Failure to Recognize Deteriorating Patient Condition
Sabina Robin; Patient Safety Champion

Mataya’s Story
And the Story Continues....
HIROC’s Claims Database & “KT” Strategy

Risk Ranking

Risk Reference Sheets


Risk Assessment Checklists
**FACT:** Patient deterioration is HIROC’s top ranked risk

### Failure to Appreciate Deteriorating Patient Risk

<table>
<thead>
<tr>
<th>Sector</th>
<th>Costs</th>
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<td>Obstetrics</td>
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<td>Acute Care</td>
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<td>Home Care</td>
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<td>Mental Health</td>
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<td>Nursing/Personal Care Homes, LTC</td>
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<td>Chronic/Complex Continuing/Rehab</td>
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**Patient Deterioration – TOP MEDICAL LEGAL RISK**

**Fact:** Failure to appreciate patient status changes or deterioration is HIROC’s top medical legal risk across the Canadian healthcare system.

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<tr>
<th>Ranking</th>
<th>Healthcare Sector</th>
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<tr>
<td>#2</td>
<td>Acute care hospitals</td>
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<td>#3</td>
<td>Nursing homes &amp; long term care facilities</td>
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<td>#11</td>
<td>Mental health facilities</td>
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<td>#15</td>
<td>Chronic care &amp; rehabilitation facilities</td>
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**FETAL DETERIORATION**

**Fact:** Despite their relatively low frequency, infant brain injury-related claims are HIROC’s most costly claims. Common contributing factors include:

- Failure to interpret/respond to abnormal fetal status
- Failure to monitor fetal status
- Mismanagement of inductory/augmentation medications
- Failure to communicate fetal status

**INFANT DETERIORATION**

**Fact:** Infant brain injury resulting from severe jaundice (i.e. high levels of bilirubin in the infant’s blood) is a Canadian ‘never event’ and HIROC’s 13th highest ranked risk for acute care hospitals.

**MENTAL HEALTH DETERIORATION**

**Fact:** In-patient suicide is a Canadian ‘never event’ and HIROC’s top ranked risk for mental health facilities.

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<td>Mental health facilities</td>
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<td>#5</td>
<td>Chronic care &amp; rehabilitation facilities</td>
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<td>#22</td>
<td>Acute care hospitals</td>
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RISK REFERENCE SHEET

Failure to Appreciate Status Changes and/or Deteriorating Client/Resident

MITIGATION STRATEGIES

Note: The Mitigation Strategies are general risk management strategies, not a mandatory checklist.

Reliable Care Processes

- Ensure orientation, inservice education, and policies establish expectations related to the frequency, components, and documentation of client/resident assessments (e.g., head-to-toe) and vital signs monitoring (e.g., heart rate, respiratory rate, blood pressure, temperature, pain levels) including client/resident-specific criteria for appropriate adjustment of monitoring frequency.
- Establish triggers for early identification of deteriorating client/resident (e.g., early warning scoring system, critical vital signs parameters, family concerns, and caregiver “feel” judgments).
- Review appropriate HCP skill mix/knowledge and assign/notify medical professionals with expertise in client/resident care to all levels of monitoring.
- Establish criteria for assigning levels of client/resident observation (e.g., 1:1 nursing, constant observation).
- Adjust structured protocols for the timely and effective communication of deteriorating client/resident status:
  - To MRF (e.g., SBAR tool)
  - To teams/leaders on inpatient units (including communication over all shifts/locations)
  - To families and substitute decision makers.
- Implement escalation protocol for deteriorating client/resident status (e.g., who to call, who can call, who needs to be notified).
- Establish escalation protocols for contacting an alternate care provider when the first is not responding or attending as needed.

Equipment and Technology

- Establish criteria for use of physiological monitoring on client/resident units; ensure monitors are not used as a replacement for assessments.
- Ensure appropriate supply, maintenance, and HCP certification for client/resident physiological monitoring equipment.
- Ensure a process to extract and retain data from physiological monitors in incident cases.

Documentation

- Ensure complete, consistent, and timely documentation of vital signs and other client/resident observations regardless of whether they are considered normal.
- Adopt documentation visual cues to assist in detection and trending of deterioration (e.g., use of graphs for calibrating vital signs).
- Ensure complete, consistent, and timely documentation of interventions to treat deteriorating client/resident.

Monitoring and Measurement

- Implement formal strategies to help ensure consistent adherence to client/resident monitoring procedures (e.g., preventative care cardiac/heart rate analysis, periodic review of documentation).

