# Physical Medicine and Rehabilitation Quality Improvement and Patient Safety (QIPS) Education and Case Review (ECR) Rounds

Division of Physical Medicine and Rehabilitation (University of Calgary) & Inpatient Neuro-Rehabilitation (Alberta Health Services)

Note:
This document serves as a supplement to the Neurorehab Quality & Patient Safety Terms of Reference. In addition, it serves as a review to the QIPS ECR Rounds document (attached) for important information about ECRs, recommendations, required conduct and guidance on choosing topics.

QIPS ECR Purpose:
There is a collective responsibility of all members of the division and team, including staff and trainees, to review thecase study data in order to serve several important purposes:

1. Identification of morbidity and mortality within our clinical practice.
2. Identification of systemic problems or barriers that may contribute to error, that should potentially trigger a referral of a personal case to review at QIPS ECR rounds
3. Enhance delivery of excellent quality of care for patients receiving inpatient and outpatient rehabilitation
4. Ensure neurorehab unit staff and residents are aware of the AHS systems, practices, and protocols in place to review quality issues of concern within the division
5. Provide an opportunity for neurorehab staff and trainees to learn more about Quality Improvement (QI) methodology and patient safety principles.

Schedule and Presenters:
Division Educational Case Review Rounds will occur 4 times per year on the 2nd Friday of the month at 8:00 am in lieu of DCNS Grand Rounds (or other mutually arranged time). Any nursing clinician, nurse, allied health member, hospitalist, or physiatrist at any stage of practice or training is welcome to present upon discussion of the topic and topic's appropriateness with the QI Rounds Lead.

- October; December; March; May

The Neurorehab Quality & Patient Safety Council meetings will also be occurring throughout the academic calendar.
Expectations:
These rounds will be the shared responsibility of PMR staff, hospitalists, neuro-rehabilitation unit staff, and residents in the PMR program. Cases will be selected by the Neurorehab Quality & Patient Safety Committee one month prior to the event. Up to 2 cases may be discussed at each rounds and a minimum of 20 minutes will be given for the discussion of each case in the event that there are multiple cases to discuss. Case presentations will be concise, with a brief outline of the presentation.

Cases (inpatient or outpatient) may be self-referred for discussion with the group regarding quality improvement and patient safety issues issues, or may be brought forward. The group may also choose to present focused audits rather than a specific case. It is also possible for cases that have already gone through a Quality Assurance Review (QAR) to be brought back to the ECRR for discussion and awareness of the outcome of the

more formal process. After discussion in rounds, some cases may also be referred on for a formal QAR if it is deemed that systemic problems may have been a factor in a sub-optimal outcome for a case.

These rounds are CME activities self-approval for category 1 for fellows of the Royal College. If a PMR physician is presenting, the presenter may claim category 3 credit for the time receiving feedback and discussion on the case.

Special Notes regarding Educational CaseReview Rounds Review:
The purpose of these rounds is to support value-added education to the staff and residents. However, these types of rounds are not legally protected, unlike the structured quality assurance review process is under the "Alberta Evidence Act" Section 9. Therefore, these rounds will not be recorded in the minutes. The specifics of cases will not be posted on resident education websites, or in shared in handouts. If using PowerPoint, case specifics are not to be included in presentation.

If discussions suggest the need for more formal review, the case should be brought to the administrator responsible for such processes as per AHS policy and the FMC Quality Assurance review committee.

Please refer to The AHS Medical Bylaws (February 2011) p. 43 – Part 6 "triggered initial assessment and triggered review" section relating to any aspect of a practitioner's responsibilities and accountabilities pursuant to section 4.2 and 6.1.3 of the Bylaws.

Resident Training in Quality Improvement (QI) and Patient Safety:
Residents are expected to receive training in quality improvement and safety in health care as part of their residency program. The proposed structure of the Neurorehab Quality & Patient Safety committee includes PGY-3 residents' participation. Every PMR resident in PGY-3 will be expected to participate. This would involve attendance of TNR Quality Council meetingsand overseeing a case at QIPS ECR rounds during the academic year.

