Sentinel EVENTS

CY 2010

Annual Report to the Joint Standing Committee on Health and Human Services

Final Report April 2011

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http://www.maine.gov/dhhs/dlrs/medical_facilities/sentinelevents/home.html
The Maine Sentinel Event Reporting Statute may be found on the internet at:
http://www.mainelegislature.org/legis/statutes/22/title22ch1684sec0.html
The Rules Governing the Reporting of Sentinel Events may be found on the internet at:
http://www.maine.gov/sos/cec/rules/10/144/144c114.doc

EXECUTIVE SUMMARY

Since 2004 Maine hospitals, ambulatory surgery centers, dialysis centers and intermediate care facilities for individuals with mental retardation have been required to report whenever a serious, unexpected and preventable event, or medical error, known as a sentinel event, occurs. These events include unanticipated patient deaths, falls with significant injury, serious medication errors, patient suicide, surgery on the wrong body part, or an error resulting in a major loss of function. In 2010, 150 such cases were reported to the Maine Division of Licensing and Regulatory Services. This report provides information about what kind of events occurred, why they happened, and what is being done to reduce the likelihood of a recurrence.

The number of cases reported, in and of itself, is not the most important information to focus on in this report. In addition the increase in reporting does not lead to any conclusions about the quality of care or safety of patients in the facilities involved. It is the lessons that are learned and the changes that are made as a result of these events that result in a safer environment for all of the patients that follow. Facilities where mistakes and errors are shared in a culture that is open and receptive, where there is no fear of reprisal, will have the greatest chance for ensuring high quality services for all patients.

Robert Wachter, MD, Professor and Associate Chairman of the Department of Medicine at the University of California, San Francisco, a national leader in the fields of patient safety and healthcare quality, described an inquiry from a news reporter in Indiana. The state had just released their first reports of hospital-specific sentinel events. That year, in the city of Indianapolis where there are two major medical centers, one had reported ten sentinel events and the other none. When the reporter queried Dr Wachter about this disparity he replied, “I wouldn’t be caught dead in the hospital that had not reported a single sentinel event.”

Each year since the initiation of mandatory reporting, more Maine hospitals and free standing centers have complied with reporting requirements. This year for the first time, all Maine hospitals have reported sentinel events and were actively involved in the program.

In 2009 the statute requiring sentinel event reporting was amended to include new reporting requirements. Highlights of those changes include adoption of the National Quality Forum list of Serious Reportable Events and enhancements to the sentinel event definition to reduce ambiguity. Additionally, facilities are now required to develop standardized processes for the detection and reporting of all sentinel events.

As a result of these changes and due to increased awareness and acceptance of the reporting requirements, there was a dramatic increase in the number of cases reported. Increased comfort with reporting and new requirements for standardized education regarding sentinel events for all staff contributed to this increase.

As in previous years the types of reports have remained fairly constant. In 2010 the most prevalent type of event reported was unanticipated death. The second and third types were pressure ulcers and major loss of function. A significant finding in 2010 was the rise in inpatient suicide. Patient falls resulting in death or significant injury continues to be a high frequency report. This is followed by retained foreign objects and wrong site surgery.

Every facility is required to conduct an in-depth analysis after every sentinel event. The facility gathers a Root Cause Analysis team and launches a review of why the event occurred, and what steps will be undertaken to prevent a recurrence. A joint meeting with the Sentinel Event Team and facility staff is held to share state findings and stimulate discussion in the effort to identify opportunities for system improvements. The final report is sent to the Division within 45 days of discovery. The Sentinel Event Team analyzes all events for statewide trends and features. Results are then shared in the Sentinel Event Annual Report.

The Maine experience has been enriched by our active participation in the National Quality Forum and Agency for Healthcare Research and Quality (AHRQ) sponsored collaboration with the other 28 states with mandatory sentinel event reporting requirements. Current issues and challenges in sentinel event reporting are shared with the goal of achieving standardized reporting, consistent with the recommendation from the Institute of Medicine report in 1999.

For the first time, this year's Annual Report includes submissions from Maine hospital administrators, senior physicians and quality leaders. These patient safety advocates and subject matter experts were invited to contribute papers that address specific topics reflecting major issues and categories of sentinel events reported in 2010. We are grateful for their outstanding contributions.

Mayo Regional Hospital
Ralph Gabarro, Chief Executive Officer, Mayo Regional Hospital
Dover-Foxcroft, Maine

On June 4, 2010 Mayo Regional Hospital experienced every hospital's worst nightmare. I have been asked to share thoughts and observations about this tragedy as part of this year's annual sentinel event report.

On the night of June 4th an emergency room patient was given 0.3 milligrams of epinephrine, an appropriate amount and the patient showed signs of improvement. When earlier symptoms recurred, another dose was administered by the medical providers involved. The second dose was too large – 10 times the appropriate amount. This human error was irreversible and led to the patient's death. What happened subsequently was not guided by past experience but rather from instinct and our values as a small rural community hospital.

Almost immediately after the mistake was identified hospital staff met with the patient's spouse and explained what we thought had occurred, pledging that we would investigate and communicate our findings as soon as possible. An autopsy conducted by the state medical examiner's office confirmed our suspicions – that epinephrine was the primary cause of the patient's death.

A series of communications then took place with Trustees, medical staff, hospital staff, and most importantly, as promised at the initial meeting, our first meeting was with the patient's family. During that meeting we took full responsibility for the error. There was never any thought given to withholding information but rather our efforts centered on full disclosure. Patients turn to hospitals at the most vulnerable times of their lives; they entrust us with their well being and that of their families. Anything short of full disclosure would have violated the trust patients place in Mayo Regional Hospital

We also felt that it was important to explain what occurred to our local media to facilitate an accurate understanding of the sentinel event. This public disclosure in turn, enabled hospitals not only in Maine but on a national basis to examine their policies and practices around epinephrine administration, hopefully minimizing exposure to this ever occurring again.

The hospital immediately assembled a team to perform a root cause analysis from which we examined all aspects of the error and applied what we learned to systems and practice improvements:

- Multi dose vials of epinephrine were removed from emergency rooms and replaced with EpiPens, a single dose way of administering epinephrine. Though we had never considered this in the past, it would have prevented this error.
- Epinephrine was added to a list of high-risk medications that require two nurses to verify the dose prior to administration

- We immediately subscribed to an electronic version of medication practice updates furnished by medical journals rather than waiting for printed versions
- We accelerated existing plans to acquire an emergency room electronic medical record. Among a variety of quality improvement advantages of an electronic system is the ability to electronically red flag potential medication errors
- Follow-up with staff involved education and counseling approached in a manner consistent with a just culture regarding patient safety. Data supports that there is no correlation between a punitive approach to medical errors and error reduction
- We developed a Board Policy that states our commitment to "Stop the Line" Communication at all levels of the organization

Finally, as difficult as it was to revisit the circumstances of this tragic event I want to thank the Department of Health and Human Services for inviting me to share our experience with others. I hope that it fosters a greater commitment to full disclosure and reinforces the critical nature of acting in a manner that retains and builds upon the trust that our patients accord us.

BACKGROUND

This report is submitted in accordance with Maine law (22 M.R.S.A. §§8751-8756) which requires the Division of Licensing and Regulatory Services (the Division) to annually report to the Legislature, health care facilities and the public on the aggregate number and type of sentinel events for the prior calendar year, rates of change, causative factors, and activities to strengthen patient safety in Maine. This report is designed to:

- Identify patterns and make recommendations to improve the quality and safety of patient care;
- Provide aggregate information on the number and nature of sentinel events reported;
- Describe efforts to address under-reporting and enhance the role of sentinel event reporting in improving patient safety; and
- Build awareness of Maine's sentinel event reporting requirements and the follow-up process used by facilities and the State when events occur.

In 2002, Maine enacted Public Law 2001, Chapter 678 establishing a mandatory sentinel event reporting system. As implemented in subsequent regulations, the law requires licensed General and Specialty Hospitals, Ambulatory Surgical Centers, End Stage Renal Disease (ESRD), and ICF/MR to report certain serious events, referred to as sentinel events.

The Institute of Medicine (IOM) report, *To Err is Human: Building a Safer Health System* (Kohn, Corrigan and Donaldson, 1999) heightened awareness of the serious injuries and deaths that occur every year from preventable medical errors. The IOM report proposed a combination of strategies to reverse these trends, among them:

- The establishment of state-based mandatory reporting systems, tied to systems of accountability, for the most serious medical errors that may cause harm and death.
- The encouragement of voluntary reporting systems for the broad spectrum of errors and near misses to better understand why and how events happen and what can be done to prevent their recurrence.
- The promotion of non-punitive systems within hospitals that encourage reporting at all levels and develop system solutions for their prevention.
- The promulgation of national efforts to standardize reporting, study patient safety trends, and disseminate best practices for reducing medical errors.

On January 1, 2009, revised reporting rules became effective. Key objectives in the rule changes were to reduce redundancy, improve reporting, streamline definitions for ease of use, reduce ambiguity and encourage reporting of near misses. Highlights of the changes include:

- Definition of a reportable event was revised to increase clarity
- Definition of Root Cause Analysis (RCA) was included with a requirement that it be 'thorough and credible'

- Adoption of the National Quality Forum list of Serious Reportable Events
- Addition of reports of patients that expire within 48 hours of treatment
- Addition of reports of an unexpected transfer of a patient to another facility
- Standardize the process for discovery of sentinel events and educating staff
- Addition of annual attestation from each facility affirming that all events have been reported
- Consolidation of the previously diverse sentinel event rules into one free standing rule
- Voluntary reporting of near misses

Definition of a Sentinel Event

Sentinel events include outcomes determined to be unrelated to the natural course of the patient's illness or underlying condition, or proper treatment of that illness or underlying condition. The law further characterizes sentinel events as:

- Unanticipated death;
- A major permanent loss of function that is not present when the patient is admitted to the health-care facility;
- Surgery on the wrong patient or wrong body part;
- Hemolytic transfusion reaction;
- Patient suicide, or attempted suicide resulting in serious disability;
- Infant abduction or discharge to the wrong family;
- Rape of a patient;
- Unintended retention of a foreign object;
- Patient death or serious disability associated with a fall; or
- Death or significant injury of a patient or a staff member resulting from a physical assault

In 2010 the entire list of the National Quality Forum Serious Reportable List was formally adopted as part of the statutory changes.

Reporting Requirements

Facilities must notify the Division within one business day of discovering an event. The facility is required to submit a brief description of the incident via a restricted fax. A facility that knowingly violates any provision of the requirements is subject to a civil penalty.

Within 45 days of discovering a reportable event, the facility is required to share the results of the Root Cause Analysis with the Division. The Root Cause Analysis includes the circumstances surrounding its occurrence, the contributing causes, corrective action plans, time frames and responsible parties. These efforts are all designed to prevent the likelihood of a recurrence.

The sentinel event team conducts an independent and comprehensive medical record review following each reported sentinel event. This review includes an assessment of the precipitating factors prior to the incident, events occurring at the time, and any contributing factors that may have gone unnoticed. This process provides an independent assessment that augments the facility's own internal review of the incident. The review also ensures that all relevant factors are considered in the Root Cause Analysis and subsequent action plan. The on-site review occurs shortly after the incident is first reported so that findings can be incorporated into the facility's action plan. The facility's Chief Executive Officer (CEO) is briefed at this time by the sentinel event team to assure his/her active engagement in understanding factors leading to the event and plans for mitigating its recurrence.

Throughout the review of a sentinel event, the sentinel event team studies relevant standards of care and evidence-based research to help inform their review of the facility's response to an event. Depending on the nature of the event, content experts may also be consulted to expand understanding of the possible system failures or other factors that may have contributed to a sentinel event.

Upon receipt of the facility's full written report, the sentinel event team confirms that direct causal factors have been examined by the facility and that corrective actions are appropriate, comprehensive, and implemented. When the report is accepted, a letter attesting to that fact is sent to the facility's CEO. Should more information be required, a letter requesting specific details is sent. When this report is complete, a final approval letter is sent to the facility. Should it be necessary, the sentinel event team may return to the facility to follow-up on the implementation of the action plan. A flow chart diagramming the sentinel event case review process can be found in Appendix B.

Information regarding sentinel events and their reviews are entered into a confidential database. This database is the primary source for identifying and generating aggregate statistics and trends found in the Annual Report.

Confidentiality Provisions

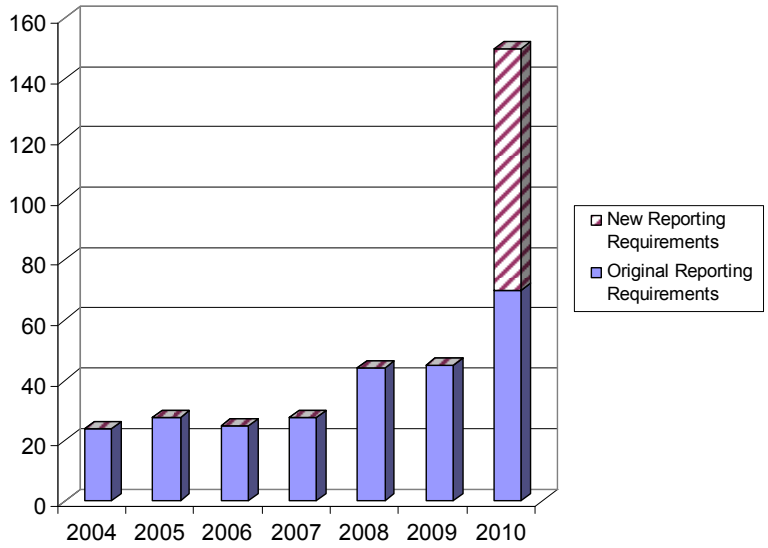
By law, all sentinel event information submitted to the Division is considered privileged and confidential. No information about facilities or providers is discoverable or made public. A firewall is maintained between the sentinel event program and the survey unit that licenses the facilities. The sentinel event team is responsible for reviewing the initial reported event, conducting on-site reviews, ensuring that all contributing factors to an event are identified, and that action plans are appropriate and implemented. In 2010, the Sentinel Event Team was permitted to share information with the licensing team if it determined that a sentinel event represented immediate jeopardy to the public. The information shared is limited to the condition of participation for the Medicare and Medicaid certification program that was impacted by the event. This ensures that the immediate jeopardy can be investigated and separate and public corrections be made to avoid harm to the public.

SENTINEL EVENTS REPORTED 2004-2010

A total of 342 sentinel events has been reported to the Division since the initiation of the program in 2004. Following focused efforts to ensure that all facilities had a heightened awareness and full understanding of the reporting requirements, reporting began to increase in 2008 and 2009.

