Health research – synthesized and contextualized for use in Newfoundland & Labrador

Synthesis topic

Agitation and Aggression in Long-Term Care Residents with Dementia in Newfoundland & Labrador

The healthcare system in Newfoundland and Labrador is seeking interventions that will help healthcare workers manage agitation and aggression in long-term care (LTC) residents with dementia with a view to finding alternatives to the use of psychotropic medication and physical restraints.

As a result, when the Contextualized Health Research Synthesis Program (CHRSP) approached the Department of Health and Community Services and its four Regional Health Authorities to ask for new topics for study, all agreed that identifying and evaluating the best available research-based evidence on the management of agitation and aggression in LTC residents with dementia would address a high-priority issue across the province.

For this study, CHRSP assembled a project team that included officials from the province’s regional health authorities with expertise in long-term care. Dr. Neena Chappell, Canada Research Chair in Social Gerontology and Professor of Sociology at the University of Victoria, agreed to serve as Academic Team Leader for the project.

The team decided that the requested synthesis would include evidence on prevention and management of two closely-linked behavioural and psychological symptoms of dementia: agitation and aggression.

At the same time, because moderate-to-severe dementia is far more prevalent in nursing homes than in other seniors’ care settings, the team decided to restrict the focus of the synthesis to LTC, rather than including personal care homes or assisted living facilities.

Our synthesis is based primarily on evidence from systematic literature reviews published between February 2009 and March 2014. To give readers a sense of how much confidence they can place in the effectiveness of the interventions under study, we have categorized the evidence for each intervention as:

- Promising – decision makers can be reasonably confident in the effectiveness of that intervention as a means for reducing the incidence of agitation and/or aggression;
- Suggestive – the intervention may be worth trying in a long-term care setting, though administrators would be well-advised to carefully evaluate its effect on the observed incidence of agitation and aggression;
- Insufficient at present – readers should be cautioned against expecting that this intervention will, by itself, yield significant reductions in agitation or aggression.

This document provides a brief summary of the interventions studied in this CHRSP research synthesis, outlines relevant local contextual considerations, and concludes with implications of the research findings for health system decision makers.

The Research Question:

*Other than use of physical restraints or prescription of psychotropic medications, what interventions, strategies, and/or practices have proven effective in preventing and managing agitation and aggression in long-term care residents with dementia?*

Disclaimer: This document is an executive summary of a larger report that contains fully referenced material. We have omitted references from this summary for the sake of brevity, but readers who wish to inspect these references can refer to the full report which is available at [www.nlcahr.mun.ca/chrsp](http://www.nlcahr.mun.ca/chrsp) together with a companion document that details the project methodology.
Summary of Review Evidence

The table below outlines the interventions studied and what the evidence tells us about their potential effectiveness:

<table>
<thead>
<tr>
<th>Evidence Category</th>
<th>Interventions in this category</th>
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| PROMISING- decision makers can be reasonably   | • Music  
| confident in the effectiveness of these        | • Staff training  
| interventions:                                   | • Reducing inappropriate use of anti-psychotics                                              |
| SUGGESTIVE- these interventions may be worth   | • Animal-Assisted Intervention  
| trying in LTC, though administrators would be   | • Aromatherapy  
| well-advised to carefully evaluate their effects| • Dance Therapy  
| on the observed incidence of agitation and      | • Pain Treatment  
| aggression:                                      | • Personalized Activities  
|                                                  | • Person-Centred Bathing  
|                                                  | • Simulated Family Presence                                                                |
| INSUFFICIENT AT PRESENT- decision makers are    | • Light Therapy  
| cautioned against expecting that these         | • Special Care Units  
| interventions will, by themselves, yield        | • Staff Case Conferences                                                                     |
| significant reductions in agitation or          |                                                                                             |
| aggression:                                     |                                                                                             |

Agitation and Aggression in LTC Residents with Dementia – the Newfoundland and Labrador Context

Population aging is occurring all across Canada, but it is especially pronounced in Newfoundland and Labrador. In 2009, the proportion of persons aged 65 years and over in this province was close to the Canadian average. According to projections, however, by 2036 Newfoundland and Labrador will have the highest proportion of older adults in Canada. This demographic fact alone will increase demand for LTC services in the province. Moreover, LTC facilities in this province and across the country have experienced a rise in the proportion of residents who require higher levels of care. The challenge of caring for LTC residents with dementia, in particular, is certainly nowhere greater than in this province; in 2013-2014, CIHI’s Continuing Care Reporting System found that 45.5% of LTC residents in participating facilities from this province were rated as severely impaired on the Cognitive Performance Scale. To put this in perspective, the Canadian province with the next highest proportion of severely-impaired LTC residents was Saskatchewan, with 36.6%. The average proportion across all provinces and territories that submitted data was 30.8%.

It is perhaps not surprising, then, that antipsychotic medications are administered more frequently in this province’s LTC facilities than in similar facilities elsewhere in the country. In 2011-12, the median rate of antipsychotic medication use by Newfoundland and Labrador LTC residents who did not have schizophrenia, Huntington’s syndrome, or hallucinations was 34% – again, the highest in the country. In some of the province’s LTC facilities, this proportion approached 50%. It is generally recognized throughout the health system that, while judicious use of antipsychotic medications is an essential component of LTC for some severely-impaired residents, considerable scope remains, nonetheless, for reducing inappropriate use of these medications.
The Newfoundland and Labrador Context continued...

