Emergency Department Avoidance in Long-Term Care Residents: Quality Improvement Project

Portia Machonisa, PMHNP-BC, RN, DNP(s), Abigail Mitchell, DHEd, MSN, MBA, RN* and Crystal Butski, DNP, FNP-BC, RN

DYouville University, Buffalo, New York, USA.

*Correspondence:
Dr. Abigail Mitchell, DYouville University, Buffalo, New York, USA.

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ABSTRACT

Purpose: This study aimed to identify and implement evidence-based initiatives and reinforce nursing involvement in reducing emergency department (ED) transfers among long-term care (LTC) residents to optimize outcomes, enhance quality of life, and support dying with dignity.

Methodology: A descriptive design explored factors influencing nurses' decisions to transfer LTC residents to acute care. Participants attended an educational session on strategies for ED avoidance. Data from open-ended questionnaires were analyzed using Chi-square analysis.

Results: Thirty LTC nurses (Registered Nurses and Registered Practical Nurses), predominantly female and working full-time, participated, with clinical experience ranging from 0–25 years. After 12 weeks of implementing quality improvement initiatives, six participants reported increased confidence ($p < 0.001$). Responses related to advance care planning, early assessment, and chronic disease management were statistically significant ($p < 0.005$).

Conclusion: Nurses are pivotal in reducing ED transfers; however, several influencing factors extend beyond the scope of nursing practice. Findings suggest the need for broader community partnerships and stakeholder engagement to improve resource access and support acute medical management in subacute care settings.

Keywords

Avoidable transfers, Emergency department, Aadvance care planning, Palliative care, Long-term care.

Background

Long-term care (LTC) facilities are home to more than six million Canadians aged 65 years and older who require assistance with activities of daily living, cognitive support, and management of chronic conditions [1]. Residents in these settings are often medically complex and may require acute medical care for health status changes related to frailty, disease progression, or complications of end-stage chronic illnesses. Common conditions contributing to emergency department (ED) transfers include urinary tract infections, falls with injury, sepsis, dehydration, congestive heart failure, pneumonia, and chronic obstructive pulmonary disease, among others [2].

The decision to transfer a resident to the ED is influenced by multiple factors, including severity of illness, complexity of medical conditions, individual goals of care, availability of facility resources, and the clinical expertise of nursing staff. While some transfers are necessary, others involve non-acute conditions that could be effectively managed within the LTC environment or in subacute settings and are therefore considered avoidable [3].

Shared decision-making regarding ED transfers remains a

complex and often poorly understood process that contributes to high rates of potentially preventable transfers. Factors influencing these decisions include limited diagnostic and treatment resources within LTC, delays in recognizing or reporting changes in health status, insufficient collaboration among interprofessional teams, and variable involvement of families in care planning. Furthermore, residents and families may request transfers despite the likelihood of limited or futile outcomes, while reluctance to engage in advance care planning complicates proactive decision-making and increases the risk of unnecessary ED use [4].

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Purpose Statement
The purpose of this quality improvement study is to explore factors influencing nursing decision-making in transferring long-term care home (LTCH) residents to emergency departments (EDs) and to implement evidence-based initiatives aimed at reducing avoidable transfers. By strengthening nursing involvement in early assessment, chronic disease management, palliative care, and advance care planning (ACP), this study seeks to optimize resident health outcomes, enhance quality of life, and promote death with dignity. Additionally, the study aims to identify areas requiring broader interprofessional and community collaboration to ensure that acute changes in residents' health status can be effectively managed within subacute care settings.

Research Question
In long-term care home residents, what factors contribute to inappropriate emergency department transfers, and how do quality improvement initiatives influence nursing decision-making regarding such transfers?

Significance of Study
The findings of this quality improvement project will provide critical insights to guide and inform clinical practice in early assessment, problem-solving, and decision-making aimed at reducing unnecessary emergency department (ED) transfers. By preventing avoidable transfers, this project seeks to improve the quality of life for long-term care home (LTCH) residents, reduce exposure to iatrogenic harm, and minimize futile medical interventions that contribute to cognitive and physical decline [5]. The study will also support the development of evidence-based, patient-centered care plans that optimize outcomes within LTCH settings.

Outcomes of this project will benefit residents and families by promoting shared decision-making regarding future care, strengthening involvement in advance care planning, and supporting competent, culturally congruent end-of-life (EOL) care. In addition, the project is expected to enhance nursing knowledge, skills, competence, and confidence in managing acute health changes, empowering nurses to make patient-centered decisions informed by evidence rather than medicolegal concerns [2].