In 2010, a dramatic increase in sentinel event reporting occurred. This spike in reports reflects a greater appreciation of the requirements and changes in the statutory requirements. There is also a growing awareness of the benefit of increased transparency with an emphasis on establishing a 'blame free' culture and a focus on systems improvements and reduction of the likelihood of a recurrence.

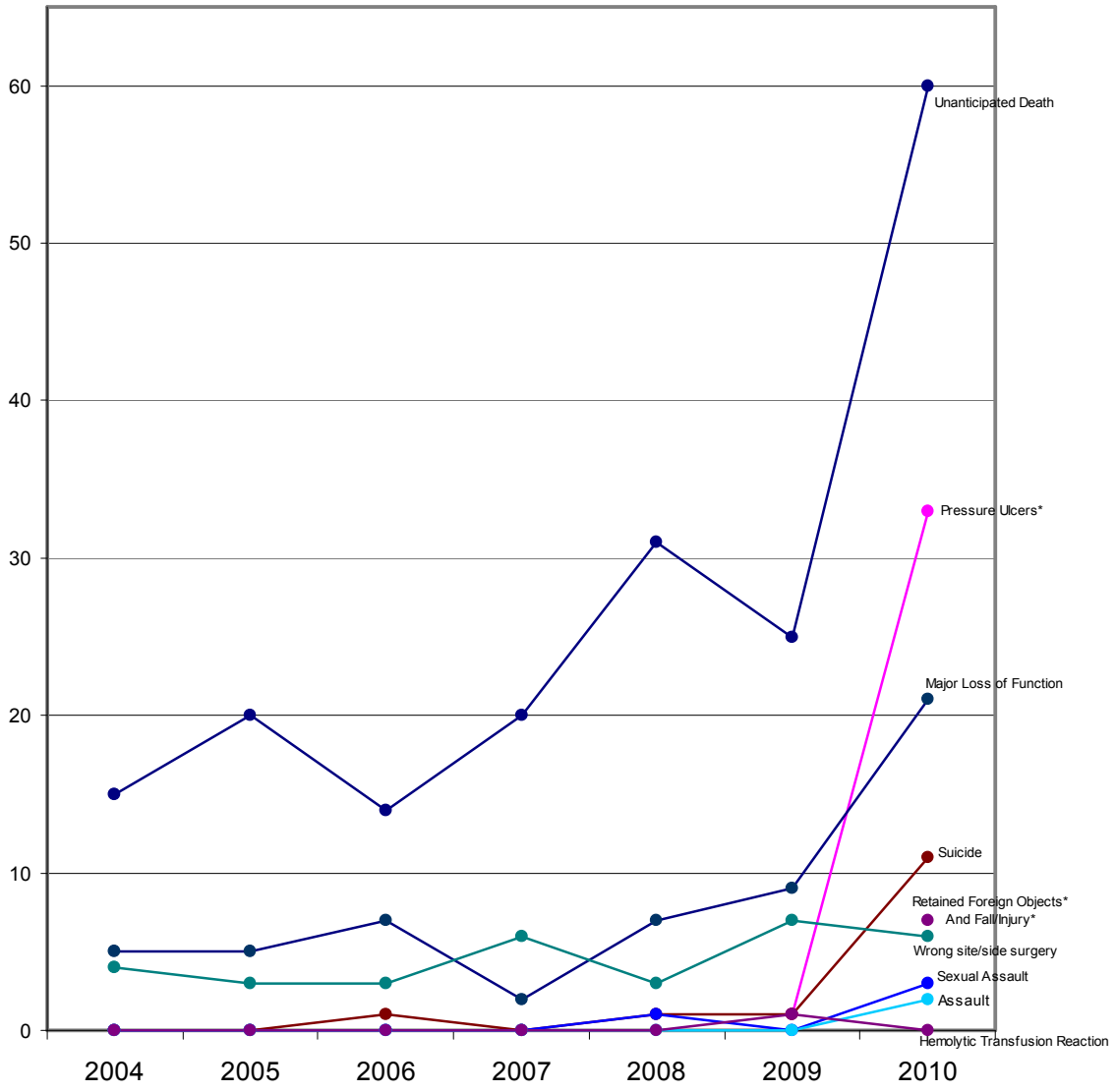
Table 1. Sentinel Events Reported, by Year, 2004-2010



The trends by type of sentinel event have remained fairly constant throughout the history of the sentinel event program. Unanticipated deaths have been the most prevalent type of event reported in every year. This is followed by major loss of function and wrong site surgery. In 2010, new reporting requirements added specific categories which appear for the first time in Table 2. They include stage III pressure ulcers, retained foreign objects following surgery, and staff assault.

A significant finding in 2010 is the rise in inpatient suicide. Four patients completed suicide in 2010. From 2004 to 2009, only 3 inpatients were reported to have completed suicide. A new reporting requirement captured an additional 7 patients who either completed suicide within 48 hours of treatment or attempted suicide with significant injury. More data on this subject can be found later in this report.

Table 2. Sentinel Events Reported, by Category, 2004-2010



	2004	2005	2006	2007	2008	2009	2010
Unanticipated Death	15	20	14	20	31	25	60
Pressure Ulcers*	0	0	0	0	0	1	33
Major Loss of Function	5	5	7	2	7	9	21
Suicide	0	0	1	0	1	1	11
Fall/Injury *	0	0	0	0	0	0	7
Retained Foreign Objects*	0	0	0	0	0	0	7
Wrong site/side surgery	4	3	3	6	3	7	6
Sexual Assault	0	0	0	0	1	0	3
Assault	0	0	0	0	0	0	2
Hemolytic Transfusion Reaction	0	0	0	0	0	1	0

* New Reporting Requirements in 2010

During the 7 years of reporting sentinel events, hospitals have steadily increased participation in the program. By 2006, only 61% of all Maine hospitals had reported a sentinel event. By the end of 2010, 100% of the 41 acute care hospitals in Maine had reported at least one sentinel event.

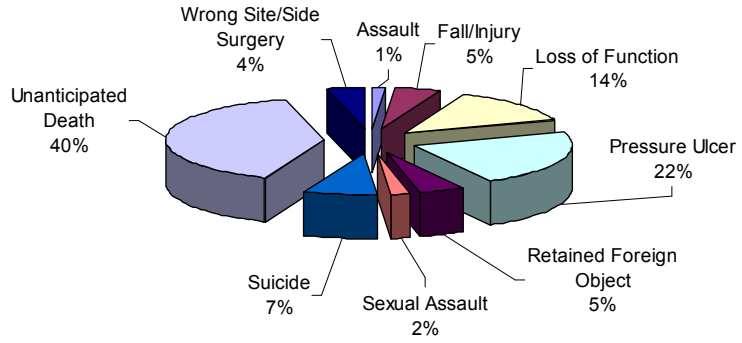
Table 3. Reporting versus Non-Reporting Hospitals, 2006 - 2010

	2006		2007		2008		2009		2010	
	No.	%	No.	%	No.	%	No.	%	No.	%
Reporting hospitals	25	61%	32	78%	33	80%	38	93%	41	100%
Non-reporting hospitals	16	39%	9	22%	8	20%	3	7%	0	0%
Total	41	100%	41	100%	41	100%	41	100%	41	100%

SENTINEL EVENTS REPORTED IN 2010

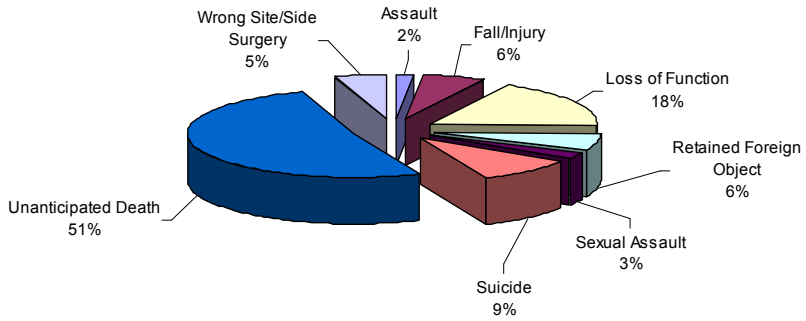
There were 150 sentinel events reported last year, compared to 45 in 2009. This represents more than a 300% increase in reporting. Table 4 indicates sentinel events by type in 2010. Unanticipated death was reported in the majority of cases at 60 (40%). Pressure ulcer reporting is a new requirement and represents 33 (22%) of all reported cases in 2010.

Table 4. Sentinel Events Reported, by Type of Event, 2010



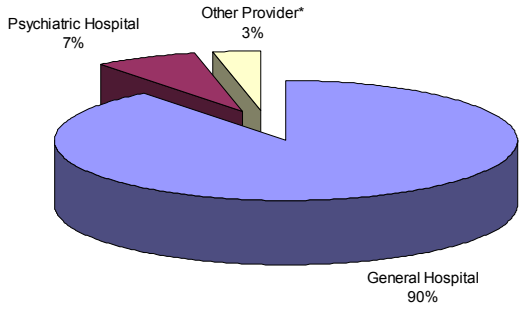
Pressure ulcer reporting is new, and the issues surrounding their detection and treatment are unique. Table 5 reflects all cases reported in 2010 minus pressure ulcer cases. Although unanticipated death remains the largest majority of cases reported, other types of sentinel events reported have increased over time.

Table 5. Sentinel Events Reported, by Type of Event, omitting Pressure Ulcer Cases, 2010



In 2010, general hospitals represented 90% of the facilities that reported to the sentinel event program. Psychiatric hospitals represented 7%. ESRD (dialysis) facilities, Ambulatory Surgical Centers and ICF/MR facilities reported 3% of cases in 2010. This proportion of non-hospital providers reporting sentinel events is slightly less than in previous years.

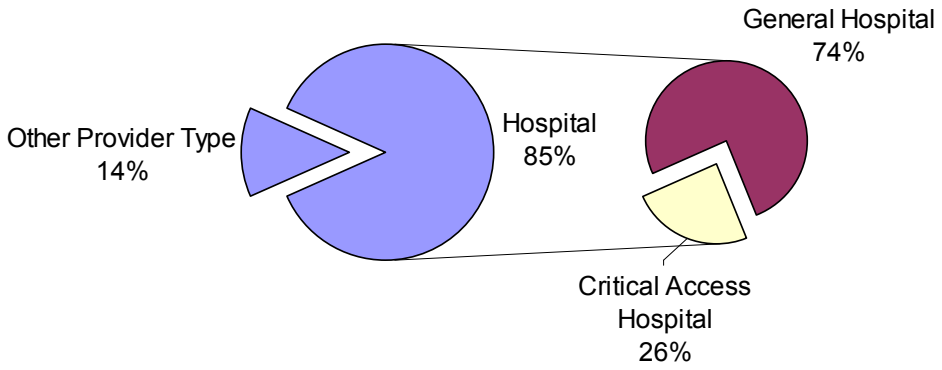
Table 6. Sentinel Events Reported, by Facility Type, 2010



*Other Providers include ESRD, Ambulatory Surgical Centers and ICF/MR Facilities.

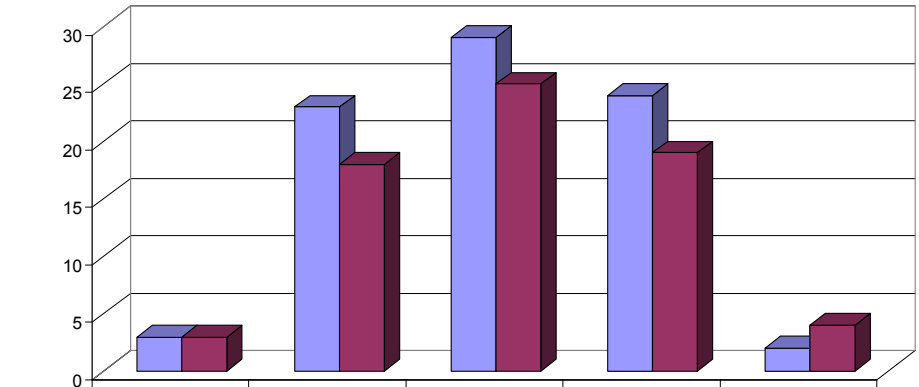
In comparing reporting of sentinel events from critical access hospitals and general and specialty hospitals, the majority of reports continue to originate from the larger facilities. This is not surprising given the size of the patient populations in the larger facilities and the overall acuity of the patients receiving care. Table 7 indicates 39 (26%) of the reported events from a hospital were from critical access hospitals and 111 (74%) were from general hospitals. There are a total of 15 critical access hospitals and 26 general and specialty hospitals in Maine.

Table 7. Sentinel Events Reported by Hospitals, omitting Pressure Ulcer Cases, 2010



A majority, 79 (54%), of the sentinel events reported in 2010 involved males. Males dominated in every age group but the very elderly and the very young.

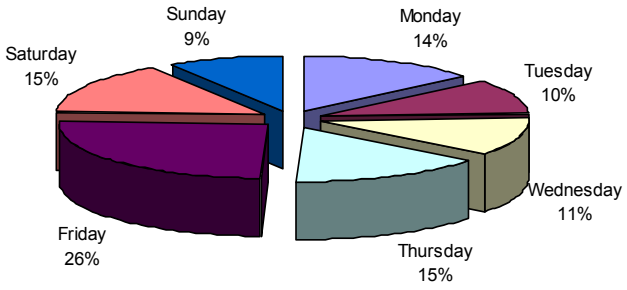
Table 8. Sentinel Events Reported, by Age and Gender, 2010



	0-10	11-45	46-65	66-85	86-100
Male	3	23	29	24	2
Female	3	18	25	19	4

Similar to previous years, sentinel events occur on the weekend, including Friday, approximately 50% of the time. The sentinel events in Table 9 represent cases that are not elective surgery or pressure ulcers. Elective surgery cases are scheduled and many pressure ulcer cases are not easily tracked by a specific day.

