

# HCQA Health Care Quality Assessment

## Patient Safety Reporting System

### 2012 Summary Report



Chris Christie, Governor  
Kim Guadagno, Lt. Governor



Cathleen D. Bennett  
Acting Commissioner

# Patient Safety Reporting System

## 2012 Summary Report



### **New Jersey Department of Health Report Preparation Team**

*Abate Mammo, PhD, Acting Executive Director  
Healthcare Quality and Informatics*

*Emmanuel Noggoh, Director  
Health Care Quality Assessment*

*Mary Noble, MD, MPH, Clinical Director  
Patient Safety Reporting System*

*Sara Day, RN, BSN, CSM, Supervising Health Care Evaluator  
Patient Safety Reporting System*

*Debra Morgan, Project Manager  
Office of Information Technology Services*

*Adan Olmeda, Administrative Support  
Patient Safety Reporting System*

*Jenny Choi, Graphic Designer*

*Date: April 2016*

#### **For further information contact:**

Patient Safety Reporting System  
Office of Policy and Strategic Planning  
Health Care Quality Assessment  
New Jersey Department of Health  
PO Box 360  
Trenton, NJ 08625-0360  
Phone: (800) 418-1397  
Fax: (609) 984-7707  
Website: [www.NJ.gov/health/ps](http://www.NJ.gov/health/ps)



# Patient Safety Reporting System

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# Patient Safety Reporting System

## Executive Summary



**T**he New Jersey Patient Safety Act (P.L.2004, c.9) requires all New Jersey licensed health care facilities 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.

The following facility type reports to the Department of Human Services, Division of Mental Health and Addiction Services:

- ❖ State psychiatric hospitals as of August 2008.

### Summary of reported adverse events for all facility types in 2012:

- ❖ 1027 events were reported to the Patient Safety Reporting System by all facility types;
- ❖ 837 events met the statutory definition of (or satisfied the criteria for) a serious preventable adverse event ("reportable");

- ❖ 190 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");
- ❖ 94 deaths were associated with the adverse events.

### General Acute Care Hospitals:

- ❖ Submitted 587 reportable adverse events in 2012 compared to 562 events in 2010 and 601 events in 2011. This represents a 2.3% decrease in the number of reports compared to 2011;
- ❖ The average number of reportable events per reporting hospital was 8.1 (does not take into account hospital sizes and bed capacity);
- ❖ There were 84 deaths associated with the adverse events; specific events with the highest percent of associated deaths were care management "other" events<sup>a</sup>, intraoperative or postoperative coma, death, or other serious preventable adverse events, surgery "other" events and fall events;
- ❖ The most frequently reported events were falls, pressure ulcers, device malfunction, care management "other" events and suicide/attempted suicide;
- ❖ Adverse events were most often caused by care planning process, communication among staff and/or with the patient/family, orientation and training of staff and supervision, and equipment maintenance/management;
- ❖ The most frequent consequences of the events were additional laboratory testing or diagnostic imaging, additional patient monitoring in current location, disability-physical or mental impairment, increased length of stay and surgery.

a: Refer to the Introduction section on page 3 for a description of "other" event types.

## Executive Summary

### Comprehensive Rehabilitation Hospitals:

- ❖ There were 27 reportable events and 1 death associated with a fall;
- ❖ The most frequently reported root causes were care planning process, patient observation procedures, and communication among staff and/or with the patient/family;
- ❖ Approximately 85 percent of the patients received additional laboratory testing or diagnostic imaging. Others were readmitted to the hospital, and /or transferred to a more intensive level of care.

### Psychiatric Hospitals:

- ❖ There were 14 reportable events and 2 deaths associated with care management “other” events;
- ❖ The most frequently reported root causes were care planning process, patient observation procedures and communication among staff and/or with the patient/family;
- ❖ Over three-quarters or 78.6 percent of the patients received additional laboratory testing or diagnostic imaging.

### Special Hospitals:

- ❖ Ten reportable events were submitted with one associated care management “other” death;
- ❖ The most frequently reported root causes were care planning process, orientation and training of staff and communication among staff and/or with the patient/family;
- ❖ Impact of the events included additional patient monitoring in current location, additional laboratory testing or diagnostic imaging, disability-physical or mental impairment, minor surgery and increased length of stay.

### Ambulatory Surgery Centers:

- ❖ Submitted 199 reportable events with 6 deaths associated with intraoperative or postoperative coma, death or other serious preventable events and surgery “other” events;
- ❖ The most frequent root causes were care planning process, communication among staff and/or with the patient/family and physical assessment process;
- ❖ The most reported impact of these adverse events were hospital admission, additional laboratory testing or diagnostic imaging, disability-physical or mental impairment and visit to the emergency.



# 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 from January 1, 2012 through December 31, 2012.

Please note that only aggregate numbers are provided for 2011 events where applicable, since the PSRS transitioned from a paper-based reporting system to a web-based system during 2011. Consequently, it became difficult to combine the data from the two sources due to differences in definition for some of the reported data elements.

This report also includes the findings of reportable events from the Division of Mental Health and Addiction Services (DMHAS) which is separately reported in section VI (2011 data) and section VII (2012 data) of this document.

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 I.

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 or DMHAS professional clinical staff to ensure that the facility performed a thorough and credible review of the adverse event. PSRS and DMHAS 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. 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.



## II. Overall Reporting Patterns by Facility Type

### II. Overall Reporting Patterns by Facility Type

This annual report summarizes the 2012 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. It also provides an overview of all the years the PSRS has been in operation.

The number of reportable, not reportable and less serious events, and near misses submitted to the Patient Safety Reporting System for 2012 from all facilities totaled 1027. The number of deaths was 94 or 11.2 percent of the 837 total reportable events submitted.

Table 1 below shows the distribution of events reported to the New Jersey Department of Health, Patient Safety Reporting System by facility types during 2012.

**Table 1: Reporting Pattern by Facility Type (2012)**

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
General Acute Care Hospitals	72	72	587	22	41	84
Comprehensive Rehabilitation Hospitals	15	10	27	2	2	1
Psychiatric Hospitals	10	5	14	1	0	2
Special Hospitals	13	6	10	1	2	1
Ambulatory Surgery Centers	163	81	199	31	88	6
Total	273	174	837	57	133	94



### A. Reporting Patterns (2005-2012)

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

Beginning in 2009, consistent with the National Quality Forum (NQF) and other states' patient safety programs, fall events resulting in less serious injury such as small superficial lacerations and single rib fractures with no significant impact on the patient, were designated as not reportable. This resulted in an increase in the number and percentage of not reportable events in 2009 and 2010. The change was initiated to focus root cause analysis on events that have the most severe impact on patients.

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 was slightly over 6 percent (6.4%) for 2011 and 10 percent (10%) for 2012, respectively. Prior to 2009, not reportable events averaged less than 10 percent of the total events collected. The number of events reported by general acute care hospitals increased to 601 in 2011 then decreased to 587 in 2012.

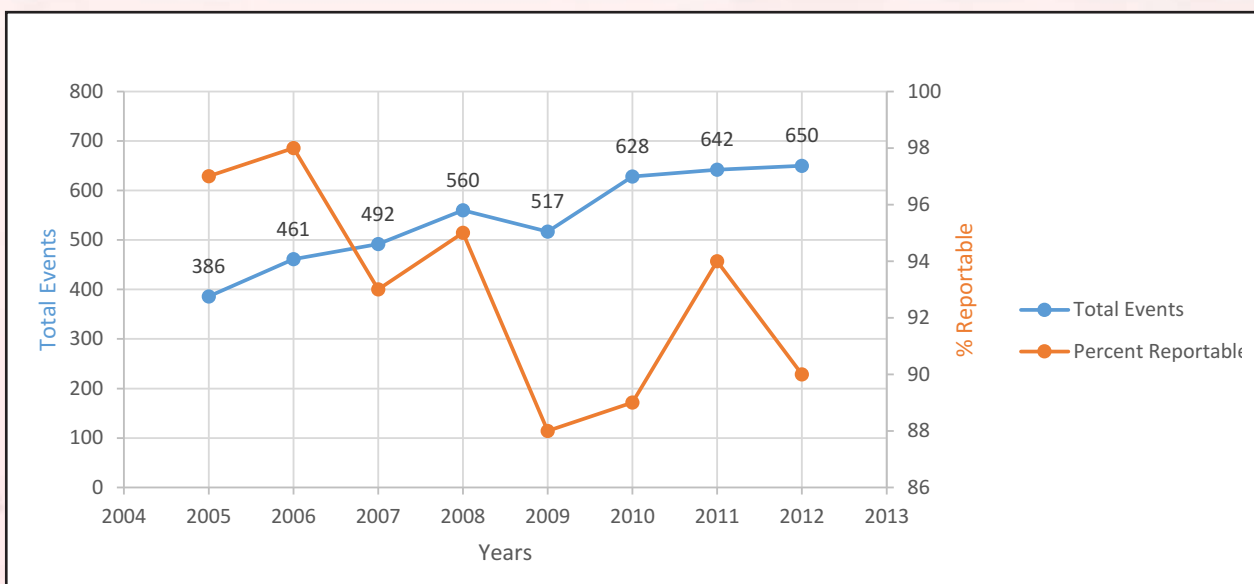
### III. General Acute Care Hospitals

**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 <sup>a</sup>	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

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

**Figure 1: General Acute Care Hospitals: Trends in Reportable and Not Reportable Events**



**a: 2005 Data represents 11 months of reporting since the program started on February 1, 2005.**  
**b: PSRS transitioned from a paper based reporting system to a web-based system during 2011.**



# Patient Safety Reporting System

## III. General Acute Care Hospitals



Since reporting began in February 2005, 4020 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 2012. In 2012, the eighth year of reporting, 587 reportable events from general acute care hospitals were submitted. The following describes the serious preventable adverse events that occurred in general acute care hospitals.

There was a 6.9 percent increase in the number of reportable events in 2011 compared with 2010 and a 2.3% decrease from 2011 to 2012 (Table 3). In 2012, all of the 72 general acute care hospitals in New Jersey submitted reportable events. The average number of reports per reporting hospital was 8.1. This average does not take into account hospital size and bed capacity.

**Table 3: General Acute Care Hospitals: Reporting Patterns (2005-2012)**

Reporting Year	Number of Reportable events	Hospitals			Average number of reports per hospital	Reportable Deaths	Percent of Deaths
		Number	Number Reporting	Percent Reporting			
2005 <sup>a</sup>	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

**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

As indicated earlier in the report, there were 587 adverse events reported by all New Jersey general acute care hospitals in 2012. There were 84 deaths associated with these adverse events. The events reported are classified into five event categories as follows:

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

Environmental events were the most frequently reported events, such as falls. As a category, environmental events accounted for 38.0 percent of total events and 23.8 percent of all deaths reported in 2012. Care management events, such as medication errors and care management “other” events accounted for 23.0 percent of reportable events and 32.1 percent of all deaths. Similarly, surgery-related events as a category accounted for 23 percent of reportable events and more than a third (36.9 %) of reported deaths. Both Product or Device and Patient Protection as event categories each accounted for 3.6 percent of deaths reported in 2012. Table 4 provides an overview of reportable events in the event categories with associated deaths.

