Quality Assurance Governance And Implementation In Cancer Pathology: A National Survey Of Canada

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Background

Quality initiatives and quality assurance are wide ranging concepts covering all matters that individually or collectively influence the quality of health services delivery. Pathology services are foundational elements for both clinical oncology and the cancer control system. Given recent advances in molecular oncology and personalized medicine, pathology is becoming an even more integral component in determining the treatment pathways for individual patients. The pathology testing cycle can be conceptualized into three distinct phases: Pre-interpretive, interpretive and post-interpretive (Fig. 1).

Figure 1: Pathology Testing Cycle

Patient/Physician Initiation of Pathology Testing



Post-Interpretive

Pre-Interpretive







Background

The *pre-interpretive* phase (i.e. technical component) includes all processes from the time a decision is made regarding a referral for pathological consultation, up to and including the production and delivery of the slides or other interpretive material to the pathologist. The *interpretive phase* involves the review of slides and other related material by a pathologist. This includes all technical and cognitive processes required for a pathologist to finalize a pathology report containing relevant diagnostic, prognostic and predictive information. The *post-interpretive* phase (i.e. technical component) includes processes involved in communication and delivery of a final pathology report to the referring physician and patient.

Robust quality assurance (QA) programs incorporating all phases of the pathology testing cycle are integral to accurate pathology diagnosis and quality of care a cancer patient receives. In many jurisdictions, there is considerable standardization of the pre- and post-interpretive phases of pathology cycle through well-developed laboratory accreditation programs and institutional standards. However, the extent of jurisdictional guidance and oversight in quality systems related to the interpretive phase of pathology remains unknown.

Methods

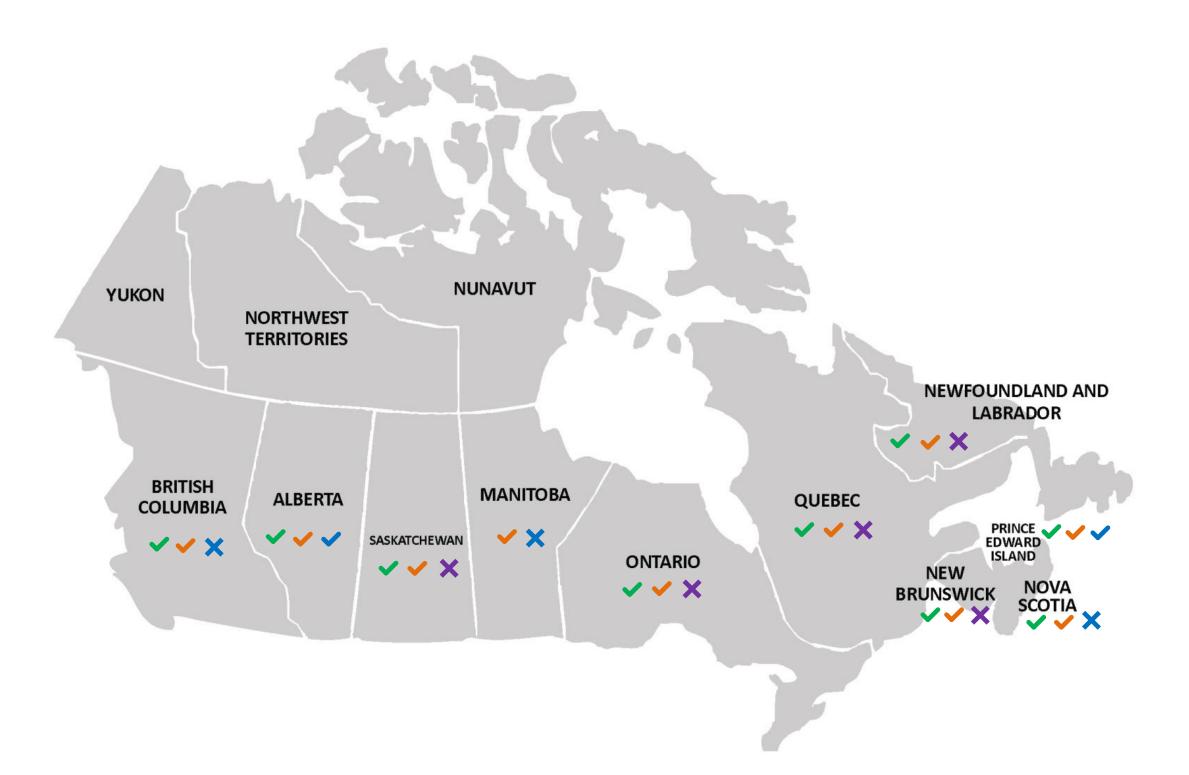
An environmental scan was conducted to determine the types and extent of current large institution and provincial-level pathology QA programs implemented across Canada. An electronic survey was administered to key stakeholders and senior decision makers in cancer pathology. Follow-up interviews were conducted with pathology leaders in each province to verify survey results, deliberate and resolve ambiguous responses. Results were presented to all survey respondents as a feedback mechanism.