Table 9. Sentinel Events Reported, by Day of Week, omitting Pressure Ulcer Cases and Elective Surgery, 2010



STATEWIDE TRENDS AND OBSERVATIONS

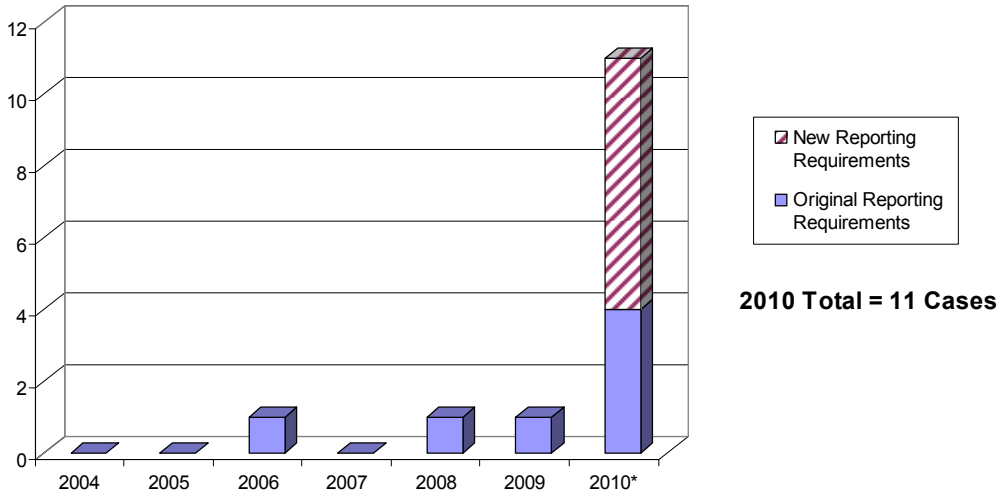
The sentinel event staff reviewed all 2010 cases to identify trends and report observations. These observations are divided into two groups: Clinical and Non-Clinical. The Clinical section includes suicide, falls, difficult airway, stage III pressure ulcers, death within 48 hours of treatment, discharge instructions, and critical thinking. The Non-Clinical section includes affective bias, hand off errors and delays.

Clinical

Cases of Patient Suicide

From 2004 to 2009 there were 3 reports of inpatient suicide. In 2010 there were 4 reports of inpatient suicide in hospitals. Expanded reporting requirements put into effect in 2010 captured an additional 7 cases of either completed suicide within 48 hours following treatment, or attempted suicide with significant injury. Of note there are 3 additional cases of unanticipated death reported in 2010 in general hospitals under unusual and unexplained circumstances.

Table 10. Sentinel Event Reports of Suicide and Attempted Suicide, 2004-2010



*Includes attempted suicides resulting in serious disability and completed suicides within 48 hours of treatment.

Table 11. Sentinel Event Reports of Suicide and Attempted Suicide, by Patient Status, 2010

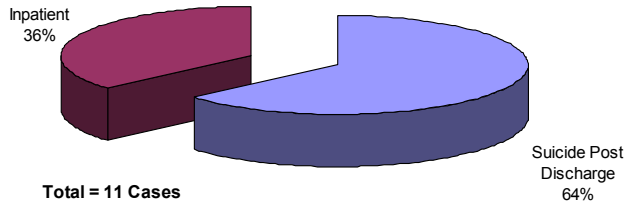
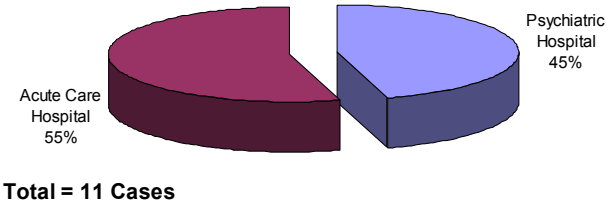
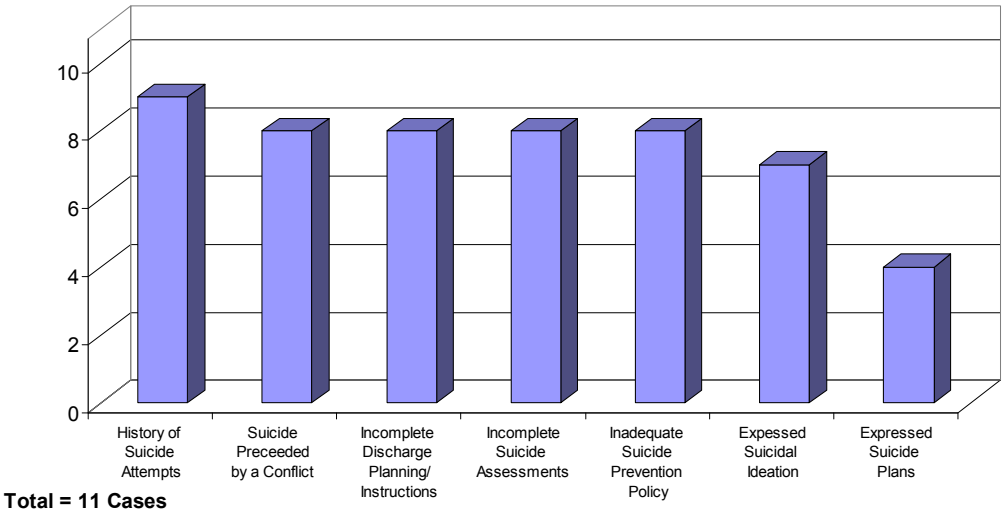


Table 12. Sentinel Event Reports of Suicide, by Facility Type, 2010



In 2010, all 11 cases were studied for similar characteristics. See Table 13 below. Some of these characteristics relate to inpatient hospitalization, history of suicide attempts, suicide preceded by a conflict, expressed suicidal ideation, expressed suicide plans and incomplete suicide assessments. An inadequate suicide prevention policy may indicate lack of supervision, continued monitoring, lack of suicide assessments or environmental safety factors. The characteristic of 'incomplete discharge planning' refers to incomplete discharge instructions and home care resources and follow-up.

Table 13. Sentinel Event Reports of Suicide, by Specific Characteristics, 2010



*Includes attempted suicide resulting in serious disability and completed suicide within 48 hours of treatment.

Suicide in Medical Inpatients

W A Schaffer, MD, Chief Medical Officer, The Acadia Hospital, Bangor Maine

Suicide is elusive, but not unstoppable. It differs in rates, practices and circumstances across cultures and patterns of suicide are continually evolving. The rates of completed suicides have been increasing in the United States since 2000. Major trends emerging include: suicides among youth and adolescents are more common and use more violent means; suicides among middle-aged adults increased by almost 20% in the first five years of this century; the geriatric population remains the group with highest rates of completed suicide. There are other major changes in rates and risk factors for suicide, but this communication will focus upon suicides which are completed by inpatients in medical centers. We will focus upon this issue and refer to the Sentinel Event Annual Report, 2010, prepared by the Division of Licensing and Regulatory Services.

The Report identifies eleven events where a hospital inpatient attempted or completed suicide while hospitalized. In most cases these individuals were not hospitalized for identified psychiatric disorders. The Report further identifies risk factors for suicide associated with each event. It is not clear when they were identified and whether or not safety plans were implemented at levels appropriate to the risk.

The most effective method for the prevention of completed suicide depends upon early identification of suicidal thinking and of risk factors predictive of suicide. The Joint Commission has recognized this and has issued bulletins encouraging hospitals to create screening tools and processes for use in hospital emergency departments; several screening tools are available on their web site (www.jointcommission.org).

A Psychiatric Consultation Liaison Service is available to provide consultative services at most medical hospitals in Maine. The Acadia Hospital provides these services on site at two hospitals in Bangor and provides telephonic consultation to many other inpatient facilities in Maine. We have introduced a comprehensive Risk Assessment instrument to these hospitals and provide it routinely at each consultation. The Acadia Hospital is pleased to make this instrument available to any Maine hospital that would choose to adopt it, and we will provide training to medical staffs who request it. This Risk Assessment is printed here (Appendix C) and is available electronically from rredmond@emh.org.

Assessment of risk for suicide should be done routinely in all patients with depressive symptoms, those with a history of attempts at self-harm, and in all those with a previous or current psychiatric diagnosis. Psychiatric consultation should be sought when a patient expresses thoughts of despair, hopelessness, and of relief achieved through death. Thoughts of suicide can emerge when an acutely ill patient faces a health crisis or when a chronically ill patient faces new loss of function or independence. Identification of risk for suicide is a clinical decision and involves multiple factors. The

Acadia instrument uses the following categories of risk: modifiable risk, non-modifiable risk, and protective factors. Certain risk factors are identified as high risk, but no numerical scoring system is used. There is no evidence that a numerical score predicts risk more effectively than a clinical assessment. Once a hospital inpatient has been identified as being at risk for suicide acutely, protective measures should be instituted. These could include constant observation, relocation to a room closer to nursing station, or removal of any medications or sharp devices to which the patient has access. It is important to inspect packages brought to the patient by visitors to identify medications, firearms, or other dangerous items that might be used to attempt suicide.

Individual prevention begins with identification of at risk individuals by primary care physicians and mobilization of community supports. Once suicidal ideation is identified medications, psychotherapy, and follow up care reduce risk. When suicidal intent is present, restriction to means and imposition of safety measures may be required. Many studies show that the most effective preventative measure is the education and support of primary care physicians who can screen for risk of suicide. Suicide is elusive, increasing, but is not unstoppable.

Cases of Patient Falls

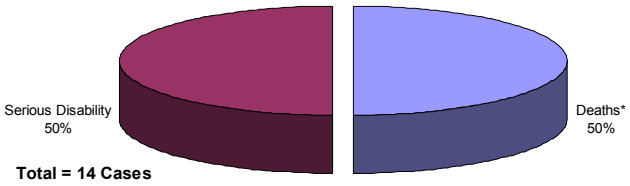
In 2010, there were reports of 14 patient falls, 7 resulting in death and 7 resulting in serious disability. Of the 7 deaths, 5 (36%) resulted in head injuries while the remaining 2 (29%) had other injuries. Of the 14 cases, 9 (64%) cases were female and 5 (36%) were male. Seven of those cases experienced delays in the post fall assessment and diagnosis. Delays include examination by a physician, diagnosis of an injury and radiology testing.

Studies have shown that 79% of patient falls occur in patient rooms. (Tzeng, 2008) All of the falls reported in 2010 occurred in patient rooms. Most cases involved missing fall risk data and/or omission of significant patient history information. With this additional information, a higher risk level would have resulted. Limitations were noted with the use of some fall risk tools that prevented the ability to individualize the risk assessments. Confusion over how to use the assessment tool in a consistent fashion leads to variable scores as well.

Current themes for improvement include modifying risk assessments to add individual risk factors and the development of a post fall algorithm to ensure complete assessment and diagnosis of injury.

"Energies may be more productively directed towards identifying common modifiable risk factors in all patients and ensuring that people who do fall in the hospital receive a proper post fall assessment, regard all patients who have already fallen as high risk." (Haines, Hill, Walsh, and Osborne, 2007)

Table 14. Sentinel Event Reports of Falls Resulting in Death and Serious Disability, 2010



* Includes Unanticipated Deaths that were a result of a fall.

Table 15. Sentinel Event Report of Falls, by Gender, 2010

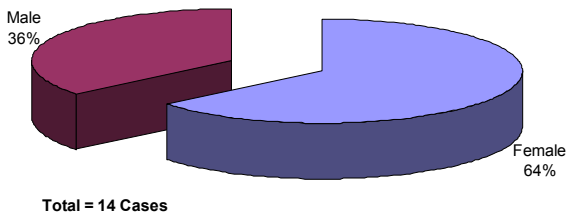
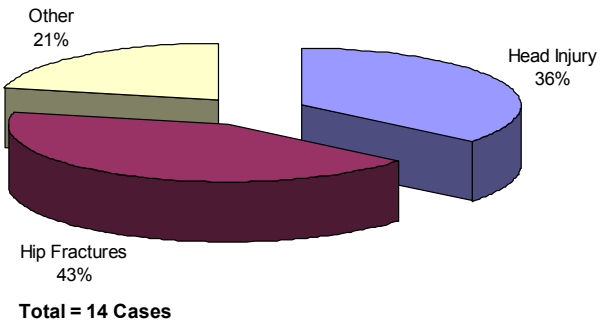


Table 16 represents the type of injury that was reported as a result of a fall. Hip fractures affected 6 (43%) of the patients, head injuries 5 (36%), and other injuries in the remaining 3 (21%) cases. Cases with head injury all resulted in death.

Table 16. Sentinel Event Report of Falls, by Injury Type, 2010



Cases of Patients with Difficult Airway Issues

In 2010, there were reports of 11 cases with difficult airway issues. Of these, 8 (73%) were characterized by failure to recognize respiratory issues. Of the 11 cases, 8 (73%) resulted in death and 3 (27%) resulted in permanent loss of function.

Table 17. Sentinel Event Reports of Difficult Airway Issues, 2010

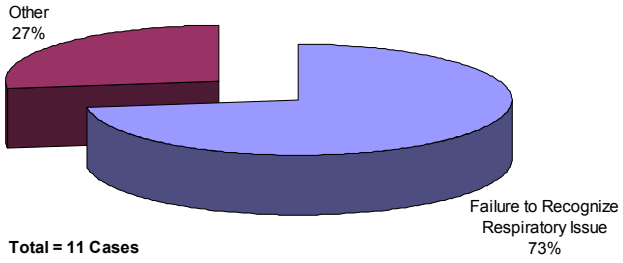
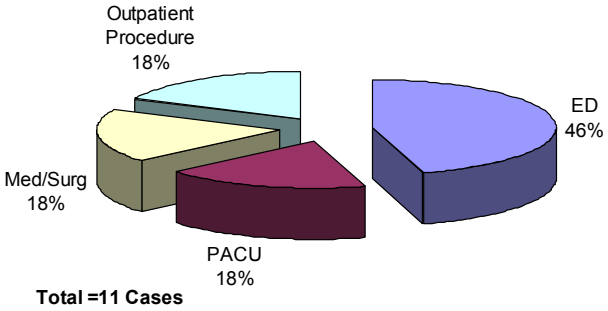
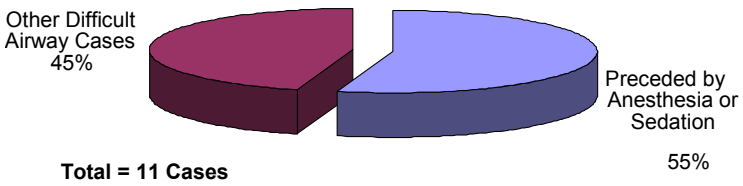


Table 18. Sentinel Event Reports of Difficult Airway Issues, by Location, 2010



The types of sedation used in these cases were outpatient procedure sedation, pain medication and post operative recovery from anesthesia. "Sedation is not without consequence and there are risks. In many cases, complications from sedation are related to pre-existing Comorbidities." (American Society of Anesthesiologists, 2003)

Table 19. Sentinel Event Reports of Difficult Airway Issues, preceded by Anesthesia or Sedation, 2010



Recognition of Respiratory Failure and Airway-related Events

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The problem:

Airway-related events are frequently assumed to result from intubation failures or complications related to intubation or extubation. However, recently patients in Maine have needed an emergent airway intervention only after their respiratory failure has gone unrecognized. Patients have developed respiratory failure while receiving sedation for a procedure and in the recovery room or procedural suite after the procedure. In addition, there has been a delay in recognizing (diagnosing) respiratory failure in the emergency room. Finally, these patients who now require emergent airway management are more likely to be difficult intubations and thus more likely at risk for hypoxia. Eight patients have died in Maine as a result of a failure to recognize respiratory failure or as a result an airway-related event (failure to oxygenate, usually resulting from a failure to intubate).

