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The Ontario Diagnostic Imaging

PEER LEARNING COMMUNITY

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Diagnostic Imaging Peer Learning Toolkit

Guide 4.0: Discrepancy Management Process

Ontario

How to Work Through the Toolkit Guides

Estimated Time to Complete Each Guide

The table below outlines the time required to work through each guide, along with the total time required to hold sessions with the radiologist working group.

Guide	Time to Complete*	Session Time
1.0 Readiness Assessment	1–3 months	--
2.0 Diagnostic Imaging Peer Review Workflow	1 month	1 session, ~1.5 hours
3.0 Learning and Education Process	1 month	1 session, ~2 hours
4.0 Discrepancy Management		
5.0 Governance and Accountability	3–4 months	--
6.0 Monitor and Sustain	1–2 months	--
7.0 Train Stakeholders	1 month	2 sessions, ~1.5 hours each

***Note:** There is some overlap between some of the guides to allow the last six guides to be completed in 4 months. For cross-organizational programs, please build in at least 3 additional months of pre-implementation work to enter into a data sharing agreement with partner organizations.*

The following Gantt chart illustrates the estimated time required to complete each of the seven guides in the Diagnostic Imaging Peer Learning Toolkit and the overlap between some of the guides.

Pre-Implementation Activities				
Guide	**Month -2**	**Month -1**	**Month 0**	
1.0 Readiness Assessment				**Decision to implement Diagnostic Imaging Peer Learning Program**

Implementation Activities				
Guide	**Month 1**	**Month 2**	**Month 3**	**Month 4**
2.0 Diagnostic Imaging Peer Review Workflow				
3.0 Learning and Education Process				
4.0 Discrepancy Management Process				
5.0 Governance and Accountability				
6.0 Monitor and Sustain Program				
7.0 Train Stakeholders				

Guides 2.0 to 5.0 Should Be Done in Parallel

After completing the Guide 1.0 Readiness Assessment, it is important to note that Guides 2.0, 3.0, 4.0, and 5.0 are highly interconnected. The guides were separated by theme for ease of use, but it is recommended that you work through some of these guides at the same time. It would be helpful to read through Guides 2.0 to 5.0 first so that you understand all of the connections before diving in.

***Note:** Guide 5.0 will also require key decisions from Guide 6.0, and Guides 6.0 and 7.0 also refer back to Guide 5.0. However, Guides 6.0 and 7.0 can be done independently of Guides 2.0 to 5.0. It is recommended that you formalize your Diagnostic Imaging Peer Learning Program Policy with your organization after completing guides 2.0 to 5.0 and then add the required information from Guide 6.0 later on.*

Guide 4.0: Discrepancy Management Process

Note: *Since it is recommended that Guides 2.0 to 5.0 are completed in parallel, it would be helpful to read through the guides first to understand how they are all related.*

In particular, Guide 3.0: Learning and Education Process and Guide 4.0: Discrepancy Management Process should be completed together because you can achieve goals from both guides in the same 2-hour radiologist working group session. Please review both guides before planning this radiologist working group session.

Deliverable:

Guide 4.0: Discrepancy Management Process will help you design a process to review and resolve discrepancies identified through peer review, and manage the follow-up to minimize the impact to patient care.

Outcome:

After working through this guide, you will have: (1) established a process for the timely management of discrepancies between original reports and peer review cases; and (2) defined accountability for key processes to mitigate impact to patient care.

Section		Supporting Tool	Page Number
4.1	Designate Discrepancy Management Roles and Responsibilities[5.5P]	Table 1: Discrepancy Management Roles and Responsibilities	6
4.2	Define a Process for Radiologists to Manage Discrepancies[5.5P]	4.2 Discrepancy Management Process Map and Standard of Work	8
For Cross-Organization Programs: **4.3**	Define Third-Party Reviewer Relationships Between Organizations	4.3x Cross-Organization Discrepancy Management Table	9
4.4	Define a Process to Manage Patient Incidents[5.5P]	4.4 Incident Management Process Map and Standard of Work	10

[5.5P] Indicates that a key decision from this section will need to be included in tool *5.5 Diagnostic Imaging Peer Learning Policy Template.*

Stakeholders to Engage:

Radiologist Working Group: Facilitate a session with the radiologist working group to design the discrepancy management process. The group should ensure that appropriate and timely action is taken in the event that a discrepancy is identified.

Radiologist-in-Chief: Have your radiologist-in-chief designate discrepancy management roles and responsibilities to radiologists who will assess, confirm, and resolve discrepancies that have been identified through completed peer reviews (see *section 4.1*).

