two Australian residential aged care homes. Staff completed one pre- and two post-education surveys, and 13 aged care residents were interviewed about their views about continence care. Pilot test data revealed post-education improvements in staff knowledge for eight of the ten questions, and 100% agreement on the feasibility, appropriateness and acceptability of the model and education program. Of the 22 participants, 63% rated the education as 'very helpful' in applying the model to practice and 37% rated it as 'somewhat helpful'. There was no statistically significant difference between the results of any of the three assessment surveys. A content analysis of resident interviews validated the importance of evidence-based, safe, clinically-informed, person-centred continence care that optimises a resident's functional abilities and responds to their individual needs, choices and dignity. The Continence Foundation of Australia has used these findings to design Continence SMART Care (CSC), which represents best practice continence care, meets the Aged Care Quality Standards, and aligns with current reform strategies for the aged care sector. Further research is required to determine the impact on practice and resident outcomes, and its relevance for use in other settings or countries.

Keywords incontinence, residential aged care, model of care, evidence-based practice, mixed methods

INTRODUCTION

Urinary incontinence (UI) and faecal incontinence (FI) in residential care homes are prevalent, long-standing, and pervasive problems. They incur human, financial and social costs. Meeting the needs of frail older people with incontinence in this setting is challenging, particularly if they have multiple comorbidities¹. Incontinence also increases the workload for care providers, as well as costs to the home².

UI impacts negatively on the quality of life of aged care residents, as reported in an analysis of data from 11,621 long-term residents of aged care homes in the USA, which found those with UI scored significantly lower on dignity, autonomy, mood sense of comfort and social engagement than did those without UI³. The negative

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Conflict of interest

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impacts of UI extend to increasing an older person's risk of falling^{4,5}, or of developing a urinary tract infection^{6,7} or incontinence-associated dermatitis⁸. Moreover, UI is a predictor of higher mortality in general, and particularly among frail older adults⁹.

Although incontinence is a potentially preventable and treatable symptom¹⁰, its management in many residential aged care homes is based on routine and is underpinned by the belief that incontinence is an intractable condition of old age¹. Evidence from several countries suggests the management of incontinence in care settings, including hospital and long-term aged care, fails to meet community expectations and is not consistent with recommended guidelines^{11,12} nor community expectations¹³.

Guidelines for the management of incontinence promote prevention strategies, a comprehensive assessment to identify a person's individual preferences and needs, including identification and treatment of potentially modifiable causes, and the implementation of a care plan that reflects the person's preferences and needs^{14,15}. However, research identifies a lack of assessment of incontinence in many long-term aged care settings¹⁶⁻¹⁸.

In addition to a lack of assessment, research points to: a lack of resident choice related to continence care¹⁹; resident and family dissatisfaction with the quality of continence care²⁰; insufficient time to provide continence care²¹; low rates of toileting assistance²²; a routine approach to bowel management²³; the overuse and inappropriate use of aperients²⁴; the indiscriminate use of incontinence products²⁵; polypharmacy²⁴; the overuse of anticholinergic medicines^{26,27}; a lack of prevention and management strategies for incontinence-associated dermatitis²⁸; inappropriate antibiotic use for residents with indwelling urinary catheters²⁹; missed care³⁰; and a lack of education for healthcare professionals about Ul³¹.

Given the ongoing concerns about the quality of continence care in long-term care settings, the aim of the project was to co-design and pilot a best practice model of continence care that reflected the best available evidence, represented the expectations of people with the lived experience of incontinence and their families, and was fit-for-purpose for Australian residential aged care homes.

MATERIALS AND METHODS

Using a mixed methods approach³², the project was undertaken in four stages as described in Table 1. The project was undertaken by researchers from the National Ageing Research Institute (NARI) and was overseen by a Project Advisory Group (PAG) (with representatives from the Australian Government and the Continence Foundation of Australia (CFA). It also comprised consumer representatives and individuals from aged care advocacy groups, as well as professionals with continence and aged care subject matter expertise. The study was approved by Austin Health Human Ethics Committee, HREC Reference Number: HREC/63029/Austin-2020. It was carried out according to the National Statement on Ethical Conduct in Human Research³³.