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

Event Category	Total Events	Percent of Total Events	Total Death Events	Percent Deaths per Event Category
A: Care Management	135	23.0	27	32.1
B: Environmental	223	38.0	20	23.8
C: Product or Device	50	8.5	3	3.6
D: Surgery-Related	135	23.0	31	36.9
E: Patient Protection	44	7.5	3	3.6
Total	587	100.0	84	100.0

## III. General Acute Care Hospitals



As Table 4 demonstrates, the surgery-related event category had the highest number of associated deaths (31) or 36.9 percent of all deaths

In 2012, general acute care hospitals reported 135 surgery-related events, which accounted for 23 percent of statewide total events reported (Table 5). Intra-operative or postoperative coma, death or other serious preventable adverse events (35 events), retention of foreign object (29 events), and surgery “other” events (63 events) were the most frequently reported surgical events. These three event types (127 total events) accounted for 94.1 percent of surgery-related events and 21.6 percent of all reportable events submitted by general acute care

hospitals. There were 31 deaths associated with the three event types, representing almost 37 percent of all reportable deaths across all facility types in 2012.

For individual event types, there were 35 intraoperative or postoperative events with 18 associated deaths or 51.4 percent of events in that category type. Of the 63 reported surgery “other” events, 12 resulted in death or 19.0 percent. There were 29 retained foreign objects reported in 2012, which resulted in one death. There were seven wrong site events and one wrong procedure event reported. None of these event types resulted in death. There were no surgery related events on the wrong patient reported in 2012. Table 5 and Figure 2 show the results.

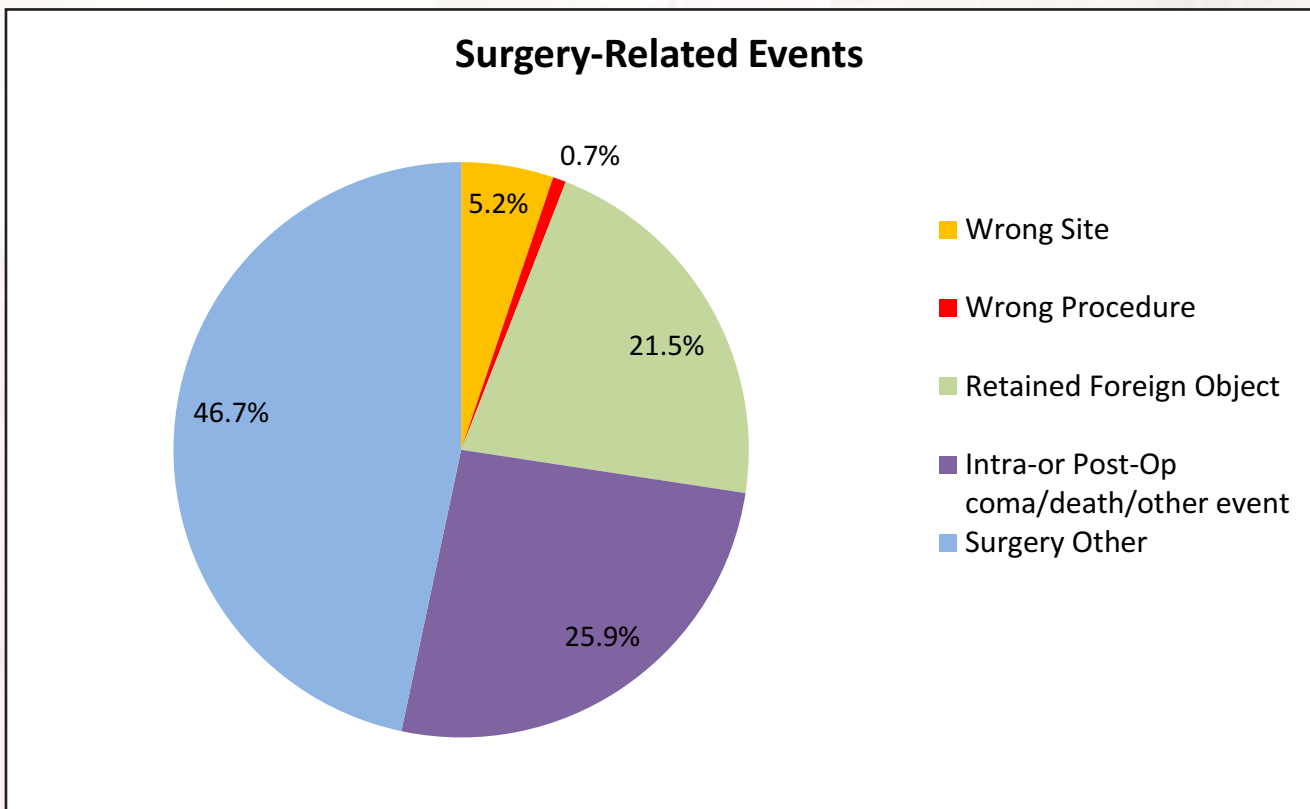
**Table 5: Surgery-Related Event Types with Associated Deaths**

Event Type	Reportable Events	Number of Deaths	Percent of Deaths by Event Type
Intra/Post-Op Coma/Death/Other Event	35	18	51.4
Retained Foreign Object	29	1	3.4
Surgery Other	63	12	19.0
Wrong Site/Procedure	8	0	0.0
Total	135	31	23.0



### III. General Acute Care Hospitals

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





### C. Events Types Associated with Highest Percent Deaths

The table below (Table 6) shows the event types with the highest percentage of deaths. As shown below, the highest percent of deaths was associated with care management “other” with 47 events and 25 deaths or 53.2 percent of events resulting in death. The next highest in terms of percent of deaths was intraoperative or postoperative coma, death or other serious preventable adverse events. Of the 35 affected patients in this event type, 18 died, which accounted for 51.4 percent of the events in this event type. The third highest

event type was surgery “other” with 63 events and 12 deaths (19%). Falls had 214 reportable events with 20 deaths or 9.3 percent. Patient or resident suicide or attempted suicide accounted for 37 events and 2 deaths. The percent of deaths in this event type was 5.4. In aggregate the five event types shown in the table below had a total of 396 reportable events which represents two thirds (67.6%) percent of all events reported. As noted, the total number of deaths associated with all event types was 84. The five event types accounted for 91.7 percent of all deaths in 2012.

**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	47	25	53.2
Intraop/Post-Op Coma, Death or Other Event	35	18	51.4
Surgery Other	63	12	19.0
Falls	214	20	9.3
Suicide/Attempted Suicide	37	2	5.4
All Other Event Types	191	7	3.8
Total	587	84	14.3

### III. General Acute Care Hospitals

#### 1. Care Management “Other” Events

The highest percentage of deaths was associated with care management “other” events as noted in Table 6. 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 46 events in 2010, 44 in 2011 and 38 in 2012. Twenty one deaths occurred in 2010, 23 in 2011 and 25 in 2012.

Care management “other” events include, but are not limited to, delays in medical care, such as failure to order appropriate diagnostic studies, failure to follow-up with the results of the studies, failure to communicate the results, failure to implement appropriate treatment or failure to do so in a timely manner.

Some of the events reported for this event type in 2012 were associated with loss of a radiology report for a patient with bowel obstruction, failure to follow up with a cardiac monitor alarm, and delays in evaluation and treatment of patients (for example, a patient having a myocardial infarction and a patient with a subdural hematoma and abnormal coagulation studies).

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

Reports of intraoperative or postoperative (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 patient were approximately the same as previous years (39 in 2010, 31 in 2011 and 35 in 2012). The number of deaths was slightly lower in 2012 (18) compared to the previous 2 years (25 each in 2010 and 2011).

Events reported for this event type in 2012 included myocardial infarctions, hypoxia (a decreased amount of oxygen in the blood), hypotension (low blood pressure) and death during or immediately (within 24 hours) following elective surgery. Organ perforations, arterial lacerations and urethral trauma during circumcision were also reported.



## III. General Acute Care Hospitals



### 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.

Events reported for this event type in 2012 included surgical site infections which manifested themselves more than 24 hours post-op and met the statutory definition of a serious preventable adverse event. Organ perforations, vessel lacerations and lost surgical specimens were also reported as this event type if the criteria for intraoperative and postoperative adverse events were not met.

The number of reported events for this event type was 63 in 2012 compared to 20 in 2010 and 27 in 2011. The number of deaths remained relatively constant (11 in 2010 and 2011, and 12 in 2012). Nine patients required additional surgery.

### 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 2012 (214) was slightly lower than the number reported in 2011 (221) and higher than 2010 (166). The number of deaths slightly increased over this time period (12 in 2010, 17 in 2011 and 20 in 2012). More than half of the fall events resulting in death (11 of 20) occurred in a med/surg unit.

Fifteen (15) of 20 occurred in the patient’s room (75.0%).

Prior to fall events, the majority of patients were engaged in toileting-related activities (75, 35%) and ambulating without assistance and/or an assistive device (59, 27.5%). Seventy-eight percent (167) of the patient falls were unwitnessed. Most of the patient falls did not occur during a change in shift (192, 89.7%). More than one-third of patients (76, 35.5%) fell on a holiday or weekend. One hundred twenty-four patients (57.9%) were known to be at high risk prior to the fall, 41 (19.2%) were at medium risk, and 49 (22.9%) were considered to be at low risk for falls.

The most frequently cited root causes for fall events included care planning process, communication among staff members, patient observation procedures and physical assessment process.

### 5. Suicide/Attempted Suicide Events

There were 37 reportable adverse events for this event type in 2012, a decrease from 2011 (50) and the same as 2010 (37). The most frequently cited root causes were communication among staff members, patient observation procedures, behavioral assessment process and care planning process.

The majority of events occurred in the Behavioral Health Unit (12), the Emergency Department (8), the Emergency Department Crises Screening Observation Unit (7) and Med/Surg units (7). Three events occurred in Critical Care Units.

There were two suicides. Both patients were inpatients. One patient was on a Med/Surg unit and was not considered to be at risk prior to the event. The second patient was on the Behavioral Health unit and was considered at risk prior to the event.

### III. General Acute Care Hospitals

#### D. Most Frequently Reported Event Types

Upon review of the specific event types submitted in 2012, falls, pressure ulcers, surgery “other”, device malfunction and care management “other” events represent the five

most frequently reported event types in order of magnitude. These five events accounted for almost 77 percent (76.7 %) of all events reported in 2012. Table 7 displays the distribution of the event types reported for the year.

**Table 7: General Acute Care Hospitals: Most Frequently Reported Event Types-2012**

Event Type	Number of Reportable Events	Percent of Events <sup>a</sup>
Falls	214	36.5
Pressure Ulcers	78	13.3
Surgery “Other”	63	10.7
Device Malfunction	48	8.2
Care Management “Other”	47	8.0
Suicide/Attempted Suicide	37	6.3
All Other Event Types	36	6.1
Intra-Op/Post-Op Coma, Death or Other Serious Adverse Events	35	6.0
Retained Foreign Object	29	4.9
Total	587	100.0

**a: Data drawn from 587 RCAs submitted for 2012 events.**

Falls, surgery “other,” care management “other,” suicide/attempted suicide, and intra-op/post-op coma, death or other

serious adverse events have been described in the prior section titled “Event Types Associated with Highest Percent Deaths.”



### 1. Pressure Ulcers

In 2012, there were 78 healthcare associated Stage III and IV pressure ulcers accepted as reportable events by the Patient Safety Reporting System. This represents a decrease from the number reported in 2010 (92) and in 2011 (93).

Fifty-eight (74.4%) of the pressure ulcers were located on the sacrum and 9 (11.5%) were on the buttocks. The remaining pressure ulcers were located on the abdomen, coccyx, ear, hip, neck, occipital region (the back and lower part of the head), and associated with a trach.

The majority of reported pressure ulcers were Stage III (65, 83.3%).

