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FY21 Office of Health Care Quality Hospital Patient Safety Update

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Disclosures

- No Disclosures

Objectives

- Review history of Maryland Patient Safety Program
- Review current requirements
- Share reporting data, including a summary of FY21 data
- Share certain significant events
- Share considerations for hospitals

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OHCQ Mission & Vision

- Protect the health and safety of Marylanders
- Ensure public confidence in the health care and community delivery systems
- Vision that all care recipients can trust
  - Their health care facility or program is licensed
  - Has met the regulatory requirements for the services they offer

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Patient Safety Program Overview

- Established by law and enacted in March 2004
- COMAR 10.07.06
- Serves to provide a safe environment for patients in Maryland hospitals
- Requires hospitals to identify adverse events
- Encourages near miss reporting
- Requires disclosure to patients and families
- Over 5,000 adverse events reported since 2004

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Adverse Event Reporting

- **Level 1 -** Resulted in death or serious disability
  - Joint Commission Sentinel Events
  - National Quality Forum “Never Events”
- **Level 2 -** Required medical intervention to prevent death or serious disability
- **Level 3 -** Does not result in death or serious disability and does not require medical intervention to prevent death or disability

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Adverse Event Reporting

- **Level 1 -** Required to report within 5 days of discovery
  - Submit RCA and actions within 60 days
- **Level 2 -** RCA required, but not submitted
- **Level 3 -** No RCA required

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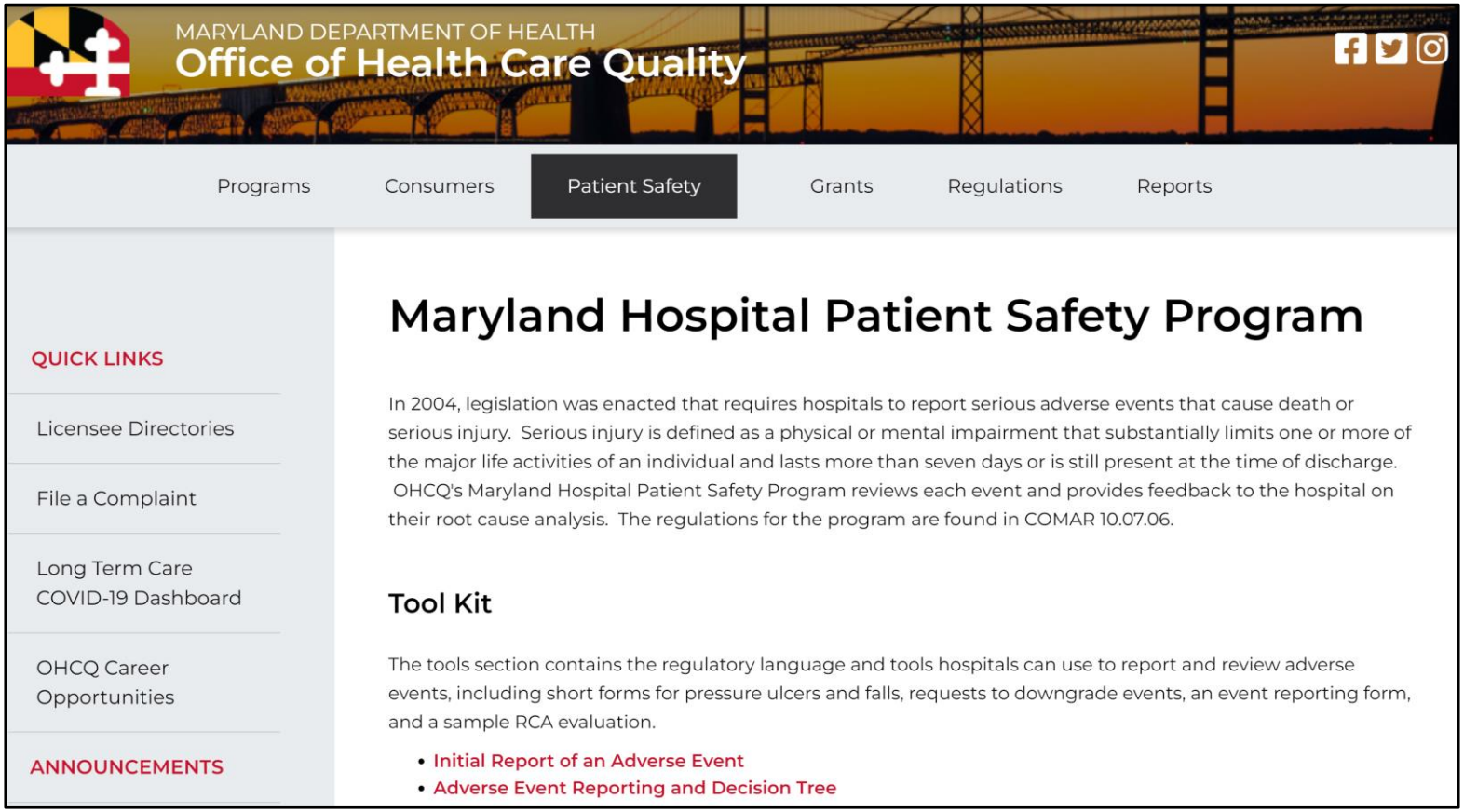
OHCQ Patient Safety Site



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Hospital Reporting

- Reporting reflects a transparent learning culture of continuous improvement
- Hospitals are not judged for the number of reported events
- Hospital Patient Safety Program ensures the quality of RCAs and actions

Hospital Reporting

- Maryland hospitals classified as:
  - Acute general
  - Psychiatric
  - Chronic
  - Children's
  - Rehabilitation

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Hospital Reporting

- Acute general hospitals account for 73% of all licensed Maryland hospitals
- Acute general hospitals reported 97% of the Level 1 adverse events in FY21
- Psychiatric and rehabilitation hospitals accounted for 4 percent of reports

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FY21 Reporting

Hospital Size	Number of Hospitals	Total Events Reported FY21	Reported Events per Hospital FY21	Percent Change from FY20
300 or more beds	11	225	20	125%
200 – 299 beds	15	215	14	128%
100 – 199 beds	14	110	8	40%
< 100 beds	22	37	2	12%