Stage 1: Scoping review

The aim of the scoping review was to identify and summarise evidence about quality continence care for people living in residential aged care homes in order to inform the model design. The literature review sought to answer questions about the prevalence, risk and impact of UI, FI and other bladder and bowel symptoms in residential aged care homes, and the effects of

Table 1. Project activities

Stage / Objective	Activities						
Stage 1: Scoping review							
Identify and summarise evidence about quality continence care for people living in residential aged care homes	A scoping review of literature						
Identify elements of the Aged Care Quality Standards ³³ to inform the design of a best practice model	• A review of databases and websites						
Stage 2: Consultation							
Identify residential aged care stakeholders' expectations and understanding of best practice continence care in residential aged	 An online survey of family carers and residential aged care staff 						
care homes	 Qualitative interviews with family carers and residential aged care staff 						
	 Co-design workshops with family carers and residential aged care staff 						
Stage 3: Co-design of model and knowledge translation resource(s)							
Design a draft model and accompanying knowledge translation resources	 Synthesis of data and initial draft of the model and resources 						
Stage 4: Pilot trial							
Determine whether the draft model and resources were contextually	A pilot trial of an education program						
relevant and fit for purpose in Australian residential aged care homes	• Qualitative interviews with aged care residents						

interventions. The methodology was developed using the Joanna Briggs Institute (JBI) Reviewers' manual³⁵ and reporting was in line with PRISMA-ScR guidelines³⁶. Studies sponsored by drug companies, or the manufacturer of incontinence products were excluded. The findings of each study were extracted and tabled. Where gaps were identified, further searching was conducted using online databases to identify published literature in that area. Relevant grey literature, including continence guidelines, were also reviewed.

Stage 2: Consultation

To understand stakeholder expectations, preferences and concerns about continence care in residential aged care homes, family carers/relatives of older people requiring care in a residential aged care home or staff members currently working in a residential aged care home anywhere in Australia were recruited via Facebook, Twitter, newsletters and email databases targeting volunteer databases and peak bodies and organisations in Australia. A mixed methods research approach was employed and consisted of an online survey, qualitative interviews and co-design workshops.

Online survey

Participants completed an online anonymous survey to rank the importance of several factors to continence care in residential aged care homes. They were offered the opportunity to win one of three \$40 gift cards in appreciation of their time. At the completion of the survey, participants were invited to participate in an in-depth telephone interview and/or online co-design workshop.

Qualitative interviews

Participants were interviewed by phone to elicit their opinions about what constituted 'good' continence care in residential aged care homes, what residents and family members and staff needed to know, and the resources required to provide good continence care. The questions were informed by findings of the literature review and in consultation with the PAG. Specifically, participants were asked:

- When thinking about continence care for people living in residential aged care, what do you think are the most important things to consider?
- When thinking about continence care for aged care residents, what do you think the most important qualities that the staff should have?
- What do you think residents and family members need to know about incontinence?
- What do you think staff need to know about incontinence in order to provide good continence care?
- What other resources (apart from staff and resident education) are needed to provide good continence care?
- What are some of the barriers to good continence care in residential aged care?

Co-designed workshops

Two online co-design workshops were held for another group of residential aged care home stakeholders. In the first workshop, participants discussed the components of a draft model of care and resources required to deliver the model. In the second workshop, they reviewed a set of propositional concepts for a draft model. The workshops were based on World Café's seven integrated principles³⁷.

Data analysis

Quantitative data were described using frequency and percentages for categorical data and Likert scales. A 2-tailed test of population proportion was used to determine statistically significant differences between categorical data subsets. Likert scale results were expressed as diverging stacked bar graphs where results are aligned to the centre of the neutral response. Statistically significant differences between Likert scale data subsets were determined by a Mann-Whitney U test between two independent groups and a Kruskal-Wallis H test between two or more independent groups. Differences between subgroups were only reported where they were calculated to be statistically significant (p<0.05).

