Health Quality Ontario

The provincial advisor on the quality of health care in Ontario

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The ED Return Visit Quality Program: How to Conduct an Audit

Ontario
Health Quality Ontario

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Introduction

The ED Return Visit Quality Program is an initiative that aims to bring focus on the quality of ED care to supplement the performance indicators that are part of the Pay-for-Results (P4R) program. This program was recommended by a task force with expertise in quality improvement that included ED physicians as well as representatives from a number of stakeholder organizations, including the Ministry of Health and Long-Term Care, Access to Care (Cancer Care Ontario) and Health Quality Ontario (HQO).

Questions? Contact us.

If you have any questions about the audit process, please contact HQO at EDQuality@hqontario.ca or the ED Lead for your LHIN.

In the ED Return Visit Quality Program, hospitals are provided with quarterly data reports summarizing their performance on two types of ED return visits, and will conduct routine and random audits of return visits to identify and understand their underlying causes. Hospitals will present the results of these audits to their CEO and Quality Committee of the Board and submit results to HQO annually. HQO will then summarize and report on key quality issues and themes discovered, as well as the improvement strategies identified, so that these key lessons can be shared among hospitals to support ongoing quality improvement.

The goal of this program is for hospitals to reflect on causes of ED return visits to identify areas for quality improvement, rather than to focus solely on reducing the rate of return visits.

Background

Types of ED return visits

ED return visits were chosen as the focus for this program based on literature evidence suggesting that they are useful 'triggers' to identify adverse events (AEs) and quality issues (i.e., adverse outcomes related to the care received during the index visit).[1,2] In this program, a select number of cases fitting the definitions of two types of return visits will be audited to identify and analyze any AEs and quality issues. The definitions of these two types of return visits are as follows:

1. Number and percentage of ED return visits within 72 hours of discharge from the initial ED non-admit visit, to the same or a different hospital, and resulting in an admission to an inpatient unit on the second visit.

2. Number and percentage of ED return visits within 7 days of discharge from the initial ED non-admit visit, to the same or a different hospital, resulting in an admission to an inpatient unit in the second visit with a sentinel diagnosis (subarachnoid hemorrhage [SAH], acute myocardial infarction [AMI], and paediatric sepsis) and with a relevant diagnosis documented in the initial ED non-admit visit.

These definitions were chosen based on literature review and consideration of factors such as data availability and application across a broad spectrum of cases and EDs.[2-5] The 72-hour all-cause return visits were chosen to provide general insight into the causes of a variety of ED return visits. The return visits involving sentinel diagnoses were chosen to narrow the focus to diagnoses for which there is a high likelihood of disability or death resulting from a missed diagnosis.

For more information on these types of return visits, including technical specifications, see Question #13 of the Frequently Asked Questions guidance document or contact Access to Care at ATC@cancercare.on.ca.

Data reports

Data reports summarizing the number and rate of cases meeting the definitions of these two types of return visits are available through iPort Access™. Please see Question #8 in the Frequently Asked Questions guidance document for more information about accessing the data reports.

Audits

Hospitals will audit a set number of cases involving return visits to the ED. These cases will be selected from the data reports provided by Access to Care.

