Innovations in Aged Care
A suite of evidence-based continence assessment tools for residential aged care

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The management of incontinence in residential aged care facilities presents staff with considerable challenges. In order to support the residential aged care workforce to provide evidence-based continence care, we developed a suite of evidence-based continence assessment tools and an accompanying educational resource for use in the residential aged care sector. The tools comply with international and accreditation standards. They address urinary and faecal incontinence and other bladder and bowel symptoms. They also include a number of cues to guide staff to assess and manage residents' continence care needs and refer as needed. An evaluation of the tools conducted in 18 residential aged care facilities across three states revealed that staff members found the tools helpful, clear, simple and user-friendly. This paper provides a description of the newly developed suite of continence assessment tools for residential aged care and the accompanying education resources, and presents staff perspectives on their clinical usefulness.

Key words: evidence-based practice, faecal incontinence, nursing assessment, nursing home, urinary incontinence.

Background
More than 50% of the 172 657 Australians currently living in residential aged care facilities (RACFs) experience urinary incontinence and between 10 and 30% experience faecal incontinence [1]. Moreover, 66% require support with bladder management; 72% require support with bowel management; and 68% require assistance in toileting [1]. Care in RACFs is provided by a total workforce of approximately 133 000 employees, most of whom are unregulated workers such as personal care workers, nursing aides and nursing assistants [2], and who have minimal formal education about incontinence and its management.

Providing quality continence care in residential aged care settings is challenging due to the complexity of residents’ health status, difficulties recruiting and retaining skilled staff, and financial and regulatory constraints [3]. For example, incontinence in frail older adults is a complex condition that is usually caused by multiple factors [4,5]. Staff are therefore required to conduct a comprehensive assessment to identify factors that contribute to residents' incontinence and to develop, implement and review an individualised care plan for each resident. As with other aspects of care, staff also need to comply with standards and guidelines established by the Australian Government Department of Health and Ageing (DoHA) and the Aged Care Standards and Accreditation Agency (ACSAA). Information from the assessment is used to complete the Aged Care Funding Instrument (ACFI) and claim the Residential Aged Care Subsidy. Recent changes in the residential aged care sector have led to a reduction in the number of qualified nursing staff and an increase in non-professional staff [2]. Consequently, the extent to which these non-professional staff are equipped with the requisite skills to provide continence care is questionable.

Assessment is the foundation of any clinical decision-making process [6]. Information about the resident is gathered using an assessment form to collect clinical information, determine their health-care status and to plan appropriate care. Therefore, it is important that assessment forms are designed to include appropriate cues and prompts to guide clinical decision-making. Assessment forms should also address legal and professional standards and assist staff in their duty of care. In order to determine whether commonly used assessment and management tools to guide continence care in residential aged care settings met these standards, we conducted a national review of continence assessment tools (resources) used in the residential aged care sector [7]. Seventy-six different continence resources were evaluated in terms of the extent to which they met international standards for assessing incontinence in frail older adults [4,5]. The findings revealed that:

1. Most tools did not meet the criteria for assessing voiding patterns and symptoms.
2. Some facilities did not use bowel charts and bladder charts.
3. Most tools did not provide cues to guide the diagnosis, management and evaluation of incontinence.
4. It was unclear as to whether these tools were suitable for use by all levels of staff (e.g. registered nurses and unregulated workers) [7].

Interviews conducted as part of this research with 147 residential aged care staff from 89 different facilities indicated a need to develop standard continence assessment forms and charts that could form part of a national continence care plan for the residential aged care sector. Based on these findings, the researchers recommended that a suite of evidence-based continence assessment tools be developed for residential aged care.
care settings. They also recommended that educational resources be developed to support the use of these tools in the clinical setting. It was important that the tools and accompanying educational material accommodate the differences in the levels of knowledge and education of the residential aged care workforce.

The current project
In the light of the above recommendations, the Australian Government DoHA funded our research team to develop and trial a suite of evidence-based continence assessment tools for use in residential aged care. This was deemed necessary as continence care represents a significant and increasing aspect of residential aged care and is a costly component of care. Moreover, older population with increasing demand for residential aged care services and the management of continence in these services, provided further support for the need to develop an evidence-based approach to continence care. This paper provides a description of the newly developed suite of continence assessment tools for residential aged care and the accompanying education resources, and presents staff perspectives on their clinical usefulness.