Client/Resident and Family-Centred Care

- Educate client/resident/family on the time of admission about their role in patient safety; as well as assessing and participating in communication venues (e.g., during daily rounds, use of information sheets, client/resident whiteboards seated in room).
- Educate HCP healthcare providers on being empathetic listeners, especially when client/resident family is expressing a quality or safety concern(s).

- Implement a mechanism/process for families and caregivers to escalate their concerns (i.e., Nursing Team Leaders, Most Responsible Practitioner, Nursing Care Manager, and/or office of patient relations).

COMMON CLAIM THEMES

- Failure to appropriately assess the client/resident.
- Failure to perform and/or not normalizing (monitoring) vital signs in a timely/manner.
- Failure to completely document vital sign responses to medications/treatments/medication administration.
- Failure to identify and/or monitor them when not normalizing.
- Failure to notify an appropriate person when abnormal vital signs were not normalized.
- Failure to adjust monitoring frequency with deteriorating client/resident.
- Failure to notify appropriate person when abnormal vital signs were not normalized.
- Failure to promptly communicate deteriorating client/resident status to the MRF.

CASE STUDY 1

While residing at a personal care facility, a resident was diagnosed with a multisystem disorder. A subsequent assessment revealed the resident was unresponsive to stimulation on the left side of the body and was unable to walk or follow verbal commands. When the resident was not responsive, the care team immediately notified the medical director. Upon notification, the resident was transferred to the emergency department due to the acute care setting, and the resident was pronounced dead on arrival. The attending physician’s documentation at the time of the event showed the resident was not communicating with the care team and had not been monitored by the care team for any changes in vital signs.

CASE STUDY 2

During the course of an admission to a long-term care facility, an incontinent resident with mobility limitations developed significant respiratory exacerbation. Eight days after the resident’s skin breakdown was noted, the resident was transferred to the emergency department of an acute care facility, where she was diagnosed with a need for a ventilator. The resident was transferred to another acute care facility for further care, where it was decided that the resident was not a surgical candidate. The resident remained in a ventilator bed for several days before passing away. The attending physician’s documentation at the time of the event showed the resident was not communicating with the care team and had not been monitored by the care team for any changes in vital signs.

The Collaboration

Led by the Canadian Patient Safety Institute (CPSI) as part of its SHIFT to Safety initiative (the go-to source for patient safety resources for patients and families, providers, and healthcare leaders), a collaboration was formed in 2015 with Patients for Patient Safety Canada and HIROC. The collaborative focused on compiling and disseminating audience specific patient deterioration tools to empower everyone to make safety a priority while navigating the healthcare system.
Literature Review
Revisions to HSO Standards - 2017

**Critical Care standards set:**
6.2 The critical care team works with other teams in the organization to determine the process for monitoring clients that includes escalating care to the critical care unit.

**Inpatient Services set:**
7.6 Clients and families are provided with information on how to identify when an escalation in care may be needed and how to initiate the process.

10.10 When signs of increased acuity are present, the team assesses the client’s risk and follows processes to escalate care.
Early warning signs of deteriorating condition are often unrecognized, leading to devastating results. Research shows that virtually all critical inpatient events are preceded by warning signs that occur approximately six-and-a-half hours in advance.

In this section, you'll find information, tools and resources to not only help you recognize deteriorating patient condition, but what you can do to act on it as a member of the public, a healthcare provider or leader.

Click any of the icons below to get started!
Recognizing Deteriorating Patient Condition – What the public needs to know!

Family members are a vital part of the healthcare team and are often best positioned to recognize the sometimes subtle, yet very important changes in their loved one’s condition that may indicate deterioration. You may not know WHAT is wrong, but you know something just isn’t right.

Empower yourself and your loved ones with the following information and resources. They will both help you recognize the signs of deteriorating patient condition, and effectively discuss your concerns with the healthcare provider.

SHIFT to Safety helps you advocate for your healthcare safety. Shift your focus to what really matters—the patient.

Understanding the basics of deteriorating patient condition

Early warning signs of deteriorating condition are often unrecognized, leading to devastating results. Research shows that virtually all critical inpatient events are preceded by warning signs that occur approximately six-and-a-half hours in advance.

To begin, familiarize yourself with the Top 10 Warning Signs of a Rapidly Declining Patient. Feel free to share this resource, print it for future reference or save it to your phone.

Some of the more common causes of rapid clinical deterioration are newborn jaundice—a yellowish discolouration in a newborn baby’s skin and eyes; post-partum haemorrhage and sepsis. Click on the following links to learn more about signs and symptoms of these disease processes: newborn jaundice; heavy bleeding after birth; and sepsis.