At the system level, reducing avoidable ED transfers will alleviate financial burdens on the healthcare system, ensure appropriate resource allocation for emergent conditions, and mitigate ED overcrowding. This in turn will shorten wait times, improve treatment performance, and enhance the quality of acute care.

Theoretical Framework
Patricia Benner's Novice to Expert Theory
Benner's *Novice to Expert* theory emphasizes that nurses acquire knowledge, skills, and clinical judgment over time through both education and practical experience [6]. The theory provides an effective framework for assessing nurses' needs at different stages of professional growth. Clinical expertise is not merely the result of time spent in practice, but of meaningful changes in perception, reasoning, and application of knowledge. As Hinck notes, experience is reflected in a nurse's ability to interpret clinical situations, anticipate contributing factors, evaluate outcomes, and consider alternative evidence-based approaches to improve patient care.

Applicability and Relevance
Nurses play a pivotal role in reducing avoidable ED transfers among LTC residents by conducting timely assessments, implementing appropriate interventions, and initiating advance care planning (ACP). Benner's theory provides a relevant framework for this project as it recognizes the influence of nurses' expertise and clinical reasoning at various stages of practice. Expert nurses combine intuition, technical competence, and holistic care to integrate resident values, culture, and preferences into decision-making. Supporting the progression from novice to expert through education, mentorship, and coaching enhances critical thinking, strengthens clinical decision-making, and promotes individualized, evidence-based care. Applying this framework can therefore empower nurses to reduce avoidable ED transfers, improve quality of life, and uphold dignity in long-term care.

Literature Review
A literature search was conducted to examine avoidable emergency department (ED) transfers among long-term care (LTC) residents. CINAHL Ultimate, PubMed, Medline, and ProQuest databases were searched. Year search from 2020-2025. Search terms included "emergency department transfers" and "long-term care residents." Inclusion criteria were adults aged 65 and above, peer-reviewed academic journals, and research published within the last five years. This search yielded 6,032 articles. Applying keywords such as "avoidable" and "quality of life" narrowed results to 440

articles, which were further reduced to 90 when limited to full-text journal articles from studies conducted in North America and published in English. Abstract review resulted in 21 studies relevant to the research question, of which four addressed quality improvement initiatives to reduce ED transfers, and two focused on integrating nursing and family education in clinical decision-making. The selected articles were analyzed for quality and applicability to LTC residents.

Quality Appraisal of Literature

The Johns Hopkins Nursing Evidence-Based Practice (JHEBP) Model and Guidelines [7] were used to critically appraise all research articles included in this review. This framework ensured rigor by promoting relevance, reliability, transparency, and accuracy, while minimizing bias in evidence synthesis.

Articles were classified on a hierarchical scale of Level I to Level V, with quality sub-ratings of "A" (high), "B" (good), and "C" (low):

- **Level I:** Experimental studies, including randomized controlled trials (RCTs) and systematic reviews of RCTs, with or without meta-analysis (strongest evidence).
- **Level II:** Quasi-experimental studies.
- **Level III:** Non-experimental studies, such as correlational or observational research.
- **Level IV:** Expert opinions based on research evidence or consensus panels.
- **Level V:** Experiential, non-research evidence such as case reports or quality improvement data.

Systematic reviews randomized controlled trials, cohort studies, and case studies were prioritized to strengthen the evidence base. Articles were included if they contained data directly relevant to long-term care (LTC) residents and avoidable ED transfers. Synthesis of the literature focused on identifying reasons for transfers, evidence-based strategies to reduce unnecessary ED utilization, and outcomes associated with these interventions. The appraisal process ensured that only research of sufficient methodological quality informed this project (Appendix A).

Avoidable ED Transfers

Potentially avoidable ED transfers are defined as inappropriate or unnecessary transitions resulting from clinical conditions that could be managed in subacute settings [4]. Such transfers are considered preventable when reasons for transfer are unclear, when risks such as pain, disorientation, and discomfort outweigh benefits, when alternative diagnostic testing and assessments are available in a timely manner through community resources, or when transfers contradict residents expressed wishes regarding future care [3]. Mukerji, et al. [8] note that although most ED transfers may be potentially avoidable, LTC homes often lack sufficient capacity, resources, organizational support, or specialized expertise to provide acute-level care in subacute settings.