Eight (10.3%) of the 78 pressure ulcers were device-related.

There were no deaths attributable to pressure ulcer events.

### 2. Use/Function of a Device

There were 48 reportable events in 2012 related to the use or function of a device. This represents an increase from 2011 (28) but is similar to the number reported in 2010 (47). The majority of events (30) occurred in the operating room.

For 2012, this event type included such events as cardiac monitor malfunction. It also included events in which a device broke, even if a piece of the device remained in the patient. Some examples include broken drill bits, guidewires, catheters, a cautery tip and a fetal scalp monitor.

Forty (83.3%) of the events involved new single use devices and 5 involved multiple use devices. There was one reprocessed single use device, one multiple use device with single use components and one malfunction of the Operating Room table remote control.

There were two device-related deaths; one occurred in the cardiac catheterization lab and one occurred in the critical care unit. Sixteen patients required surgical intervention. This represents a third of all device-related events.

### 3. Retained Foreign Objects (RFOs)

There were 29 retained foreign object events in 2012. This represents a decrease from 2010 (80) and 2011 (49). Five events were discovered by a second facility. There was one associated death and 17 patients required surgical intervention (58.6%). Five RFO events occurred in one facility. This represents 17.2% of all RFO events.

Thirteen of the 29 events were sponges/gauze (44.8%). Examples of other retained objects included a clamp, lap pads, and a plastic connector.

This event type excludes objects intentionally implanted as part of a planned intervention, objects present prior to surgery that were intentionally retained, and retained broken microneedles.

### III. General Acute Care Hospitals

#### E. Major Root Causes for All Events

In 2012, the most frequent root causes of adverse events reported to PSRS were care planning process (54.7%), communication among staff and/or with the patient/family (21.0%), orientation and training of staff and supervision of staff (18.2%), equipment maintenance (15.8%) and patient observation

procedures (15.2%) and “other” accounted for 15.3 percent (for the root causes). 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 about 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<sup>a</sup>**

Root Cause	Number of Events	Percent of Events <sup>a</sup>
Care Planning Process	321	54.7
Communication among Staff and/or Patient/Family	123	21.0
Orientation and Training of Staff and Supervision	107	18.2
Equipment Maintenance/Management	93	15.8
Other	90	15.3
Patient Observation Procedures	89	15.2
Physical Assessment Process	72	12.3

**a: Data drawn from 587 RCAs submitted for 2012 events.**





### F. Contributing Factors to All Events

Similar to the past years of reporting, patient characteristics were the most frequently reported contributing factor to the events (71.9%). This factor can include the patient's confusion, co-morbidities and the patient's choice to refuse care. Task factors (tasks performed or omitted by any member of the

care team that contributes to the event) were contributing factors in 63.7 percent of events. The third most frequent contributor to events was team factors (39.9%); this includes failure of the care team to work together and to communicate appropriately. Additional contributing factors were staff factors (30.5%), procedures (29.3%), equipment (19.9%), patient record documentation (15.8%) and medication (15.0%).

**Table 9: General Acute Care Hospitals: Contributing Factors to All Events<sup>a</sup>**

Contributing Factors	Number of Events	Percent of Events <sup>a</sup>
Patient Characteristics <i>(May include confusion, co-morbidities and the patient's choice to refuse care.)</i>	422	71.9
Task Factors <i>(May include tasks performed incorrectly, omitted or characteristics of the task such as complexity.)</i>	374	63.7
Team Factors <i>(May include factors which interfere with the care team working together, such as inadequate communication.)</i>	234	39.9
Staff Factors <i>(May include training, experience and inadequate staffing levels.)</i>	179	30.5
Procedures <i>(May include diagnostic or therapeutic interventions that contribute to the event.)</i>	172	29.3
Equipment <i>(May include inappropriate use and malfunction of items such as stretchers, bed alarms and wheelchairs.)</i>	117	19.9
Patient Record Documentation <i>(May include missing or inaccurate information in the medical record.)</i>	93	15.8
Medications <i>(May include inappropriate administration, dose and prescribed medications not administered.)</i>	88	15.0

**a: Data drawn from 587 RCAs submitted for 2012 events.**

### III. General Acute Care Hospitals

#### G. Impact of All Events on Patients

A review of the 587 events and corresponding Root Cause Analysis (RCA) reports for 2012 showed that similar to 2009 and 2010, the most frequent consequences of serious preventable adverse events on patients included additional laboratory testing or diagnostic imaging (57.1%) and additional

patient monitoring in current location (44.3%). About 42.9 percent of the patients also experienced physical disability or mental impairment with associated increase in their length of stay (39.2%). Additional impacts included major surgery for the patients (31.2%), transfer to more intensive level of care (20.1%), and “other” additional diagnostic testing (19.4%), as shown in Table 10.

There were 84 deaths reported which represents 14.3 percent of all the reportable events.

**Table 10: General Acute Care Hospitals: Impact of All Events on Patients<sup>a</sup>**

Impact/Outcome	Number of Events	Percent of Events
Additional Lab Testing or Diagnostic Imaging	335	57.1
Additional Patient Monitoring in Current Location	260	44.3
Disability-Physical or Mental impairment	252	42.9
Increased Length of Stay	230	39.2
Major Surgery	183	31.2
Transfer to more intensive level of care	118	20.1
Other Additional Diagnostic Testing	114	19.4
Death	84	14.3

**a: Data drawn from 587 RCAs submitted for 2012 events.**

# Patient Safety Reporting System

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



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

There were 51 reportable events submitted from specialty hospitals in 2012.

Comprehensive rehabilitation hospitals submitted 27 reportable events, averaging slightly more than two event reports per facility type.

Psychiatric hospitals submitted 14 reportable events, an average of 2.7 per facility while special hospitals submitted 10 reportable events (1.4 reports per facility).

Special hospitals were the lowest reporters among the specialty hospitals, consistent with prior years. Variation in reporting may relate to the size and patient population of the facility.

**Table 11: Specialty Hospitals: Overall Reporting Pattern (2012)<sup>a</sup>**

Facility Type	Number of Facilities	Number of Facilities Reporting	Number of Reportable Events	Average Number of Reports per Facility	Number of Deaths
Comprehensive Rehabilitation	15	10	27	2.7	1
Psychiatric Hospitals	10	5	14	2.8	2
Special Hospitals	13	7	10	1.4	1
Total	38	22	51	NA	4

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

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

**A. Comprehensive Rehabilitation Hospitals**

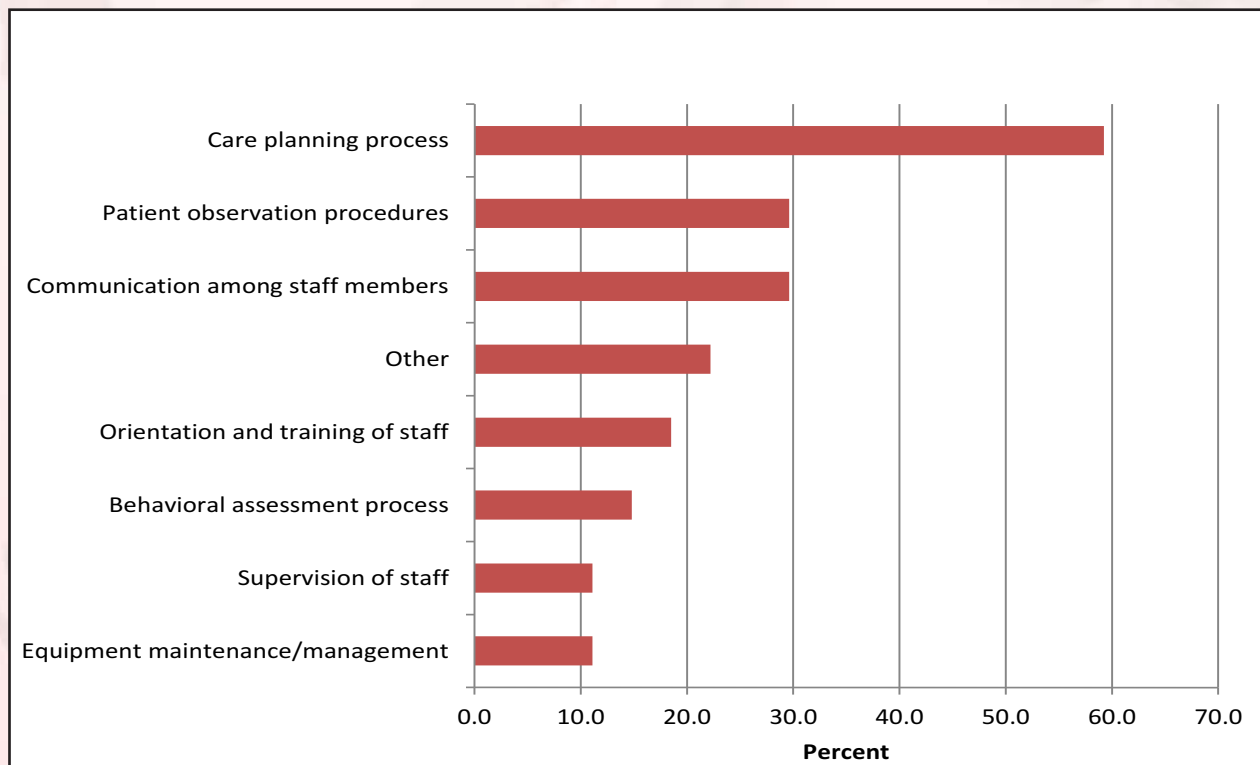
Of the 15 comprehensive rehabilitation hospitals in the state, 10 (66.7%) reported at least one event in 2012. There were 27 reportable events from these hospitals of which there were 23 fall events, representing 85 percent of the total reportable events submitted by comprehensive rehabilitation hospitals. Care management “other” events and pressure ulcers were the second highest number of reportable events with two events each. The average submission by this facility type was 2.7.

There was only one reportable death submitted by comprehensive rehabilitation hospitals. This death was related to a fall.

**1. Root Causes for All Events**

Most of the 27 events submitted (59.3%) had a root cause related to care planning process. This was followed by patient observation procedures and communication among staff and/or with patient/family each with a 29.6 percent representation. Additional root causes included “Other” (22.2%) of the events, orientation and training of staff for 18.5 % and behavioral assessment process for 14.8 %. Supervision of staff and equipment maintenance/management each accounted for 11.1 % of the events.

**Figure 3: Comprehensive Rehabilitation Hospitals: Root Causes for All Events<sup>a</sup>**



a: Data drawn from 27 RCAs submitted for 2012 events.



# Patient Safety Reporting System

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



### 2. Contributing Factors to All Events

In 2012, all the reported events had contributing factors that were related to patient characteristics (100.0%). Other

contributing factors included: task factors (74.1%), staff factors (44.4%) and team factors (40.7%). Additional factors reported were patient record documentation (29.6%), equipment (25.9%) and procedures (25.9%).

