

The issue of patient safety is much in the news lately, especially with the passage March 12, 2003 by the U.S. House of Representatives of "The Patient Safety and Quality Improvement Act." The legislation was in response to a 1999 report by the Institute of Medicine that found medical errors caused at least 44,000 and perhaps as many as 98,000 deaths a year in the U.S. If passed, it will create a system of voluntary reporting of medical errors.

Utah is one of 20 states that already require medical error reporting. The Utah reporting system was developed jointly by the Utah Hospitals and Health Systems Association (UHA), the Utah Department of Health, and HealthInsight with the goals of 1) analyzing aggregate state data on medical errors, and 2) conducting root cause analysis of medical errors within facilities.

An adverse event is defined as an injury resulting from a medical intervention - either an act of care or the omission of necessary care - rather than from the patient's underlying disease process. There are two kinds of adverse events that are currently reported under the Utah rules: adverse drug events (ADEs) and sentinel events.

**Adverse Drug Events (ADE)**

*Definition.* Not all ADEs result from errors nor are all preventable. Reportable ADEs include:

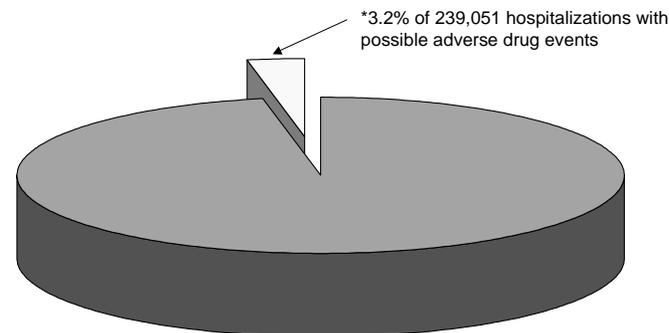
- allergic reactions
- adverse effects of drugs
- drug-drug interactions, and
- errors of medication dose, type, route, or timing

A patient may have an ADE that leads to a hospital admission or may experience an ADE during the course of patient care in the hospital or surgical center. As required in the rule, all hospitals must have ADE reduction programs, and these will be audited every three years.

*Results Reported to UDOH.* In a 12 month reporting period, 3.2 percent of nearly 240,000 inpatients experienced ADEs as reported by 41 acute care hospitals in Utah.

**Possible Adverse Drug Events**

*Figure 1.* Possible adverse drug events detected through hospital discharge reporting, Utah, January-December 2001.



The incidence of ADEs increased with the patient's age and length of stay in the healthcare facility.

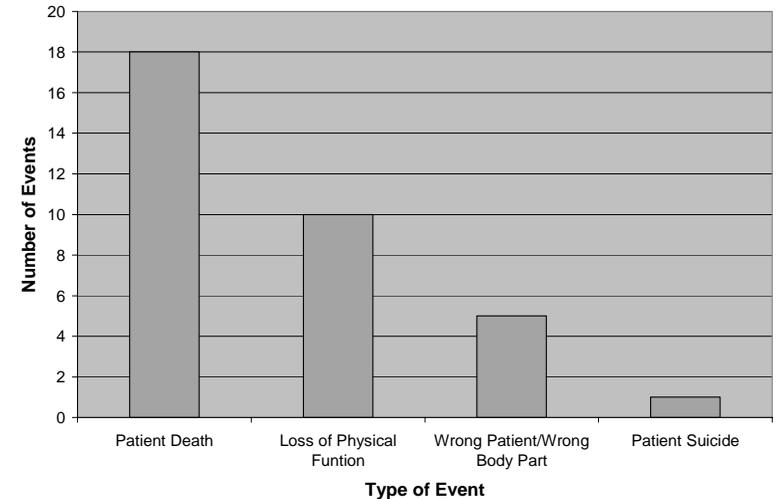
**Sentinel Events**

*Definition.* A reportable sentinel event includes:

- surgery on the wrong patient or the wrong body part
- suicide of a patient
- alleged assaults
- major loss of physical or mental function
- death that is directly related to medical care provided to a patient and is not an expected outcome of the patient's underlying condition.

**Sentinel Events by Type of Event**

*Figure 2.* Sentinel events reported by type of event, Utah, Oct. 2001-Sept. 2002.



