Utah Tenth Anniversary (2001-2011) Patient Safety Report

Identifying Opportunities for Improvement

A joint report from

UHA UTAH HOSPITAL ASSOCIATION

HealthInsight

UTAH DEPARTMENT OF HEALTH

About this Report

The purpose of this report is to provide information on the Patient Safety initiative authorized by Utah Code Rule: R380-200 and collected between October 2001 and December 2011 by the Utah Department of Health (UDOH). Facilities participating in the data collection include all Utah hospitals and ambulatory surgical centers. All UDOH activities associated with the Patient Safety efforts have been conducted without additional state funding and in cooperation with industry representatives.

Included in this report are the following sections:

1) A look to the past;

2) Utah "safe practices" survey;

3) Utah "patient safety" initiatives;

4) A look to the future

A Look to the Past

In 2001, the Utah Department of Health (UDOH), in response to the publication "To Err is Human," initiated a patient safety program in partnership with the Utah Hospital Association (UHA), Utah Medical Association (UMA), and HealthInsight, the quality improvement organization for Utah. Quality and risk managers representing the healthcare sector collaborated as a learning group to better identify actual and potential events and to develop system-wide, sustainable safeguards to prevent these events in the future. The reporting system was deliberately designed to shift away from a traditional "focus of blame" and instead to encourage a "just" culture for collaborative system improvement.

Sentinel events, by their nature, are rare events. Although sentinel events are not always medical errors, they are indicators of system breakdown. Sentinel events can be devastating experiences to patients, their families, and their healthcare providers. Identification of these events across hospitals and ambulatory surgical centers provides industry leaders with the opportunity for system-wide learning and the development of industry-based improvement strategies.

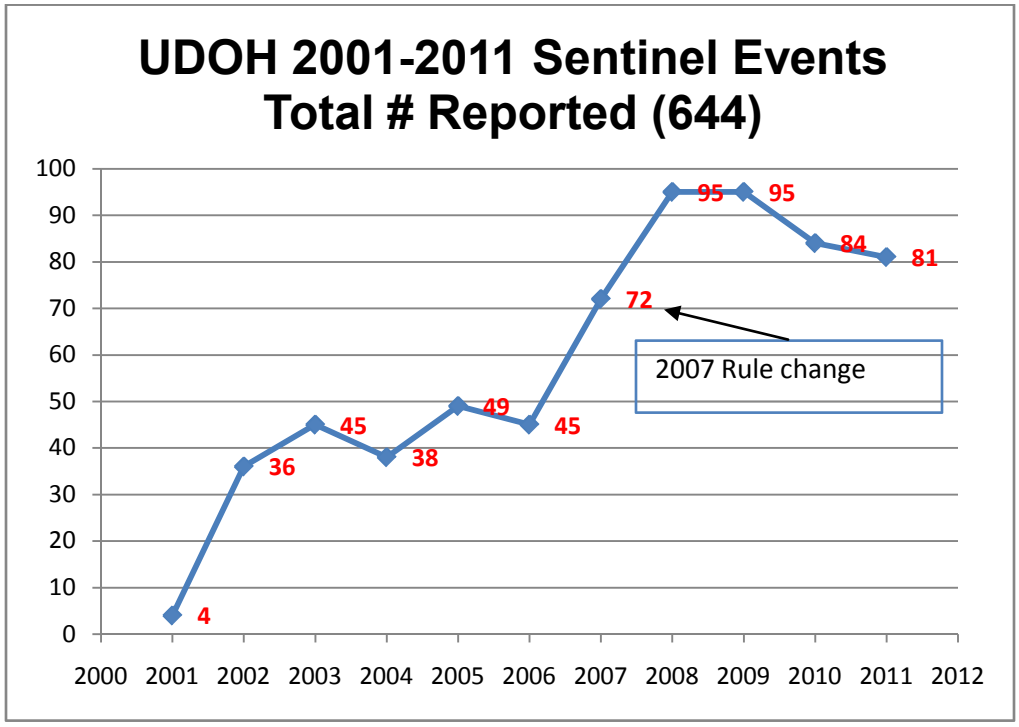
Between October 2001 and April 2007, sentinel events, defined as unanticipated deaths, wrong site surgeries, abductions, and loss of function that occur at a facility (hospital or ambulatory surgical center) directly related to a clinical service were required to be reported to the Utah Department of Health. During that time period there were eight general categories reported, and on average, between 30 and 40 events a year were identified and reported.

