Quality Assurance in Forensic Pathology: Peer Review

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Disclosures of Conflict of Interest

- No financial disclosures
- Chair, OFPS Complex Case Expert Committee
- Firm believer in the utility of Peer Review in Forensic Pathology

Learning Objectives

At the end of the presentation, participants will be able to:

1. Define peer-review in the practice of forensic pathology.
2. Explain the necessity, rationale and significance of peer review.
3. Describe the approaches to the performance of peer-reviews of postmortem examination reports.
4. Describe the approach to the peer-review of Deaths in Custody cases in the Ontario Forensic Pathology Service (OFPS).

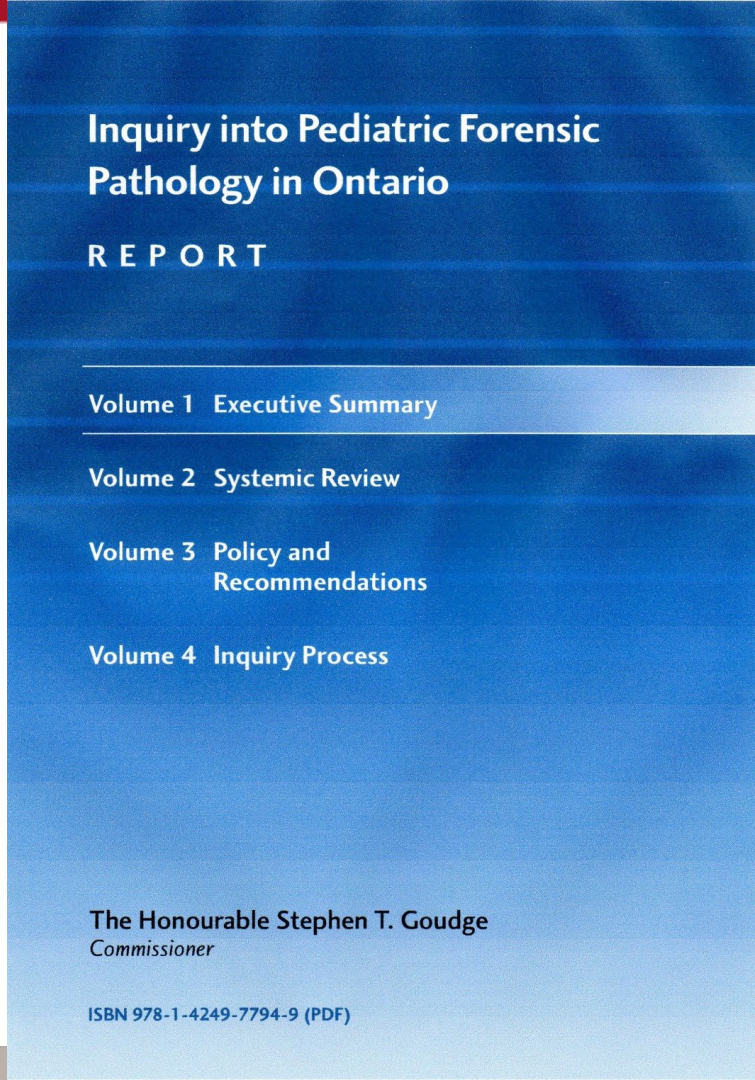
Peer-Review in Forensic Pathology

- One of the main QA measures
- Promotion and maintenance of overall quality through effective checking of reports to assess
  a. **Standard of examination performed**
  b. **Correct interpretation of the findings**
  c. **Reasonableness of Conclusions & Opinions.**
- Utility of Peer Review is detection of:
  - Errors of misinterpretation
  - Errors of "lack of recognition/missed findings"
  - Errors of omission
  - Failure of pursuit of pertinent ancillary investigations (confirmation/exclusion)
- Concept of PR
  - ***Not been accepted and adopted universally***
  - ***Variable international utilisation (0% - 100% of reports).***