Qualitative data were uploaded into NVivo 12³⁸, a software package to facilitate the organisation of qualitative analysis. Two researchers independently used an inductive thematic analysis approach to develop a coding framework, which was then further developed collaboratively. The coding framework was independently applied by both researchers to the anonymised data. Differences in coding were discussed and mediated by a third researcher where necessary. The interviews were transcribed and analysed with survey comments and co-design workshop findings to identify the major themes.

Stage 3: Co-design of model and knowledge translation resource(s)

Findings from the scoping review, online survey, qualitative interviews and the first co-design workshop were synthesised to co-design a model and accompanying knowledge translation resources. Feedback was sought from PAG members and participants of the second co-design workshop. This information informed further iterations to the draft model and resources.

Stage 4: Pilot trial

A pilot trial of the draft model of care was conducted to determine its feasibility and application. Convenience sampling was used to recruit staff from residential aged care homes with whom the researchers had a working relationship. Nurse unit managers (NUMs) identified up to 10 registered nurses, enrolled nurses or personal care assistants experienced in providing continence care for the education program. Managers of the homes provided administrative approval for their organisation's participation and individual staff provided informed consent. Homes were reimbursed for staff costs. The pilot trial involved a 3-hour education program consisting of four modules of education. The program was delivered live online by two researchers using the Zoom platform. Three surveys were drafted with reference to the literature and the findings from previous stages of the research. They consisted of multiple-choice questions. The draft surveys were reviewed by the education team from the CFA and adapted accordingly. The three surveys were:

- A pre-education pilot study survey (administered 1 week prior to the education).
- An immediate post-education pilot study survey (administered within 1 week following the education).
- A follow-up post-education pilot study survey (administered 4 weeks after the education).

Free text comments were also invited. Participants were asked to indicate the appropriateness, acceptability and feasibility of the draft model and education program and to indicate areas for improvement. Quantitative data were analysed using summary statistical analysis in excel. Qualitative data transcribed from the education sessions and from the survey's open-ended questions were subject to content analysis conducted by two researchers who each independently reviewed the data to draw out the major themes. The results of the evaluation forms, together with additional feedback from the participants and the researchers' observations and experiences, were collated and analysed and used to adapt the model.

Validation: resident interviews

To further validate the propositional concepts in the draft model of continence care, gualitative interviews were conducted with residential aged care home residents who were assessed as cognitively able to provide informed consent and had the capacity to take part in a face-to-face interview of 30-60 minutes' duration. Residents were purposively recruited from residential age care homes that had staff participate in the trial of the draft model education program. They were recruited by the NUM of each home. Using an open-ended interview approach, participants were interviewed about their opinions about what constituted 'good' continence care in residential aged care homes, what they and family members and staff needed to know, and the resources required to provide good continence care. Data collection continued until saturation was reached.

Interviews were recorded, transcribed and thematically analysed using NVivo 12³⁸. Two researchers independently reviewed the data to identify the major themes. The themes extracted by the two researchers were compared for any differences, and agreement was researched. A deductive coding framework was used to make cross comparisons with the propositional concepts in the draft model.

RESULTS

Stage 1: Scoping review

The scoping review of literature identified 1,776 peer-

reviewed publications. After removal of duplicates, 223 were included. Over 500 guidelines, frameworks and policy documents were located; 24 were eligible for inclusion. Data from each study were extracted and tabled according to whether they addressed the prevalence, risk or impact of UI, FI, dual incontinence, and other bladder/bowel symptoms, or was an evaluation of an intervention. The findings from each study were synthesised and translated into recommendations that address the following six topics:

- Caring for a resident with incontinence and other bladder and bowel symptoms (14 recommendations).
- Caring for a resident with an indwelling urinary catheter (7 recommendations).
- Caring for a resident with incontinence-associated dermatitis (5 recommendations).
- Educating the residential aged care home workforce about continence care (5 recommendations).
- Addressing organisational and policy factors that influence the quality of continence care in residential aged care (13 recommendations).
- Providing end-of-life continence care (5 recommendations).