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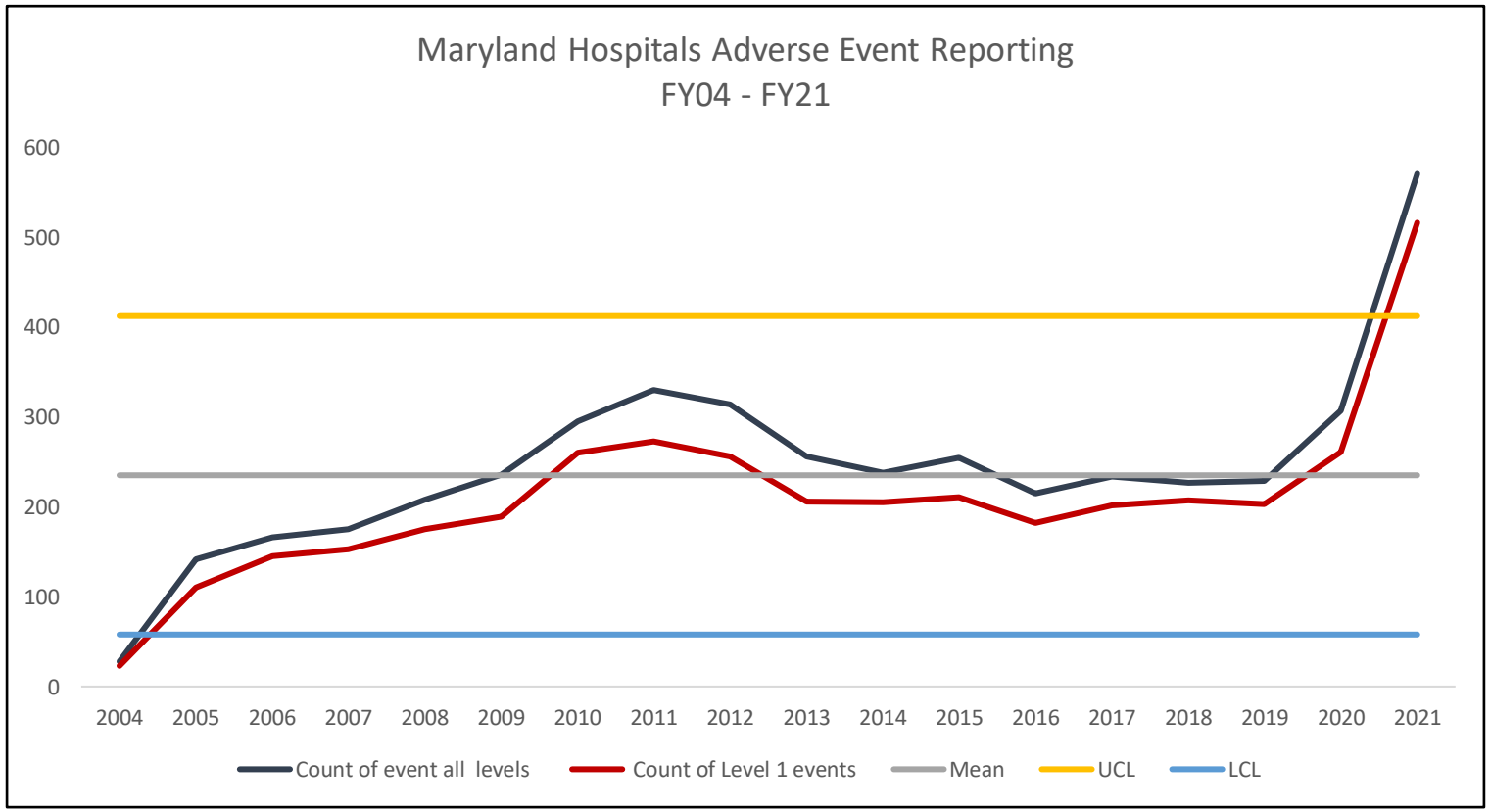
Hospital Reporting



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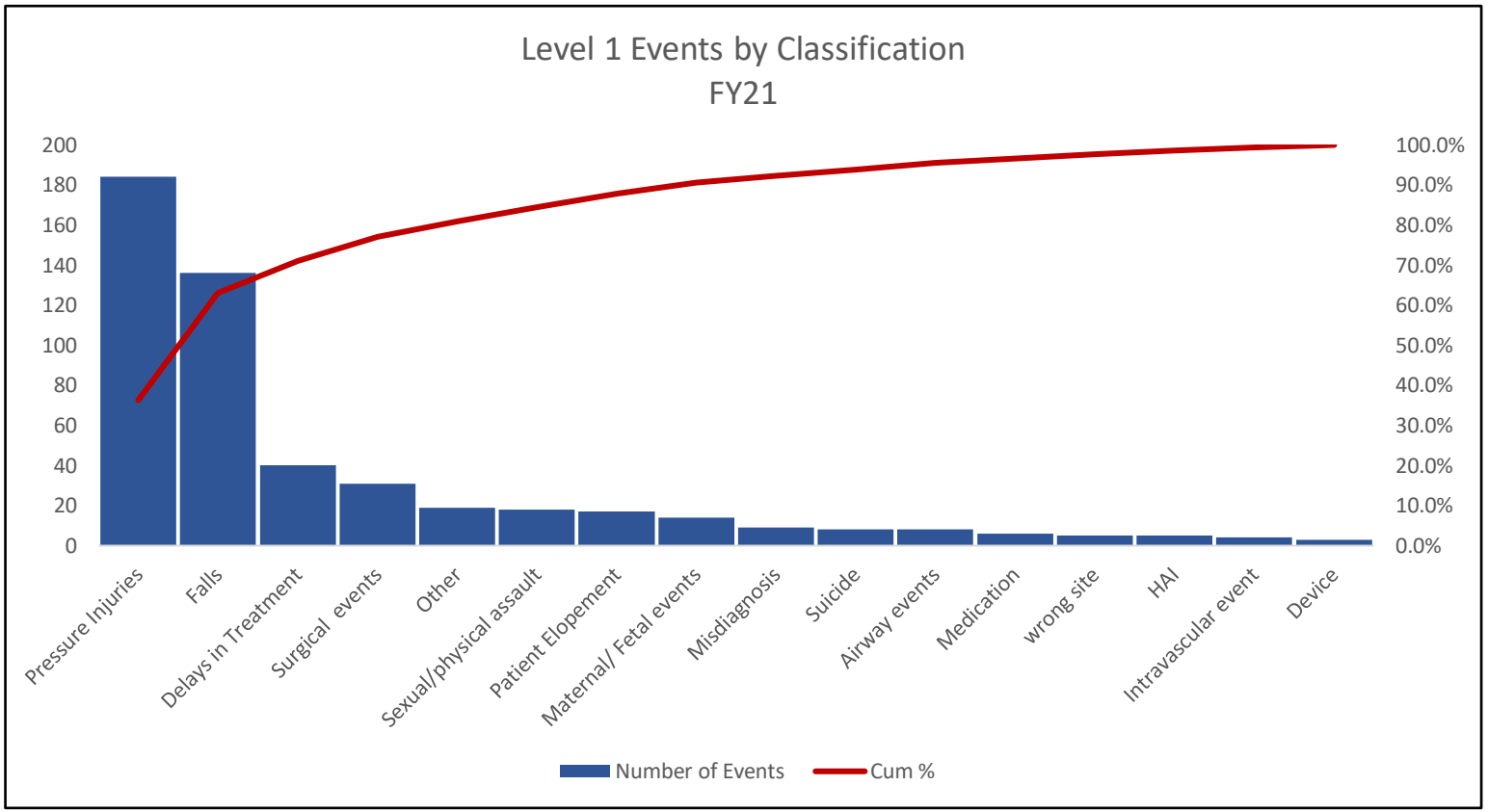
FY21 Level 1 Events