Impact of Errors

Errors do not necessarily need to be large to have a large impact

- **Goudge Inquiry**
  - *systemic review and assessment of policies, procedures, practices, accountability, oversight mechanisms, quality control measures and institutional arrangements of pediatric forensic pathology in Ontario (1981 to 2001) as they related to its practice and criminal proceedings.*
- Cases surrounded Dr Charles Randall Smith, Head Forensic Ped Path at Toronto Sick Kids (1982 – 2003)
- **June 2005**: Chief Coroner of Ontario ordered a review of 44 autopsies; 13 cases had resulted in criminal charges and convictions
- **April 2007**: Release issued substantial problems in 20 of the autopsies.
- **8-month Public Inquiry (2007/2008):** release of Report on October 01, 2008
  - **169 recommendations made.**
- **Resulted in birth of the OFPS**



Range of Materials for Review*

- Draft Final PME report
- Summary of Circumstances of Death
- Summary of Scene Examination findings/Scene Photographs
- Postmortem Examination Photographs
- Routine histology slides*
- Results of Ancillary Investigations (biochemistry, toxicology, microbiology etc)
- Specialist Pathology Consultation reports
  - Neuropath,
  - Cardiac path

*It may not be necessary to review all materials**

Approaches to Peer Review 1

1. Prospective Peer Review

- Informal vs formal
- Preventive tool
- More likely to be performed in homicidal/criminally suspicious deaths, SUDI and high-profile cases.

2. Retrospective Peer Review

- Not a preventive tool
- Audit of the standard of practice
- Performed on a proportion of ***other*** signed-out routine medicolegal cases.

Approaches to Peer Review 2

1. Individualistic

- One-on-One review

2. Committee

- Committee-on-One review

Approaches to Peer Review 3

1. **Unblinded Peer Review**
   - ➢ No redaction of contextual information
   - ➢ More frequent*
2. **Blinded Peer Review**
   a. Redaction of contextual information
   b. Reviewer blinded as to context
   c. Linear Sequential Unmasking

Ontario Forensic Pathology Service

- Largest single MLDI system in the world (geographically)
- Works collaboratively with the Office of the Chief Coroner for Ontario (OCCO)
- Chief Forensic Pathologist + 2 Deputy Chief FPs
- Register of Pathologists (3 categories)
- **Forensic Pathology Advisory Committee (FPAC)**
- **Provincial Death Investigation Oversight Committee (DIOC)**

OFPS Register of Pathologists

Category A – Can perform all types of cases

Category B – Can perform only criminally non-suspicious adults

Category C – Can perform only criminally non-suspicious children

OFPS Operational Structure

- Six (6) FP Units
  - **Provincial Forensic Pathology Unit (PFPU)**
    a. Seat of OFPS
    b. Base of CFP
    c. Based in Toronto
  - **Five (5) Regional Forensic Pathology Units (RFPUs)**
    a. Ottawa
    b. Kingston
    c. London
    d. Sudbury
    e. Sault Ste Marie
- Each RFPU headed by a Medical Director who reports to Chief FP
- **Robust Quality Assurance System**

Approaches to Peer Review in the OFPS

1. **Individualistic Reviews**
   a. Homicides/criminally suspicious deaths
   b. Non-criminally suspicious deaths (routine cases)

2. **Committee Reviews**
   a. Complex Case Expert Committee (CCEC)
   b. Child Injury Interpretation Committee (CIIC)

OFPS Peer Review: Judicial Cases

- Mandatory review of **all reports of PMEs performed by a Category A pathologist (FP) that will go before a court (prelim inquiry, trial, inquest)**
- **Review conducted by another Category A Pathologist (FP) on the OFPS Register**
- Centralised submission of draft reports + random allocation of a Rev Path anywhere in Province.
- **Unblinded review; Individualistic**
- Completion and submission of a standardised peer-review form
- Disagreements of opinion referred to Chief FP for ratification