Number and type of cases to audit

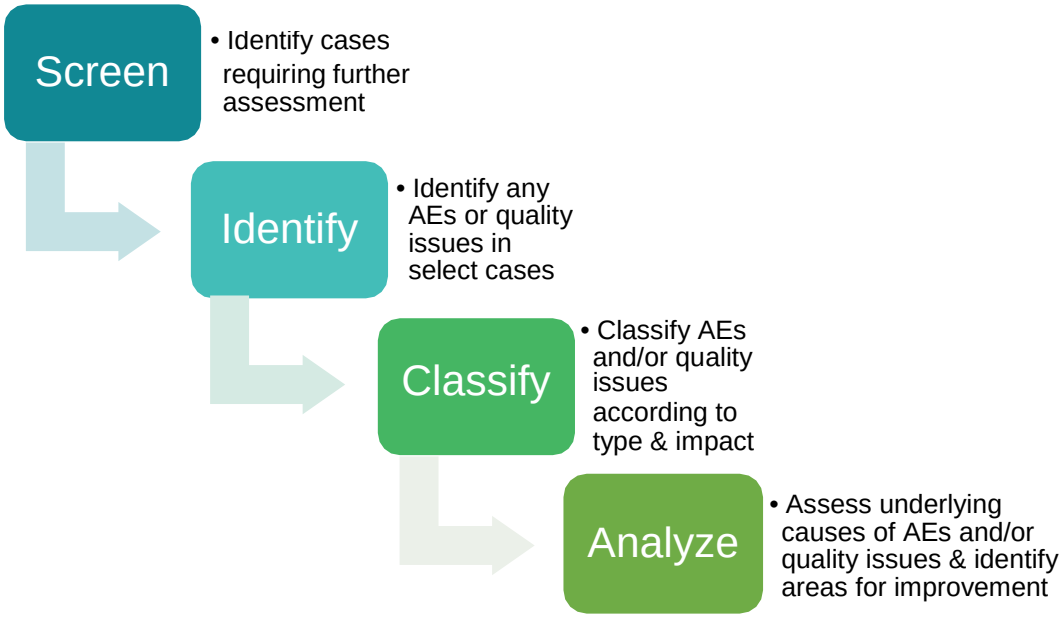
All return visits involving sentinel diagnoses *must* be audited. In addition to these cases, a random selection of all-cause 72-hour return visits will be audited until the required number of cases is met. The minimum number of audits to be conducted will be **50 cases**.

These requirements are applied on a per-site basis; thus, multi-site organizations will be expected to conduct a minimum 50 audits for each ED site.

The audit process

Overview

The following audit process is based on a study of AEs in patients with ED return visits:[2]



Who will conduct the audits

As outlined above, the audits will consist of an initial screening process (Part 1) followed by a more extensive, multi-step analysis of select cases identified during the screening process (Part 2). The more extensive analysis of these cases should be conducted by an ED physician. If at any point a physician reviewer is uncertain of his or her review, discuss the case among other reviewers (where available) until consensus is achieved.

If it is helpful, another qualified health care professional (e.g., nurse, physician assistant, etc.) can complete the screening process. This person should be familiar with the purpose of the program and be assigned and dedicated to completing this part of the audits.

Part 1: Screen cases to identify those requiring further assessment

The purpose of this screening process is to conduct a preliminary assessment of each case to identify and exclude from further analysis any cases where return visits were unrelated to index visits and/or scheduled.

See below for an overview of the screening process followed by detailed instructions for each step.

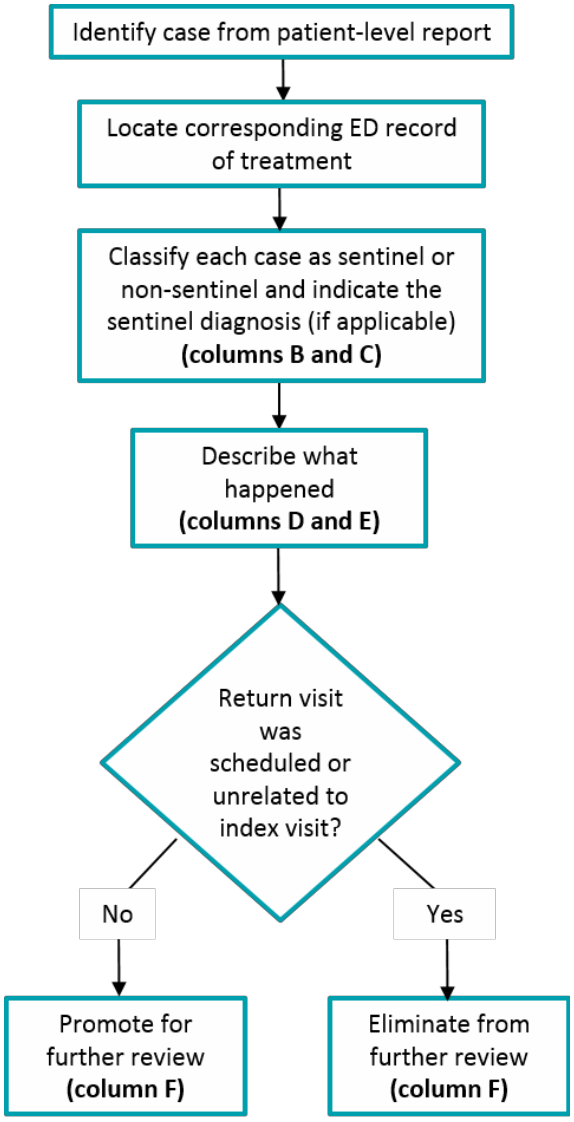


Figure 1. Overview of the screening process. Complete this process for all sentinel cases in the patient-level report first. Then, repeat the process for non-sentinel cases until a minimum of 50 cases have been screened.

