OVERVIEW: LEARNING FROM CLINICAL ADVERSE EVENTS IN ALBERTA HEALTH SERVICES

Developed in collaboration with the Medical Staff Engagement in Quality Advisory Council (MSEQ)

April 2019 Version 2.0

For questions and/or additional information: quality.assurance@ahs.ca
Learning from Adverse Events in Alberta Health Services

When adverse events occur involving patient care, the Alberta Health Services (AHS) Patient Safety Policy Suite and accompanying procedures outline the range of responses available to support learning. A key determinant in ensuring that the needs of the patient/family, staff/medical staff, and AHS senior leaders are met is that shortly after the occurrence, the Accountable Leader for the event conducts an ‘initial assessment’.

The initial assessment includes understanding the chronology of the event, along with key facts, to decide which processes need to occur. This overview document and the Patient Safety Policy Suite documents describe common processes that are all intended to review the quality of care.

Alberta Health Services documents that provide further support for reviewing the quality of care within AHS include the Quality Assurance Review Handbook and the Systems Analysis Methodology Handbook. These documents provide additional detail and reference Figure 1 which is a schematic for guiding decision making subsequent to an adverse event.
It is important for leaders within AHS to understand the differences among these processes (discussed below), as each has a distinct objective and outcome, and meets the needs of different stakeholders. Table 1 reflects the learning process, products of these processes and information regarding support for the process.
Table 1: Review Processes, Products and Supports

<table>
<thead>
<tr>
<th>REVIEW PROCESS</th>
<th>PRODUCTS RESULTING FROM THE REVIEW</th>
<th>SUPPORT FOR THE PROCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Assurance Review (QAR) or a Patient Safety Review (PSR)</td>
<td>Description of the event, system related issues, and recommendations. If appropriate, a Patient Safety Learning Summary.</td>
<td>Provincial or Zone based Patient Safety Department</td>
</tr>
<tr>
<td>Educational Case Review</td>
<td>Designed to engage a number of individuals to focus on learning from case studies. If appropriate, a Patient Safety Learning Summary.</td>
<td>Appropriate Clinical Department</td>
</tr>
<tr>
<td>Administrative Review (also known as performance reviews)</td>
<td>An evaluation of whether a staff member or medical staff member’s actions in a specific event were appropriate or inappropriate; performance management plan may result.</td>
<td>Human Resources or Medical Affairs</td>
</tr>
<tr>
<td>Quality Improvement Initiative</td>
<td>For a particular problem or issue, a project team will define the opportunity, build understanding of the situation, implement an improvement, and sustain results. Projects range from small to large. If appropriate, a Patient Safety Learning Summary.</td>
<td>Zone Clinical Quality Department</td>
</tr>
<tr>
<td>Human Factors Evaluation</td>
<td>Employ human factors science to study how healthcare providers work and then evaluate and design workspaces, equipment, tools, and information that contribute to a high-quality and safe healthcare system. If appropriate, a Patient Safety Learning Summary.</td>
<td>Human Factors Team (Provincial Patient Safety Department)</td>
</tr>
<tr>
<td>Simulation</td>
<td>Simulation can be applied to learn what happened after an adverse event and to identify latent hazards that may not otherwise be detected. If appropriate, a Patient Safety Learning Summary.</td>
<td>eSim™</td>
</tr>
<tr>
<td>Patient Concerns Resolution Process</td>
<td>Responses to patients/families specific questions and concerns about their care in compliance with the Alberta Patient Concerns Resolution Process Regulation 124/2006. If appropriate, a Patient Safety Learning Summary.</td>
<td>Patient Relations Department</td>
</tr>
</tbody>
</table>
A brief explanation follows related to each of the options available to accountable leaders within AHS to support learning from adverse events.

1. QUALITY ASSURANCE REVIEWS  
   (Protected by Section 9 of the Alberta Evidence Act)

According to the Alberta Evidence Act “quality assurance activities” mean a planned or systematic activity the purpose of which is to study, assess or evaluate the provision of health services with a view to the continual improvement of:

the quality of health care or health services, or
the level of skill, knowledge and competence of health service providers.

“Quality assurance committee” means a committee, commission, council or other body that has as its primary purpose the carrying out of quality assurance activities but does NOT include a committee whose purpose, under legislation governing a profession or occupation, is to review the practice of or to deal with complaints respecting the conduct of a person practising a profession or occupation.