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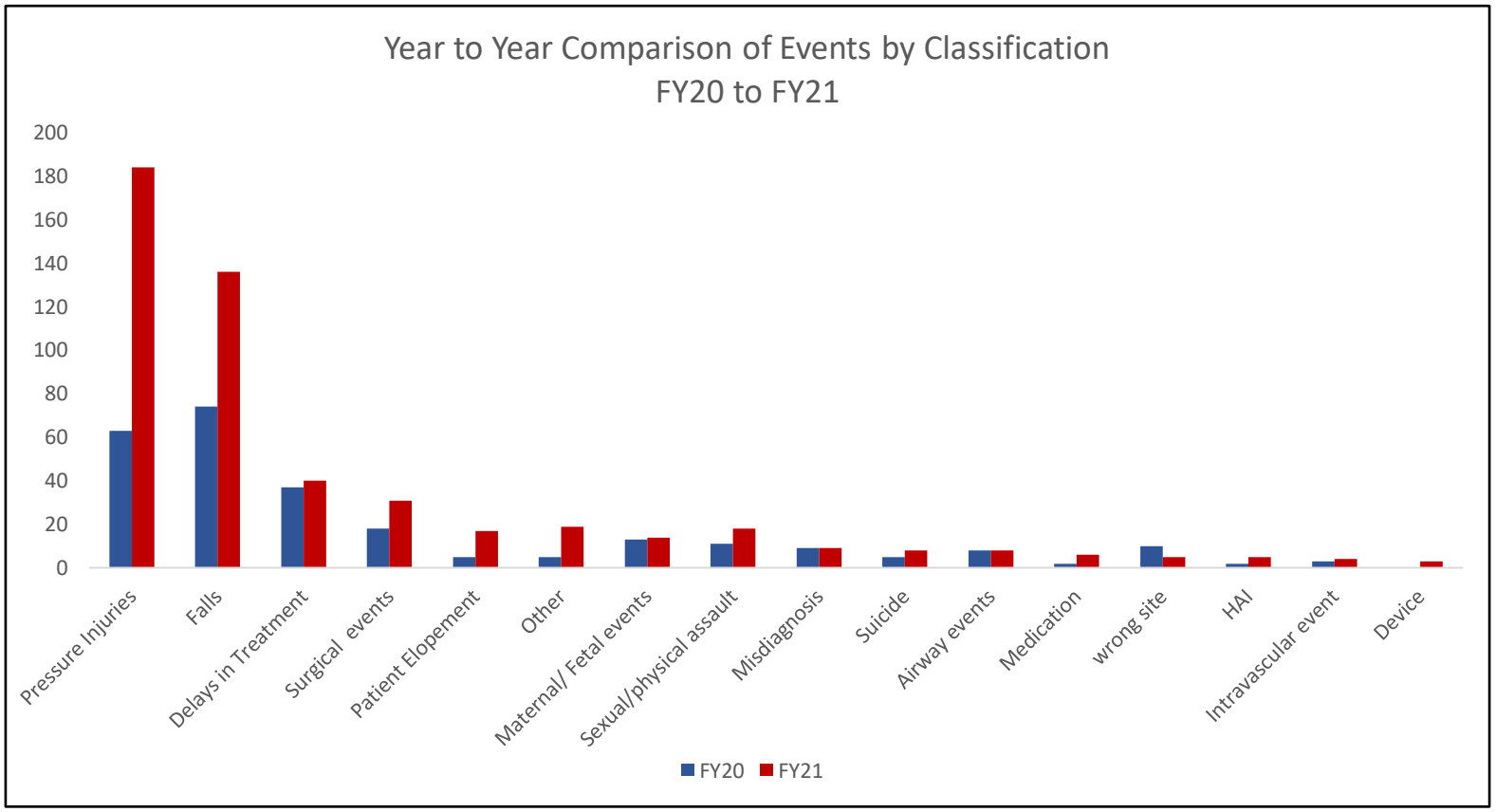
FY20 Compared to FY21



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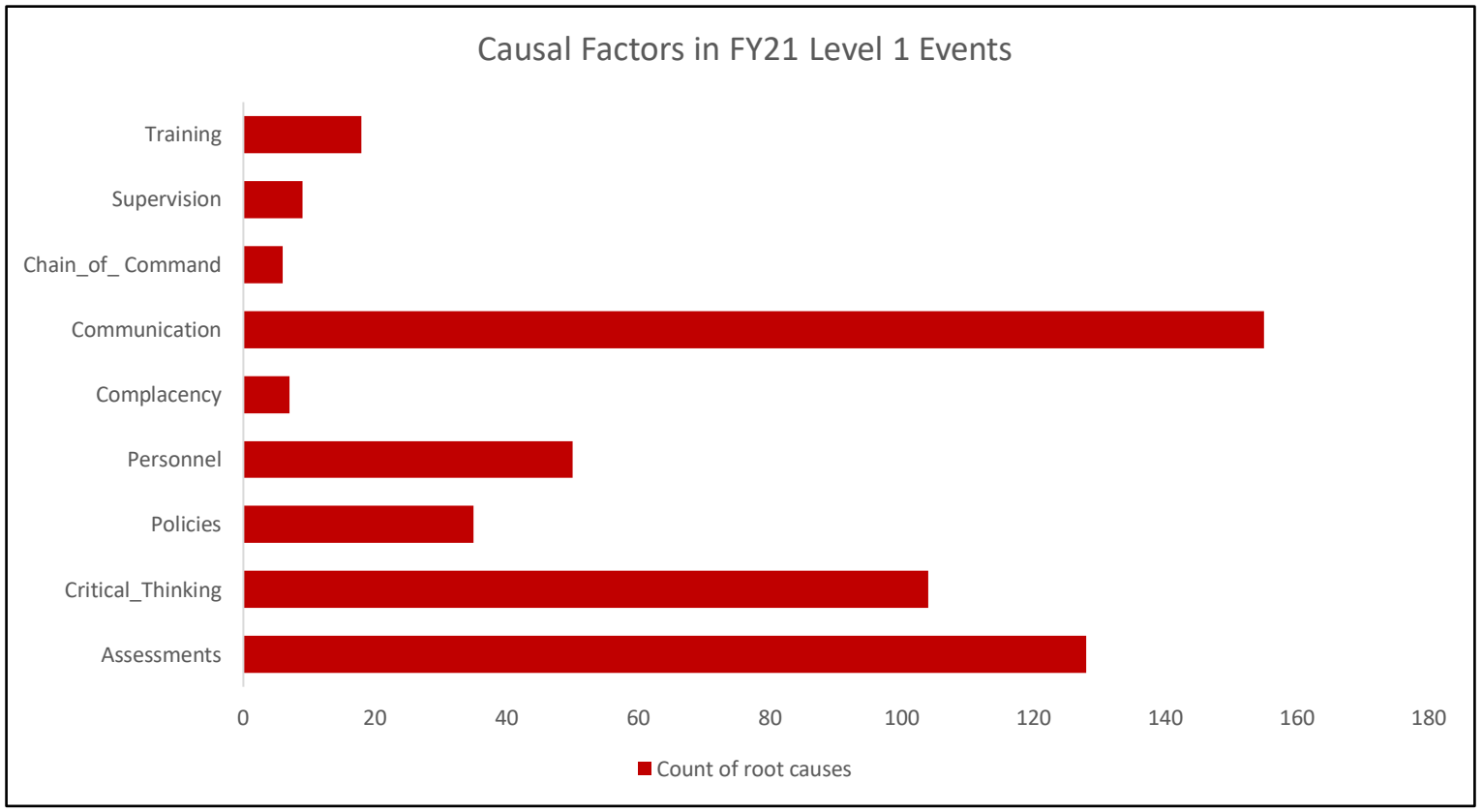
RCA Requirements

