

Advancing Patient Safety in the ED: Risks, Challenges and Corrective Initiatives



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Speaker



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Objectives

- Describe suicidal patient safety measures for the ED.
- Describe restraint standards that must be followed.
- Explain new and revised standards, regulations, and laws put forth by CMS, TJC and the federal government.
- Evaluate compliance requirements and penalties.

The Faces We Should Remember



- Ben Kolb, a 7 year old scheduled for elective ear surgery
- The surgeon injected with Lidocaine around the ear to numb the area
- He went in a cardiac arrest and died
- Martin Memorial Hospitals does a full investigation
- He had accidentally been given concentrated Epi which was poured into a unmarked sterile container
- Many Epi medication errors in the ED

ERCI 2015 Top 10 Patient Safety Issues

- ECRI Institute publishes list of top ten patient safety issues in 2015
- ECRI is a PSO and the list is the result of patient safety event reports, research requests, and root-cause analyses (RCA) submitted to ECRI
- Also from knowledge gained through investigating incidents, observing and assessing hospital practices, and reviewing health-technology-related problem reports
- Mislabeled lab specimens and patient falls while toileting still remains a concern

ERCI 2015 Top 10 Patient Safety Issues



ERCI 2015 Top 10 Patient Safety Issues

1. Alarm hazards: inadequate alarm configuration policies and practices
 - Do you have a monitor watcher in the ED?
 - How do you make sure if a monitor goes off in the ED that someone goes in to assess the patient
 - Remember the issue of alarm fatigue where there are so many things that beep that staff may not hear the alarm
 - It is a Joint Commission (TJC) NPSG (National Patient Safety Goal) and as of 2016 must have P&P to manage alarms identified by the hospital
 - Discussed in detail later

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ERCI 2015 Top 10 Patient Safety Issues

2. Data integrity: incorrect or missing data in EHRs and other health IT systems
 - Create an EHR that includes all of the required documentation elements
 - Technology can create safety risks if not designed appropriately or implemented correctly
 - Missed data so no allergy recorded and ED patients gets medication she is allergic to
 - Initially missed diagnosis of EBOLA in Texas ED was reported to be due to ED physician not being able to see ED triage nurses notes but later recanted
 - Outdated information being copied and pasted into chart

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ERCI 2015 Top 10 Patient Safety Issues

3. Managing patient violence
 - Major issue in the ED and with the Emergency Nurses Association (ENA) and American College of Emergency Physicians (ACEP)
 - Accounts for 900 deaths and 1.7 million non-fatal assaults every year
 - ENA has many excellent workplace violence resources along with a study of the problem and a violence position statement at www.ena.org/government/State/Pages/WVResources.aspx
 - ENA has workplace violence toolkit at www.ena.org/practice-research/Practice/ViolenceToolkit/Documents/toolkitpg1.htm
 - Staff need proper training to recognize : CPI, MOAB, etc.
 - TJC requires de-escalation training. See PC.01.01.01 EP 4 and 24

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Luer Misconnections Memo

DEPARTMENT OF HEALTH & HUMAN SERVICES
 Center for Medicare & Medicaid Services
 700 Security Boulevard, Mail Stop C2-23-16
 Baltimore, Maryland 21244-1800



Center for Clinical Standards and Quality/Survey & Certification Group

DATE: March 8, 2013
TO: State Survey Agency Directors
FROM: Director
 Survey and Certification Group
SUBJECT: Luer Misconnection Adverse Events

Ref: S&C: 13-14-ALL

Memorandum Summary

- **Luer Misconnections continue to result in adverse events and deaths** – Luer connectors easily link many medical components, accessories, and delivery systems. Clinicians, in any type of provider or supplier setting, can mistakenly connect the wrong devices and deliver substances through the wrong route. Despite numerous alerts and warnings, a patient's blood pressure tubing was recently misconnected to an intravenous (IV) line in an ambulatory surgery center (ASC) resulting in a patient death.
- **Adverse Event Complaint Investigation:** During a complaint investigation for an adverse event involving delivery of an incorrect substance or utilization of an incorrect delivery route, surveyors must be alert to whether the event involved misconnections of a Luer device. If so, surveyors must determine whether the facility has taken actions to ensure systems are in place to prevent recurrence of this type of adverse event.
- **Facility Reporting to Food & Drug Administration (FDA):** Surveyors should encourage health care facilities to report problems with Luer misconnections to the FDA, even if an adverse event occurred.