Identify cases to audit

- Start by reviewing the aggregate and patient-level data reports provided by Access to Care. If you have not yet received these reports, refer to Question #8 in the Frequently Asked Questions document for more information on how to access them.

- In the aggregate data report, refer to the column labelled “Volume Admitted with Sentinel Diagnosis within 7 days of Non-Admit ED Visit” to determine how many return visits involving sentinel diagnoses occurred in each quarter. Identify these cases in your patient-level report by locating those with “Yes” in the column labelled “Return within 7 Days, Sentinel.” **All of these cases will need to be audited.**

- All cases with “No” in the column labelled “Return within 7 Days, Sentinel” fit the criteria for all-cause 72-hour return visits. Select a random sample of these cases to audit until, combined with the sentinel cases, the minimum number of cases per year is fulfilled. You can also select cases that represent priorities for your organization; however, be aware that if you follow this route you may be missing cases that could reveal issues that are as yet unknown to you.

- Using the medical record number as a case identifier, pull the selected cases from your patient records system. Once the patient chart is accessed, proceed to the next step.

Classify each case as sentinel or non-sentinel, and specify the sentinel diagnosis if applicable (Columns B and C)

- For sentinel cases, select the “sentinel” option in the “Sentinel vs Non-Sentinel” column of the audit template and indicate the type of sentinel diagnosis (SAH, AMI, or paediatric sepsis) in the “Sentinel Diagnosis” column of the audit template.

- For non-sentinel cases, select the “Non-sentinel” option in the “Sentinel vs Non-Sentinel” column of the audit template and select the “N/A” option in the “Sentinel Diagnosis” column of the audit template.

Describe what happened in the initial visit and the return visit (Columns D and E)

- For each case, complete a free-text response to the prompt “Please describe what happened” in the “Summary” columns of the audit template. Describe what happened in visit 1 followed by what happened in visit 2. Refer to the hypothetical cases at the top of the template for guidance on the scope of information to include here.

- There may be times when you are unable to access the ED record of treatment because the patient’s return visit was to another hospital. For these cases, simply indicate the admitting diagnosis in visit 2, as noted in your patient-level report, and state that the return visit was to another hospital.

Eliminate cases involving scheduled or unrelated return visits from further review (Column F)

- Using your patient-level data report and the ED record of treatment, eliminate from further review cases where return visits were scheduled or were due to completely unrelated injuries or ailments by selecting the "No further analysis required" option in the "Screening Result" column of the audit template. No additional fields in the template need to be completed for these cases.
    - Nearly all cases will involve unscheduled return visits, because most cases involving scheduled return visits will be screened out in the data collection process and will not appear in your aggregate or patient-level report.
    - It is anticipated that almost all sentinel cases will have return visits related to the index visit, because the diagnoses on the two visits have been "paired". Therefore, nearly all sentinel cases will likely be promoted for further review.
- If a case is not eliminated (i.e., where the index and return visits are related and unscheduled), select the "Further analysis required" option in the "Screening Result" column of the audit template.

This completes the screening portion of the audit. An example of the results of this portion of the audit is provided in Figure 2.

			For completion by qualified health care provider		
A	B	C	D	E	F
Case #	Sentinel vs Non-Sentinel p. 7	Sentinel Diagnosis p. 7	Summary of Visit 1 (Please describe what happened) p. 7	Summary of Visit 2 (Please describe what happened) p. 7	Screening Result p. 8
1	Non-sentinel	N/A	Patient seen in the ED with respiratory symptoms and diagnosed with pneumonia, discharged home despite low oxygen saturation during walk test (89%) and elevated lactate blood test (4.7) - both of which were not noted by the staff physician.	Patient returned to the ED by EMS within 6 hours in cardiac arrest, was resuscitated and admitted to ICU; comfort measures instituted and patient deceased next day.	Further analysis required

Figure 2. The ED Return Visit Audit Template showing the results of the screening process for a single hypothetical case

Please note that AEs and/or quality issues could still be identified in cases that were eliminated from further review following this screening process; they are, however, less likely to be found and, for the purposes of efficiency, are excluded from further review.