Goals:

1. Early diagnosis and management of respiratory failure. This includes the appropriate monitoring of patients during a procedure and the recovery period as well as the assessment of patients at risk for developing respiratory failure either because of their physical status or the nature of the planned sedation (anesthetic) and procedure.
2. Education of "local" providers and teams caring for patients with respiratory failure and responding to airway emergencies. This includes the development of algorithms that focus on maintaining oxygenation and ventilation and not simply intubation. Use of a supraglottic airway (e.g. laryngeal mask airway) may be life-saving while the team assembles and plans the best next step. In addition, the use of videolaryngoscopes may improve success with intubations. Finally, facilities should assess the ability of the team to provide a surgical airway when needed. All of these skills and team performance may be enhanced by simulated learning exercises and team training education.

Strategies:

1. Early diagnosis and management of respiratory failure:
   a. Patient assessment prior to sedation or anesthesia for procedures with a focus on factors that may place the patient more at risk for hypoxia when sedated (e.g. morbid obesity, obstructive sleep apnea).
   b. Focused airway assessment prior to administering sedation focusing on predicted ease of mask ventilation and intubation
   c. Pulse oximetry monitoring – continuous monitoring for patients receiving

moderate or deep sedation or general anesthesia during and post-procedure until return to baseline status.

d. Clearly defined algorithms (with back up plans) in place for the management of respiratory failure. The development of a difficult airway response team may be appropriate for some facilities (Johns Hopkins model).

2. Education of "local" providers and teams caring for patients with respiratory failure and responding to airway emergencies:
   a. Team training – e.g. all providers empowered to express concerns about a patient's status or care plan.
   b. Simulation – team members continually participate in scenarios which focus on the diagnosis and management of respiratory failure and airway emergencies. In addition to the review of algorithms during these scenarios, competency of team members with the use of non-invasive ventilation, supraglottic airways, videolaryngoscopes, and securing a surgical airway should be assessed.

List of references:

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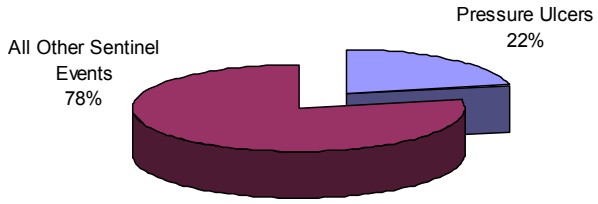
Cases of Patients with Stage III Pressure Ulcers

In 2010, 33 (22%) stage III pressure ulcer cases were reported. New reporting requirements state that stage III and stage IV pressure ulcers not present on admission are reportable events.

Table 20. Sentinel Event Reports of Stage III Pressure Ulcers, 2010

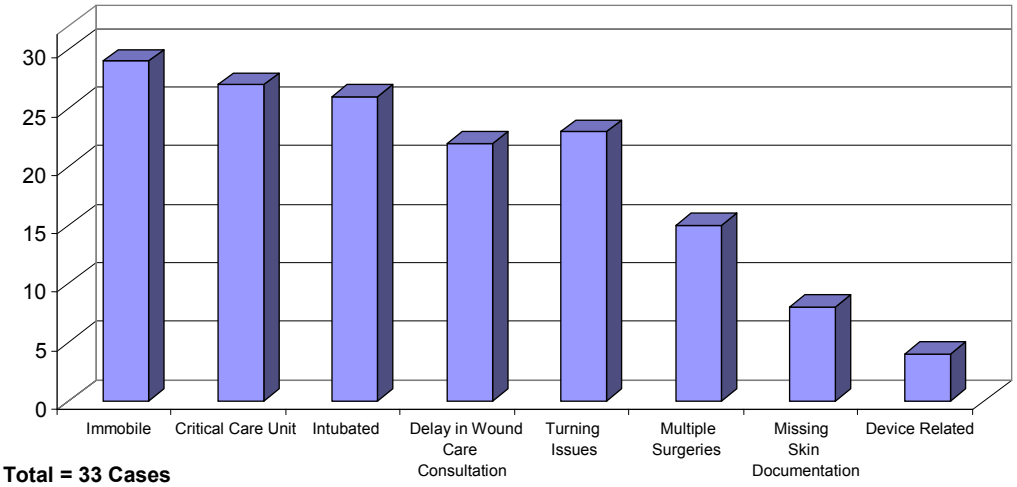


Total = 33 Cases

Of the pressure ulcers reported, 22 (67%) were located in the patient's sacral or coccyx area. The other 11 (33%) cases reported pressure ulcers from devices such as cervical collars, ET tubes, abdominal binders, casts, orthopedic immobilizers and operating room devices.

Pressure ulcer cases reported in 2010 shared multiple similar characteristics. These similarities are listed in Table 21 and include: immobility, critical care patients, intubated, difficulty with turning due to disease process, delays in wound care consults and multiple visits to the operating room.

Table 21. Sentinel Event Reports of Stage III Pressure Ulcers, by Specific Characteristics, 2010



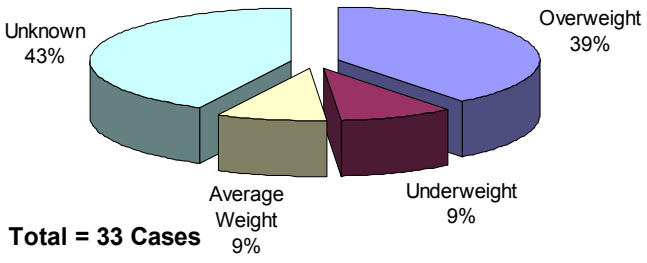
Total = 33 Cases

"Critically ill patients are at higher risk for pressure ulcers than are patients in general care areas. Several factors increase the risk: greater severity of illness; increased length of stay; poor tissue perfusion due to hemodynamic instability; use of vasoactive medications, and anemia, sensory impairment resulting in a reduced sensitivity and /or reaction to pressure due to sedation or underlying abnormality, skin maceration due to moisture; immobility; and poor nutritional status." (Elliot, McKinley, and Fox, 2008)

Hospitals are focusing on prevention with education of nursing staff in specialty areas (ICU, CCU, OR) in regards to pressure ulcer prevention and identifications as well as consultation with wound care nurses. Some hospitals have made improvement in areas such as documentation of appearance of skin issues and early consults with wound care nurses. Increased physician involvement is an area that all of the reporting hospitals are interested in working on.

In addition to the characteristics listed in Table 21, weight was reviewed and found that 13 (39%) of the patient's were overweight. Weight is a factor that affects skin integrity whether the individual is overweight or underweight.

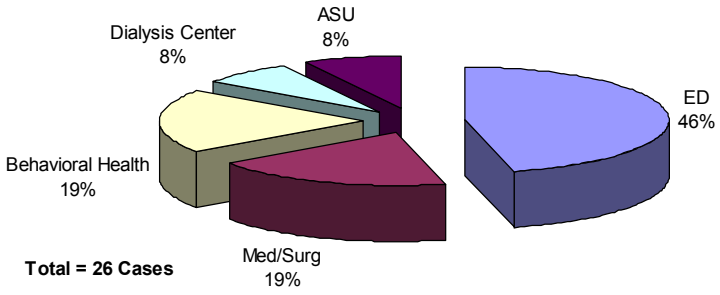
Table 22. Sentinel Event Reports of Stage III Pressure Ulcers, by Patient Weight, 2010



Patient Deaths within 48 hours of Treatment

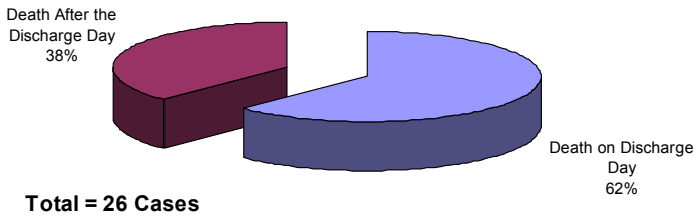
In 2010, there were reports of 26 cases of patients whose deaths were within 48 hours of treatment. Of the 26 events, a majority of the cases, 12 (46%), were patients discharged from the Emergency Department.

Table 23. Sentinel Event Reports of Deaths within 48 hours of Treatment, by Department, 2010



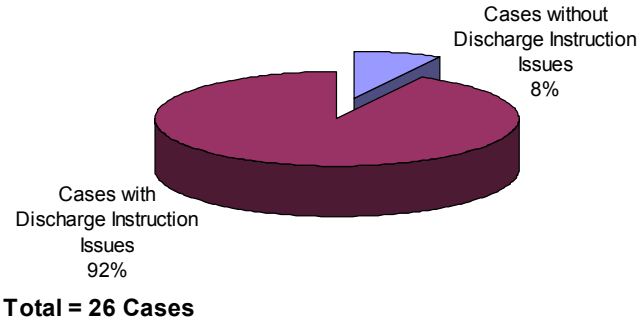
Of the 26 deaths within 48 hours of treatment, 15 (62%) of the deaths were on the day following treatment and 9 (38%) of the deaths were after the day of treatment.

Table 24. Sentinel Event Reports of Deaths within 48 hours after Treatment, by Timeframe, 2010



Of the 26 deaths within 48 hours of treatment, 24 (92%) of the cases had discharge instruction issues. A further review of discharge instructions follows.

Table 25. Sentinel Event Deaths within 48 Hours of Treatment, with Discharge Instruction Issues, 2010



Inadequate Patient Discharge Instructions

The discharge process is a critical component of a patient's hospital experience. The planning that leads up to a safe patient discharge is an essential process to ensure complete and thorough discharge instructions.

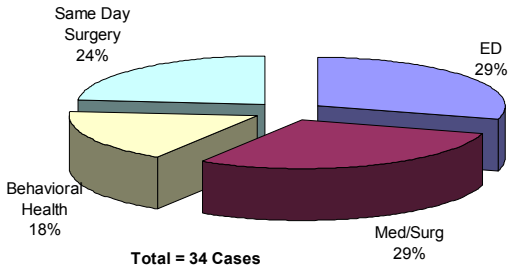
"The discharge process is intended to provide patients with adequate information and necessary resources to improve or maintain their health during the post hospital period and to prevent adverse events and unnecessary re-hospitalization … High rates of unnecessary re-hospitalization have been shown to be related to poorly managed discharge processes. In a study conducted at an 800 bed urban teaching hospital, it was found that approximately 20% of 300 patients interviewed at 3 weeks post discharge had experienced an adverse event." (Pennsylvania Patient Safety Advisory, 2008)

Discharge planning may include implementing systems such as:

- Prior to discharge from any department a quick time out to determine the readiness for discharge factoring current health status, mental status, available resources at home, family participation, and the patient's understanding of their condition.
- Educate patients and family or caregivers.
- Provide material in easy to read format, disease specific, verbal instructions, and illustrations if possible, making sure that reading level is determined.
- Reconcile medications, overview of new medications, discuss side effects.
- Follow-up appointments (dates, times, directions if needed, phone numbers).
- How and when to seek medical treatment along with signs and symptoms of complications.
- How and when to reach someone in case of an emergency.

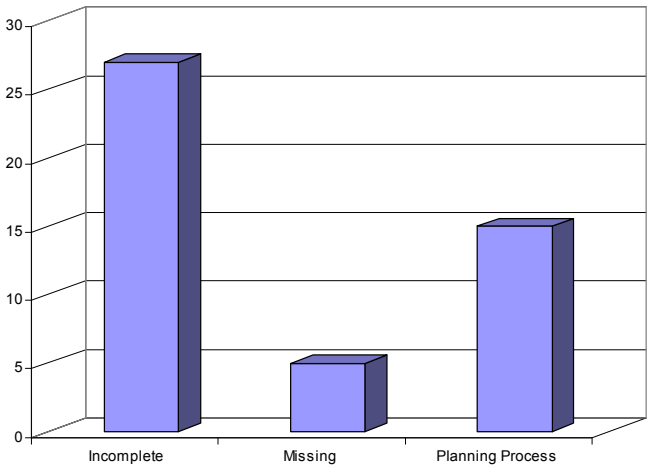
Thirty four cases were identified in which discharge issues were a factor. Of the 26 deaths, 12 (46%) were patients discharged from Emergency Departments, 5 (19%) from medical surgical floors, 5 (19%) from psychiatric institutions and 4 (15%) from other areas. Emergency Departments are challenged with this process as their time is limited, the variable acuity of the patient and the limited amount of health history that is available. It is critical for all facilities to customize the discharge process for each patient area.

Table 26. Sentinel Event Reports of Inadequate Discharge Instructions, by Location, 2010



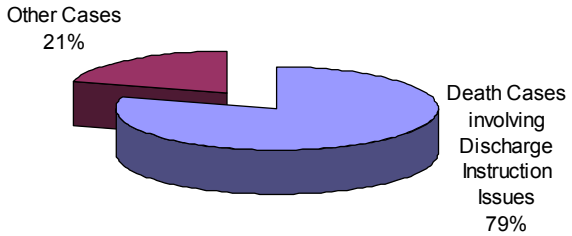
Of the 34 cases, it was found that incomplete instructions constituted the majority of cases. This is followed by insufficient planning processes and missing documentation. Incomplete instructions are defined as lacking the following: emergency information, medication instructions, signature, disease specific guidelines, etc. The planning process should include follow-up appointments, information on and referrals to community resources, etc.

Table 27. Sentinel Event Reports of Inadequate Discharge Instruction, by Type, 2010



Total = 34 Cases

Table 28. Sentinel Event Reports with Inadequate Discharge Instructions, followed by Death within 48 hours, 2010



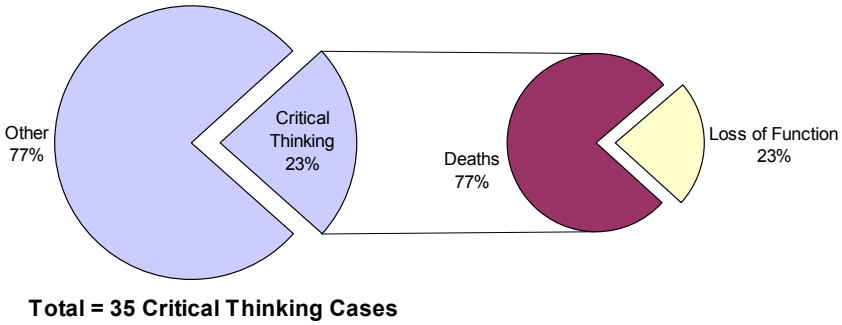
Total = 34 Cases

Critical Thinking

Critical thinking errors can lead to diagnostic mistakes. Biases, anchoring, diagnosis momentum, overconfidence and premature closure are examples of cognitive dispositions that lead to diagnostic mistakes. “Diagnostic errors are associated with a proportionally higher morbidity than is the case with other types of medical errors.” (Croskerry, 2003).