PA Patient Safety Authority Article

Table. Tubing Misconnections Reported to the Pennsylvania Patient Safety Authority, January 2008 to September 2009

MISCONNECTION	NUMBER OF REPORTS
Secondary intravenous (IV) infusion connected to lower "Y" part of primary IV tubing set	8
Hemodialysis arterial and venous tubing lines reversed	5
G-tube and J-tube lines reversed	3
Incorrect tubing connection (no further explanation provided in reports)	3
Epidural and patient-controlled analgesia (PCA) tubing sets reversed	2
Nonhemodialysis arterial and venous tubing lines reversed	2
Call cover tubing connected to call cover reservoir	1
Feeding tube set connected to Braviac®	1
Feeding tube set connected to peripherally inserted central catheter (PICC) line	1
Feeding tube set connected to suction port	1
Imaging contrast tubing set connected to tracheostomy cuff	1
IV tubing set connected to dialysis catheter	1
IV tubing set connected to PICC line	1
IV tubing set connected to tracheostomy cuff	1
Knee irrigation connected to peripheral IV tubing	1
Miscommunication (arterial line noted in medical record as peripheral IV)	1
Oral medication delivered through peripheral IV line	1
Suction line connected to water seal	1
Suction and feeding tubing sets reversed	1
Total	36

TJC Sentinel Event Alert #36 www.jointcommission.org

The screenshot shows the website interface for The Joint Commission. At the top, there are navigation links for Accreditation, Certification, Standards, Measurement, Topics, About Us, and Daily Update. The main content area features a 'Topic Library Item' for 'Sentinel Event Alert, Issue 36: Tubing misconnections—a persistent and potentially deadly occurrence' dated April 3, 2008. Below the title is a 'Download This File' button and a small image of a medical tubing connector. The page also includes social media sharing icons for Twitter, Facebook, LinkedIn, and YouTube.

ERCI 2015 Top 10 Patient Safety Issues

7. Opioid-related events

- Use and prescribing of opioids has significantly increases
- So has the number of adverse events and overdoses with the number of overdoses doubling from 2004 to 420,000 in 2011
- Commonly involved is Dilaudid (HydroMORPHONE), oxycodone, PCA opioid, and fentanyl patches
- CMS implemented detailed process for hospitals on June 6, 2015 and discussed in more detail later
- Must have P&P, must train staff, P&P must be approved by MEC, must include how to monitor patients (VS, Pulse Ox, ETCO2 etc) and how often

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Medication and Safe Opioid Use

- CMS issues 32 page memo on medication administration and safe opioid use March 14, 2014 and effective June 6, 2014
 - Risk and patient safety need to review this besides nursing, pharmacy, MEC, and nurse educator
- Concerned about the number of patients with adverse events when taking opioids
- Must have a P&P
- Must train staff and include information that must be in the assessment
- Must document process
 - Questions to hospitalscg@cms.hhs.gov

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CMS Memo Med & Safe Opioid Use

DEPARTMENT OF HEALTH & HUMAN SERVICES
 Centers for Medicare & Medicaid Services
 7500 Security Boulevard, Mail Stop 52-21-16
 Baltimore, Maryland 21244-1850



Center for Clinical Standards and Quality/Survey & Certification Group

Ref: S&C: 14-15-Hospital

DATE: March 14, 2014

TO: State Survey Agency Directors

FROM: Director, Survey and Certification Group

SUBJECT: Requirements for Hospital Medication Administration, Particularly Intravenous (IV) Medications and Post-Operative Care of Patients Receiving IV Opioids

