

Evidence *in* Context

Issue: Age-Friendly Acute Care
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Health research – synthesized and contextualized for use in Newfoundland & Labrador

Synthesis topic

Age-Friendly Acute Care in Newfoundland & Labrador

In March of 2011, officials from the Central Health Authority in Newfoundland and Labrador asked the Contextualized Health Research Synthesis Program (CHRSP) of NLCAHR to identify and evaluate the best available research-based evidence on age-friendly approaches to organizing and delivering acute care. Though this research topic was initially suggested by authorities at Central Health, consultations with the province's other Regional Health Authorities (RHAs) and with the Department of Health and Community Services (DHCS) indicated that the experience of older adults in hospital was a high-priority issue for them as well. CHRSP personnel assembled a project team that included senior officials from each of the four RHAs, a consultant from DHCS, a faculty member from Memorial University's School of Nursing with a background in acute care and gerontology, and a project coordinator internal to the CHRSP program. Dr. Belinda Parke of the University of Alberta agreed to serve as Academic Team Leader.

The team decided that the focus of the project would be programs and service delivery in acute-care hospital units that are *not* designed exclusively for adults aged 65 years and over (hereafter referred to as "older adults.") Since Newfoundland and Labrador currently has very little in the way of specialized geriatric units, and since it cannot be assumed that the province will be funding such units in the short or medium term, we were particularly



interested in finding out what works for older adults admitted to inpatient units designed for all adult-age groups. As a result, general medicine/surgical wards and emergency departments were the two main settings examined in our synthesis, but units that deliver condition-specific care (e.g., stroke units, orthopedic units, psychiatric units, cardiovascular units, etc.) were also considered relevant because

older adults represent a high proportion of the patient population in these units. In addition, programs and services delivered in diagnostic areas as part of an acute-care episode were considered relevant. We did not, however, discuss any forms of rehabilitative or long-term inpatient care, nor did we focus on specially-designed geriatric units such as Acute Care for Elders (ACE)

units, except insofar as these units provide a control or comparison group for assessing the effects of programs and services delivered in all adult-age units.

With the project parameters in place, Dr. Parke and the CHRSP team searched for and identified the relevant research literature, critically appraised and synthesized the evidence, and – with input from the full project team – provided additional analysis and contextualization of the research for Newfoundland and Labrador. Research findings and key messages for decision makers are outlined in the following pages.

The Research Question:

What programs and/or services are associated with improved outcomes for older adults admitted as inpatients to acute-care hospitals?

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 together with a companion document that details the project methodology.

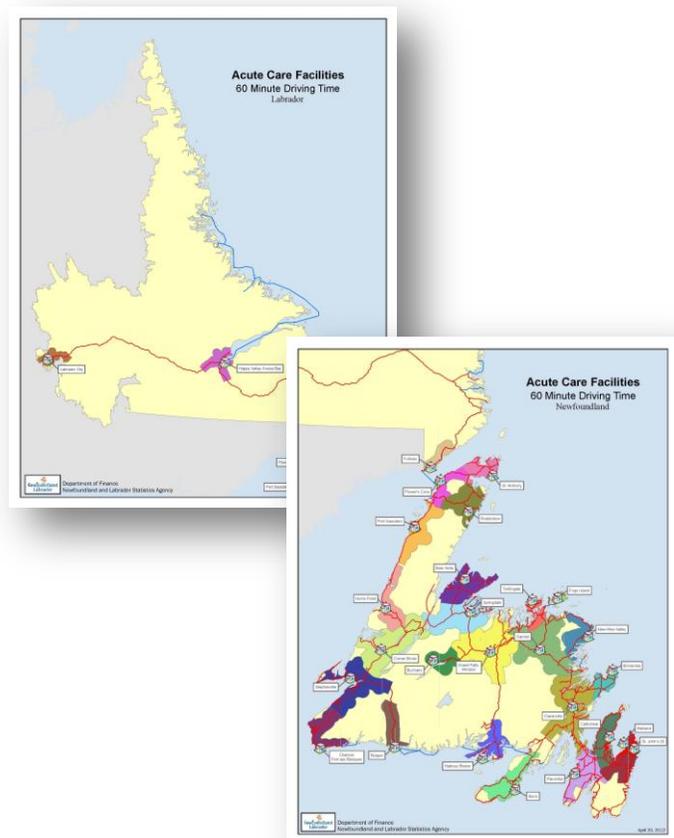
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Background