In an effort to improve reporting, the Sentinel Event Users Group (SEUG), renamed the Patient Safety Work Group (PSWG) and comprised of representatives from UHA, UMA, HealthInsight and UDOH, worked diligently to increase the reporting of qualified events as well as improving the methods used to report these events. Consequently, an administrative rule change was implemented in the middle of 2007 to expand the type of events reported from eight general categories to 32 specific event types. This change brought Utah in line with national experiences and data. Additionally, in late 2008, the event-reporting process changed from a faxed document and manual database entry done by the UDOH Patient Safety Director to a secured, web-based reporting portal. This reporting change now supports individual facilities by providing them the ability to download all of their reports and enables them to conduct internal trend analyses and improvement efforts.

The primary goal of the Utah Patient Safety Program is to create a safe, secure, and robust surveillance system which captures the incidence of sentinel events occurring in hospitals and ambulatory care centers. This has been a work-in-progress and as the system has improved, the number of events reported has increased. Working with a volunteer users group, building trust for safe reporting, streamlining the reporting process, and expanding the categories of reportable events are all factors contributing to the increase in events reported over time. Population growth, an increase in the number of available beds as well as the increase in ambulatory surgical centers operating in Utah may also play a role in increased events.

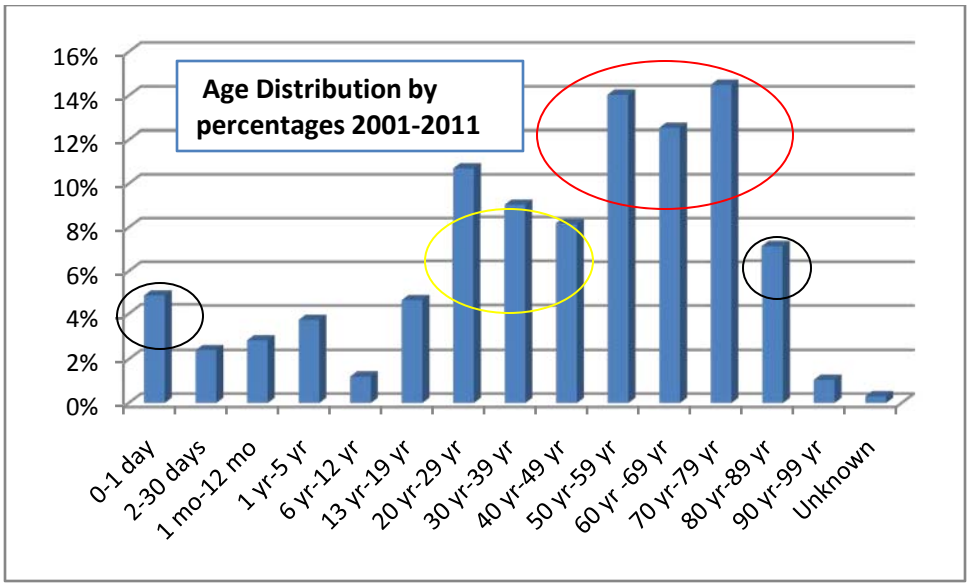
The following section provides information on the types and frequency of sentinel events (SE) reported by hospitals and ambulatory surgical centers for the period between October 2001 and December 2011. During this 10-year time period there were a total of 644 sentinel events reported overall for the state of Utah. From 2001-2010, the overall number of hospital discharges from Utah hospitals increased from 247,056 discharges in 2001 to 274,576 in 2010 (an 11% increase) and reached a peak in 2008 at 279,590. The number of sentinel events reported below follows this same pattern.

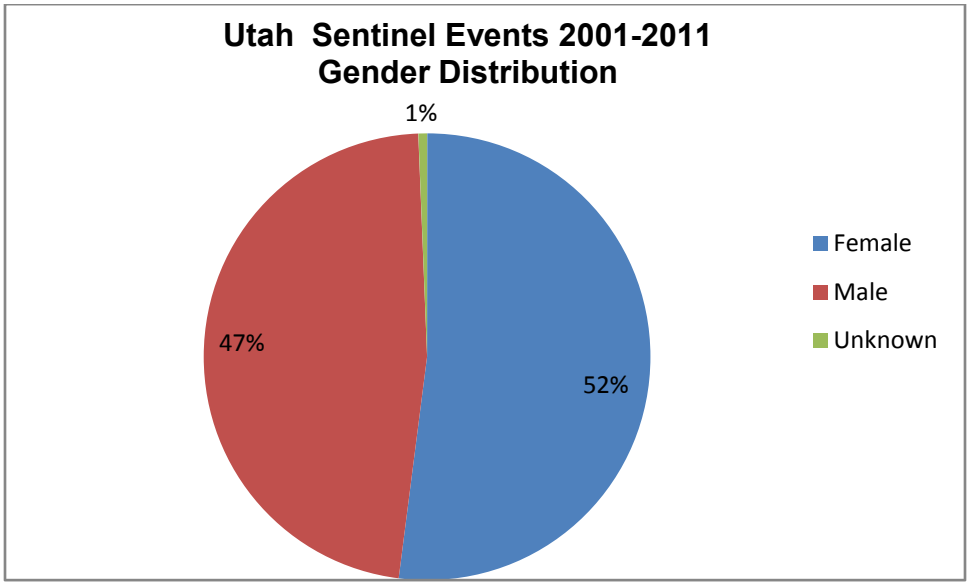
The following table identifies the growth in sentinel event reporting as the process has become more streamlined and additional reporting categories were added with the 2007 rule change.