Memorandum Summary

- **Medication Administration:** We are updating our guidance for the hospital medication administration requirements to:
 - Make clear that the medication administration requirements under the nursing services condition of participation (CoP) are related to only some components of the overall hospital medication process, but that hospitals are expected, through this and the related requirements under the pharmaceutical services and quality assessment performance improvement CoPs, to take a comprehensive approach to the medication process.
 - Update our guidance for IV medications and blood transfusions in general; and
 - Reflect the need for patient risk assessment and appropriate monitoring during and after medication administration, particularly for post-operative patients receiving IV opioid medications, in order to prevent adverse events.
- **Immediate Post-operative Care:** Clarification is also being made to the guidance for the surgical services CoP requirement for hospitals to have adequate provisions for immediate post-operative care to emphasize the need for post-operative monitoring of patients.

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ERCI 2015 Top 10 Patient Safety Issues

8. Inadequate reprocessing of endoscopes and surgical instruments

- ED instruments are wiped down after use, soaked in an enzymatic solution and sent to central supply for processing

9. Inadequate patient handoffs related to patient transport

- Have good report process and consider bedside report and when transferring patient to their bed and discussed in detail later (safe handoffs)

10. Medication errors related to pounds and kilograms

- ENA initiative and always weigh in kg and not pounds

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ACEP and ENA Position Statements

- ED physicians and ED staff should always be aware of position statements by national association such as ACEP and ENA

- American College of Emergency Physicians (ACEP) is www.acep.org

- Emergency Nurses Association is www.ena.org

- CMS in the hospital Conditions of Participation (CoPs) states that hospitals must follow the acceptable standards of care and practice

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ACEP Policy Statements

ACEP Policy Statements www.acep.org/policystatements/

Search this Section Search

ACEP board-approved policy statements highlight the scope of issues being addressed in emergency medicine. New policies are initially distributed to ACEP members via Annals of Emergency Medicine and posted here. In addition, the ACEP Board of Directors has directed that all policy statements undergo automatic review when they are seven years old. Unless a policy still contains relevant information, it will then sunset. Due to the extensive time required to review seven-year-old or older policies, some are still under review.

Embed/num: Policy Statements

Please select a Category:

- Certification/Credentialing (24)
- Contracts & Compensation (7)
- Disaster Preparedness & Response (23)
- Diversion (6)
- Ethics (27)
- EMS (54)
- Health Care Reform (6)
- Hospitals (27)
- Imaging (4)
- Information Technology & Data (10)

Policies:

2011 State of the Art - Observation Units in the ED 0511

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Nurse Can Not See Monitor When Sitting



National Center for Human Factors

MedStar Health
National Center for Human Factors in Healthcare
http://medicalhumanfactors.net/ MedStar Institute for Innovation

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To Better Is Human
The National Center for Human Factors in Healthcare brings together a diverse set of human factors experts with clinical experts to improve quality, efficiency, reliability, and safety in healthcare. As part of the National Institute for Standards and Technology (NIST) and the National Health Research Institute (NHRI), the Center's home and research lab is located in Scotts, a \$4.6B not-for-profit healthcare organization with 10 hospitals and 50 diversified healthcare organizations, the largest healthcare provider in the Baltimore & Washington DC region.

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What Can Our Human Factors Team Do For You?

RESEARCH Cutting edge human factors and applied cognitive research from the nation's leading experts.	USABILITY Medical device and health IT evaluations, both for the industry and as a service to MedStar.	CONSULTING Expert advice on a range of services for your organization.	EDUCATION Resources for learning about the science of human factors and how it applies to you.