AHS Quality Assurance Committees (QACs) carry out planned, systematic, quality assurance reviews (QARs) generally utilizing Systems Analysis Methodology (SAM). QARs assess and evaluate the provision of health services from a system perspective with the goal of improving the quality of services provided. This process can be time and resource intensive.

Each QAC is approved and designated by the AHS Official Administrator (past QAC were approved by previous Board of former Regional Health Authorities). Each QAC has standard terms of reference consistent with legislative requirements, and must have regularly scheduled meetings with defined membership. Minutes arising from these meetings are not widely distributed and are kept by the Chair.

An approved QAC is authorized by the AHS Official Administrator to establish temporary quality assurance subcommittees. Approval of the Official Administrator is required for appointment of subcommittees for duration longer than one year.

It is recognized that throughout the province, there is a spectrum of formats in which cases are reviewed for various purposes (e.g. some formal death audit processes). In order for these reviews to be protected under Section 9 of the Alberta Evidence Act, they must be conducted by an AHS Official Administrator-appointed QAC (or QAC subcommittee).

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1 AHS Official Administrator functions with the power and authority of an AHS board.

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A. Reviews of the Quality of Health Care or Health Services (QAR)
A QAR of an adverse event utilizing SAM aims to determine what happened, how it happened, and what can be done to improve care for future patients. This type of review generally involves engaging a multidisciplinary team to examine all of the healthcare system components (e.g. environment, task, policy, etc.) as they related to an event (or group of similar events). This process often results in recommendations aimed at improving the quality and safety of health care delivery. The focus is on improving structures, processes and/or practices within AHS.

QARs are requested by the Accountable Leader for the event and accepted by the Chair of the appropriate Quality Assurance Committee. The Accountable Leader and QAC Chair complete and submit designated forms to Patient Safety so the progress of accepted QARs can be tracked. QAR team members involve stakeholders in the review process to develop resulting recommendations, and ensure that an operational owner is engaged and agrees to implement the recommendation. Patient Safety also receives a final report of the QAR (once approved by the QAC) for the purpose of monitoring implementation of recommendations.

**QAR Scenario:** A patient certified under the Mental Health Act elopes from an inpatient mental health unit and attempts suicide.

B. Reviews of the Level of Skill, Knowledge and Competence of Health Service Providers
A QAC may request and discuss reports of amalgamated or aggregate performance data (e.g., complication rates) in order to understand risks to patient safety and design system strategies for improvement. For instance, Laboratory Services assesses amalgamated or aggregate performance data within their QA process as per their approved terms of reference.

The resulting reports and discussion (including compiled data, analysis and opinions regarding the data) are protected under Section 9 of the Alberta Evidence Act for the purpose of recommending improvement strategies. The reports are **not** to be used to resolve issues of individual performance however in the event that the data reveals a trend related to performance that is outside of accepted limits, as determined by the clinical group, the issue shall be referred to the appropriate administrative medical leader for review and next steps.

*It is important to note:* The raw data used to prepare reports of individual provider performance data (e.g., vital signs, ECG tracings) is available outside of Section 9 protection (See Appendix

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2 Accountable Leader means the individual who has ultimate accountability to ensure the consideration and completion of the listed steps in the immediate and ongoing management of the serious clinical adverse event process. This accountability lies with the senior vice president or vice president responsible for the clinical area where the event occurred and/or the relevant senior medical director, zone medical director or facility/community medical director. Responsibility for some or all of the components of management may be delegated to the appropriate level responsible administrative leader, but the accountability remains at the senior level.
A). Patients are able to obtain copy of their AHS Patient chart pursuant to the Health Information Act; therefore individual data points may be accessible for other purposes (including subsequent civil litigation).

QAR Scenario: Diagnostic discrepancies are detected in the context of peer group review comparison for pathologists.

2. PATIENT SAFETY REVIEW
(Not Protected under Section 9 of the ALBERTA EVIDENCE ACT)

This type of review is requested when the available facts (e.g. clinical records, dispatch recordings) without witness interviews or medical opinions are sufficient to understand what happened and to identify the opportunities for system improvements.

Similar to QARs, the SAM methodology is utilized to support analysis within the Patient Safety Review. As this type of review is not completed under the auspices of a QAC it is not protected by Section 9 of the Alberta Evidence Act. All documents arising from a Patient Safety Review will be producible in subsequent proceedings and witnesses can be questioned on the contents of the review.