Preventive Care

Preventive care strategies, including vaccinations, routine monitoring, and chronic disease management, have been shown to prevent acute care utilization through early assessment and intervention [9]. Preventive care reduces ED transfers by proactively identifying and managing health issues before they escalate into emergencies [10]. Vaccinations improve immunity in older adults and reduce related hospital admissions. Routine health assessments facilitate early identification, communication, evaluation of changes in health status, and implementation of onsite interventions, thus avoiding unnecessary ED transfers. Cetin-Sahin, et al. [4] emphasizes the value of chronic disease management, vaccinations, and comprehensive care plans to prevent infections and exacerbations requiring ED transfers.

Shared Decision-Making

Shared decision-making among LTC residents, families, and staff represents a key component of relationship-centered care and significantly improves quality of life for older adults. Educating residents and families about disease prognosis, available treatments in LTC settings, and potential outcomes reduces power imbalances and fosters patient-centered care. Such collaboration allows residents and families to make informed decisions aligned with their wishes, preferences, and values. However, literature appraisal indicates that family and resident engagement in health education and decision-making remains inadequately addressed among strategies to reduce avoidable ED transfers [11]. Deficits in education and involvement contribute to unnecessary transfers and poorer outcomes [4,8].

Advance Care Planning

Advance care planning (ACP) has been shown to improve the quality of end-of-life (EOL) care, reduce ED transfers, and increase the proportion of residents dying in LTC rather than hospital settings. Munene, et al. [2] endorse ACP as a means to align treatments with residents' preferences, values, and cultural attributes, minimizing intensive care at EOL. ACP also prepares residents and families for EOL, addressing questions and alleviating fears. LTC nurses and nurse practitioners face complex decision-making challenges when family members request ED transfers based on expectations of improved quality of life, even considering poor prognoses. Such transfers may be influenced by medicolegal fears and structural factors rather than residents' clinical needs [12]. Research underscores the importance of ACP in honoring resident wishes and avoiding unnecessary hospitalizations [13]. Awareness of available LTC treatments supports informed decisions and effective implementation of advanced directives.

Cross-Sectional Collaboration

Care coordination and communication between LTC facilities, physicians, specialists, and hospitals enhance quality of care, continuity, and reduce unnecessary ED transfers [14]. This collaborative approach enables early detection and management of chronic conditions in subacute settings [10]. Effective collaboration with ED physicians ensures a continuum of care, reducing inappropriate transfers while improving individualized care.

Comprehensive post-discharge planning promotes appropriate specialist follow-up and prevents readmissions [5]. Conversely, fragmented care, duplication of services, and inefficiencies arise when collaboration is lacking.

Palliative Care

Integrating quality palliative care addresses the physical, emotional, social, psychological, and spiritual needs of LTC residents and their families, embodying culturally sensitive, patient-centered care at EOL [15]. Palliative care aims to relieve suffering and enhance quality of life and dying for individuals with life-limiting diagnoses. Optimal supportive EOL care is individualized and collaborative, reducing inappropriate ED transfers. Staff education to improve communication with residents and families is critical for facilitating informed decision-making regarding EOL and symptom management [16].

Synthesis of Findings

ACP and palliative care are consistently identified as key interventions to reduce avoidable ED transfers in LTC [2,9]. Shared decision-making enhances quality of care and aligns treatment with resident preferences [12]. However, the role of cultural factors in ACP and palliative care remains underexplored. In some cultures, discussions about death are taboo, complicating sensitive conversations and influencing decisions toward transfers despite limited benefits. Knowledge gaps among residents and families regarding disease prognosis and available LTC treatments contribute to unnecessary ED transfers, even when palliative care is appropriate [4]. Coordinated care and early detection of health changes are vital to reducing transfers and improving quality of life [13,14].

Identification of Gaps in Literature

While existing literature offers valuable insights into interventions to reduce avoidable ED transfers, the role of nurses remains inadequately explored. Specifically, the factors influencing nursing decision-making and their impact on quality of life have not been fully addressed. Existing studies often emphasize systemic approaches, such as virtual consultations, while omitting nursing-led strategies. This study aims to address this gap by exploring best practices that enhance nursing decision-making and facilitate the implementation of evidence-based strategies to reduce avoidable ED transfers in LTC settings.

Methodology
Purpose

The purpose of this quality improvement (QI) project was to strengthen nursing involvement in reducing emergency department (ED) transfers of long-term care (LTC) residents, thereby optimizing health outcomes, improving quality of life, and promoting death with dignity. Evidence from prior studies informed the design, identified gaps, and guided the intervention.