The next part of the audit process (Part 2; highlighted in green in the audit template) should be completed by an ED physician.

Part 2: Analyze select cases

Cases that have been identified as requiring further analysis during the screening portion of the audit will proceed to Part 2 of the audit – analysis by an ED physician. The purpose of Part 2 is to use the results of the screening process, medical records and clinical judgment to identify any AEs or quality issues, classify AEs and/or quality issues according to type and impact, uncover underlying causes, and develop potential actions for quality improvement.

The following is an overview of the analysis process. Detailed instructions for each step follow.

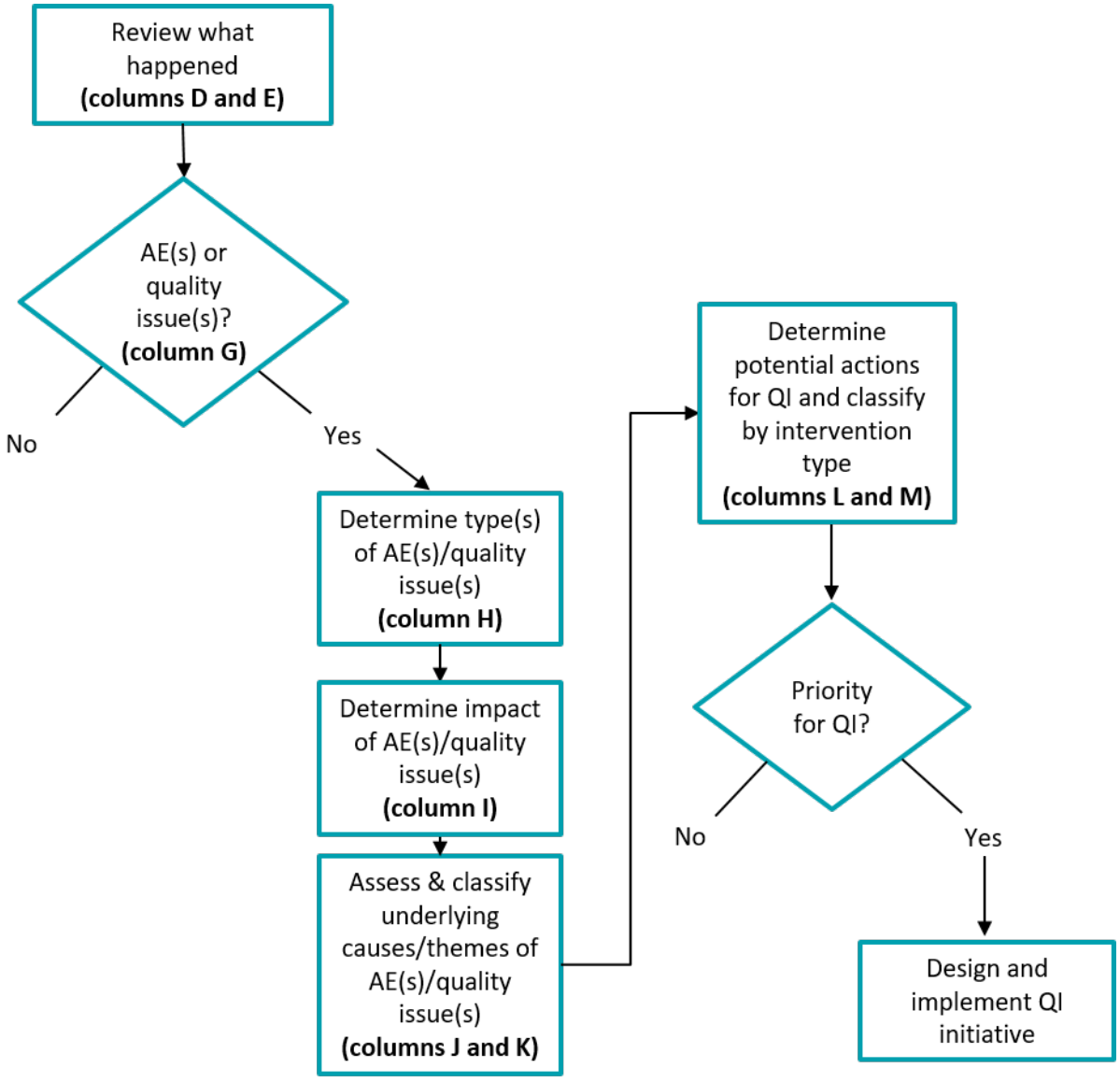


Figure 3. ED physician review process. Complete this process for all cases requiring further analysis, as identified in the screening process.