Patient Safety Review Scenario: Morphine is ordered, instead hydromorphone is drawn up but the adverse event is recognized prior to the medication being given. In order to learn from the event to prevent it from happening again.
3. EDUCATIONAL CASE REVIEWS
(Not Protected under Section 9 of the ALBERTA EVIDENCE ACT)

Educational case reviews are designed to engage a number of individuals to focus on learning from case studies. Historically, case reviews have been done by groups of physicians (including medical students, residents and fellows), but they can also take place with multidisciplinary teams. Any recommendations arising from these sessions tend to be focused on education. It is important to note that AHS does not have a formal process to move recommendations forward to an operational owner from this type of review.

However, educational case reviews can serve as a platform to identify events that require a quality assurance review when recommendations for the organization are necessary.

Recommendations for conducting educational case reviews:

Conduct as an educational activity. These informal educational sessions do not require minutes. Do not publish case reviews/[Power Point] presentations on web sites or release handouts containing descriptive identifiable health information about the case.

De-identify details of any case being reviewed (remove names, site, dates, etc.)

Present the details and facts about a case to ask specific questions, such as how it could have been done differently

Present any supporting literature for discussion

If it is determined that the case needs further review, an AHS Accountable Leader may request a Quality Assurance Review using the established process

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4. ADMINISTRATIVE REVIEWS
(Not Protected under Section 9 of the ALBERTA EVIDENCE ACT)

In certain occurrences there may be a need to review individual practice and behaviour. This review may or may not be disciplinary in nature; however, this activity takes place outside of Section 9 protection pursuant to the Medical Staff Bylaws for physicians, or human resources for staff. Some information may be protected from disclosure pursuant to privacy legislation; however, this is assessed on a case-by-case basis.

Assessment of medical staff performance remains within the realm of AHS medical leadership and regulators such as the College of Physicians and Surgeons of Alberta. Periodic reviews

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of active medical staff occur every three years. Individual provider performance data from aggregate QA reports will not be used in periodic reviews. When the need for a Triggered Initial Assessment or a Triggered Review of a Concern is identified by AHS medical leadership, a formal process described in part 6 of the Alberta Health Services Medical Staff Bylaws and Rules (February 2011) will be followed.

Administrative Review Scenario: Aggregated data in the context of peer group comparison reveals a trend related to performance that is outside of accepted limits, as determined by the clinical group.

5. QUALITY IMPROVEMENT INITIATIVE
(Not Protected under Section 9 of the ALBERTA EVIDENCE ACT)

A Quality Improvement Initiative is indicated in cases where the issue(s) that led to the adverse event are well understood without the necessity of a formal investigation and recommendations for system improvement. The Alberta Health Services Improvement Way (AIW) provides a consistent approach, an effective set of questions, and helps create a shared language and approach to improving our daily work. The AIW includes four key steps:

Define Opportunity
Build Understanding
Act to Improve
Sustain Results

The AIW is supported by proven methods to manage change and share learning. Clinical Quality Improvement (CQI) Directors lead teams of dedicated quality improvement experts within each zone and are available to consult with regarding AIW initiatives.

Quality Improvement Initiative Scenario: A wrong site surgery in a high volume surgical environment such as ophthalmology occurs the week after an aggregate review of all wrong site surgeries and one week prior to the implementation of an AIW pilot to reduce wrong site surgeries.
6. SIMULATION
(Not Protected under Section 9 of the ALBERTA EVIDENCE ACT)

Simulation can serve to prospectively identify potential preventable hazards in the system that may be contributing to an adverse event either in situ on a unit, or when commissioning a new space or testing a new process. It can also be used to recreate an adverse event within a safe environment, without risking patient harm, incorporating the environment, equipment, health-care team behaviors and system processes that may have contributed to the complexities of an adverse event.

Simulation Scenario: Discovering the batteries are dead for the defibrillator on a care unit when running a simulation around resuscitation/acute deterioration. If this was not found proactively by the simulation team, the same may have occurred when resuscitating a patient.

7. HUMAN FACTORS EVALUATION
(Not Protected under Section 9 of the ALBERTA EVIDENCE ACT)

The AHS provincial Human Factors (HF) team studies how health-care providers work and then designs workspaces, equipment, tools, and information that contributes to a high-quality and safe healthcare system. Human factors projects generally have two goals in mind: to reduce the possibility of unexpected outcomes for patients and improve efficiency through human factors evaluation and design.