- COMAR 10.07.06.06 states:
  - C. The root cause analysis shall examine the cause and effect of the event through an impartial process by:
    - (1) Analysis of human and other factors;
    - (2) Analysis of related processes and systems;
    - (3) Analysis of underlying cause and effect systems through a series of "why" questions; and
    - (4) Identification of risks and possible contributing factors

Causal Factors



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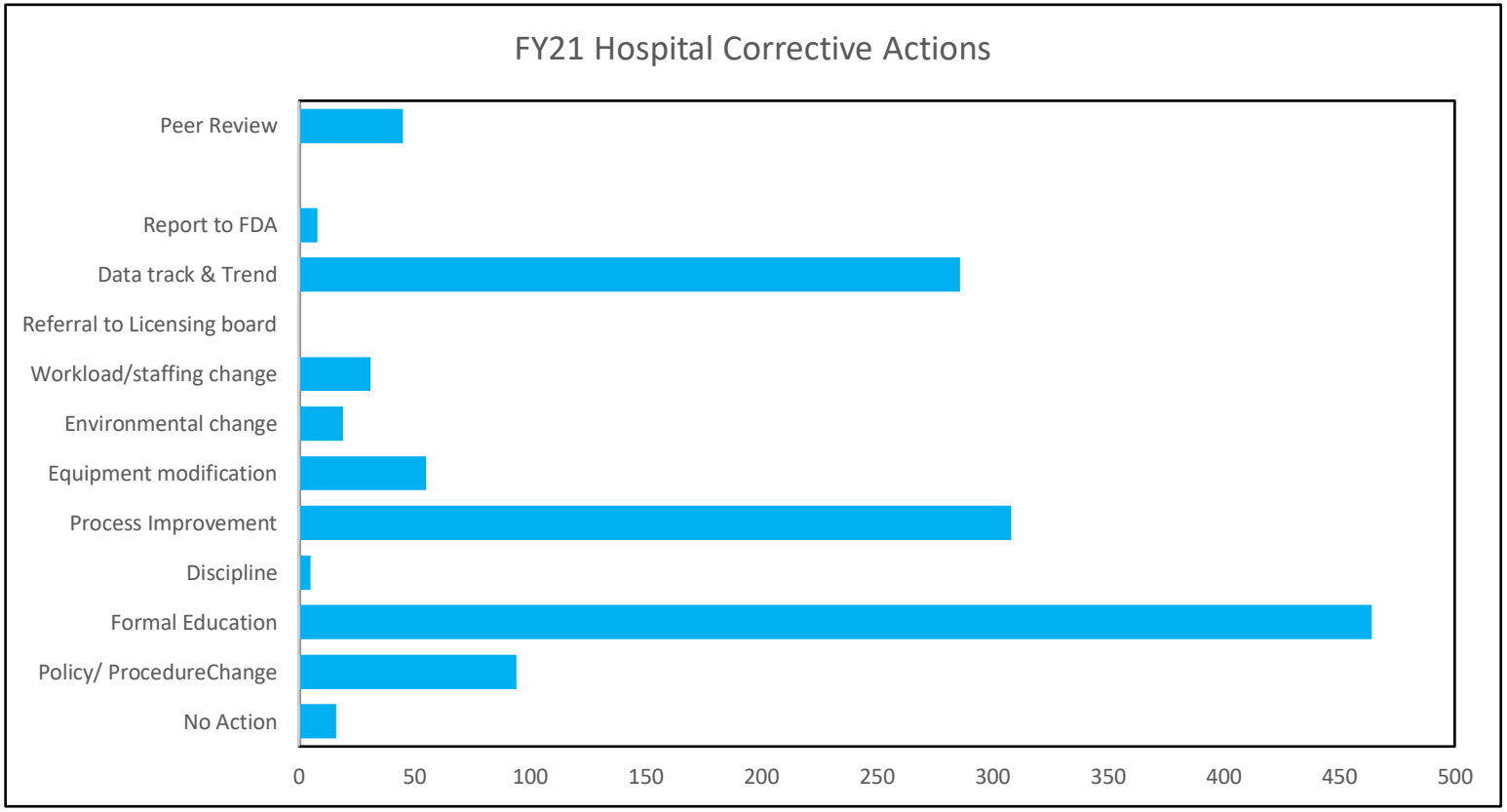
Corrective Actions