**Care Processes**

Against this backdrop, the Western, Central, and Eastern RHAs are participating in the *Reducing Antipsychotic Medication Use in Long Term Care* collaborative organized by the Canadian Foundation for Healthcare Improvement (CFHI). Our synthesis of research evidence indicates that programs for reducing inappropriate use of antipsychotic medications among older LTC residents should be routinely incorporated into standard clinical practice. To this end, CFHI is providing seed funding and other support to help health authorities across Canada replicate the success of a project originally piloted in the Winnipeg Regional Health Authority. This project was designed to improve the way healthcare providers used resident data to identify situations where non-pharmacological behaviour management approaches might be a safe and effective alternative to drugs.

The participating RHAs from Newfoundland and Labrador have seized upon this initiative as an opportunity to evaluate and improve care processes in LTC, though each RHA is using the resources of the CFHI collaborative in different ways, according to particular organizational needs and priorities. The CFHI collaborative could potentially confer a number of long-term benefits to the province’s network of LTC facilities. Through it, the participating RHAs are building their capacity for planning and evaluating resident care and they are accessing expertise in person-centred care methods that have been used successfully in other parts of Canada. They are pooling knowledge and skills that could ultimately be disseminated to other facilities and worksites throughout the province. This work has also created an opportunity for the different levels of government and other funders to leverage their support for the LTC system by building on initiatives launched under the collaborative. Many of these initiatives were designed to be self-sustaining, but some may require support from other sources if they are to endure or if decision makers wish to implement them more broadly throughout the regions.

**Human Resources**

Notwithstanding these investments in innovative care practices, the provincial healthcare system faces a number of human resource challenges that have the potential to undermine any attempted improvement in the quality of care provided for LTC residents with moderate to severe dementia. Our synthesis of the research evidence and our key informant interviews both attest to the importance of meaningful interaction with LTC residents and the potential benefits of training staff in person-centred care. However, the best opportunities for meaningful interaction occur in the context of stable therapeutic relationships between carers and residents who have come to understand and trust one another over time. Frequent absenteeism, turnover, and the employment of casual workers inhibit the development of this kind of rapport, add to residents’ disorientation, and prevent staff from achieving the personal familiarity required to identify and meet a resident’s particular care needs. An additional consequence is that units are sometimes short-staffed, which can leave workers little time to attend to anything beyond the most basic care requirements. Likewise, even the most highly-rated intervention in training for person-centred care will fail to yield maximum benefit unless learned messages are consistently reaffirmed and mechanisms are in place to ensure that staff members take the time to apply lessons learned. It is very probable that the health care system’s success in resolving these challenges will in large part determine the effectiveness of its attempts to improve the quality of care for LTC residents.

**Infrastructure**

The primary challenge facing the province’s LTC infrastructure is the changing nature of its resident population. As noted earlier, the care needs of LTC residents in this province have risen steadily over the past decade. However, the facilities in which most of them currently reside were designed in an earlier era, for populations with fewer care needs. A number of the older facilities are now challenged by the necessity of serving a high-need population they were never designed to accommodate. Recognizing the need for upgraded LTC infrastructure, the provincial government has made substantial investments in new facility construction and expansion over the past five years. The construction of new facilities has created an opportunity for planners to think about how the physical environment can affect residents with dementia and to incorporate innovative design features into the spaces where residents live. These welcome developments invite contemplation about what might happen with existing LTC facilities that are not yet targeted for replacement. Many of these older facilities have similar structural challenges – units with 35 or more residents, rooms with multiple beds, narrow corridors terminating in locked doors, limited access to outdoor areas, and a general lack of tranquil space. Where possible, alterations have been made to existing facilities, but, in other cases, essential structural changes have been more difficult to effect. Given that there will likely be a steady increase in demand for LTC services in the years to come, decision makers would be well-advised to continue building on the improvements that have been made to the province’s LTC infrastructure in recent years.

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**CHRSP: Agitation and Aggression in LTC Residents with Dementia**

**NLCAHR November 2014**
Contextualized Synthesis: Agitation and Aggression in Long-Term Care Residents with Dementia

Implications for Decision Makers

1) Collaborative research projects like the CFHI-sponsored Reducing Antipsychotic Medication Use in Long Term Care create opportunities for funders to maximize the impact of their support for LTC by building on initiatives that have already been started; such initiatives may require additional support if they are to be sustained beyond project timelines or if decision makers wish to implement them more broadly throughout the province.

2) In order to maximize their benefit to the entire provincial network of LTC facilities, innovative care practices adopted in one region – such as Music & Memory in Eastern Health, or the PIECES program in the Western Health and Central Health regions – could be disseminated to other regions and facilities, particularly those with fewer research and innovation capabilities.

3) The ability of the healthcare system to deliver high-quality person-centred care for LTC residents with dementia will most likely depend on the successful resolution of the various human resources challenges it faces.

4) There is probably no client population that would be better served by reduced worker absenteeism and greater consistency in staffing assignments than LTC residents with moderate to severe dementia; frequent absenteeism inhibits the development of a rapport between carers and residents, adds to residents’ disorientation, and prevents staff from achieving the personal familiarity required to identify and meet a resident’s particular care needs.

5) The management and supervisory skills of those who occupy leadership positions at the unit level are crucial to ensuring that team members from different professional backgrounds work together harmoniously to provide seamless resident care.

6) By regularly reaffirming learned messages and ensuring that staff members actively follow through on their training, unit-level leaders can play a vital role in the success of person-centred care staff training interventions.

7) Decision makers would be well-advised to continue building on recent improvements to the province’s aging LTC infrastructure; many existing facilities are challenged by the necessity of serving a high-need population they were never designed to accommodate.