The Joint Commission

Case Example #1
A death resulting from failure to rescue

CASE EXAMPLE

A patient underwent surgery at a hospital. The procedure and post-op recovery were uneventful and the patient remained on cardiac monitoring during recovery on a medical unit.

Alarm fatigue from the leads frequently disconnecting led to unconscious bias assuming leads were off.

Morning of post-op day 1: The monitor in the telemetry room showed an abnormal rhythm suggesting the leads were off, once again. Per protocol, the technician called the corresponding nurse but was unable to reach the nurse. The patient went from sinus tachycardia to ventricular tachycardia.

No escalation policy was in place if the nurse could not be reached.

Process within the telemetry room relied on memory to call the nurse back after 5 minutes.

At this time, the telemetry technician within the monitoring room is responding to another patient's concerning rhythm and forgets to call the nurse after 5 minutes had elapsed, per policy. Though the monitoring room is normally staffed with two technicians to monitor 120 patients on average, only one telemetry technician is in the room; the other technician is on a unit retrieving a used telemetry monitor to clean and inventory.

Technicians were responsible for retrieval, cleaning, inventory and set up of cardiac monitors while also monitoring up to 60 patients each. The telemetry unit is significantly understaffed to effectively monitor all 120 patients. All of these responsibilities can cause considerable distraction.

27 minutes later, while performing routine rounds, the nurse entered the room to find the patient unresponsive. A code is called. The responding charge nurse immediately retrieves the crash cart as the nurse begins compressions.

At the initiation of the code, the crash cart was not appropriately locked, and the log documentation and equipment checks were not performed.

Both pediatric and adult supplies were in the same crash cart and the adult oral airway had not been replaced

3 minutes later, the code team arrives. The certified registered nurse anesthetist (CRNA) requests supplies for intubation and the nurse provides an endotracheal tube but it is pediatric in size. The CRNA manually ventilates the patient as an adult endotracheal tube is located from a crash cart on another floor. By this time, more personnel are responding to the code.

Mock code drills had not been conducted in over a year.

An excessive number of personnel responded, impeding role clarity and communication.

Variation in daily/shift assessment of the crash cart led to lack of recognition of missing supplies.

7 minutes later, the defibrillator is turned on after confusion with defibrillator status. Pads are placed on the patient and the first rhythm strip is recorded.

Leadership made new equipment acquisition decisions that were not communicated to staff and therefore staff were not trained on new equipment model. Cardiac defibrillator was not configured in the ready state, delaying availability of defibrillator.

In a 12-month review of 2008, the Pennsylvania Patient Safety Authority identified 56 reports that highlighted emergency or rapid response situations in which supplies or equipment were missing or outdated. Of the 56 reports, 35 referenced issues with crash carts and 21 referenced issues with missing supplies or malfunctioning equipment during an emergency situation.

6 minutes later, after being defibrillated, the patient decompensates further.

21 minutes later, after efforts to resuscitate, the patient expires.

Quick Safety 32: "Crash-cart preparedness" includes safety actions to prepare your staff and make sure your crash cart has the correct emergency equipment, medications and supplies needed to manage the next emergency.

The team conducted a post-code huddle/debriefing in which they identified risks and opportunities to improve their rapid response.

Disclaimer: This case example is aggregated and is not representative of a single report or incident. Any likeness to an actual event is purely coincidental.

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SAFETY STRATEGIES

A patient underwent surgery at a hospital. The procedure and post-op recovery were uneventful and the patient remained on cardiac monitoring during recovery on a medical unit.

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Safety Strategy: Leadership convened a multidisciplinary alarm system management team to mitigate nuisance alarms[1] and incorporated evaluation of lead position and integrity in shiftly hand-off communication processes.

Safety Strategy: An escalation algorithm was established clearly identifying who and how to contact, and the timeframe within which escalation should take place, should the primary nurse be unavailable. Staff were trained and a quality assurance plan was created to periodically assess and measure effectiveness.

Additionally, telemetry techs established a monthly "strip review" to increase knowledge and skill for detecting subtle rhythm changes.

Safety Strategy: A risk assessment was conducted to further determine scope of issues and to ensure no other crash carts co-mingled pediatric and adult supplies. Adult and pediatric supplies were physically separated by designated carts and processes for assessment were standardized to increase awareness of missing or misplaced items.

Staff were trained and mock code drills included verifying access to crash cart and timeliness of retrieval.

Safety Strategy: Given the tragic circumstances to the patient that undoubtedly affected staff, leadership launched a Second Victim program to provide support and resources for those involved in a patient safety event.[6]

Safety Strategy: A team analyzed the workflow and task demands for telemetry monitoring and determined additional staff was needed to safely monitor patients. Leadership budgeted one additional telemetry monitor per shift bringing the ration to 1:40 patients.[2] Other tasks, such as cleaning and inventorying monitors, were redistributed out of the telemetry monitor duties to limit distractions.

Safety Strategy: The organization implemented an electronic log process to track and verify that crash carts were evaluated per policy. This enables real-time trending and correction, if needed.[3]

Safety Strategy: Given the drift in safety processes, which included mock codes, leadership self-evaluated their high reliability journey and began incorporating daily stand-up briefings to share issues that occurred in the last 24 hours, anticipate adverse conditions in the next 24 hours and review steps taken for previously identified issues.[4,5] Staff were empowered to speak to any disruptions in their daily workflow.