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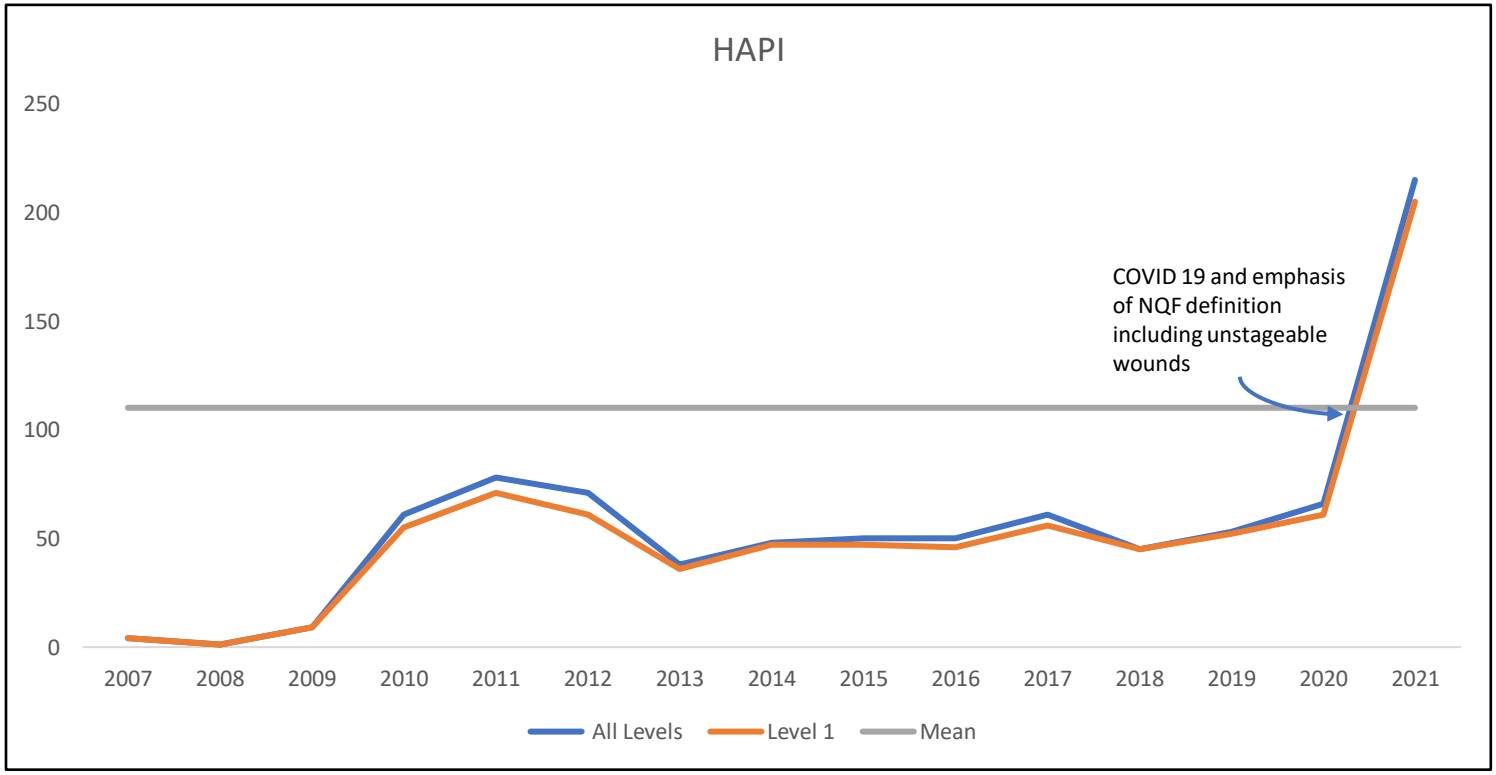
Pressure Injuries

- Any Stage 3, Stage 4, and unstageable pressure ulcers acquired after admission
- Report all HAPIs except:
  - Wounds acquired pre-admission that progress, as long as recognized at admission
  - Deep tissue injuries (DTIs) unless evolve into or debrided into Stage III or IV wounds
  - Kennedy ulcers that arise during the hypoperfusion state in the 24 to 48 hours prior to death

Pressure Injuries



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Pressure Injuries

- A 63-year-old patient was diagnosed with COVID-19 infection and was brought to the hospital after experiencing extreme fatigue, loss of appetite, and inability to get out of bed. The patient arrived at the ED with extreme hypoxia.
  - Patient placed on non-rebreather oxygen and then BiPAP
  - After 9 days on BiPAP, the patient was intubated
  - Patient remained intubated for 39 days, but could not tolerate proning
  - WOCN consult initial assessment did not include the sacral area because the patient was too unstable
  - Air mattress ordered, but it was not plugged into the air pump
  - Patient developed a Stage 3 pressure injury to the sacrum

Pressure Injuries

- Thorough skin assessment should always be done
- Check under tubing and devices
- Placing multi-layer foam dressings on bony prominences prior to proning reduces risk of pressure injury

Pressure Injuries

- Securing devices with adhesive and plastic anchors can be lifted and multilayer foam dressings be placed underneath to protect the skin
- Medical tubes and devices cause 30 percent of in-hospital pressure injuries
  - Proper security of medical tubes and devices is crucial to pressure injury prevention