ONTARIO FORENSIC PATHOLOGY SERVICE

Peer Review Form

Submit by Email

CASE DATA	
Name of Deceased	Anthony DECEDENT
Autopsy File Number	FA-21-12345
Date of Autopsy	February 11, 2021
Pathologist	Dr. James Quincy
Coroner	Dr John H Watson
Regional Supervising Coroner	Dr Sherlock Holmes
Reviewing Pathologist	Dr Alfredo E Walker

ITEMS REVIEWED	Yes	No	N/A
Postmortem examination report	✓		
Photographs	✓		
Microscopic slides		✓	
Toxicology report	✓		
Other (specify):Warrant, Vitreous biochemistry report	✓		

Part 1: ADMINISTRATIVE AUDIT	Yes	No
Name and autopsy number recorded on report	✓	
Recommended template used	✓	
History provided	✓	
Opinion provided	✓	
Cause of death provided	✓	
Disclosure of retained samples and organs provided	✓	

Part 2: TECHNICAL AUDIT	Yes	No
Descriptions are satisfactory	✓	
Appropriate ancillary testing performed	✓	
Report is free of major language errors	✓	
Report is independently reviewable	✓	
Cause of death is reasonable	✓	
Other opinions are reasonable	✓	

A conflict of interest (COI) is any situation - actual, potential or perceived - where a peer reviewer's interests may be incompatible or in conflict with his or her duties as a peer reviewer.

CONFLICT OF INTEREST	Yes	No
		×

The Chief Forensic Pathologist must be notified by the Reviewing Pathologist, if "no" is recorded in part 1 or 2, or if the turnaround time exceeds 12 months. The pathologist who performs the postmortem examination is responsible for providing testimony on the autopsy. A copy of this evaluation is to be submitted to the OFPS (OFPS@ontario.ca)

Signature of Reviewing Pathologist A3L **Date** May 6, 2021

ONTARIO FORENSIC PATHOLOGY SERVICE

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Part 1: ADMINISTRATIVE AUDIT: Name and autopsy number recorded on report ✓; Recommended template used ✓; History provided ✓; Opinion provided ✓; Cause of death provided ✓; Disclosure of retained samples and organs provided ✓

Part 2: TECHNICAL AUDIT: Descriptions are satisfactory ✓; Appropriate ancillary testing performed ✓; Report is free of major language errors ✓; Report is independently reviewable ✓; Cause of death is reasonable ✓; Other opinions are reasonable ✓

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Signature of Reviewing Pathologist A3L Date May 6, 2021

Effective: November 8, 2020
Authorized by: Dr. M. Pollanen
Peer Review Form
P-FORM-05.03
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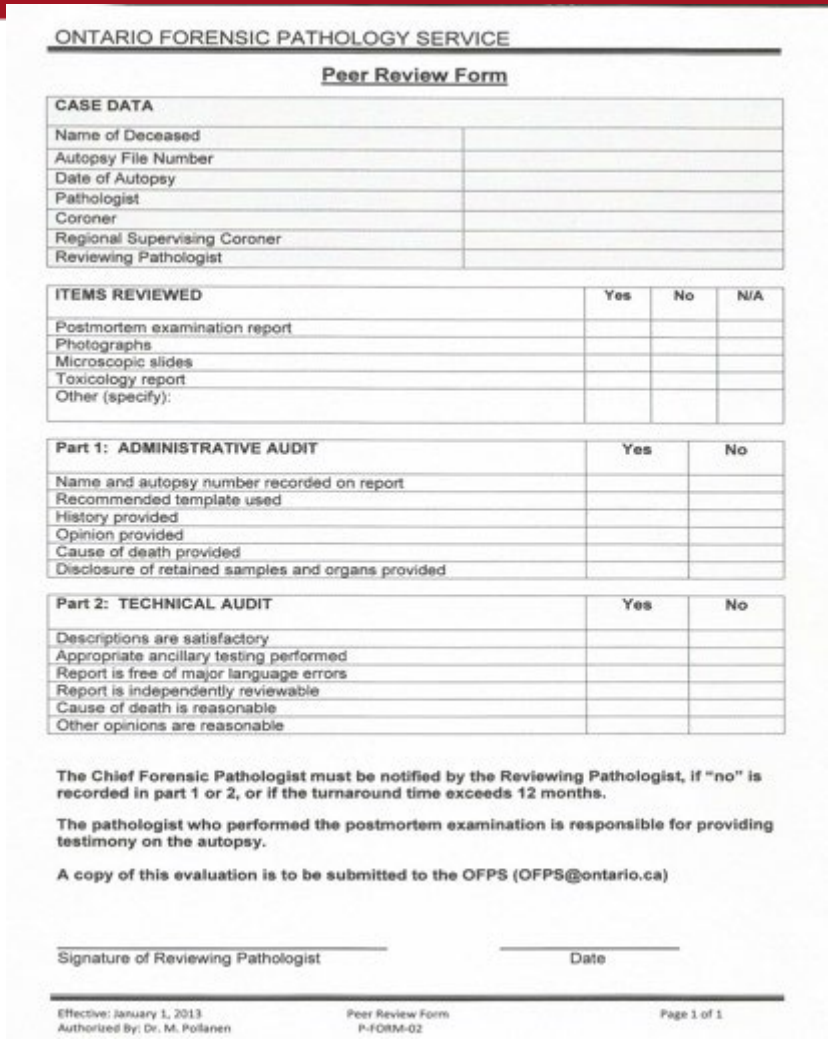
OFPS Peer Review of Non-Judicial Cases