**Table 12: Comprehensive Rehabilitation Hospitals: Contributing Factors to All Events (2012)<sup>a</sup>**

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>	27	100.0
Task Factors <i>(May include tasks performed incorrectly, omitted or characteristics of the task such as complexity.)</i>	20	74.1
Staff Factors <i>(May include training, experience and inadequate staffing levels.)</i>	12	44.4
Team Factors <i>(May include factors which interfere with the care team working together, such as inadequate communication.)</i>	11	40.7
Patient Record Documentation <i>(May include missing or inaccurate information in the medical record.)</i>	8	29.6
Equipment <i>(May include inappropriate use and malfunction of items such as stretchers, bed alarms and wheelchairs.)</i>	7	25.9
Procedures <i>(May include diagnostic or therapeutic interventions that contribute to the event.)</i>	7	25.9

**a: Data drawn from 27 RCAs submitted for 2012 events.**

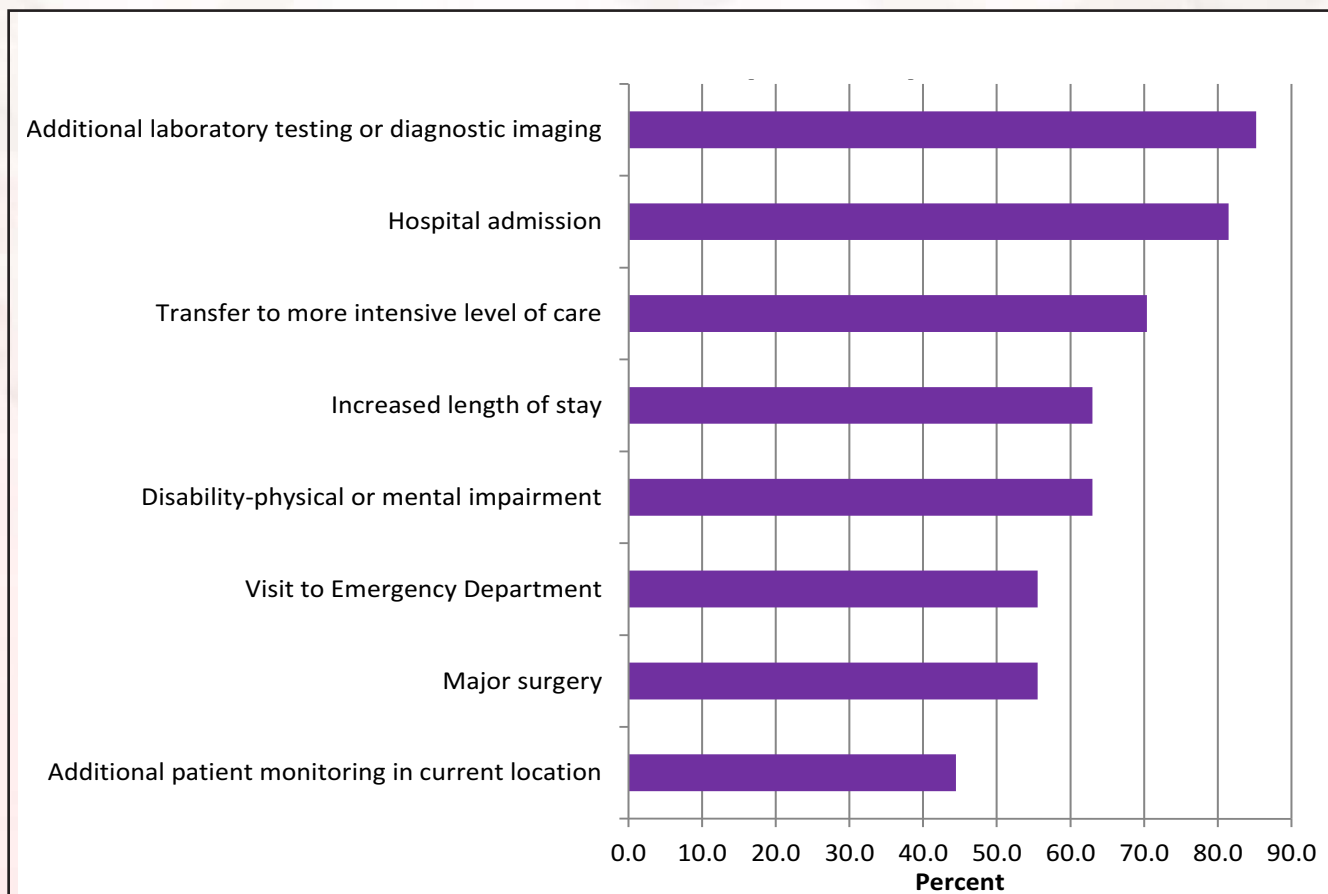
**IV. Overall Reporting Patterns for Specialty Hospitals:  
Comprehensive Rehabilitation, Psychiatric and Special Hospitals**

**3. Impact of All Events**

As a result of these adverse events, about 85 percent of the patients received additional laboratory testing or diagnostic imaging. An equally high percent of patients (81.5%) were admitted to a general acute care hospital or

transferred (70.4%) to a more intensive level of care. Other major impacts included increased length of stay (63.0%), disability-physical or mental impairment (63.0%). Over 55 percent of the patients went to the emergency department or had major surgery.

**Figure 4: Comprehensive Rehabilitation Hospitals: Impact of All Events<sup>a</sup>**



**a: Data drawn from 27 RCAs submitted for 2012 events.**

# Patient Safety Reporting System

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



### B. Psychiatric Hospitals

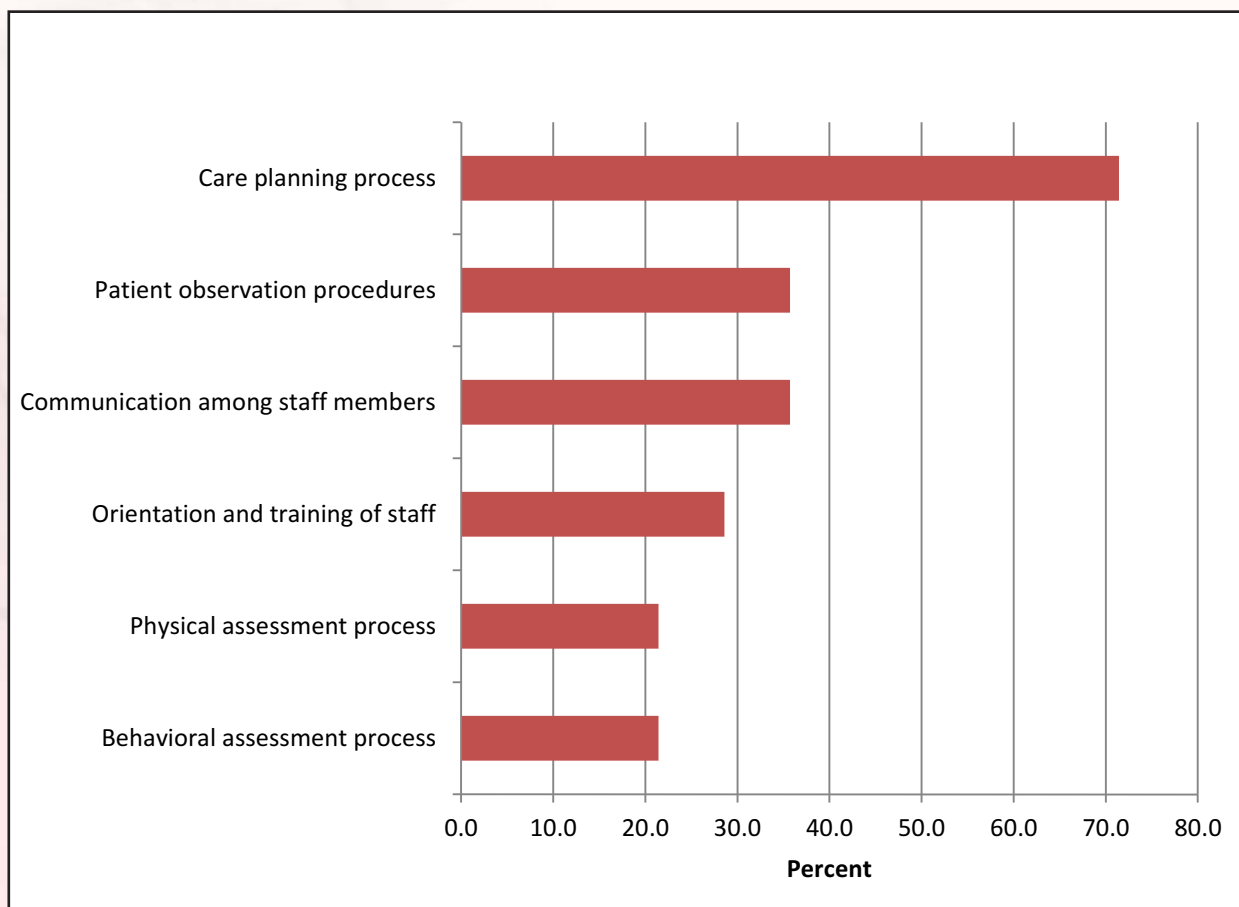
Only five out of the 10 psychiatric hospitals reported at least one event during 2012, a decrease in reporting from 8 down to 5 facilities. A total of 14 reportable events were submitted to the Patient Safety Reporting System. Of the 14 events, eight (57.1%) were falls, four were care management “other” events (28.6%) and pressure ulcers and suicide/attempted suicide had one reported event each. The average submission by this facility type was 2.8.

There were a total of two deaths associated with care management “other” events.

#### 1. Root Causes for All Events

Care planning process (71.4%), patient observation (35.7%) and communication among staff and/or with patient/family (35.7%) were the major causes of adverse events within psychiatric hospitals. Other root causes included orientation and training of staff (28.6%), physical assessment process (21.4%) and behavioral assessment process (21.4%).

**Figure 5: Psychiatric Hospitals: Root Causes for All Events<sup>a</sup>**



<sup>a</sup>: Data drawn from 14 RCAs submitted for 2012 events.

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

**2. Contributing Factors to All Events**

Patient characteristics (92.9%) and task factors (85.7%) were the most frequently reported contributing factors to events occurring in psychiatric hospitals. The next most frequently reported contributing factor was

staff factors (50.0%). Team factors accounted for 42.9 percent while organization/management represented 35.7 percent of the contributing factors. Procedures and equipment each contributed 21.4 percent to the adverse events reported.