1. While sitting on the Committee, each resident will be expected to review potential cases for discussion with the other committee members using reputable incident analyses tools and frameworks. This will help guide feasible next steps within the scope of a quality council keepin gin mind that this group does not hold legal or administrative standing outside of the local setting
2. Residents will assist in identifying educational cases from the residents or staff on rotation on inpatient services.
3. Residents will be expected to draft one QI project proposal during their one year term rotation on the committee. They will be encouraged to implement the proposal with divisional and committee support, where relevant, but this will not be mandatory. The proposal will be reviewed by the Committee and mentorship encouraged for projects. Residents will be expected to make an oral presentation and written summary during their one-year term on the committee on some aspect of their QI project to their peers during academic half day (15 minutes), National QI Symposium, or Education Retreat time.

Quality & Patient Safety Resources and Additional Training opportunities:

AHS Improvement Way (AIW) Yellow Belt modules can be completed through MyLearningLink on Insite:

- Standard Work · 5S: Workplace Organization · Process Mapping

Online modules on the CMPA Good Practices Guides website:

- Patient safety · Managing Risk · Professionalism
- Teams · Human Factors
- Communication · Adverse Events

Certificate in Patient Safety and Quality Management:

- W21C, University of Calgary
- September – March: online weekly course, project with mentor, poster and paper presentation, and 4 days of in person interactive sessions

Additional free online courses are offered through the Institute for Health Improvement: www.IHI.org

## QIPS ECR Rounds Format

Pre-Rounds:

The individual presenting the case will touch base with the facilitator of the Quality & Patient Safety committee for Unit 58/Outpatient clinics to offer feedback on case selection and slides. Appropriate cases may include:

- Adverse events: unintended harm resulting from the healthcare and/or services provided to the patient (or lack of services). Does not refer to known/expected risks of procedures, medications, or therapies when appropriate informed consent given by patient, or to the underlying medical condition
- No harm incident: patient safety incident that reached the patient but no discernable harm resulted
- Near miss/close call: patient safety incident that did not reach the patient ("good catch")
- Reportable circumstance: significant potential for harm but no incident occurred
- Deaths
- Transfers to acute care or ICU from Rehab unit
- Prolonged rehabilitation length of stay
- Management dilemmas
- Focused audits on a topic questioning quality of care on the unit or in clinic

At Rounds:

1. Facilitator reminds and emphasizes the ground rules to attendees:
   - Respect for all, just and safe culture to discuss case details and issues, no shame, and especially the confidentiality of case and those health care providers involved
   - What is a Just culture? "Safer patients - every patient, every time." Administrators, healthcare providers, and patients have a responsibility for patient safety. A just culture seeks ways to improve safety and protect patients, healthcare providers and institutions. It respects everyone's observations and contributions. It is honest and transparent when an adverse event occurs.
2. Facilitator will act as time keeper - start on time, keep discussion on time and finish on time
3. Case presentation - PMR staff, residents, or Hospitalists
   - Review of full case details (10 minutes)
   - Analysis of case for cognitive and system issues that contributed to the outcome (10 minutes)
   - *See handout on Case analysis and question checklist from Ottawa M&M model*
   - Creation of concrete bottom lines and action items by consensus (10 minutes), i.e., Summary of cognitive and system issues which are suitable for concrete action by the team
4. Attendees: PMR staff, residents, medical students, hospitalists, allied health, nursing, as appropriate
5. If only one case presented: second half of meeting may be used to:
   - Further discuss the case; OR
   - Review recent incident reports and trends, followed by discussion to create a concrete Bottom Line, or other educational patient safety topics/speakers

Post Rounds:

Presenter to create ECCR Bottom Line using template (remove presenter names, no case details) and disseminate following Rounds to the Quality & Patient Safety Committee and/or to Division members, hospitalists and applicable other team disciplines (as appropriate).