Research Design

A descriptive survey design was selected to examine the relationship between nurses' roles in ED transfer decisions and resident outcomes. Descriptive surveys allow for both explanatory and exploratory inquiry, making them appropriate for assessing knowledge, perceptions, and practice patterns [17,18]. Pre- and post-intervention questionnaires assessed changes in nursing confidence and decision-making related to avoidable transfers, advance care planning (ACP), palliative care, and end-of-life (EOL) communication.

Population and Sample

The study population included all nurses and nurse practitioners (NPs) employed at a single LTC facility in Hamilton, Ontario, who were responsible for clinical decision-making regarding resident transfers. The eligible pool was 50 staff members. Convenience sampling was used to recruit participants who met inclusion criteria and provided consent. This approach was selected for feasibility and efficiency, though it carries potential bias [19]. To strengthen credibility, efforts were made to recruit the largest possible proportion of the eligible population.

Eligibility Criteria

Inclusion criteria:
- Age ≥ 18 years
- Any gender, culture, or race
- Variable levels of clinical experience
- Willingness to participate

Exclusion criteria:
- LTC staff not directly involved in ED transfer decisions

Data Collection

Data were collected between March 24 and May 31, 2025, using both electronic and paper questionnaires. Instruments included:
- **Pre-intervention questionnaire:** Primarily close-ended, with some open-ended items, to assess baseline knowledge of avoidable transfers, prognosis, treatment options, and ACP.
- **Post-intervention questionnaire:** Likert-scale items measuring confidence, perceived effectiveness of the QI initiative, and comfort with initiating difficult conversations. Scale ranged from 1 (strongly disagree) to 5 (strongly agree).

Educational sessions, developed using literature review findings and baseline results, introduced evidence-based strategies to reduce unnecessary transfers. Questionnaires were written in plain language, piloted for clarity, and designed for completion within 15 minutes. Demographic information was also collected to explore potential influences on decision-making.

Reliability and Validity

Reliability was supported by consistent administration procedures, removal of identifying data, and careful revision of questionnaire items for clarity [20].

Validity was addressed in two ways:
- **Content validity:** Questions were developed from the

literature and reviewed by experts.

- **External validity:** Maximized by recruiting a large proportion of the eligible population [20].

Data Analysis

Quantitative data from closed-ended items were coded and analyzed in SPSS using descriptive statistics, presented in tables, graphs, and charts. Qualitative responses to open-ended questions underwent content analysis to identify recurring themes, which were integrated with quantitative findings in the final report.

Ethical Considerations

Ethical standards guided all phases of the study. Participants received written and verbal information regarding study aims, risks, and benefits, and provided informed consent (Appendix B). Confidentiality and anonymity were preserved by removing identifiers and numbering questionnaires. Participation was voluntary, with the option to withdraw without penalty. Data were reported transparently, with acknowledgment of limitations. Approval was obtained from the D'Youville University Institutional Review Board and the LTC facility's Executive Director (Appendices C & D).

Risk Management

No physical risks were anticipated. To address possible emotional discomfort from discussing EOL issues, participants were offered access to counseling resources. Researcher contact information was provided for follow-up questions, and all study procedures prioritized participant safety and confidentiality.

Overall Findings

Overall, the data demonstrates that most nurses who participated in the pre-intervention assessment were already somewhat confident (31%) or confident (47%) in using strategies to reduce ED transfers prior to attending the educational session. The remaining participants (22%) reported feeling very confident, and no participants indicated being at all confident with alternatives to ED transfers. Post-intervention analysis revealed a significant increase in confidence levels, with 93% of participants reporting high confidence in critical decision-making to avoid unnecessary ED transfers.