Utah's growth in reported sentinel events also mirrors what is happening on a national basis as hospitals and ambulatory surgical centers continue to work toward improved accountability and transparency.

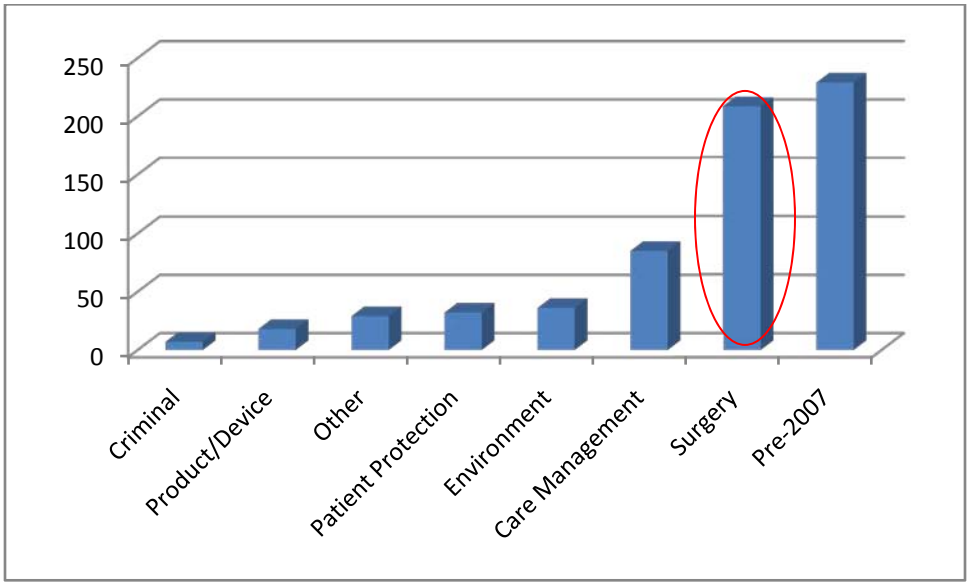
The distribution of the reported events by age and gender are presented below. Distribution by age reveals higher risk for events in the older age categories of 50-80 years. The second at risk category of age is from 20-49 years and the third is 0-1 year and 80-89 years, our most vulnerable. Gender distribution is 52% female and 47% male with 1% unknown.


Age Distribution by percentages 2001-2011
16%
14%
12%
10%
8%
6%
4%
2%
0%
0-1 day
2-30 days
1 mo-12 mo
1 yr-5 yr
6 yr-12 yr
13 yr-19 yr
20 yr-29 yr
30 yr-39 yr
40 yr-49 yr
50 yr-59 yr
60 yr -69 yr
70 yr-79 yr
80 yr-89 yr
90 yr-99 yr
Unknown


Utah Sentinel Events 2001-2011
Gender Distribution
1%
47%
52%
Female
Male
Unknown

