Pan-Canadian Quality Assurance Recommendations for Interpretive Pathology – A National Framework

John Srigley, Natasha Camuso, Anubha Prashad, Diponkar Banerjee, Laurette Geldenhuys, Rosemary Henderson, Fergall Magee, C. Meg McLachlin, Tarek Rahmeh, Stephen Raab, Esther Ravinsky, Bernard Têtu, Martin Trotter, Robert Wolber

Background

In recent years, a number of events in Canada have raised questions regarding the quality of diagnostic interpretation and patient safety in anatomical pathology and diagnostic imaging. As a result, there is an impetus to build a culture around high quality diagnostic services.

Objective

The Quality Initiative for Interpretive Pathology (QIIP) aimed to develop a comprehensive and evidence-informed set of pan-Canadian Quality Assurance (QA) Recommendations for interpretive pathology.

These recommendations aim to enhance patient safety by promoting better and more consistent pathology quality assurance processes across the country. A document containing these recommendations was created to address a national interest in improving interpretive pathology QA across the country with a standardized approach.

Methodology

The recommendations were developed through a multi-pronged process including an environmental scan, expert opinion input from QIIP Thought Leaders (*Figure 1*) and a modified-Delphi process (*Figure 2*). The modified-Delphi process was used to achieve consensus on the national recommendations. A pre-defined list of guiding principles was used to help guide the consensus process and included: feasibility of implementation at the national-level, national relevance, evidentiary support, measurability, and clarity. Provincial, national and international leaders and quality experts were consulted throughout the design process.

Figure 1. QIIP Thought Leaders Group

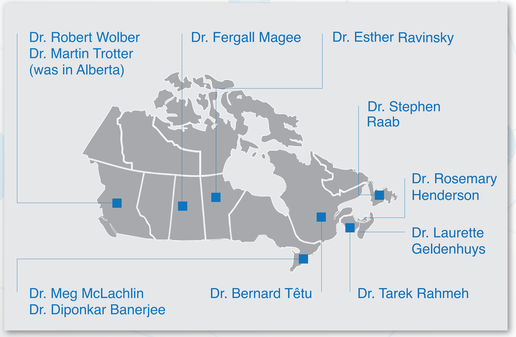

Figure 2. Document development process

Pre-Delphi Survey
73 recommendations considered
45 recommendations achieved consensus to include
28 recommendations did not achieve consensus to include

N=21

In-Person Delphi Meeting
28 recommendations discussed
6 recommendations excluded
67 recommendations considered in Phase 3

N=19

Post-Delphi Survey
Several recommendations merged for conciseness
3 recommendations excluded
54 final recommendations included

N=19

Targeted Review
Circulated to:
- Pathologists (both university- and community-based)
- Provincial cancer agencies
- Provincial professional laboratory medicine associations
- Academic heads for pathology from Canadian universities
- International experts and pathology leaders

N=80

Targeted Public Review
Circulated to:
- Provincial Laboratory Medicine Associations
- Canadian Cancer Action Network (selected member organizations)
- CPAC patient/family advisors and volunteers
- CAP-ACP Membership

Posted on cancerview.ca and CAP-ACP website

N=35

Results

The QIIP document consists of 54 high-level key recommendations that should be included in an interpretive pathology QA program. These recommendations fall into a number of categories (see Table 1) including:

1) Foundational elements, including governance, linkage to existing QA programs, and resources, such as human resource planning, documentation systems, and informatics (27 recommendations);
2) The pathology testing cycle from an interpretive perspective, including pre-assessment, diagnostic assessment and post-assessment of the pathology report (11 recommendations);
3) Internal QA policies and procedures (12 recommendations);
4) External QA (3 recommendations);
5) Approach to expressions of concern regarding a pathologist's performance (1 recommendation).

This document has been endorsed by the Canadian Association of Pathologists (CAP-ACP) and the Canadian Leadership Council on Laboratory Medicine (CLCLM).

Future Directions

This opus is intended to be a living document which will be updated at regular intervals, every two to three years as new concepts and evidence emerge.

Planned activities include:

- Development of knowledge products to aid provinces in adopting the recommendations into their existing quality systems
- Development of system-level indicators to promote measurement and evaluation of system performance

Table 1. Sample recommendations

2.4. Human Resource Plan/Workload Measurement/Staffing

An effective workload measurement system should include the following:
- A transparent system that is based on the specimen volume and complexity, ancillary investigations (immunohistochemistry, molecular testing, etc.), reporting requirements and clinical information
- Activities related to QA, as well as patient care
- Other professional activities including administrative and academic ones
- Evaluation of laboratory and individual pathologist workload levels to ensure adequate staffing

3.3. Peer Review

There should be a review process in place for pathologists to seek peer consultation relevant to their practice setting in a timely manner. This would include intra-departmental and/or external consultation. The review process should work as follows:

Prospective peer review of diagnostic work in selected cases to minimize reporting discrepancy and eliminate significant errors before they affect patient care decisions or patient outcomes. Such peer review may also help to identify system flaws and individual pathologist's knowledge deficits, allowing corrective action to be taken

Retrospective peer review, including multidisciplinary case rounds and case look-backs (during the process of evaluating current cases) to optimize patient care decisions and patient outcomes. Such retrospective peer review would help to identify systemic causes of discrepancies, especially false negative diagnoses, allowing corrective action to be taken

All forms of intra- and extra-institutional peer review should include the principles of professionalism, independent analysis, formal documentation, prospective discrepancy identification, targeted review of difficult or significant and unexpected diagnoses, incorporation into normal laboratory work flow, resolution of diagnostic discrepancies, and protection from civil legal action

Conclusions

A comprehensive and evidence-informed set of recommendations for quality assurance in interpretive pathology has been developed using an iterative consensus approach with broad stakeholder engagement. The recommendations were developed at a pan-Canadian level and will need to be adapted and contextualized according to the provincial and local health system characteristics.

These recommendations can be used by pathology leaders and other senior decision makers to develop and/or strengthen interpretive pathology quality assurance programs.

Access and download the document at http://www.partnershipagainstcancer.ca/
For more information, please contact quality@partnershipagainstcancer.ca

Production of this poster has been made possible through a financial contribution from Health Canada.
The views expressed herein represent the views of the Canadian Partnership Against Cancer.

CANADIAN PARTNERSHIP AGAINST CANCER
PARTENARIAT CANADIEN CONTRE LE CANCER