

HCQA Health Care Quality Assessment

Patient Safety Reporting System

2017
Summary
Report



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Table of Contents

| | | | |
|---|------------|--|-----------|
| Lists of Tables and Figures | iii | IV. Overall Reporting Patterns for Specialty Hospitals: | 36 |
| Executive Summary | 1 | A. Comprehensive Rehabilitation Hospitals | 37 |
| I. Introduction..... | 3 | 1. Root Causes for All Events..... | 37 |
| II. Overall Reporting Patterns by Facility Type..... | 4 | 2. Contributing Factors to All Events | 38 |
| III. General Acute Care Hospitals | 5 | 3. Impact of All Events | 39 |
| A. Reporting Patterns (2005-2017) | 5 | B. Psychiatric Hospitals..... | 40 |
| B. Reportable Events and Associated Deaths by Event Category | 8 | 1. Root Causes for All Events..... | 40 |
| C. Event Types Associated with Highest Percent Deaths | 12 | 2. Contributing Factors to All Events | 41 |
| 1. Care Management “Other” Events | 13 | 3. Impact of All Events..... | 42 |
| 2. Intraoperative or Postoperative Coma, Death or Other Serious Preventable Adverse Event..... | 14 | C. Special Hospitals..... | 43 |
| 3. Surgery “Other” Events..... | 17 | 1. Root Causes for All Events..... | 43 |
| 4. Fall Events | 19 | 2. Contributing Factors to All Events | 44 |
| D. Most Frequently Reported Event Types | 24 | 3. Impact of All Events | 45 |
| 1. Suicide/Attempted Suicide Events | 26 | V. Ambulatory Surgery Centers..... | 46 |
| 2. Pressure Ulcers..... | 28 | A. Root Causes for All Events | 50 |
| 3. Retained Foreign Objects | 31 | B. Contributing Factors to All Events | 51 |
| E. Major Root Causes for All Events | 33 | C. Impact of All Events | 52 |
| F. Contributing Factors to All Events..... | 34 | VI. Division of Behavioral Health Services 2017 Report..... | 53 |
| G. Impact of All Events on Patients | 35 | Appendix 1: Classification of Serious Reportable Adverse Events | 57 |
| | | Appendix 2: Required Components of a Root Cause Analysis..... | 60 |
| | | Patient Safety Reporting System (PSRS) Contact Information | 61 |

* Most frequently reported events include falls, pressure ulcers, retained foreign objects and care management “other” events. Falls and care management “other” events have been reviewed in the section “Specific Events with the Highest Number of Associated Deaths.”

Patient Safety Reporting System

Tables and Figures



List of Tables

| | |
|------------------|--|
| Table 1: | Reporting Pattern by Facility Type (2017)4 |
| Table 2: | General Acute Care Hospitals: Reportable, Less Serious Events /Near Misses and Not Reportable Events by Year6 |
| Table 3: | General Acute Care Hospitals: Reporting Patterns (2005-2017)7 |
| Table 4A: | General Acute Care Hospitals: Reportable Events and Associated Deaths by Event Category 20178 |
| Table 4B: | General Acute Care Hospitals: Reportable Events and Associated Deaths by Event Category-20179 |
| Table 5: | Surgery-Related Event Types with Associated Deaths10 |
| Table 6: | General Acute Care Hospitals: Event Types Associated with Highest Percent Deaths12 |
| Table 7: | General Acute Care Hospitals: Most Frequently Reported Event Types (2017)24 |
| Table 8: | General Acute Care Hospitals: Major Root Causes for All Events33 |
| Table 9: | General Acute Care Hospitals: Contributing Factors to All Events34 |
| Table 10: | General Acute Care Hospitals: Impact of All Events on Patients35 |
| Table 11: | Specialty Hospitals: Overall Reporting Pattern (2017)36 |
| Table 12: | Comprehensive Rehabilitation Hospitals: Contributing Factors to All Events38 |
| Table 13: | Psychiatric Hospitals: Contributing Factors to All Events41 |
| Table 14: | Special Hospitals: Contributing Factors to All Events44 |
| Table 15: | Ambulatory Surgery Centers: Reporting Patterns (2008-2017) ...46 |
| Table 16: | Ambulatory Surgery Centers: Events Reported in 201748 |
| Table 17: | Ambulatory Surgery Centers: Contributing Factors to All Events51 |

List of Figures

| | |
|-------------------|--|
| Figure 1: | General Acute Care Hospitals: Trends in Reportable and Not Reportable Events (2005-2017)5 |
| Figure 2: | General Acute Care Hospitals: Distribution of Surgery-Related Events11 |
| Figure 3: | Care Management "Other" Events ..13 |
| Figure 4: | ASA Classification14 |
| Figure 5: | Number of Facilities Reporting Intra Op/Post-Op Events15 |
| Figure 6: | Patient Admission Type16 |
| Figure 7: | Surgery "Other" Facilities Reporting17 |
| Figure 8: | Surgery "Other" ASA Classifications18 |
| Figure 9: | Number of Facilities Reporting Fall Events19 |
| Figure 10: | Fall Risk Categories20 |
| Figure 11: | Activities Prior to Fall21 |
| Figure 12: | Percent of Patient Fall Locations ...22 |
| Figure 13: | Most Frequently Reported Event Types 2014-201725 |
| Figure 14: | Suicide/Attempted Suicide Events26 |
| Figure 15: | Suicide/Attempted Suicide Event Locations27 |
| Figure 16: | Number of Facilities Reporting Pressure Ulcer Events28 |
| Figure 17: | Pressure Ulcer Stages29 |
| Figure 18: | Retained Foreign Objects Events ...31 |
| Figure 19: | Retained Foreign Object Items32 |
| Figure 20: | Comprehensive Rehabilitation Hospitals: Root Causes for All Events37 |
| Figure 21: | Comprehensive Rehabilitation Hospitals: Impact of All Events ...39 |
| Figure 22: | Psychiatric Hospitals: Root Causes for All Events40 |
| Figure 23: | Psychiatric Hospitals: Impact of All Events42 |
| Figure 24: | Special Hospitals: Root Causes for All Events43 |

Figure 25: Special Hospitals: Impact of All Events^a.....45

Figure 26: ASC Trends in Reportable and Not Reportable Events 2008-2017^a.....47

Figure 27: ASC Facilities Intra Op/Post-Op Reporting^a49

Figure 28: ASC Surgery "Other" Reporting^a ...49

Figure 29: Ambulatory Surgery Centers: Root Causes for All Events50

Figure 30: Ambulatory Surgery Centers: Impact of All Events^{aa}.....52

Patient Safety Reporting System

Executive Summary



The New Jersey Patient Safety Act (P.L.2004, c.9) requires all New Jersey licensed health care facilities to report every serious preventable adverse event to the Department of Health (DOH) for the purpose of enhancing patient safety. Facilities must perform a Root Cause Analysis (RCA) to identify the systems issues which led to the event and to implement strategies to prevent future events. The Act defines a serious preventable adverse event as “an adverse event that is a preventable event and results in death or loss of a body part, or disability or loss of bodily function lasting more than seven days or still present at the time of discharge from a health care facility.”

The following types of facilities currently report to the New Jersey Department of Health’s Patient Safety Reporting System:

- ❖ General acute care hospitals as of February 1, 2005;
- ❖ Comprehensive rehabilitation hospitals as of April 1, 2008;
- ❖ Psychiatric hospitals as of April 1, 2008;
- ❖ Special Hospitals as of April 1, 2008; and
- ❖ Licensed ambulatory surgery centers as of October 1, 2008.

Summary of reported adverse events for all facility types in 2017:

- ❖ 814 events were reported to the Patient Safety Reporting System by all facility types;
- ❖ 596 events met the statutory definition of (or satisfied the criteria for) a serious preventable adverse event (“reportable”);
- ❖ 218 events did not meet the statutory definition and included less serious events, near misses and events that were not associated with the provision of health care (“not reportable”);

- ❖ 87 deaths were associated with the adverse events.

General Acute Care Hospitals:

- ❖ Submitted 405 reportable adverse events in 2017 compared to 418 events in 2016;
- ❖ The average number of reportable events per reporting hospital was 5.6 (does not take into account hospital sizes and bed capacity);
- ❖ There were 75 deaths associated with the adverse events; specific events with the highest percent of associated deaths were care management “other” events (36), a intraoperative or postoperative coma, death, or other serious preventable adverse events (20), surgery “other” events (16), and fall events (13);
- ❖ The most frequently reported events were falls, care management “other” events, pressure ulcers, retained foreign objects and suicide/attempted suicide;
- ❖ Adverse events were most often caused by care planning process, communication among staff and/or with the patient/family, patient observation procedures, orientation and training of staff, and physical assessment process;
- ❖ The most frequent consequences of the events were additional patient monitoring in current location, additional laboratory testing or diagnostic imaging, increased length of stay, disability-physical or mental impairment, transfer to more intensive level of care, major surgery, and death.

Executive Summary

Comprehensive Rehabilitation Hospitals:

- ❖ There were 21 reportable events and two deaths, each associated with fall and product device/malfunction;
- ❖ The most frequently reported root causes were care planning process, and communication among staff members;
- ❖ Two-thirds (66.7%) of the patients required additional laboratory testing of diagnostic imaging, and others experienced increased length of stay or hospital admission.

Psychiatric Hospitals:

- ❖ There were 19 reportable events with four deaths;
- ❖ The most frequently reported root causes were communication among staff members, care planning process, behavioral assessment process, patient observation process, physical assessment process and physical environment;
- ❖ Nine out of the 19 events resulted in a visit to the emergency department and another nine resulted in major surgery.

Special Hospitals:

- ❖ Seven events were submitted by five reporting facilities and there was no associated death;
- ❖ The most frequently reported root causes were physical assessment process and orientation and training of staff;
- ❖ The most frequent impact of the events included additional patient monitoring in current location, additional laboratory testing or diagnostic imaging, loss of sensory function, disability-physical or mental impairment and hospital admission.

Ambulatory Surgery Centers:

- ❖ Submitted 144 reportable events with six deaths which were all associated with intraoperative or postoperative coma, death or other serious preventable events;
- ❖ The most frequent root causes were care planning process and physical assessment process, and “other”;
- ❖ The most reported impact of these adverse events were increased length of stay, hospital admission, visit to the emergency department as well as additional laboratory testing or diagnostic imaging.

Patient Safety Reporting System

I. Introduction



This report presents the findings from serious preventable adverse events reported to the Department's Office of Health Care Quality Assessment (HCQA), Patient Safety Reporting System (PSRS). The findings of the report are based on data reviewed and analyzed from event and Root Cause Analysis (RCA) reports submitted in 2017.

Health care facilities are required to report serious preventable adverse events and perform a root cause analysis (RCA) for each reportable event. The Act defines a serious preventable adverse event as "an adverse event that is a preventable event and results in death or loss of a body part, or disability or loss of bodily function lasting more than seven days or still present at the time of discharge from a health care facility." Serious preventable adverse events ("reportable events") are divided into 5 categories: Care Management, Environmental, Product or Device-related, Surgery-related and Patient Protection-related.

Patient Safety Regulations also require facilities to report in the appropriate category events that are not specifically listed that meet the definition of a serious preventable adverse event. These types of events (such as lost surgical specimens and failure to follow up with results of diagnostic studies) are submitted as "Other" events in the appropriate category. The classification and definitions of serious preventable events can be found in Appendix 1.

The Act requires facilities to provide a description of the event; an analysis of why the event happened; the corrective actions taken for the patient; the method for identifying other patients that may be affected by a similar event; the systemic

changes needed to reduce the likelihood of similar events; and how the corrective actions will be monitored (See Appendix 2 for additional details).

Each RCA is reviewed by PSRS professional clinical staff to ensure that the facility performed a thorough and credible review of the adverse event. PSRS staff work with facilities to improve their analysis and the corrective actions designed to minimize the recurrence of events.

Prior to the implementation of the web-based reporting system, events were designated as reportable or not reportable. Since 2011, PSRS has the ability to capture less serious events and near misses pursuant to the Patient Safety Act. Less serious events, near misses and events that are not associated with the provision of health care ("not reportable events") do not require an RCA. However, healthcare facilities are encouraged to perform an RCA on less serious events and near misses which may be voluntarily submitted to the Patient Safety Reporting System.

This report is one component of the Department's commitment to supporting quality through collecting and analyzing information on health care and making this information available for consumers and health care providers.

The report also includes the findings of reportable events from the Division of Behavioral Health Services (DBHS/Division) in section VI of this document.

II. Overall Reporting Patterns by Facility Type

Overall Reporting Patterns by Facility Type

This annual report summarizes the 2017 Patient Safety Reporting System (PSRS) reportable events and RCAs with a focus on events with a high percentage of associated deaths and the most frequently reported events. The report covers events and RCAs submitted by general acute care hospitals, specialty hospitals (comprehensive rehabilitation, psychiatric and special hospitals), and ambulatory surgery centers.

The number of reportable, not reportable and less serious events, and near misses submitted to the Patient Safety Reporting System for 2017 from all facilities totaled 814.

Of this total, 596 were deemed reportable with 87 associated deaths. In 2016, the number of reportable events across all facility types was 632 with 79 associated deaths.

An in-depth analysis of the data shows that there were 36 fewer reportable events between 2016 and 2017. The highest drop in reportable events (13) was attributed to general acute care hospitals. The second highest decrease (10) was from ambulatory surgery centers.

There were eight more deaths in 2017 compared to 2016. Of this increase, psychiatric hospitals added four deaths, acute care hospitals accounted for three and ambulatory surgery centers added two more deaths.

Table 1 shows the distribution of events reported to the New Jersey Department of Health, Patient Safety Reporting System by facility types for the year 2017.

Table 1: Reporting Pattern by Facility Type (2017)

| Facility Type | Number of Facilities | Number of Reporting Facilities | Number of Reportable Events | Number of Not Reportable Events | Number of Less Serious/Near Misses | Number of Deaths | Percent Reportable Deaths |
|--|----------------------|--------------------------------|-----------------------------|---------------------------------|------------------------------------|------------------|---------------------------|
| General Acute Care Hospitals | 72 | 72 | 405 | 4 | 59 | 75 | 18.5 |
| Comprehensive Rehabilitation Hospitals | 14 | 11 | 21 | 1 | 6 | 2 | 9.5 |
| Psychiatric Hospitals | 11 | 9 | 19 | 0 | 5 | 4 | 21.1 |
| Special Hospitals | 14 | 8 | 7 | 0 | 3 | 0 | 0 |
| Ambulatory Surgery Centers | 176 | 89 | 144 | 10 | 130 | 6 | 4.2 |
| Total | 287 | 189 | 596 | 15 | 203 | 87 | 14.6 |

Patient Safety Reporting System

III. General Acute Care Hospitals



A. Reporting Patterns (2005-2017)

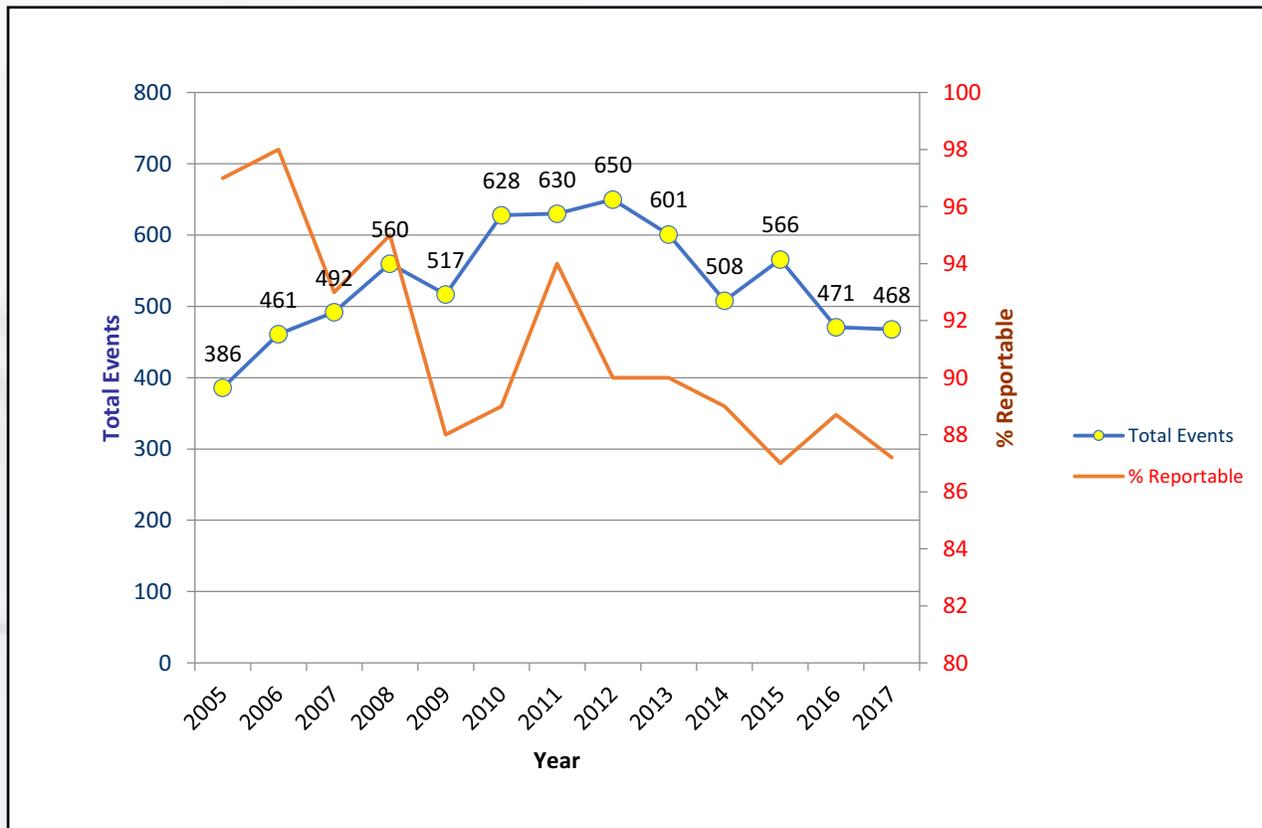
Figure 1 and Table 2 demonstrate the reporting patterns for general acute care hospitals over the past 13 years.

In the early years of the reporting program, adverse events were designated as reportable if they met the statutory definition of a serious preventable adverse event or not reportable.

With the implementation of the web-based system in 2011, PSRS has the ability to capture less serious events and near misses pursuant to the Patient Safety Act.

The percent of not reportable events by general acute care hospitals increased from 11.3 percent in 2016 to almost 13 percent (12.8%) in 2017.

Figure 1: General Acute Care Hospitals: Trends in Reportable Events 2005-2017



III. General Acute Care Hospitals

Table 2: General Acute Care Hospitals: Reportable, Less Serious Events/Near Misses and Not Reportable Events by Year

| Year | Reportable | Not Reportable | Less Serious/Near Misses | Total Events | Percent Not Reportable | Percent Reportable |
|-------------------|------------|----------------|--------------------------|--------------|------------------------|--------------------|
| 2005 ^a | 376 | 10 | NA | 386 | 3 | 97 |
| 2006 | 450 | 11 | NA | 461 | 2 | 98 |
| 2007 | 456 | 36 | NA | 492 | 7 | 93 |
| 2008 | 533 | 27 | NA | 560 | 5 | 95 |
| 2009 | 455 | 62 | NA | 517 | 12 | 88 |
| 2010 | 562 | 66 | NA | 628 | 11 | 89 |
| 2011 | 601 | 10 | 31 | 642 | 6 | 94 |
| 2012 | 587 | 22 | 41 | 650 | 10 | 90 |
| 2013 | 542 | 5 | 54 | 601 | 10 | 90 |
| 2014 | 451 | 2 | 55 | 508 | 11 | 89 |
| 2015 | 491 | 8 | 67 | 566 | 13 | 87 |
| 2016 | 418 | 4 | 49 | 471 | 11 | 89 |
| 2017 | 405 | 4 | 59 | 468 | 13 | 87 |

a: Represents 11 months of data since the program started on February 1, 2005.

Patient Safety Reporting System

III. General Acute Care Hospitals



Since reporting began in February 2005, 6327 reportable adverse events have been submitted by New Jersey general acute care hospitals to the Patient Safety Reporting System (PSRS) through the end of year 2017.