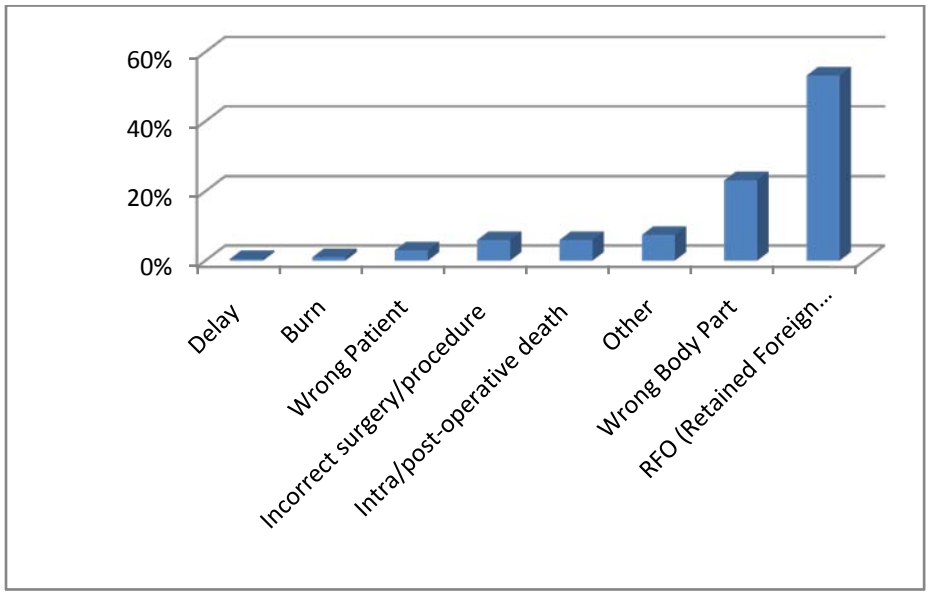
Types of Events

With the administrative rule change in 2007, eight general categories of events were reclassified into six categories with 32 corresponding event types. These categories include: care management events; criminal events; environmental events; patient protection events; product or device events; and surgical events. Within each category several occurrence types are identified. The following charts present the data from date of the rule change (**2007 to December 31, 2011**) and include a total number of events prior to 2007. Surgical events are the most frequently reported event category.

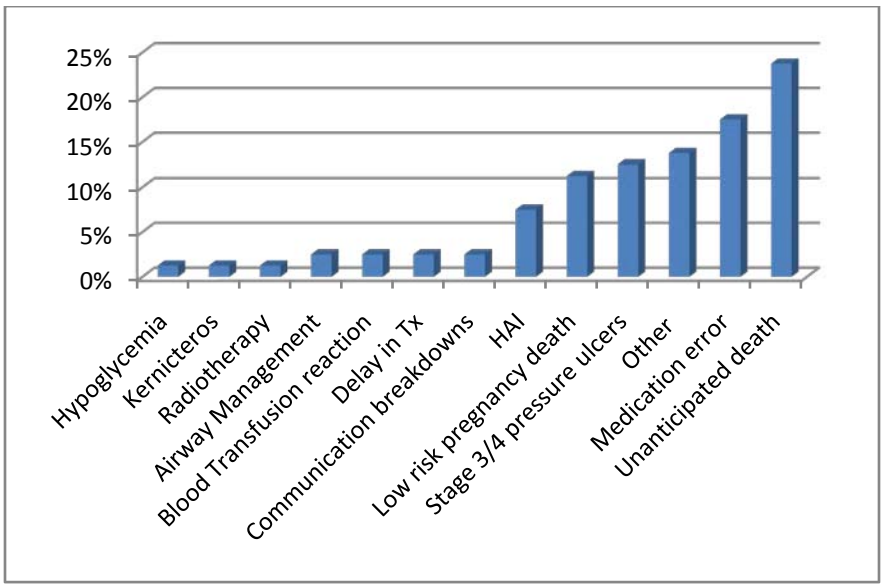


The next six charts break down the types of events within each category starting with the most frequent and moving to the least. Each chart reports on the percentage of events within each of the event categories.

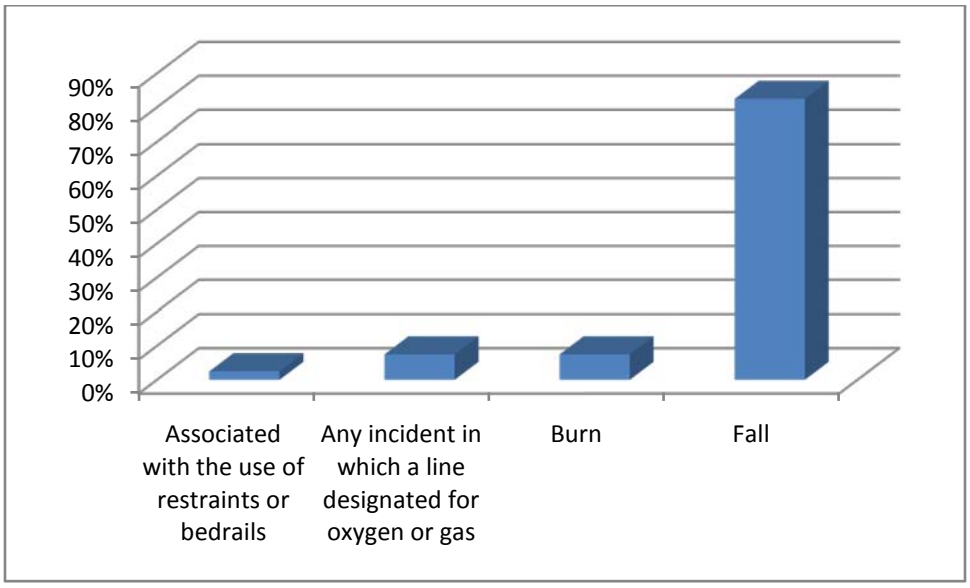
Surgical Events (n = 208)