Continence resource development
In order to develop the tools and accompanying educational resources, the project team conducted a comprehensive review of literature and a search of the websites of prominent national and international peak bodies with expertise in continence or urology. Forty-three factors were identified for inclusion in the tools: 28 clinical symptoms (e.g. frequency and severity of urinary and faecal incontinence) and 15 factors that contribute to incontinence (e.g. delirium, constipation) [4,5]. Draft versions of the tools went through several iterations following feedback from members of a key stakeholder advisory group, outcomes measurement experts and staff from the DoHA. To ensure congruence with standards and guidelines from the DoHA and from the ACSAA, the tools were also developed with reference to the Residential Aged Care Manual [8] and guidelines for using the ACFI [9].

The newly developed continence assessment tools for residential aged care are freely available from the DoHA Bladder and Bowel website (http://www.bladderbowel.gov.au) and from the Continence Foundation of Australia website (http://www.continence.org.au). They include the following forms:
- Continence Management Flow Chart.
- Continence Screening Form (see Figure 1 for example).
- Three Day Bladder Chart.
- Seven Day Bowel Chart.
- Monthly Bowel Chart.
- Continence Assessment and Care Plan Form (see Figure 2 for example).
- Continence Review Form.

The Continence Assessment and Care Plan Form includes cues for assessment and management. It addresses urinary and faecal incontinence as well as other bladder and bowel symptoms such as constipation, urinary frequency and nocturia. A number of triggers are incorporated to alert staff to seek more specialised advice. A Continence Care Summary form allows assessment data to be documented in a condensed format so that it can be used as a guide to daily care. The tools are accompanied by an education guide, a PowerPoint Presentation and a poster. These free educational resources have been designed to be self-explanatory and to be used by registered nurses to train other levels of staff. The educational resources provide information on the following issues:
- Identifying residents who require a continence assessment.
- Completing the Three Day Bladder Chart.
- Completing the Seven Day Bowel Chart.
- Using the Bristol Stool Form Scale.
- Completing the Monthly Bowel Chart.
- Completing the Continence Assessment Form and Care Plan.
- Reviewing residents’ continence status.
- Respecting residents’ rights during a continence assessment.
- Linking ACFI with the continence tools.
- Bladder and bowel symptoms and conditions that warrant further attention.
- Medications that may affect continence.
- Other resources.

The forms were designed cognisant of the diverse skill mix of the RACF workforce and with the intent of providing direction for all levels of staff that use the forms. However they were also developed based on the understanding that within the context of existing models of care in the residential aged care sector, registered nurses have responsibility for overall care and can delegate care activities according to the knowledge, skill and scope of practice of the staff members. Therefore, how the tools are used in practice, and by whom, will be based on the registered nurses’ decision and delegation.

Tool evaluation
The continence assessment tools for residential aged care and education resources were evaluated across 18 RACFs in Victoria, South Australia and Tasmania. The facilities were selected as they represented a mix of private and public facilities that provide both high and low care. The project team invited staff from participating sites to trial the tools and to provide feedback to the project team. Following the trial, staff were invited to complete a purpose-designed survey, which contained questions about the helpfulness and clarity of the tools and accompanying educational resources. In addition, we conducted one-on-one and focus group interviews to obtain further information on the following issues:
- The usefulness of the tools in assisting with bladder and bowel assessment and management (i.e. helpfulness, clarity, ease of implementation, user-friendliness).
- The impact of the tools on practice.
A total of 119 staff members participated in the evaluation. Of the 110 who provided information on their registration status, 53 were registered nurses division 2 (enrolled nurses); 31 were registered nurses division 1; 23 were unregulated workers; and 3 were registered nurses division 3. Most staff members worked part-time (68%; see Table 1). On average, they had been in their positions for 6.8 years (standard deviation = 6.4; ranging from 3 months to 28 years). The average time since they commenced nursing or unregulated nursing duties was 17.3 years (standard deviation = 12.2; ranging from 6 months to 45 years). Most participants had a Technical and Further Education qualification or higher. Countries of origin were mainly English speaking, with most participants (78.2%) from Australia and from other Commonwealth countries (10.9%) and most spoke English at home (91%).

