Broadening the Patient Safety Agenda to Include Safety in Long-Term Care

Tiana B. Rust, Laura M. Wagner, Carolyn Hoffman, Marguerite Rowe and Iris Neumann

Abstract
The recent patient safety literature has included less of an emphasis on long-term settings than on research in the acute care sector. Recognizing this knowledge gap in our understanding of safety in the long-term care sector, the Canadian Patient Safety Institute, Capital Health (Edmonton) and CapitalCare (Edmonton) have collaborated to create a research and action agenda for improving resident safety in Canadian long-term care settings. This collaboration resulted in the development of a background paper highlighting the current state of the science and 14 key-informant interviews with stakeholders across Canada. The background paper subsequently informed an invitational round-table discussion. Key findings from the key-informant interviews as well as implications for research are described in this article.

The Canadian Patient Safety Institute, Capital Health (Edmonton) and CapitalCare (Edmonton) have jointly identified a gap in our current understanding of safety in Canadian healthcare settings: unlike the acute care setting, there has been little written about improving safety and adverse event prevention in Canadian long-term care (LTC) settings. More recently, Canadian researchers have increased the research capacity regarding common safety issues in the areas of improving medication safety (Rochon et al. 2005, 2006), falls (Gallagher et al. 2005; Krueger et al. 2001), pressure ulcers (Woodbury and Houghton 2004) and nosocomial infections (Loeb et al. 1999, 2001, 2003). However, these adverse events continue to be a daily challenge for LTC providers, and the research is still lacking in how to best minimize their occurrence.

To explore and address the need for new knowledge in this field, 14 key informants were interviewed and a background paper (Wagner and Rust 2007) was produced that informed an invitational round-table meeting held in Edmonton, Alberta, on May 31, 2007. This coordinated and collaborative effort is a critical step toward identifying the key issues and research priorities for resident safety in Canadian LTC settings. The highlights of the key-informant interviews follow.

Key-Informant Interviews
Key informants were selected so that the views of people in diverse groups (e.g., family members, front-line staff, researchers, policy makers and managers) from LTC settings across Canada would be captured. Fourteen key informants, identified by an advisory committee, participated in audi-taped, semi-structured telephone interviews. The purpose of the interviews was to identify safety issues in LTC. These interviews were transcribed verbatim, and a thematic analysis of the transcripts...
was conducted. Data were independently reviewed and coded, and 12 themes were developed. Factors, priorities and gaps in resident safety in LTC identified by key informants, as well as representative quotations, are provided in Figure 1.

Barriers to adequate training include availability of adequate training programs for best practices and the ability to cover staff when they are off the floor.

Balance between Safety and Quality of Life
LTC requires a balance between protecting the rights of the resident and ensuring public safety. Similarly, a balance is needed between ensuring that residents are safe and that their quality of life (QOL) is not being adversely affected by the safety measures being put into place. It is important to examine both the effects of safety interventions on the incidence of adverse events and the impact of those interventions on residents’ QOL.

Staff Knowledge, Skills and Training
The majority of direct care staff in LTC have had little training, and that training may not be sufficient to consistently ensure a safe care environment. Priority areas for education include techniques around redirecting and re-focusing frustrated and aggressive residents, dementia care, identifying and recognizing risks, use of equipment and infection control. Barriers to adequate training include availability of adequate training programs for best practices and the ability to cover staff when they are off the floor.

Increasing Clinical Complexity of Residents
The care needs of residents in LTC have been increasing steadily over the years. Residents are older, are frailer, have more behavioural issues and are on more medication. Staffing levels and staff knowledge and abilities have not increased to meet the rise in need. Recruiting and retaining staff to work with the increasingly complex LTC client has become more difficult.

Equipment and Technology
Advances have been made in technology and equipment. Many choices for equipment exist, which makes the process of selection difficult. Due to resource limitations, it is not always possible to purchase appropriate equipment. Risk is increased if staff members are not trained in the proper use of the equipment, proper protocols are not in place regarding the use of the equipment, equipment is not in good working order and the equipment is not appropriate for the resident.

Physical Environment
Many elements of the design of LTC facilities impact safety. Respondents discussed challenges with older buildings resulting from...
small or shared bathrooms, insufficient storage space, too much clutter, poor lighting and insufficient access to sinks. Respondents also indicated that renovations and upgrades to older buildings can have a positive impact on safety when the changes are made with safety in mind.

**Working short staffed** is common and results in staff rushing to provide care.

**Communication between Management, Staff, Residents and Families**
When residents are unable to communicate with staff because of an inability to speak, cognitive impairment or language barriers, risk is increased. Accurate and complete documentation is essential to prevent errors and ensure consistent and adequate care. Additionally, communication with family about the progression of residents’ diseases is important so that family members do not put residents in unsafe situations.

