Joint Commission Patient Safety Initiatives

Patient Safety Overview
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Accreditation – A Definition

• Usually a voluntary process by which a government or non-government agency grants recognition to health care institutions which meet certain standards that require continuous improvement in structures, processes, and outcomes.
Organizational Base

• The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) is the organizational parent of Joint Commission Resources (JCR), of which Joint Commission International (JCI) is a major division

• JCAHO is an independent non-profit, non-governmental agency

• Accredits over 18,000 organizations in the United States
Why Worry About Patient Safety?
Deaths Per 100 Million Hours

- Being pregnant: 1
- Traveling by train: 5
- Working at home: 8
- Working in agriculture: 10
- Being in traffic: 50
- Working in construction: 67
- Flying on a commercial airplane: 100
- Being hospitalized: 2000
What Do We Mean by Health Care Errors?

• Failure to diagnose
• Medication Errors
• Failure to use or act on diagnostic test
• Wrong Site Surgery
• Use of inappropriate or outmoded diagnostic test or procedure
• Transfusion Errors
Impact of Medical Errors

- The UK Dept of Health, in its 2000 report, estimated that adverse events occur in approximately 10% of hospital admissions, or about 850,000 adverse events a year.

- The Quality in Australian Health Care Study (QAHCS) released in 1995 found an adverse event rate of 16.6% among hospital patients.

- The Hospitals for Europe’s Working Party on Quality Care in Hospitals estimated in 2000 that every tenth patient in hospitals in Europe suffers from preventable harm and adverse effects related to his or her care.
Impact of Medical Errors
(1999 IOM Report)

- 44,000 – 98,000 annual deaths
- Medication errors were leading cause followed by surgical errors and complications
- More Americans die from medical errors each year than from breast cancer, AIDS or car accidents
Impact of Medical Errors
(1999 IOM Report)

• Two percent of hospital admissions experience adverse drug events, resulting in increased LOS and nearly $4700 increase in cost / event

• Total national cost estimated $8.5 - $29 billion

• 2 million nosocomial infections / year

• Direct and indirect costs – 2.5% of hospital’s annual budget
“Accreditation is, at its Core, a Risk Reduction Strategy”

‘94 – New Survey Process and New Standards Launched
- Built upon Patient Safety Principles
- Using Experts – Identified Key Functions in Health Care Organizations
- Identified Vulnerabilities and Risk Points
- Systematically Developed Standards to Mitigate these Risks

‘95 – Multiple Highly Publicized Events
- Wrong-Site Surgeries
- Medication Errors

‘96-’97 – Over Time, Established Requirements for Reporting, Analyzing, and Sharing Lessons Learned
Joint Commission’s Sentinel Event Database

- Collects reports from accredited organizations that have experienced a sentinel (adverse) event within their organization—organizations can report voluntarily or the Joint Commission could find out from another source
- Data from reports are collected, aggregated, and analyzed to identify root causes of adverse events
- The root causes are shared with all health care organizations
- The goal is to use the data to prevent similar errors from occurring in other health care organizations
Sentinel Events Subject to Review Under the Sentinel Event Policy

(Applies only to recipients of care)

- Event resulted in unanticipated patient death or major permanent loss of function (unrelated to the natural course of the patient's illness or underlying condition)
- Or, the event involves one of the following:
  - Suicide in a 24-hour care setting
  - Infant abduction or discharge to wrong family
  - Rape
  - Hemolytic transfusion reaction
  - Surgery on wrong patient or wrong body part
Experience to Date

Of 2405 sentinel events reviewed by the Accreditation Committee, January 1995 through December 2003:

- 370 inpatient suicides
- 308 operative/post op complications
- 296 events of surgery at the wrong site
- 276 events relating to medication errors
- 156 deaths related to delay in treatment
- 111 deaths of patients in restraints
- 109 patient falls
- 83 assault/rape/homicide
- 69 transfusion-related events
- 63 perinatal death/injury
- 47 deaths following elopement
- 44 fires
- 34 infection-related events
- 439 “other”
Settings of the Sentinel Events
January 1995 through December 2003

Total for all settings = 2405
What is Root cause analysis?

