

REFERENCE FOR QA REVIEWS

TIMELINE/CHRONOLOGY

The timeline is probably one of the most useful tools in an event investigation. Time is a powerful organizing principle; hence, timelines are designed to take what appears to be an instantaneous event and divide it into separate moments. A detailed timeline will help to demonstrate the critical points of the event and help to gain insight into both process/system issues and human performance issues.

Sources of data:

- EMR: nursing assessments, physician notes, flow sheets, dosage history, results
- Biomedical engineering: machine read out of infusion pump dosage, rate, delivery
- Telemetry: cardiac monitoring results
- Camera/surveillance
- Staff and patient interviews

Tips:

- Focus on facts only. Do not include opinions. Refrain from blame.
- Organize timeline based upon actions leading up to event, the actual event (main focus), the post-event care and patient outcome
- Do not use staff members' names – titles only
- Use military time
- Describe in your “own words” – minimize cutting and pasting from medical record

INTERVIEW PARTICIPANTS

The goal of the interview is to preserve staff well-being, as they are second victims in these events, and to discover information about what happened and why. This will lead to the identification of system issues and ultimately to effective and sustainable corrective actions. It is important not to ask “where did people go wrong”, but “why did their actions make sense to them at the time?” If it made sense for people to do what they did, then it may make sense for others as well.

Tips:

- Interview one individual at a time
- Stress that the goal is to identify system issues and not to assign blame
- Be non-judgmental and avoid giving your opinions
- Have the participant tell the story from their point of view without presenting any reminders
- Tell the story back to them to verify your understanding
- Progressively probe and rebuild how the world looked to people on the inside of the situation at each juncture
- Use open ended questioning

ANALYSIS & IDENTIFICATION OF ROOT CAUSES/CONTRIBUTING FACTORS

The practice of RCA is predicated on the belief that problems are best solved by attempting to correct or eliminate root causes, as opposed to merely addressing the immediate obvious symptoms.

Tips:

- An RCA focuses primarily on systems and processes
- Should be non-judgmental nor assign individual blame
- Getting to the root causes takes effort and involves asking a series of "why" (5 times) until root causes are identified
- Look for underlying causes of proximate causes
- Root causes of a sentinel event can be categorized according to the following organizational functions or processes:
 - Policy, procedure and practice factors
 - Equipment factors
 - Environmental factors
 - Human resources and human factors
 - Information and communication factors
 - Organizational factors
- Human error and human factors
 - What we call human error is usually a symptom of deeper trouble rather than the cause of trouble
 - "Human error" is information about how people learn to cope (successfully or not) with complexities and contradictions of real work
 - A "human error" problem is at least as complex as the organization that helped create it
 - It is systematically connected to features of people's tools, tasks and operating environment

STANDARD OF CARE (SOC) DETERMINATION

The "medical standard of care" is typically defined as the level and type of care that a reasonably competent and skilled health care professional, with a similar background and in the same medical community would have provided under the circumstances. The facility's determination of standard of care is consistent with current practice. The standard of care designation is independent of harm designation.

Tips:

- The standard of care is what most of your colleagues are actually doing or would do under similar circumstances
- It is NOT what your colleagues think should be done, or what an expert has deemed "best practice"
- Standard of care is NOT an aspirational standard
- Actions should be consistent with hospital/department policy and

- procedures, guidelines and protocols
- Aim to focus on systems and how to improve the process versus blaming the individual
 - Options for SOC determination:
 - **SOC Met:** no deviations from generally accepted medical standards – no further action
 - **SOC Met with Room for Improvement:** no deviations from generally accepted medical standards but there were opportunities for improvement noted
 - **SOC Not Met Due to Systems:** there were deviations from generally accepted medical standards due to systems
 - **SOC Not Met Due to Practitioner:** there were deviations from generally accepted medical standards by provider or other medical professional
 - **SOC Not Met Due to Systems and Practitioner:** there were deviations from generally accepted medical standards due to systems and practitioner or other medical professional

HARM DETERMINATION

The AHRQ Harm Scale assesses: 1) severity of harm at any given point after the event episode, and 2) the duration of a given degree of harm.

Tips:

- Options for Harm determination:
 - **HARM – Death:** dead at time of assessment
 - **HARM – Severe Permanent Harm:** Severe lifeline bodily or psychological injury or disfigurement that interferes significantly with functional ability or quality of life
 - **HARM – Permanent Harm:** Lifelong bodily or psychological injury or increased susceptibility to disease
 - **HARM – Temporary Harm:** Bodily or psychological injury, but likely not permanent
 - **HARM – Additional Treatment:** Injury limited to additional intervention during admission or encounter and/or increased length of stay, but no other injury. Treatment since discovery, and/or expected treatment in future as a direct result of event.
 - **HARM – Emotional distress or inconvenience:** Mild and transient anxiety or pain or physical discomfort, but without the need for additional treatment other than monitoring. Distress/inconvenience since discovery, and/or expected in future as a direct result of event.
 - **NO HARM:** Event reached patient, but no harm evident.
 - **UNKNOWN:** Unknown at time of assessment.

RISK REDUCTION STRATEGIES (RRS)

The most important step in this process is the identification and implementation of actions, or risk reduction strategies, to eliminate or control system hazards or vulnerabilities that have been identified as root causes. These actions are intended to prevent the event from recurring. It is important to create strong risk reduction strategies that focus on improving system issues.

Tips:

- Discuss RRS during the quality review process
- Include best practices learned from literature and other departments that have already mitigated the risk of the event
- Include at least one strong or intermediate action to ensure effectiveness
 - Strong action examples
 - Architectural changes
 - Simplify process
 - Standardize equipment or process
 - Intermediate action examples
 - Redundancy
 - Increase in staffing
 - Software modifications
 - Eliminate/reduce distractions
 - Sim-based education
 - Checklists/cognitive aids
- Weaker actions should be temporary measures until stronger actions can be implemented
 - Weak action examples
 - Double checks
 - Warnings
 - New procedure/policy
 - Training
- Timeframes for completion usually within 3 months following the event
- Assign responsibility of implementation to one person

MEASURES OF EFFECTIVENESS

In order to ensure that the RRS have been implemented and are successful, they need to be monitored and measured for a specific time period. These can either be process measures or outcome measures. Measures should identify what is being measured, by whom, what compliance level is expected, and a specific date that the measure will be assessed.

Tips:

- Assign responsibility of monitoring to one person
- Ensure monitoring tool actually measures what it is intended to measure
- Include a defined sampling strategy