Teamwork and Patient Safety Culture

- There are many studies that show the importance of team work on patient safety culture
- Teamwork training provides safer healthcare
- Teamwork is a powerful solution to improve patient safety
- Evidenced based teamwork system will improve both teamwork and communication among ED staff
- Common ones include crew resource management (CRM) or AHRQ TeamSTEPPS
 - AHRQ has many excellent free resources on teamwork and other patient safety tools

Use a Trigger Tools

- There are three trigger tools that could be used in the ED
- CMS in the hospital CoP manual and TJC say you can't just rely on incident reports
- Need another source to discover errors like medication errors
- In the hospital CoPs, there is a list of indicator drugs or IHI had trigger tools
 - August 11, 2010 Mayo Clinic publishes research that the global trigger tool is promising approach to measuring patient safety

Measuring Hospital Adverse Events: Assessing Inter-rater Reliability and Trigger Performance of the Global Trigger Tool

James M. Naessens, Thomas J. O'Byrne, Matthew G. Johnson, Monica B. Vansuch, Corey M. McGlone, Jeanne M. Huddleston
 Posted: 08/11/2010. International Journal for Quality in Health Care, 2010;22(4):266-274. © 2010 Oxford University Press

Abstract and Introduction

Abstract

Objective. To determine the inter-rater reliability of the Institute for Healthcare Improvement's Global Trigger Tool (GTT) in a practice setting, and explore the value of individual triggers.
Design. Prospective assessment of application of the GTT to monthly random samples of hospitalized patients at four hospitals across three regions in the USA.
Setting. Mayo Clinic campuses are in Minnesota, Arizona and Florida.
Participants. A total of 1138 non-pediatric inpatients from all units across the hospital.
Intervention. GTT was applied to randomly selected medical records with independent assessments of two registered nurses with a physician review for confirmation.
Main Outcome Measure. The Cohen Kappa coefficient was used as a measure of inter-rater agreement. The positive predictive value was assessed for individual triggers.
Results. Good levels of reliability were obtained between independent nurse reviewers at the case-level for both the occurrence of any trigger and the identification of an adverse event. Nurse reviewer agreement for individual triggers was much more varied. Higher agreement appears to occur among triggers that are objective and consistently recorded in selected portions of the medical record. Individual triggers also varied on their yield to detect adverse events. Cases with adverse events had significantly more triggers identified (mean 4.7) than cases with no adverse events (mean 1.8).
Conclusions. The trigger methodology appears to be a promising approach to the measurement of patient

Trigger Tool Finds More Adverse Events

- Recent study found that an adverse event occurred in about one out of three admissions
- This is 10 times the number of previous estimates
- Found that trigger tool confirmed ten times more serious adverse events in hospitals
 - This compared to using the AHRQ 28 patient safety indicators
- Trigger tool has a much broader definition of adverse event
 - Global Trigger Tool Shows That Adverse Events In Hospitals May Be Ten Times Greater Than Previously Thought, Classen, David, Roger, Resar etc. Health Affairs, Vol 30, No.5, May 2011

Patients Identify Undocumented AE

- Trigger tools can help determine undocumented adverse events (AE) but what else?
- Do we really know the true adverse event rates for our ED patients?
- Telephone interviews with 201 patients after ED discharge
- Identified 10 AEs that had not been reported in their medical records

▪ Source CJEM September 26, 2008

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Disclosure of Unanticipated Outcomes

- TJC requires now that patients be informed when unanticipated outcomes under RI.01.02.01
 - EP21 Patient or surrogate decision maker is informed about unanticipated outcomes (UO) of care that related to reviewable sentinel events
 - EP 22 LIP must inform patient if not aware
- Also one of the 34 National Quality Forum Safe Practices for Better Healthcare
- NPSF says patient have a right to receive a truthful and compassionate explanation about the error and remedies available to the patient

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Patient Safety Studies

- Many studies showed that a large percentage of the errors that occur in healthcare are due to system error
- They are not due because of the negligence of a staff member or physician
- It is not a blame and train mentality
- Studies found that healthcare facilities needed a non-punitive environment
- A healthcare facility can not fix a problem it does not know exists

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Patient Safety

- Having a **non-punitive environment** would encourage reporting of errors and near misses
- Both the Joint Commission (TJC) and the Centers for Medicare and Medicaid Services (CMS) require a non-punitive environment
- However, many healthcare facilities have balanced this with the **Just Culture theory**
- A person who is reckless or does something intentional to harm a patient should be terminated from employment

