

Economic and Healthcare Impacts of Public Funding for Intermittent Catheters in Nova Scotia

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Background and Objectives

Patients with significant neuromuscular diseases, spinal cord injuries, and non-neurogenic conditions, often face challenges in urinary health due to the reuse of single-use intermittent catheters (ICs). This practice increases the risk of urinary tract infections (UTIs), placing additional strain on the healthcare system. This study assesses the financial and broader implications of introducing public funding for ICs, in Nova Scotia.

Methods

We conducted a cost-analysis exploring the adoption of adequate IC usage over a 5-year period under a publicly funded scheme. Key input included patient adoption rates, projected healthcare savings from reduced UTIs, due to re-use, and direct program costs. Savings were estimated based on reduced UTI incidence¹, including the prevention of antimicrobial resistance (AMR)-related complications² and decreased hospitalizations³.

Results

Net Impact of IC Coverage on Nova Scotia Health Expenditures(\$ Mill)

Year:	1	2	3	4	5
Number of patients	425	850	1,275	1,700	2,125
Costs(\$Mill)	\$1.111	\$2.220	\$3.331	\$4.440	\$5.551
Savings (\$Mill)	\$0.4777	\$0.955	\$1.432	\$1.909	\$2.387
Net cost per patient (\$)	\$1.4917	\$1.488	\$1.489	\$1.488	\$1.488
Net Cost (\$Mill)	\$0.634	\$1.265	\$1.899	\$2.530	\$3.164

Hospital Resource Impact

The average hospital stay for a UTI is 10 days. Each resistant UTI prevented by adequate use of ICs frees up a bed for at least three days, alleviating strain on hospital resources and healthcare workers.



Net Expenditures: Projected to peak and stabilize at approximately \$3 million annually once the program reaches full adoption.



Savings: Reflect reductions in UTI-related costs, estimated to save approximately \$2.4 million annually by preventing infections that currently cost \$1,295 per case for initial treatment and up to \$7,123 for resistant infections.

Conclusions Broader Healthcare Impact:

UTIs through adequate public IC coverage provides a higher standard (gold standard) of care for patients at the same net cost per patient. Enhances patient outcomes, strengthens the healthcare system, and improves access for Nova Scotians without increasing the cost per user.

Other Indirect Additional Healthcare System Benefits:

- Fewer visits to family physicians and specialists
- Reduced emergency room visits
- Decreased demand for inpatient hospital beds

This poster presentation highlights the key findings and implications of the study, providing a clear and concise overview of the economic and healthcare impacts of public funding for intermittent catheters in Nova Scotia.

1. Delgado, J., Heilbronn, C., and M.J. Mellon (2021). Urinary Tract Infection in the Neurogenic Bladder: an Update of Surgical and Non-surgical Management. Curr Bladder Dysfunct Rep 16, 34–40 (2021). <https://doi.org/10.1007/s11884-021-00628-1>
2. Council of Canadian Academies, 2019. When Antibiotics Fail. The Expert Panel on the Potential Socio-Economic Impacts of Antimicrobial Resistance in Canada, Council of Canadian Academies.
3. Rognoni, C. & R. Tarricone (2017). Intermittent catheterization with hydrophilic and non-hydrophilic urinary catheters: systematic literature review and meta-analyses. BMC Urol., doi:10.1186/s12894-016-0191-1
Details on the survey are available upon request from Coloplast Canada.