Of the 150 reported sentinel event cases, 35 (23%) had evidence of critical thinking errors. Critical thinking or the decision making process errors resulted in death in 27 (77%) of the events and loss of function in 8 (23%) of the cases.

Table 29. Sentinel Events with Critical Thinking Issues, 2010



Diagnostic Errors

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Robert Trowbridge, MD, Department of Medicine,
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The Problem

Diagnostic errors are defined as "a diagnosis that was unintentionally delayed (sufficient information was available earlier), wrong (another diagnosis was made before the correct one), or missed (no diagnosis was ever made), as judged from the eventual appreciation of more definitive information." Up to 8.4% of hospitalized patients is subject to a major diagnostic error. Diagnostic error is a poorly recognized and underreported problem in patient safety.

Potential Strategies to Improve Diagnostic Reliability

- Perform root cause analysis on diagnostic errors: *many diagnostic errors are thought to result from human error and enter a peer review process. In fact, most diagnostic errors are systems-related and can be analyzed as such.*
- Gather data on diagnostic errors and feedback to physicians: *set up systems to find discrepancies between autopsy results, surgical pathologic diagnoses, etc. and radiology findings and coded clinical diagnoses.*
- Institute a diagnostic pause or diagnostic 'time out': *Some experts suggest training providers to pause in the care process to self reflectively answer questions like:*
    - *Was I comprehensive?*
    - *Do I need to make the diagnosis now, or can I wait?*
    - *What is the worst-case scenario?*
    - *Does the way I feel about this patient affect my clinical reasoning?*
    - *Have I prematurely closed the differential diagnosis?*
- Deliver regular education to providers related to commonly missed diagnoses: *Yearly written case scenarios, standardized patients in a simulation setting, or secret shopper patients to drill providers on specific patient presentations (i.e. aortic dissection, endocarditis, stroke, epidural abscess)*

References:

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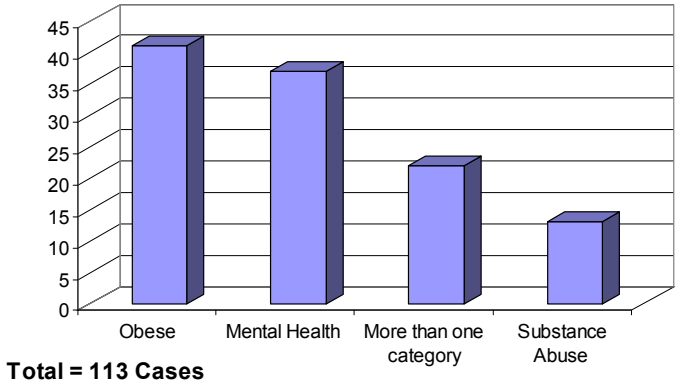
Non-Clinical

Cases of Affective Bias

The sentinel event program reviewed all cases reported, omitting pressure ulcer cases, for affective bias characteristics. The features studied were mental health diagnosis, obesity and history of substance abuse. Of the 117 cases (150 minus 33 pressure ulcer cases), 113 demonstrated these comorbidities. Of the 113 cases, 37 (33%) had a mental health diagnosis, 41 (36%) were obese, 13 (12%) had a substance abuse history and 22 (19%) had more than one of these features.

Affective biases can undermine the objectivity of diagnostic reasoning when providers are making healthcare decisions. Obesity, mental health diagnosis and substance abuse history are examples of specific biases that can affect objectivity. "There are several affective biases and factors that influence decision making. Some originate from general human dispositions, others are more specific and are determined by an individual patient, or by the characteristics of groups of patients as occur in stereotyping." (Henriksen, 2005)

Table 30. Sentinel Event Reports of Mental Health, Obesity and Substance Abuse Comorbidities, 2010



Total = 113 Cases

Table 31. Sentinel Event Reports of Affected Bias Cases, Followed by Death within 48 hours, 2010

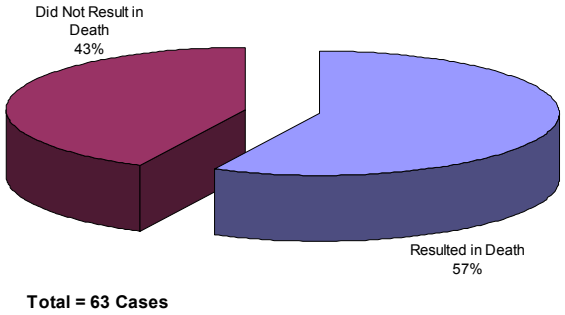
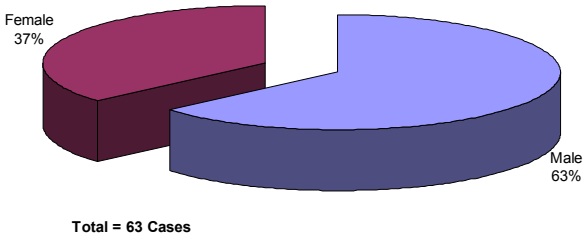


Table 32. Sentinel Event Reports of Affected Bias Cases, Followed by Death within 48 hours, by Gender, 2010



"DRUG SEEKER IN ROOM 4" - THE CLINICAL BLINDERS OF CAREGIVER BIAS

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Executive Director, Maine Institute for Human Genetics and Health

At any given moment a million things can distract me from care of my patients. The worst of those things are the personal biases I bring to the bedside. Some of the biases are cultural, most are personal, and all are dangerous, for they are the invisible blinders and filters that may stop me from seeing the right thing to do for that patient.

You know what I mean. Most of us carry some degrees of racism and sexism, however subtle and unintended, or just a predisposition to treat people "like us" a little differently than those who are not "like us." We often have limited tolerance to one disease or another that reflects an underlying bias, most commonly diseases of obesity, mental illness, and HIV-AIDS. We have names for patient types that reflect biases so common in healthcare they almost represent a consensus among caregivers that such patients are less deserving of care: "Drug seeker," "demanding," "gomer," "frequent flyer," and "Medicaid mom" are but a few.

Common to every one of these biases is that they have the ability to affect what we see of the patient and therefore how we think. Unfortunately, that also means the bias can affect the care we give. If we are all 'lucky', the caregiver might 'just' be less generous with pain medication for patients against whom he or she has a bias that causes a discounting of the severity of the patient's pain complaints. (Several studies have suggested, for example, that male physicians treat pain less aggressively in women.)

I say "lucky" because those same biases that may blind us to the severity of a patient's pain might also blind us to the possibility of a deadly cause of that pain. Almost everyone I know who has taken care of patients for very long can recall a drunk patient, for example, whose critical illness or injury was missed - or just barely caught - after most of the caregivers wrote the complaints off, failed to do a fastidious exam, or discharged the patient from the ER before the more serious nature of the problem became clear through the fog of bias and booze.

My oldest daughter, an ER resident for only 9 months, has already had her first: a drunk trauma patient complaining of neck pain almost everyone in the ER wanted the younger Dr. Steele to discharge without a CT scan. She ordered it anyway; he turned out to have a potentially catastrophic neck fracture.

Few studies have quantified how often such biases may be among the root causes of sentinel and other adverse events in health care. The State of Maine has started examining this issue through its sentinel event reporting process, and while no scientifically clear picture has yet emerged, the shape of a problem we need to address

is starting to become apparent.

Of the 150 sentinel events reported to the state in 2010, 54 (36%) involved patients who were obese, mentally ill, or had a history of substance abuse. Patients who are poor, socially disconnected, homeless, and less educated are disproportionately represented among sentinel event patients, according to state officials.

To some extent, that is not surprising; these same patients suffer from more disease and need may get more healthcare, so they may suffer more sentinel events in their care. They are also more complicated patients on the whole, requiring more complicated care. But the preponderance of patients with these problems in the sentinel event data base raises real questions about how much of the problem was the patient and how much of the root cause was a caregiver's problem with that kind of patient?

What's needed on the issue are two things: first, constant awareness that when we are impatient, ticked off, or frustrated with our patients, it may in part be our biases at work and our clinical vigilance at that moment may be diminished.

Second, we need a clear-eyed review of this issue, perhaps in a Maine-wide conference aimed at a better understanding affective bias in patient care, and how best to mitigate its potential impact on patient care and safety. We need a better look at more data, then an expert-led discussion of how we can recognize the biases we all bring to the bedside and avoid having them come subtly or disastrously between us and our patients. We should not need more data to prove that's a discussion worth having.

Cases with Hand off Errors

In 2010, of the 150 cases reported, 106 (71%) were found to have hand off errors. These errors were reviewed for type of provider: nurse to nurse 35 (33%), nurse to physician 35 (33%), physician to physician 34 (32%), and physician to nurse 2 (2%). A hand off is defined as "the transfer of information (along with authority and responsibility) during transitions in care across the continuum; to include an opportunity to ask questions, clarify, and confirm." (King, Hohenhaus, and Salisbury, 2007)

Table 33. Sentinel Event Reports with Hand off Error, by Type, 2010

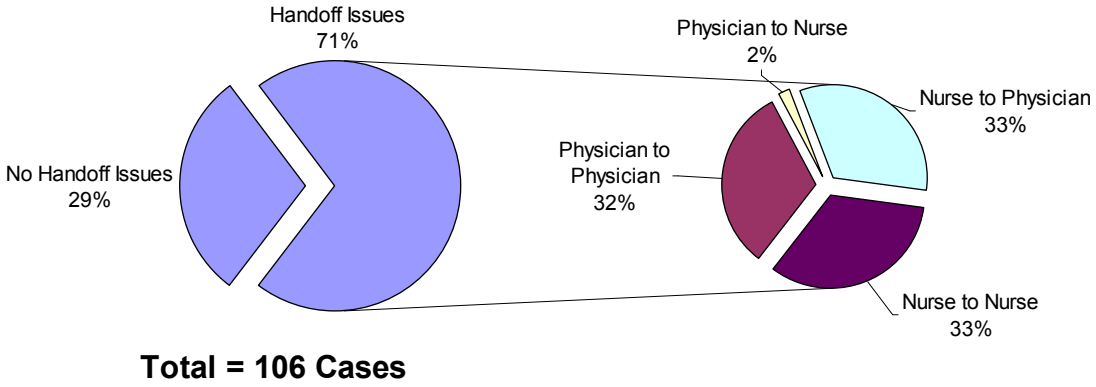
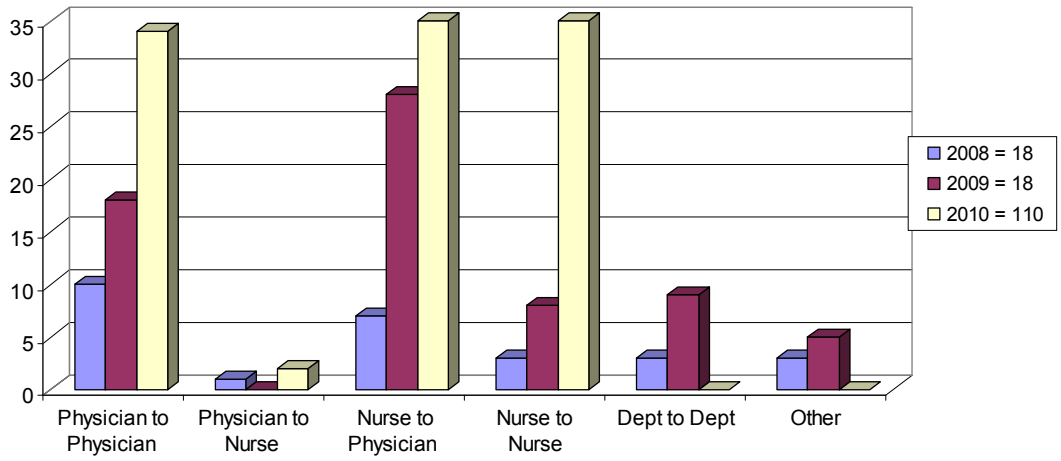


Table 34 compares hand off errors that were tracked in 2008-2010. In 2010 hand off errors were identified more often with individuals accounting for the lack of representation in the 'department to department' and 'other' category. The Joint Commission requires all health care providers to "implement a standardized approach to hand off communications including an opportunity to ask and respond to questions." (August 2006)

Table 34. Sentinel Event Reports of Hand off Error, by Type, 2008 - 2010



Communication

Patty Roy, RN, MSN , Director Quality & Medical Affairs,
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Clear, effective communication is critical between two people trying to share information about a patient. Basic communication principles include a person or team who is the "sender" of the information and a person or team who is the "receiver." When communication is not effective medical errors can occur. An estimated 80% of serious medical errors are related to a breakdown in communication. Consequences of ineffective communication can lead to adverse events, omission of needed care, delays in treatment and inappropriate treatment being provided.

There are two key points of communication that are involved in many of these adverse events:

1. Transition of care- when patient care is transferred or handed over from one caregiver or team to another. This occurs multiple times a day in a hospital, whether it be shift change for clinicians, sign out of patients between providers, or transfer of patient from one department to another.
2. Communicating new information: When one caregiver is trying to communicate new information or a change in a patient's condition to another caregiver.

Critical patient information is transferred between caregivers so that the receiver can care safely for the patient and make timely decisions on needed treatment and care. This requires the "sender" to pull together and synthesize patient information before they can effectively share it with the receiver. In a busy healthcare setting with competing priorities this can sometimes be challenging. There are a variety of strategies an organization can use to enhance this process and thus minimize the risk to patient's safety.

1. Make effective handover communication an organizational priority.
2. Educate staff and providers on the risks in communication and what makes a successful handover of information.
3. Set clear expectations and accountability for effective handovers between all staff and providers.
4. Standardize the content and format of the information to be shared; use of tools such as checklists and SBAR forms are helpful. At a minimum it should include: patient identifiers, patient history, new clinical information, test results pending, key treatments occurring, any important tasks to be completed, key patient clinical indicators to watch for and contingency plans for changes in patients condition.
5. Use technology such as E.H.R. and hand held devices for access to up to date data and information about the patient's condition. Summary documents and quick access to key points makes synthesis of the whole picture easier.
6. Establish environment or setting that is conducive; quiet with limited

interruptions allowed.