**Medication Management**
Medication management is multi-faceted. There is a need to ensure that the drugs prescribed are appropriate for the residents, medication reviews are effective, instructions regarding medications are communicated accurately and the right drugs are administered to the right people, in the right dose, at the right time.

**Aggressive Resident Behaviours**
Physically, verbally and sexually aggressive resident behaviour is an emerging issue that can affect the safety of other residents, staff, visitors and the aggressive residents themselves. Managing the behavioural challenges posed by residents with dementia, brain injury and mental health issues can be difficult, especially when one is attempting to minimize the use of restraints.

**Falls**
Falls are a key safety issue in LTC because of the frailty of the population. Medications, physical environment, social environment, equipment and facility policies can impact residents’ risk of falling.

**Infection Control**
Because the LTC population is frail, infection can have devastating consequences. The risk of transmission of infection is heightened in LTC because of aggregate living. Hand-washing, glove use and influenza vaccinations reduce risks. Ensuring buy-in on infection-control procedures from staff on the front lines is essential.

**Restraints**
Restraints are not being used as frequently now as they once were. However, there is still some resistance to the policy of least-restraint from family and staff. Funding for alternatives to restraint is sometimes an issue.

**Staffing**
The type of staff, staff-to-patient ratios and the ability to recruit and retain qualified staff all affect resident safety in LTC. There is insufficient funding to ensure adequate staff-to-patient ratios and adequate numbers of support people such as educators and infection-control practitioners. It has become more difficult to recruit and retain staff; this has sometimes led to a less competent workforce. Working short staffed is common and results in staff rushing to provide care.

**Implications for Research**
The interviews suggest that research needs to be encouraged and supported to answer a number of questions: How does one manage risk so that a proper balance can be struck between safety and quality of life? What knowledge and skills are important, and how can they best be acquired? What should be done to reduce the risks that have accompanied the increase in the complexity of care required? Which existing technologies and equipment are appropriate, and how can they be improved? How does one ensure that equipment is used appropriately? What design features of LTC facilities reduce risks, and what can be done to improve older facilities? How can effective communication be facilitated? What policies, procedures and training are required to avoid adverse drug events? How can aggressive behaviours be prevented, reduced and managed? How can the risk of falls be reduced? What role do nurse managers play in preventing adverse events? What infection-control processes are required in LTC, and how does one encourage compliance? Several priority safety issues were identified in the key-informant interviews that are not well addressed in the literature. For example, issues requiring further inquiry include the following: aggressive resident behaviour and related adverse events; innovative methods to nurture the balance between safety and quality of life among LTC residents; and how best to maintain safe environments with the increasing clinical complexity of residents in LTC, especially among those transferring from the acute care setting.

Research has been conducted on adverse events in LTC such as falls, pressure ulcers, medication errors and infections and their relationship to key patient safety concepts. Despite this research, these adverse events are ubiquitous and continue to pose serious challenges for quality improvement. Research on barriers to uptake in the LTC sector is required to ensure that the occurrence of these events is fully minimized.
Conclusion
Despite the emerging research conducted on patient safety in the past decade, little research has focused on LTC and other areas outside of the acute care setting. Progress in resident safety in Canadian LTC settings is imperative to improve the safety of frail elders in this setting. Research on safety in LTC is necessary to guide policy and to improve the quality of care. Such research will provide stakeholders with the tools necessary to address the issues that continue to persist.

About the Authors
Tiana B. Rust, MSc, is a doctoral candidate at the University of Alberta, Edmonton, Alberta, supported by a Canada Graduate Scholarship from the Social Sciences and Humanities Research Council of Canada. Her educational background is in health promotion and her research focuses on caregiver-resident interactions in long-term care. You can contact her at 780-426-5418, by fax at 780-492-1768 or by e-mail at rust@ualberta.ca.

Laura M. Wagner, PhD, RN, is a gerontological nursing research scientist in the Kunin-Lunenfeld Applied Research Unit at Baycrest, Toronto, Ontario. She is a certified geriatric nurse practitioner, and her research focus is on improving resident safety in long-term care settings.

Carolyn Hoffman, RN, MN, is the director of critical care at Royal Alexandra Hospital, Edmonton, Alberta. Her background includes extensive experience as a critical care, emergency and home care nurse in addition to positions in clinical education, health human resources, risk management and quality improvement across various local, provincial and national roles.

Marguerite Rowe is vice-president and chief operating officer, Community Care, Rehabilitation and Geriatrics Division at Capital Health in Edmonton, Alberta. She is a certified health services executive and an adjunct professor of nursing at Dalhousie University, Halifax, Nova Scotia.

Iris Neumann, MSA, BSc, is chief executive officer of CapitalCare in Edmonton, Alberta. She has 14 years’ experience as an administrator in long-term care centres. Her areas of interest and expertise include ethics, dementia care and management theory.

References


