Reducing Urinary Catheterization Rates in Newfoundland and Labrador Hospitals

Objective

To reduce unnecessary urinary catheter use by implementing the "Lose the Tube" toolkit from Choosing Wisely Canada in hospitals throughout Newfoundland and Labrador (NL).

Choosing Wisely Canada Recommendations

- 1. Don't place, or leave in place, a urinary catheter without reassessment.
- 2. Don't place, or leave in place, urinary catheters without an acceptable indication (such as critical illness, obstruction, palliative care).

Practice Points

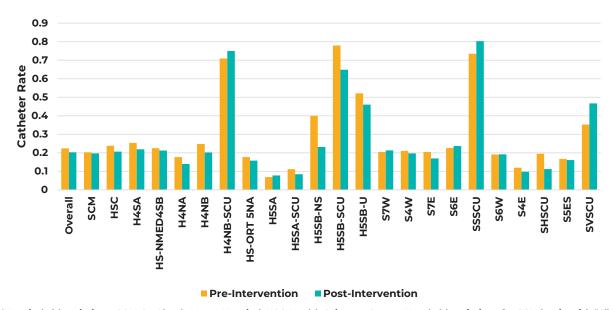
 Urinary catheters are linked to increased morbidity, mortality, and complications such as decline in activities of daily living (ADLs) and increased length of stay, as well as catheter-associated urinary tract infections (CAUTIs), with rates as high as 4.7 per 1,000 catheter-days. 2. Historically, NL has high urinary catheterization rates, with approximately 20% of medical and surgical in-patients using catheters (2018/2019 review). Up to two-thirds of catheters are inserted without guideline-based reasons, and many go unnoticed by medical practitioners. Prior to this initiative, no hospital-wide catheter reduction programs existed in NL.

Methods (N. Wilson, P. Daley)

A medical directive enabling nurses to remove urinary catheters without physician orders was released across NL Health Services' Eastern Zones and implemented across medical and surgical wards in St. Clare's Mercy Hospital (SCM) and the Health Sciences Centre (HSC).

Results

- Post-intervention, catheterization rates for both hospitals (HSC and SCM combined) decreased from 22.4% to 20.2% (9.6% relative reduction (p<0.001)), representing 6,502 fewer catheter days in the six months after the directive was released.
- SCM rates decreased from 20.2% to 19.6% (3.0% reduction (p=0.012)) and the HSC decreased from 23.8% to 20.6% (13.2% reduction (p<0.001)).



'Hospital abbreviations: SCM-St. Clare's Mercy Hospital; HSC-Health Sciences Centre. Ward abbreviations for SCM begin with "S" and begin with "H" for HSC

Figure 1. Pre- and Post-intervention Catheterization Rates by Hospital and Ward



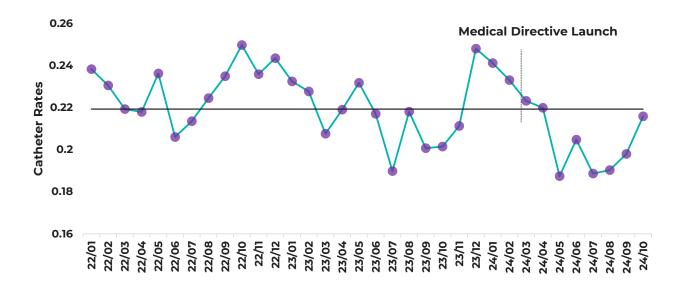


Figure 2. Run Chart Showing Overall Monthly Catheterization Rates for Both St. Clare's Mercy Hospital and Health Sciences Centre, Jan 2022-Oct 2024

Since the medical directive was launched, catheterization rates have stayed below pre-intervention levels.

Conclusions

- 1. The directive was associated with reductions in catheterization rates, though variability between hospital wards requires further exploration. Sustained monitoring and further implementation measures are needed to further reduce unnecessary catheter use.
- 2. Results suggest a need to promote the directive via education and reminders in electronic medical record (EMR) or to use additional interventions to reduce catheter use.
- 3. Discussions are underway with NL Health Services leadership, Quality of Care NL/Choosing Wisely NL, front-line staff, and patient partners to explore further interventions.