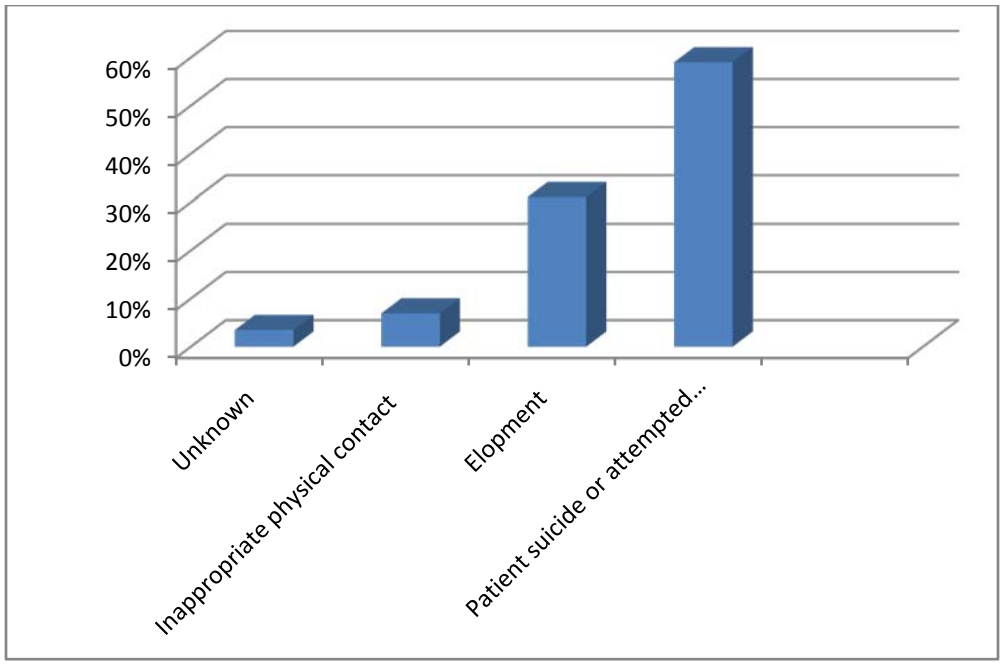
Care Management Events (n = 85)



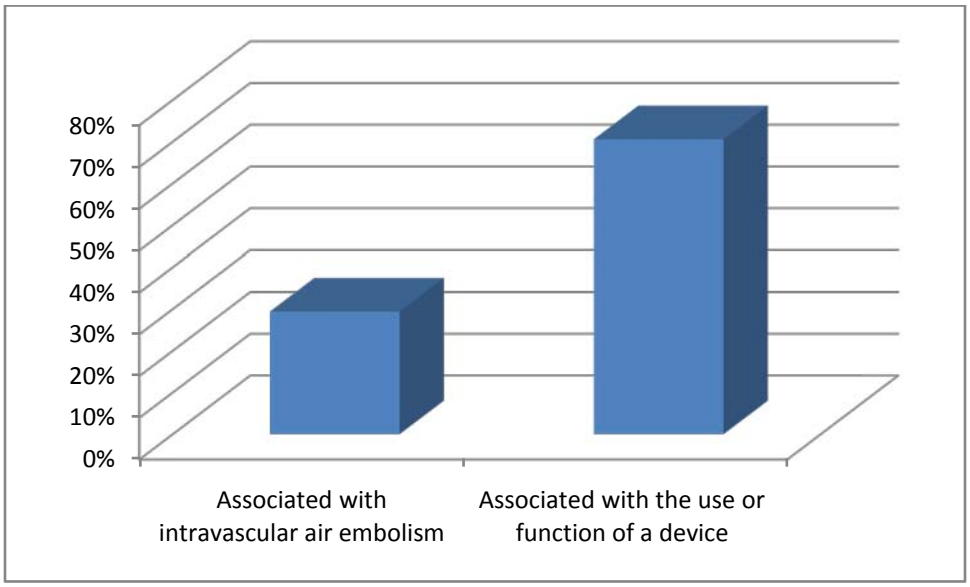
Environmental Events (n = 36)