Steering Committee: Obtain final steering committee approval of the discrepancy management process developed by the radiologist working group.

Organizational Patient Safety and Incident Management Office: Consult the group or groups that manage the incident management process and policy at all participating organizations (e.g., Patient Safety and Incident Management Office). They will advise on the design of an appropriate reporting mechanism in the event of a patient safety incident identified through peer review. Individual organizations must determine whether an incident has occurred, based on their definition of patient harm.

Estimated Time to Complete:

Time to Complete Guide 4.0:

- 1 month (in parallel with other guides; particularly Guide 3.0)

Featured Activity:

- Radiologist Working Group Meeting (1 x ~2-hour session):
  Facilitate a session with the radiologist working group using tools 4.2 (for all users) and 4.3x (for cross-organization programs only) to develop and document the discrepancy management process for your Diagnostic Imaging Peer Learning Program. This may be completed in the same 2-hour session that you are using to develop your learning and education process from Guide 3.0: Learning and Education Process.

Things to Consider:

Alignment with Learning and Education Roles
Refer to *Guide 3.0, section 3.1 Designate Learning and Education Roles and Responsibilities* when designating the discrepancy management roles in *section 4.1*. Consider whether the individuals who lead the learning and education process will also be responsible for the discrepancy management process. Centralization of this role will streamline collection of learnings to allow for broad dissemination across the entire radiologist group.

Discrepancy Rate
The discrepancy rate is anticipated to be around 1% to 5%,[i,ii,iii] based on current literature benchmarks. For example, an organization completing 50,000 exams annually, and peer reviewing 2% of annual volumes, should expect approximately 10 discrepancies per year. The major discrepancy rate found in the literature is between 0.5% to 0.8%.[iv] As such, an organization completing 50,000 exams annually, and peer reviewing 2% of annual volumes, should expect around five major discrepancies per year. Accordingly, discrepancy management is not expected to have a substantial impact on the workload of the quality leads.

Learning and Education Focus
Experience from successful peer learning programs across Ontario have identified the discrepancy management process as a valuable opportunity for radiologist-to-radiologist learning moments. To maximize learning opportunities, your discrepancy management process should aim to promote collaborative decision-making around the confirmation of discrepancies and encourage peer-to-peer conversations, where possible. This approach may also help to manage concerns regarding discrepancy management becoming a punitive process.

Consensus-Oriented Group Peer Review
Seek to reach group-based consensus[v] when managing discrepancies so that decision-making does not rest solely upon the original reporting radiologist. This will enable self-regulated but consistent oversight of discrepancy management and ensure that all discrepancies are managed and impact to patient care is minimized.

Retrospective vs. Prospective
In *Guide 2.0, section 2.2: Determine If Reports Will Be Reviewed Retrospectively or Prospectively*, your radiologist working group determined whether your program will be retrospective or prospective. Note that a **retrospective** peer review requires an incident management process (*section 4.4: Define Process to Manage Patient Incidents*) in the event that a patient is harmed as a result of a major discrepancy. **Prospective** peer review requires that reports are sent to the referring physician after a peer review has been completed. It is therefore less likely that harm could reach the patient and an incident management process is less likely to be required. Your organization may wish to classify prospectively identified discrepancies as "near miss incidents," which may still require establishing the process outlined in *section 4.4*.

Incident Management
Processes must be established to manage critical incidents that may be identified through the discrepancy management process (i.e., in the instance that a discrepancy results in patient harm, as defined by the organization where the original imaging and report were completed). If an incident is deemed to have occurred, the discrepant case will exit the peer review process and be managed through the organization-specific incident management policy and procedures. Ensure that discrepancy management is designed in alignment with your organizational incident management practices.

For Cross-Organization Programs:

Any incidents identified through the peer review process should always be managed by the organization where the original imaging and report were completed, following the organization-specific incident management policy and procedures.

Anonymity
Aim to maintain anonymity between the original reporting radiologist and the radiologist completing peer review. Mechanisms should be in place to provide feedback anonymously through third-party reviewers who will assess and confirm discrepancies.

Time Sensitivity
Consider time constraints when designing the discrepancy management and incident management processes to minimize impact to patient care if, or when, follow up is required. When a significant discrepancy is identified, a prompt addendum to the original report and disclosure to the patient may be necessary to conform to clinical and professional standards.[ii]

Accountability
Clearly defining and centralizing roles and responsibilities for the management of discrepancies will support the timely management of potential discrepancies. Management of discrepancies should not be the responsibility of the original reporting radiologist alone.

4.1 Designate Discrepancy Management Roles and Responsibilities

This Section Will Help You: Designate and define key roles and responsibilities for the management of discrepancies and incidents identified through the peer review process.