Each recommendation was translated into an evidence statement that was then mapped to one or more of the Australian Aged Care Quality Standards³³.

Stage 2: Consultation

Online survey

An online survey was completed by 177 aged care stakeholders. Most of the factors were ranked as 'very important', with ranking between 83–95%. A total of 90% of respondents who completed the survey also indicated that information for residents and families about incontinence options was 'very important', as was information about care options (85%) and treatment options (75%).

When asked to rank these factors from 'most' to 'least important', most respondents ranked 'access to timely staff help' as the 'most important' aspect, followed by 'help to reach and use the toilet', followed by 'help to maintain continence'. 'Dignity' was also ranked highly, as was 'a skilled and trained workforce'.

Qualitative interviews

Qualitative interviews were conducted with 14 participants. Findings revealed participants valued continence care that was person-centred, practical, delivered by staff who were knowledgeable, skilled and educated, and was appropriately resourced (Table 2).

Co-design workshops

The co-design workshops were attended by 18 people - 10 participants in the first session and eight in the second. Participants represented an equal mix of individuals who worked in residential aged care homes and family carers of residential aged care home residents. The findings from all sources were synthesised by the researchers using an inductive approach. This led to the identification of several

Table 2. Themes and sub-themes from qualitative interviews

Theme / Sub-theme

Person-centred continence care

- Practices that promote and uphold a resident's personal choice, dignity and independence and minimises their embarrassment and shame
- Staff beliefs, attitudes, personal characteristics and communication skills
- Family advocacy and involvement in a resident's care
- Appropriate assessment and care planning
- Information sharing

Practical assistance to optimise residents' continence

- Access to timely responsive assistance
- Access to appropriate equipment, infrastructure and environment

Staff knowledge, skills and education

- Gaps in basic education programs
- Who needs to know what?
- The mixed benefits of industry-based education

Adequate resources

- Appropriate staff-to-resident ratios
- Consistent staffing
- Access to clinical support and leadership

Table 3. Factors that are considered important to residents and families for quality continence care in residential aged care homes

Important factors for residents and families

Residents

- Choice and autonomy
- Values, goals and preferences
- Acknowledgement of residents' personhood
- Dignity
- Access and equity
- Inclusivity (respect for culture, diversity and identity)
- Involvement in decisions about care planning and evaluation
- Involvement of family carers
- Timely, responsive care
- Safety

Families

- Advocacy opportunities
- Access to information and education
- Access to support

factors that stakeholders believed were important to residents and families for quality continence care (Table 3), as well as staff and organisational factors that potentially affect the quality of continence care in this setting (Table 4). All of these factors were included in the final model.

Stage 3: Co-design of model and knowledge translation resource(s)

The draft model consisted of 10 aspirational statements (Figure 1):

1. Continence care is person-centred through supported shared decision-making.

Table 4. Staff and organisational factors that potentially influence the quality of continence care in residential aged care homes

Staff and organisational factors

Staff

- Qualifications
- Scope and standards of practice
- Knowledge and skills about bladder and bowel function
 Communication skills (verbal and non-verbal)
- Communication skills (verbal and non-verbal)
 Personal attributes i.e. empathy kindness, compased
- Personal attributes i.e. empathy, kindness, compassion
 Access to mentoring
- Access to independent education about incontinence
- Access to specialist advice