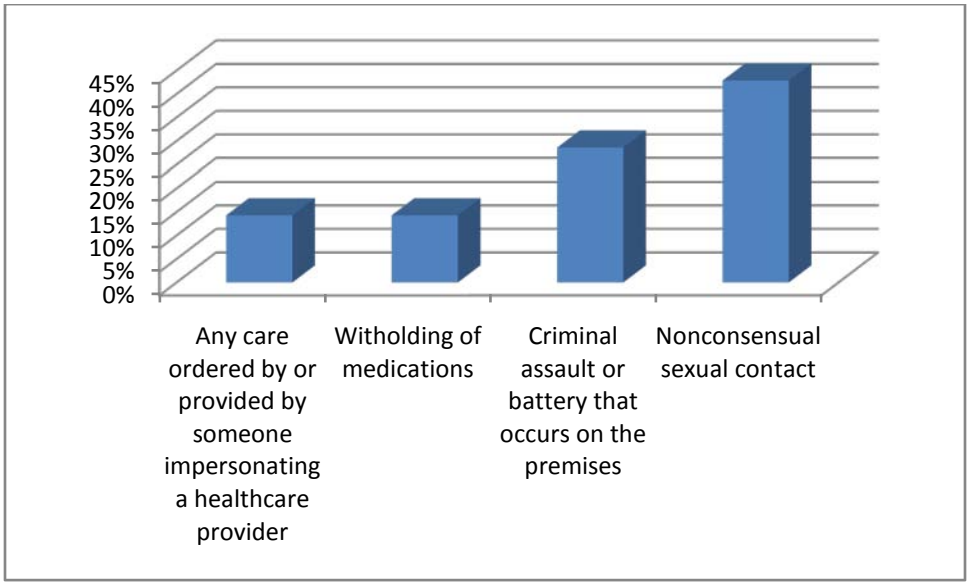
Patient Protection Events (n = 32)



Product/Device Events (n = 18)



Criminal Events (n = 7)



Utah "Safe Practices" Survey

In an effort to determine where the industry should focus resources and intentions, a self-reported safe practices survey was created in September 2011 and administered to the Utah industry in October 2011.

Approximately 200 email surveys were sent out from the contact list of those who report sentinel events and healthcare infection to the Utah Department of Health. Of that 200, 64 industry representatives responded for a 32% response rate. Those that responded were representative primarily of for-profit facilities from urban settings. Close to 80% of the respondents were from Joint Commission-accredited facilities. The predominant size of the facilities that responded was those with 100-300 beds. The types of roles respondents held ranged from quality management, clinical professions, middle management, and senior management. All levels (primary, secondary, tertiary) of care were represented as well.

The intent of the survey was to use a "stages of change" approach to the implementation of the 2010 National Quality Forum List of 34 endorsed safe practices. These seven "stages of change" include: 1) not a priority; 2) contemplation; 3) preparing; 4) implementation; 5) maintenance; 6) evaluation; and 7) institutionalization.

The 34 practices are listed in the table below. Green cells indicate that the percentages of respondents are at or above average in reporting that the practice has been instituted. Yellow cells indicate that progress is being made in instituting the practice but that more work is needed. Red cells indicate that the practice needs to be further investigated. Upon review of the data with industry representatives, there was concern expressed about question clarity and the understanding of some of the questions. Further investigation is recommended to validate the lack of institutionalization of the safe practice. Additionally, the survey is weighed more heavily toward the for-profit hospital sector and does not represent the industry as a whole.

Safe Practices	
	Instituted: within/above confidence limits
	Continue efforts towards improvement
	Needs further investigation
1) Leadership structures and systems	
2) Culture measurement, feedback and intervention	
3) Teamwork training and skill building	
4) Identification and mitigation of risks	
5) Informed consent	
6) Life-sustaining treatment	
7) Disclosure	
8) Care of caregiver	
9) Nursing workforce	
10) Direct caregivers	
11) Intensive care unit care	
12) Transmission of patient care information	
13) Order read-back and abbreviations	
14) Labeling of diagnostic studies	
15) Discharge systems	
16) Adoption of computerized prescriber order entry	
17) Medication reconciliation	
18) Pharmacist leadership structures and systems	
19) Hand Hygiene	
20) Influenza Prevention	
21) Central line bloodstream infection prevention	
22) Surgical-site infection prevention	
23) Care of the ventilated patient	
24) Multidrug-resistant organism prevention	
25) Catheter-associated urinary tract infection prevention	
26) Wrong site, wrong-procedure, wrong-person surgery	
27) Pressure ulcer prevention	
28) Venous thromboembolism prevention	
29) Anticoagulation therapy	
30) Contrast media-induced renal failure prevention	
31) Organ donation	
32) Glycemic control	
33) Fall prevention	
34) Pediatric imaging	