Age-Friendly Acute Care in Newfoundland & Labrador

While population aging and rural outmigration are occurring all across Canada, these demographic trends are especially relevant in Newfoundland and Labrador. In 2009, the per capita number of older adults 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 the country. Population aging has been especially marked in rural parts of the province: between 1996 and 2006 the predominantly rural regions of the province experienced a greater increase in the share of the population aged 65 and over than any other region in Canada. Furthermore, the percentage of Newfoundland and Labrador's population living in rural communities remains more than twice the percentage of the Canadian population as a whole. These demographic trends pose serious challenges when it comes to providing acute-care services. In 2010/2011, older adults accounted for 31.9% of all acute-care hospital separations in this province and 49.5% of all hospital days. Clearly, older adults place proportionally greater demand on the health system than other age groups, and, as their share of the population grows, we can expect a demand for age-friendly acute care to grow along with it.



Newfoundland and Labrador acute care facilities and catchment areas (representing sixty-minute driving time to/from a facility)

Summary of Findings

Our literature search focused on high-level research: systematic reviews, meta-analyses, health technology assessments, and very recent high-quality primary studies. Screening resulted in fourteen relevant sources being selected as the focus of our synthesis.

Care inside or outside specialized geriatric units?

We did not systematically review the evidence on self-contained units with specialized gerontological expertise – such as ACE units – but the evidence did provide compelling indications that care may be more effective when delivered inside specialized units. The authors of one of the highest-quality articles in our synthesis suggest several possible reasons:

- A dedicated ward focused on older patients' unique needs may provide more opportunities for learning/skill-building.
- Outside such units, geriatric teams that move from unit to unit may not exert much influence on the behavior of other health professionals, so their recommendations may not always be carried through.
- Protocols for managing key conditions are more readily implemented and followed in geriatric wards.
- A dedicated ward area can also enact its own recommendations with respect to goal setting; as such these activities may be better coordinated.
- A customized ward environment might offer greater opportunities for reducing the risk of delirium and promoting mobility and independence.

Nevertheless, the evidence we reviewed was not unanimous on this question, and a few articles in our synthesis found that team-based models of care delivered outside of specialized units – such as the Hospital Elder Life Program (HELP) and modified versions of the ACE model – could also be effective.

Training for professional staff

While our synthesis provides some indication that effective care for older patients can be delivered outside specialized geriatric units, models designed to work outside these units invariably employ a body of providers with enhanced geriatric training and skill sets. HELP teams, for instance, are led by a core group of gerontologically-trained specialists including a geriatrician, elder-life nurse specialist, and elder-life specialist. The modified ACE-style services reviewed in our synthesis were delivered largely by fellowship-trained geriatricians or by hospitalists who had, at minimum, attended an intensive mini-course in inpatient geriatrics.

Collaborative interprofessional teams

A number of our included articles emphasized that specially-trained interdisciplinary or interprofessional teams constitute an essential component of high-quality, knowledgeable care for older people. However, notwithstanding a clear emphasis on the importance of interdisciplinary and interprofessional teams, the literature provides little direction as to the most effective configuration for such teams. The interdisciplinary roles identified most frequently include physiotherapists, occupational therapists, advance-practice gerontological nurses, social workers, hospitalists, geriatricians, pharmacists, dietitians, and recreational therapists. Generally speaking, the term “interdisciplinary team” denoted a combination of some or all of these roles. Above all, the literature in our synthesis indicates that building effective teams involves more than just assigning responsibility for patient care to a group of professionals, and ensuring that the group has the right mix of skills and expertise. Also, and perhaps more importantly, it requires team members to confer actively and frequently, involve one another in clinical decision-making, and work toward shared patient care goals.

Clinical assessment procedures tailored to unique needs:

Overall, the evidence in our synthesis suggests that effective care for older adult patients must involve some kind of clinical assessment procedure that takes account of the unique medical, social, functional, and psychological needs of this high-risk group. The paradigmatic example of such a procedure is comprehensive geriatric assessment (CGA). Though various models of CGA have evolved in different health-care settings to meet differing needs, four main components are common to all models:

- coordinated multidisciplinary assessment;
- geriatric medicine expertise;
- identification of medical, physical, social, and psychological problems; and
- the development of a plan of care including appropriate rehabilitation.