Supporting Tool: Table 1: Discrepancy Management Roles and Responsibilities

Table 1: Discrepancy Management Roles and Responsibilities

Role	Recommended Responsibilities
Radiologist-in-Chief	• Designate radiologists to fill the discrepancy management roles for quality lead(s) and peer learning program lead* (if applicable) ***Note:*** *It is recommended that the radiologists in these roles are the same individuals designated as quality leads for the learning and education process (see Guide 3.0, section 3.1: Designate Learning and Education Roles and Responsibilities).* • Actively participate in the process if a quality lead is away (e.g., vacation) • Provide an additional perspective during discrepancy management in the event that a discrepancy cannot be confirmed immediately (i.e., any uncertain peer review cases) *Estimated Time Commitment: 30 minutes per month*
Quality Leads and/or **Peer Learning Program Lead** ***Note:*** *The peer learning program lead is often held by the radiologist-in-chief, but the role can be assigned to another radiologist.*	• Act as third-party reviewer for cases assessed as discrepancies: - Review original report and peer review assessment - Form level of agreement with original report and/or validate discrepancy - Assess whether the misinterpretation resulted in significant harm to the patient or had potential to do so (i.e., determine whether a patient incident has occurred) ***For Cross-Organization Programs:*** If a peer review case from another organization has been confirmed as a discrepancy, inform the quality lead and/or radiologist-in-chief from the organization where the original imaging/report was completed. The organization where the report originated should determine whether patient harm resulted from the discrepancy. *Estimated Time Commitment: 30 minutes per month*

For Cross-Organization Programs:

Ensure that each participating organization assigns members for each of the discrepancy management roles described in Table 1.

How to Use the Tool(s)

Recommended Users: Radiologist-in-chief, program lead, and quality leads

1. **Radiologist in Chief:** Designate radiologists to fill the discrepancy management roles for the quality lead(s) and the peer learning program lead (if applicable).

   Note: *It is recommended that the radiologists in these roles are the same individuals designated as quality leads for the learning and education process (see Guide 3.0, section 3.1: Designate Learning and Education Roles and Responsibilities).*

2. **All Recommended Users:** Refer to the responsibilities listed for each role (see Table 1) and modify as required to meet the discrepancy management processes of your organization(s).
3. Once you have completed this section, document any applicable revisions to your discrepancy management roles and responsibilities descriptions from Table 1 and include them in your Diagnostic Imaging Peer Learning Program Policy (tool *5.5 Diagnostic Imaging Peer Learning Program Policy Template, section C.2: Peer Learning Program Governance*).

4.2 Define a Process for Radiologists to Manage Discrepancies

This Section Will Help You: Determine a process for radiologists to confirm and resolve discrepancies identified through the peer review process.

Supporting Tool: 4.2 Discrepancy Management Process Map and Standard of Work

How to Use the Tool(s)

Recommended User(s): Radiologist working group

1. Review tool *4.2 Discrepancy Management Process Map and Standard of Work* tool with the radiologist working group.
    - Page 1 summarizes the steps that constitute a discrepancy management process from start to end
    - Answer the key questions found on pages 2 to 5 to customize the process for your Diagnostic Imaging Peer Learning Program
2. Document your decisions in tool *4.2 Standard of Work* template found on pages 6 to 7. Once populated, this document can be used for training and communication purposes.
3. Obtain approval of your discrepancy management process from the Diagnostic Imaging Peer Learning Program Steering Committee.

4.3 Define Third-Party Reviewer Relationships Between Organizations

For Cross-Organization Programs:

Section 4.3 applies to cross-organization programs only.

This Section Will Help You: Determine which participants in your cross-organization peer learning program will act as third-party reviewers for potential discrepancies, both internally and for other organizations.

Supporting Tool: 4.3x Cross-Organization Discrepancy Management Table

How to Use the Tool(s)

Recommended User(s): Radiologist working group

1. If you have determined that third-party reviewers will be assigned (i.e., not automated or randomly selected), list each of the participating organizations in Table 1, row 8 of tool *4.3x Cross-Organization Discrepancy Management Table*. You may need to add or delete columns, depending on the total number of organizations in your program.
2. Refer to tool *2.5x Cross-Organization Sub-Group and Lookback Matrix* from Guide 2.0 and populate the required inputs listed below in the 4.3x tool:
    - Sub-groups at each participating organization in-scope for peer review (row 9)
    - Number of radiologists in each sub-group (row 10)
    - Annual volumes performed for each sub-group (row 11)
3. Enter your volume benchmark (e.g. 2%), as determined in *Guide 2.0, section 2.6: Determine the Frequency for Radiologists to Complete Peer Review* in row 12 of the 4.3x tool.
4. Once documented, the total number of annual peer review volumes and expected number of discrepancies will automatically populate in rows 13 and 14 of the 4.3x tool based on your peer review volume benchmark a major discrepancy literature benchmark of 0.5%[iv].
5. Determine which organizations will act as third-party reviewers for one another based on the following considerations:
    - **Critical Mass:** A minimum of four radiologists is recommended for a third-party review to be from within an organization.