7. Establish systems for verification of information and understanding. This can include ability to ask questions or stating back what was heard.
8. Review and establish systems and workflow of clinical teams that include successful handovers; planning for how face to face communication will occur in a quiet environment is critical.
9. Measure how it is working and provide feedback to clinical teams; some measurements could be the use of tools and if standard content was followed.
10. When adverse events occur evaluate the root causes to see what role communication and handover played. Share this learning widely in the organization.

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Enhancing Patient safety during Hand offs; Standardized communication and teamwork using the SBAR method. Hohenhaus S, Powell S, Hohenhaus JT. Am J Nurs. 2006; 106:72A-72B

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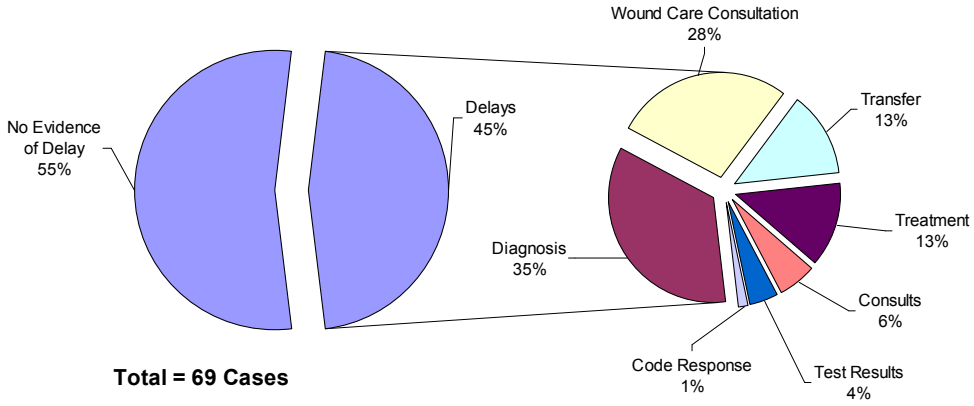
AHRQ Patient Safety Primer: Hand offs and Signouts; accessed at HTTP://psnet.ahrq.gov March 2011

Cases with Evidence of Delays

In 2010, the sentinel event team found evidence of delays in 69 (45%) of the cases. Of these cases, delays in diagnosis and wound care consultations were the highest type of delay noted while code response and test results were the least. According to Pennsylvania Patient Safety Authority, "Errors related to missed or delayed diagnoses are a frequent cause of patient injury and, as such, are an underlying cause of patient safety related events." (September 2010)

Table 35. Sentinel Event Reports Containing Evidence of Delay, by Type, 2010



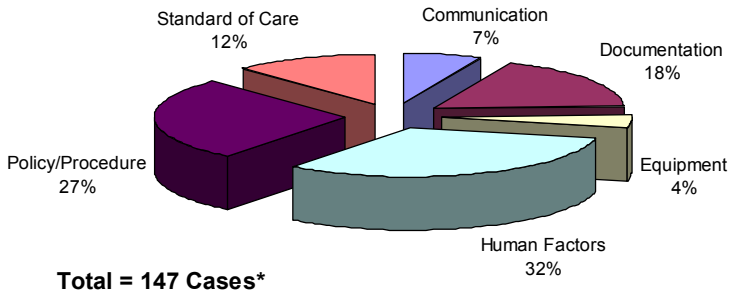
The Joint Commission Sentinel Event Alert #26, released in 2002, discussed delays in treatment. "Of the 55 reported cases of delays in treatment, 29 were ED-related, while 26 cases originated in hospital intensive care units, medical-surgical units, inpatient psychiatric hospitals, freestanding and hospital-based ambulatory care services, the operating room and in the home care setting. Of the 55 cases of delays in treatment, 52 resulted in patient death. The reported reasons for the delays in treatment are many and varied with the most common factor being misdiagnosis (42 percent). Other delaying factors include: delayed test results (15 percent); physician availability (13 percent); delayed administration of ordered care (13 percent); incomplete treatment (11 percent); delayed initial assessment (7 percent); patient left unattended (4 percent); paging system malfunction (2 percent); and unable to locate ER entrance (2 percent)." Joint Commission Sentinel Event Alert #26.

FACILITY REPORTED ROOT CAUSE ANALYSIS AND ACTION PLANS

Cited Root Causes 2011*

Facilities submitted Root Cause/Action Plans for the sentinel event team to review and make recommendations. In 2010, 150 Root Cause analyses were submitted and reviewed. The Root Causes are grouped into the categories as shown on Table 36. Human factors represented the majority of the categories with 47 (32%), while Equipment represented 6 (4%). These represent the primary root causes as identified by reporting facilities.

Table 36. Sentinel Event Reports of Facility Cited Root Cause, by Category, 2010



Total = 147 Cases*

* Three cases did not have a root cause identified.

The primary root causes as identified by the facilities are listed below by category.

Communication 10
Hand off communication with specialist
Communication between providers
Communication with family
Hand off error between nurse practitioner and physician
Communication between nurse and provider
Communication between nurse/nurse
Communication between community and staff
Communication between facility and patient after discharge

Policy Procedures 40
Operating room count policy
Conscious sedation policy
Video monitoring policy
Fall prevention policy
VTE risk assessment
Level of observation policy not followed
Pressure ulcer prevention policy
Skin assessment policy

Suicide prevention policy
Discharge planning policy
Syringe disposal policy
Preoperative clearance policy
Robotic equipment policy
AMA policy
Positioning in the OR policy
Marking policy
Timeout policy
Telemetry protocol
DNR policy
Patient belongings policy
Paracentesis protocol
Restraint protocol
Chemotherapy protocol
Central line protocol
DVT policy
Myocardial infarction protocol
Sexual assault policy
Temperature protocol
Blood glucose protocol
PCA policy
Radiology intervention policy
Rapid response policy
Anaphylaxis protocol
Pain management protocol
Self administration of medications policy
Specimen handling policy
Pediatric fever protocol
Workplace safety policy
Patient burn/accident policy
PICC line policy

Documentation 26
Nursing documentation missing or incomplete
Suicide risk assessment incomplete or missing
Fall risk assessment incomplete or missing
Braden score incomplete/misunderstood
Preop checklist incomplete
Discharge instructions incomplete or missing
Consult documentation missing
Allergy documentation missing or incomplete

Documentation missing from other providers
Obtaining accurate history
Illegible handwriting

Human Factors 47
Delay in diagnosis of a disease process
Delay in treatment
Delay in transfer
Failure to recognize respiratory distress
Nurse failed to follow order
Surgeon technique error
Wrong dose of medication ordered
Wrong medication ordered
Wrong medication administered
New staff/float staff
Hospitalist coverage issues
Physician assistant supervision issues
Busy environment/hurry staff
Decision of placement of a patient
Respiratory therapy coverage
Misinterpretation of test results
Intubation technique difficulty
Incomplete medical exam
Resident supervision
New surgical procedure
Surgical marked area covered
Wound care nurse availability
Physician consult delay
Noisy environment

Standard of Care 18
Failed to monitor patient (fetal heart rate, temperatures, post op pt, PCA, level of violence, level of observation)
Availability of Information
Delay in obtaining history
Missing historical information from previous providers
Failure to follow standard of care
Failure to follow care plan
Post fall assessment missing
Monitoring in radiology
Urine collection management
Assessment not completed/incomplete

Discharge plan not followed

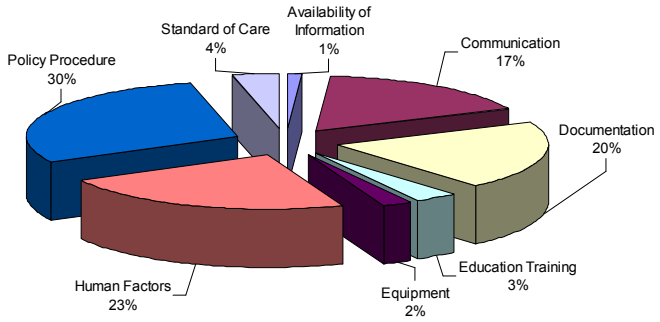
Equipment 6
Cautery device not checked
PICC line equipment
Intubation equipment
Robotic surgical equipment
Mislabeled equipment
Bed alarms off
Cervical collar application
Tab alarms not used
Air mattress unavailable

* there are some root causes that are cited in more than one case.

Contributing Factors

Contributing factors are in addition to the primary root causes addressed in Root Cause Action Plans submitted by facilities. Most facilities cited more than one contributing factor with their plans leading to a large number of contributing factors. The numbers represent the number of times each category was cited in all 150 cases.

Table 37. Sentinel Event Reports of Contributing Factors, by Category, 2010



Total = 640 Contributing Factors

Communication 110
Hand off communication with specialist
Communication between providers
Communication with family
Hand off error between nurse practitioner and physician
Communication between nurse and provider
Communication between nurse/nurse
Communication between community and staff
Communication between facility and patient after discharge

Education Training 22
Equipment training needed/unfamiliar with equipment
Morse scale education
Braden score education
EMR/paper record education
Newborn monitoring education
Pediatric assessment
Violent behavior assessment training
Pressure ulcer staging education
Orientation to unit
Detoxification education

Policy Procedures 185
Operating room count policy
Conscious sedation policy
Video monitoring policy
Fall prevention policy
VTE risk assessment
Level of observation policy not followed
Pressure ulcer prevention policy
Skin assessment policy
Suicide prevention policy
Discharge planning policy
Syringe disposal policy
Preoperative clearance policy
Robotic equipment policy
AMA policy
Competency policy
Positioning in the OR policy
Marking policy
Timeout policy
Telemetry protocol
DNR policy
Patient belongings policy
Paracentesis protocol
Gerry chair protocol
Restraint protocol
Chemotherapy protocol
Central line protocol
Visitor policy
DVT policy
Myocardial infarction protocol
Sexual assault policy
Temperature protocol
Blood glucose protocol
PCA policy
Radiology intervention policy
Rapid response policy
Poison control policy
Anaphylaxis protocol
Pain management protocol
Self administration of medications policy
Specimen handling policy

Pediatric fever protocol
Workplace safety policy
Elopement policy
Disclosure policy
Guardian policy
Next of kin policy
Burn policy
PICC line policy
Stroke protocol

Documentation 130
Nursing documentation missing or incomplete
Suicide risk assessment incomplete or missing
Fall risk assessment incomplete or missing
Braden score incomplete/misunderstood
Morse scale incomplete/misunderstood
Preop checklist incomplete
Discharge instructions incomplete or missing
Consult documentation missing
Allergy documentation missing or incomplete
Documentation missing from other providers
Inaccurate history obtained
Illegible handwriting

Human Factors 148
Delay in diagnosis of a disease process
Delay in treatment
Delay in transfer
Failure to recognize respiratory distress
Nurse failed to follow order
Surgeon technique error
Wrong dose of medication ordered
Wrong medication ordered
Wrong medication administered
New staff/float staff
Hospitalist coverage issues
PA supervision issues
Busy environment/hurry staff
Decision of placement of a patient
Respiratory therapy coverage
Misinterpretation of test results (misread x-ray , EKG)
Surgeon error (WSS or tear, laceration)

Intubation technique difficulty
Incomplete medical exam
Resident supervision
Code cart not updated
New procedure
Marked area covered
Wound care nurse availability
Consult delay
Noisy environment

Standard of Care 24
Failed to monitor patient (fetal heart rate, temperatures, post op pt, PCA, level of violence, level of observation)
Failure to follow standard of care (not turning patient)
Failure to follow care plan
Post fall assessment missing
Monitoring in radiology
Urine collection management
Assessment not completed/incomplete
Discharge plan not followed

Availability of Information 7
Delay in obtaining history
Missing historical information from previous providers

Equipment 14
Cautery device not checked
PICC line equipment
Intubation equipment
Robotic surgical equipment
Mislabeled equipment
Bed alarms off
Cervical collar issue
Tab alarms not used
Air mattress unavailable
Code cart missing equipment

Action Plans listed by Type of Sentinel Event

In 2010 there were 150 sentinel events reported. In an effort to distribute meaningful information to be utilized by facilities, the following action plans have been grouped by type of event. Action Plans are submitted by facilities with specific target dates and individuals responsible for ensuring the action item has been completed. The action plans are reviewed by the sentinel event program.

Best Practice Action Plans*:	
Blue Hill Memorial Hospital	Stroke protocol and algorithm
Central Maine Medical Center	Gel Pads to be used on all surgical cases
Mayo Regional Hospital	Time out prior to administration of high alert medications
Mercy Hospital	Fall response team

* Submitted with permission

1. **Assault**
1. Review policy regarding placement of patient sitters
2. Video monitoring policy revision
3. Visitor policy revision
4. Development of standard of care for the violent patient
5. Encourage charge nurses to collaborate with nurse managers or supervisors before releasing staff from floors
6. Ensure than an outline of client specific behavioral interventions are readily available in a quick read format

2. **Retained Foreign Object**
1. Educate staff about specific device used in the OR
2. Post removal x-ray to be performed intraoperatively when there is a suspicion of Retained Foreign Object
3. Process change needed to call for another count if anymore sponges are used after the final count
4. Revision of time out policy
5. Revision of count policy
6. Develop a checklist /procedure according to manufacturer recommendations equipment specific

3. **Unanticipated Death**
1. Conscious sedation policy for radiology revised to include vital signs every 5 minutes
2. Team STEPPS Training for communication issues

3. Revision of VTE policy
4. Implementation of an audit committee unit specific
5. Education specific to unit and situation
6. Record audit for completeness of documentation
7. Call back policy revision
8. Review all transfers of patients to tertiary centers for timeliness in the decision to transfer
9. Diagnosis specific education
10. Team will establish a work group to evaluate and develop protocols to improve services to clients
11. Nursing department will address the issue of completion of documentation
12. Minimal requirements for records of past assessment and develop policies
13. Develop process for effective communication with hospitalists
14. Standardize pre-procedure nursing assessment form and documentation
15. Clarification expectations of nursing hand off communication
16. Quarterly audits/monitor periodically for compliance
17. Monitor 3 files a week to determine if a tool is used according to new guidelines
18. Standard of care for hypothermia revision
19. Develop evidenced based assessment tool to identify patients at risk for OSA
20. Review conscious sedation policy
21. Review and revise timeout policy in interventional radiology
22. Stroke protocol and education
23. Communication between physician and results via computer, added to physician area of EMR
24. Place sleep apnea assessment questionnaire on the admission database form used on adult paths
25. Educate staff on need to assess vital signs and report abnormal findings to physician when indicated
26. Add feature to initial assessment inquiring about medications brought from home
27. Syringe disposal policy
28. Update discharge instructions to include anesthesia concerns
29. Monitor follow up call procedure compliance
30. Guideline for adult and pediatric dosing of epinephrine
31. Review regulations for ordering medications
32. Review process for EKG result distribution to cardiologists
33. NSTEMI guideline revision
34. Review preop guidelines
35. Auditing of student documentation
36. Review of code sheets at staff meetings
37. Review transcripts of physician's orders that include notations or additional instructions to assure consistency and carry over