- Any Cognitive De-biasing strategies
- Education around evidence, practice guidelines, policies, procedures
- Changes to system and how the inpatient/outpatient team works
- Ways adverse outcome could have been mitigated or harm reduced

## EXAMPLES for CASE ANALYSIS

Cognitive Issues contributing to Diagnostic or Management error *(a specific pitfall in clinical decision making)*:

- Incomplete information
- Misinformation
- Perceptual errors
- Cognitive biases, logical fallacies – fundamental attribution error, availability bias, hindsight bias, triage cueing

Systems Issues *(a problem beyond the individual clinician or team which pertains to how the division or hospital or larger rehab system works)*:

- Wait times
- Triage
- Investigations – availability of tests, accuracy of results and timeliness
- Availability of medications, medication errors, procedural errors
- Shift work or time of day of the event
- Crowding, bed pressures

Other Factors to consider for discussion:

- Patient factors – communication barrier, behaviour, social supports, compliance
- Skill set error – error in interpretation of test results, or procedural complications
- Disease Factors – severity of the underlying condition, co morbidities
- Teamwork failure – conflict, do not share same goals, unclear roles of team members, culture and attitudes
- Communication Failure – within team, between units in hospital, after d/c, pre-admit to rehab or to clinic
- Human Factors – clinician fatigued, stressed, ill, lacks knowledge, skill or attitude

(**not protected** under Section 9 of the *Alberta Evidence Act*.)

## WHAT ARE EDUCATIONAL CASE REVIEW (ECR) ROUNDS?

Educational case rounds are designed to engage a number of individuals to focus on learning from case studies within a Just Culture (Appendix A). Historically, QIPS ECR rounds (previously termed morbidity and mortality rounds) have been completed by groups of physicians. Consideration should be given to the value of conducting Educational Case Rounds with an inter-professional team that also includes residents and students. To be clear - the purpose of these rounds is to provide education for health care providers. This is not a venue to produce system level recommendations or to assess individual provider performance. Educational Case Rounds may inadvertently identify events that require other review processes. Should this occur, the session leader should refer the case to the appropriate administrative or medical leader.

## RECOMMENDATIONS FOR CONDUCTING EDUCATIONAL CASE ROUNDS:

- Discussion will be moderated and speaker will be introduced by the moderator. Moderator will typically be the Section of PM&R's QI Lead
- Conduct as an educational activity. These are informal educational sessions, minutes should not be taken.
- De-identify details of any case being discussed (remove names, site, dates, etc.).
- Do not print, publish or post on websites case specific details in order to maintain confidentiality of patient and provider information.
- A third party not involved in providing care to the patient may present the de-identified case to ask specific questions, such as how it could have been done differently?
- Suggested method for conducting an Educational Case Round: 10 minutes for overview of the case (presenting problem and case course) and state of evidence on current management
- 10-20 minutes for case analysis considering Cognitive Human Factors (Appendix B) and Health System Components (Appendix C). Present any supporting literature for discussion.

## IDENTIFYING CASES FOR DISCUSSION

Cases may be chosen from various sources such as those that:

- relate to medical management, clinical processes or pathways
- highlight a recurring system issue
- caused you to think about them long after they occurred
- identified in the Reporting and Learning System (RLS)

## APPENDIX A: JUST CULTURE GUIDING PRINCIPLES

Alberta Health Services (AHS) acknowledges that as a group, we at AHS commit and intend to provide safe and healthy care and/or work environments. However, we also know that despite our best efforts, things can sometimes go wrong. As such, we all have an important role to play in identifying, reporting and addressing issues or concerns about our health system and/or organizational processes, and to share what we learn, in support of continuous quality and safety improvement. When everyone knows what to expect, we can work together to look at the context of the situation, identify the contributing factors, make system and/ or organizational changes, and share our learnings.

The Just Culture philosophy supports an environment where everyone feels safe, encouraged, and enabled to discuss quality and safety issues where reporting and learning are key elements. This means that reporting is conducted within a psychologically safe environment where there is

demonstrated respect and support for the individual, and the potential for human and systems fallibility is acknowledged. Everyone can trust that those within the organization will demonstrate, through their behaviours and decisions, a fair and consistent approach to responding to issues raised.