Additionally, a team training program was incorporated, building competencies in speaking up, identifying role clarity, and communicating clearly, which is particularly critical during code situations. The organization will measure these behaviors and others during mock code drills.

Safety Strategy: Leadership established a new process wherein input will be sought from front-line end users before new acquisition or change to supplies. Staff will be trained and will undergo a simulation/mock code using the supplies prior to "going live."

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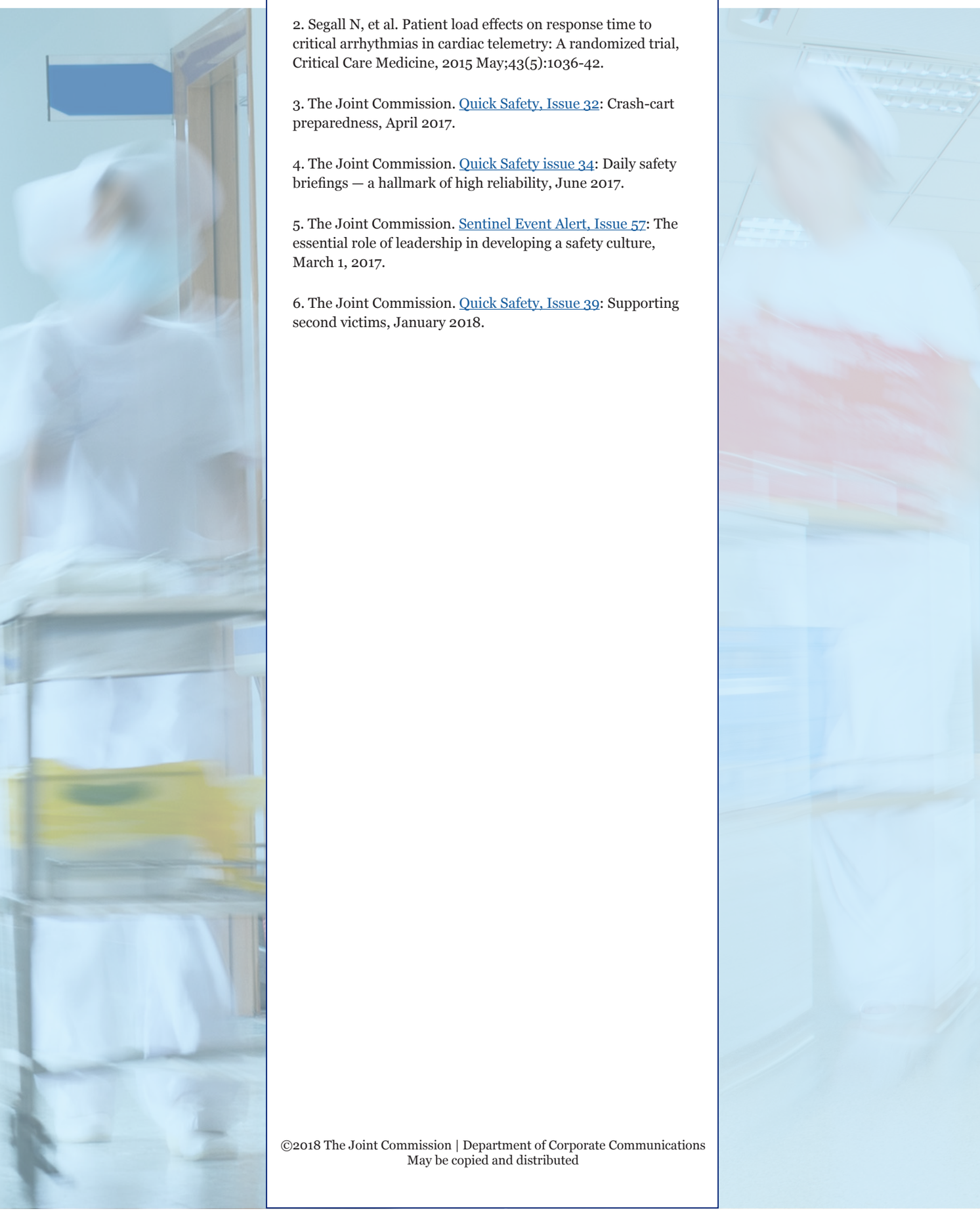

FOOTNOTES

1. The Joint Commission. Sentinel Event Alert, Issue 50: Medical device alarm safety in hospitals, April 8, 2013.

2. Segall N, et al. Patient load effects on response time to critical arrhythmias in cardiac telemetry: A randomized trial, Critical Care Medicine, 2015 May;43(5):1036-42.

3. The Joint Commission. Quick Safety, Issue 32: Crash-cart preparedness, April 2017.

4. The Joint Commission. Quick Safety issue 34: Daily safety briefings — a hallmark of high reliability, June 2017.

5. The Joint Commission. Sentinel Event Alert, Issue 57: The essential role of leadership in developing a safety culture, March 1, 2017.

6. The Joint Commission. Quick Safety, Issue 39: Supporting second victims, January 2018.