Results

Figure 2: Pan-Canadian Results

- 1. Is there a professional group(s) that represents pathology in your province? Yes = \checkmark
- 2. Does your province have a TECHNICAL lab accreditation programme? Yes = ✓
- 3. Do you have a coordinated provincial quality assurance programme related to the INTERPRETIVE aspects of pathology? Yes = ✓ No = ×

No but in progress or on-going discussions to implement one = ×



<u>Table 1: Provinces With An Established Provincial INTERPRETIVE Pathology Quality Assurance Program.</u>

Prov.	Is there a coordinated provincial plan in place?	Programme Details; Organization who Provides Oversight
AB	Yes	Laboratory Services Quality Assurance Plan for Anatomic Pathology; Alberta Health Services *Collecting data for the next 6-12 months to establish benchmarks/targets.
PE	Yes	A very comprehensive QA program; Self administered by al 5 pathologists on the island (2 hospitals) - not regulated .

Table 2: Provinces With Plans To Implement A Provincial INTERPRETIVE Pathology Quality Assurance Program

Prov.	Is there a coordinated provincial plan in place ?	Programme Details; Organization who Provides Oversight
SK	No *Ongoing discussion for a stronger provincial program; College of Physician and Surgeons and some Ministry of Health involvement.	One of the larger labs is College of American Pathologists (CAP) accredited which includes some professional interpretative modules.
ON	No *Ongoing discussion.	Standards2Quality has been proposed, only voluntary at the organizational level with oversight at the hospital level.
QC	No *A partial plan in place.	*Since 2010, all pathology laboratories must have an internal and external quality assurance program. The external program is provided by the Laboratoire de Santé Publique and part of the activities are interpretive with elements from the CAP program.
NL	No *Ongoing discussion for the Provincial Working Group of Newfoundland to lead this initiative.	N/A
NB	No *A partial plan in place.	A combination of various External Quality Assurance (EQA) programs such as: CAP check samples/performance improvement program (PIP) for surgical path, NSH/CAP and cIQC for IHC, Atlantic Peer Review Program through the NB college of physician and surgeons (2008) implemented in the province; New Brunswick Cancer Network(NBCN) Pathology Advisory Committee.

Table 3: Provinces With NO Established Provincial INTERPRETIVE Pathology Quality Assurance Program

Prov.	Is there a coordinated provincial plan in place?	Programme Details; Organization who Provides Oversight
ВС	No *No plan in place.	•Diagnostic Accreditation Program (DAP) accreditation standards 2010 document - Quality improvement peer review section; College of Physicians and Surgeons of BC.
MB	No *No plan in place.	*All <u>public</u> laboratories (x6) are run by Diagnostic Services of Manitoba (DSM) with self-reporting conducted manually. * <u>Commercial</u> laboratories mostly run by Gamma Dynacare.
NS	No *No plan in place.	The Capital District Heath Authority (CDHA) Anatomical Pathology Laboratory, the largest and only academic laboratory in the province (70% of the lab work for the province), has a QA policy and many policies related to interpretative pathology; The Service Chief of the Division and a Divisional QA Committee.

Conclusions

This is the first study to document the landscape for pathology QA across provinces. Large pan-Canadian variations remain for the level of integration and future plans to develop and integrate interpretive pathology QA programs within provinces. Next steps should include developing a pan-Canadian recommendations framework for interpretive pathology QA to help guide senior decision-makers in implementing such prospective quality programs consistently across provinces.