In 2017, the thirteenth year of reporting, 405 reportable events from general acute care hospitals were submitted. The following describes the serious preventable adverse events that occurred in general acute care hospitals.

In 2017, all 72 general acute care hospitals in New Jersey submitted reportable events. The average number of reports per reporting hospital was 5.6. This average does not take into account hospital size and bed capacity.

Please note that starting in 2016 the data includes the actual number of events which occurred in the year 2017. In prior years, the data was collected based on the year the event was reported and could have inflated the number for those years.

Table 3: General Acute Care Hospitals: Reporting Patterns (2005-2017)

| Reporting Year | Number of Reportable events | Hospitals | | | Average number of reports per hospital | Reportable Deaths | Percent of Deaths |
|-------------------|-----------------------------|-----------|------------------|-------------------|--|-------------------|-------------------|
| | | Number | Number Reporting | Percent Reporting | | | |
| 2005 ^a | 376 | 82 | 68 | 82.9 | 5.5 | 57 | 15.2 |
| 2006 | 450 | 81 | 71 | 87.7 | 6.3 | 47 | 10.4 |
| 2007 | 456 | 80 | 75 | 93.8 | 6.1 | 72 | 15.8 |
| 2008 | 533 | 72 | 72 | 100.0 | 7.4 | 75 | 14.1 |
| 2009 | 455 | 72 | 68 | 94.4 | 6.7 | 74 | 16.3 |
| 2010 | 562 | 72 | 71 | 98.6 | 7.9 | 85 | 15.1 |
| 2011 | 601 | 72 | 69 | 95.8 | 8.7 | 89 | 14.8 |
| 2012 | 587 | 72 | 72 | 100.0 | 8.1 | 84 | 14.3 |
| 2013 | 542 | 72 | 72 | 100.0 | 7.5 | 84 | 15.5 |
| 2014 | 451 | 72 | 72 | 100.0 | 6.3 | 75 | 16.6 |
| 2015 | 491 | 72 | 72 | 100.0 | 6.8 | 96 | 19.6 |
| 2016 | 418 | 72 | 68 | 94.4 | 6.1 | 72 | 17.2 |
| 2017 | 405 | 72 | 72 | 100.0 | 5.6 | 75 | 18.5 |

a: Represents 11 months of data since the program started on February 1, 2005.

III. General Acute Care Hospitals

B. Reportable Events and Associated Deaths by Event Category

- ❖ Care Management
- ❖ Environmental
- ❖ Product or Device-Related
- ❖ Surgery-Related
- ❖ Patient Protection

As indicated earlier in the report, there were 405 adverse events reported by New Jersey general acute care hospitals in 2017. There were 75 deaths associated with these adverse events. The events reported are classified into five event categories as follows:

Tables 4 and B provides an overview of reportable events in the event categories with associated deaths. Please see Appendix 1 for the types of events associated with these categories.

Table 4A: General Acute Care Hospitals: Reportable Events and Associated Deaths by Event Category-2017

| Event Category | Total Reportable Events | Percent of Total Events | Total Deaths per Events | Percent Deaths per Event Category |
|-----------------------|-------------------------|-------------------------|-------------------------|-----------------------------------|
| A: Care Management | 99 | 24.4 | 33 | 44.0 |
| B: Environmental | 144 | 35.6 | 11 | 14.7 |
| C: Product or Device | 3 | 0.7 | 2 | 2.7 |
| D: Surgery-Related | 90 | 22.2 | 27 | 36.0 |
| E: Patient Protection | 69 | 17.0 | 2 | 2.7 |
| Total | 405 | 100.0 | 75 | 100.0 |



**Table 4B: General Acute Care Hospitals:
Reportable Events and Associated Deaths by Event Category-2017**

| Event Category | Total Reportable Events | Total Deaths per Event |
|--|-------------------------|------------------------|
| A: Care Management | 99 | 33 |
| <u>Care Management Other</u> | <u>49</u> | <u>27</u> |
| <u>Medication Error</u> | <u>8</u> | <u>5</u> |
| <u>Maternal Labor (Low Risk Pregnancy)</u> | <u>1</u> | <u>1</u> |
| B: Environmental | 144 | 11 |
| <u>Fall</u> | <u>138</u> | <u>10</u> |
| <u>Restraints</u> | <u>3</u> | <u>1</u> |
| C: Product or Device | 3 | 2 |
| <u>Air Embolism</u> | <u>3</u> | <u>2</u> |
| D: Surgery-Related | 90 | 27 |
| <u>Intra/Post-Op, Coma/Death/Other Event</u> | <u>26</u> | <u>15</u> |
| <u>Surgical Other</u> | <u>16</u> | <u>12</u> |
| E: Patient Protection | 69 | 2 |
| <u>Suicide/Attempted Suicide</u> | <u>67</u> | <u>2</u> |
| Total | 311 | 75 |

III. General Acute Care Hospitals

As Tables 4 and B demonstrate, the care management event category had the highest number of associated deaths (33 out of 75) or 44 percent of all deaths. The second highest category for reported deaths was surgery-related (27, same as last year) followed by environmental (11). Product/Device malfunction and Patient Protection each accounted for two deaths.

For individual surgery-related event types, retained foreign objects had the highest number of reported events (29); however, this was a decrease of nine (9) from 2016. Consistent with 2015 and 2016, there were no deaths associated with this event. The second highest reported event was for intra-operative or post-operative events (26). There were 15 deaths related to this event type.

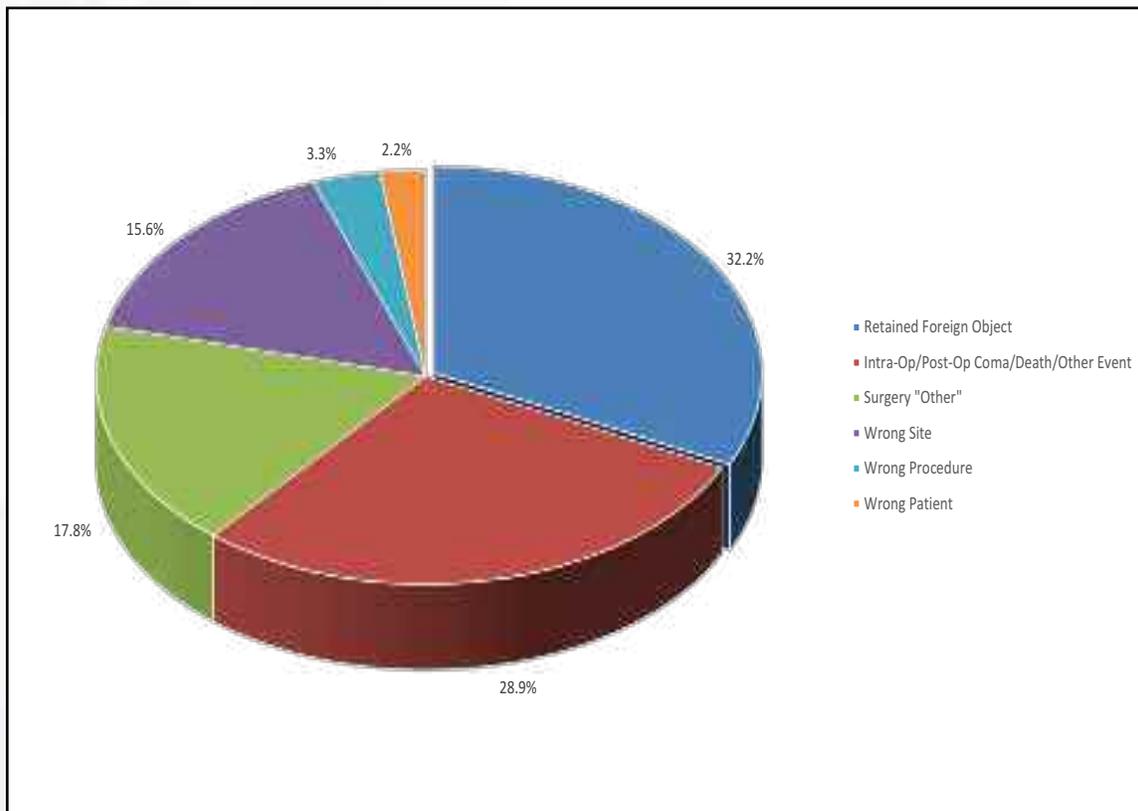
Table 5 and Figure 2 show the results.

Table 5: Surgery-Related Event Types with Associated Deaths

| Event Type | Reportable Events | Number of Deaths | Percent of Deaths by Event Type |
|--|-------------------|------------------|---------------------------------|
| Retained Foreign Object | 29 | 0 | 0.0 |
| Intra-Op/Post-Op Coma/Death/Other Event | 26 | 15 | 55.6 |
| Surgery "Other" | 16 | 12 | 44.4 |
| Wrong Site | 14 | 0 | 0.0 |
| Wrong Procedure | 3 | 0 | 0.0 |
| Wrong Patient | 2 | 0 | 0.0 |
| Total | 90 | 27 | 30.0 |



Figure 2: General Acute Care Hospitals: Distribution of Surgery-Related Events



III. General Acute Care Hospitals

C. Events Types Associated with Highest Percent Deaths

Table 6 shows the event types with the highest percentage of deaths. In aggregate, the four event types identified below had a total of 229 reportable events which represent

56.5 percent of all events reported. However, the total number of deaths associated with these four events was 64 deaths and accounted for more than 85 percent (85.3%) of all deaths in 2017.

Table 6: General Acute Care Hospitals: Event Types Associated with Highest Percent Deaths

| Event Type | Number of Events | Number of Deaths | Percent Deaths to Events |
|---|------------------|------------------|--------------------------|
| Care Management "Other" | 49 | 27 | 55.1 |
| Intra-Op/Post-OP Coma, Death or Other Event | 26 | 15 | 57.7 |
| Surgery-Related "Other" | 16 | 12 | 75.0 |
| Fall | 138 | 10 | 7.2 |
| All Other Event Types | 176 | 11 | 6.2 |
| Total | 405 | 75 | 18.5 |



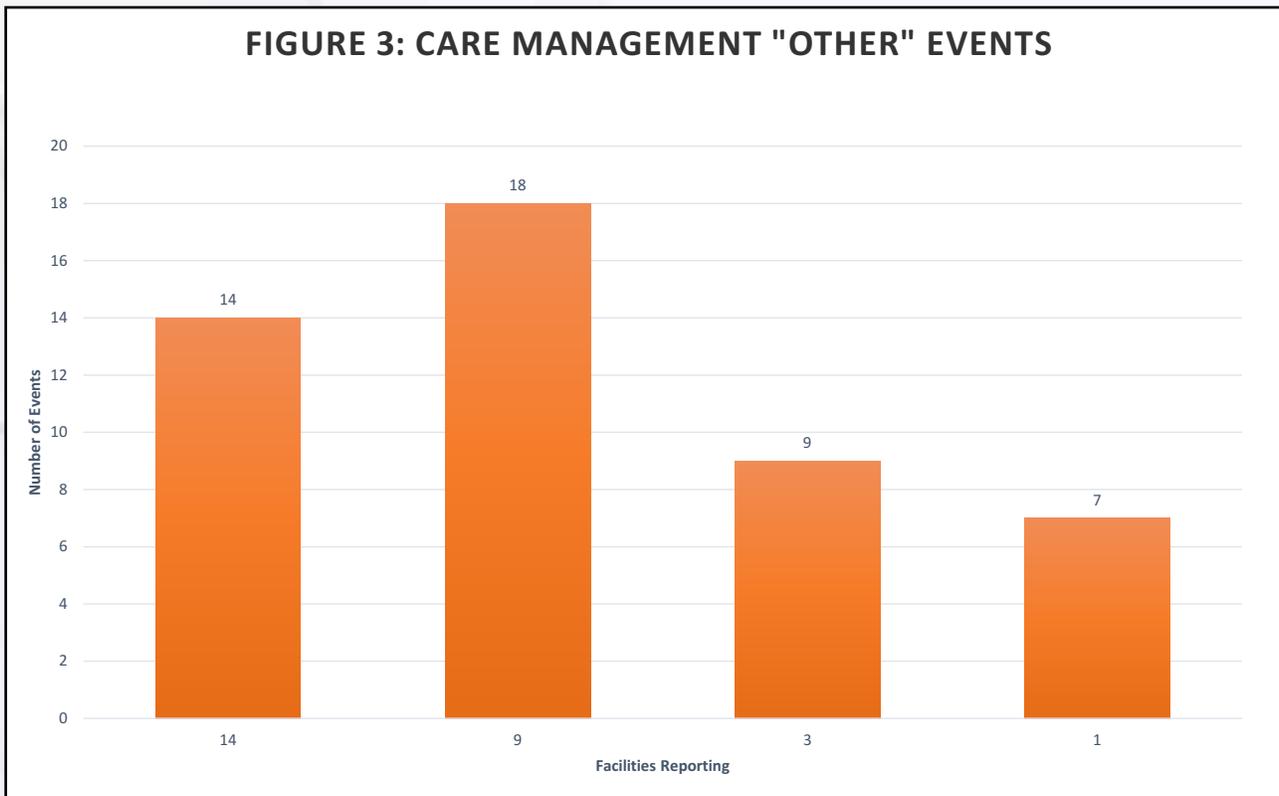
1. Care Management “Other” Events

Twenty-seven out of 49 patients who received care in this event category died (55.1%). In 2016, 52.4% of care management “other” events resulted in death. Table 6 shows the results. Care management “other” events include care management related events which do not meet the definition of the specific care management event types, such as medication errors and pressure ulcers. Events must meet the statutory definition of a serious preventable adverse event.

Care management “other” events have consistently been associated with one of the highest percentage of deaths and the number of

deaths per year has remained relatively constant. There were 62 events in 2014, 65 in 2015, 63 in 2016 and 49 in 2017. There were six events that occurred to a newborn/neonate. Forty-nine events were submitted by general acute care hospitals as follows. See table below.

Examples of events reported for this event type in 2017 include delays in responding to non-reassuring fetal heart rate tracings, delays in reporting or processing critical lab or EKG results, missing pathology specimen, incorrect placement of feeding tubes, IV extravasations/infiltrations, unexplained fractures, and failure to adequately monitor patients on cardiac monitors. Approximately 35% of all care management “other” events were related to a delay in care.



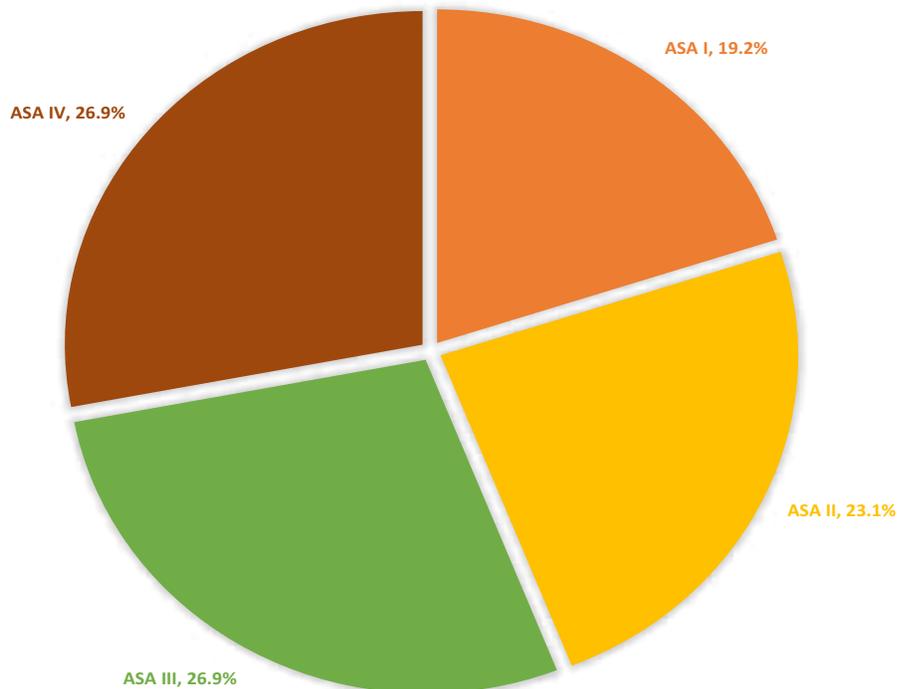
III. General Acute Care Hospitals

2. Intraoperative or Postoperative Coma, Death or Other Serious Event Preventable Adverse Event

There were 26 reports of intraoperative or postoperative (that is, within 24 hours) coma, death or other serious preventable adverse event in 2017 compared to 36 in 2016. The number of deaths decreased from 18 in 2016 to 15 in 2017.

Based on the American Society of Anesthesiology (ASA) classification, the patients fell into the following classifications: ASA Class I: 5 (19.2%), ASA Class II: 6 (23.1%), ASA Class III: 7 (26.9%), and ASA Class IV: 7 (26.9%). See chart below.

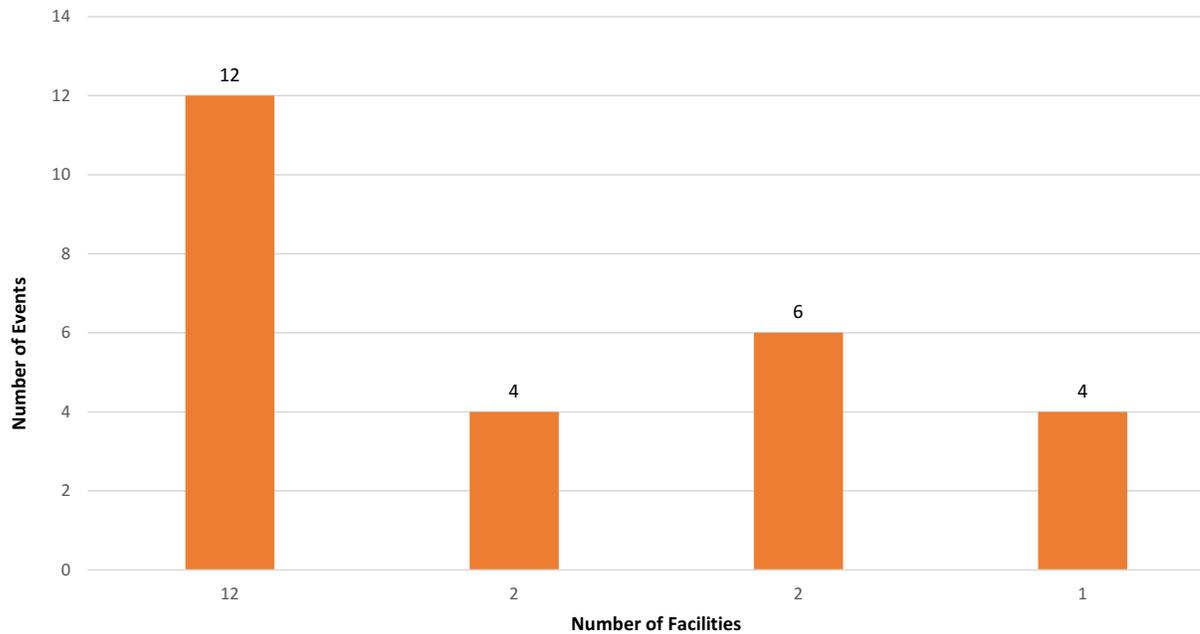
FIGURE 4: ASA CLASSIFICATION





The 26 events were reported as follows by facilities:

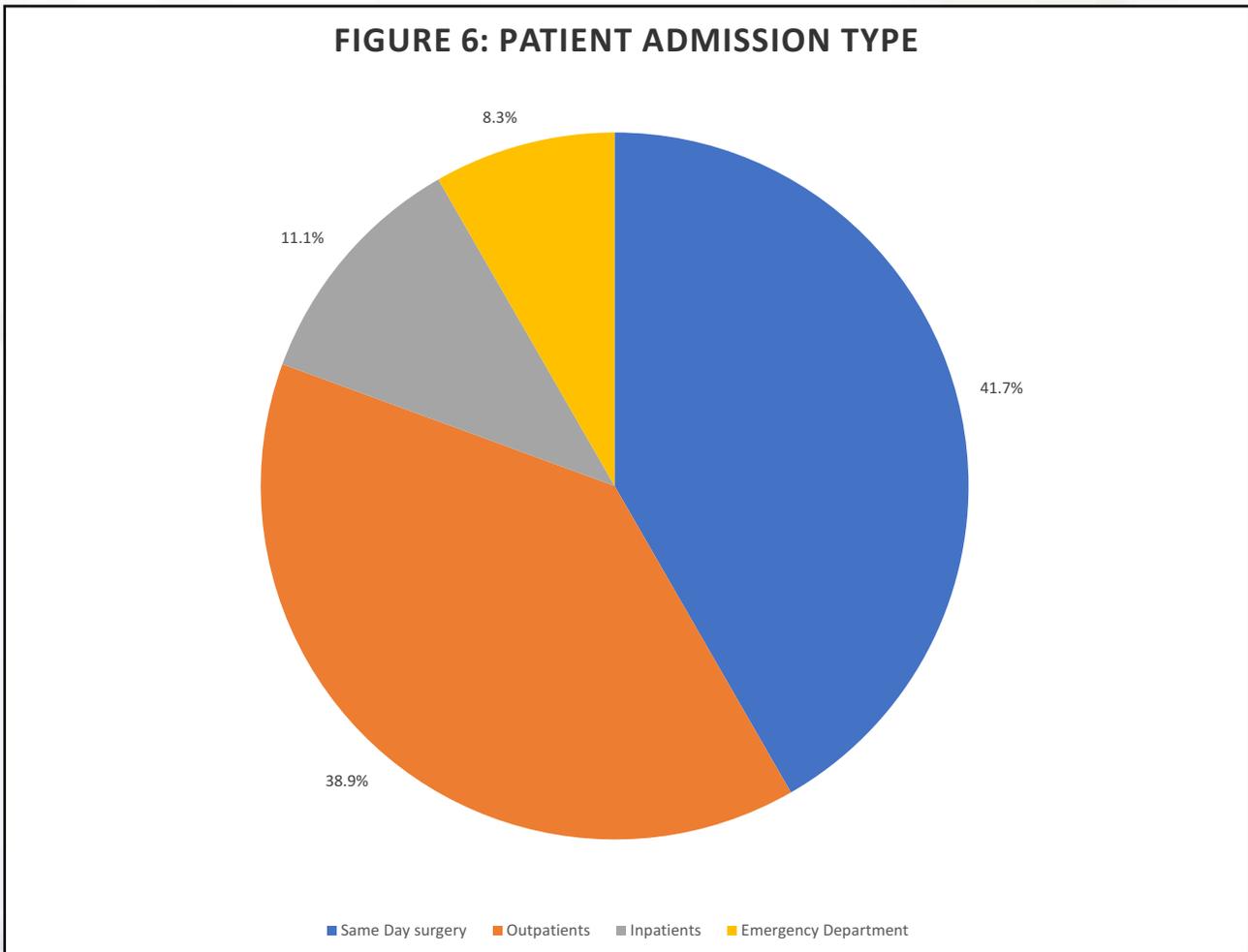
FIGURE 5: NUMBER OF FACILITIES REPORTING INTRA OP/POST-OP EVENTS



III. General Acute Care Hospitals

Events reported for this event type in 2016 were similar to past years and included death, cardiorespiratory arrest, ischemic leg following cardiac catheterization, infarct of brainstem and cerebellum following cervical fusion, hypotension (low blood pressure), blood vessel lacerations, perforations during or immediately (within 24 hours) following surgery.

The events occurred to the following types of patients as shown in the chart below:



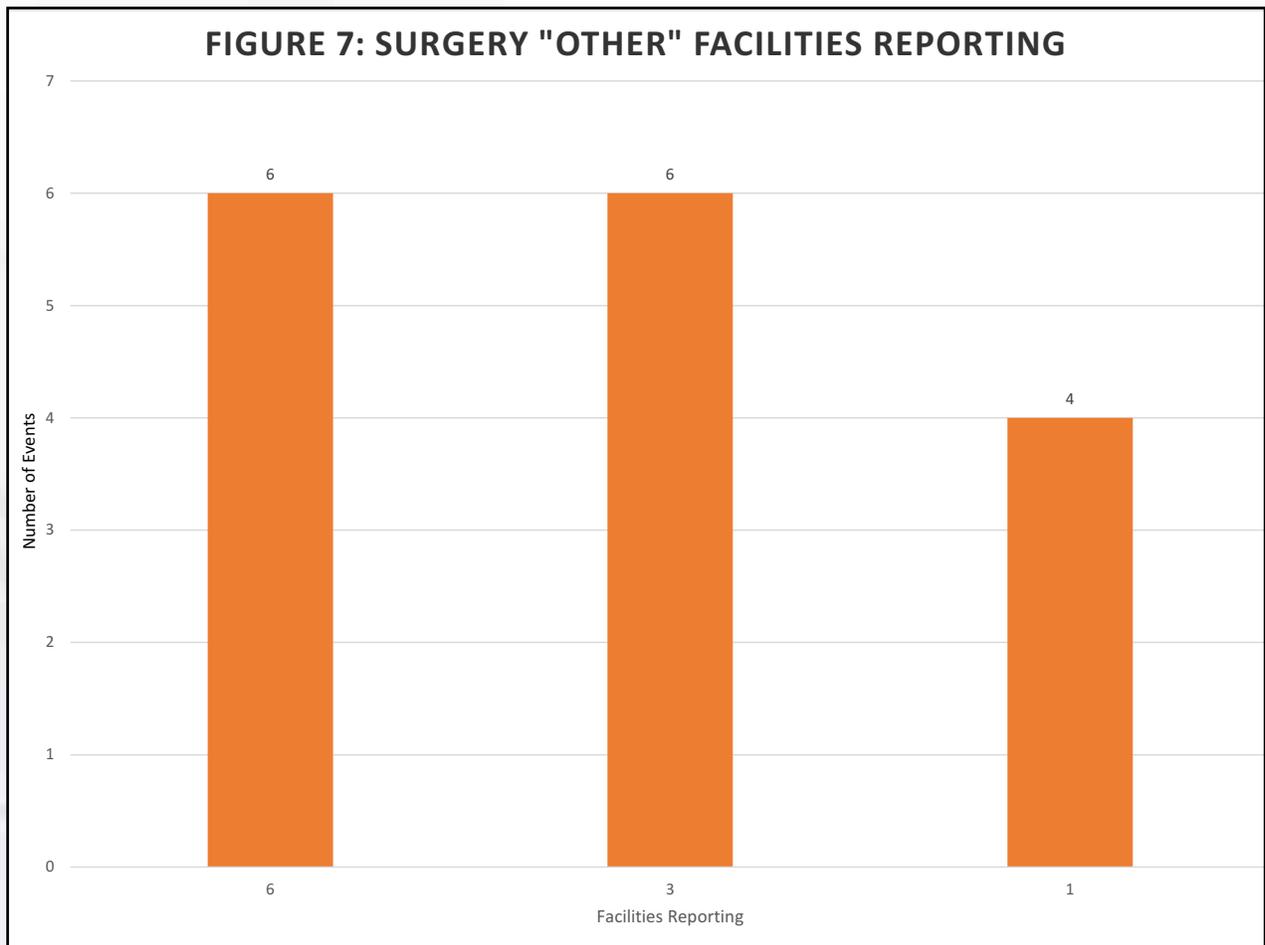


3. Surgery "Other" Events

Surgery "other" events include surgery-related events which do not meet the definition of the specific surgery event types, such as retained foreign objects, intraoperative or postoperative events and wrong site surgery events.

The number of reported events for this event type was 16 in 2017 compared to 25 in 2016. The number of deaths increased from 9 in 2016 to 12 in 2017.

Ten facilities reported 16 events as follows:

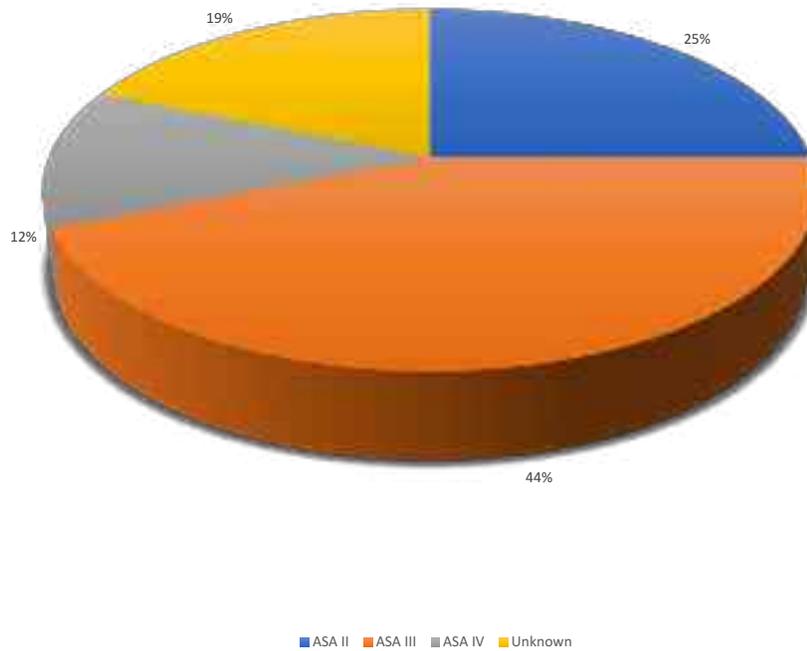


III. General Acute Care Hospitals

Of the 16 events submitted, seven of the patients were designated as ASA Class III (43.8%), four additional patients were designated as ASA Class II (25.0%) and two as ASA Class IV (12.5%). The remaining three were classified as unknown.

As in previous years, events reported for this event type in 2017 included death, spinal cord compression, compartment syndrome, major vessel lacerations, organ perforations, surgical site infections and sepsis.

FIGURE 8: SURGERY "OTHER" ASA CLASSIFICATIONS



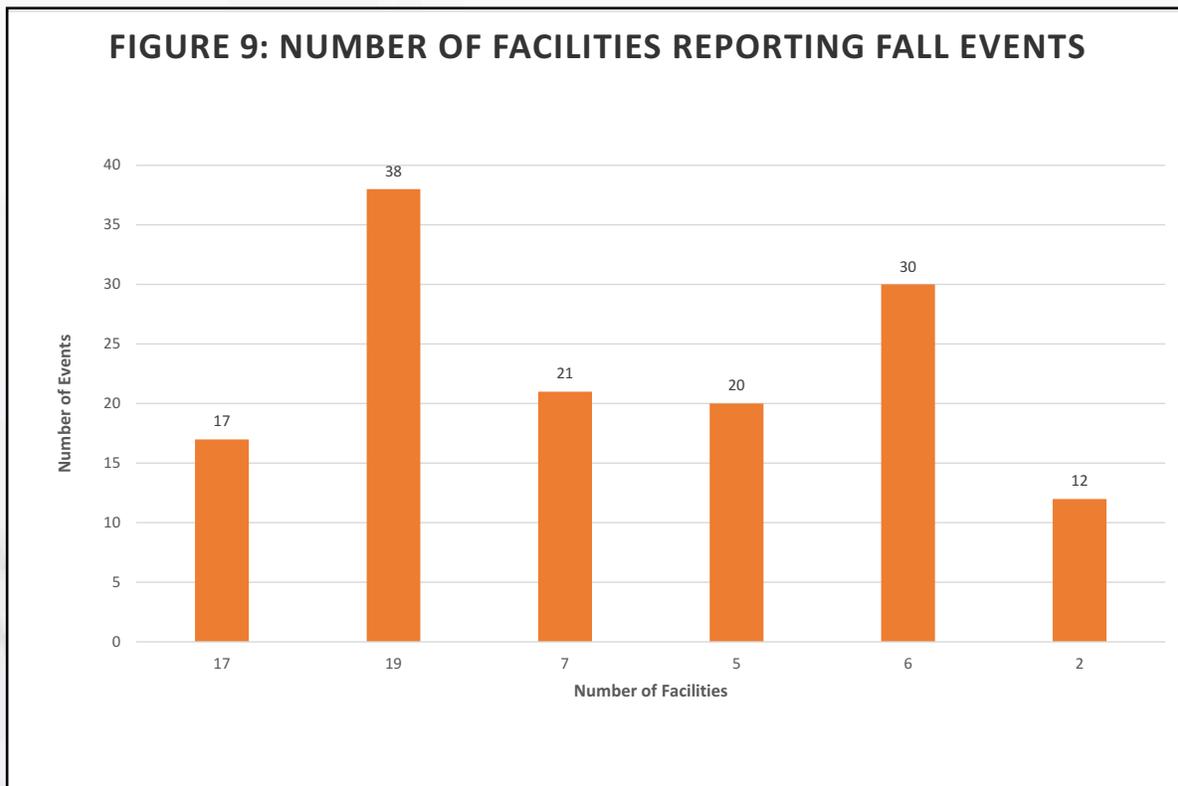


4. Fall Events

Falls continue to be the most frequently reported event submitted to the Patient Safety Reporting System. The number of reported falls in 2017 was 138. This number was higher than the number reported in 2016 (123).

There were 10 reported deaths from these events, compared to eight in 2016.

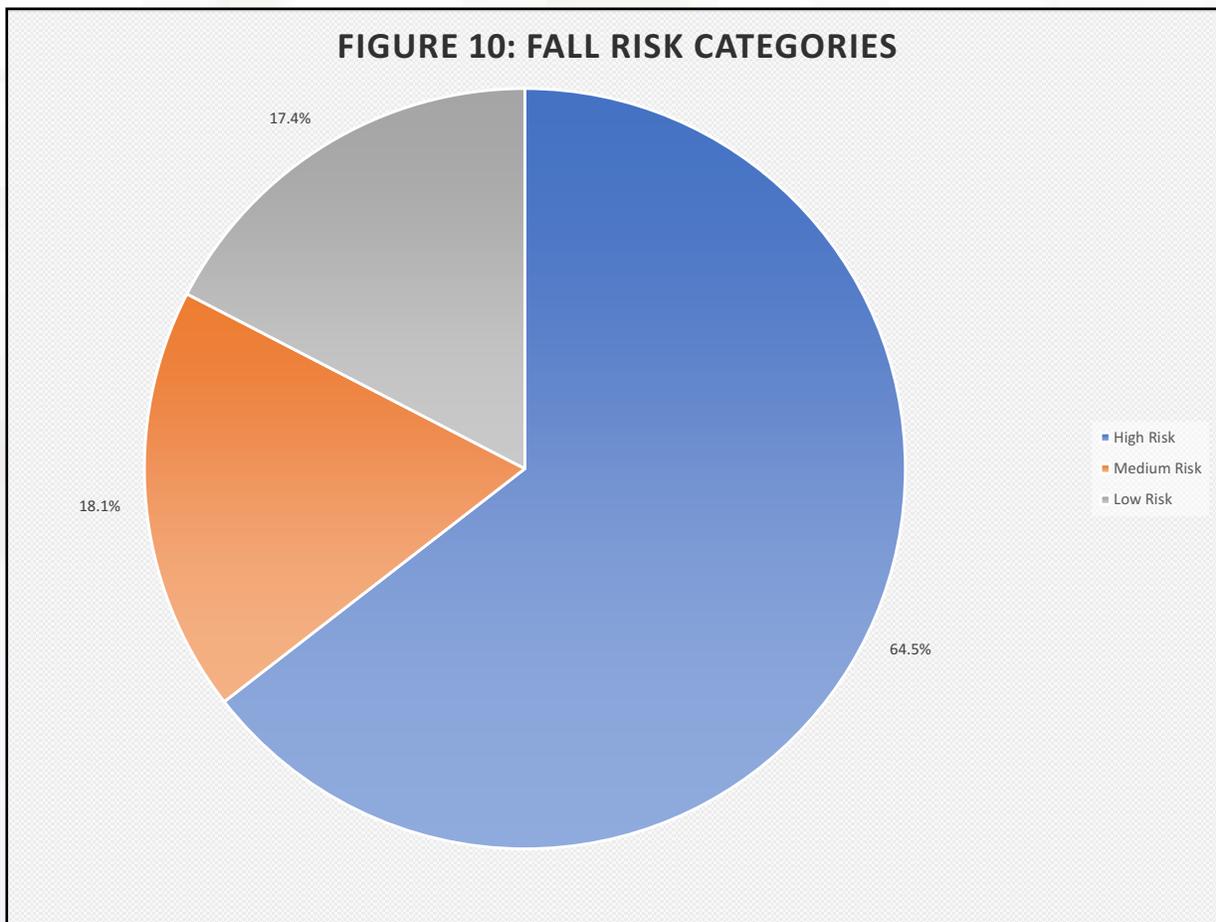
Fifty-six hospitals submitted the 138 fall events as follows:



III. General Acute Care Hospitals

There were 10 deaths associated with falls. One-half of the patient deaths occurred in the Med/Surg Unit. Two deaths occurred in the ICU/CCU/Telemetry unit and the other at the stepdown unit.

Prior to the fall, 89 patients (64.5%) were known to be at high risk, 25 (18.1%) were at medium risk, and 24 (17.4%) were considered to be at low risk for falls.

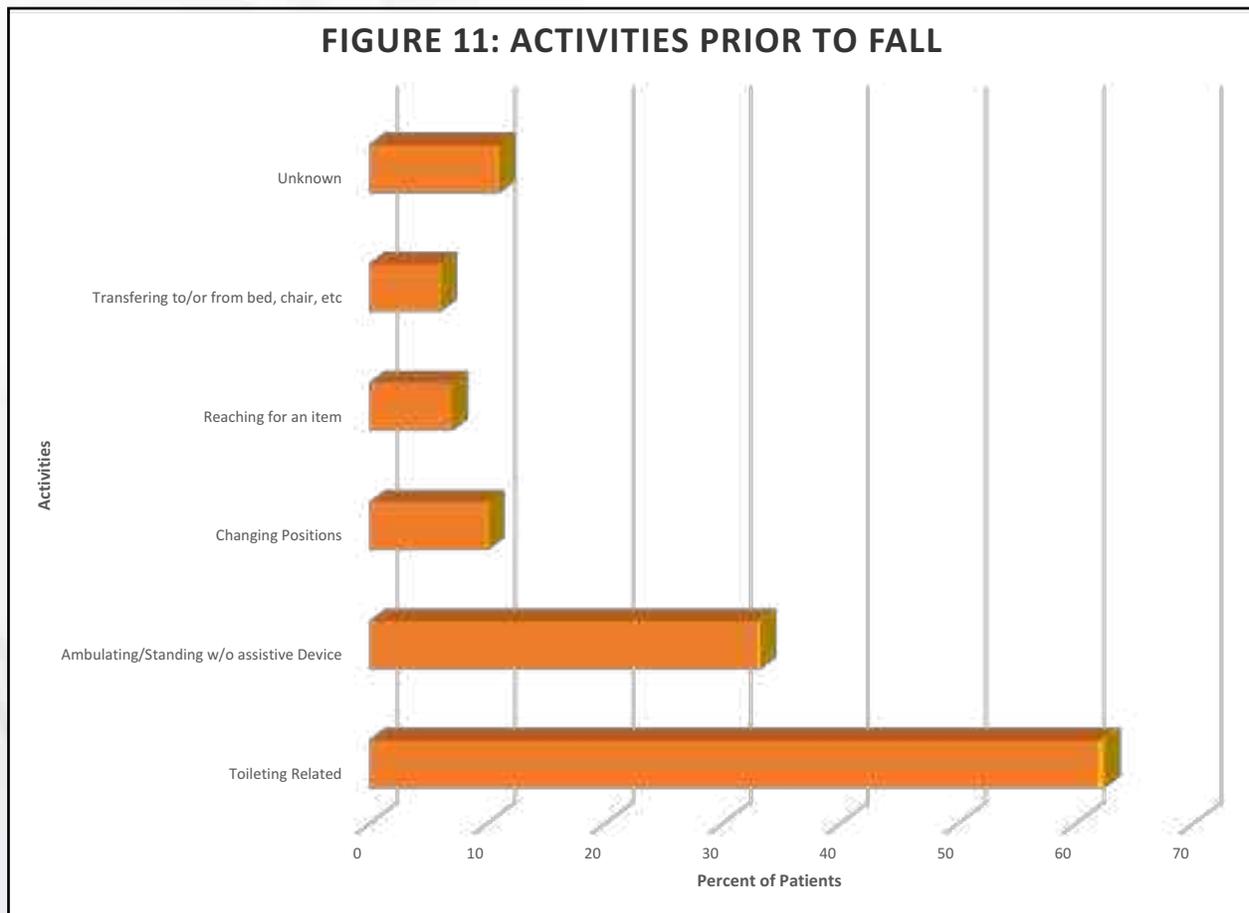


Patient Safety Reporting System

III. General Acute Care Hospitals



The chart below shows majority of the patients were engaged in various activities prior to the fall:

