

Managing Tests policy in Ontario

Analysis using the 3-i framework

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Test results management can have a direct impact on patient safety and has been identified as a priority area by the World Health Organization.¹ Failure to follow up on tests results could lead to diagnostic delays, resulting in suboptimal clinical outcomes, patient harm, and medicolegal consequences for physicians.²

In 2016, the College of Physicians and Surgeons of Ontario (CPSO) started the process of updating its test results management policy.³ The CPSO collected feedback from clinicians, medical organizations, and the general public; conducted a literature review; and ultimately published the *Managing Tests* policy, along with companion resources on continuity of care, on September 20, 2019, thereby establishing expectations for physicians to deliver patient-centred care in a way that maximizes patient safety.⁴

Specifically, the *Managing Tests* policy aims to ensure that physicians are tracking test results that are at risk of being clinically significant, applying judgment when deciding to track other tests, following up on noteworthy test results, and taking appropriate management action in a timely manner.⁴ The 2019 policy advises physicians to exercise caution when using “no news is good news” strategies for managing test results, to prevent any missed results that could potentially be important. The *Managing Tests* policy is similar to policies addressing test management in other Canadian provinces, as they all refer to physicians’ responsibility to ensure that they have an effective system for ordering, tracking, and following up on tests. However, Ontario’s policy adds detail to each policy statement and distinguishes between results of routine tests and those that are at high risk of being clinically significant.

The 3-i framework

In this article, the 3-i framework⁵ is used to analyze the development of and choices behind the *Managing Tests* policy in Ontario. This framework is based on the theory that policy developments are influenced by 3 main factors: *ideas* (referring to both research knowledge and values), *interests* (the agendas of various stakeholders), and *institutions* (norms and precedents).⁵

Ideas. Globally, researchers and policy makers are advocating for improvements in patient safety. This drive constitutes the ideas lens, which is at the core of the CPSO’s *Managing Tests* policy. The World Health Organization defines patient safety as “the absence of preventable harm to a patient and reduction of risk of unnecessary

harm associated with health care to an acceptable minimum.”¹ Medical errors (such as diagnostic delay, harmful procedure, etc) can occur at any step of the health care process, starting during the initial patient encounter, often before a test is even ordered.

The *Managing Tests* policy emphasizes that when ordering a test, the physician is expected to promote patient engagement, discuss the rationale and the importance of the test, and confirm the patient’s understanding of the provided information,⁶ with the objective of achieving better clinical outcomes.⁷ Physicians should also review the possible risks and complications that could result from any test they order, as well as the potential for false results or emotional stress for the patient.⁷ This includes the risk of overdiagnosis leading to unnecessary anxiety, if a diagnosed disease would not have otherwise had any long-term negative consequences.⁸ It is estimated that approximately 30% of the tests, treatments, and procedures that Canadian patients undergo are unnecessary.⁹ The test ordering and management process thus must find the critical balance between patient expectations, evolving best practices, and the medicolegal risk in practising medicine.

Interests. There are many interests associated with test management in the context of an outpatient health care setting. The patients who have the most to gain from successful implementation of this policy represent the most important interest group. Consequently, the CPSO, whose mission is “serving the people of Ontario through effective regulation of medical doctors,”¹⁰ might see a reduction in the number of patient complaints related to medical errors or delayed diagnoses. Improved patient satisfaction and health outcomes could foster a more positive public opinion of the CPSO and the medical profession in general.

Legal cases involving a delayed diagnosis due to a test management issue have a high rate of settlement on behalf of physicians, hospitals, and laboratories.² Thus, if the *Managing Tests* policy is successful in improving physicians’ practices in test management, the Canadian Medical Protective Association might experience a reduction in their settlement rates, benefiting both the association and its physician members, whose malpractice insurance fees might be reduced.

The language in the *Managing Tests* policy might be subject to interpretation by physicians, who constitute an important stakeholder group. The policy states that physicians should use judgment when deciding whether

to track test results that are not at high risk of being abnormal. Clinical judgment is a vital part of medical practice but can be difficult to document when it is related to an administrative task such as test tracking. If a result is not received and added to the chart, a physician has no way of knowing if the test was completed without tracking pending tests and following up with the testing facility or the patient. For this reason, some physicians might feel pushed to track every test they order, for fear of missing an unexpected abnormal result on a routine test that could lead to adverse patient outcomes. The stress accrued by the increased administrative workload (often viewed as an inefficient use of time¹¹) and the heightened sense of responsibility could potentially lead to a lack of job satisfaction and burn-out.¹² This stress is particularly felt by solo physicians¹³ but can also be experienced by physicians working as part of a multidisciplinary team. In the latter setting, burnout and job satisfaction could also affect nursing and administrative staff to whom tracking or follow-up tasks are delegated.