Review select cases and identify any AEs or quality issues (Column G)

- For each case with a screening result of "Further analysis required" (column F), review the summaries of visits 1 and 2 in the audit template (columns D and E).
    - If the description in visit 2 indicates that the second visit occurred at a different site, continue with the analysis based on the summary of visit 1 and the admitting diagnosis for visit 2. The focus of the analysis should be on the initial visit because this is when AEs and quality issues are more likely to have occurred.
- Use the summaries of the two visits, medical records and clinical judgment to identify any AEs or quality issues. AEs or quality issues are adverse outcomes related to the care received during the index visit. Consider whether the outcome for this patient could have been different had he/she received different care during the index visit.
- Where no AEs or quality issues are identified (for example, where return visits are due to natural disease progression), select "No AEs/quality issues identified" in the "AE(s)/Quality Issue(s)" column of the template. You do not need to complete any additional fields in the template for these cases.
- Where one or more AEs or quality issues are identified, select "AE(s)/quality issue(s) identified" in the "AE(s)/Quality Issue(s)" column of the template. Proceed to the next step for these cases.

Classify AEs/quality issues (Columns H and I)

Classify the type of each AE or quality issue (Column H)

- Refer to the following definitions (Calder et al, 2015)[2]:
    - A **diagnostic issue** is defined as not acting on documented signs, symptoms, laboratory tests or imaging, or not ordering an indicated diagnostic test.
    - A **management issue** is defined as a suboptimal management plan despite accurate diagnosis or based on an inaccurate diagnosis.
    - A **medication adverse effect** is defined as occurring when a patient experiences a symptom related to a medication regardless of whether the medication was appropriately prescribed or taken.
    - A **procedural complication** is defined as occurring when a patient experiences adverse consequences of a procedure.
    - **Suboptimal follow-up** is defined as problems with follow-up arrangements that led to the development of new symptoms or unnecessary prolongation of symptoms. This could be due to inadequate availability of a follow-up appointment or due to inappropriate follow-up arrangements.

- An **unsafe disposition** decision is defined as when a patient is placed at an unnecessary risk of experiencing death or major disability by being sent home.

- Select the type in the "Type(s) of AE(s)/Quality Issue(s)" column of the audit template. If none of the types listed above appear to fit the AE/quality issue, you may ignore the drop-down list and write a type that you think better captures the issue directly in the cell.

Classify the impact or severity of harm of each AE or quality issue (Column I)

- Select from the following options[7]:

1. **None** – patient outcome is not symptomatic or no symptoms detected and no treatment is required.

2. **Mild** – patient outcome is symptomatic, symptoms are mild, loss of function or harm is minimal or intermediate but short term, and no or minimal intervention (e.g., extra observation, investigation, review or minor treatment) is required.

3. **Moderate** – patient outcome is symptomatic, requiring intervention (e.g., additional operative procedure; additional therapeutic treatment), an increased length of stay, or causing permanent or long term harm or loss of function.

4. **Severe** – patient outcome is symptomatic, requiring life-saving intervention or major surgical/medical intervention, shortening life expectancy or causing major permanent or long term harm or loss of function.

5. **Death** – on balance of probabilities, death was caused or brought forward in the short term by the incident.

6. **Unable to determine.**

G	H	I
AE(s)/Quality Issue(s) p. 10	Type(s) of AE(s)/Quality Issue(s) p. 10	Impact (severity of harm) p. 11
AE(s)/quality issue(s) identified	Unsafe disposition decision, Management issue	Death

Figure 4. The ED Return Visit Audit Template showing the identification and classification of quality issues for a single hypothetical case

Assess underlying causes and themes of AEs or quality issues and identify actions for improvement (Columns J, K, L, and M)

Underlying causes are the deepest, yet still modifiable factors that contribute to an AE or quality issue.[8] Analysis of these causes will reveal opportunities for improvement for which achievable projects can be designed.[8]

Remember that these assessments should be blame free and promote a just culture, as the goal of this program is system and individual learning and improvement.

