



College of Medical  
Laboratory Technologists  
of Ontario

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# CMLTO Interprofessional Collaboration (IPC) Case study

## Case study #3: Insourcing diagnostic testing

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## **Introduction**

As one of Ontario's self-regulated health professions, medical laboratory technologists (MLTs) are governed by the *Regulated Health Professions Act, 1991* (RHPA). The RHPA was developed to protect the public's right to safe, competent, and ethical healthcare. The RHPA requires each health regulatory College to develop and maintain Standards of Practice that outline the expected level of quality and safety for professional services provided by its members. Legislation, regulations, bylaws, Standards of Practice, practice guidelines, and the Code of Ethics collectively establish a framework for medical laboratory technology practice.

The Ontario government, through the RHPA, defines CMLTO's objectives. These expectations include promoting and enhancing interprofessional collaboration (IPC) among MLTs, and with other members of the healthcare team. Further, the CMLTO is expected to support MLTs' abilities to respond to changes in the healthcare environment.

### ***What is a case study?***

A case study describes a relevant professional practice scenario or issue to enable MLTs to critically analyze a situation and identify opportunities for learning and development. Members can apply these learnings when faced with similar situations in their own practice. Expanding current professional behaviours empowers MLTs to share their knowledge and expertise with other health professionals to support improved patient care.

### ***How can I use this case study in my professional practice?***

CMLTO's professional practice resources are intended to support, not replace, an MLT's professional judgment. Reading through case study materials, and reflecting upon the professional practice issues or opportunities supports an MLT's ability to develop effective strategies and skills for handling similar situations in the future. MLTs reading this case study may not experience the exact same scenario in their own workplaces. However, similar key themes may exist locally making the case study useful in identifying issues and opportunities for improving their professional practice.



Case study reflection and discussions may be done independently, or as a group. In either situation, MLTs should reflect on the scenario's enablers and barriers to identify both personal and organizational opportunities to improve their professional practice. Thinking about case studies from both perspectives and articulating those reflections will enable MLTs to develop successful strategies and solutions.

### **Case study 3: Insourcing diagnostic testing**

#### **Case study highlights**

- External confirmation testing turnaround times affected hospital resources and patient outcomes.
- A collaborative healthcare team developed a plan to insource confirmation testing leading to improved patient outcomes and hospital resource utilization.

A large hospital laboratory performs routine *Clostridium difficile* (*C. difficile*) testing in-house by antigen and toxin testing. However, inconclusive test results are sent out to a reference laboratory for Polymerase Chain Reaction (PCR) confirmation testing. When *C. difficile* is suspected, hospital policy requires patient isolation until the test is confirmed. The turnaround time for confirmation testing is highly variable (1 to 7 days) as it is dependent on many factors including transportation restrictions, staffing, equipment issues, batching, etc. As a result, patients suspected of carrying *C. difficile* occupy isolation beds for longer periods than required, which reduces the overall number of available hospital beds. In some instances, this has caused elective surgery cancellations as well as reduced emergency department and operating room efficiency.

The hospital's Medical Microbiologist, Infection Control Nurse, and Laboratory Operations Supervisor proposed insourcing the confirmatory PCR testing to reduce turnaround times. As part of this process, the individual stakeholders worked collaboratively to enable the change by thoroughly understanding the issue and identifying a possible solution. They worked with hospital administration, the Medical Advisory Committee and specialists for support, as well as with the hospital foundation to secure funding for the required capital equipment purchase.

The Microbiology/Infection Control specialist helped by gathering information from the laboratory information system (LIS) to illustrate the issue by charting referral



frequency and turnaround times for these patient tests. The specialist helped to build custom reports that extracted the correct information from the system.

The team face some challenges in changing the confirmatory testing process including the referral laboratory's reluctance to lose the test. However, the hospital's team managed the various issues by demonstrating the need for change, securing support and funding, and ensured that the necessary changes were enabled.

### Enablers and barriers

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	<b>Institutional/organizational</b>	<b>Personal</b>
<b>Enablers</b>	<ul style="list-style-type: none"><li>• Commitment of hospital administration to support this initiative.</li><li>• A strong collaborative environment and team.</li></ul>	<ul style="list-style-type: none"><li>• Each member of the team was motivated to change and worked together.</li></ul>
<b>Barriers</b>	<ul style="list-style-type: none"><li>• There is competition for test volumes between laboratories.</li><li>• A lack of understanding or awareness of the cost implications to the broader system.</li></ul>	<ul style="list-style-type: none"><li>• Individuals were initially hesitant to change due to unknown outcomes.</li></ul>

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### **Individual reflection and group discussion questions**

The following questions are meant to guide individual reflection and/or group discussion. Writing responses down may be helpful in preparing an action plan for a specific professional practice issue.

1. What steps would you take to develop a business case for insourcing confirmation testing? Who would you need to communicate with and why?
2. Why do you think this initiative successful?
3. If this situation occurred in your professional practice setting, what personal and organizational enablers or barriers would be similar? What would be different?
4. Do you think the outcomes would be similar in your institution? Why or why not?

### **Conclusion**

CMLTO's role includes a legislated requirement to promote the ability of members to respond to changes in the healthcare system including IPC. The CMLTO develops case studies to prepare MLTs to effectively analyze and reflect on professional practice scenarios involving IPC.

Please contact CMLTO at [memberrelations@cmlto.com](mailto:memberrelations@cmlto.com) to discuss this case scenario, other professional practice IPC scenarios, and to share your own experiences.

### **Additional resources for MLTs**

CMLTO provides additional resources for MLTs that may help address local professional practice issues. Please visit the Members section of [www.cmlto.com](http://www.cmlto.com) for the most recent professional practice resources for MLTs.