In practicing the **Just Culture Four Guiding Principles** we are living our AHS organizational values. Through Just Culture, we will:

- be **respectful** in how we **engage** with those involved;
- be **transparent** in the evaluation processes used;
- hold our system, ourselves and others **accountable**; and
- **learn** from mistakes and close calls to improve **safety** and **performance.**

Seven Process Principles:

When there is a need to review a situation, whether in a clinical or non-clinical area:

1. Alberta Health Services (AHS) will ensure a fair and consistent approach to evaluatingwhat occurred in context, and responding to the individuals involved.
2. Everyone will be able to trust that AHS has effective processes in place to support this fairand consistent approach, and that these processes will be followed.
3. Actions will be evaluated in consideration of the circumstances and context of whatoccurred, rather than results and outcomes.
4. Individuals will not be held accountable for system and/or organizational errors over whichthey have no control and will be treated with care, compassion, support, respect and dignity.
5. AHS Leaders are accountable for ensuring system and/or organizational changes/improvements are made based on our learnings and the best evidence available. Throughout that process, they will engage with those who work within/are impacted by the system and/or organization (including patients, families, staff and medical staff).
6. Individuals will feel enabled, empowered and supported to openly discuss and report whatoccurred.
7. Individuals will be held appropriately accountable for reckless behavior or intent to harm.

Organizational Commitment:

AHS will provide the necessary resources, supports and tools to enable staff and medical staff to become aware of, understand and apply the Just Culture Guiding Principles.

## APPENDIX B: COGNITIVE HUMAN FACTORS

When preparing case rounds for discussion, it is important to be aware of cognitive human factors: the way we process information and make decisions. The table below includes questions to consider when conducting an educational case round. 'NO' to any question implies a cognitive human factor is worth discussing during an educational case round.

### TABLE 1. POTENTIAL COGNITIVE HUMAN FACTORS

| **Cognitive Factor** | **Question** | **If NO, then consider these solutions:** | **Other resources** |
|---|---|---|---|
| Decision Making | Do we have safeguards[1] against decision making bias and shortcuts? | • Determine the type of bias that may have or can occur (Table 2)<br>• Discuss the influence of bias in any decision making process, especially diagnoses<br>• Use a diagnostic process that is more robust to bias:<br>1. Gather sufficient information<br>2. Develop a differential diagnosis 3. Consider the worst case scenario.<br>4. Carefully review any conflicting information.<br>5. Test alternative hypotheses.<br>6. Get a 2nd opinion --- take advantage of your team<br>7. Reconsider your diagnosis if the patient is not responding as expected | • The Canadian Medical Protective Association Website<br>• The Canadian Medical Protective Association Practice Guide<br>• Clinical Reasoning Toolkit<br>• Improving Diagnosis in Healthcare Book |

[1] Safeguards help reduce decision making 'uncertainty' and may include: information is available, decision support tools, standard protocols, clinical practice guidelines, a team decision making culture, receiving feedback on decisions, having sufficient time to make a good decision, etc.

| | | | |
|---|---|---|---|
| Sensation | Is important information easy to gather through the senses? | • Identify the reason(s) that information is not easy to detect (e.g., too noisy, visual clutter)<br>• Increase the relative strength of critical stimuli (e.g., increase volume on critical alarms, increase task lighting to improve readability, reduce ambient noise)<br>• Consider how the design of the work environment may impact information reaching someone's senses | For alarm improvements:<br>• Alarm Management in Healthcare<br><br>For noise management:<br>• Noise Control in the Healthcare Environment<br><br>For lighting improvements:<br>• Lighting at work<br><br>For work environment design improvement opportunities<br>• AHS Human Factors Team Consultation Request |

| | | | |
|---|---|---|---|
| Perception | Is important information easy to understand and interpret? | • Determine if the design of the information could be improved<br>• Consider whether an assumption or the presence of pre-existing knowledge may influenced the perception of information | For information design improvement opportunities<br>· AHS Human Factors Team Consultation Request |
| Attention | Do we have mechanisms in place to minimize distraction? | • Identify and remove all sources of distraction (e.g., interruptions, noise, visual distractions, etc.)<br>• Add mechanisms to both prevent distraction (e.g., policies, protocols, 'do not' disturb vests, staff training, etc.) and help people recover from distraction (e.g., use checklists, implement standard work, etc.) | · Human Factors Recommendations for Mitigating Distractions and Interruptions in Health Care |
| | Have we reduced the amount of multitasking or divided attention that is required? | · Reduce the need for multitasking through simplified job design or staffing | |
| Memory | Do we have protocols in place to make sure nothing is forgotten? | · Create protocols that reduce the amount of information that people need to remember: ○ Create a checklist ○ Develop reminders<br>○ Group information in a meaningful way (i.e., chunking) | • The Checklist Manifesto: How to Get Things Right<br>• Diagnostic Checklists |

