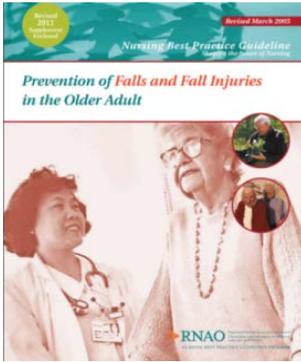


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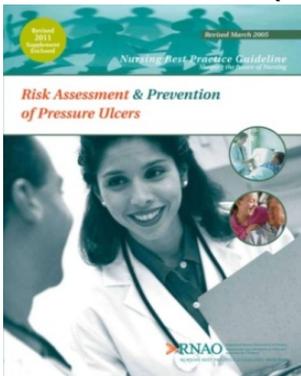
Best Practice Guideline Implementation and Estimated Cost Savings

Prevention of Falls and Fall Injuries in the Older Adult, 2011 (3rd Ed.)



The annual direct health-care costs are estimated to be CAD \$2 billion due to falls, with older adults accounting for nearly half of these costs¹. In 2012, the average cost for a serious injurious fall was estimated to be CAD \$31,000² when compared to a patient with no falls treated for similar diagnosis. This reflected direct and indirect in-patient costs of 34 days in the hospital with nursing care and excluded physician billing.

Risk Assessment & Prevention of Pressure Ulcers, 2011 (2nd Ed.)



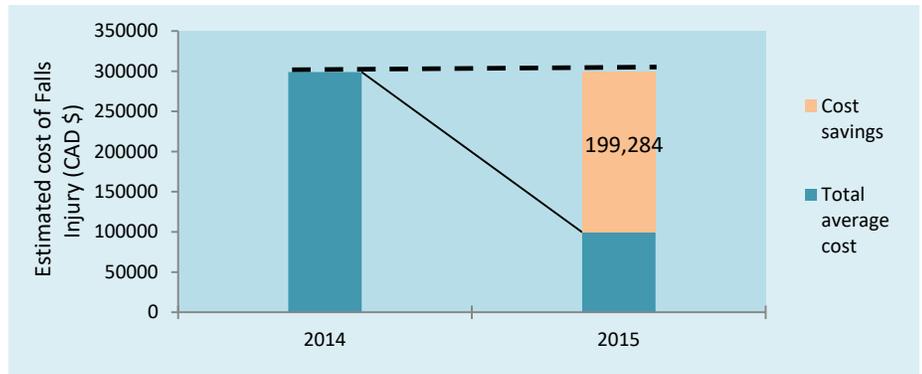
The direct health-care costs of treating a single pressure injury ranges from CAD \$26,800 to \$231,000 [in 2017] and treating pressure injuries can increase nursing care hours by up to 50%³. In 2004, a Canadian organization estimated the minimum cost per case to be CAD \$9,000⁴ related to direct patient care cost that excludes physician billing but includes nursing labour, dressing supplies, medications, etc.

Aims: To estimate the cost savings associated with changes in health outcomes after the implementation of two RNAO best practice guidelines (BPG); *Prevention of Falls and Fall Injuries in the Older Adult, 2011 (3rd Ed.)* and *Risk Assessment and Prevention of Pressure Ulcers, 2011 (2nd Ed.)* in one Ontario hospital-based Best Practice Spotlight Organization® (BPSO®).

Measure: Using the Nursing Quality Indicators for Reporting and Evaluation® (NQUIRE®) data system: (a) estimated cost of injury from falls using the falls injury indicator (see Figure 1) and (b) estimated cost of health-care acquired pressure injuries (HAPI) (see Figure 2).

Clinical improvement: Noted as a decrease in the cost of injuries resulting from falls and a decrease in new stage II-IV pressure injuries acquired in hospital.