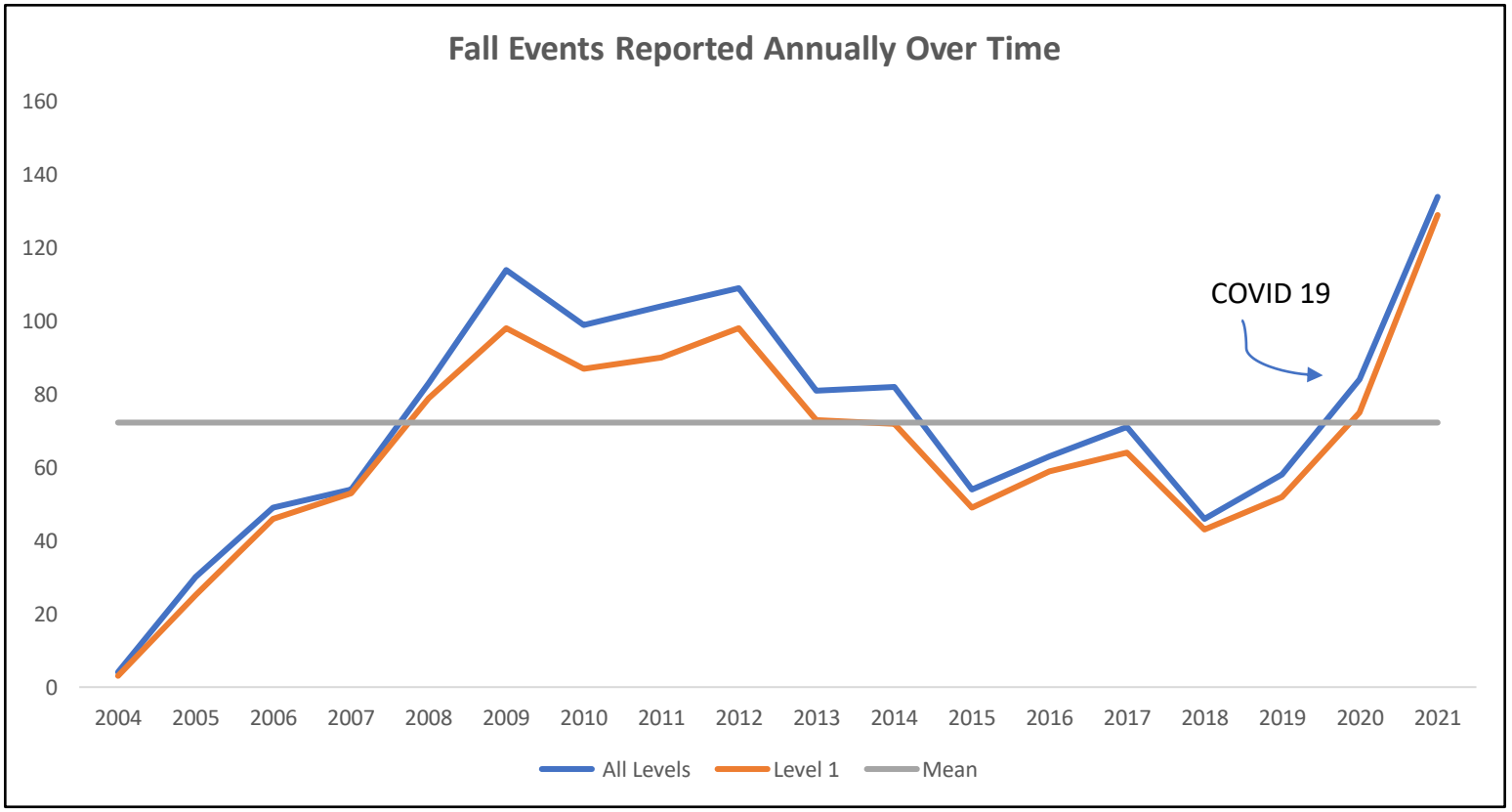
Pressure Injuries

- Standard pillows, as well as donut-shaped pillows, should not be used to support the head while proning
- Specialized foam head cushions are preferred because they have tunneled spaces that allow for passage of the endotracheal tube
- Swimmer's position is the preferred method of patient body positioning when proning
- OHCQ notes in the system when the standard of care has been met

Falls

- Agency for Healthcare Research and Quality:
  - More than one-third of hospital falls result in injury, including serious injuries such as fractures and head trauma
- Death or serious injury from a fall in a health care facility is considered a never event
- Fall prevention in hospitals is a balance between:
  - Managing a patient's underlying fall risk factors
  - Enabling the patient to maintain autonomy while adapting to the unfamiliar hospital environment

Fall Reporting



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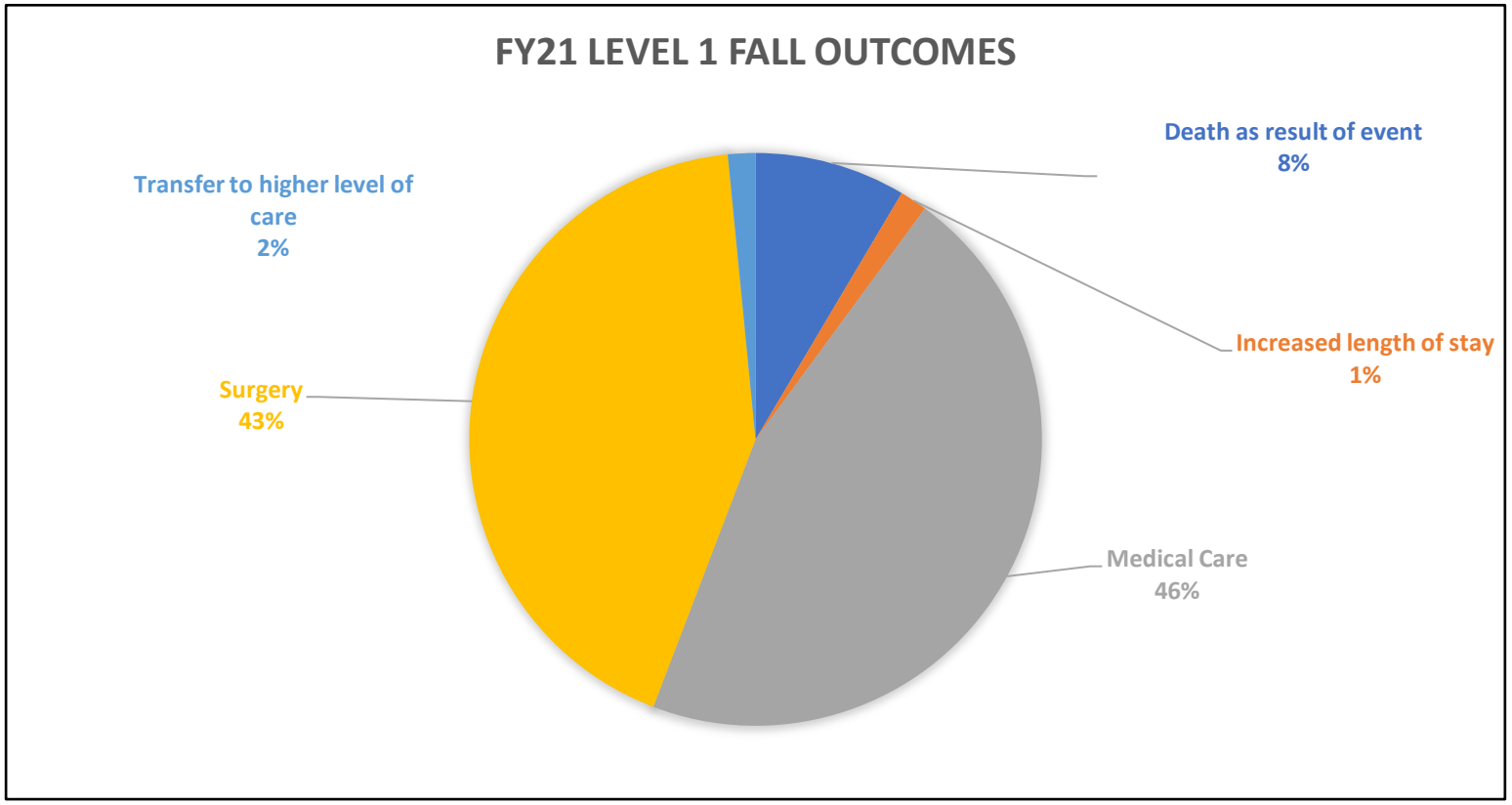
Fall Outcomes



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Event

Fall

- A patient presented to the ED with generalized weakness and shortness of breath
- Admitted with a diagnosis of sepsis, anemia, and a suspected pancreatic mass
- Two days after admission the patient sustained an unwitnessed fall, but denied hitting their head

Event

Fall

- The primary nurse documented notifying a physician about the fall, but did not document the name of the provider called
- No post-fall patient assessment by a provider
- Four hours after the fall, the patient began having anxiety and difficulty concentrating
- Two days later, the patient became hostile and was alert only to self

Fall

- After two more days, a rapid response was called when the patient became unresponsive to painful stimuli
- A CT scan revealed an acute hemorrhage and the patient was taken to the OR for right craniotomy and hematoma evacuation
- A brain flow study revealed no cerebral profusion consistent with brain death
- The patient was pronounced dead

Falls

- Engage the patient and family in the fall prevention process
- Assess fall risk at the original point of encounter
- Tailor interventions to the patient
- Staff should ensure that the right strategy is used for the right patient