## APPENDIX C: HEALTH SYSTEM COMPONENTS

When conducting an Educational Case Round, discussion of the Health System Components that focus on the interaction between healthcare providers and the system is appropriate. As a general rule, when system issues are discovered and there may be an opportunity for learning and improvement, the use of the AHS Systems Analysis Methodology (SAM) is recommended. Systems Analysis Methodology is a comprehensive multi-phase approach to understanding systems issues. **If, on initial examination of the case, there are system issues to be addressed, please refer the case to the most appropriate Accountable Leader and/or patient safety representative for consideration of a patient safety review or a quality assurance review**.

The guidance below is provided as examples; this is not an exhaustive list. The information provided here is intended to guide Educational Case Rounds to focus on systems issues that may have contributed to the outcomes of the case and to avoid focusing on the actions of individuals.

| Health System Components | Guidance to Support Focusing on the System |
|---|---|
| Task | Was a protocol available?<br>Were test results available to make care decisions?<br>What was the level of skill required to perform the task?<br>Were there any time constraints? What<br>was the chance of failure?<br>Was a fixed sequence essential?<br>Other |
| Equipment | Were the displays and controls understandable?<br>Does the equipment detect and display problems?<br>Is the maintenance/ upgrade up-to-date?<br>Is equipment located in the appropriate place and is it accessible?<br>Is the equipment standardized or made of several different modules?<br>Are the warnings/ labels understandable?<br>Is the safety mechanism functional and appropriate? Was<br>enough training provided for this equipment?<br>Other |
| Organization | **Policies and procedures:**<br>• Is there a standardized process (order set/ checklist)? Is it up to date?<br>• Is the standard/ policy available and workable?<br>Was training/ orientation provided?<br>Do people work around official policy? Is there a feedback mechanism for staff when policy and practice don't match?<br>Is there a risk assessment/ audit/ quality control program in place for the process?<br>Other |

| | |
|---|---|
| Environment | Do noise levels interfere with voice alarms?<br>Is the available lighting adequate for the task(s)?<br>Is the area adequate for people and equipment?<br>Is there clutter or inadequate storage? **Information systems:**<br>Is Patient identification, documentation, available to all and up to date?<br>What is the level of automation? Was training provided?<br>**Scheduling and staffing levels:**<br>Were there any scheduling changes that influenced the staffing level or resulting in stress, fatigue? |
| **Health System Components** | **Guidance to Support Focusing on the System** |
| | Other |
| Team | Is this a regular team?<br>Are the roles defined?<br>Are there authority gradients?<br>What is the quality and quantity of communication between team members (verbal and/or written): i.e., clear, accurate, relevant, goal directed, sufficient, timely? Are there regular briefing, debriefings?<br>Did the existing documentation provide a clear and comprehensive picture?<br>How is the culture and morale?<br>Was the communication between staff and management adequate?<br>Was the communication between professions adequate, accurate, complete, and free of jargon?<br>Are communication systems (pager, phone) available and operational?<br>Other |
| Caregiver | What is their position, education, experience and training?<br>Was there fatigue, stressors, task saturation, overload, health, or other factors?<br>What remunerations and/or other incentives (formal and informal) were in place?<br>Did they seek help or supervision?<br>Other |
| Patient | Consider the: age, sex, medications, allergies, diagnosis, other medical conditions<br>Were there any social/ cultural factors involved?<br>Was there a language barrier?<br>Other |
| Other | Are there any other local conditions or circumstances that may have influenced the outcome?<br>Are there any sector specific conditions or circumstances that may have influenced the outcome?<br>Regulatory agency influences? |