A process for identifying the basic or causal factors that could lead to variation in performance, including the occurrence or possible occurrence of an adverse event.
Root Cause Analysis

- Accredited organizations that have experienced a sentinel event are required to conduct a thorough and credible root cause analysis.
- Conducting a root cause analysis will help the organization identify where within its processes the error might have occurred.
- The organization must then use the results of its root cause analysis to make improvements to prevent a recurrence of the event.
How to Conduct a Root Cause Analysis

- Obtain commitment and participation of leaders
  - Administration, nursing, medical staff
- Include “hands-on” care-givers (all disciplines)
- Include QI & RM professionals; legal counsel
- Getting started:
  - Identify the facts of the case (Who? What? Where? When?)
  - Describe the process(es):
    - As designed
    - As usually performed
    - As performed in this case
How to Conduct a Root Cause Analysis

- Keep asking “Why?”
- Treating only symptoms (the obvious [proximate], or special causes) will lead to short-term improvements but will not prevent a recurrence
- Drilling down to root causes is difficult and uncomfortable
  - Don’t mistake obvious causes for root causes
  - Resist the temptation to stop drilling and take action prematurely
Characteristics of an Acceptable Root Cause Analysis

Thorough

- Includes the facts of the case—what happened?
- Includes a description of the processes involved
- Includes an analysis of underlying processes and systems
  - Including at least all the areas on the “Minimum Requirements” matrix
- Identifies possible underlying (root) causes
- Suggests potential improvements
- Includes an action plan
- Includes a strategy for measuring effectiveness
Characteristics of an Acceptable Root Cause Analysis

**Credible**
- Participation by leaders and those closest to the process
- Internally consistent
- Explains areas that are “not applicable” or were not identified as being causes of the adverse event
- Considers relevant literature

**Other tests**
- Applicable to multiple events
- The same “root causes” derive from different events—for example, if communication among staff is identified as a root cause of the event being analyzed, communication problems could lead to adverse events elsewhere
Levels of Analysis

External environmental factors
- Not directly controllable by the organization (Consider redesign to protect against)

Organization management systems
- Pt. care processes
- Internal common cause (controllable through redesign)
- Special cause variation (not controllable within the process)
Root Causes of Sentinel Events
(All categories; 1995-2003)

- Communication
- Orientation/training
- Patient assessment
- Staffing levels
- Availability of info
- Competency/credentialing
- Procedural compliance
- Physical environment
- Continuum of care
- Organization culture
- Alarm systems

Percent of events
• Data and other information from the Sentinel Event Database are used to identify recommendations to prevent a specific type of adverse event
• These recommendations are published in *Sentinel Event Alert*, an online newsletter developed by the Joint Commission
• Each issue of *Sentinel Event Alert* includes expert commentary and recommendations on a particular topic
• Organizations are encouraged to use the recommendations in *Sentinel Event Alert* to prevent the occurrence of a specific type of adverse event
New Publication

We are pleased to introduce the first issue of *Sentinel Event Alert*, a periodic publication dedicated to providing important information relating to the occurrence and management of sentinel events in Joint Commission-accredited health care organizations. *Sentinel Event Alert*, to be published when appropriate as suggested by trend data, will provide ongoing communication regarding the Joint Commission's Sentinel Event Policy and Procedures, and most importantly, information about sentinel event prevention. It is our expectation and belief that in sharing information about the occurrence of sentinel events, we can ultimately reduce the frequency of medical errors and other adverse events.

**Medication Error Prevention -- Potassium Chloride**

In the two years since the Joint Commission enacted its Sentinel Event Policy, the Accreditation Committee of the Board of Commissioners has reviewed more than 200 sentinel events. The most common category of sentinel events was medication errors, and of those, the most frequently implicated drug was **potassium chloride (KCl)**. The Joint Commission has reviewed 10 incidents of patient death resulting from misadministration of
Sentinel Event Trends: Potassium Chloride Events

S. E. Alert # 1
February 1998

Conc. KCl
Lab error
Sentinel Event Trends: Medication Errors (% of Total)

- S. E. Alert #11: November 1999
- S. E. Alert #19: May 2001
- S.E.A. #23: Sept. 2001
Sentinel Event Trends: Suicide Events (Percent of Total)

S. E. Alert # 7
November 1998
Critical Steps to Meaningful Improvements In Patient Safety

• Identify all significant errors
• Analyze each error to determine root causes
• Compile data about error frequencies and root causes
• Share information to permit redesign of systems and processes
• Periodically assess effectiveness of risk reduction efforts
For more information:

The Joint Commission Resources Web Site
www.jcrinc.com

The Joint Commission on Accreditation of Healthcare Organizations Web Site
www.jcaho.org