38. Review policy for patient self directed care
39. In-service staff regarding preop screening
40. Develop a pain management protocol to identify patients preop and develop a pain management plan for post op period
41. Attempt to obtain physical address on all patients
42. Ensure all entries in medical record are legible
43. Revise DNR policy
44. Policy revision to include that vital signs should be taken no more than one hour preop, including temperature
45. Education about the importance of documenting time spent with patient
46. Develop a list of preprinted order sets in EMR
47. Anesthesia department will meet and discuss factors associated with risk of aspiration
48. Clarification of two different orders by two different physicians
49. Surgical discharge instructions will be reviewed and enhanced as needed to include clear directions for follow up
50. Education of ED staff around appropriate documentation
51. Develop a consistent discharge process
52. Reeducate staff on use of rapid response team codes
53. Recommend a centralized method of contacting on call that provides for one accurate complete up to date on call coverage schedule
54. Education on need to document patient refusal of treatment
55. Hypoglycemia policy revision
56. Develop a protocol to ensure patient is seen in PAT with adequate time prior to surgery to satisfy protocol
57. Develop recommendation to establish consult protocol and etiquette
58. Review Rapid response team protocol
59. Staff education on the chain of command policy
60. Implement CPO in ED
61. Education regarding training in glucose protocol
62. Education of anesthesiologists of assessment of appropriate ASA classifications
63. DNR status assessment has been added to the nurse preop checklist
64. Transfer time out for ED staff prior to transport of all patients
65. Mandatory EMTALA updates and annual education for all medical clinical employees
66. Create a stroke algorithm
67. Revise PA supervision policy
68. Create a system wide plan for CT scan readings
69. Case management will develop a discharge checklist for acute rehabilitation and inpatients patients with los greater than 10 days
70. AMA policy changes
71. Training staff and providers how to access weekend/night radiology coverage

72. Procedure for cardiac monitoring
73. Peak flow education
74. Education of staff re documentation of history

4. **Falls**
1. Purchase additional Stryker Beds with built in alarm systems
2. Patient admission orientation to the room includes how to call for assistance
3. Use of TAB alarms on patients less than 100 lbs
4. Heparin and anticoagulation protocols revision
5. Fall prevention protocol revision
6. Educate staff in proper way to complete fall risk assessment to assure proper documentation
7. Retraining nurses and CNAs regarding fall risk
8. Institute use of table top caution wet floor sign for use in patient rooms
9. Fall reporting checklist
10. Revise hand off communication policy
11. Post fall protocol for patients on anticoagulation
12. Review fall risk policy/procedure
13. Implementation of new equipment which would act to notify nursing staff of pt movements
14. Review all falls through a post fall analysis
15. Develop sitter program policy
16. Purchase chair alarms

5. Wrong Side/Site Surgery
1. Time out policy revision to include a final timeout
2. Change timeout to prior to intubation so anesthesiology can participate
3. Site identification should specify surface location
4. Update universal /timeout protocol to include more detail documentation tools to include all outpatient areas

6. **Pressure Ulcers**
1. Develop patient care policy regarding skin assessment of patient with orthotic devices
2. Explore alternatives for securing nasal tubes
3. Evaluate and have available patient lifts that can accommodate 1,000 lbs
4. Use of sacral dressing
5. Use of airflow pads
6. Training on staging and devices
7. Investigate alternative solutions for off loading heels
8. Product for ET securing
9. Include skin assessment into daily rounds

10. Enhance team communication in reporting between team members
11. Review triggers for use of special pressure relief gel pads
12. Braden assessment used to evaluate skin for pressure ulcer risk and modify for pediatrics
13. WOCN to evaluate OR use of pressure distribution surfaces
14. Review of stretchers mattresses use in ED
15. WOCN to attend ICU rounds
16. WOCN to daily use pressure redistribution algorithm
17. Critical care areas will develop a multidisciplinary standard skin breakdown prevention protocol
18. WOCN dedicated to ICU/CCU certain hours a week
19. Preop skin assessment by RN
20. Research evidence based guidelines for proper positioning of patients with BMI > 35 in the OR
21. Revision of risk assessment tool
22. Educate medical staff on staging PU
23. Develop multidisciplinary huddle for patients who are at high risk of developing pressure ulcers
24. Review RRT protocol
25. Reeducate staff as necessary about policy and standard of practice
26. Physician education to be offered by skin/wound care specialist
27. Orientation program for new nurse hires and updates for current nurses on pressure ulcer prevention education
28. Gel pads for all OR tables
29. Hand off communication improvement regarding skin integrity

7. Suicide
1. Develop and implement a standardized process for reassessing communicating and documenting talk of suicidal ideation
2. New procedure for notifying social worker of missing critical information
3. Policy and procedure for patient discharge will be modified to require an internal review of patients admitted on an involuntary basis
4. Revise suicide risk assessment
5. Develop staff training on diagnosed and undiagnosed behavioral issues and management on a medical/surgical floor
6. Revise level of supervision policy and educate staff
7. Attempt to insure completeness of history from patient , family and other facilities
8. Revise family communication policy
9. Environment evaluation for mechanisms of self harm

8. Permanent Loss Of Function
1. All nursing staff will review hand off communication policy
2. Physician training of EMR to review nursing assessments
3. Revision of foley catheter policy
4. Train and assess staff on use of bladder scanner
5. Review the institutional ED guidelines for diversion plan to be followed when ED capacity is exceeded by volume, acuity in patient boarding
6. Diagnostic error and affective bias education for all residents house wide

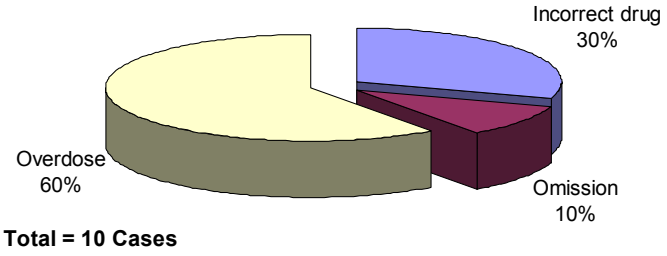
CONCLUSIONS AND NEXT STEPS

A dramatic increase in reporting sentinel events occurred in Maine in 2010. This more than 300% increase resulted from statutory changes defining events that must be reported as well as an increasing and widespread acceptance of the process. It is crucial that when reviewing these data that the reader draw no conclusions about the rate or relative frequency of events.

The new reporting requirements in 2009 include a provision for voluntary reporting of 'near miss' events. The AHRQ defines a near miss as follows: 'An event or situation that did not produce patient injury, but only because of chance. This good fortune might reflect robustness of the patient (e.g., a patient with penicillin allergy receives penicillin, but has no reaction) or a fortuitous, timely intervention (e.g., a nurse happens to realize that a physician wrote an order in the wrong chart).The study of near miss cases provides a unique opportunity to learn from events where things almost go wrong. Near miss events occur at a rate many times that of the rate of sentinel events. Therefore there are many more occasions to review when a disaster was averted and pinpoint where adverse events are most likely to occur. Near miss events allow for individuals who witness an almost-accident to be recognized as heroes, a stark contrast to sentinel events where staff may be devastated and suffering from second guessing their own actions. In 'near miss' situations the resulting opportunity is one where there is no tragedy, no victim, and no injured parties. In addition it gives the Root Cause Analysis teams a chance to hone their skills in a positive and productive environment. The hope is that through these studies health care leaders can learn enough from near-miss reports that they can head off a tragedy before it occurs. Although there was an increase in sentinel event reporting in 2010 when compared with national and peer reviewed studies on rates of medical error, Maine continues to underreport sentinel events. (NQF, 2002) Certain types of cases continue to be unevenly reported. For example, wrong site surgery may be reported in one facility with regularity, often without harm to the patient, where another larger facility will report no such instances. It is difficult to discern whether the first facility is hyper-vigilant in its efforts to identify these cases and transparent in their reporting processes, or if they, in fact, have a higher rate of occurrence. National data would support the fact that wrong site surgery incidents continue to be a challenge despite widespread attention to the topic and the adoption of timeout procedures in operating suites.

In 2010, there were 10 (7%) out of the 150 cases reported in which a medication was the event or a factor in the event. The number of sentinel events involving medication errors in Maine is low when compared to national data. "Nationally, serious preventable medication errors occur in 3.8 million inpatient admissions each year." (MTC and NEHI, 2008) "37 percent of preventable medication errors result from dosing errors." (Bobb, Gleason, Husch, Feinglass, Yarnold, and Noskin, 2004) "22 percent of preventable medication reconciliation errors occur during admissions, 66 percent during transitions in care and 12 percent during discharge." (Santell, 2006) Medication errors may occur by unintentional overdosing, incorrect drug administered and omission of an ordered drug.

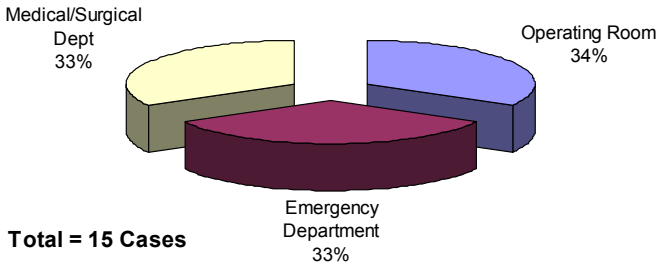
Table 38. Sentinel Events Reported with Medication Errors, by Type, 2010



The Sentinel Event Team gathers data and examines trends continuously throughout the year. The process is a dynamic one. Specific characteristics and features of cases are added to new case reviews and are included in future discussions and reports. Currently we are studying cases for aspects of 'hurrying' or 'rushing' that may help identify causative factors and subsequent remedies and best practices.

Hurrying was a factor that the sentinel event team tracked in a portion of the sentinel events reported in 2010. Of the 15 cases where hurrying was reported as a factor, 33% were on a Medical Surgical Floor, 34% in the Operating Room and 33% in the Emergency Department. Hurrying can be a result of a busy environment with noise issues and/or interruptions or a simpler situation in which the provider feels rushed to complete a specific task. It is important to evaluate events from a "hurrying" perspective to assist staff in requesting help when needed and reduce the need to rush through patient care. "Rushing and hurrying combined with noise/interruptions were prevalent concerns regarding the increase of errors for employees," according to study conducted by a research team submitted to frontline care workers at 3 hospitals. (Rathert, Fleig-Palmer, and Palmer, 2006)

Table 39. Sentinel Events Reported with Evidence Involving Hurried Providers and/or Staff, by Department, 2010



Concerns over staff supervision, lapses in training, and on-call issues have been increasingly associated with sentinel events in Maine. We continue to study these issues and will present specific findings in future reports. These are complex issues often involving critical decision making and communication failures. In anticipation of that data the final following section

begins to address these issues. Recent research also confirms previous findings that communication is a major barrier to improving patient safety and reducing the likelihood of serious adverse events. Despite work over the past decade across all segments of the health care delivery system to improve communication and prevent errors, these types of errors persist. According to the national study, "The Silent Treatment: Why Safety Tools and Checklists Aren't Enough to Save Lives," 85% of health care workers reported a safety tool warned them of a problem that otherwise might have been missed and could have harmed a patient. And yet, more than half, 58%, of the participants said that while they got the warning, they failed to speak up and solve the problem.

In the 2011 Sentinel Event Annual Report we will address this issue and include data on these subjects. In particular the reluctance of staff to speak up or share concerns prior to the event occurring. This may be one of our best tools to prevent a serious adverse event.

Factors to Consider

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On rounds one morning, the entire team including the Chief of Surgery, the Chief Resident, Senior Residents, interns and several competitive medical students were seeing patients. Striding into a patient room, the Chief of Surgery announced, "Today we need to get an ABG." Turning to the medical students, "Who's going to draw the ABG?" "I will!" an eager medical student exclaimed. "Great, we'll discuss the result on afternoon rounds."
For those not clinically trained, arterial blood gas, (ABG) directly measures the amount of oxygen dissolved in the blood. Oxygenated blood from the heart is typically obtained from an artery in the wrist or upper thigh.

That afternoon, the team returned to the bedside. "What was the ABG?" asked the Chief of Surgery. The student reported the results. "OK, start oxygen and repeat the ABG." The patient, who had been silent throughout the entire interchange suddenly exclaims, "NO, NO, NO!!!" "Why not" asked the surgeon, "what is so terrible about an ABG?" "Well," answered the patient, "When he stuck that needle through my heart, I thought it was going to KILL me!"

While humorous and (hopefully) apocryphal, many of the issues that account for errors in medicine are embodied in this tale. Deficiencies in training, inadequate supervision, a culture of swagger and bravado, overconfidence and one sided and authoritative communication are all present.

Level of training, quality and nature of supervision, the situational culture, communication style, and clinical overconfidence are all important factors contributing to error. A complete discussion of each is beyond the scope of this article, but the bibliography contains many interesting and informative references.

There are many causes of medical error but having an inadequate understanding of one's limitations, the reluctance to ask for help, or overconfidence merits special consideration. Reluctant supervisors, lack of mentors, inadequate training, or absence of collegiality create dangerous conditions, especially for newer physicians and mid-level practitioners.

Training

Adequate training is crucial for appropriate procedural or cognitive performance. Medical staffs must ensure that physicians and allied health practitioners have appropriate training. Equally important is skills maintenance, particularly for complex, high-risk, and rarely performed procedures. For example, emergency practitioners must be adequately prepared

for endotracheal intubation. In high volume, trauma settings, where intubations are done frequently, proficiency may be maintained and assessed during routine practice, but this may not be possible in settings where this skill is performed occasionally. In these situations, consideration should be given to use of a high definition simulator such as those available at Maine Medical Center or from Lifeflight of Maine.

Supervision

In Maine, Physician Assistants practice under delegation from a physician supervisor. The relationship and the nature of the supervision must be described in a Plan of Supervision. The plan defines the limits of the PA's practice, which cannot exceed those of the supervisor. All physicians working with PAs should be familiar with the extent of the PA's practice. PAs should be encouraged to solicit assistance whenever necessary. See Chapter 2 of the Rules of the Board of Licensure in Medicine for complete details.

Delegated practice is no longer available for Nurse Practitioners in Maine. In July 2010 the regulations enabling physicians to delegate to nurse practitioners was repealed. Thereafter, a Scope of Practice defines each NP's practice. Every NP must demonstrate appropriate training and competence to perform skills within this defined scope of practice. For more information regarding NPs, see the Board of Nursing Rules.