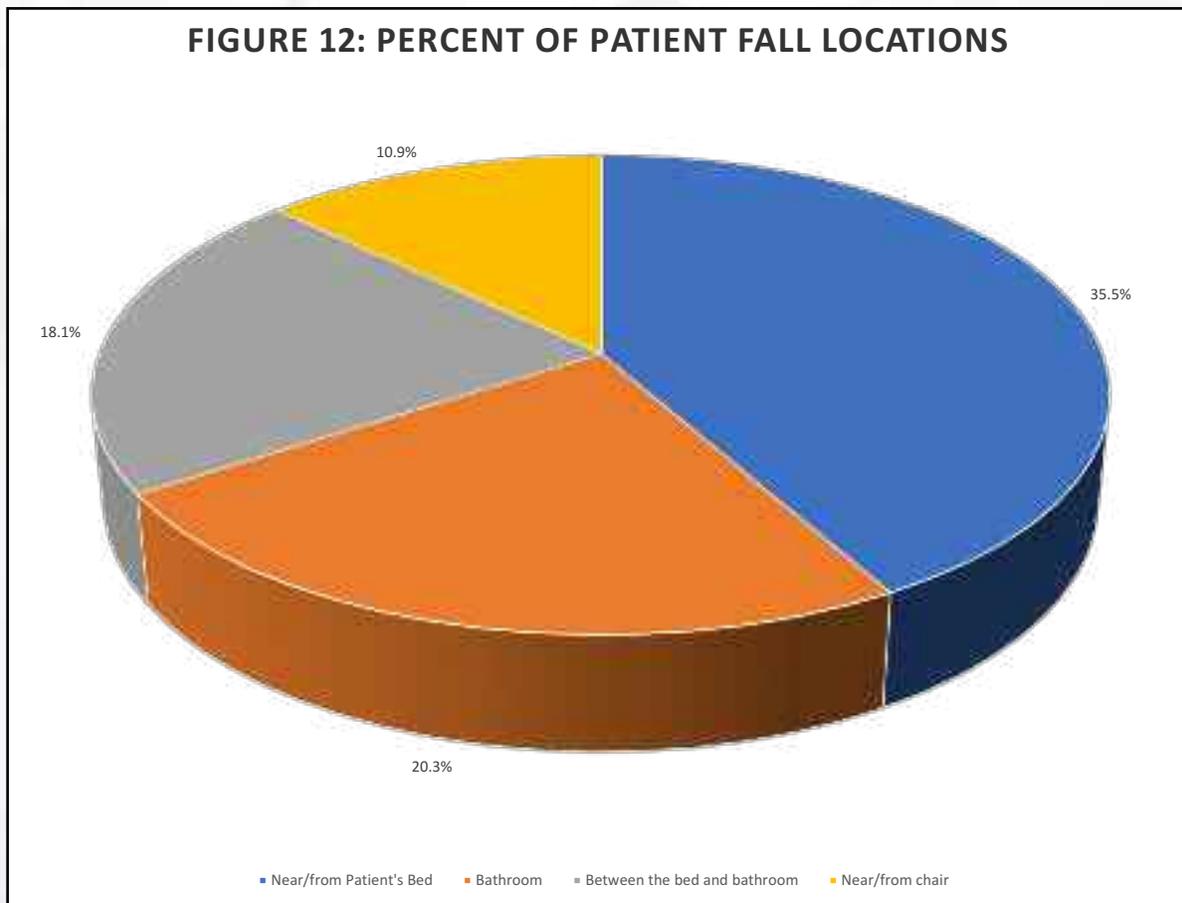


III. General Acute Care Hospitals

As in the past, a fall risk screening tool was used to assess the patient’s risk prior to the fall. The most prevalent screening tool used was the Morse Fall Risk Assessment (62, 44.9%). The next mostly used tool was the Johns Hopkins Fall Risk Assessment Tool (49, 35.5%), the Hendrich/Hendrich II Fall Risk Assessment (6, 4.3%). Six patients were assessed by using Facility developed or “Other” risk assessment tools (6, 4.3%).

More than one-half of the patients (73, 52.9%) were observed on patient rounds less than 30 minutes prior to the fall and less than 1 hour prior to the fall (43, 31.2%). For five of the events (5, 3.6%), the last patient rounds occurred more than 2 hours prior. There were five events for which the last time rounds was “unknown”.

Similar to 2016, a majority of the falls occurred in the locations shown in the chart below.



Patient Safety Reporting System

III. General Acute Care Hospitals



Fall Patient Care Specifics

Percent
Yes

| | |
|---|-------|
| A fall team regularly evaluates the falls program | 100.0 |
| A fall risk screening was documented at admission | 94.9 |
| A validated, reliable fall risk screening tool was used | 95.6 |
| The screening tool indicated that the patient was at risk for a fall if used | 86.2 |
| The patient had a history of a fall prior to admission | 38.0 |
| The patient was placed at risk due to clinical judgement, if applicable | 45.5 |
| The facility's universal fall precautions were in place for this patient, if applicable | 90.2 |
| The patient was re-evaluated during each nursing shift, if applicable | 98.4 |
| The patient was re-evaluated upon transfer between units, if applicable | 98.5 |
| The patient was re-evaluated upon change in status, if applicable | 96.7 |
| The patient was re-evaluated post fall, if applicable | 94.0 |
| There was a visual indication alerting staff to patient's at-risk status | 81.0 |
| A fall prevention intervention plan was documented | 85.4 |
| The fall prevention plan focused on the patient's specific risk factors | 78.8 |
| The patient/family education was completed | 86.1 |
| Side rails were in proper position, if applicable | 97.9 |
| Restraints were used | 0.7 |
| The patient was wearing non-skid footwear | 89.1 |
| Footwear fit properly, if applicable | 100.0 |
| The patient was on culprit medication within 6 hours of the fall | 38.0 |

III. General Acute Care Hospitals

D. Most Frequently Reported Event Types

As shown in Table 7 below, almost 94 percent of events submitted in 2017 were for the following specific events: fall, care management “other”, suicide/attempted suicide, pressure ulcer, retained foreign

object, intra-op/post-op coma/death or other serious events and surgery-related “other”. Cumulatively, these events were the most frequently reported and accounted for 90.1 percent of all events reported in 2017.

Figure 3 shows the reporting trends for these event types from 2014 to 2017.

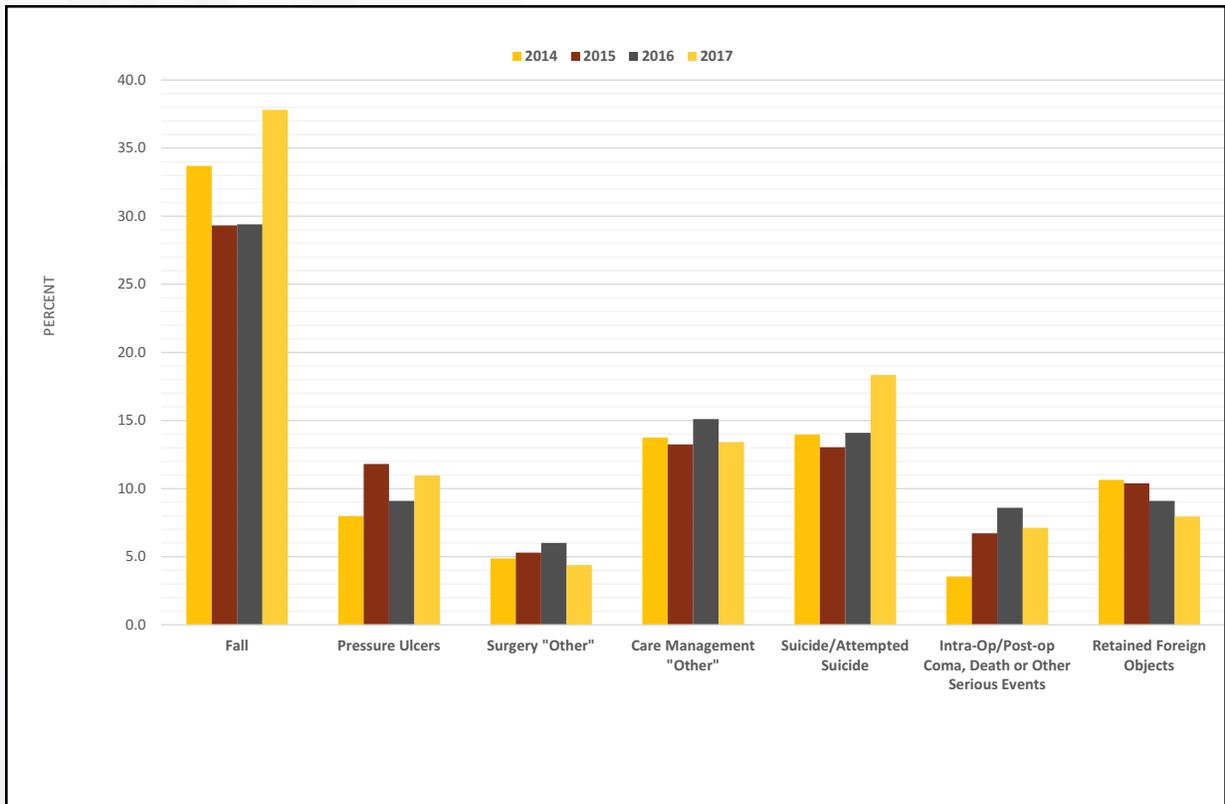
Table 7: General Acute Care Hospitals: Most Frequently Reported Event Types-2017

| Event Type | Number of Reportable Events | Percent of Events ^a |
|--|-----------------------------|--------------------------------|
| Fall | 138 | 34.1 |
| Suicide/Attempted Suicide | 67 | 16.5 |
| Care Management “Other” | 49 | 12.1 |
| Pressure Ulcer | 40 | 9.9 |
| Retained Foreign Object | 29 | 7.2 |
| Intra-Op/Post-Op Coma, Death or Other Serious Adverse Events | 26 | 6.4 |
| Surgery “Other” | 16 | 4.0 |
| All Other Events | 40 | 9.9 |
| Total | 405 | 100.0 |

Note: Falls, care management “other” events, intra-op/post-op coma, death or other serious adverse events and surgery-related “other” events have been described in the prior section titled “Event Types Associated with the Highest Percent Deaths.”



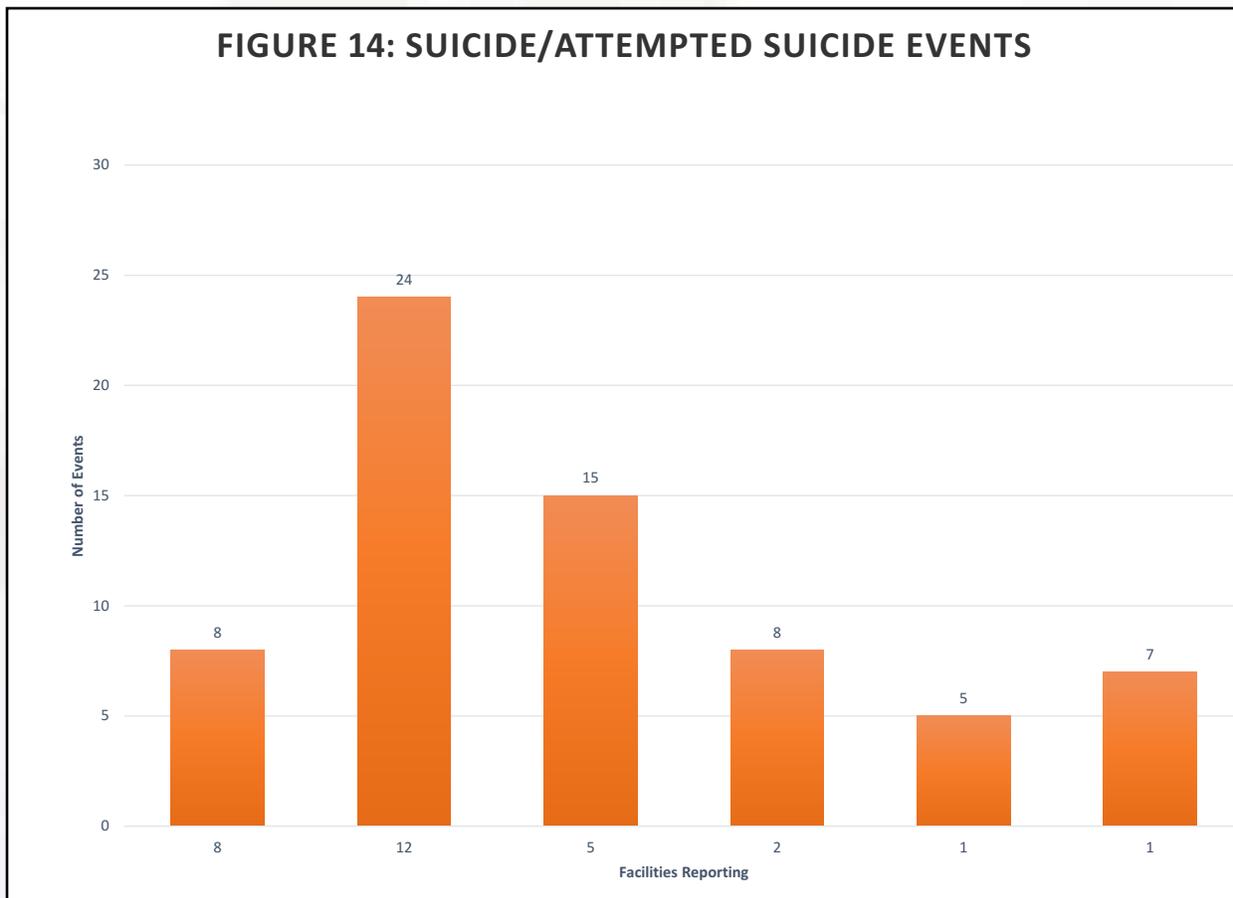
Figure 13: Most Frequently Reported Event Types 2014-2017



III. General Acute Care Hospitals

1. Suicide/Attempted Suicide Events

There were 67 reportable adverse events for this event type in 2017, an increase of eight from 2016 (59). In 2017, the 67 suicide attempts were submitted by 29 hospitals.



Patient Safety Reporting System

III. General Acute Care Hospitals

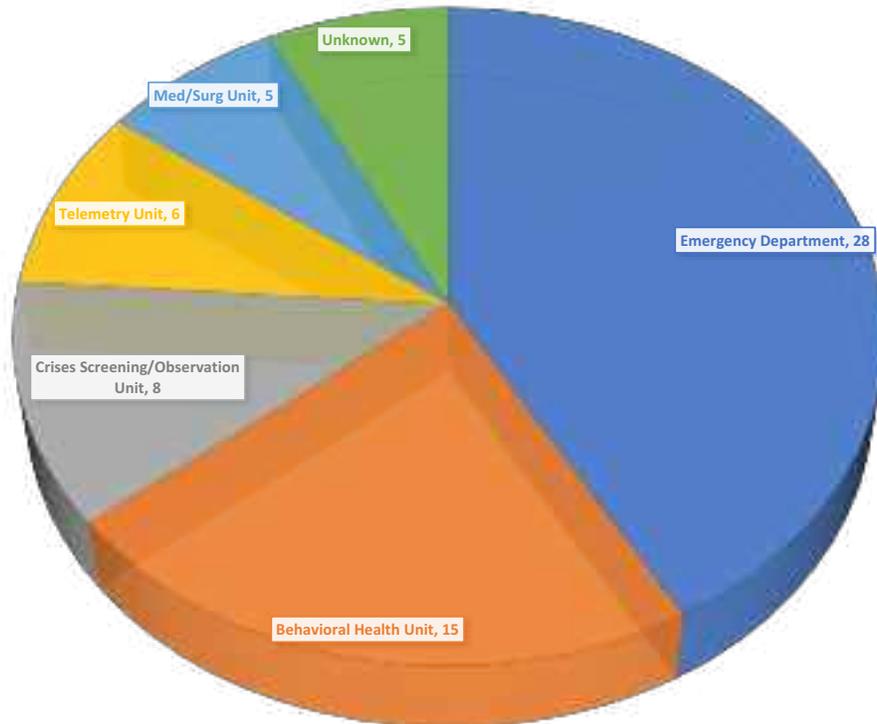


Prior to the suicide attempt, more than half of the patients (41, 61.2%) were considered at risk and 30 (44.8%) were seen by a psychiatrist. Forty-one patients had a prior suicide attempt. Fifty-six (83.4%) of the patients saw a psychiatrist after the attempted suicide event. At the time of the event, the following levels of observation were in place: 19 patients (28.4%) were on 1:1, 23 (34.3%) were on 15-minute checks, 10 on hourly visits, and the rest on other observation.

The events reported mostly occurred in the Emergency Department, the Behavioral Health Unit, the Emergency Crisis Screening/Observation Unit, Telemetry unit and Med/Surg unit. See table below.

There were two suicide-related death in 2017; one occurred in the patient's room in the Emergency Department unit and the other in the Hallway/Common Area within the Emergency Department.

FIGURE 15: SUICIDE/ATTEMPTED SUICIDE EVENT LOCATIONS



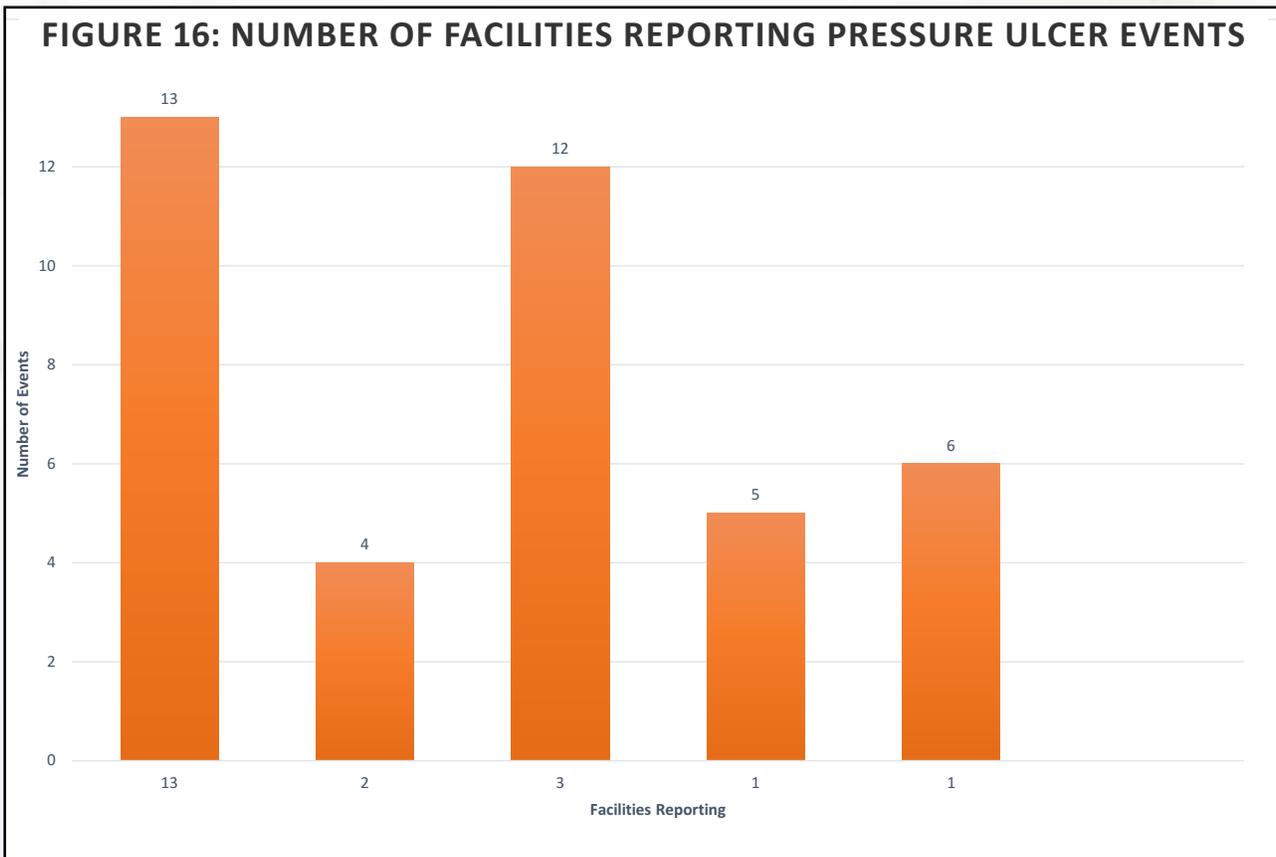
III. General Acute Care Hospitals

2. Pressure Ulcers

In 2017, there were 40 healthcare associated pressure ulcers compared to 38 in 2016, an increase of two events.

