

Barriers to Reducing Unnecessary Preoperative Testing in Newfoundland and Labrador



Clinical guidelines and Choosing Wisely Canada recommend against performing preoperative tests (for example, bloodwork, chest x-rays, or tests for heart health) for patients who don't have an existing heart or breathing condition and who are undergoing a low- risk, noncardiac surgery (like a knee-replacement or gall-bladder removal). Despite this, these types of low-value tests are often routinely performed on all patients undergoing any type of surgery.

What did the researchers do?



Interviewed healthcare providers (HCPs) including surgeons, anesthesiologists, and nurses to develop a better understanding of the factors influencing low-value preoperative test-ordering in NL, Canada.

What did they find?



- Most HCPs don't *intend* to perform low-value testing.
- Many factors drive ordering decisions (e.g., inability to access all of a patient's health records, or a hospital's use of automatic order sets).
- There is a lack of clarity about who is responsible for ordering preoperative tests
- Processes for ordering preoperative assessments varied among hospitals in the province.



- Most participants believe the benefits of not ordering tests outweigh the risks.
- However, they still order tests to avoid cancellations or detect underlying clinical findings.

To reduce low-value pre-operative testing, respondents recommend:

- building consensus on a preoperative testing strategy to inform the development of clear hospital policy
- improving communication and access to resources
- periodically evaluating performance

Why is it important?



For patients

- Factors beyond patient and surgery characteristics influence test-ordering
- Patients in this province are likely undergoing low-value testing
- Low-value testing may unnecessarily delay procedures, lengthen hospital stays, require further testing, and create patient stress/harm.



For decision-makers

- Health authorities and hospital administrators must collaborate with HCPs to develop, endorse, and clearly communicate evidence-based policy on preoperative testing.
- HCPs must have access to up-to-date patient medical records to support their decisions to not order tests.



For clinicians

- Clinicians must be supported to move beyond "just in case" types of ordering and strive for greater consistency.
- Clinicians should work with decision-makers to develop consensus on a local testing strategy which clearly defines what tests are necessary and who is responsible for ordering them.

For more information about this study and our future work please contact

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Hall A, Pike A, Patey A, et al. Barriers to reducing preoperative testing for low-risk surgical procedures: A qualitative assessment guided by the Theoretical Domains Framework. *PLoS One*. 2022;17(12):e0278549.



De-implementing Wisely Research Group

A CIHR SPOR-funded innovative clinical trial, which brings together researchers, patients partners, clinicians, and health system partners to investigate ways to reduce low-value care.



The Ottawa Hospital Research Institute is the research arm of The Ottawa Hospital – one of Canada's largest learning and research hospitals.





The PHRU is a research unit within Memorial University's Discipline of Family Medicine.