Organisation

- Strategies to minimise risk and harm
- Processes to support resident and family input
- Evidence-based screening and assessment
- Comprehensive care planning and review
- Communication processes
- Processes to identify and respond to changes in continence and health
- Standardised infection control programs
- · Targeted, individualised enabling approaches
- A supportive physical environment
- Appropriate staffing levels and skill mix
- Leadership and mentoring
- Provision of education and training
- Clear roles and responsibilities
- Audit and feedback processes for quality improvement, i.e. complaints
- Quality indicators
- 2. Continence care is clinically informed through an assessment process.
- 3. Continence care is informed by the best available evidence.
- 4. Continence care protects a resident's dignity.
- 5. Continence care optimises a resident's functional abilities.
- 6. Continence care is timely and responsive.
- 7. Continence care is inclusive and respectful of a resident's culture, diversity and identity.
- 8. Continence care is safe.
- 9. Continence care is provided by appropriately trained and skilled staff.
- 10. Continence care is appropriately resourced (Appendix 1).

To support its use in practice, five knowledge translation resources were designed (Figure 2):

- 1. A consumer guide to continence care in residential aged care.
- 2. A continence care decision support tool.
- 3. A continence care organisational audit tool.
- 4. A continence care education resource.
- 5. Continence care evidence statements.

THE BEST PRACTICE MODEL OF CONTINENCE CARE IN RESIDENTIAL AGED CARE



Figure 1. The Best Practice Model of Continence Care in residential aged care

MIDNALA RESEARCHING	RI RI Resources to Suppor	t the Best-Practice Model of Con	tinence Care
	WHAT IS THE RESOURCE?	WHO IS IT AIMED AT?	HOW WILL IT BE USED?
-	Consumer Guide to Continence Care in Residential Aged Care	Residents, their families and care partners	To understand what continence care is, and what they can expect in terms of continence care
~	Continence Care Decision Support Tool	Registered Nurses who assess residents' continence care needs	To augment existing continence assessment processes
8	Continence Care Organisational- Audit Tool	Managers and Quality Assessors who evaluate continence care practices	To evaluate continence care practices
4	Continence Care Education Resource	Education Developers and Providers	To support the design and delivery of education about the Model
CO	Continence Care Evidence Statements	Aged care decision-makers, employees and Quality Assessors	To inform the implementation of evidence-based continence care

Table 5. Demographic profiles of education program pilot participants

Variable / Description	Pre-education		1 week post-education		4 weeks post-education				
	n=22	%	n=19	%	n=12	%			
Current role									
Registered nurse ⁺	6	27	2	11	1	8			
Enrolled nurse*	11	50	10	91	9	75			
Personal care assistant [§]	4	18	6	32	2	17			
Nurse unit manager	1	5	1	5	0	0			
Time worked in aged care				I					
0-5 years	7	32	6	32	4	33			
5-10 years	3	14	5	26	0	0			
10-20 years	8	36	4	21	6	50			
20+ years	4	18	4	21	2	17			
Time worked in current role									
0-5 years	8	36	7	37	3	25			
5-10 years	4	18	6	32	5	42			
10-20 years	8	36	4	21	3	25			
20+ years	2	9	2	11	1	8			
Qualifications									
General									
Year 10 or below	6	27	3	16	5	42			
Year 11/12	12	55	12	63	5	42			
Health									
Certificate IV/Diploma in Enrolled Nursing	9	41	9	47	7	58			
Other basic nursing qualification	1	5	1	5	2	17			
Bachelor Degree in Nursing	7	32	3	16	1	8			
Aged care									
Certificate III in Aged Care	1	5	2	11	2	17			
Certificate III in Home and Community Care	1	5	2	11	2	17			
Certificate IV in Aged Care	5	23	7	37	2	17			
Post-basic nursing qualification in aged care	1	5	1	5	0	0			
Other (aged care)	0	0	1	5	0	0			
Other (disability)	1	5	0	0	0	0			
Management									
Diploma (Management)	1	5	2	11	0	0			
Bachelor or Postgraduate Degree (Management)	0	0	3	16	0	0			
Other									
Certificate III or IV (Other)	1	5	1	5	1	8			
Diploma (Other)	3	14	1	5	2	17			
Bachelor or Postgraduate Degree (Other)	2	9	0	0	0	0			

* A person who has completed the prescribed education preparation, demonstrates competence to practise and is registered under the Health Practitioner Regulation National Law as a RN in Australia. Registered nurses are responsible and accountable for supervision and the delegation of nursing activity to enrolled nurses and others (Nursing & Midwifery Board of Australia, 2016).