**Table 13: Psychiatric Hospitals: Contributing Factors to All Events (2012)<sup>a</sup>**

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>	13	92.9
Task Factors <i>(May include tasks performed incorrectly, omitted or characteristics of the task such as complexity.)</i>	12	85.7
Staff Factors <i>(May include training, experience and inadequate staffing levels.)</i>	7	50.0
Team Factors <i>(May include factors which interfere with the care team working together, such as inadequate communication.)</i>	6	42.9
Organization/Management <i>(May include unclear policies and a lack of support from leadership.)</i>	5	35.7
Procedures <i>(May include diagnostic or therapeutic interventions that contribute to the event.)</i>	3	21.4
Equipment <i>(May include inappropriate use and malfunction of items such as stretchers, bed alarms and wheelchairs.)</i>	3	21.4

**a: Data drawn from 14 RCAs submitted for 2012 events.**



# Patient Safety Reporting System

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



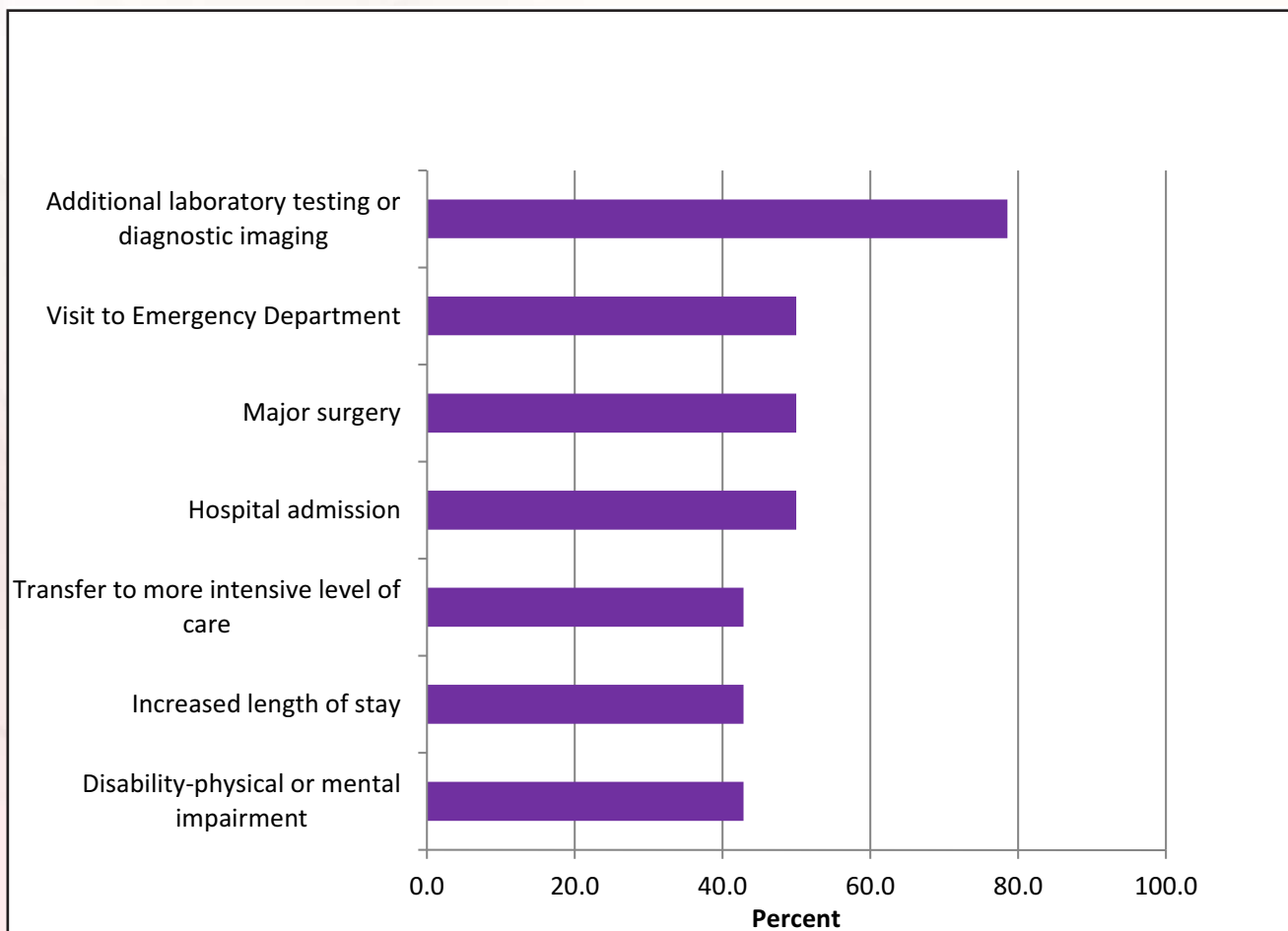
### 3. Impact of All Events

The highest percent of the impact factors was related to the patient receiving additional laboratory testing or diagnostic imaging (78.6%). Each of the following affected 50% of the patients: visits to the emergency department, major surgery and hospital admissions. Additional impact included

transfer to a more intensive level of care, increased length of stay and disability-physical or mental impairment, each at 42.9 percent.

As noted earlier, there were two deaths reported and both deaths were associated with care management “other” events.

**Figure 6: Psychiatric Hospitals: Impact of All Events<sup>a</sup>**



**a: Data drawn from 14 RCAs submitted for 2012 events.**

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

**C. Special Hospitals**

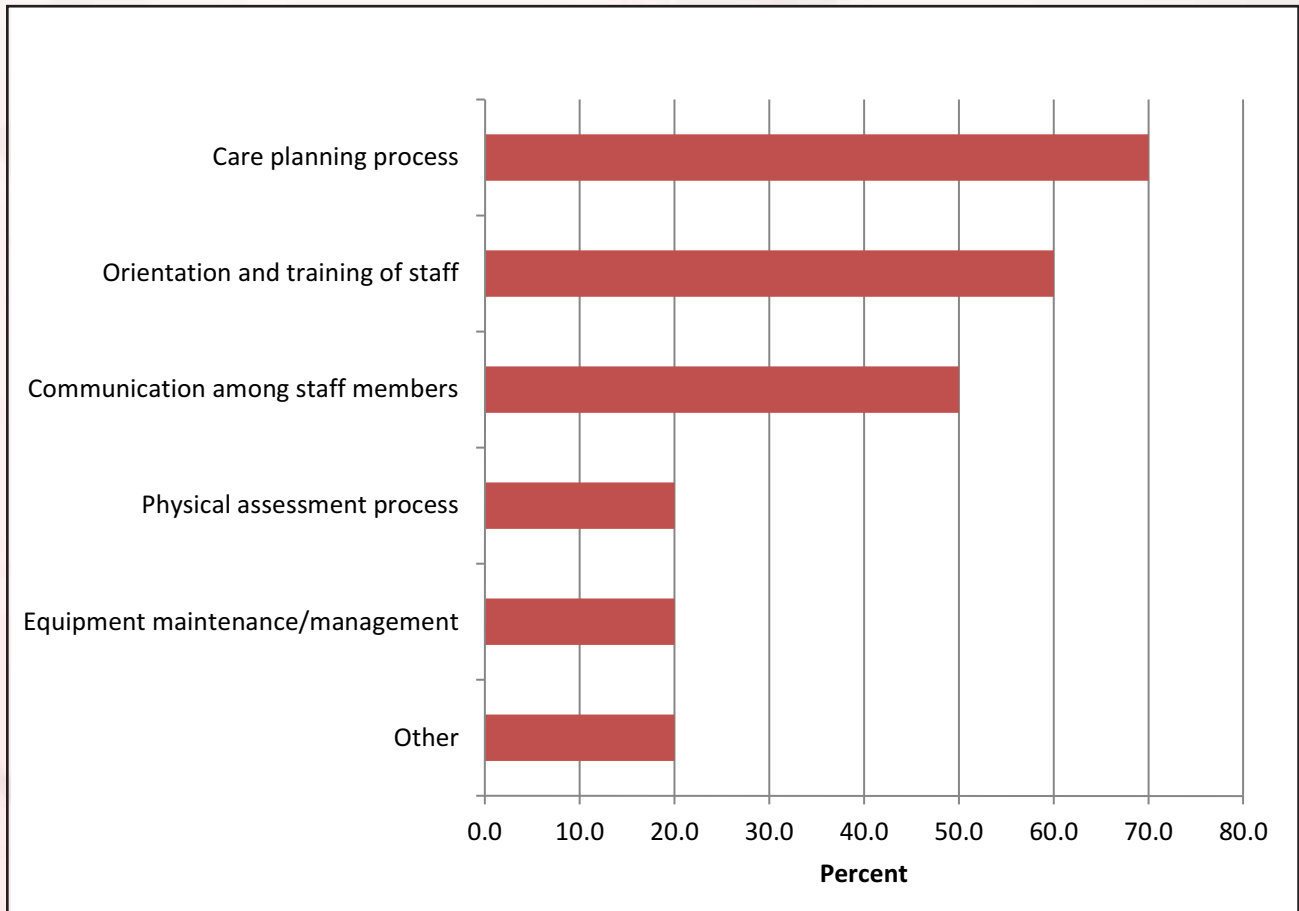
Seven of the 13 special hospitals reported at least one event in 2012. This is consistent with prior years. Ten reportable events were submitted compared to six reportable events submitted in 2010, and 11 in 2011. Seven of the events were from the care management category: pressure ulcers (5) and care management “other” events (2). There was one event each reported for fall, device malfunction and retained foreign object. The only reported death among this facility type

was associated with the care management “other” event type. The average submission by this facility type was 1.4.

**1. Root Causes for All Events**

The primary root causes were care planning process (70.0%), orientation and training of staff (60.0%) and communication among staff and/or with patient/family (50.0%). Others included physical assessment process and equipment maintenance/management at 20 percent each.

**Figure 7: Special Hospitals: Root Causes for All Events<sup>a</sup>**



<sup>a</sup>: Data drawn from 10 RCAs submitted for 2012 events.

# Patient Safety Reporting System

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



### 2. Contributing Factors to All Events

The most frequently reported contributing factor was patient characteristics (80.0%), followed by task factors (50.0%) and team

factors (40.0%). Additional reported factors included equipment (30.0%), patient record documentation, organization/management, imaging and x-ray and procedures (20.0% each).

**Table 14: Special Hospitals: Contributing Factors to All Events (2012)<sup>a</sup>**

Contributing Factors	Number of Events	Percent of Events <sup>a</sup>
Patient Characteristics <i>(May include confusion, co-morbidities and the patient's choice to refuse care.)</i>	8	80.0
Task Factors <i>(May include tasks performed incorrectly, omitted or characteristics of the task such as complexity.)</i>	5	50.0
Team Factors <i>(May include factors which interfere with the care team working together, such as inadequate communication.)</i>	4	40.0
Equipment <i>(May include inappropriate use and malfunction of items such as stretchers, bed alarms and wheelchairs.)</i>	3	30.0
Patient Record Documentation <i>(May include missing or inaccurate information in the medical record.)</i>	2	20.0
Organization/Management <i>(May include unclear policies and a lack of support from leadership.)</i>	2	20.0
Imaging and X-ray <i>(May include procedure related factors such as equipment and imaging agents.)</i>	2	20.0
Other <i>(Includes factors not identified in the other categories.)</i>	2	20.0