The 40 pressure ulcer events were submitted by 20 hospitals.

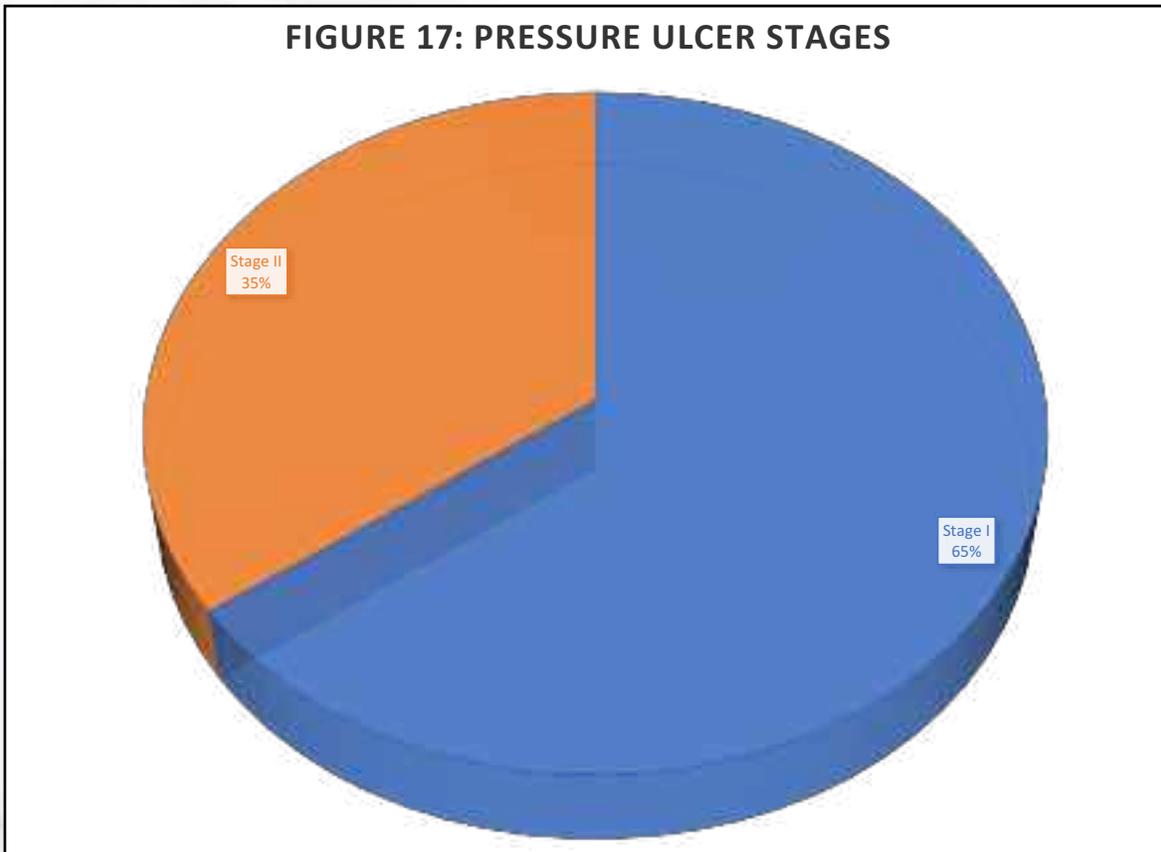
Over one half (22) of the ulcers reported were located in the sacrum, six were on the buttocks and nine were classified as “other”.





Of the 40 events, 26 or 65.0 percent were Stage I and the rest Stage II.

FIGURE 17: PRESSURE ULCER STAGES



Pressure Ulcer Patient Characteristics:

Most of the patients (15 out of 40) who had pressure ulcer were diagnosed as being clinically malnourished, diabetic, incontinent, experienced heart failure and had various neurological /neuromuscular conditions. Eight (20.0%) patients received dialysis, were

incontinent as well as clinically malnourished. Others (17.5%) were categorized as being morbidly obese and with a body mass index (BMI) of 40 or greater.

III. General Acute Care Hospitals

Pressure Ulcers Patient Care Specifics

Percent Yes

| | |
|---|-------|
| Pressure ulcer risk assessment (Braden) was documented on admission and daily | 92.5 |
| Skin inspection was documented on admission and daily | 85.0 |
| Removal of devices such as stockings and splints was documented each shift, if applicable | 93.8 |
| Staff used documented care plan | 100.0 |
| Patients with impaired sensory perception, mobility and activity were repositioned every 2 hours | 87.5 |
| Patients with impaired sensory perception, mobility and activity had heels lifted off bed | 95.0 |
| Patients with impaired sensory perception, mobility and activity had appropriate support surfaces | 95.0 |
| Patients with friction/shear risk as defined by Braden scale had HOB 30 degrees or less | 82.5 |
| The patient refused repositioning | 25.5 |
| The patient had an unstable condition that prohibited repositioning | 27.5 |
| The patient had a long ambulance or other transport time | 0.0 |
| Pressure ulcer was possibly related to a surgery/procedure | 16.1 |
| Patients with nutritional deficits were followed by dietary services | 100.0 |
| Pain assessment and management adequately performed | 100.0 |
| Incontinence was addressed, if applicable | 93.8 |
| Patient/family skin safety education and patient response was documented | 91.9 |



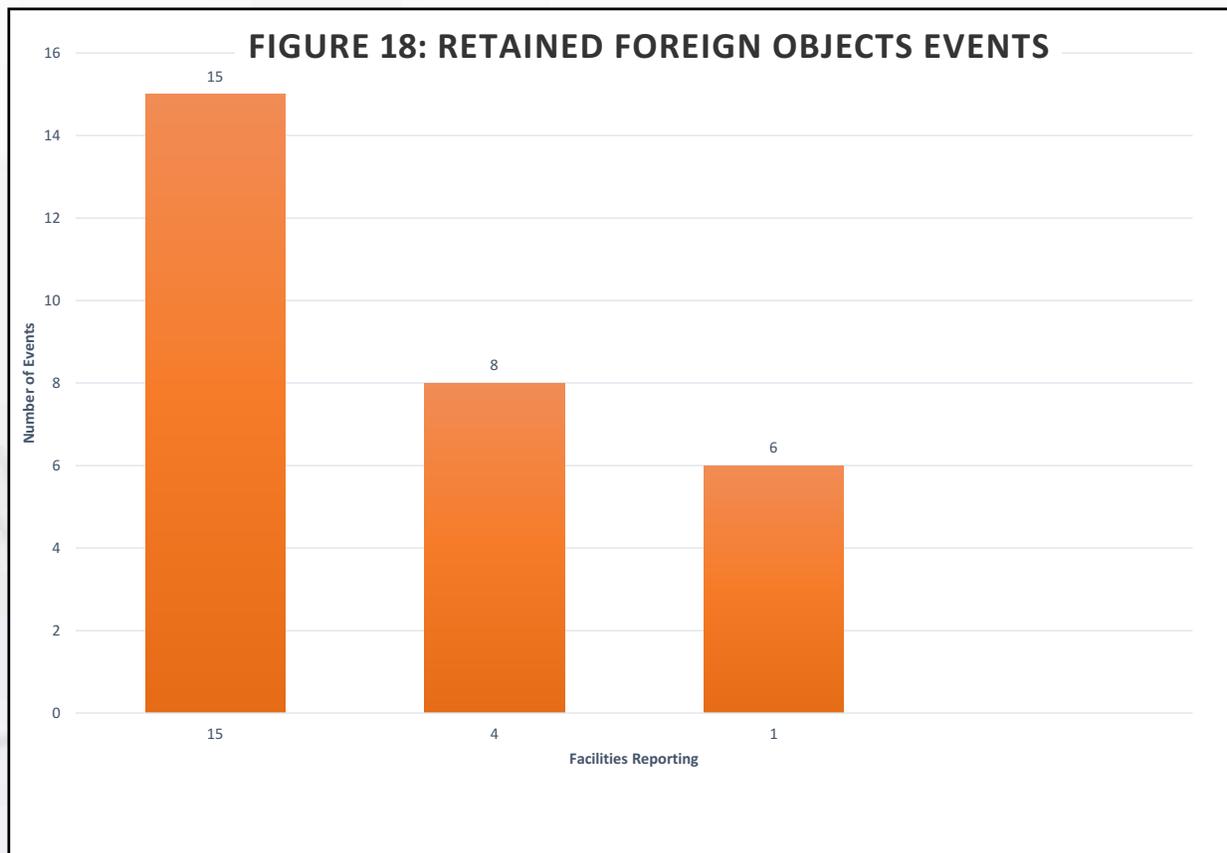
3. Retained Foreign Objects

There were 29 retained foreign object events submitted in 2017 compared to 38 in 2016. This represents a decrease of 9 or 23.4 percent from 2016. There were no deaths associated with these events.

Figure 18 shows the number of facilities reporting the events.

Of the 29 RFOs, 8 were sponges/gauze, two were lap pads, and the rest were “other”.

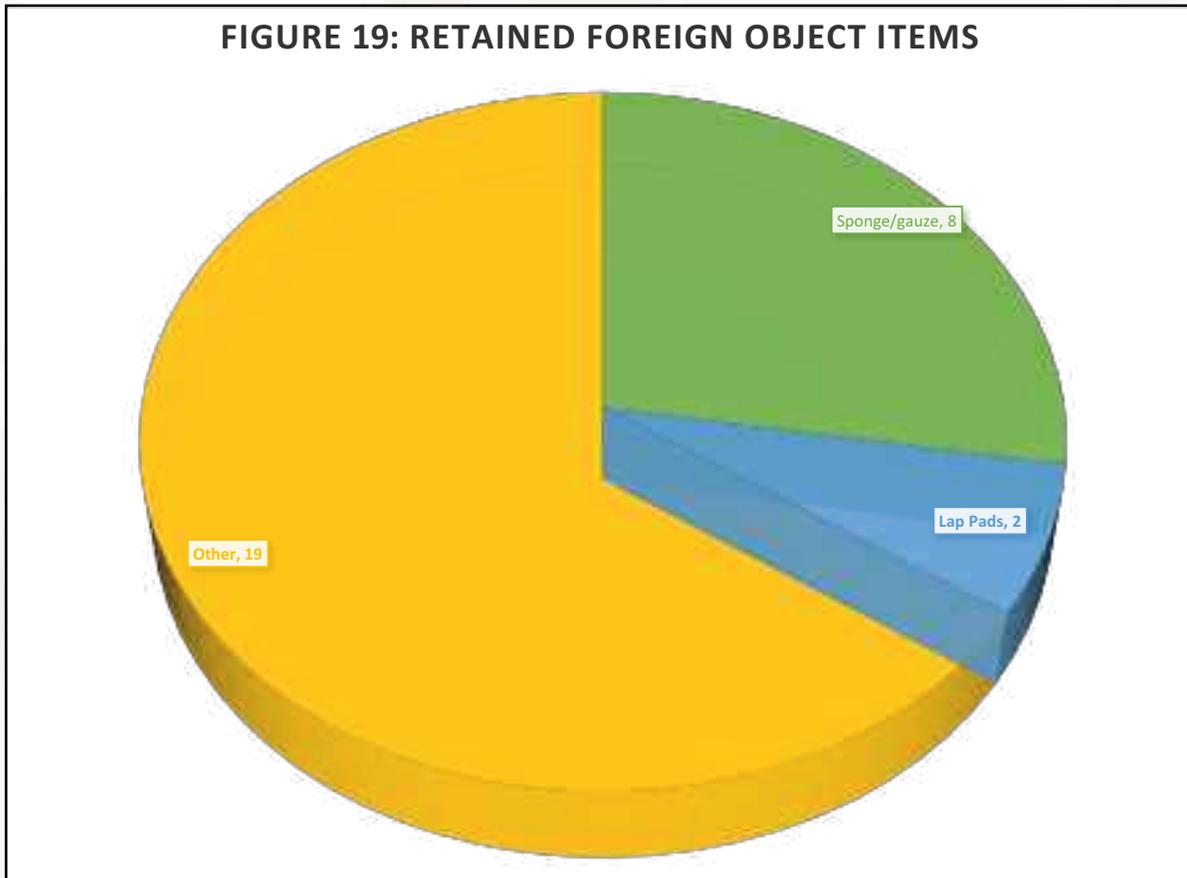
Examples of other RFOs included a surgical towel, vaginal prep stick, umbilical tape, hemovac drain, gauze inside of a glove, piece of a cardiac stent, and piece of a drain.



III. General Acute Care Hospitals

Twenty out of the 29 patients (68.9%) required a second surgery to remove the object.

FIGURE 19: RETAINED FOREIGN OBJECT ITEMS





E. Major Root Causes for All Events

In 2017, the most frequent root causes of adverse events reported to PSRS were care planning process (47.9%), communication among staff (31.4%), patient observation procedures (13.3%), “other” (12.8%), orientation and training of staff (12.6%), and physical assessment process (12.6%).

The root cause of “other” signifies that the hospital did not initially identify a system root cause for the event.

General acute care hospitals averaged almost two root causes per reportable event.

Table 8 shows the major types of root causes reported and the percent of all adverse events caused by each.

Table 8: General Acute Care Hospitals: Major Root Causes for All Events^a

| Root Cause | Number of Events | Percent of Events ^a |
|-----------------------------------|------------------|--------------------------------|
| Care Planning Process | 194 | 47.9 |
| Communication Among Staff Members | 127 | 31.4 |
| Patient Observation Procedures | 54 | 13.3 |
| “Other” | 52 | 12.8 |
| Orientation and Training of Staff | 51 | 12.6 |
| Physical Assessment Process | 51 | 12.6 |

a: Data drawn from 405 RCAs submitted for 2017 events.

III. General Acute Care Hospitals

F. Contributing Factors to All Events

Table 9 shows the most frequently identified factors that contributed to the adverse events reported to the Patient Safety Reporting System.

Table 9: General Acute Care Hospitals: Contributing Factors to All Events^a

| Contributing Factors | Number of Events | Percent of Events ^a |
|---|------------------|--------------------------------|
| Patient Characteristics <i>(May include confusion, co-morbidities and the patient's choice to refuse care.)</i> | 286 | 70.6 |
| Task Factors <i>(May include tasks performed incorrectly, omitted or characteristics of the task such as complexity.)</i> | 233 | 57.5 |
| Team Factors <i>(May include factors which interfere with the care team working together, such as inadequate communication.)</i> | 217 | 53.6 |
| Organization/Management <i>(May include unclear policies and a lack of support from leadership.)</i> | 123 | 30.4 |
| Staff Factors <i>(May include training, experience and inadequate staffing levels.)</i> | 122 | 30.1 |
| Procedures <i>(May include diagnostic or therapeutic interventions that contribute to the event.)</i> | 108 | 26.7 |
| Equipment <i>(May include inappropriate use and malfunction of items such as stretchers, bed alarms and wheelchairs.)</i> | 75 | 18.5 |

a: Data drawn from 405 RCAs submitted for 2017 events.



G. Impact of All Events on Patients

Table 10 shows the impact of the events reported by the acute care general hospitals. In addition to the other impacts identified below, there were 75 deaths which represent 18.5% of the 405 reportable events submitted.

Table 10: General Acute Care Hospitals: Impact of All Events on Patients^a

| Impact/Outcome | Number of Events | Percent of Events |
|---|------------------|-------------------|
| Additional Patient Monitoring in Current Location | 230 | 56.8 |
| Additional Lab Testing or Diagnostic Imaging | 225 | 55.6 |
| Increased Length of Stay | 200 | 49.4 |
| Disability-Physical or Mental impairment | 134 | 33.1 |
| Major Surgery | 119 | 29.4 |
| Transfer to more Intensive Level of Care | 108 | 26.7 |
| Death | 75 | 18.5 |

a: Data drawn from 405 RCAs submitted for 2017 events.

**IV. Overall Reporting Patterns for Specialty Hospitals:
Comprehensive Rehabilitation, Psychiatric and Special Hospitals**

Mandatory adverse event reporting for the comprehensive rehabilitation, psychiatric and special hospitals began on April 1, 2008.

There were 47 reportable events submitted from specialty hospitals in 2017 compared to 60 in 2016 and 68 in 2015.

Ten comprehensive rehabilitation hospitals submitted 21 reportable events, a decrease of 15 from 2016. The average event reports per this facility type was 2.1. As in 2016, there were two deaths associated with this facility type.

Ten out of the eleven psychiatric hospitals submitted 19 reportable events in 2017; an average of almost 2.0 (1.9) per facility. There were four deaths associated with this facility type. Special hospitals submitted seven reportable events averaging approximately 1.4 reports per facility. There were no deaths associated with this facility type.

Consistent with prior years, special hospitals have been the lowest reporters among the specialty hospitals. Variation in reporting may relate to the size and patient population of the facility.

Table 11: Specialty Hospitals: Overall Reporting Pattern, 2017

| Facility Type | Number of Facilities | Number of Facilities Reporting | Number of Reportable Events | Average Number of Reports per Facility | Number of Deaths |
|------------------------------|----------------------|--------------------------------|-----------------------------|--|------------------|
| Comprehensive Rehabilitation | 14 | 10 | 21 | 2.1 | 2 |
| Psychiatric | 11 | 10 | 19 | 1.9 | 4 |
| Special Hospitals | 14 | 5 | 7 | 1.4 | 0 |
| Total | 39 | 25 | 47 | 1.9 | 6 |

a: Only psychiatric hospitals licensed by DOH are included in this section.

Patient Safety Reporting System

IV. Overall Reporting Patterns for Specialty Hospitals: Comprehensive Rehabilitation, Psychiatric and Special Hospitals



A. Comprehensive Rehabilitation Hospitals

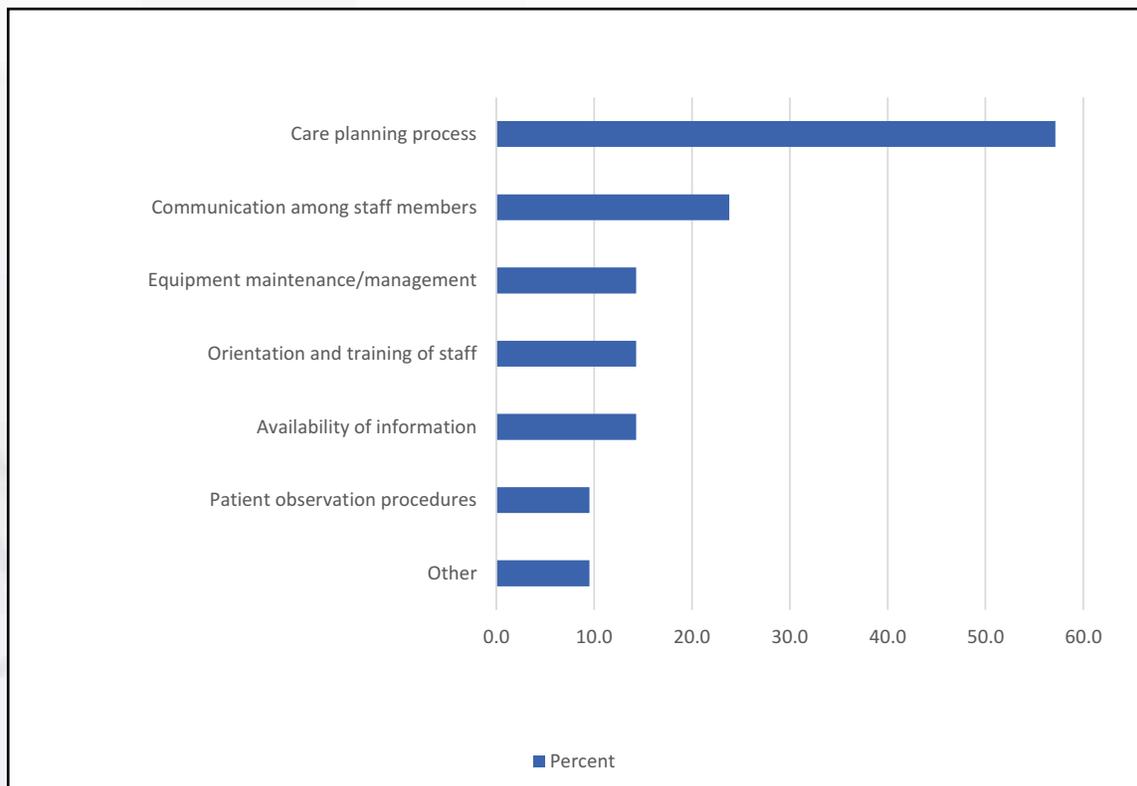
Of the 14 comprehensive rehabilitation hospitals in the state, 10 (71.4%) reported at least one event in 2017. There were 21 reportable events and two deaths from these facilities. These deaths were each related to a fall and product/device malfunction event.