Reporting Medical Errors and Near Misses

- Staff need to feel comfortable in reporting medical errors and near misses
- Reporting system should facilitate the sharing of patient safety information
 - In fact, this is a TJC requirement
 - We need a learning environment so we can learn from our mistakes
 - Need to use a system analysis approach and fix the system to prevent medical errors in the future
- The entire hospital needs to be focused on patient safety if a culture of safety is to be established

ACEP Reporting of Medical Errors

Reporting of Medical Errors

Reaffirmed and approved by the ACEP Board of Directors April 2014
 Revised and approved by the ACEP Board of Directors June 2008
 Originally approved by the ACEP Board of Directors September 2001

The American College of Emergency Physicians (ACEP) supports a standardized system of medical error reporting for the purpose of aiding practitioners and institutions in efforts to improve patient safety. Such a system should:

- Define procedures to identify and report errors.
- Utilize a set of definitions and taxonomy of errors developed through consensus.
- Use a centralized data repository that processes and evaluates the data submitted and assures its integrity and confidentiality.
- Ensure that information submitted to reporting systems will be comprehensively analyzed to identify actions that would minimize the risk that reported events recur that reduce recurrence of errors. Reporting systems should facilitate the sharing of patient safety information among providers and health care organizations and foster confidential collaboration with other health care reporting systems.
- Support a non-punitive culture for reporting health care errors focusing on preventing and correcting systems failures rather than on individual or organizational culpability.
- Include statutory protection from liability to providers and institutions that report data to the system.
- Eliminate redundancy in reporting to multiple agencies or governmental bodies.
- Be adequately funded.

Safety Initiatives Any ED Can Do

- Recent article describes safety initiatives a hospital can take
 - Hospital in the study had a patient safety committee
 - This committee created a safety mission statement
 - Developed a non-punitive error reporting policy
 - Created information sheet of safety tips for patients and families
- Educated staff on the science of safety and how to disclose errors
- Developed a safety intranet site to share stories on patient safety
- Implemented senior safety walk abouts

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Downloaded from qhc.bmj.com on September 7, 2010 - Published by group.bmj.com



Evaluation of the culture of safety: survey of clinicians and managers in an academic medical center

P J Pronovost, B Weast, C G Holzmueller, et al.
Qual Saf Health Care 2003; 12: 405-410
 doi: [10.1136/qhc.12.5.405](https://doi.org/10.1136/qhc.12.5.405)

Updated information and services can be found at:
<http://qhc.bmj.com/lookup/forward?doi=10.1136/qhc.12.5.405>

These include:

References This article cites 12 articles, 2 of which can be accessed free at:
<http://qhc.bmj.com/lookup/forward?doi=10.1136/qhc.12.5.405>

Article cited in:
<http://qhc.bmj.com/lookup/forward?doi=10.1136/qhc.12.5.405>

Email alerting service Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

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Suicidal Patients

- Inpatient suicides is the 3rd most common sentinel event for hospitals (TJC)
 - July 2015 data of 11,660 SE and 8% of all sentinel events and has 750
- Don't let suicidal patient sit in ED lobby unattended
- If prevented from leaving then CMS seclusion standards apply
- Sitters or security with suicidal patients in the ED and have a safe room and be aware of policy
 - How to build a safe room Guidelines for the Built Environment of Behavioral Health Facilities at www.naphs.org and now on FGI website at www.fgi.org/guidelines.org/beyond