**a: Data drawn from 10 RCAs submitted for 2012 events.**

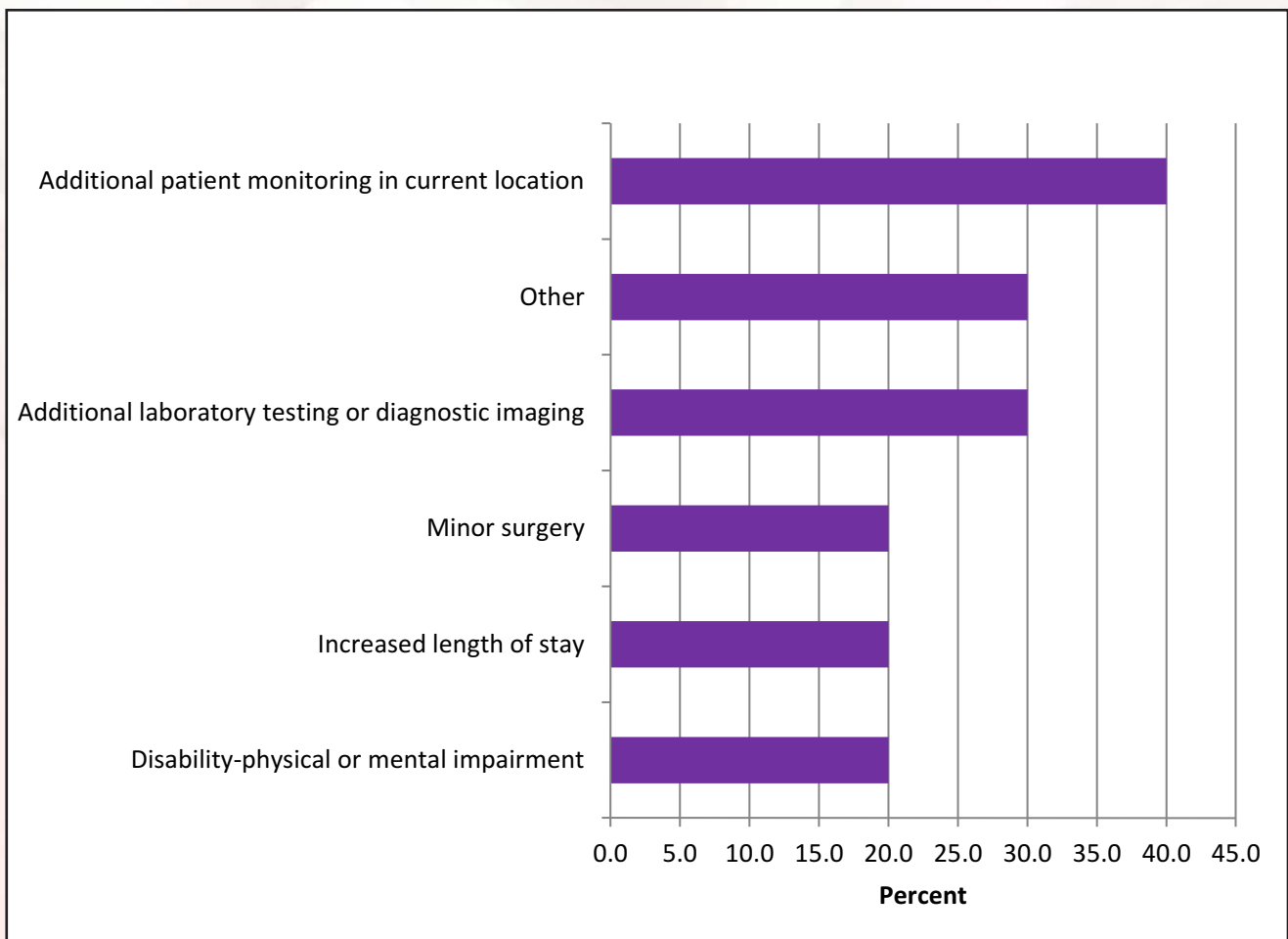
**IV. Overall Reporting Patterns for Specialty Hospitals:  
Comprehensive Rehabilitation, Psychiatric and Special Hospitals**

**3. Impact of All Events**

Impact from the reportable adverse events were: additional patient monitoring in current location (40.0%), additional laboratory testing

or diagnostic imaging (30.0%) and “Other” (30.0%). Minor surgery, increased length of stay and disability-physical or mental impairment and accounted for 20 percent each.

**Figure 8: Special Hospitals: Impact of All Events<sup>a</sup>**



a: Data drawn from 10 RCAs submitted for 2012 events.



# Patient Safety Reporting System

## V. Ambulatory Surgery Centers



**N**ew Jersey licensed ambulatory surgery centers (ASCs) began reporting serious preventable adverse events to PSRS as of October 1, 2008. Of the 163 ambulatory surgery centers in 2012, slightly less than one half (49.7%) submitted events. A total of 318

events were submitted of which 199 were reportable (62.6% of total), 31 not reportable (9.7%) and 88 (27.7%) classified as less serious or near misses. There were six deaths associated with these events. The average number of events submission by this facility type was 2.5.

**Table 15: Ambulatory Surgery Centers: Reportable and Not Reportable Events by Year**

Year	Reportable	Not Reportable	Less Serious/Near Misses	Total Events	Percent Not Reportable	Percent Reportable
2008 <sup>a</sup>	13	0	NA	13	0	100.
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

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

## V. Ambulatory Surgery Centers

As shown in Table 16 below, a majority of the cases were intraoperative or postoperative coma, death or other serious preventable adverse events. These events in aggregate accounted for two-thirds (66.8%) of all events reported by ambulatory surgery centers. The next highest event type was surgery “other” events with 57 cases or 28.6 percent of the total events reported from ASC centers.

These two event types accounted for 190 cases or 95.4 percent of the total.

There were six deaths reported: five from intraoperative or postoperative coma, death or other serious preventable adverse events type and one death attributed to a surgery “other” event.

**Table 16: Ambulatory Surgery Centers: Events Reported (2012)**

Event Type	Number of Events	Percent of Total Events	Number of Deaths
Intra- or Post-Operative Coma, Death or other serious preventable adverse event	133	66.8	5
Surgery-Related Other Event	57	28.6	1
Wrong Site	5	2.5	0
Burn	2	1.0	0
One event was reported for each of the following event types: Wrong Procedure and Fall	2	1.0	0
<b>Total</b>	<b>199</b>	<b>100.0</b>	<b>6</b>

## V. Ambulatory Surgery Centers

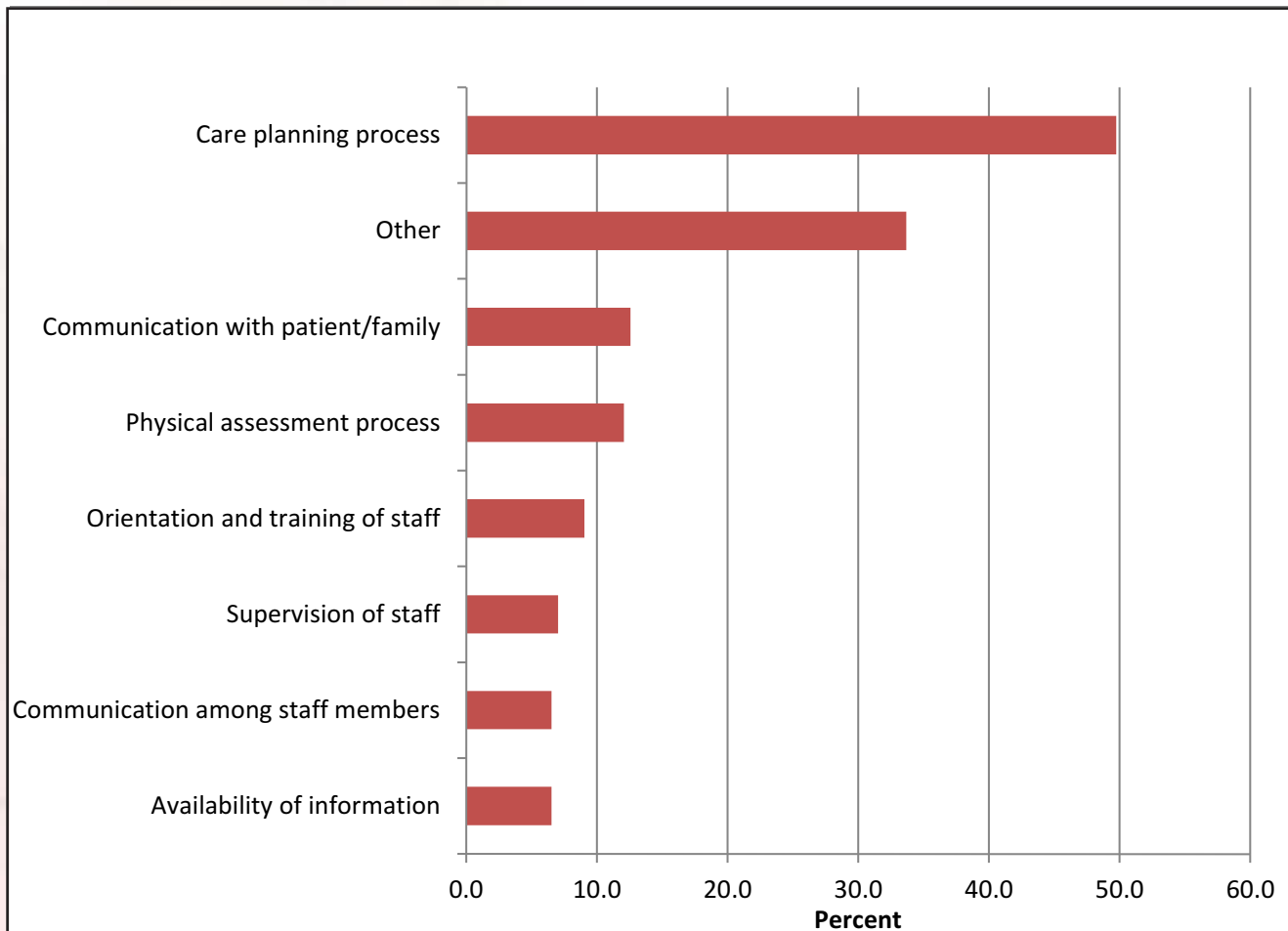


### A. Root Causes for All Events

A review of the 199 RCA reports showed that the most frequent causes of all the events reported by ambulatory surgery centers were care planning process (49.7%), “other” causes (33.7%), communication among staff and/or

with patient/family (12.6%), physical assessment process (12.1%), and orientation and training of staff (9.0%). The root cause “other” indicates that the surgery center did not initially identify a systems cause of the adverse event.

**Figure 9: Ambulatory Surgery Centers: Root Causes for All Events<sup>a</sup>**



**a: Data drawn from 199 RCAs submitted for 2012 events.**

## V. Ambulatory Surgery Centers

### B. Contributing Factors to All Events

The most frequently reported contributing factors were patient characteristics (68.3%), task factors (53.3%), and procedures (49.7%). “Other”

factors (31.2%), team factors (21.1%), staff factors (17.6%) and medications (15.1%) were also identified as contributing to the adverse events reported.

**Table 17: Ambulatory Surgery Centers: Contributing Factors to All Events<sup>a</sup>**

Contributing Factors	Number of Events	Percent of Events <sup>a</sup>
Patient Characteristics <i>(May include confusion, co-morbidities and the patient’s choice to refuse care.)</i>	136	68.3
Task Factors <i>(May include tasks performed incorrectly, omitted or characteristics of the task such as complexity.)</i>	106	53.3
Procedures <i>(May include diagnostic or therapeutic interventions that contribute to the event.)</i>	99	49.7
Other Factors <i>(Includes factors not identified in the other categories.)</i>	62	31.2
Team Factors <i>(May include factors which interfere with the care team working together, such as inadequate communication.)</i>	42	21.1
Staff Factors <i>(May include training, experience and inadequate staffing levels.)</i>	35	17.6
Medications <i>(May include inappropriate administration, dose and prescribed medications not administered.)</i>	30	15.1

**a: Data drawn from 199 RCAs submitted for 2012 events.**

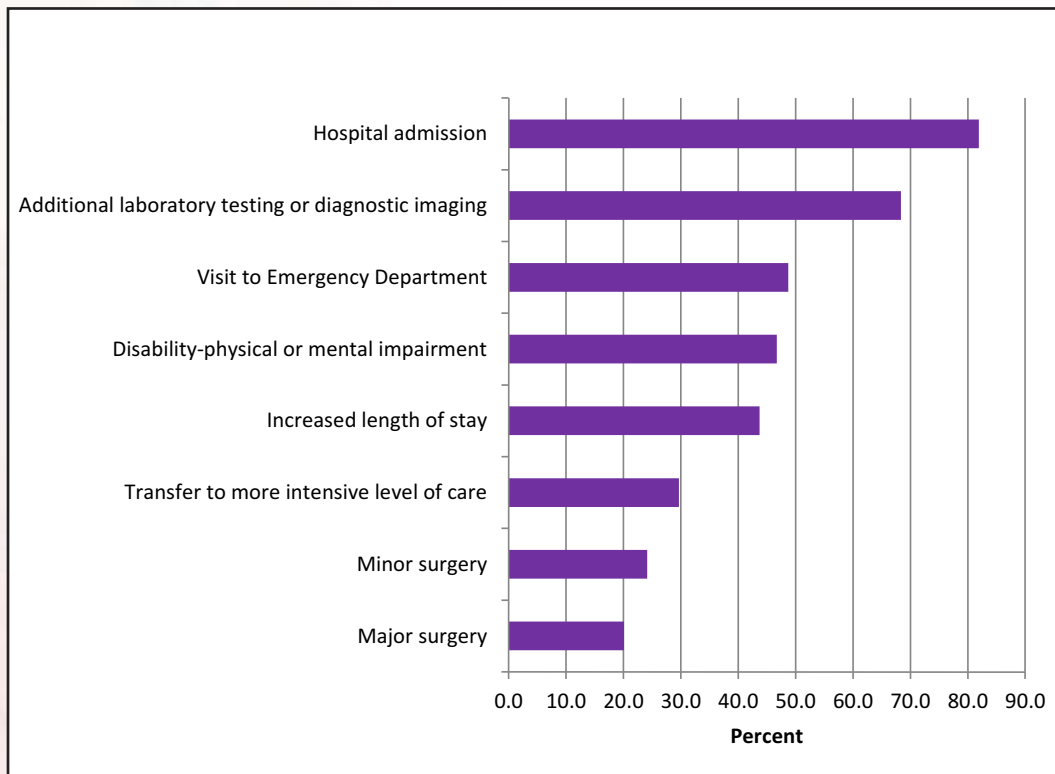


### C. Impact of All Events

Of the 199 reported events submitted, almost 82 percent of the patients were hospitalized. Additional laboratory testing/diagnostic imaging was provided to 68.3 percent of the patients.