      Note: *The 4.3x Cross-Organization Discrepancy Management Table tool will automatically suggest "no" for sub-groups with fewer than 4 radiologists. Organizations with more than four radiologists may elect to participate in cross-organization discrepancy management.*

    - **Appropriate Peer Matching of Radiologists:** Radiologists should act as third-party reviewers for cases that are reflective of their actual clinical practice.
6. Once you have determined which organization will act as the third-party reviewer, select its name from the dropdown menus in Table 1, row 16 of the 4.3x tool.
7. Once complete, Table 2 in the 4.3x tool will automatically summarize the number of discrepancies expected to occur at each organization and the number of discrepancies expected to be reviewed by each organization.

4.4 Define a Process to Manage Patient Incidents

This Section Will Help You: Define a process to manage discrepancies that are confirmed to have resulted in patient harm. This process should align with your existing organization-specific policies and procedures.

Supporting Tool: 4.4 Incident Management Process Map and Standard of Work

How to Use the Tool(s)

Recommended User: Radiologist working group

1. Review tool *4.4 Incident Management Process Map and Standard of Work* with the radiologist working group.
    - Page 1 summarizes the steps that constitute an incident management process from start to end
    - Answer the key questions found on pages 2 and 3 to customize the process for your Diagnostic Imaging Peer Learning Program
2. Document your decisions in tool *4.4 Standard of Work* template (page 4). Once populated, this document can be used for training and communication purposes.
3. Obtain approval of your incident management process from the Diagnostic Imaging Peer Learning Program Steering Committee.

Appendix 1: Frequently Asked Questions

Which assessment categories will be included in the discrepancy management process?

It is advised that all category 3 (major discrepancy) cases are reviewed immediately. You may also elect to review all category 2 (minor discrepancies). In the event your facility has elected to use the additional categories of: (a) unlikely to be clinically significant, and (b) likely to be clinically significant, it is recommended that all cases assigned with a "b" classification ("likely to be clinically significant") are reviewed immediately. See *Guide 2.0, section 2.3: Select Assessment Categories* for more information about assessment categories.

In the event of a patient incident resulting from a discrepancy, how will the incident be managed?

If an incident is identified through the peer review process, the case will exit the processes developed for the Diagnostic Imaging Peer Learning Program and be managed through the incident management process at your organization. Your working group should consult your Patient Safety and Risk Management Office.

For Cross-Organization Programs:

Incidents identified through cross-organization peer review will exit the processes developed for the Diagnostic Imaging Peer Learning Program and be managed through the incident management process at the organization ***where the original imaging and report were completed.***

Each participating organization should consult their Patient Safety and Risk Management Office to understand their own specific processes.

In the instance that a major discrepancy (assessment category 3) is submitted for a report where the quality lead is the original reporting radiologist, who will act as third-party reviewer?

It is recommended that the radiologist-in-chief always receive a notification that a major discrepancy is submitted in addition to the quality lead or any selected third-party reviewers. Quality leads ***cannot*** act as a third-party reviewer for discrepancies found in their own reports. In this instance, the radiologist-in-chief would lead the discrepancy management process as the third-party reviewer with the quality lead as the original reporting radiologist.

Appendix 2: Discrepancy Management Process Checklist

Completing this guide and checking off the items below confirm that you have successfully designed a process to confirm and manage discrepancies and any potential incidents resulting from your peer learning program.

- ☐ Designate discrepancy management roles and personalize responsibilities to facility needs.
- ☐ Designate third-party reviewers for timely management of discrepancies.
- ☐ Define assessment categories for inclusion in the discrepancy management process.
- ☐ Define discrepancy management process and supporting standard of work for timely management of discrepancies.
- ☐ Define incident management process aligned with each organization's existing policies and procedures.
- ☐ Obtain approval of your discrepancy management process and incident management process from the Diagnostic Imaging Peer Learning Program Steering Committee.
- ☐ Include key decisions in your Diagnostic Imaging Peer Learning Program Policy (tool *5.5 Diagnostic Imaging Peer Learning Program Policy Template, section C.2*).

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