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May 2015 Edition 7.0



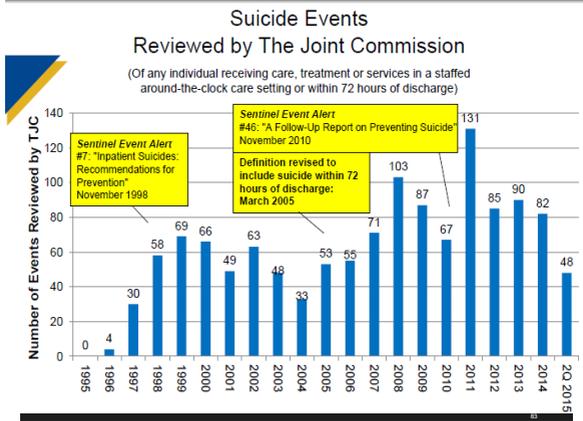
www.fgiguideelines.org/pdfs/DesignGuideBH_7.0_1505_rev.pdf

Design Guide for the Built Environment of Behavioral Health Facilities

Now with
Patient Safety Risk Assessment Tool

by James M. Hunt, AIA, NCARB
and David M. Sine, DrBE, CSP, ARM, CPHRM

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Root Cause Information for Suicide Events Reviewed by The Joint Commission

(Suicide of any individual receiving care, treatment or services in a staffed around-the-clock care setting or within 72 hours of discharge)

2004 through 2Q 2015 (N=905)	
The majority of events have multiple root causes	
Assessment	718
Communication	536
Human Factors	505
Leadership	474
Physical Environment	355
Information Management	192
Continuum of Care	168
Care Planning	162
Medication Use	25

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Suicidal Patients

- A good assessment is mandatory
 - Provide training to ED nurses so they feel more comfortable about taking care of suicidal patients
 - Include suicide lethality scale
- Document if suicidal and if plan and document assessments
- Knowledge of state law on involuntary commitment if danger to himself or others
- It is imperative that the ED provide a safe environment to prevent suicidal patients from committing suicide

Patient Suicide Risk

- TJC has a NPSG on this
- Goal 15, 15.01.01. states that the hospital identifies patients at risk for suicide
- Only 1 left of 2 standards
- NPSG.15.01.01 has 3 EPs
- This section only applies to psychiatric hospitals and patients being treated for emotional or behavioral disorders in general hospitals.
- See TJC Patient Flow Chapter in LD chapter and PC.01.01.01 EP 4 and EP 24.

Patient Suicide Risk

1. Risk assessment must be conducted that includes factors that increase or decrease the risk for suicide
2. Need to address the immediate safety needs of a suicidal patient and the most appropriate setting
3. Must provide information to patients at risk for suicide when they leave the hospital such as a crisis prevention hotline

Communication

- Communication break downs are the leading system failure that contributes to error
- TJC sentinel event data support this which is why it became a NPSG
 - Left with notifying physicians of panic values and document
 - Most common root cause of sentinel events is communication and accounts for 70% of all errors
- A communication model (like SBAR or standard report sheet form, ticket to ride, hall pass, or report template) could help
 - Improving communication in the emergency department. Redfern E, Brown R, Vincent CA. Emerg Med J. 2009;26:658-

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Communication Bedside Shift Report

- Important in giving report for ED nurses and physicians going off duty
 - TJC standard on handoff
 - NPSG.02.03.02
 - Bedside shift report improves patient safety and nurse accountability
 - Bedside shift report improves patient safety and nurse accountability. Baker SJ. J Emerg Nurs. 2010;36:355-358
 - Watch chasing zero by Dennis Quaid at <http://safetyleaders.org/Quaid/>
- Good communication is also important for preventing lawsuits

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Watch This Video Bedside Nurse Report

SafetyLeaders.org

Dennis Quaid: Our New SafetyLeaders TMIT Teammate

The Quaid Foundation Has Merged with TMIT

As of April 12, 2010, The Quaid Foundation has merged with TMIT. The Quaid Foundation was formed by Dennis and Kimberly Quaid in 2007 after hospital personnel administered an overdose of propofol, a knock-out drug, to their 10-year-old twins, putting their lives at great risk. The Quaid family is joining forces with TMIT to raise public awareness about our nation's medical culture, to eliminate human error, and to make caregivers aware that patients have the right to receive all information that could have an impact on their health and well-being, with major focus on increasing awareness of the dangers of medication errors.