Other impacts included: visit to the emergency department (48.7%) and disability-physical and mental impairment (46.7%). About 43.7 percent of the patients also had an increased length of stay.

**Figure 10: Ambulatory Surgery Centers: Impact of All Events<sup>a</sup>**



**a: Data drawn from 199 RCAs submitted for 2012 events.**



**2012 Summary Report**



# Patient Safety Reporting System

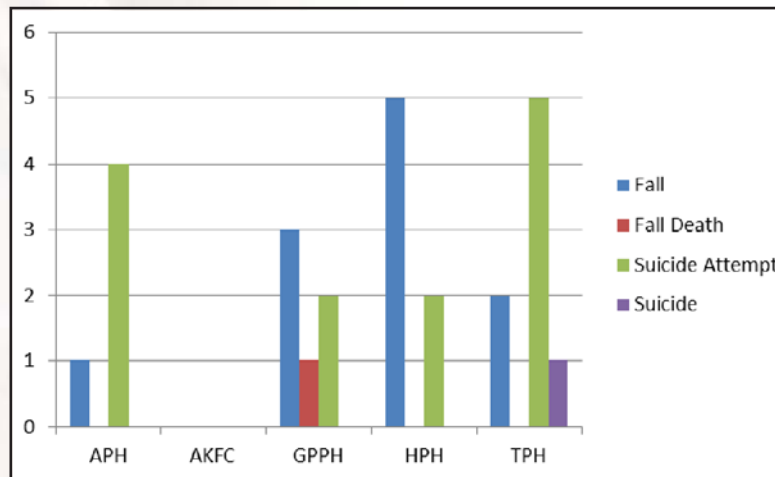
## VI. Division of Mental Health and Addiction Services 2011 Report



### A. Overall Reporting Patterns

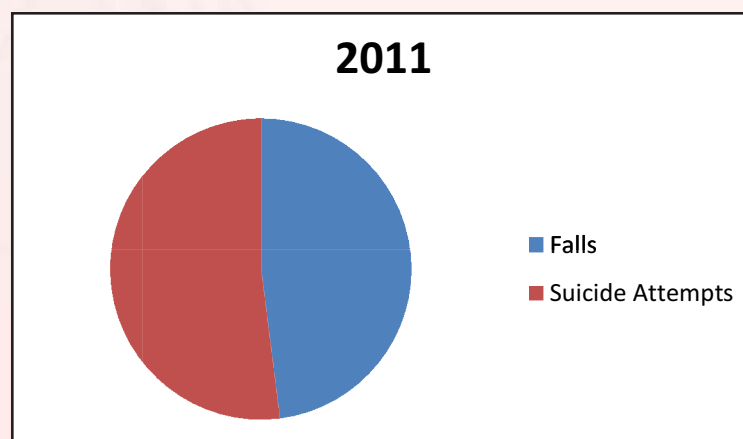
From January 1, 2011, through December 31, 2011, twenty five (25) events meeting the

definition of a serious preventable adverse events were reported by 4 (four) of the five (5) State Psychiatric Hospitals<sup>1</sup>.



The majority of these events (13 out of 25, 52%) were suicide attempts; falls with major injury (12 out of 25, 48%) accounted for the rest. There were two deaths reported as

Patient Safety Events-one which occurred after a fall and another as a result of a suicide attempt.



**Hagedorn Psychiatric Hospital is included in this report. It subsequently closed June 2012.**

**VI. Division of Mental Health and Addiction Services 2011 Report**

**B. Demographic Data:**

DMHAS collects demographic data including age, gender and race. Of the 25 Patient Safety Events that occurred in 2011, twenty four of

the twenty five (96%) patients involved in these events were Caucasian. Thirteen (52%) involved males and twelve (48%) involved females. The cohort of 35-44 years of age had the highest number of events (20%).

Age Cohort	Male		Female		All patients	
	Number of Reports	%	Number of reports	%	Number of Reports	%
18-24	2	14%	1	9.1%	3	12%
25-34	4	28%	0	0	4	16%
35-44	1	8%	4	36.4	5	20%
45-54	1	8%	0	0	1	4%
55-64	4	28%	0	0	4	16%
65-74	2	14%	2	18.1	4	16%
75-84	0	0	4	36.4	4	16%
85-94	0	0	0	0	0	0
95-	0	0	0	0	0	0
Total	14	100%	11	100%	25	100%

**C. Focusing on Specific Events:**

Suicide/Attempted Suicide

There were thirteen (13) suicide attempts, one (1) of which resulted in death.

Seven (7) attempts were made by females, six (6) by males, with most of these occurring in the 25-44 year old age groups.

Age Cohort	Male		Female		All Patients	
	Number of Suicide Attempts	%	Number of Suicide Attempts	%	Number of Suicide Attempts	%
18-24	2	34%	1	14%	3	24%
25-34	3	50%	1	14%	4	30%
35-44	0	0	4	58%	4	30%
45-54	1	16%	0	0	1	8%
55-64	0	0	0	0	0	0
65-74	0	0	1	14%	1	8%
75-84	0	0	0	0	0	0
85-94	0	0	0	0	0	0
95-	0	0	0	0	0	0
Total	6	100%	7	100%	13	100%



Three (3) of the thirteen (13) attempted suicides occurred when the patient was out of the hospital during a brief visit home. In one case, the patient slit his/her wrist, another attempted to overdose by ingesting an excessive number of pills with alcohol, and one used a belt tied around his/her neck in an attempted hanging.

In eight (8) of the ten (10) attempts that occurred in the hospital, a ligature was used by the patient to tie around his/her own neck. Of these, a bed sheet was used in three (3) of the eight (8) events. A plastic bag brought back from an acute care hospital visit was used in one (1) event; and belts or cords taken from the patient's own clothing were used in the remaining four (4) events.

In six (6) of the eight (8) events that occurred when a ligature was used, the patient had been on one to one (1:1) observation and all of these events occurred in the patient's bedroom or bathroom.

The remaining two (2) suicide attempts occurred from drinking cleaning solution from an unattended housekeeping cart.

### **Preventing Attempted Suicides:**

A review of the patient safety reports showed that some of the recurrent root causes in these events were related to staff performance when observing high risk individuals and when checking for contraband. In two events, it was found that housekeeping carts were not locked which resulted in access to poisonous chemicals.

### **Prevention Strategies:**

- ❖ Policies requiring face visualization with enhanced supervision of direct care staff.
- ❖ Enhanced contraband check policies at the point when patient is placed on 1:1 or returning from brief visit or from another hospital.
- ❖ Development of staff competencies for high-risk interventions and to recognize changes in patients conditions, early response processes developed.
- ❖ Environmental modifications to address suicidal risks-'safer rooms' developed.
- ❖ Assessment and reassessment policies revised to incorporate best practices of suicide risk assessments.
- ❖ Division-wide training 'Suicide Risk Assessment and the Columbia Suicide Severity Rating Scale' provided.
- ❖ Trauma Informed Care trainings provided.

**VI. Division of Mental Health and Addiction Services 2011 Report**

**1. Falls (7)**

There were 12 falls resulting in serious injury reported in 2011. Typically these involved older adults between the ages of 55 and 84.

Eleven (91%) of the reported twelve (12) falls occurred in the bedroom or bathroom. The most common serious injury was hip fracture, which occurred in five (41%) of the 12 events.

Age	Male		Female		All Patients	
Cohort	Number of Falls	%	Number of Falls	%	Number of Falls	%
18-24	0	0	0	0	0	0
25-34	0	0	0	0	0	0
Age	Male		Female		All Patients	
35-44	1	14%	0	0	1	8%
45-54	0	0	0	0	0	0
55-64	4	57%	0	0	4	32%
65-74	2	29%	1	20%	3	24%
75-84	0	0	4	80%	4	32%
85-94	0	0	0	0	0	0
95-	0	0	0	0	0	0
<b>Total</b>	<b>7</b>	<b>100%</b>	<b>5</b>	<b>100%</b>	<b>12</b>	<b>100%</b>

**Preventing Falls:**

A review of Patient Safety Reports show environmental factors contributing significantly to the number of serious falls. That is, patients' unfamiliarity with the environment, possessions not being placed within reach; and spills left on the floor accounted for most of the falls with major injury. Inadequate patient assessment and care planning, and poor medication management were also found to be root causes of these falls.

**Prevention Strategies:**

- ❖ Environmental expenditures to safeguard clients such as low beds, fall alarm systems and adaptive devices.
- ❖ Treatment teams trained to address instances of patient's noncompliance with safety precautions.
- ❖ Treatment teams trained to address fall risk through Individual Patient Plans and improve communication of interventions among caregivers.





### **Report Preparation Team**

**Lisel Hutchins**

**Quality Assurance Coordinator**

**Office of State Hospital Management**

**Division of Mental Health and Addiction Services**

**Robert Eilers, M.D.**

**Medical Director**

**Division of Mental Health and Addiction Services**

**Alberto Regalado**

**Quality Assurance Coordinator**

**Office of State Hospital Management**

**Division of Mental Health and Addiction Services**

**Sandy Moss**

**Quality Assurance Coordinator**

**Office of State Hospital Management**

**Division of Mental Health and Addiction Services**

## VII. Division of Mental Health and Addiction Services 2012 Report

### A. Implementation

The process for each hospital's risk management department coding applicable incidents as patient safety act events continued this year. To ensure adherence, members of the Division of Mental Health And Addiction Services' Patient Safety Act Event Oversight Committee continue to monitor incident reports from all four State Psychiatric Hospitals to ascertain if an incident entered into the Unusual Incident Reporting Management System (UIRMS) should have been categorized as a Patient Safety Act Event and tracks to ensure that a root cause analysis is conducted.

This committee is tasked with assessing the root cause analysis for thoroughness and credibility using The Joint Commission criteria as well as the requirements of the Patient Safety Act. Inquiries are made to obtain clarification or more information and recommendations are sent back to the facilities with regards to systems and process issues. There continues to be emphasis on re-education of Risk Managers, Directors of Quality Management, and Medical Directors regarding processes.