- 100 % technical audit of pathologists who conduct less than 20 cases per year
- 100 % unascertained cases
- 100% natural deaths under 40 years of age
- 10% random audit of all pathologists and peer review of all criminally suspicious cases.

OFPS: Peer Review of Non-Judicial Cases

- **Individualistic, Unblinded, Prospective review**
- *"In-house review"* within the RFPU
- No centralized submission of draft final reports to Toronto
- Random allocation of report
- Similar OFPS Peer Review form



ONTARIO FORENSIC PATHOLOGY SERVICE

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Signature of Reviewing Pathologist

Date

Effective: January 1, 2013
Authorized By: Dr. M. Pollanen

Peer Review Form
P-FORM-02

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Committee Reviews

OFPS Peer Review

- Cornerstone of the OFPS Quality Assurance program
- Two (2) types of Peer Reviews
  1. **One-on-One**
     - homicides, inquest deaths
  2. **Committee-on-One***
     - *Cases that require higher level of transparency, rigor and broader input (public or CJS interest)*
     - **CCEC** & **CIIC**
- Two (2) types
  1. Prospective Peer Review
  2. Retrospective Audit

Complex Case Expert Committee

- CCEC
- Standing committee of OFPS Forensic Pathology Advisory Committee (FPAC)
- Standing CCEC membership:
  - Chair*
  - Current & Past DCFPs
  - Current & Past Medical Directors of RFPUs
  - Current and Past Medical Managers of RFPUs
- Two (2) categories of Review
  1. **Mandatory**
  2. **Discretionary**

When will a CCEC Panel Convene?

A. Mandatory CCEC Review:

1. **Death in Custody when physical altercation between inmate & correctional staff occurred.**

2. **Death when force used by Law Enforcement Officer(s**) and includes, (but not limited to):
   i. Restraint.
   ii. Application of Conducted Energy Weapon or another restraint modality (pepper spray, baton, etc).

   NB. Uncomplicated police shootings do not require CCEC review.

3. **Death while detained and physically restrained in a Psychiatric facility, Hospital or Secure Treatment Program.**

B. Mandatory CCEC review:

1. Persistent disagreement during peer review based on a perceived error or difference of opinion between the originating FP and the Reviewer FP that cannot be resolved.

2. Originating FP or Reviewer FP identifies a case as requiring additional review during One-on-One peer review

C. Discretionary CCEC Review:

1. Case referred by Chief Forensic Pathologist (CFP).
2. Case referred by Deputy Chief FP (DCFP) for case performed by CFP.
3. Case referred by:
   a. The Deputy Solicitor General.
   b. The Chief Coroner.
   c. The Chair of the Death Investigation Oversight Council (DIOC).
4. Case referred by any of the above after the final autopsy report has been released.
5. Request for CCEC referral from a relative/legal representative through CFP.