*Results Reported to UDOH.* Among nearly 450,000 inpatient hospital and outpatient surgical center discharges, 34 sentinel events were reported by 76 facilities during the one-year reporting period since the rule took effect. The distribution of events is shown in Figure 2.

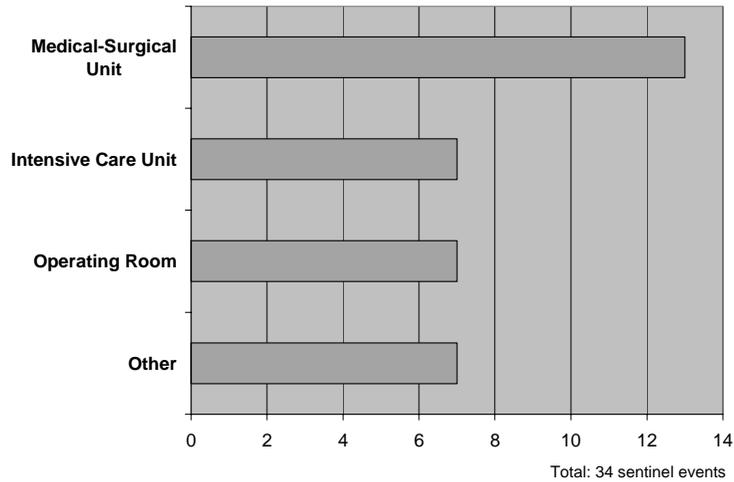
Figure 3 shows the location within facilities where the Utah sentinel events occurred.

**Misadventures and Other Specified Procedure Complications**

Along with the events reported under the patient safety rule, the Utah patient safety project conducts aggregate analysis of adverse events included in the Utah Hospital Discharge Database. Figure 4 shows that over 90% of discharges with diagnoses in the category Misadventures and Other Specified Procedure Complications are accidental punctures or lacerations.

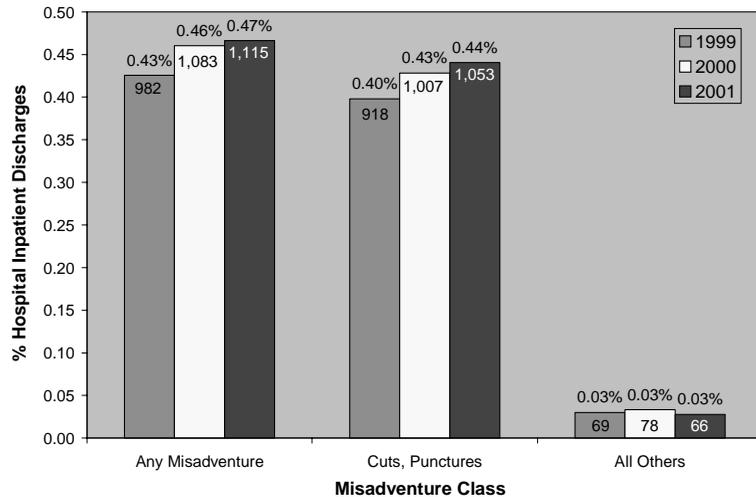
### Sentinel Events by Location in Hospital

Figure 3. Sentinel events by location in hospital, Utah, Oct. 2001-Oct. 2002.



### Misadventures by Class

Figure 4. Number and percentage of Utah acute care hospital inpatient discharges with at least one misadventure, 1999 - 2001, secondary diagnoses.



National research has established the important role patients and families play as partners in helping the medical care system identify and prevent errors. Patients should ask questions when treatment seems different than they expected and family members can help patients to take the right medications at the right time, and better enable their loved ones to follow physician advice, especially after returning home.

For more information on the Utah Patient Safety Initiative, go to <http://health.utah.gov/psi/>

## March 2003 Utah Health Status Update

For more information about this topic, please contact the Office of Health Care Statistics, Utah Department of Health, P.O. Box 144004, Salt Lake City, Utah 84114-4004, (801) 538-7048, FAX (801) 538-9916, or the Office of Public Health Assessment, Utah Department of Health, P.O. Box 142101, Salt Lake City, Utah 84114-2101, (801) 538-6108, FAX (801) 538-9346, email: [phdata@utah.gov](mailto:phdata@utah.gov).

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