Over the last year, Dennis Quaid and TMIT have been actively involved in a number of other initiatives that have great reach and impact.

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Heparin Mix Up Almost Killed Their Twins



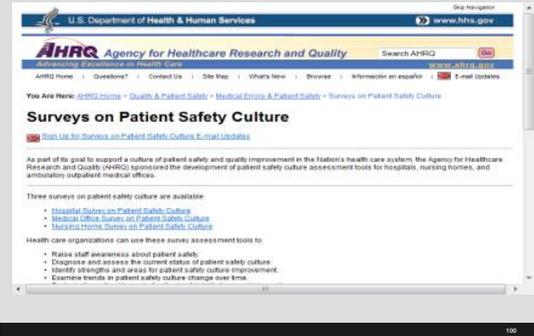
Hand Offs

- Recent study examined handoff communications among ED physicians and found a number of communication errors
- There were errors in 13.1% and omissions in 45.1% of the handoffs
- Errors and omissions were associated with handoff time per patient and ED length of stay
- There were fewer errors with the use of written or electronic support materials
 - ED handoffs: observed practices and communication errors, Brandon Maughan, Lei Lei, Rita Cydulka, American Journal of Emergency Medicine, Volume 29, Issue 5, Pages 505-511, June 2011

ENA Safer Handoff Tool

Safer Handoff		PATIENT HANDOFF/ TRANSFER FORM		UNBROKEN INSTITUTION LOGO
DATE OF TRANSFER: / /		TIME OF TRANSFER: : AM PM		
PATIENT INFORMATION Last Name First Name MI Street Address City State/Province Zip/Postal Code DOB / / GENDER: M F		CONTACT PERSON/LEGAL GUARDIAN/DPOA Last Name First Name () Emergency Telephone NOTIFIED Yes No Street, City, State/Province, Zip/Postal Code Relationship to Patient:		
NAME OF FACILITY TRANSFERRING FROM Facility Name Address City State/Province Zip/Postal Code ()				
NAME OF RN/LPN/MD in Charge of Patient at Time of Transfer Telephone				
REASON FOR TRANSFER		SECONDARY DIAGNOSIS		

www.ahrq.gov/qual/patientsafetyculture/



Holding Admitted Patients in the ED

- Delays lead to overcrowding and boarding in the ED, ambulance unloading to ED cart or diversion, and patients who LWBS
- Holding patients in the ED causes delays in patient care
 - ENA and ACEP position statements
- Place patients at risk for poor outcomes
- Prolongs pain and suffering

Holding Patients in the ED Boarding

- Result in patient dissatisfaction
- Decreased staff productivity and frustration and violence
- Increased potential for errors and studies have confirmed increased mortality and morbidity
- GAO, CDC, and ACEP have issued reports on the effects of overcrowding
- TJC has standard in LD chapter called the Patient Flow standard and a Patient Flow Tracer

TJC Patient Flow Tracer

- Patient flow standard is LD.04.03.11
 - Final changes in 2013 and 2014
- Patients can not get into the ED rooms and patients wait in ED for an inpatient bed
- LD has responsibility to evaluate and manage patient flow and take action to implement plans to improve
 - If patient flow problems are identified during survey will interview hospital leaders about their shared accountability with MS
- Will look at all of the standards on patient flow

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TJC Amends Patient Flow Standards



www.jointcommission.org/standards_information/prepublication_standards.aspx

Standards Revisions to Address Patient Flow Through the Emergency Department Hospital Accreditation Program

Standard LD.04.03.11

The hospital manages the flow of patients throughout the hospital.