Utah "Patient Safety" Initiatives

Opportunities for improvement are abundant as a result of Utah's voluntary sentinel event reporting initiative. The state of Utah maintains an active WEB site documenting its Patient Safety efforts at http://health.utah.gov/psi/. The Utah Hospital Association does also at http://www.utahhospitals.org/education/patient-safety.html as do many individual hospitals. Efforts are underway to review the 2011 report, to drill down in a confidential manner to determine failure patterns and improvement opportunities, and to design statewide improvement efforts. The following is an overview of the work being done to address the results of the sentinel event data as well as other patient safety concerns.

Active Initiatives

Retained Foreign Objects—The top concern identified is the issue of "retained foreign objects." Efforts are currently underway by the Patient Safety Work Group to publish a position paper based on current standards related to the unintended retention of a foreign body. Upon completion, this paper will be shared with all hospitals for systems improvement purposes. The group will also execute a "drill down" exercise to identify specific actions and best practices for reducing the number of these events among facilities. This continues to be of concern especially as it relates to OBGYN usage of sponges and the need to account for them.

Utah CheckPoint—Found at http://www.utcheckpoint.org/index.aspx, this website provides reliable data on 14 interventions that medical experts agree should be taken to treat heart attacks, heart failure and pneumonia. CheckPoint is designed to help Utah citizens learn more about health care and makes evidence-based health information publicly available and understandable. Additionally, CheckPoint assists hospitals in continuously improving their performance, and thereby, improving the overall quality of care provided to Utah citizens. Utah CheckPoint is a joint effort between UHA, Utah Hospitals & Health Systems Association and HealthInsight, the quality improvement organization (QIO) for Utah.

Healthcare Associated Infections—Nosocomial infections, also known as Healthcare-Associated Infections (HAIs) pose a significant burden on patients and their care within the healthcare system. The Healthcare-Associated Infection Work Group (HAIWG) was established to provide recommendations for the surveillance and prevention of these HAIs in Utah hospitals. This workgroup has used the FMEA process to ascertain process improvements used to reduce infections related to central line associated bloodstream infections. For more information on this project, go to http://www.utahhospitals.org/education/patient-safety.html. Additionally, in 2008 Utah Administrative Code R386-705 was implemented requiring hospitals to report Central Line Associated Blood Stream Infections and influenza vaccinations of their employees.

Utah PricePoint—Found at http://www.utpricepoint.org/Paying.aspx, this website allows health care consumers to receive basic information about inpatient services and charges at Utah's hospitals. Utah PricePoint is a joint effort between UHA, Utah Hospitals & Health Systems Association and UDOH.

Healthcare Information Technology—UHA, UMA and other members of the healthcare community are heavily involved in several projects with the Utah Health Information Network (UHIN). One of the biggest projects is the **cHIE**, or Clinical Health Information Exchange initiative which will allow the transfer of clinical data between providers, improving the quality of care and alleviating duplication of clinical tests. Another major effort, **A**dvancing **R**ural **C**onnections for **H**ealthcare and **E**-health **S**ervices (**ARCHES)**, will attempt to improve the statewide infrastructure for the transfer of clinical information between facilities.

Past Initiatives

C3 Initiative—The Utah C3 initiative is committed to assuring that the **correct** procedure is performed at the **correct** site on the **correct** patient. In 2005, the Utah Patient Safety Steering Committee adopted statewide guidelines for all hospitals and surgical centers to voluntary follow to reduce surgical errors. The guidelines include procedural recommendations for site marking, "time out" procedures and patient verification. To review these guidelines, go to http://www.utahhospitals.org/education/patient-safety.html.

"Never Events" Policy Guidelines—In 2008, UHA's board of trustees adopted guidelines related to the non-payment for certain conditions caused by medical error. Utah hospitals agreed not to seek payment for costs associated with the occurrence of a serious event if an investigation by the hospital determines that the event was reasonably preventable and was within the control of the hospital. The guidelines were distributed to all hospital members for inclusion.

Standardized Patient Wristband Initiative—In 2008, UHA members reached a consensus on standard colors for patient wristbands in our state. This standardization will alleviate confusion for staff working at multiple facilities. The color "red" has been standardized to serve as an "allergy" alert; "yellow" indicates a fall risk, and "purple" indicates "Do Not Resuscitate."