Identify the underlying causes of the AE/quality issue (Column J)

- It is recommended that the team involved in treating the patient be consulted for this portion of the audit. Although it can be difficult to recall a case that occurred more than three months ago, it is important that individuals try to recreate the thought process and environment that existed during the index visit in order to understand why actions that appear inappropriate in retrospect made sense at the time.[9]

- You may consider involving patients and their families in the analysis as well. If this seems appropriate, first contact your department head to help you coordinate with Patient Relations to ensure that this is carried out in a sensitive manner.[10]

- Guiding questions from the Canadian Incident Analysis Framework (p. 89-91)[11] can be used to uncover underlying causes.

- For each cause, add a new row to the template (see hypothetical cases #1 and #3 for reference).

Identify one or more theme(s) of the AE/quality issue (Column K)

- In the first year of this program, Health Quality Ontario and a team of clinicians analyzed all audits in which adverse events/quality issues were identified. Eleven themes were identified through this analysis. These themes, including descriptions and examples for each, are presented in the audit template in a separate worksheet titled Underlying Cause Themes. To

learn more about these themes and how they were identified, read the Year 1 report (specifically Section 3).

- Using the drop-down menu, indicate which of these themes is present in the case in question.

- There will likely be cases that do not correspond to any of the 11 themes listed here. If this is the case, enter "Other" in this cell.

Provide a summary of tangible actions that could be taken to address each underlying cause (Column L)

- Focus on concrete actions to be taken and avoid vague conclusions such as "we should try harder next time," which are not likely to result in change.[10,11]

- Hospitals may not have the resources available to address every underlying cause of every preventable quality issue; it is therefore recommended that hospitals prioritize three to five underlying causes and their resulting potential actions for improvement. Ideally, a SMART format (Specific, Measurable, Attainable, Realistic, Timely) will be used when planning to implement these actions.[12] Leave columns L and M blank for audits for which you will not be designing actions for improvement.

- Hospitals may wish to prioritize by focusing on underlying causes that are common across two or more AEs/quality issues and/or are associated with the greatest degree of harm. A useful guide for prioritization can be found on p.58-60 of the Canadian Incident Analysis Framework.[11]

- It is recommended that hospitals work with their CEO, Quality Committee of the Board, and/or Medical Advisory Council (or other appropriate committee) when reviewing audit results and prioritizing underlying causes to ensure that chosen actions to improve quality are aligned with overall hospital strategy.

- For guidance about how to design and implement a quality improvement initiative, please refer to the Getting Started module of HQO's Quality Compass: http://qualitycompass.hqontario.ca/portal/getting-started

Indicate the intervention type (Column M)

The intervention types are based on the Hierarchy of Effectiveness.[13] As you choose interventions, consider whether you can target interventions that are ranked as being more effective according to this hierarchy. Full descriptions and examples of each intervention type are presented in the audit template in a separate worksheet titled Intervention Types.

J	K	L	M
Underlying Cause(s) p. 12	Theme p. 13	Potential Actions for Quality Improvement p. 13	Intervention Type p. 13
Oxygen desaturation was not clearly indicated on the patient's chart.	Documentation	Nursing documentation charts will be re-organized.	Simplification & standardization

Figure 5. The ED Return Visit Audit Template showing underlying cause, theme, and potential actions for quality improvement for a single hypothetical case

Reflect on the results of the audits

Once a minimum of 50 cases have been audited, hospitals will be asked to reflect on the findings as well as any actions for quality improvement and associated outcomes in a Narrative section to be submitted to HQO in January of each year. The CEO will need to review and sign off on this Narrative. The Narrative template is available from the ED Return Visit Quality Program website: www.hqontario.ca/ED-Return-Visit

Hospitals may also wish to consider sharing their narrative and learnings with their department and/or hospital, being sure to remove all identifying patient and provider information. Sending feedback to your department about any changes that have resulted from the audit program is also a good way to demonstrate how the program is improving care.[8]

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