

# Preoperative Consultations: OHTAC Recommendation

Ontario Health Technology Advisory Committee

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All reports prepared by the Evidence Development and Standards branch at Health Quality Ontario are impartial. There are no competing interests or conflicts of interest to declare.

## About Health Quality Ontario

Health Quality Ontario (HQO) is an arms-length agency of the Ontario government. It is a partner and leader in transforming Ontario's health care system so that it can deliver a better experience of care, better outcomes for Ontarians, and better value for money.

Health Quality Ontario strives to promote health care that is supported by the best available scientific evidence. The Evidence Development and Standards branch works with advisory panels, clinical experts, developers of health technologies, scientific collaborators, and field evaluation partners to provide evidence about the effectiveness and cost-effectiveness of health interventions in Ontario.

To conduct its systematic reviews of health interventions, the Evidence Development and Standards branch examines the available scientific literature, making every effort to consider all relevant national and international research. If there is insufficient evidence on the safety, effectiveness, and/or cost-effectiveness of a health intervention, HQO may request that its scientific collaborators conduct economic evaluations and field evaluations related to the reviews. Field evaluation partners are research institutes focused on multicentred clinical trials and economic evaluation, as well as institutes engaged in evaluating the safety and usability of health technologies.

## About the Ontario Health Technology Advisory Committee

The Ontario Health Technology Advisory Committee (OHTAC) is a standing advisory subcommittee of the Board of Directors of Health Quality Ontario. Based on the evidence provided by Evidence Development and Standards and its partners, OHTAC makes recommendations about the uptake, diffusion, distribution, or removal of health interventions within the provincial health system. When making its recommendations, OHTAC applies a unique decision-determinants framework that takes into account overall clinical benefit, value for money, societal and ethical considerations, and the economic and organizational feasibility of the health care intervention in Ontario.

## Publishing Health Quality Ontario Research

When the evidence development process is nearly completed, draft reviews, reports, and OHTAC recommendations are posted on HQO's website for 21 days for public and professional comment. For more information, please visit: <http://www.hqontario.ca/evidence/evidence-process/evidence-review-process/professional-and-public-engagement-and-consultation>.

Once finalized and approved by the Board of Directors of Health Quality Ontario, the research is published as part of the *Ontario Health Technology Assessment Series*, which is indexed in MEDLINE/PubMed, Excerpta Medica/Embase, and the Centre for Reviews and Dissemination database. Corresponding OHTAC recommendations and associated reports are also published on the HQO website. Visit <http://www.hqontario.ca> for more information.

When sufficient data are available, OHTAC tracks the ongoing use of select interventions it has previously reviewed, compiling data by time period and region. The results are published in the Ontario Health Technology Maps Project Report.

## Disclaimer

This report was prepared by the Evidence Development and Standards branch at Health Quality Ontario or one of its research partners for the Ontario Health Technology Advisory Committee and was developed from analysis, interpretation, and comparison of scientific research. It also incorporates, when available, Ontario data and information provided by experts and applicants to HQO. The analysis may not have captured every relevant publication and relevant scientific findings may have been reported since the development of this recommendation. This report may be superseded by an updated publication on the same topic. Please check the Health Quality Ontario website for a list of all publications: <http://www.hqontario.ca/evidence/publications-and-ohtac-recommendations>.

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# Background

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Overuse, underuse, and misuse of interventions are important concerns in health care and lead to individuals receiving unnecessary or inappropriate care. In April 2012, under the guidance of the Ontario Health Technology Advisory Committee's Appropriateness Working Group, Health Quality Ontario (HQO) launched its Appropriateness Initiative. The objective of this initiative is to develop a systematic framework for the ongoing identification, prioritization, and assessment of health interventions in Ontario for which there is possible misuse, overuse, or underuse.

For more information on HQO's Appropriateness Initiative, visit our website at [www.hqontario.ca](http://www.hqontario.ca).

The Evidence Development and Standards branch at Health Quality Ontario conducted a rapid review<sup>1</sup> (1) to answer the following research questions:

- What is the clinical utility of preoperative consultations by internal medicine specialists or anesthesiologists that occur at in-hospital preoperative assessment clinics?

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<sup>1</sup> Rapid reviews are developed in response to an urgent need to provide evidence, and in some cases develop OHTAC recommendations, in support of provincial initiatives. Rapid reviews are usually completed within a 2-week timeframe and therefore are not as comprehensive as other evidence reports prepared by the Evidence Development and Standards branch at Health Quality Ontario.