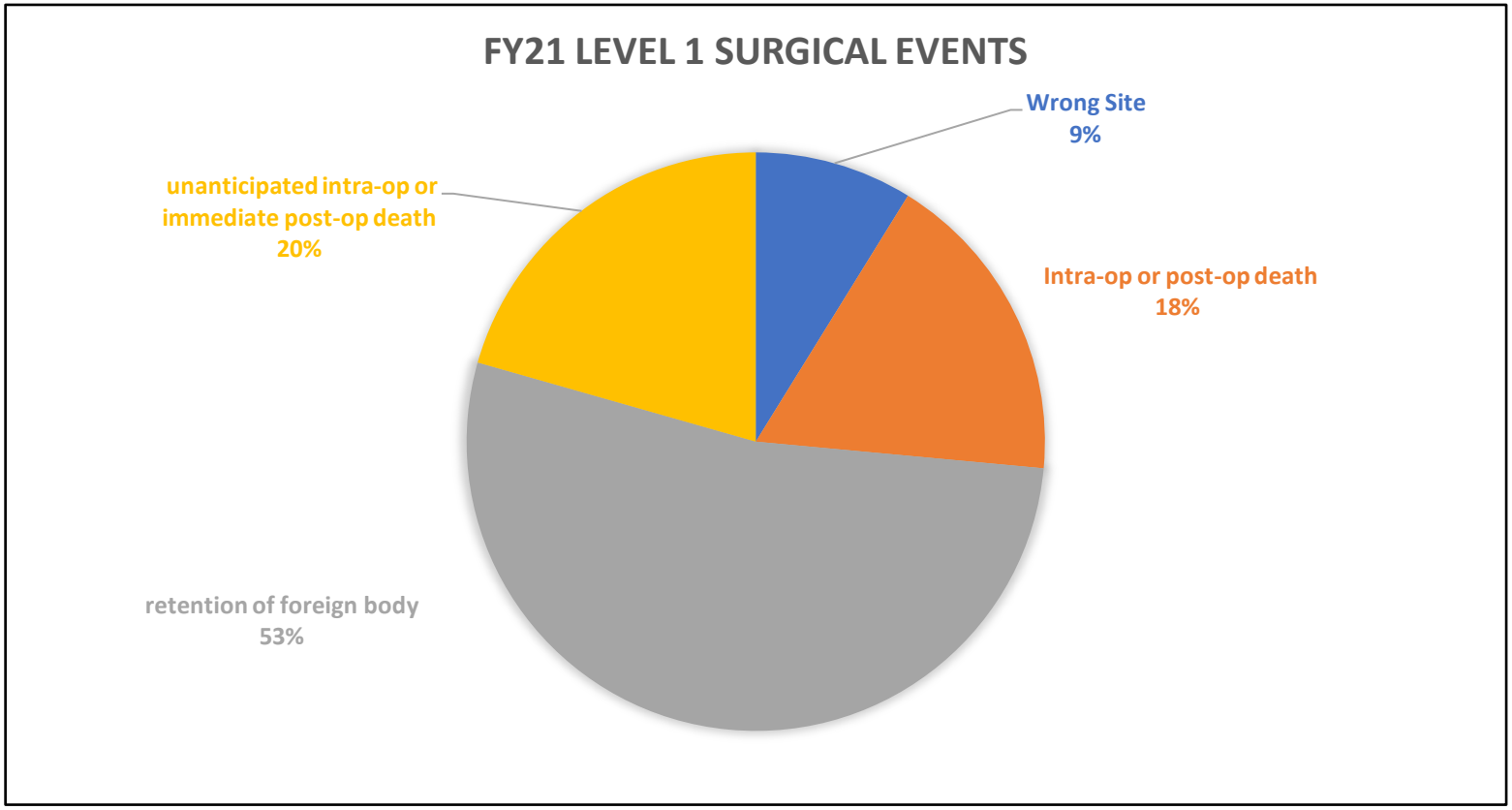
Falls

- Telesitter may not be appropriate for every patient
- When using telesitter, consider what to use should the patient need to travel off unit
- Ensure beds and other equipment are operational

Surgical Events

- Surgical events include all patient/procedure events along with:
  - retained foreign objects (RFOs),
  - intraoperative death in healthy individuals having low-risk procedures,
  - unanticipated intraoperative or
  - immediately post-operative deaths

Surgical Events



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Surgical Events

- A patient underwent surgical procedure for a right long finger trigger release
- Consent obtained and site marked at bedside
- Report was given to the OR team with consent, history and physical, and site marking verified
- The patient was prepped and draped
- The OR team called a time-out prior to the start of the procedure

Surgical Events

- The surgeon did not mark the site where the incision was to be made
- The dorsal side of the right hand was marked
- The surgeon started the incision on the lateral part of the right hand which was visibly unmarked

Surgical Events

- At the postoperative evaluation in the surgeon's office two weeks later, the surgeon identified that the wrong finger (the right ring finger, not the long finger) had been operated on
- The patient was rescheduled for a procedure on the correct finger
- The surgeon stated he did not mark the lateral side of the right hand because marking would be in the way of his incision

Surgical Events

- OR Staff should count in and count out (sponges, tools, and equipment)
- Use evidence-based tools like sponge counters
- Don’t close the patient until all items going in have been counted out
- Clearly mark site near the point of incision
- Ensure staff are all in for the time out (not distracted, not multitasking, and attentive)
- Clearly define roles and responsibilities including backup, when needed

Delay Events

- A 93-year-old patient on telemetry monitoring was transferred from her inpatient room on the fourth floor to the first floor for scheduled imaging studies
- While the patient was having the imaging studies completed, the monitor tech notified the patient's nurse that the patient's heart rate was bradycardic
- Staff did not know the patient's location in the Imaging Department and had difficulty finding her

Delay Events

- Eventually, the vascular lab tech confirmed that the patient was in the Vascular Lab and awaiting transport back to her room
- When the Vascular Lab tech checked on the patient, she was unresponsive
- A Code Blue was called
- Patient was resuscitated and transferred to the ICU
- All heroic measures were discontinued, and the patient expired

Delay Events

- An acute myocardial infarction patient underwent cardiac catheterization with stenting
- After the procedure, the patient was admitted to the telemetry unit on continuous cardiac monitoring
- Bilateral restraints for safety had been ordered for the patient

Delay Events

- The patient was found several hours later in her room in cardiac arrest
- A retrospective review of telemetry data indicated the patient had an episode of tachycardia, then continuous “leads fail” alerts for approximately 2 hours
- Review of monitor data found that these alerts had been repeatedly silenced

