



CANADIAN INCIDENT ANALYSIS FRAMEWORK

Incident Analysis Guiding Questions

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G. INCIDENT ANALYSIS GUIDING QUESTIONS

A set of guiding questions is provided below to guide the identification of contributing factors, hazards and mitigating factors during the “how and why did it happen” stage of incident analysis. They are intended to assist with checking the availability and strength of safeguards at all levels in the organization and guide the analysis towards the identification of system vulnerabilities that aligned in such a way that allowed for the incident to take place. Teams are encouraged to note, analyze and report the system barriers that worked well (mitigating factors) and therefore should be reinforced and recognized so they will continue to prevent future harm.

The questions are grouped around categories of factors designed to focus the analysis on the interaction between humans and the system, and in this way help identify system-level contributing factors at various levels in the organization (*Section 2.3*). The categories were developed by researching and adapting categories used in analysis throughout the world^{37, 49, 50, 51} and refined through pilot testing and consultation with a human factors specialist.

The way the list is used is a matter of personal preference. Some may choose to use the questions below to guide information gathering and interviews, while others may prefer to use them to cross-reference the information already collected. The goal of this exercise is to go through the questions to find if the safeguards were in place and functioning. For each category consider what other factors may have contributed to the incident and include them in the analysis.

Tips:

- The guiding questions are provided as examples; this is not an exhaustive list.
- The guiding questions are different than the interview questions.
- For every guiding question, ask how it impacted the incident.
- If the answer to a guiding question suggests that the safeguard was not in place or did not work, probe further with additional questions (e.g. “Why is this the case?”, “If so, how did this/these contribute to/impact the incident?”).

Task (care/work process):

- » Were there previous or predicted failures for this task or process?
- » Were specialized skills required to perform the task?
- » Was a fixed process or sequence of steps required (e.g. order sets, checklists)?
Did it exist and was it followed?
- » Was a protocol available, was it up-to-date, and was it followed in this case?
- » Were there constraints or pressures (e.g. time, resources) when performing the task?
- » Was the information required to make care decisions available and up-to-date (e.g. test results, documentation, patient identification)?
- » Was there a risk assessment/audit/quality control program in place for the task/process?
- » Other?

Equipment (including information and communication systems):

- » Were the displays and controls understandable?
- » Did the equipment automatically detect and display problems?
Was the display functional?
- » Were the warning labels, reference guide and safety mechanisms functional and readily visible/accessible?
- » Were the maintenance and upgrades up-to-date?
- » Was the equipment standardized?
- » Would the users describe this equipment as “easy-to-use”?
- » Were the communication systems (phone, pager, software, hardware, etc.) available and operational?
- » Other?

Work environment:

- » Did noise levels interfere with the alarms?
- » Was the lighting adequate for the task?
- » Was the work area adequate for the task(s) being performed (e.g. space, layout, location and accessibility of resources)?
- » Other?

Patient(s) characteristics:

- » Did the patient(s) have the information to assist in avoiding the incident?
If not, what would have supported the patient in assisting their care team?
- » Did factors like age, sex, medications, allergies, diagnosis, other medical conditions, contribute to the incident? How did they contribute?
- » Did any social or cultural factors contribute to the incident?
What factors? In which way?
- » Was language a barrier?
- » Other?

Care team:

Caregiver(s):

- » Were the education, experience, training and skill level appropriate?
- » Was fatigue, stressors, health or other factors an issue?
- » Was the workload appropriate?
- » Were appropriate and timely help or supervision available?
- » Other?

Supporting team (all involved in care process):

- » Was there a clear understanding of roles and responsibilities?
- » Was the quality and quantity of communication (verbal and/or written) between team members appropriate (clear, accurate, free of jargon, relevant, complete and timely)?
- » Were there regular team briefings/debriefings about important care issues?
- » Was team morale good? Do team members support each other?

- » Were the communication channels available and appropriate to support the needs of the team (e.g. email, pager, and phone)?
- » Other?

Organization:

Policies and priorities:

- » Were the relevant policies and procedures available, known, accessible, and did they meet the needs of users?
- » Were there work-arounds to the documented policy/procedure?
- » Was there a mechanism in place to identify and resolve gaps between policy and practice?
- » Were the strategic priorities of the organization clear to all?
- » Other?

Culture:

- » Was everyone (patients, clinicians, other staff) comfortable to speak-up about safety concerns?
- » Was there visible support from leadership and board for safe patient care?
- » Was communication between staff and management supportive of day-to-day safe patient care?
- » Were incidents considered system failures with people not blamed?
- » Other?

Capacity (resources):

- » Did scheduling influence the staffing level, or cause stress, fatigue?
- » Was there sufficient capacity in the system to perform effectively (e.g. access to resources)?
- » Were formal and/or incentives appropriate?
- » Other?

Other - consider:

- » Were there any local conditions or circumstances that may have influenced the incident and/or an outcome?
- » Were there any sector specific conditions or circumstances that may have influenced the incident and/or outcome?
- » Other?