* A person who provides nursing care under the direct or indirect supervision of a RN. They have completed the prescribed education preparation, and demonstrate competence

to practise under the Health Practitioner Regulation National Law as an enrolled nurse in Australia. Enrolled nurses are accountable for their own practice and remain responsible to a Registered nurse for the delegated care (Nursing & Midwifery Board of Australia, 2016). * Non-nursing staff who provide personal care, general assistance, emotional support and companionship for the elderly and those with disability (or long-term health conditions). This coverage loosely aligns to ANZSCO codes 4231 Aged and Disabled Carers and 4233 Nursing Support and Personal Care Workers (excluding hospital orderlies and therapy code). aides) (Australian Government Department of Employment, 2014)

Stage 4: Pilot trial

The pilot trial

Twenty two staff members from two residential aged care homes attended the education sessions and completed the pre-education survey. Nineteen completed the post-education survey within 1 week of the education sessions. Twelve participants completed the follow-up post-education survey at 4 weeks. Participant demographic characteristics, including roles, qualifications, length of service in a residential aged care home and time in current role, are shown in Table 5.

Knowledge of continence care

Prior to training, staff scored an average of 76%±10.6% on the survey designed to test their knowledge. Scores increased to 81%±7.2% within the week of educational training and decreased slightly to 80%±9.1% at 4 weeks post-education. There was no statistically significant difference between the results of any of the three assessment surveys.

Two of the multiple-choice questions appeared to be problematic for participants. Unlike the remaining eight questions, there was no upward trend in these two questions following the education session. These were questions about the definitions of "resident care preferences" and an "aged care consumer pathway for continence care".

Ratings of the appropriateness, acceptability and feasibility of the model and education program

Participants were asked to rate the appropriateness, acceptability and feasibility of the model and the education program in a series of nine assessment questions. All participants who responded 1 week and 4 weeks post-education strongly agreed that the model was appropriate, acceptable and feasible to implement. Eighteen of the 19 participants who responded in the first survey strongly agreed that the education program was appropriate, with the remaining participant only 'agreeing' and not 'strongly agreeeing' with the statement.

Survey responses immediately post-education showed that 63% of participants rated the education program as very helpful, while 37% rated it as somewhat helpful. After 4 weeks, of the 12 respondents, 55% rated the

Table 6. Themes and sub-themes from resident interviews

Theme / Sub-themes

- Oh God, it's come to this!How staff should deal with 'it'
- Being kept in the loop
- Involving my family

Getting the help I need

- Receiving care from staff who care about me
- Being able to walk, but getting help when I need it
- Enough staff to care for me
- Being able to use incontinence products
- Having my own toilet and access to a call bell
- Being able to eat what I want

education program as very helpful and 45% somewhat helpful. No participants at either time point felt that the education program would be not helpful at all.

Qualitative comments

A content analysis of comments about the education suggested the need for further independent contemporary information about continence care for residential aged care home staff. Comments noted the emphasis within the program on the role of empathy in the delivery of continence care and the information about how emotions impact on residents' and staff behaviour. Participants noted that while the causes of incontinence were covered in sufficient detail in the education program, more information could and should be provided on details of continence assessment and practical strategies about how to communicate well with residents about incontinence. Participants provided several suggestions for applying the information to practice, and the model of delivery.

Qualitative interviews with aged care residents

Thirteen residential aged care home residents were interviewed – nine residents living in rural residential aged care homes and four in a metropolitan residential aged care home. Two major themes emerged from the qualitative data: (i) Oh God, it's come to this! and (ii) Getting the help I need. The themes, together with their sub-themes, are listed in Table 6.