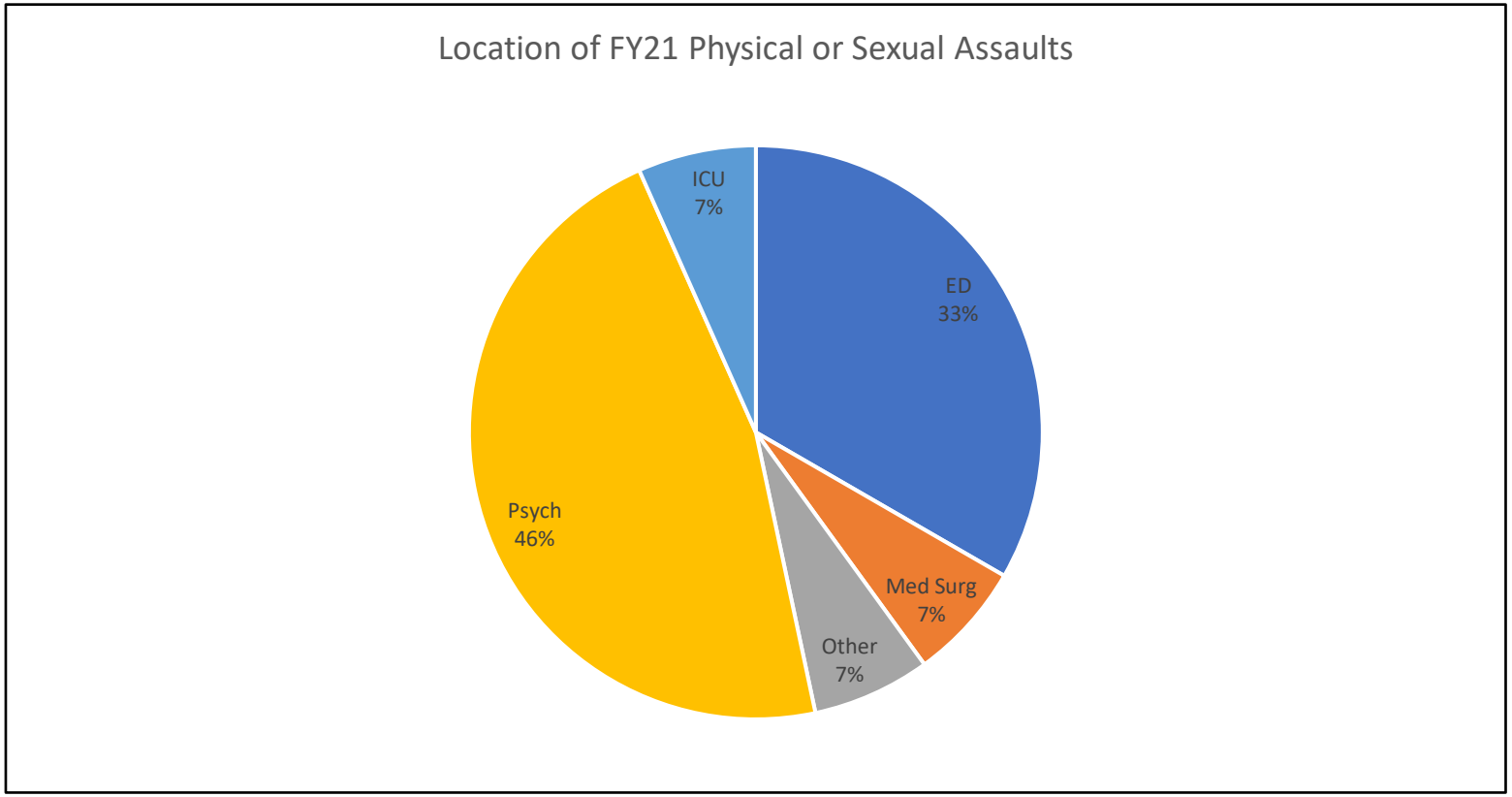
Delays in Treatment

- Assess alarms, monitoring functionality to avoid alarm fatigue
- Ensure that there are redundancies and contingencies for responsibilities for critical alarm updates or configurations for safety
- Ensure that the staff are knowledgeable in all functions of the monitoring equipment to prevent accidental silencing or canceling of critical alarms

Delays in Treatment

- Develop or optimize processes for interdepartmental communication
- Ensure patients are appropriate for travel
- Implement rounding and bedside handoff for care team communication and collaboration

Physical or Sexual Assaults



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Physical or Sexual Assaults

- Assaults may be random and unprovoked
- Provide physical and emotional support to staff in areas with an increased risk of assaults
- Ensure staff are trained and competent in de-escalation tactics
- Promote a just culture that includes zero tolerance for reckless behavior, such as intentionally unsafe or criminal acts

Other Significant Events

- A 34-year-old patient was a restrained driver involved in a front-end car collision with air bag deployment
- The orthopedics team recommended surgical stabilization
- During open reduction and internal fixation in the OR, the patient coded, and the procedure was aborted
- CPR was performed and CT was completed showing bilateral pulmonary embolism
- The patient was transferred to the ICU, where he coded again and ultimately expired

Other Significant Events

- Subsequent review identified that orders for deep vein thrombosis (DVT) prophylaxis had been omitted for one-and-a-half days
- The orthopedics team recommended DVT prophylaxis, but did not verify whether it had been ordered
- The surgical team's physician assistant documented in the progress notes that the patient was on DVT prophylaxis, but there was no order placed in EMR

Other Significant Events

- Prior to surgery, the surgical team did not fully review orders and evaluate the patient
- The surgical provider failed to follow the protocol for placing medication orders in the EMR

Other Significant Events

- An Emergency Department (ED) physician consulted with a neurologist about initiating intravenous immune globulin (IVIG) medication regime for myasthenia gravis
- The neurologist recommended the patient receive IVIG 2 gm/kg over 5 days (that is, 0.4 gm/kg daily for 5 days)
- The ED provider ordered 2 gm/kg daily for five days

Other Significant Events

- The patient received eight (8) grams total over four days before a pharmacist caught the error
- The treatment team contacted Poison Control, which recommended plasmapheresis
- The patient had a religious objection to transfusion and refused
- The intensivist also contacted a specialty team to explore bloodless alternatives

Other Significant Events

- Use of erythropoietin and iron were recommended
- The treatment team also ordered steroids, but interventions were not successful
- The patient developed acute renal failure due to the medication error and became severely anemic
- The patient expired as a result of the IVIG infusion overdose

Other Significant Events

- Maintenance staff inadvertently closed a valve on the medical oxygen supply line that feeds the ICUs, ED, and patient care areas
- The staff member thought the valve was a medical air tie-in valve that was installed previously during facility construction
- At the time of the incident, the ceiling tile frame beneath this valve was labeled “TIE-IN FOR CCU/HOSP MED AIR.”

Other Significant Events

- A loss of oxygen supply was evident immediately by:
  - all ventilators alarming,
  - the call bell system alarms,
  - ICU medical gas zone alarm panels also alarming
- While the oxygen valve was closed, resuscitation was initiated on three patients
- Two patients died and a third died within a day

Other Significant Event

- Findings from the investigation included:
  - Medical gas labeling inaccuracies,
  - Ceiling valves not locked,
  - Alarm panels outdated or missing,
  - Communication breakdowns between maintenance staff and contractors,
  - Lack of communication between maintenance staff and clinical leaders regarding medical gas, and
  - General medical gas knowledge deficit

Summary

- Creating a culture of safety with a high reliability mindset is essential
- Overcome:
  - Production pressures,
  - Staffing challenges, and
  - Disrupters like the COVID-19 pandemic

References

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Questions

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