The usefulness of the tools
Participants who had reviewed or used the tools and completed the survey rated the tools on a four-point scale (1 = ‘not at all’ to 4 = ‘very’).

1 The content and layout of the Flow Chart and Screening Chart were rated as moderately to very helpful and clear with similar ratings that ranged from 3.2 to 3.4.
The content and layout of the Bladder Chart and Bowel Chart were rated as moderately to very helpful with similar ratings that ranged from 3.2 to 3.3 for all of the categories. Bladder and bowel charts were also rated as moderately to very clear in both content and layout with ratings that ranged from 3.2 to 3.3.

Participants rated the assessment questions and care options on the tools as moderately to very helpful with ratings that ranged from 3.0 to 3.4. Similarly, the assessment questions and care options on the tools were generally considered to be moderately to very clear with ratings for all of the assessment categories that ranged from 3.1 to 3.5.
The management options on the tools were rated as moderately to very helpful with ratings that ranged from 3.1 to 3.3. Similarly, the management options on the tools were generally considered to be moderately to very clear with similar ratings that ranged from 3.1 to 3.5 for all of the care option categories.

Although staff had limited opportunity to review and comment on the educational resources, those participants who completed survey questions about the material indicated that they generally found the information in the education guide was suited to their needs, was relevant and added to their understanding. The messages in the promotional posters were rated as clear, relevant, conveyed sensitively, lasting and applicable.

Qualitative information suggested that the tools provided staff with direction that ‘helped them to develop continence care plans’, that they were ‘user-friendly’, ‘simple’ and ‘straightforward’, as illustrated by the following comments:

- ‘. . . better forms [than ACFI], more info, easier to use’.
- ‘Great assessment tools, triggers other assessments’.
- ‘Found all information very clear’.
- ‘The tools are very comprehensive’.

**Impact of the tools on practice**

All levels of staff, including unregulated workers rated the charts, review form and educational resources highly. Some registered nurses commented that the tools provided guidance to the unregulated workforce and assisted them in the management of continence care. As the tools were easy to use and could be completed by unregulated workers, more of this group conducted continence assessments. This involvement in conducting assessments prompted unregulated workers to be more committed to completing the bladder and bowel charts.

**Strategies for implementing the tools in residential aged care facilities**

Some staff indicated that education was essential to assist the implementation of the tools. At the same time, they noted that consideration needs to be given to the form of education that best accommodates the diversity of learning needs within the workforce. For example, some unregulated workers required one-on-one clinical support to introduce changes into practice rather than relying on written material or didactic forms of education. When asked about implementation strategies, staff provided the following recommendations:

- Integrate the tools with existing electronic assessment/care packages.
- Promote a team approach to conducting a continence assessment and completing the tools, with the registered nurse taking overall responsibility for care as appropriate.
- Integrate the continence assessment tools for residential aged care with ACFI documentation so as to minimise documentation requirements and assessment processes.

**Conclusion**

The management of incontinence in residential aged care settings is challenging, costly and needs to be evidence-based. Currently, residential aged care services can select the types of assessment tools they use to guide clinical care. However, past research evaluating a sample of continence assessment tools used, revealed that the majority did not comply with international standards [7]. Given the changes in the residential aged care workforce and the employment of increasing numbers of unregulated workers, it is important that policy-makers provide support systems to enhance continence care. This paper presents a suite of evidence-based continence assessment tools for use in RACFs that comply with international professional standards and current accreditation standards.

Although the tools were developed by a panel of experts and comply with international and accreditation standards, further research is required to evaluate their impact on resident outcomes. The evaluation of their clinical usefulness revealed that they were user-friendly, simple and straightforward and that they assisted staff to plan care. Staff positively appraised the accompanying education resources and found them valuable in practice. Based on user feedback and on the fact that the tools comply with international and accreditation standards, we recommend that the suite of continence tools for residential aged care be used to guide and improve continence care in residential aged care settings.

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Key Points

• The management of incontinence in residential aged care is challenging and costly.
• Prior research indicated the need for evidence-based tools to support clinical decision-making about continence care.
• We developed and trialled a suite of evidence-based continence tools for the residential aged care sector.
• These tools were appraised by key stakeholders as being user-friendly and provided guidance to all levels of care workers and assisted them to provide continence care.

References