What to do if you think someone’s condition is deteriorating

If you note any changes in your loved one’s condition, go to the hospital, or if in hospital, notify your healthcare team. It’s okay to ask questions. It’s also okay to ask for a second opinion. If you’re concerned about how to speak up or escalate your concerns to members of the healthcare team, these phrases, referred to as CUS, may help:

- I am concerned about my loved one’s condition
- I am uncomfortable with my loved one’s condition
- I believe the safety of my loved one is at risk.
Empowered Patient®
Ten warning signs of a rapidly deteriorating patient

1. **BODY TEMPERATURE** is too high or too low. Report temperatures below 36.0° C or above 38.0° C.

2. **HEART RATE** (pulse) or **RESPIRATORY RATE** (breathing) changes. A heart rate that stays less than 60 or greater than 100 beats per minute, or a respiratory rate of less than 15 or greater than 20 breaths per minute, may need to be evaluated.

3. **BLOOD PRESSURE** numbers are out of the normal range. If the systolic (top number in the blood pressure reading) is less than 90 or greater than 180 mmHg, ask for an assessment.

4. **CHANGES IN MENTAL STATE** including confusion, delirium, or an acute change in personality, memory or alertness.

5. **CHANGES IN URINE OUTPUT OR APPEARANCE.** A decrease in amount of urine is a concern (less than 50 ml over 4 hours), as is urine that appears darker in colour or looks "concentrated."

6. **THE PATIENT STATES** that something is wrong with them. Patients often have a sense that they are experiencing a sudden decline in their health.

7. **THE PATIENT DOESN'T LOOK RIGHT** to the family or advocate. Someone who knows the patient personally is often a better judge of a change in normal appearance or behavior.

8. **SHORTNESS OF BREATH** or having a tight feeling or discomfort in the chest. Shortness of breath can be a sign of heart attack, pulmonary embolism (blood clot), infection or pneumonia.

9. **ACUTE PAIN,** especially in the abdomen. This could be a sign of an infection (including peritonitis), intestinal obstruction, a perforated ulcer and other potentially life-threatening problems.

10. **VERY PALE** appearance of the skin or breaking out in cold sweats. These symptoms could indicate internal bleeding, shock, infection or heart attack.
Recognizing Deteriorating Patient Condition – what leaders need to know!

As a healthcare leader, it's important to ensure appropriate system supports and resources are available within your organization to effectively manage the early recognition of clinical deterioration. It's important as well to recognize the valuable role family members play in the recognition of clinical deterioration, and to enable open and effective communication between patients and providers. Empower yourself, your providers and the patients they care for, with the following information and resources.

Early warning signs of deteriorating condition are often unrecognized, leading to devastating results. Research shows that virtually all critical inpatient events are preceded by warning signs that occur approximately six-and-a-half hours in advance. The most comprehensive approach to successfully managing deteriorating patient condition should include patients and their family as members of the healthcare team. It consists of:

1. The recognition of deteriorating condition (early warning systems)
2. Timely and appropriate response (escalation measures)

All of the Deteriorating Patient Condition Resources are divided into the following categories. Don't forget to share them with your colleagues.

SHIFT to Safety helps you put the spotlight on patient safety. Shift your focus to what you do best — leading your organization in quality improvement.

Are you a patient or provider? Please share these resources with the leadership at your healthcare facility! We also offer Deteriorating Patient Condition resources specific to the public and providers.
Recognizing Deteriorating Patient Condition in a general care setting

When introducing early warning tools and systems, as with any improvement opportunity, it's important to consider design, implementation and evaluation processes that include all relevant team members. Meaningful consultation, and contribution is key to implementing and sustaining improvement. The following tools and resources will assist you in recognizing and responding to the deteriorating patient condition in a general care setting.

- Symptoms of sepsis
- Rapid Response Team Getting Started Kit
- National Early Warning Score Guidelines
- Safety Is Personal - Partnering with Patients and Families for the Safest Care
- The Failure to Rescue Change Package
- The Australian Commission on Safety and Quality in Health Care
- HIROC Risk Reference Sheets

Need a helping hand?

If you are interested in learning more about early warning systems using an electronic health or medical record, the teams at either Hamilton Health Sciences via Dr. Alison Fox-Robichaud (foxrob@hhsc.ca) or Dr. Michael Miletin at William Osler Health System (Michael.Miletin@williamoslerhs.ca) would be happy to speak with you.
Search: “deteriorating patient condition”
at www.patientsafetyinstitute.ca