Most frequently reported event types were 14 falls, five pressure ulcers, one care management “other” event and one device malfunction event. These events are similar to previous years’ reporting.

1. Root Causes for All Events

Figure 20 shows the major causes for the events reported by this facility type.

Figure 20: Comprehensive Rehabilitation Hospitals: Root Causes for All Events^a



a: Data drawn from 21 RCAs submitted for 2017 events.

**IV. Overall Reporting Patterns for Specialty Hospitals:
Comprehensive Rehabilitation, Psychiatric and Special Hospitals**

2. Contributing Factors to All Events

In 2017, the five most frequently reported contributing factors were patient

characteristics (80.9%), staff factors (57.1%), task factors (52.4%), and team and equipment factors (42.9%) each.

Table 12 shows the results.

Table 12: Comprehensive Rehabilitation Hospitals: Contributing Factors to All Events^a

| Contributing Factors | Number of Events | Percent of Events |
|---|------------------|-------------------|
| Patient Characteristics <i>(May include confusion, co-morbidities and the patient's choice to refuse care.)</i> | 17 | 80.9 |
| Staff Factors <i>(May include training, experience and inadequate staffing levels.)</i> | 12 | 57.1 |
| Task Factors <i>(May include tasks performed incorrectly, omitted or characteristics of the task such as complexity.)</i> | 11 | 52.4 |
| Team Factors <i>(May include factors which interfere with the care team working together, such as inadequate communication.)</i> | 9 | 42.9 |
| Equipment <i>(May include inappropriate use and malfunction of items such as stretchers, bed alarms and wheelchairs.)</i> | 9 | 42.9 |

a: Data drawn from 21 RCAs submitted for 2017 events.

IV. Overall Reporting Patterns for Specialty Hospitals: Comprehensive Rehabilitation, Psychiatric and Special Hospitals



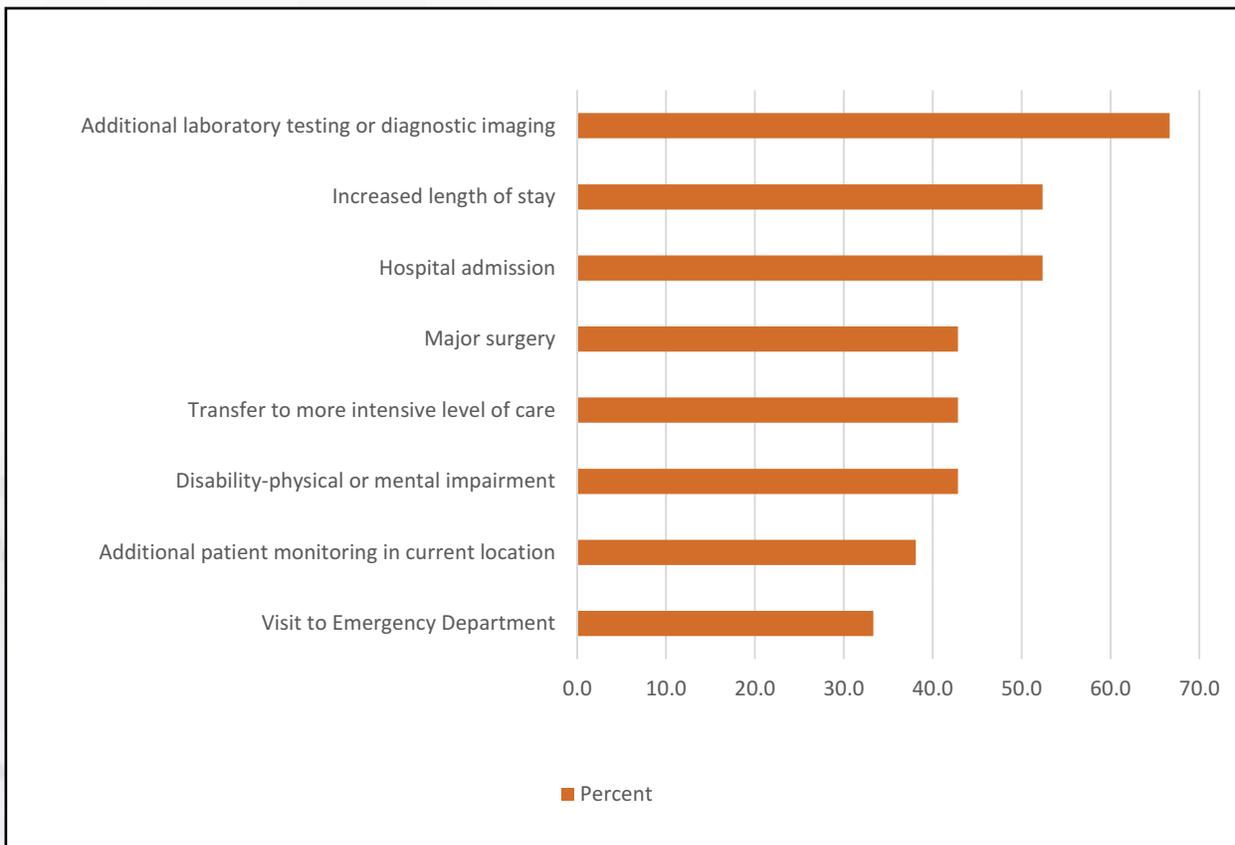
3. Impact of All Events

As a result of these adverse events, about two-thirds (66.7%) of the patients received additional laboratory testing or diagnostic imaging. Other impacts included increased length of stay, hospital admission and major surgery.

Figure 21 shows other impacts associated with adverse events from comprehensive rehabilitation hospitals.

There were two deaths reported from this facility type; one each for fall and care management “other”.

Figure 21: Comprehensive Rehabilitation Hospitals: Impact of All Events^a



a: Data drawn from 21 RCAs submitted for 2017 events.

**IV. Overall Reporting Patterns for Specialty Hospitals:
Comprehensive Rehabilitation, Psychiatric and Special Hospitals**

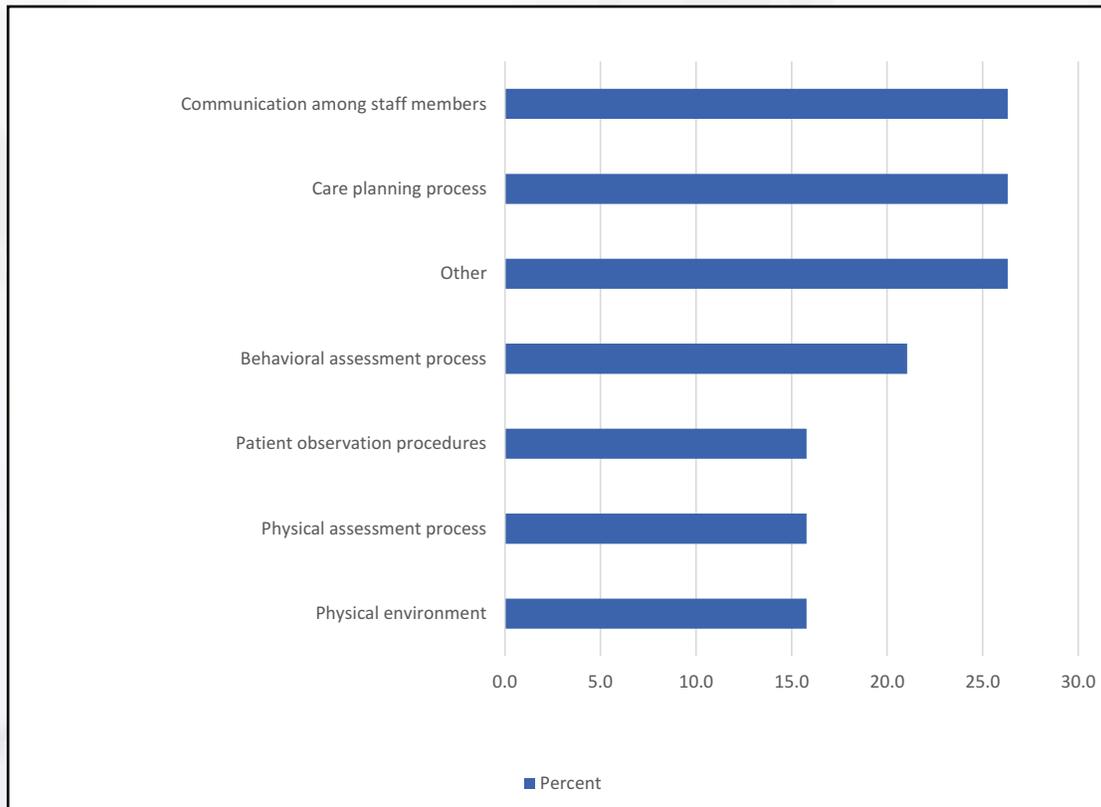
B. Psychiatric Hospitals

Ten out of 11 psychiatric hospitals reported at least one event during 2017. A total of 19 reportable events were submitted to the Patient Safety Reporting System. Of the 19 events reported, twelve were falls, three for suicide/attempted suicide (16.7%) and three were care management “other” events. The average submission by this facility type was 1.9. There were no reported deaths for this facility type.

1. Root Causes for All Events

Figure 22 shows the most reported causes for the events that occurred in Psychiatric hospitals

Figure 22: Psychiatric Hospitals: Root Causes for All Events^a



a: Data drawn from 21 RCAs submitted for 2017 events.

Patient Safety Reporting System

IV. Overall Reporting Patterns for Specialty Hospitals: Comprehensive Rehabilitation, Psychiatric and Special Hospitals



2. Contributing Factors to All Events

Table 13 shows the most frequently reported contributing factors for the events.

Table 13: Psychiatric Hospitals: Contributing Factors to All Events^a

| Contributing Factors | Number of Events | Percent of Events |
|---|------------------|-------------------|
| Patient Characteristics <i>(May include confusion, co-morbidities and the patient's choice to refuse care.)</i> | 14 | 73.7 |
| Medications <i>(May include inappropriate administration, dose and prescribed medications not administered.)</i> | 7 | 36.8 |
| Organization/Management <i>(May include unclear policies and a lack of support from leadership.)</i> | 5 | 26.3 |
| Task Factors <i>(May include tasks performed incorrectly, omitted or characteristics of the task such as complexity.)</i> | 4 | 21.1 |
| Team Factors <i>(May include factors which interfere with the care team working together, such as inadequate communication.)</i> | 4 | 21.1 |
| Procedures <i>(May include diagnostic or therapeutic interventions that contribute to the event.)</i> | 4 | 21.1 |
| Other Factors <i>(May Includes factors not identified in the other categories.)</i> | 4 | 21.1 |

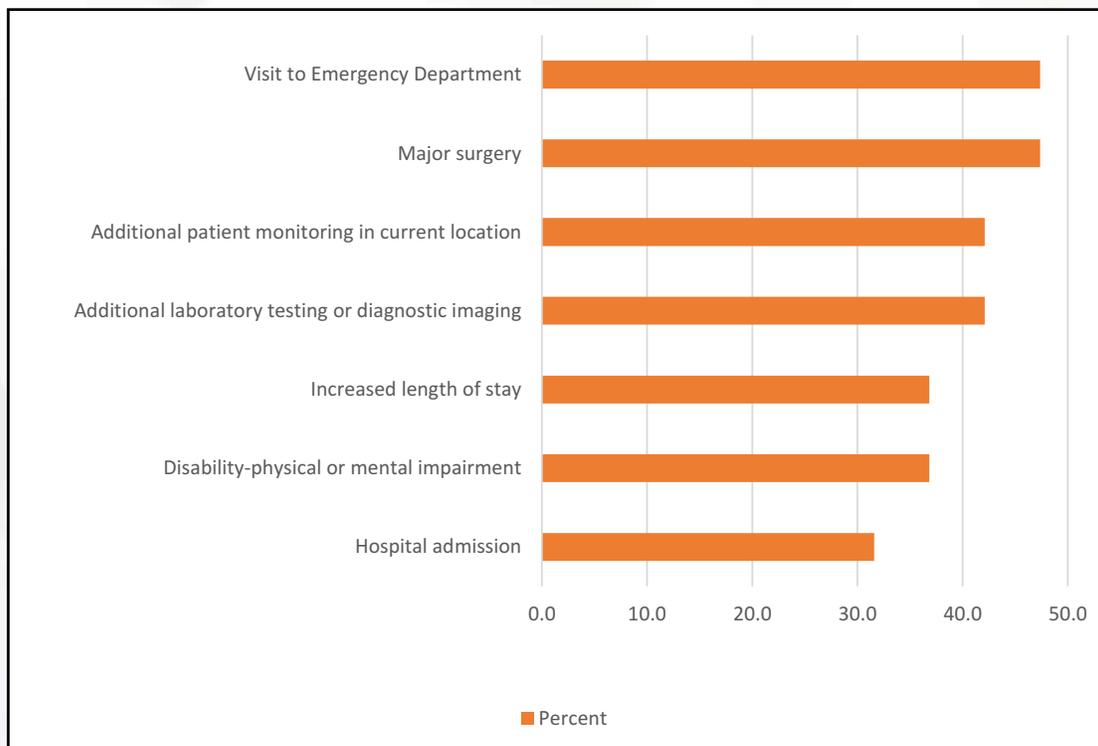
a: Data drawn from 19 RCAs submitted for 2017 events.

**IV. Overall Reporting Patterns for Specialty Hospitals:
Comprehensive Rehabilitation, Psychiatric and Special Hospitals**

3. Impact of All Events

Figure 23 shows the most frequently reported impact of the events. There were no deaths reported from the 19 reportable events.

Figure 23: Psychiatric Hospitals: Impact of All Events^a



a: Data drawn from 19 RCAs submitted for 2017 events.

Patient Safety Reporting System

IV. Overall Reporting Patterns for Specialty Hospitals: Comprehensive Rehabilitation, Psychiatric and Special Hospitals



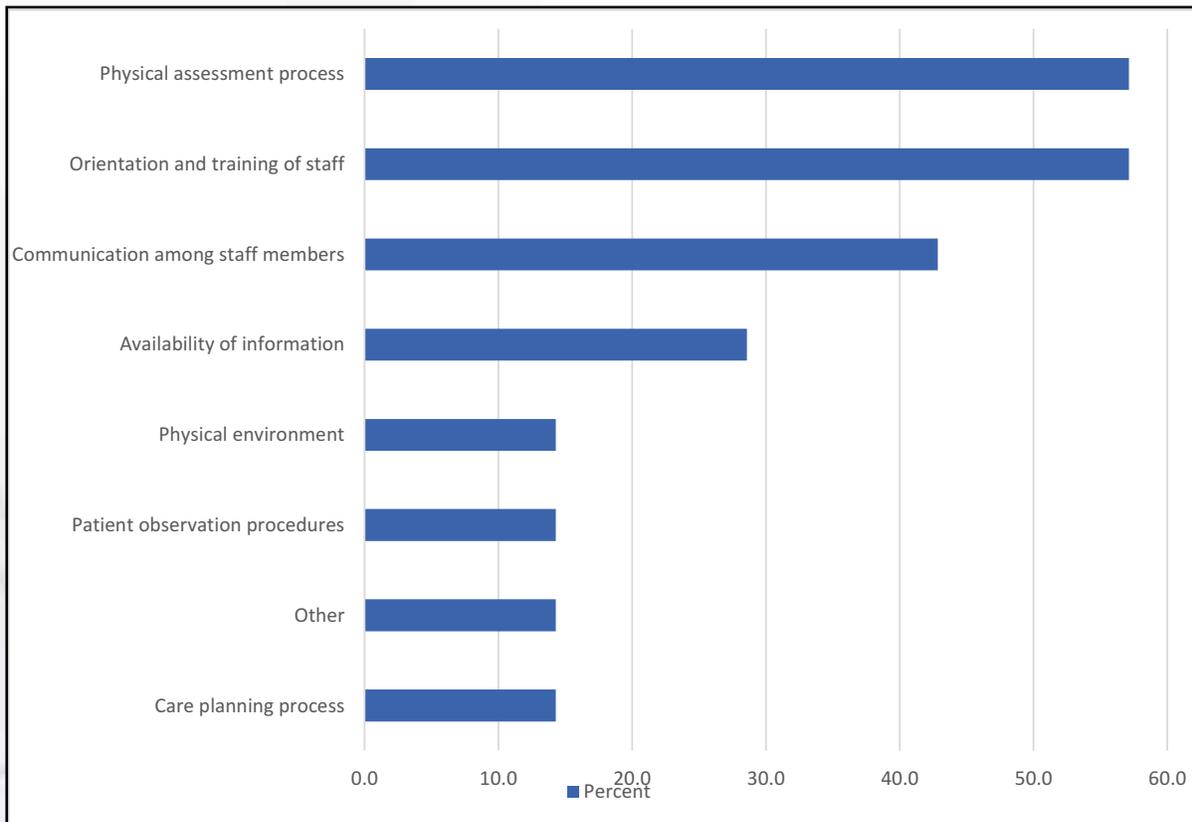
C. Special Hospitals

There were 14 special hospitals in 2017 and five submitted seven reportable events. This low reporting is consistent with prior years. There were no deaths reported for this facility type in 2017, similar to 2014, 2015 and 2016.

1. Root Causes for All Events

Figure 24 shows the most frequent root causes of events in this facility type.

Figure 24: Special Hospitals: Root Causes for All Events*



a: Data drawn from 7 RCAs submitted for 2017 events.

**IV. Overall Reporting Patterns for Specialty Hospitals:
Comprehensive Rehabilitation, Psychiatric and Special Hospitals**

2. Contributing Factors to All Events

Table 14 shows the most frequent contributing factors to the events reported by special hospitals. As in 2016, the most

frequently reported contributing factor was patient characteristics (57.1%), task factors (57.1%), patient record documentation (42.9%) staff factors, team factors and medical devices, each accounting for 28.6% of the adverse events.

Table 14: Special Hospitals: Contributing Factors to All Events^a

| Contributing Factors | Number of Events | Percent of Events ^a |
|---|------------------|--------------------------------|
| Patient Characteristics <i>(May include confusion, co-morbidities and the patient's choice to refuse care.)</i> | 4 | 57.1 |
| Task Factors <i>(May include tasks performed incorrectly, omitted or characteristics of the task such as complexity.)</i> | 4 | 57.1 |
| Patient Record Documentation <i>(May include missing or inaccurate information in the medical record.)</i> | 3 | 42.9 |
| Staff Factors <i>(May include training, experience and inadequate staffing levels.)</i> | 2 | 28.6 |
| Team Factors <i>(May include factors which interfere with the care team working together, such as inadequate communication.)</i> | 2 | 28.6 |
| Medical Devices <i>(May include inappropriate use and malfunction of items such as stretchers, bed alarms and wheelchairs.)</i> | 2 | 28.6 |

a: Data drawn from 7 RCAs submitted for 2017 events.