Interestingly, while there was there was robust evidence that inpatients in dedicated geriatric wards are more likely to survive and return home if they receive CGA, we found little evidence to suggest that CGA could be effective outside specialized geriatric inpatient units. This suggests that the clinical setting in which CGA is delivered is one of the primary determinants of its effectiveness. A number of articles recommended that a more narrowly focused assessment in the Emergency Department using validated risk stratification tools should be a routine prelude to a time-intensive and detailed CGA after the patient has left the Emergency Department.

The benefits of enhanced discharge planning

Enhanced discharge planning can include: liaison and post discharge referrals, follow-up of high-risk patients, a post-discharge health visit, and/or a nurse discharge plan coordinator, among other possible elements. Enhanced discharge planning appears to have a significant effect on patient satisfaction and moderate effects on quality of life and hospital resources, though the articles in our synthesis noted no strong effects for any one particular type of discharge planning. We have not systematically reviewed the literature on post-acute homecare, but to the extent that the literature in our synthesis compared care models that included a follow-up homecare component with ones that did not, the former appeared to generate better results.

The importance of relational aspects of care delivery

Our synthesis identified three key features of care that were linked to more positive patient satisfaction: a ‘connected’, reciprocal relationship with staff; staff recognition of patients’ uniqueness; and shared decision-making. The authors of one systematic review recommend a measures acute care staff should take to create an age-friendly hospital milieu:

- ensure that patients feel welcome, respected, and confident that help will be given when it is needed;
- create an atmosphere that enables patients to interact with family and with one another;
- acquire knowledge of the patient’s life context, including their family and occupation;
- protect patients’ privacy, personal space, and belongings;
- ensure that patients and relatives understand as well as possible what is happening and what treatments are planned; and
- try to understand each patient’s expectations and wishes about their health.

Implications for Decision Makers

- 1) Two of the highest quality reviews in our synthesis compared interventions delivered in self-contained units possessing specialized gerontological expertise with interventions delivered outside of such units. These reviews found evidence for the effectiveness of the former but not of the latter. This suggests that RHAs may wish to carefully evaluate the available evidence on the benefits and costs of such units and on how they function within the broader hospital environment in order to determine whether or not this would be a viable and useful option within their jurisdictions.
- 2) Allocating space within designated hospitals for the intake, assessment, and triage of older patients could potentially fill a key gap in the province's acute-care infrastructure. At present, Emergency Departments within the province's larger hospitals are not designed to facilitate comprehensive geriatric assessment and care planning.
- 3) One significant impediment to the delivery of age-friendly acute care in Newfoundland and Labrador is a lack of a service provider workforce educated in principles of geriatric care; this deficit in basic geriatric training extends to all provider groups and all areas of the province.
- 4) Given point #3, RHAs may wish to consider establishing formal standards for elements of hospital care that are especially relevant to older adults. Implementing formal protocols in association with those standards could help to ensure that front-line providers are knowledgeable in the principles of high quality geriatric care.
- 5) Decision makers would also be well-advised to find training methods that fit into employees' tight schedules. Educational initiatives that draw staff away from their units for extended periods of time would be particularly problematic for the smaller, more remote sites of services, which tend to operate with only a small number of core staff. In particular, decision makers may wish to look for online curriculum packages that have been found effective elsewhere in increasing hospital staff's knowledge of geriatrics.
- 6) Older adults are particularly ill-served by fragmented and ad hoc approaches to care. Initiatives that encourage patient care teams to communicate across professional boundaries and work more effectively toward shared patient care goals may be of significant benefit to older patients.
- 7) Acute-care facilities in all regions may wish to consider assigning responsibility for assessment of older patients to specially-trained personnel equipped with a validated geriatric assessment tool. The tools and procedures currently in use in the ED, such as the Canadian Triage Acuity Scale, may not address the full range of variables and risk factors relevant to older patients.
- 8) The province-wide shortage of allied health personnel compromises discharge planning processes and undermines interprofessional collaboration. The input of allied health professionals – and, in particular, physiotherapists and occupational therapists – is important for ensuring a successful transition from the hospital unit to the home setting.
- 9) Effective discharge planning on acute-care units would seem to require augmentation of post-acute care services, particularly in regions outside Eastern Health. Gaps in the post-acute service continuum are stranding older patients in acute-care units which are not always equipped to provide intensive rehabilitation and other forms of step-down care.

For the complete CHRSP report, including details on the evidence reviewed by the project team, and for more information about the CHRSP process, please visit the NLCAHR website: www.nlcahr.mun.ca/chrsp