# Conclusions

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Based on low quality of evidence, there were mixed results for both outcomes of interest:

- Two observational studies found that patients who had preoperative anesthesia consultations had a reduced postoperative hospital length of stay (LOS) compared to patients who had no preoperative consultation. However, one observational study found that patients who had preoperative medical consultations had an increased hospital LOS compared to those who did not have medical consultations.
- One observational study found that preoperative anesthesia consultation was not associated with reduced mortality rates (30 days and 1 year). However, another observational study found that preoperative medical consultation was associated with increased mortality rates (30 days and 1 year).

# Decision Determinants

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OHTAC has developed a decision-making framework that consists of 7 guiding principles for decision making and a decision determinants tool. When making a decision, OHTAC considers 4 explicit main criteria: overall clinical benefit, consistency with expected societal and ethical values, value for money, and feasibility of adoption into the health system. For more information on the decision-making framework, please refer to the *Decision Determinants Guidance Document* available at: <http://www.hqontario.ca/evidence/evidence-process/evidence-review-process/decision-making-framework>.

Appendix 1 provides a summary of the decision determinants for this recommendation.

Based on the decision determinants criteria, the lack and inconsistency of current literature led OHTAC to weight in favour of a field evaluation assessing preoperative consultations. OHTAC also believes that the cost of preoperative consultations by internal medicine physicians and anaesthesiologists is much higher than presented.

# OHTAC Recommendations

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OHTAC recommends a field evaluation be developed based on the recommendations of the expert panel to include:

- province-wide assessment to understand variation across hospitals and other healthcare settings in how preoperative care is being organized and arranged to meet patients' needs and taking into account duplication in care pathways
- validating screening questionnaires in a variety of hospital settings to address heterogeneity, such as research hospitals, large and small community hospitals, rural, urban, etc. This would ensure that patients who are in need of consultations are appropriately screened.



# Appendices

## Appendix 1: Decision Determinants

**Table A1: Decision Determinants for Preoperative Consultations**

Decision Criteria	Subcriteria	Decision Determinants Considerations
<b>Overall clinical benefit</b> How likely is the health technology/intervention to result in high, moderate, or low overall benefit?	<b>Effectiveness</b> How effective is the health technology/intervention likely to be (taking into account any variability)?	There is consistent evidence that preoperative consultations for low-risk and high-risk non-cardiac surgical procedures lead to a decrease in last minute cancellations, delays of surgery, and hospital LOS, although data are not as plentiful.  Those patients who do receive consultations are more likely to be older and have more comorbid conditions such as coronary artery disease, hypertension, diabetes mellitus, atrial fibrillation, vascular disease, renal failure, congestive heart failure, and chronic obstructive pulmonary disease.  In fiscal year 2011, there were approximately 43,000 preoperative consultations by anesthesiologists in an assessment clinic setting and 20,000 preoperative consultations by internal medicine specialists.
	<b>Safety</b> How safe is the health technology/intervention likely to be?	
	<b>Burden of illness</b> What is the likely size of the burden of illness pertaining to this health technology/intervention?	
	<b>Need</b> How large is the need for this health technology/intervention?	
<b>Consistency with expected societal and ethical values<sup>a</sup></b> How likely is adoption of the health technology/intervention to be congruent with societal and ethical values?	<b>Societal values</b> How likely is the adoption of the health technology/intervention to be congruent with expected societal values?	Uncertain.
	<b>Ethical values</b> How likely is the adoption of the health technology/intervention to be congruent with expected ethical values?	
<b>Value for money</b> How efficient is the health technology likely to be?	<b>Economic evaluation</b> How efficient is the health technology/intervention likely to be?	From an economic perspective, costs of preoperative consultations by internal medicine physicians and anaesthesiologists are 5.7 million and 8.7 million (Cdn), respectively. However, we are unable to specify if a proportion of the cost is appropriate or inappropriate.
<b>Feasibility of adoption into health system</b> How feasible is it to adopt the health technology/intervention into the Ontario health care system?	<b>Economic feasibility</b> How economically feasible is the health technology/intervention?	Uncertain.
	<b>Organizational feasibility</b> How organizationally feasible is it to implement the health technology/intervention?	

<sup>a</sup>The anticipated or assumed common ethical and societal values held in regard to the target condition, target population, and/or treatment options. Unless there is evidence from scientific sources to corroborate the true nature of the ethical and societal values, the expected values are considered.

# References

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- (1) Lambrinos, A. Preoperative consultations: a rapid review. Toronto: Health Quality Ontario; 2014 March. 19 p. Available from: <http://www.hqontario.ca/evidence/evidence-process/appropriateness-initiative#preop-consult>.

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