Communication

Much has been written about the importance of adequate and appropriate communication among and between all members of the healthcare team. In investigating errors and sentinel events, problems with communication occur in almost every circumstance. Of interest here though is the importance of encouraging open, respectful, and non-demeaning dialogue amongst all parties involved in patient care. Particularly when working with PAs and Nurse Practitioners, but also with physician colleagues, the approachability and willingness of other physicians or staff to assist when asked is crucially important to maintaining a culture of safety. A consultant who demeans, or discourages questions, creates an environment that discourages future requests for help.

Overconfidence

Medical culture encourages the expression of confidence, even when it is unwarranted. The physician who frequently expresses uncertainty to his patients is seen as less qualified while those colleagues who express firm convictions are often feted. While the confident clinician may be frequently correct, overconfidence has been shown to make one less likely to question a diagnosis or re-evaluate a clinical situation when the situation starts to go awry.

Situational awareness - being fully engaged in what is happening around you, is a routine part of team training. Situational awareness can also refer to a realistic appraisal of skill and knowledge. Studies consistently demonstrate that less skilled or knowledgeable practitioners routinely overestimate their expertise or ability. While disappointing, studies demonstrate that lack of situational awareness regarding knowledge and skill occur in

physicians, too.

Recommendations

While knowledge and experience, supervision, culture, communication and overconfidence are all potential causes of error, each require different mitigation strategies.
Adequate initial training is crucial, but medical leaders should consider their responsibility to ensure that practitioners use CME to maintain, enhance, add, and refine their skills and knowledge.

Organizational culture starts with leadership. What are your organization's expectations regarding communication? Has there been formal widespread team training involving all caregivers? When help is needed, will practitioners in your organization ask, and how responsively will the request be fulfilled? Do mid-level practitioners have supportive and adequate supervision? Are consults encouraged? Are there response expectations when a consultation is requested or the Emergency Department calls?

Overconfidence can be reduced with awareness and training, but like many problems, recognition is the first step toward solution.

These factors frequently contribute to adverse outcomes. Reducing or eliminating preventable errors requires organizational commitment to use "root cause" techniques, to investigate every error or adverse outcome, understand their causes, anticipate future problems, and establish systems to recognize and prevent future occurrences.

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APPENDIX A

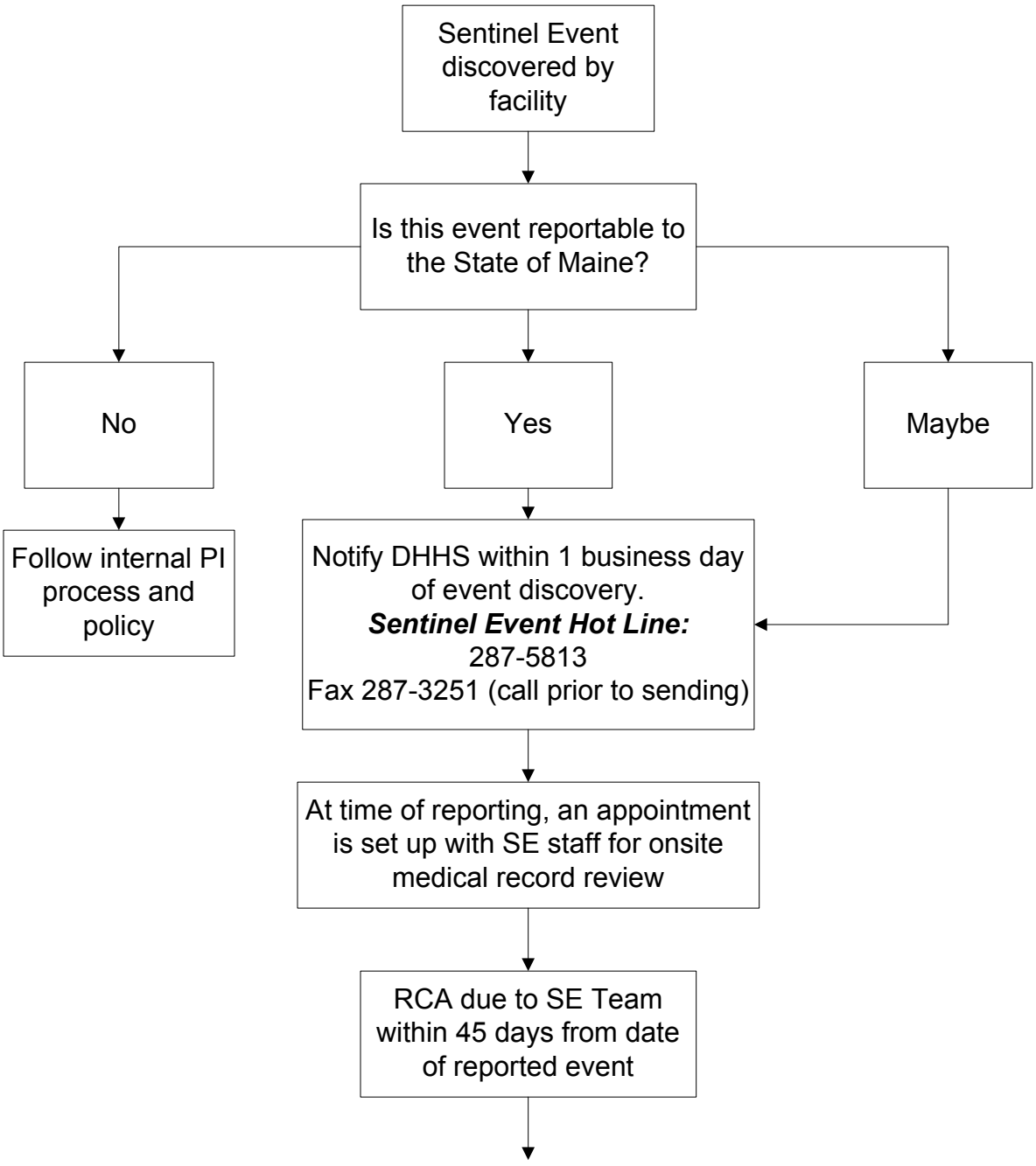
Additional Website Resources

www.anesthesiology.org
http://psy.psychiatryonline.org
http://www.medscape.com
www.ahrq.gov
http://www.ncbi.nlm.hih.gov
www.nursingcenter.com
www.ihi.org
http://hospitalmedicine.org
http://www.patientsafety.gov
www.psa.state.pa.us
http://www.patientsafetyauthority.org
http://www.jointcommission.org
http://www.patientsafetysolutions.com
www.va.gov/ncps/alerts
www.who.int/patientsafety
www.npsf.org
www.acog.org
www.patientsafety.gov/patients
www.oig.hhs.gov/oei/reports/oie

APPENDIX B

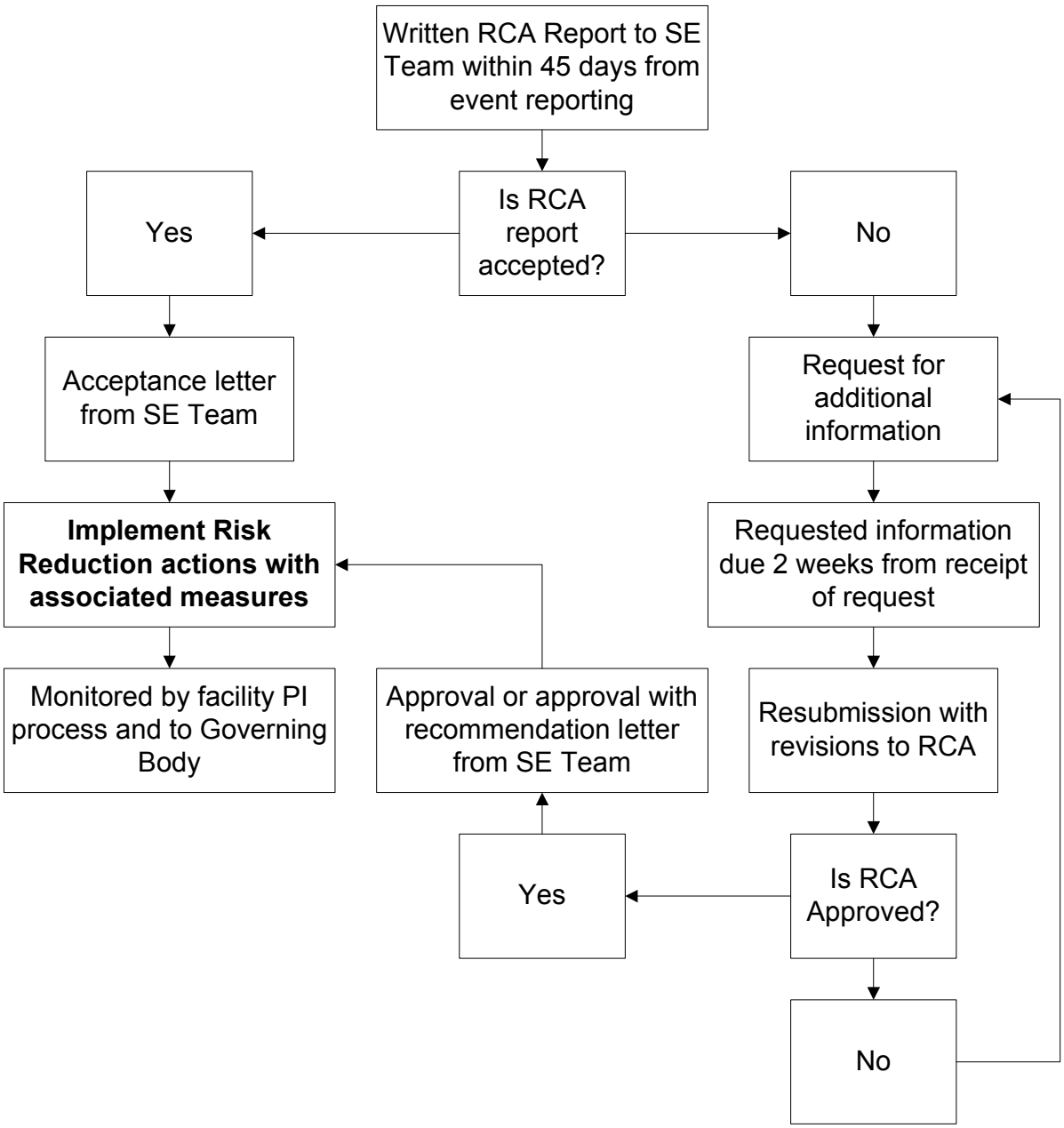
State of Maine
Department of Health and Human Services
Division of Licensing and Regulatory Services
Sentinel Event Process Flow

Part 1



State of Maine
Department of Health and Human Services
Division of Licensing and Regulatory Services
Sentinel Even Process Flow

Part 2



APPENDIX C

Acadia Hospital Corp.
268 Stillwater Avenue
PO Box 422
Bangor, Maine 04402-0422

Suicide Risk Assessment

Patient ID

☐ Admission ☐ Mid-Treatment ☐ Discharge

MODIFIABLE RISK FACTORS (Check all that apply)

Factors that Indicate High Risk Level
**Any checked risk factor in this section indicates a high risk rating*

- ☐ Intent for self harm or suicide
- ☐ Current plan for suicide
- ☐ Current suicidal ideation
- ☐ Means available
- ☐ Potential lethality of means
- ☐ Intoxication
- ☐ Acute delirium

Additional Modifiable Risk Factors

- ☐ Capacity to take action (increased organization or increased energy)
- ☐ Recent losses or disruption of care
- ☐ Recent loss of family or significant relationship
- ☐ Substance abuse / dependence
- ☐ Physical pain
- ☐ Panic attacks
- ☐ Impulsivity
- ☐ Aggressivity
- ☐ Agitation
- ☐ Psychic distress / anxiety / pain
- ☐ Vulnerability to painful affective states
- ☐ Hopelessness
- ☐ Helplessness
- ☐ Despair
- ☐ Decreased self esteem
- ☐ Loss of pleasure / interest
- ☐ Decreased concentration
- ☐ Perfectionism
- ☐ Insomnia
- ☐ Current abuse
- ☐ New psychotropic medication
- ☐ Impoverished thought content
- ☐ Polarized thinking
- ☐ Psychotic state
- ☐ Command hallucinations
- ☐ Sudden improvement in symptoms
- ☐ Evasive or superficial engagement with staff
- ☐ New patient / not known to treatment team

NON-MODIFIABLE RISK FACTORS (Check all that apply)

Factors that Indicate High Risk Level
**Any checked risk factor in this section indicates a high risk rating*

- ☐ Recent suicide attempt
- ☐ History of rehearsal behaviors for suicide
- ☐ Chronic or terminal illness

Additional Modifiable Risk Factors

- ☐ Prior suicide attempt
- ☐ Discharge from psychiatric hospital in last 3 months
- ☐ Recognition of global functional deterioration due to psychiatric illness
- ☐ Mood disorder
- ☐ Male
- ☐ Widowed, divorced, single
- ☐ Older than 55 y/o
- ☐ 19 years old or younger
- ☐ Caucasian
- ☐ Poor social support
- ☐ Unemployment
- ☐ Loss of freedom
- ☐ Economic crisis
- ☐ Schizophrenia
- ☐ Panic disorder
- ☐ Cluster B personality disorder
- ☐ Dementia
- ☐ Presence of comorbidity (more than one psychiatric disorder)
- ☐ Family history of attempted or completed suicide
- ☐ Childhood abuse / neglect
- ☐ Family history of psychiatric illness

PROTECTIVE FACTORS (Check all that apply)

- ☐ Children in home
- ☐ Religious prohibition
- ☐ Satisfaction with life
- ☐ Sense of responsibility to family and social supports / connections
- ☐ Pets in the home
- ☐ Capacity for self-observation
- ☐ Positive coping skills / potential
- ☐ Positive problem solving
- ☐ Capacity to self-regulate
- ☐ Capacity to realistically appraise one's self and one's life circumstances
- ☐ Capacity to establish therapeutic alliance
- ☐ Willingness to comply with treatment plan
- ☐ Motivated to participate in outpatient services
- ☐ History of participation in outpatient treatment
- ☐ Future oriented in thinking
- ☐ Other: _____

OVERALL RISK RATING: (Check all that apply)

Acute	Chronic	
☐ Low	☐ Low	*(high rating should occur with presence of any highest risk factor)*
☐ Moderate	☐ Moderate	
☐ High	☐ High	

COMMENTS ON ASSESSMENT OF RISK

100001126

Signature of Person Completing Form: _____ Date: _____ Time: _____

Signature of LIP (Physician, PMH-NP): _____ Date: _____ Time: _____

MR219 (8/19/10)