The pilot and validation activity confirmed the salient of the existing concepts and indicated no requirement to alter the model. The collective findings from qualitative interviews with residents, and from the data collected during the pilot trial, informed the need for minor revisions to the draft model and accompanying knowledge translation resources. In particular, the project management group revised the educational content to ensure a stronger alignment with the principles of the model.

DISCUSSION

The aim of the project was to co-design and pilot a best practice model of continence care that reflected the best available evidence, represented the expectations of people with the lived experience of incontinence and their families, and was fit-for-purpose for Australian residential aged care homes. We were unfortunately unable to demonstrate statistically significant differences in staff knowledge between the results of the three assessment surveys. Whist the small sample size was a key factor, it could also relate to the lack of reliability and validity of the data collection instrument.

The education program about the model differed from standard educational programs about incontinence for the aged care workforce. The data collection instrument was designed by the team to align with the educational content. It needs to be further tested, as does the model and the methods to evaluate the uptake of the model. Despite this finding, we suggest the model and accompanying resources have multiple uses. As the model describes best practice continence care, its use in practice could augment aged care providers' efforts to meet and exceed quality standards and contribute to broader efforts to strengthen systems to ensure quality care in this setting. The model could also underpin and inform education about continence care for the residential aged care home workforce in particular and thereby augment the government's and industry's overall strategy to build workforce knowledge and skills.

Prior research identifies major gaps in education about incontinence for aged care employees as well as for healthcare professionals^{31,39}. The educational learning objectives and educational content designed as part of the project could partially address this gap. It primarily targets nurses and personal care assistants working with residential aged care home residents. However, the holistic nature of the model also means it may have broader applicability to other organisational settings such as in acute care or institutions for people living with a disability who have continence care needs. By establishing and articulating what characterises best practice continence care, the model could also inform the design of quality indicators to evaluate the quality of continence care in a residential aged care home context.

Despite the rigorous approach undertaken to design the model, further consultation is required to ensure it is inclusive and respectful of the diversity of residential aged care home residents, such as residents from cultural and linguistically diverse backgrounds, First Nations peoples and people who identify as Lesbian, Gay, Bisexual, Transgender and Gender Diverse, and/ or Intersex, as well as residents with an ostomy or indwelling urinary catheter. Moreover, as the data are based on a small sample of staff from only two residential aged care homes and a convenience sampling approach, the findings could reflect a bias toward negative experiences and may or may not represent the quality of continence care in all residential aged care homes. Hence, a robust pre/post-study or randomised controlled trial is required to evaluate the effects of the model on residents, their families and aged care providers in different residential aged care homes and in different cultural contexts.

CONCLUSION

The Best Practice Model of Continence Care designed by NARI is a theoretical model that describes best practice care for a residential aged care home resident who requires support to maintain continence or manage incontinence or other bladder and bowel symptoms. The focus is on evidence-informed, safe, clinically informed, person-centred continence care that optimises a resident's functional abilities and responds to their individual needs, choices and dignity. As such, the model promotes and supports the goal of care as well as the goal of cure. The design approach was characterised by an iterative process of collecting, synthesising and integrating evidence from multiple sources. It therefore represents the best available evidence, incorporates the expectations of people with the lived experience of incontinence and other residential aged care home stakeholders, and is fit-forpurpose.

The model could inform the development of quality standards and quality indicators for continence care in residential aged care. It also has the potential to reframe current education about continence care for the aged care workforce. To this end, the Continence Foundation of Australia has designed a comprehensive program titled <u>Continence SMART Care</u> (CSC), and is adopting a phased approach to its implementation.

Although a rigorous approach was used to design the Best Practice Model of Continence Care and CSC, further research is nevertheless required to determine the impact on practice and resident outcomes broadly as well as its contextual relevance for use in other settings or countries.

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