Questionnaire Findings

Analysis of 21 participant responses indicated mixed statistical significance. Responses to questions 2, 3, 4, and 5 on the pre- and post-intervention ED avoidance questionnaires were statistically significant ($p < 0.05$). Question 4, which assessed participant comfort with initiating ACP discussions, yielded a p-value < 0.05, indicating a significant increase in confidence. The pre-intervention mean score was 3.85, increasing to a post-intervention mean score of 4.97. This suggests the educational session effectively met the learning objectives regarding ED avoidance.
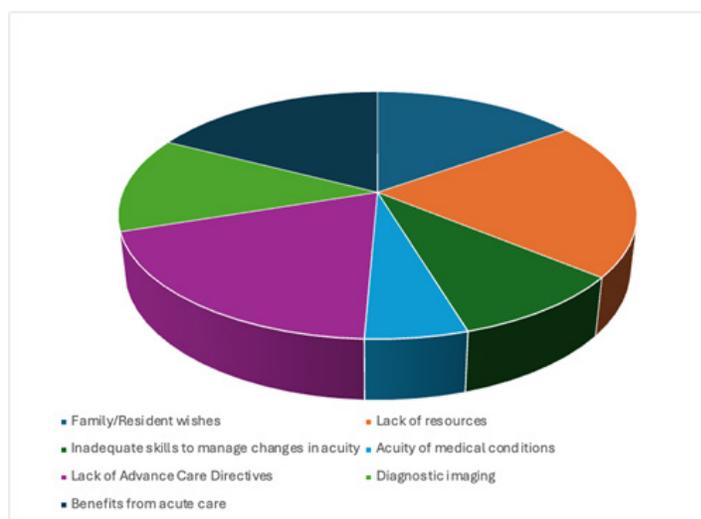
Although participant responses were overwhelmingly positive, there was limited variability, reflecting strong nursing confidence in ED avoidance interventions while identifying factors beyond their control—such as lack of AD and resource limitations—as influencing decisions to transfer residents to ED.

By the conclusion of the QI project, participants demonstrated a clear understanding of the significance of ED avoidance in LTC residents, and the role of ACP and quality palliative care. Notably, 92% of participants reported confidence in initiating ACP conversations, and 78% expressed confidence in their assessment skills, knowledge, and ability to implement early interventions to manage acute changes in residents.

Table 1: Data Analysis: Demographic Analysis of Participant Characteristics.

	Total Sample (N)	Frequency (%)
Gender		
Female	29	96.7%
Male	1	3.3%
Level of Education		
College Diploma	14	46.7%
Bachelor's Degree	15	50%
Master's Degree	1	3.30%
Doctorate Degree	0	0.00%
Clinical Experience		
0-5 years	5	16.7%
6-10 years	8	26.7%
11-15 years	6	20.0%
16-20 years	7	23.3%
21-25 years	3	10.0%
25+ years	1	3.30%
Employment Status		
Full-time	25	83.3%
Part-time	3	10%
Casual	2	6.7%

- Family/Resident wishes
- Lack of resources
- Inadequate skills to manage changes in acuity
- Acuity of medical conditions
- Lack of Advance Care Directives
- Diagnostic imaging
- Benefits from acute care

Implications
For Nursing Practice
This QI project demonstrates that ongoing training enhances nurses' competency, confidence, and decision-making in ED avoidance. Integrating adaptive scaffolding and dynamic assessments supports early interventions, improves outcomes, and promotes culturally sensitive care. Findings align with Benner's *Novice to Expert* framework, highlighting knowledge and skill acquisition as essential for clinical expertise.

For Healthcare Policy
Results underscore the need for policies that address systemic barriers such as resource availability and regulations influencing ED transfers. Policy support for ACP, resource allocation, and ongoing nursing education can improve LTC resident outcomes, enhance safety, and reduce system strain.

For Future Research
Further studies should investigate culturally tailored ACP approaches, scalable staff-training models, and multi-site interventions. Research should also explore how cultural and religious beliefs influence ACP uptake and identify strategies to overcome these barriers.

Sustainability and Future Directions
This project provides a foundation for sustainable practice change by promoting staff education, ACP integration, and resource optimization. Future initiatives may focus on community partnerships, equity in resource distribution, and innovative family engagement strategies to further reduce ED transfers and enhance quality of life in LTC.

Limitations
Limitations include a small, homogeneous, single-site sample and voluntary participation, which limit generalizability. Selection bias was possible, as participants already had interest in ED transfer reduction. Despite these constraints, findings were statistically significant and provide a strong foundation for larger, multi-site studies.

Conclusions
This QI project highlighted the critical role of LTC nurses in reducing avoidable ED transfers and provided evidence-based strategies to support resident-centered decision-making. ACP, early intervention, collaborative care, and quality palliative services were identified as effective in reducing unnecessary transfers while promoting dignity at EOL.

Implementation of these findings requires cultural, organizational, and policy-level support, reinforced by ongoing staff education. A holistic, individualized, and culturally safe approach is essential to meet the complex needs of aging, multimorbid LTC populations and ensure sustainable, high-quality care.

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