Figure 1: Average Hospital Cost Savings from Reduced Injurious Falls, 2014 to 2015, for an Ontario Hospital BPSO



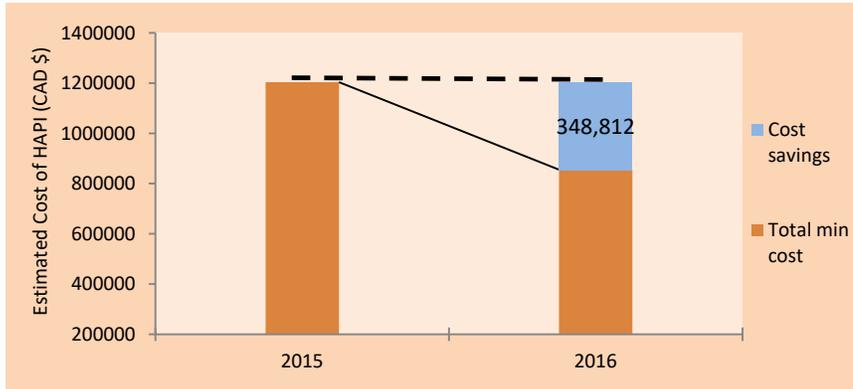
Impact: From 2014 to 2015, injurious falls decreased by 66.7 per cent in a complex care unit of an Ontario hospital BPSO resulting in an estimated cost savings of approximately CAD \$200,000 [2017 conversion] accounting for inflation where each case was adjusted to be CAD \$33,214.

Practice Changes

In 2012, this Ontario hospital BPSO began implementation of the guideline. Implementation activities included post-falls huddles, hourly rounding with signage at the doorway, no slip socks, a revised falls risk threshold to identify patients at risk for falls on admission, fall prevention pamphlets for patients and their families, an updated falls prevention policy, review of level III and IV falls by a Best Practice Champion Falls Team, and implementation of the BEEEEACH model (Behaviour, Education, Environment, Equipment, Clothing, Health-management). Implementation of the RNAO BPG also contributed to the BPSO achieving national accreditation.

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Figure 2: Average Cost Savings from Reduction in HAPI, 2015 to 2016, in Ontario Hospital BPSO



Impact: From 2015 to 2016, the number of HAPI cases decreased by 30 per cent in the acute medical unit. This improvement resulted in an estimated cost savings of CAD \$349,000 [2017 conversion] accounting for inflation where each case is adjusted to be a minimum of \$11,252.

Practice Changes

In 2015, this Ontario hospital BPSO conducted a gap analysis and established implementation strategies including: a standardized approach for assessing wounds using the Bates-Jensen Wound Assessment Tool, use of the NERDS tool (Non-healing – Exudate – Red & Bleeding – Debris – Smell) to identify infected wounds, a therapeutic surface strategy to standardize pressure reducing surfaces for all patients, a nutrition tracking log, daily reports of overall nutrition status, collaboration with the interprofessional team to document specific pressure injuries, and standardization of all prevention and management interventions.

Conclusion: This analysis demonstrates decreases in fall injuries and new stage II-IV pressure injuries in an Ontario BPSO that implemented RNAO's best practice guidelines, *Prevention of Falls and Fall Injuries in the Older Adult, 2011* (3rd Ed.) and *Risk Assessment and Prevention of Pressure Ulcers, 2011* (2nd Ed.). Substantial cost savings were evident one year post-implementation and this BPSO realized an estimated combined cost savings of approximately CAD \$548,000.



RNAO launched the BPG Program in 1999⁴ with funding from the Ministry of Health and Long-Term Care in Ontario, Canada. The 53 evidence-based BPGs developed to date are transforming nursing care and interprofessional work environments in all sectors in health systems worldwide. BPSOs are health-care and academic organizations that implement BPGs and evaluate the impact of their efforts, using NQuIRE and other data systems. Currently, there are 109 BPSOs across Canada and around the globe, representing more than 550 implementation sites.

NQuIRE⁶, a unique nursing data system housed in the International Affairs & Best Practice Guideline Centre, allows BPSOs to measure the impact of BPG implementation by BPSOs worldwide. The NQuIRE data system collects, compares, and reports data on human resource structure, guideline-based nursing-sensitive process, and outcome indicators.

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