This committee also evaluates system-wide or hospital-specific patient safety issues and makes additional recommendations to reduce the risk to patients. Tracking these to completion was, and continues to be, a challenge. A log is maintained and timeliness of completion and review of the cause analysis is tracked.

The plan is to continue with training in 2013.

### B. Overall Reporting Patterns

From January 1, 2012, through December 31, 2012, twenty-two (22) events meeting the definition of Patient Safety Act event were reported. The majority of these events (13 out of 22, 59%) were falls with major injury. There were five deaths (5 out of 22, 23%) meeting the PSA event criteria while four suicide attempts (4 out of 22, 18 %) accounted for the rest.



### C. Focus on Specific Events:

#### a. Falls (13)

Of the thirteen falls, six of the patients were male and seven were female. Eleven were over the age of 60 with the average age of 68. Five of the thirteen events were hip fractures while the remaining eight were other extremities.

#### Root Causes:

- The fall risk assessments used inefficiently or omitted
- Physical Therapy assessment and follow-ups performed inaccurately or omitted
- Hand-off communication used ineffectively
- Environmental factors were noted as contributing causes
- Patient Observation Procedures inadequate to meet patients' needs

#### Prevention Strategies:

- Perform environmental modifications to address safety risks
- Revise assessment and reassessment policies and procedures and incorporate best practices for reducing falls
- Reinforce policy and procedures for hand-off communication
- Adopt new protocols for identifying newly admitted patients at risk for falls
- Safety Department will conduct educational sessions, Nursing will develop competency based training for patient transfers, and Rehabilitation Services will provide refreshers regarding the proper use of adaptive equipment
- Revise Patient Observation Procedures for patients that have an increased likelihood to have falls
- Incorporate Gerontology Training during orientation for staff on geriatric units

## **VII. Division of Mental Health and Addiction Services 2012 Report**

### **b. Attempted Suicides (4)**

Of the four reported events in the patient protection category, one involved a female and three involved males during the reporting period. The males were 38, 39, and 56 years of age while the remaining female was 53 years of age at the time of the event.

A review of the Root Cause Analysis Reports shows that some of the recurrent root causes continued to be the areas of behavioral assessment/reassessment, patient observation procedures and communication among staff.

#### **Root Causes:**

- Assessment and Reassessment process
- Hand-off communication used ineffectively to communicate patient's current needs
- Ineffective implementation of Special Observation Monitoring protocols
- Staff not attending annual refresher trainings as required
- Incomplete orders entered into Patient Tracking Database

#### **Prevention Strategies**

- Continue assessing for suicide risk in the environment
- Reinforce policy and procedures for hand-off communication and in-service staff on Special Observation Monitoring protocols and utilization of corresponding documentation
- Conduct suicide prevention training
- Provide training to ensure completeness and accuracy of transcription of physicians' orders
- Increased utilization of suicidal risk assessment

### **c Deaths (5)**

There were five deaths; four males and one female. Ages ranged from 28 to 78 and included two patients in their 20's, two in their 40's, and one 78 year old. Causes of deaths included three choking related incidents, one suicide, and one death due to complications related to repeated swallowing of non-food foreign bodies. The three choking incidents were unrelated (ingestion of a plastic cap, "stuffing food" and visitors supplying whole food to a patient needing a chopped diet)

Three of the five deaths occurred at one facility, but none of the three were related as to cause of death (one suicide, one choking, and one death related to complications of surgery following swallowing of non-food behaviors).



### Root causes

Analysis of Root Causes revealed that the areas of behavioral assessment /reassessment, patient observation procedures, staff supervision, and communication among staff were the most prevalent root causes.

### Prevention Strategies

- Revision of policy/procedures and subsequent retraining in the areas of visitation, completion of recovery plan updates and reassessments, and contraband checks.
- Reeducation/retraining of staff regarding patients at risk for choking (i.e., “stuffing”), monitoring/observation of patients on special precautions, chewing and swallowing assessments, and modification of forms utilized to document observations of patients on special observations and nursing evaluative notes regarding choking risks.
- Implementation of program changes, including Integrated Dual Diagnosis Treatment, on-unit programs for patients on Detainer status (legally involved patients), Substance use maintenance therapy, and agreements with offsite Pain Management service.
- Increased clinical supervision of staff monitoring patients on special precautions and specialized mock code blue drills for patients in Geri-chairs and choking incidents.
- Purchase of endotracheal tubes (Yankauer catheters) to be included in emergency bags and subsequent training provided for their usage.
- Division-wide training on Suicide Risk Assessment.
- Division-wide suicide prevention plan and implementation of a hotline in 2012.
- Meetings of the DHS Clinical Review Board in 2012 to review state hospital deaths and serious incidents.

### Report Preparation Team

John H. Williams III  
Quality Assurance Specialist  
Office of State Hospital Management

Sandy Moss  
Quality Assurance Coordinator  
Office of State Hospital Management

Robert Eilers, M.D.  
Medical Director, DMHAS



## Appendix I: Classification of Serious Preventable Adverse Events

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. Care management-related events include, but are not limited to:

1. Patient/resident death, loss of body part, disability, or loss of bodily function lasting more than seven days or still present at discharge, associated with a medication error (e.g., errors involving the wrong drug, wrong dose, wrong patient/resident, wrong time, wrong rate, wrong preparation, wrong route of administration, etc.).
2. Patient/resident death, loss of body part, disability, or loss of bodily function lasting more than seven days or still present at discharge, associated with a hemolytic reaction due to the administration of ABO-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/resident death, loss of body part, disability, or loss of bodily function lasting more than seven days or still present at discharge associated with hypoglycemia, the onset of which occurs while the patient is being cared for in the health care facility.
5. Death or kernicterus<sup>a</sup> associated with failure to identify and treat hyperbilirubinemia<sup>b</sup> 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/resident to a health care facility. This does not include skin ulcers that develop as a result of an underlying vascular etiology, including arterial insufficiency, venous insufficiency and/or venous hypertension; or develop as a result of an underlying neuropathy, such as a diabetic neuropathy. Also excludes progression from Stage II to Stage III, if Stage II was recognized and documented upon admission.
7. Patient death, loss of body part, disability, or loss of bodily function lasting more than seven days or still present at discharge, associated with spinal manipulative therapy provided in a health care facility.
8. Other patient/resident care management-related adverse preventable event resulting in patient death, loss of a body part, disability, or loss of bodily function lasting more than seven days or still present at the time of discharge not included within the definitions above.

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.



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

1. Patient/resident death, loss of body part, disability, or loss of bodily function lasting more than seven days or still present at discharge, associated with any shock while being cared for in a health care facility. Excludes events involving planned treatments, such as electric counter shock (heart stimulation).
2. Any incident in which a line designated for oxygen or other gas to be delivered to a patient/resident contains the wrong gas or is contaminated by toxic substances and results in patient/resident death, loss of body part, disability or loss of bodily function lasting more than seven days or still present at discharge.
3. Patient/resident death, loss of body part, disability, or loss of bodily function lasting more than seven days or still present at discharge, associated with a burn incurred from any source while in a health care facility.
4. Patient/resident death, loss of body part, disability, or loss of bodily function lasting more than seven days or still present at discharge, associated with a fall while in a health care facility.
5. Patient/resident death, loss of body part, disability, or loss of bodily function lasting more than seven days or still present at discharge, associated with the use of restraints or bedrails while in a health care facility.
6. Other environmentally-related adverse preventable events resulting in patient/resident death, loss of a body part, disability, or loss of bodily function lasting more than seven days or still present at the time of discharge not included within the definitions above.

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

1. Patient/resident death, loss of body part, disability, or loss of bodily function lasting more than seven days or still present at discharge, associated with use of generally detectable contaminated drugs, devices, or biologics provided by the health care facility, regardless of the source of contamination and/or product.
2. Patient/resident death, loss of body part, disability, or loss of bodily function lasting more than seven days or still present at discharge, associated with use or function of a device in patient/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/resident is in the facility. However, this does not include deaths or disability associated with neurosurgical procedures known to present a high risk of intravascular air embolism.
4. Patient/resident death, loss of body part, disability, or loss of bodily function lasting more than seven days or still present at discharge associated with use of a new single-use device or a reprocessed single-use device in which the device is used or functions other than as intended. All events related to single-use devices should be reported in this category. Indicate whether the device was new or had been reprocessed.
5. Other product or device-related adverse preventable event resulting in patient death, loss of a body part, disability, or loss of bodily function lasting more than seven days or still present at the time of discharge not included within the definitions above.

## Appendix I: Classification of Serious Preventable Adverse Events

### **D. Surgery-related events (i.e., any invasive manual or operative methods including endoscopies, colonoscopies, cardiac catheterizations, and other invasive procedures) include but are not limited to:**

1. Surgery initiated (whether or not completed) on the wrong body part.
2. A surgical procedure (whether or not completed) intended for a different patient of the facility.
3. A wrong surgical procedure initiated (whether or not completed) on a patient.
4. Retention of a foreign object in a patient after surgery, excluding objects intentionally implanted as part of a planned intervention and objects present prior to surgery that were intentionally retained.
5. Intraoperative or postoperative (i.e., within twenty-four hours) coma, death or other serious preventable adverse event for an ASA Class I inpatient or for any ASA Class same day surgery patient or outpatient. Includes all patient deaths, comas or other serious preventable adverse events in situations where anesthesia was administered; the planned surgical procedure may or may not have been carried out.
6. Other surgery-related adverse preventable event resulting in patient death, loss of a body part, disability, or loss of bodily function lasting more than seven days or still present at the time of discharge not included within the definitions above.

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

1. Discharge of an infant to the wrong person, excluding patient/resident abductions.
2. Any patient/resident death, loss of body part, disability, or loss of bodily function lasting more than seven days associated with patient/resident elopement.
3. Patient/resident suicide or attempted suicide while in a health care facility. However, this does not include deaths or disability resulting from self-inflicted injuries that were the reason for admission to the health care facility.
4. Other patient/resident protection-related adverse preventable event resulting in patient death, loss of a body part, disability, or loss of bodily function lasting more than seven days or still present at the time of discharge not included within the definitions above.



# Patient Safety Reporting System

## Appendix II: 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.

## 2012 Summary Report

### **Patient Safety Reporting System (PSRS) Contact Information**

**PSRS Telephone:** 609-633-7759

**PSRS Website** <http://nj.gov/health/ps>

#### **PSRS Staff:**

Mary Noble, MD, MPH, *Clinical Director*

[Mary.Noble@doh.nj.gov](mailto:Mary.Noble@doh.nj.gov)

Sara Day, RN, BSN, CSM, *Supervising Health Care Evaluator*

[Sara.Day@doh.nj.gov](mailto:Sara.Day@doh.nj.gov)

Regina Smith, RN, BSN, MA, *Health Science Specialist*

[Regina.Smith@doh.nj.gov](mailto:Regina.Smith@doh.nj.gov)

Contrina Warren, MSN, RN, *Health Science Specialist*

[Contina.Warren@doh.nj.gov](mailto:Contina.Warren@doh.nj.gov)

Eva Besserman, DO, MBA, FCCM, *Clinical Consultant*

[Eva.Besserman@doh.nj.gov](mailto:Eva.Besserman@doh.nj.gov)

Adan Olmeda, *Administrative Support*

[Adan.Olmeda@doh.nj.gov](mailto:Adan.Olmeda@doh.nj.gov)

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](mailto: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](http://www.nj.gov/health/ps).