Institutions. When analyzing the CPSO's *Managing Tests* policy through the institutions lens, it is important to recognize that the 2019 policy is not the first of its kind, and that it replaces the CPSO's 2011 *Test Results Management* policy.¹⁴ Key changes include the need for patient education about the test itself (while ordering the test), and the incumbent responsibility on the physician in tracking test results that are at high risk of being clinically significant.¹⁵ The current policy makes an explicit distinction between critical (urgent, possibly immediately life-threatening) results and clinically significant results (important findings, possibly dangerous in the long term), echoing previous work by Roy and colleagues.¹⁶

The Ontario Medical Association (OMA) developed a tests checklist¹⁷—perhaps, in looking out for its members, as a knowledge translation initiative—which outlines the various steps involved in the test management process and reinforces the CPSO policy's expectations for each step. Through these efforts, the OMA could also be considered an interest group in the CPSO's policy. The OMA's checklist is very similar to a guide produced by the Agency for Healthcare Research and Quality, *Improving Your Laboratory Testing Process: A Step-by-Step Guide for Rapid-Cycle Patient Safety and Quality Improvement*,¹⁸ a quality improvement initiative designed to help medical offices assess and improve their testing processes. It is not clear whether the Agency for Healthcare Research and Quality's work has in any way shaped the CPSO's policy or the OMA's checklist, because the process for the CPSO's literature review is not publicly available, as discussed below.


An important criticism directed at the CPSO's *Managing Tests* policy relates to system and technology issues, which are actually acknowledged by the CPSO

in its report *Advice to the Profession: Continuity of Care*.¹⁹ Currently, in Ontario, there are numerous electronic medical record (EMR) software products with varying capabilities. In order for the *Managing Tests* policy to be fully enforceable, EMR systems across the province must have better interoperability (ie, the ability to interface with each other in order to facilitate the transmission of information among health care providers).¹³ OntarioMD, funded by the Ontario Ministry of Health, has allowed EMRs to gain better connectivity to provincial electronic health data via its Health Report Manager and Ontario Laboratories Information System.²⁰ Improvements to the existing system would include an increase in the number of Health Report Manager sending facilities (through OntarioMD); EMR-specific enhancements to facilitate test tracking; and a patient portal through which patients could view the results of their own tests, thus promoting patient engagement and creating a sense of shared responsibility in the patient-provider relationship.

In reading and analyzing the available online resources as they relate to the *Managing Tests* policy, it is difficult to follow the process behind their creation. There's a certain lack of transparency, as most of the related content has been archived and is unavailable for viewing on the CPSO website, including the previous *Test Results Management* policy.¹⁴ Archived pages of the CPSO consultation process mention a literature review, but none of the references are available on the website. The *Managing Tests* policy posits that improved testing processes can reduce medical errors and subsequently improve outcomes, but research in this topic is still in its infancy stage.²¹ Hickner et al²² showed a correlation between having a monitoring system for tests ordered in primary care and a reduced likelihood of reporting errors in test implementation, including whether the patient actually completed the test. Additionally, there is some evidence that improvements in testing systems can lead to a reduced rate of laboratory errors in the hospital laboratory setting.²³ A 2012 systematic review by Singh and colleagues²⁴ highlighted the potential for technology to improve the transmission of results to physicians but did not find evidence of an effect on patient outcomes. A 2013 systematic review by McDonald et al²¹ reported a paucity of evidence on the cost and clinical outcomes of interventions focused on patient safety strategies to reduce diagnostic errors. Evidence is also lacking on whether an improved testing process or shared decision making, or both,²⁵ translate to reduced legal conflict. However, in a simulation study²⁶ involving hypothetical adverse outcome scenarios related to missed diagnoses, participants exposed to shared decision making were less likely to blame the physician for the adverse effect and were 80% less likely to report a plan to contact a lawyer than those not exposed to shared decision making. The simulation study's findings suggest that improvements in the patient engagement part of the

testing process, a positive facet of the *Managing Tests* policy, could result in reduced litigation for physicians.

Conclusion

Test management in medical practice is a complex issue and requires multipronged solutions.²⁷ The 2019 *Managing Tests* policy aims to maximize patient safety by addressing the different steps in the testing system. Physicians, key stakeholders in this policy, have an important role to play in its implementation and future revisions. Given the central role of the patient in this policy, it would make sense for physicians to maximize patient engagement by promoting patient education and shared decision making, and by routinely providing patients with access to their results, thus closing the loop of the testing process. The success of this policy's implementation will also depend on what technological enhancements can be brought to the current EMR systems that vary in their interoperability and test tracking abilities. Further studies will be needed to assess the impact of the 2019 *Managing Tests* policy on patient outcomes, on rates of physician burnout, and on medicolegal cases. 

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Competing interests

None declared

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The opinions expressed in commentaries are those of the authors. Publication does not imply endorsement by the College of Family Physicians of Canada.

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This article has been peer reviewed.

Can Fam Physician 2021;67:644-6. DOI: 10.46747/cfp.6709644.

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