Failure Mode Effects Analysis (FMEA)—Three different workgroups have utilized the "Failure Mode Effects Analysis" technique to determine approaches to reduce the risk of error in inpatient settings. Two of the analyses took place under the guidance of the Medication Safety Workgroup. The third analysis was undertaken by members of the Healthcare-Associated Infection work group. More information on this project can be found at http://www.utahhospitals.org/education/patient-safety.html

MedCard Initiative—The MedCard initiative is designed to help patients and their families create and maintain a list of medications which is an important first step in helping with the medication reconciliation process and thereby reducing the possibility of adverse drug interactions. This initiative, developed and supported by the Medication Safety Workgroup, offers the MedCard in various forms and is available for download at http://www.utahhospitals.org/education/patient-safety/mediction/MedRec.html.

Safe Patient Lifting Practices—In 2006 UHA convened a workgroup to review and develop state standards for the transport and lifting of patients. The workgroup explored various options and after several months of work developed voluntary guidelines for safe patient lifting practices for the protection of healthcare workers and patients alike.

A Look to the Future

Centers for Medicaid and Medicare – Provider Preventable Conditions (PPC)—In July 2011, the Utah Medicaid program issued an emergency rule similar to what was occurring in Medicare at the national level on its policy regarding the reimbursement of provider preventable conditions. In this rule, Medicaid has determined that it will no longer pay for PPCs. Facilities are prohibited from submitting claims for payments of these conditions when the condition did not exist prior to initiation of treatment. Secondly, providers are required to report to the state the occurrence of the PPCs within 30 calendar days of the event. Conversations are underway to clarify the reporting function of this rule since it is believed that facilities are already incompliance due to the patient safety rules below. As of March 6, 2012 this issue is still under discussion.

(a) R380-200 Sentinel Event Reporting Rule;
http://www.rules.utah.gov/publicat/code/r380/r380-200.htm

(b) R380-210 Healthcare Facility Patient Safety Program
http://www.rules.utah.gov/publicat/code/r380/r380-210.htm

(c) R386-705 Healthcare Associated Infection
http://www.rules.utah.gov/publicat/code/r386/r386-705.htm

(d) R428-10. Health Data Authority Hospital Inpatient Reporting Rule.
http://www.rules.utah.gov/publicat/code/r428/r428-010.htm

HB55: Healthcare-Associated Infections – This bill passed during the 2012 Legislative session with Representative Draxler as its sponsor. HB55 makes it mandatory for hospitals and ambulatory surgical centers to report selected infections to the Utah Department of Health and will provide resources to the Utah Department of Health to conduct annual reporting on infections, including central line-associated blood stream infections, surgical site infections, catheter associated infections, and other emerging infections. The reporting will be presented by individual facilities to the public and made available system wide.

Health and Human Services: Meaningful Use—The American Recovery Reinvestment Act of 2009, authorized financial incentives to eligible hospitals and physicians to become meaningful users of the Electronic Health Record (EHR). The core components of a hospital EHR include patient registration, computerized provider order entry, clinical documentation and clinical decision support. EHRs are believed to hold the key to improved patient outcome and healthcare delivery efficiencies by reducing redundancies, improving access to information, and eliminating written order errors. According to the December 2010 Report to the President, The Centers for Medicare and Medicaid (CMS) is phasing in meaningful use criteria in three stages. These stages include:

Stage 1: Initiated in 2011—electronic capture of health information in a manner that will support decision making, patient sharing and the ability to exchange information.

Stage 2: Scheduled for 2014—includes standards such as online access for patients to their health information and electronic health information exchange between providers.

Stage 3: Scheduled for 2015—improved outcomes of care through the use of HIT.

Each of these stages will bring both challenges and opportunities to improve patient safety and quality of care.

LINC: Linking Information Necessary for Care - The LINC transfer form was developed as a local initiative to improve the transfer of information across sectors of care. The goal of capturing the necessary information and transferring it across the continuum of care is to improve patient safety and aid the reduction of hospital readmissions. An information transfer document has been developed and is currently being vetted for compliance with national electronic information transfer standards. Information can be found at http://www.utahhospitals.org/education/patient-safety/ToC.html.

This report was prepared in cooperation with the Utah Department of Health, HealthInsight and UHA, Utah Hospital Association.

For more information on Utah's Patient Safety Initiative, contact Iona Thraen, ACSW PhD at 801-273-6643, ithraen@utah.gov or go to http://health.utah.gov/psi/.