Patient Safety Reporting System

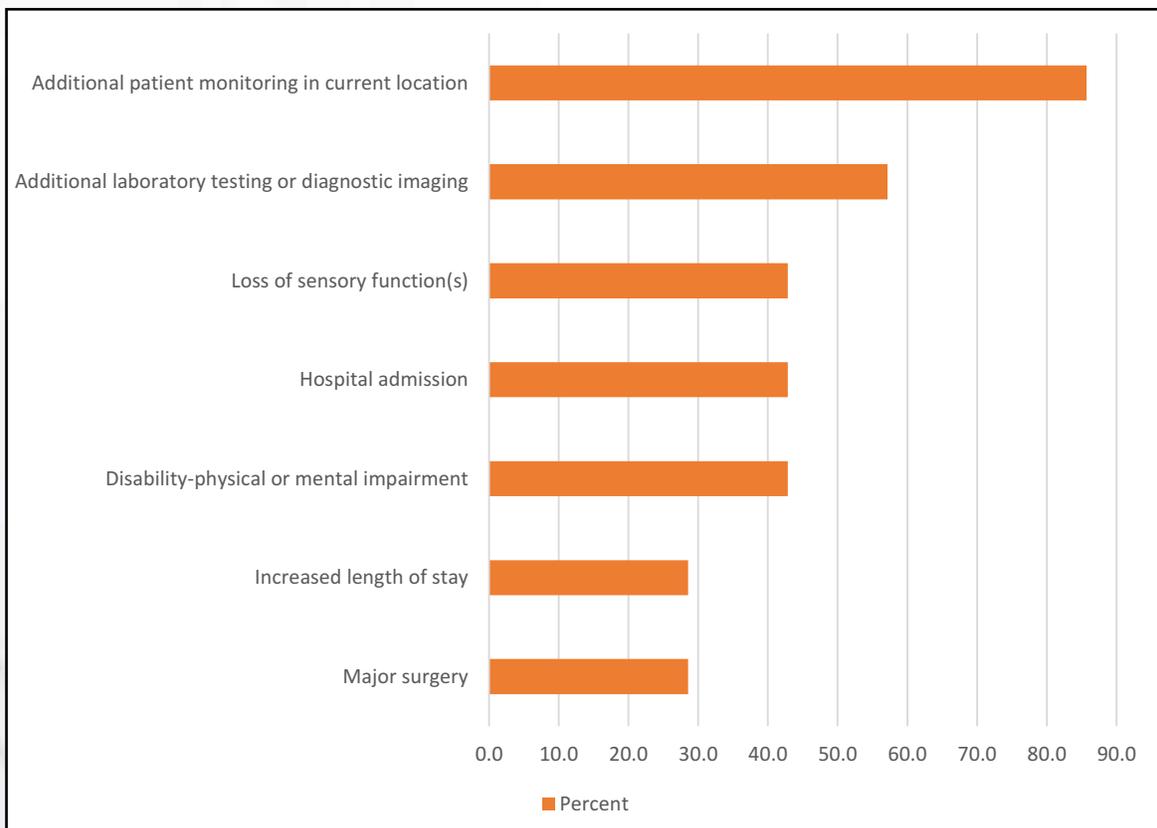
IV. Overall Reporting Patterns for Specialty Hospitals: Comprehensive Rehabilitation, Psychiatric and Special Hospitals



3. Impact of All Events

Figure 25 exhibits the most frequently identified impact from the reportable adverse events submitted by special hospitals.

Figure 25: Special Hospitals: Impact of All Events^a



a: Data drawn from 7 RCAs submitted for 2017 events.

V. Ambulatory Surgery Centers

New Jersey licensed ambulatory surgery centers (ASCs) began reporting serious preventable adverse events to PSRS as of October 1, 2008. Of the 176 ambulatory surgery centers in New Jersey, 89 facilities (about one-half) submitted events in 2017. A total of 284 events were submitted of which 144 were deemed reportable (50.7%).

There were six deaths associated with these events and all were related to intraop or postop coma, death or other serious preventable adverse events. The average number of events submission by this facility type was 2 in 2017.

Table 15 and Figure 26 show the reporting patterns for the period 2008 to 2017.

Table 15: Ambulatory Surgery Centers: Reporting Patterns (2008-2017)

| Year | Reportable | Not Reportable | Less Serious/Near Misses | Total Events | Percent Not Reportable | Percent Reportable |
|-------------------|------------|----------------|--------------------------|--------------|------------------------|--------------------|
| 2008 ^a | 13 | 0 | NA | 13 | 0 | 100.0 |
| 2009 | 48 | 4 | NA | 52 | 7.7 | 92.3 |
| 2010 | 74 | 17 | NA | 91 | 18.7 | 81.3 |
| 2011 | 144 | 10 | 9 | 163 | 11.7 | 88.3 |
| 2012 | 199 | 31 | 88 | 318 | 37.4 | 62.6 |
| 2013 | 200 | 17 | 135 | 352 | 43.2 | 58.6 |
| 2014 | 201 | 6 | 154 | 361 | 44.3 | 55.7 |
| 2015 | 165 | 5 | 162 | 332 | 50.3 | 49.7 |
| 2016 | 154 | 14 | 141 | 309 | 50.2 | 49.8 |
| 2017 | 144 | 10 | 130 | 284 | 49.3 | 50.7 |

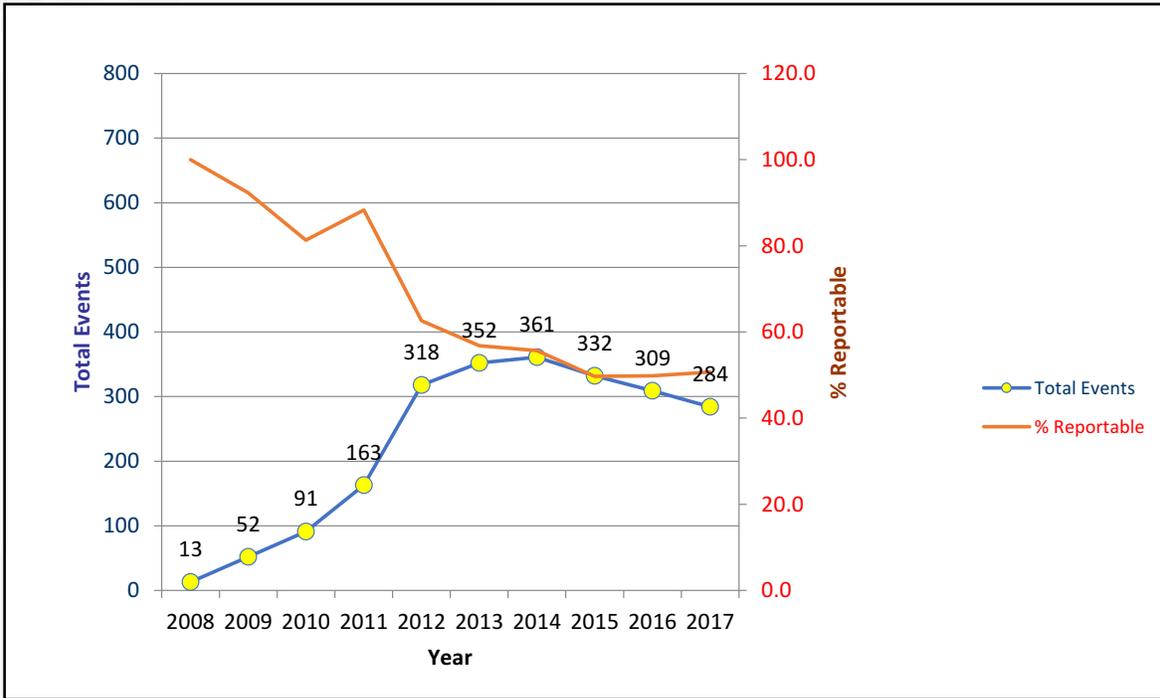
a: Represents 3 months of data since reporting started on October 1, 2008.

Patient Safety Reporting System

V. Ambulatory Surgery Centers



Figure 26: ASC Trends in Reportable and Not Reportable Events 2008-2017



V. Ambulatory Surgery Centers

As shown in Table 16 below, nearly three-quarters (74.3%) of the reportable cases were intraoperative or postoperative coma, death or other serious preventable adverse events. The second highest event type was surgery-related “other” events with 23 cases or 16.0 percent of the total events reported from ambulatory surgery centers.

These two event types accounted for 130 cases or 90.3 percent of the total events reported (n = 144).

There were six deaths reported and all were associated with intraoperative or postoperative coma, death or “other” serious preventable adverse events type.

Table 16: Ambulatory Surgery Centers: Events Reported in 2017

| Event Type | Number of Events | Percent of Total Events | Number of Deaths |
|--|------------------|-------------------------|------------------|
| Intra-or-Post-Operative Coma, Death or “Other” serious preventable adverse event | 107 | 74.3 | 6 |
| Surgery-Related “Other” Event | 23 | 16.0 | 0 |
| Wrong Procedure | 4 | 2.8 | 0 |
| Wrong Site | 1 | 0.7 | 0 |
| Retained Foreign Object | 6 | 4.2 | 0 |
| Care Management Other | 1 | 0.7 | 0 |
| Fall | 2 | 1.4 | 0 |
| Total | 144 | 100.0 | 6 |

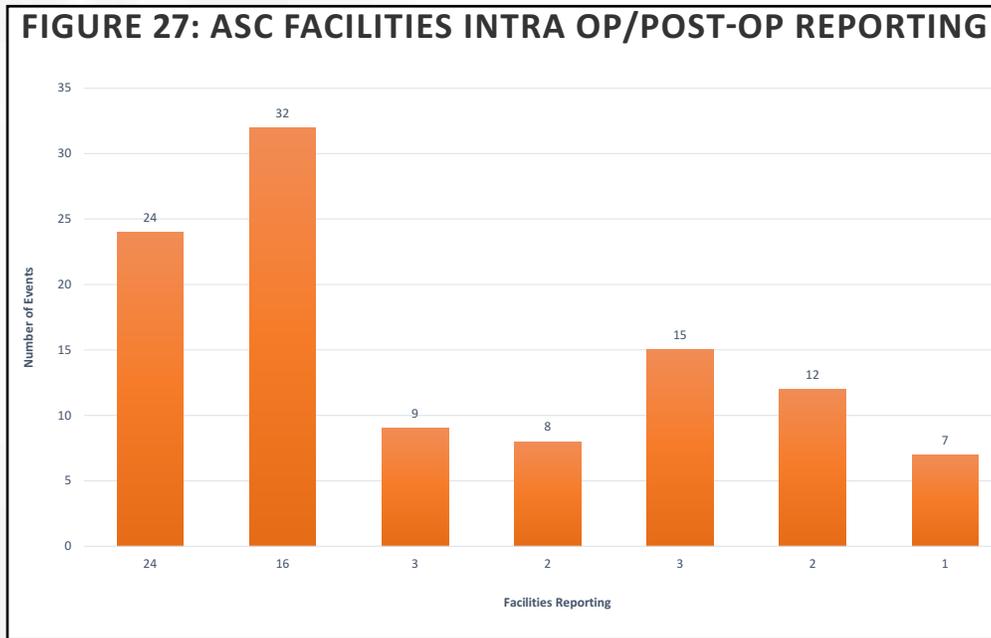
Patient Safety Reporting System

V. Ambulatory Surgery Centers

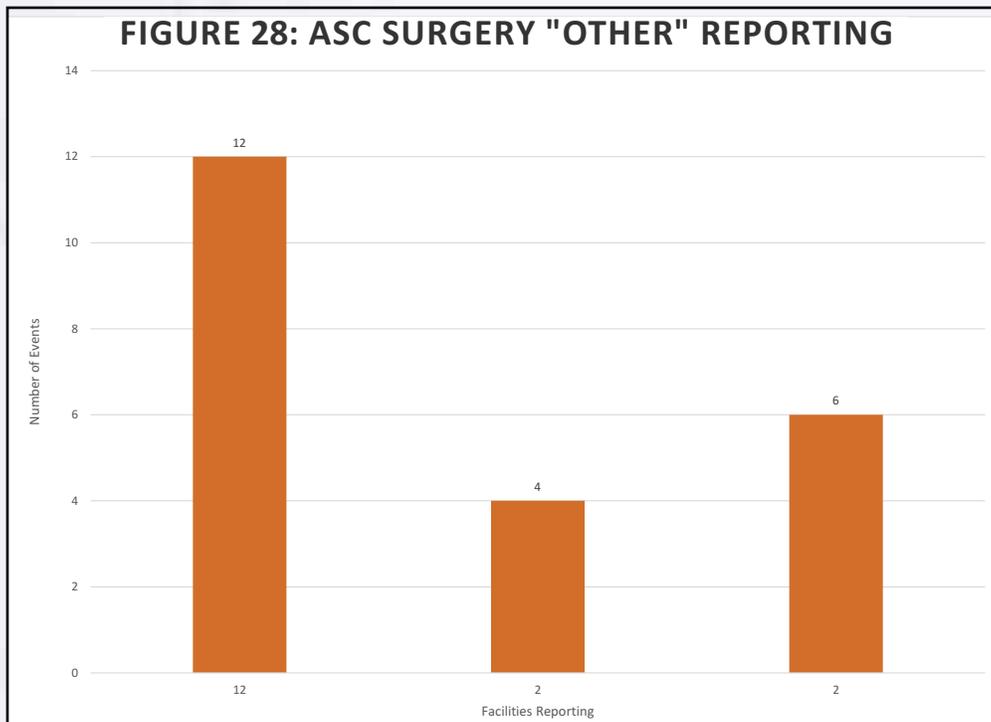


There were 107 events submitted by 51 ambulatory surgery facilities. The chart below shows the reporting pattern by those facilities.

For example, 24 facilities reported one event each while two facilities reported a total of 12 events. (i.e. 6 per facility)



A total of 23 surgery-related “other” events were reported by 16 facilities as displayed in the chart below:

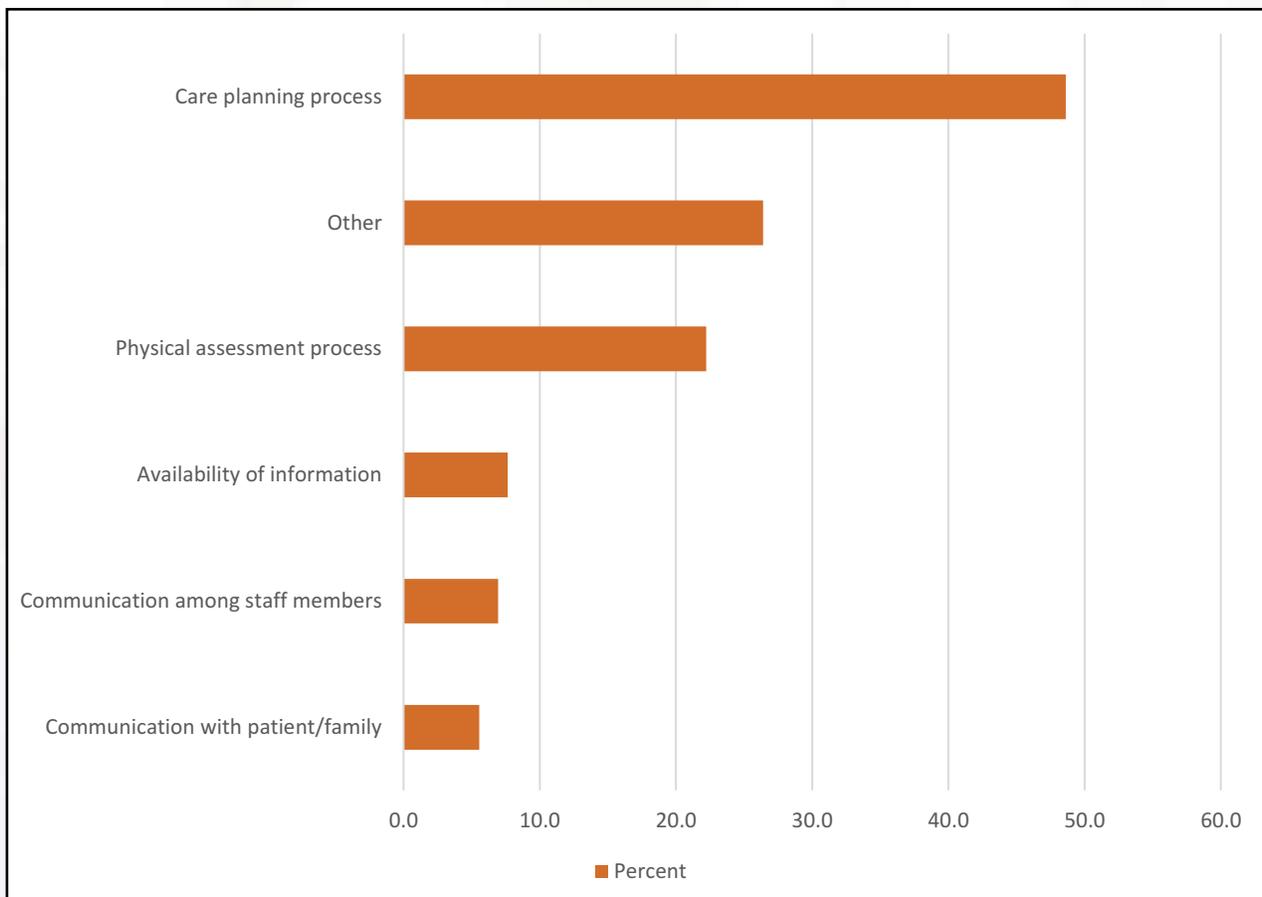


V. Ambulatory Surgery Centers

A. Root Causes for All Events

Figure 29 shows the most frequently identified root causes of the events reported by ambulatory surgery centers in 2017.

Figure 29: Ambulatory Surgery Centers: Root Causes for All Events^a



a: Data drawn from 144 RCAs submitted for 2017 events.



B. Contributing Factors to All Events

Table 17 shows the most frequently reported contributing factors at ambulatory surgery centers.

Table 17: Ambulatory Surgery Centers: Contributing Factors to All Events^a

| Contributing Factors | Number of Events | Percent of Events ^a |
|--|------------------|--------------------------------|
| Patient Characteristics <i>(May include confusion, co-morbidities and the Patient's choice to refuse care.)</i> | 94 | 65.3 |
| Procedures <i>(May include diagnostic or therapeutic interventions that contribute to the event.)</i> | 76 | 52.8 |
| Task Factors <i>(May include tasks performed incorrectly, omitted or characteristics of the task such as complexity.)</i> | 34 | 23.6 |
| Team Factors <i>(May include factors which interfere with the care teamworking together, such as inadequate communication.)</i> | 30 | 20.8 |
| Staff Factors <i>(May include training, experience and inadequate staffing levels.)</i> | 17 | 11.8 |
| Medical Devices <i>(May include inappropriate use and malfunction of items such as stretchers, bed alarms and wheelchairs.)</i> | 16 | 11.1 |
| Other Factors <i>(May Includes factors not identified in the other categories.)</i> | 15 | 10.4 |

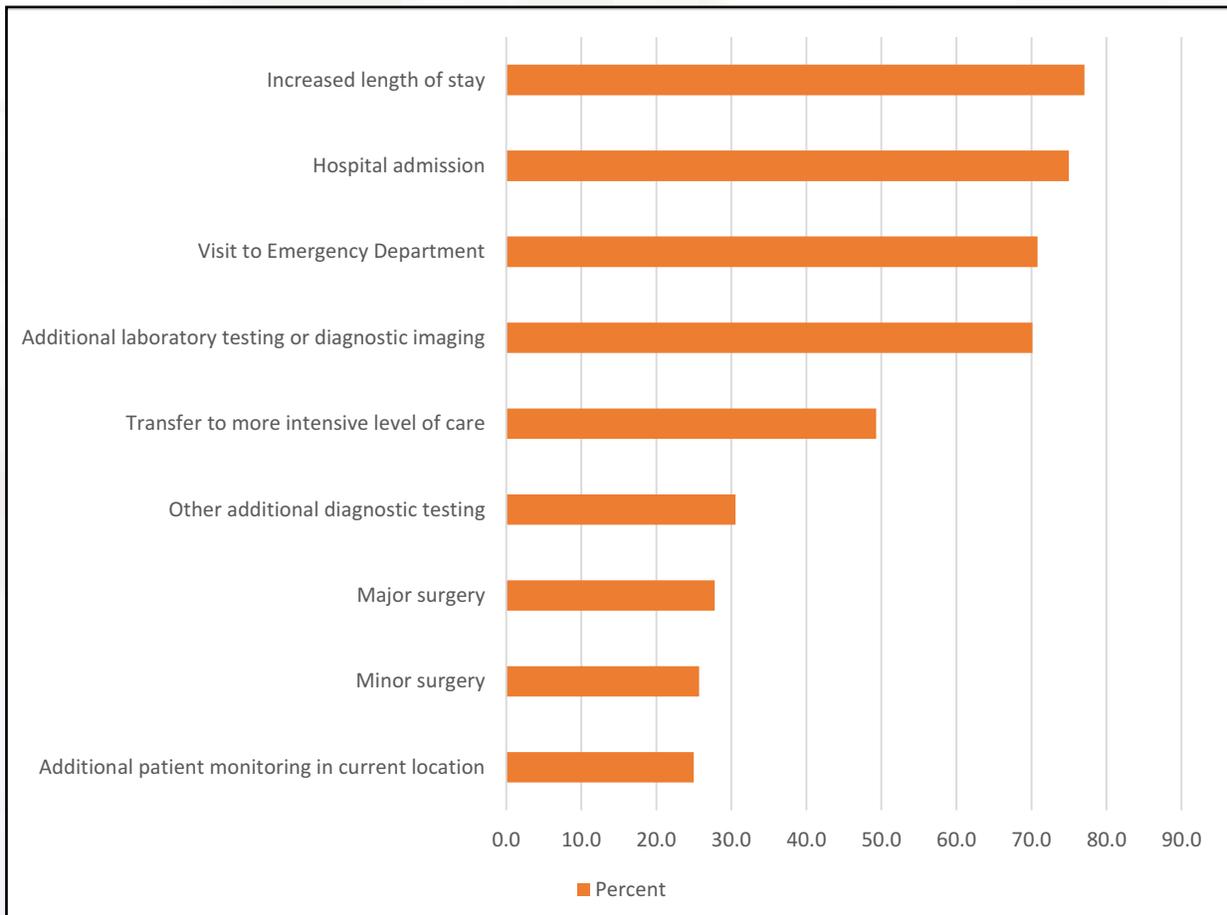
a: Data drawn from 144 RCAs submitted for 2017 events

V. Ambulatory Surgery Centers

C. Impact of All Events

Figure 30 displays the most frequently reported impact of adverse events at ambulatory surgery centers.