Human factors design principles and evaluative methodologies have been incorporated into numerous projects within Alberta Health Services that fall into a number of different categories including facility, room and workspace design, procurement and usability of medication devices, storage and labeling of medications and supplies and usability of signs, forms and information.

Human Factors Evaluation Scenario: A patient is given the wrong medication because two medication vials looked the same.
8. PATIENT CONCERNS RESOLUTION PROCESS  
(Compliant with Patient Concerns Resolution Process Regulation 124 / 2006)

The Patient Concerns Resolution Process (PCRP) is a fair, consistent, transparent and timely process intended to support complainants who have a right to raise concerns with AHS regarding their healthcare experience or that of a patient about whom they are concerned. The PCRP is initiated at the request of the patient / complainant and is conducted in compliance with legislation (Patient Concerns Resolution Process Regulation 124 / 2006) and the AHS Patient Concerns Resolution Process Policy Suite.

Managing the feedback presented by patients is a component of delivering quality care and is an important learning resource for care issues and service improvements. When there is a complaint, reaching a resolution is the responsibility of ALL staff, management and physicians. Feedback can be shared by:

- patients and families talking to the local healthcare team directly. Whenever possible patients are first encouraged to speak with their care team when they have questions or concerns, because their care team knows them best. They can also ask the manager or supervisor for help.
- contacting the Patient Relations Department found at https://www.albertahealthservices.ca/about/patientfeedback.aspx
- or completing an online patient feedback form found on the Patient Relations Department above.

**Patient Concerns Resolution Process Scenario:** A patient’s family member believes a caregiver to be unprofessional when she witnesses the caregiver ignoring a call for patient assistance in favour of finishing a text message.
Appendix A – Uses for Clinical Information

Uses for Clinical Information and Data (not protected) in the context of Quality Assurance Activities (protected under section 9)

<table>
<thead>
<tr>
<th>STRUCTURE</th>
<th>USE</th>
<th>PROCESS</th>
<th>OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Information/Data</td>
<td>Example:</td>
<td>Patient Care</td>
<td>Patient-Specific Reports and Clinical Notes</td>
</tr>
<tr>
<td>[1] Requisitions</td>
<td>[2] Specimens</td>
<td>Clinical Information/Data collected during the course of regular business for a program/service forms a patient’s health record (paper and electronic versions) and is used to make clinical decisions, and communicate results to health care providers and patients.</td>
<td>E.g. Consultation reports, lab results, discharge summaries, multidisciplinary progress notes, etc.</td>
</tr>
<tr>
<td>[5] Vital signs at regular intervals</td>
<td>[6] Observations from health care providers</td>
<td>Clinical Information/Data is reviewed and analyzed to generate data that reflects performance of a program/service as determined through researched criteria and performance targets.</td>
<td>E.g. program performance dashboard metrics, Quality Improvement reports with recommendations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quality Assurance</td>
<td>QA Reports</td>
</tr>
<tr>
<td></td>
<td>QA Activities under the auspices of a QAC</td>
<td>The QA data/reports generated form a sample of Clinical Information/Data for the QA Centers Section 9 of the Alberta Evidence Act. QA Activities are described in a QAC Terms of Reference, and any QA data produced is protected and may not be used for other purposes (e.g. competency assessment). QA data contains opinions and represents a systematic sampling. Quality Assurance Committee: 1. QAC evaluates data (program performance or individual performance) relative to established targets. 2. QAC may initiate a Quality Assurance Review (QAR) utilizing AHS system analysis methodology. 3. QAC prepares and reviews reports for the purpose of system learning &amp; improvement.</td>
<td>E.g. Summary of a QA systems analysis with recommendations, QA Dashboard metrics, de-identified practitioner ‘report cards’ produced under QAC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Individual Competency Assessment</td>
<td>An “Individual Competency” issue may be identified during the course of Patient Care or QA Activities. The issue is referred to appropriate Medical/Scientific Director. QA reports are not used for Individual Competency Assessment.</td>
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</tbody>
</table>

- Criteria as appropriate
- Not addressed through Quality Assurance – a separate process is required, utilizing Clinical Information/Data
- Section 9 (Alberta Evidence Act) not applicable.

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