CCEC Case Review

- **Review materials circulated in advance to all panelists**
- **One-time CCEC Panelists' meeting**
- CCEC Panelists
  1. **Chair of CCEC.**
  2. *At least* **Two (2) Standing CCEC members chosen in rotation** (subject to availability).
  3. *At least* ***O*****ne (1) forensic pathologist with ≥5 years practice experience** chosen in rotation (subject to availability).
  4. **Other subspeciality experts as required** (e.g. cardiac pathologist, neuropathologist, anthropologist, toxicologist, etc.).
  5. **FP from another jurisdiction* (as required).**
  6. **Originating FP (**at his/her discretion).
  7. **Reviewer FP*** (if applicable).

Conflict of Interest

- CCEC Chair cannot preside over his/her own case under review
- Originating FP excluded from being Chair of the specific CCEC meeting.
- Reviewer FP excluded from serving as Chair of the specific CCEC meeting.
- Each member of the CCEC panel must declare whether they have a COI. eg. consulted on case by an interested party
- *If COI exists, that member cannot participate in the review in any way.*

Format of CCEC Panel Meeting

- Case Presentation:
  - Originating FP delivers a PPT presentation on the case.
  - Q&A

- Round table Discussions
  - Canvass of each panelist's opinions (with discussion)
  - Chair's opinions (with discussion)
  - Recommendations for further case workup or analysis
  - Documentation of Consensus or Majority Opinions

Suggested CCEC Panel Discussion Points

- Description of **Information and Material reviewed**.
- **Cause of Death**
  - **Injury-related or not?**
- If CoD injury-related
  - *(i) Can conclusions be made about how the injury was sustained and whether there are alternative explanations?*
  - *(ii) Are the observed signs of injury accidental or inflicted (self/other)?*
  - *(iii) Is it certain that the injury is due to the recent incident?*
  - *(iv) Can the injury be timed?*
- The key physical findings should be explained in relation to the cause of death.
- Has the committee relied on additional information such clinical signs during life or other information in witness statements?
- **Have the features of this case and conclusions been described previously in the literature?**
  - *Is the evidence/research base relied upon in this case unequivocal and definitive?*
  - *Would your peers come to the same conclusion based on the observed physical signs detected at autopsy?*

CCEC Panel Conclusions

- Chair prepares Peer- Review document after panel meeting to address:
  - Reason for CCEC referral.
  - List of CCEC panelists and criteria for selection:
  - No COI declaration by all panelists.
  - Issues discussed and panelists Opinions.

- Chair circulates draft PR to panelists for review, comment, suggested edits and approval.

- After approval:
  - CCEC PR doc. issued to Originating FP.
  - Originating FP considers and incorporates content of CCEC review doc
  - **Originating FP issues final PM report with CCEC PR doc. appendaged**
  - *In cases where the autopsy report was previously finalized and peer reviewed, the Chair will distribute the review document to the originating forensic pathologist, the original peer reviewer, the CFP, the Regional Supervising Coroner (RSC) and Crown (if required for criminal proceedings).*

Outcome CCEC Review

- Preparation of a PR document (letter) for case reviewed
  - ➢ PR document replaces the standard PR form
- Content of PR letter
  1. Nature of the contentious issues in case
  2. Discussion of Issues
  3. Opinions of CCEC
     a. Range of opinions
     b. Principal determinations/Consensus
- **CCEC PR document must be appended to the final report**

Summary

- Peer Review is an integral component of Quality Assurance in Forensic Pathology
- There are many approaches to PR
  a. Prospective vs Retrospective
  b. Unblinded vs Blinded
  c. Individualistic vs Committee
- A form of Peer Review should be instituted in all departments
- Each department needs to adopt the components of PR which are best suited for its local QA needs.

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- Email communication: Dr Linda Iles, Head of Forensic Pathology, VIFM

Thank You.

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