Figure 30: Ambulatory Surgery Centers: Impact of All Events^a



a: Data drawn from 144 RCAs submitted for 2017 events.



Department of Health Division of Behavioral Health Services Annual Patient Safety Act Report January 1, 2017 through December 31, 2017

Implementation

The Division of Behavioral Health Services (DBHS/Division) Patient Safety Act (PSA) advisory committee continues to receive and review the Root Cause Analyses (RCAs) submitted under the Patient Safety Act by the three (3) regional NJ state psychiatric hospitals and one (1) forensic psychiatric center. A log of PSA related events is maintained by the Division to monitor the timely submission and review of submitted RCA's.

The review committee, which consists of members of different disciplines (see below) assesses the Root Cause Analyses for timeliness, thoroughness, and credibility. Questions or concerns of the committee are shared with the RCA team/facilitator as well as the Director of Quality Assurance and Risk Manager of the facility where the event occurred. Facility staff review and provide responses to these questions/concerns and may be asked to reconvene the RCA committee as needed. If necessary, a revision to the RCA is requested.

During 2017, system initiatives/improvements that are expected to decrease the number of incidents in the hospitals reportable under the PSA included the following:

- Major strides were made in all hospitals in assessment and remediation of environmental risk areas regarding ligature points. The initiative is taken very seriously and is still in progress at this time.
- Clinicians and direct care staff were trained in evidence-based, trauma informed “Six Core Strategies” with the overall goal of creating a treatment environment that is less likely to be coercive or trigger conflicts. The strategies rely heavily on the concept of individualized treatment, a necessity for improved moral and better staff-patient relationships.
- In addition, Three Steps-to-Safety was offered in all four hospitals for the same purpose of creating a more harmonious treatment environment. An improved patient and staff satisfaction is expected to contribute to conditions that are more conducive towards wellness and recovery.
- Effective treatment planning training was offered based on the concept that a living document that accurately reflects patients’ needs, challenges, and vulnerabilities will contribute to improved treatment that will result in fewer incidents. Code Blue drills conducted every shift/every complex/every quarter to include Narcan administration.
- Additional Behavior Support Technicians were hired to provide behavioral support services to a variety of patients. Hospitals utilizing these staff were found to have increased compliance with medication and medical appointments/procedures/lab work; increased Activities of Daily Living (ADLs), increased attendance in therapeutic programming; and decreased maladaptive behaviors such as suicidal gestures and behaviors.
- Training on proper use of tools to adequately assess risk for suicide and violence was provided to psychologists and psychology interns as well as effective ways of making results available to the treatment teams to inform best treatment options. Since trauma informed care is now recognized as standard practice, “Trauma, Addictions Mental Health and Recovery” (TAMAR) groups were implemented, to reduce the impact of trauma through behavioral self-regulation. As a result, suicidality is expected to be reduced with hospitalized individuals being able to more effectively deal with their feelings and behaviors. suicide and other poor treatment outcomes.

Division of Behavioral Health Services 2017 Report

- Dialectical Behavioral Therapy (DBT), an evidence-based treatment program was implemented to increase patients' self-regulation and decrease incidents of maladaptive behaviors such as suicidal ideations.
- Implementation of new Administrative Bulletin, "Screening and Assessment of Suicidal Ideation and Behavior" addressing suicide risk via utilization of evidence-based tools. Every patient is to be screened at admission with follow-up assessment as indicated. Hospital policies were revised accordingly, and training provided on the administration of these instruments.

Overall Reporting Patterns

From January 1, 2017, through December 31, 2017, a total of twelve events were reported and reviewed. Eight out of the twelve events occurred at one facility and the other four occurred at another facility. The events consisted of: eight suicide attempts, two unexpected deaths, a patient's fall which resulted in a broken hip, and a patient who developed a Stage III pressure ulcer.

Focus on Specific Events

a. Falls

A 64-year-old man reported to staff that he had fallen unwitnessed in his bedroom but had been able to go back to bed on his own. He refused to answer any questions regarding how he fell. The fall resulted in a broken hip. The patient's most recent fall assessment placed him at low risk according to the Morse Fall Scale. Precipitating factor for the fall included low blood pressure secondary to psychotropic medication.

Root Cause:

- Face check rounds not completed per protocol.
- Failure to incorporate patient's known risk factors (i.e. psychotropic medication, age, hypotension, nutrition, and weight loss) into the fall risk assessment.
- Use of outdated protocol for fall risk assessment.
- Failure to address and implement fall precaution interventions on patient's comprehensive individualized treatment plan post incident.
- Failure to follow protocol for assessment and documentation of vital signs/neuro-checks post incident.

Prevention Strategies:

- Retraining on protocol for face and safety checks, and subsequent monitoring by nursing supervisors.
- Retraining on protocol for medication management.
- Revision of protocol for implementation of fall precautions and subsequent training on revisions.
- Provided training on conducting on hand-off communications and staffing assignments.
- Revision of policy and subsequent training on conducting neuro-checks.



b. Attempted Suicides

There was a total of eight suicide attempts in 2017. Two of the eight involved male patients, and the rest involved female patients. The ages of those involved ranged between 20 and 53, with a mean age of 30.5, and a median age of 23.5.

Three suicide attempts occurred at one hospital, and the other five occurred at another hospital. Of the five, one incident involved the laceration of the patient's wrist. The other incidents involved patients tying objects around their necks; either tying an article of clothing around the neck or placing a bed sheet, blanket or clothing article over a door. Two of the events occurred in the patients' bedrooms, three in the common areas of the units, and three in bathroom areas.

Root causes

- Inadequate communication of policy and procedures and lack of notifying treatment team members regarding behavioral change and clinical issues.
- Failure to follow care planning process; patient not assessed properly and information from assessment not incorporated into treatment plan.
- Lack of training at all discipline levels. Staff training did not promote necessary level of competency including providing consistency with interventions listed in patients' care plan.
- Face check policy did not adapt to specific needs of patients.
- Failure to follow policy regarding face checks, search, and contraband checks, as well as disposal of sharps.
- Lack of staff response to request for assistance.
- Ligature points present in environment of patient areas.
- Staffing levels not adequate for high acuity level of patients.
- Failure to follow directive re: assignment of staff observation of self-injurious patient.
- Revision of nursing assignment sheets to include patients identified with history of suicide attempt.

Prevention strategies

- Development of protocol for notifying physician of changes in patients' behaviors. In-service for treatment teams regarding updating of treatment plans when significant changes/changes in baseline behavior occur. Independent audit to evaluate the incorporation of identified problems into treatment plans. Development of daily communications book; implementation of daily communications meetings.
- Revision of Assessment/Reassessment process to include referral of all patients with a history of suicide attempt to Dialectical Behavioral Therapy (DBT) and a Behavior Support Technician.
- Revision of policy to include the communication of pertinent information from patients' personal safety plans to the observation monitoring sheets to improve communication to staff assigned to monitor patients on precautions. Increased training and identification of suicidality and suicide prevention.
- Nursing PI Project initiated regarding face checks. Revision of nursing assignment sheets to include patients identified with history of suicide attempt and census face check policy and form to require increased rounds during open bedroom hours of patients with a history of suicide attempt(s).
- Assessment of all trash receptacles for security. Nursing staff re-educated regarding contraband policies, disposal of sharps, and search protocols.

Division of Behavioral Health Services 2017 Report

- Revision of policy re: psychiatric emergencies to require administrative response as well as direct care response. Implementation of behavioral mock drills and Therapeutic Options training.
- Evaluation and remediation of potentially unsafe environmental issues with existing ligature points in common areas and high-risk areas such as doors in patients' bathrooms and bedrooms.
- Increased supervisory monitoring and signage of areas which should be locked.
- Revision of policy to include the communication of pertinent information from patients' personal safety plans to the observation monitoring sheets to improve communication to staff assigned to monitor patients on precautions. Increased training and identification of suicidality and suicide prevention.

c. Pressure Ulcer

During this reporting period there was one incident of a patient who developed a Stage III pressure ulcer. The patient was a 52-year-old male, who was on fall precautions, was sometimes incontinent, was losing weight and utilizing a wheelchair. He intermittently refused medication, food, nutritional supplements, fluids, wound care and caring for his personal hygiene.

Root causes

- Failure to properly complete skin assessment monitoring protocol and to incorporate identified skin integrity and nutritional issues into the active treatment plan from assessments.
- Failure to document progress related to treatment ordered for skin condition.
- Failure to follow protocol for weights.
- Inadequate hand off communication amongst caregivers.
- Failure to follow policy and lack of direction in policy regarding skin assessment and patient refusals.
- Inattentive blindness to physical problems due to patient's lack of communication of needs/problems and staff's focus on psychiatric issues.

Prevention strategies

- Revision of medical record audit tool to include qualitative criteria regarding medical conditions and revision of protocol with added requirement for audits utilizing revised form.
- Enhanced training provided to nursing staff on all shifts regarding weights.
- Enhanced training provided to nursing staff on skin assessments.
- Revision of process for communicating weight change by clinical nutritionists and communication between caregivers via revision of Universal Transfer Form.
- Revision of processes for pressure injury prevention and management program.
- Revision of Nursing 24-hour reports to include prompts for patient refusals of assessment and treatment and tracking of medical issues.

d. Unexpected Deaths

There were two (2) unexpected deaths which occurred during 2017, occurring at two (2) different facilities. One (1) was a 29-year-old male and the other was a 24-year-old female. It was later determined that one (1) death was due to cardiac arrest most likely related to an opioid overdose and the other cause of death was later determined to be natural, due to endotoxic shock and stercoral ulcers, after being admitted to a local medical facility for severe dehydration and constipation.



Root causes:

- Absence of clear guidelines for staff regarding level of supervision during visitation and required frequency of random searches.
- Failure to follow policies regarding completion of contraband checks, implementation of visitation policy and face check procedures.
- Although available in unit emergency boxes, staff reported lack of knowledge of Narcan availability and competency in administration. Narcan administration not adequately included in mock codes.
- Lack of continuity in protocols regarding patient safety and security checks resulting in lapses during changes of shift.
- Lack of knowledge of current nutritional standards leading to a failure to identify nutritional symptoms and incorporate into patient's treatment plan and failure to follow Bowel Management Guidelines for nursing.
- Failure to address patient's religious/spiritual beliefs and to make accommodations in treatment plan for his continual fasting and belief that he could not die.
- Communication breakdown between caregivers in managing patient's ongoing refusals of assessments and treatment. He was refusing solid foods.

Prevention strategies:

- Revision of policies to provide clear guidelines for staff responsibilities regarding level of supervision during visitation and random searches to reduce the interval between checks conducted during changes of shift.
- Implementation of real time video surveillance of staff performance during rounds.
- Implementation of review of therapeutic milieu checklists by staff from other units.
- Incorporation of Narcan use into mock drills on all shifts and in all areas of the hospital and require demonstrations of competencies of Narcan use.
- Implementation of new procedure for visitors to include escort directly to unit visiting areas from a centralized parking and check-in area.
- Initiation of required demonstration of competency of correct process for conducting security checks, and subsequent inclusion in annual competencies.
- Implementation of guidelines for nursing responsibilities regarding monitoring of bowel movements.
- Education of staff regarding symptoms of nutritional risk factors and integration of religious/spiritual beliefs into active treatment and multidisciplinary collaboration among caregivers to address patient refusals.

Division of Behavioral Health Services 2017 Report

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Pursuant to the Patient Safety Regulations (N.J.A.C. 8:43E-10.6), the types of serious preventable adverse events include, but are not limited to, the categories listed below. A facility shall report in the appropriate category events that are not specifically listed that meet the definition of a serious preventable adverse event.

A. Patient or resident care management-related events include, but are not limited to:

1. Patient or resident death, loss of body part, disability or loss of bodily function lasting more than seven days or, in the case of a non-residential health care facility, still present at discharge, associated with a medication error (such as errors involving the wrong drug, wrong dose, wrong patient or resident, wrong time, wrong rate, wrong preparation, or wrong route of administration);
2. Patient or resident death, loss of body part, disability or loss of bodily function lasting more than seven days or, in the case of a non-residential health care facility, still present at discharge, associated with a hemolytic reaction due to the administration of ABO/HLA-incompatible blood or blood products;
3. Maternal death, loss of body part, disability or loss of bodily function lasting more than seven days or still present at discharge associated with labor or delivery in a low-risk pregnancy while in a health care facility;
4. Patient or resident death, loss of body part, disability or loss of bodily function lasting more than seven days or, in the case of a non-residential health care facility, still present at discharge associated with hypoglycemia, the onset of which occurs while the patient or resident is being cared for in the health care facility;
5. Death or kernicterus associated with failure to identify and treat hyperbilirubinemia in a neonate while the neonate is a patient in a health care facility;
6. Stage III or IV pressure ulcers acquired after admission of the patient or resident to a health care facility. Progression from stage II to stage III is excluded, provided that stage II was recognized and documented upon admission; and
7. Patient or resident death, loss of body part, disability or loss of bodily function lasting more than seven days or, in the case of a non-residential health care facility, still present at discharge, associated with spinal manipulative therapy provided in a health care facility.

a: "Kernicterus" means the medical condition in which elevated levels of bilirubin cause brain damage.

b: "Hyperbilirubinemia" means elevated bilirubin levels. Bilirubin is a breakdown product of red blood cells.

Appendix 1: Classification of Serious Preventable Adverse Events

B. Environmental events include, but are not limited to:

1. Patient or resident death, loss of body part, disability or loss of bodily function lasting more than seven days or, in the case of a non-residential health care facility, still present at discharge, associated with an electric shock while being cared for in a health care facility. Events involving planned treatments, such as electric countershock (heart stimulation) or elective cardioversion, are excluded;
2. Incidents in which a line designated for oxygen or other gas to be delivered to a patient or resident contains the wrong gas or is contaminated by toxic substances and results in patient or resident death, loss of body part, disability or loss of bodily function lasting more than seven days or, in the case of a non-residential health care facility, still present at discharge;
3. Patient or resident death, loss of body part, disability or loss of bodily function lasting more than seven days or, in the case of a non-residential health care facility, still present at discharge, associated with a burn incurred from any source while in a health care facility;
4. Patient or resident death, loss of body part, disability or loss of bodily function lasting more than seven days or, in the case of a non-residential health care facility, still present at discharge, associated with a fall while in a health care facility; and
5. Patient or resident death, loss of body part, disability or loss of bodily function lasting more than seven days, or in the case of a non-residential health care facility, still present at discharge, associated with the use of restraints or bedrails while in a health care facility.

C. Product or medical device-related events include, but are not limited to:

1. Patient or resident death, loss of body part, disability or loss of bodily function lasting more than seven days or, in the case of a non-residential health care facility, still present at discharge, associated with use of generally detectable contaminated drugs, medical devices, or biologics provided by the health care facility, regardless of the source of contamination or product. "Generally detectable" means capable of being observed with the naked eye or with the use of detection devices in general use;
2. Patient or resident death, loss of body part, disability or loss of bodily function lasting more than seven days, or in the case of a non-residential health care facility, still present at discharge, associated with the use or function of a medical device in patient or resident care in which the device is used or functions other than as intended, including, but not limited to, catheters, drains, and other specialized tubes, infusion pumps, and ventilators;
3. Intravascular air embolism that occurs while the patient or resident is in the facility. This does not include deaths or disability associated with neurosurgical procedures known to present a high risk of intravascular air embolism; and
4. Patient or resident death, loss of body part, disability or loss of bodily function lasting more than seven days or, in the case of a non-residential health care facility, still present at discharge, associated with the use of a new or reprocessed single-use device in patient or resident care in which the device is used or functions other than as intended.



D. Surgery-related events include, but are not limited to:

1. Surgery initiated (whether or not completed) on a patient that is not consistent with the patient's documented informed consent, including, but not limited to, a surgical procedure intended for a patient "A" that is initiated on the wrong body part of patient "A," and a surgical procedure intended for another patient of the facility, but initiated on patient "A". Surgery-related events exclude emergent situations that occur in the course of surgery and as to which exigency precludes obtaining informed consent;
2. Retention of a foreign object in a patient after surgery, excluding objects intentionally implanted as part of a planned intervention, objects present prior to surgery that were intentionally retained, and retained broken microneedles; and
3. Intraoperative or post-operative (that is, within 24 hours) coma, death, or other serious preventable adverse event in any patient of an ambulatory surgery facility, in any hospital same-day surgery patient, or in any American Society of Anesthesiologists (ASA) Class I hospital inpatient. This includes all patient deaths, coma or other serious preventable adverse events in situations where anesthesia was administered, regardless of whether the planned surgical procedure was carried out.

E. Patient or resident protection-related events include, but are not limited to:

1. Discharge of an infant to the wrong person, excluding patient or resident abductions covered under N.J.A.C. 8:34E-10.11(b);
2. Patient or resident death, loss of body part, disability or loss of bodily function lasting more than seven days associated with patient or resident elopement; and
3. Patient or resident suicide or attempted suicide while in a health care facility. This does not include deaths or disability resulting from self-inflicted injuries that were the reason for admission to the health care facility.

Appendix 2: Required Components of a Root Cause Analysis

N.J.A.C. 8:43E-10.6(l)

The root cause analysis performed by a facility in response to a report of an occurrence of a serious preventable adverse event may vary in substance and complexity, depending on the nature of the facility and the event involved, but shall include the following general components:

1. A description of the event, including when, where and how the event occurred and the adverse outcome for the patient or resident;
2. An analysis of why the event happened that includes an analysis not only of the direct cause(s) of the event, but also potential underlying causes related to the design or operation of facility systems;
3. The corrective action(s) taken for those patients or residents affected by the event;
4. The method for identifying other patients or residents or settings having the potential to be affected by the same event and the corrective action(s) to be taken;
5. The measures to be put into place or systematic changes needed to reduce the likelihood of similar events in the future; and
6. How the corrective action(s) will be monitored to assess their impact.

New Jersey Department of Health Review of Root Cause Analyses

N.J.A.C. 8:43E-10.6(m)

The Department shall:

1. Review an RCA to determine whether it satisfies the criteria in (l) above; and
2. Return an RCA that does not meet the criteria in (l) above to the facility for revision and shall not consider the RCA complete until the Department determines that the RCA meets the criteria in (l) above.

Patient Safety Reporting System

Contact Information



Patient Safety Reporting System (PSRS) Contact Information

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Limited copies of this report are available by writing to the New Jersey Department of Health, Office of Health Care Quality Assessment, P.O. Box 360, Trenton, NJ 08625, by calling (800) 418-1397, by e-mailing hcqa@doh.nj.gov or by fax at (609) 984-7735. The report is also posted on the New Jersey Department of Health's website at www.nj.gov/health/ps.