Element of Performance for LD.04.03.11

1. The hospital has processes that support the flow of patients throughout the hospital.
2. The hospital plans for the care of admitted patients who are in temporary bed locations, such as the post anesthesia care unit or the emergency department.
3. The hospital plans for care to patients placed in overflow locations.
4. Criteria guide decisions to initiate ambulance diversion.
5. The hospital measures the following components of the patient flow process:
 - The available supply of patient beds
 - The efficiency of areas where patients receive care, treatment, and services

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Patient Safety Brief



**EMERGENCY
MEDICINE
PATIENT SAFETY
FOUNDATION**

The Joint Commission New Patient Flow Standards

By: Sue Dill Calloway RN MSN JD CPHRM
Chief Learning Officer
Emergency Medicine Patient Safety Foundation
July 2012

The Joint Commission is an organization that accredits about 82% of the hospitals in the United States. Any hospital accredited by the Joint Commission must be in compliance with all of their standards. The Joint Commission has standards on patient flow to prevent overcrowding and boarding of patients in the emergency department and in other temporary locations.

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TJC Patient Flow Standards

- TJC has revised their standards on patient flow effective January 1, 2013 and 2 changes in 2014
 - Not called JCAHO anymore
- LD.04.03.11 EP 6 goes into effect January 1, 2014 regarding setting a 4 hour window as the goal for boarding of patients in the ED before they get to their bed
- LD.04.03.11 EP 9 goes into effect January 1, 2014 regarding boarding of behavioral health patients in the ED

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LD.04.03.11 Patient Flow

- Standard: The hospital must manage the flow of patients throughout the hospital
- Managing patient flow is very important
- Patient flow **tracer** added in 2008 surveys and modified in 2012, 2013 and 2014
- Needed to prevent overcrowding that leads to patient safety and quality issues
- Hospital needs to use indicators to monitor process including admitting, assessment, and treatment, patient transfer and discharge

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TJC Final Pt Flow Changes

The screenshot shows the 'Standards' section of The Joint Commission website. The main heading is 'Standards Revisions to Address Patient Flow through the Emergency Department'. Below this, it says 'Prepublication Standards' and 'May 6, 2012'. A 'Download This File' button is visible. A URL is provided: www.jointcommission.org/standards_information/prepublication_standards.aspx. There is also a link to 'Electronic Standards Manual'. The page includes a search bar, navigation tabs (Accreditation, Certification, Standards, Measurement, Topics, About Us, Daily Update), and social media icons.

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TJC Issues R3 Report

- Published December 19, 2012 and is 5 pages
 - Provides rationale, requirements, and references used
- Can be downloaded off TJC website at www.jointcommission.org/r3_report_issue4/
- Discusses LD.04.03.11 and PC.01.01.01
 - LD.04.03.11: The hospital manages the flow of patients throughout the hospital (Revises EP 5, 7, and 8)
 - PC.01.01.01: The hospital accepts the patient for care, treatment, and services based on its ability to meet the patient's needs (EP 4 and 24)
- LD EP 6 (4 hour time frame) and 9 (boarding behavioral health patients) go into effect Jan 1, 2014

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R3 Report Patient Flow Thru the ED



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Patient Flow Standard LD.04.03.11

- EP1. Must have processes that support the efficient flow of patients throughout the hospital
- EP2. The hospital plans for care of admitted patients who are in temporary-bed locations, such as the PACU and the emergency department (ED)
- EP3. The hospital plans for care to those patients who are placed in overflow locations
- EP4. Criteria guide decisions to initiate ambulance diversion

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Patient Flow Standard

- EP5. The hospital measures and sets goals for mitigating and managing the boarding of patients who come through the ED
 - Boarding is the practice of holding patients in the ED or a temporary location after the decision to admit or transfer has been made.
 - It is recommended that hospital set goals with attention to best practices and its goals and boarding should not go over 4 hours in the interest of patient safety and quality of care

LD.04.03.11 Boarding and the 4 Hour Rule

- EP6 EP was effective January 1, 2014
- The hospital must measure and set goals for mitigating and managing the boarding of patients who come through the ED
- It is recommended that patients not be boarded more than 4 hours
- This is important for safety and quality of care

LD.04.03.11 Review Measurement Data

- EP7 was effective January 1, 2013
- EP 7 Requires the staffs or individuals who manage the patient flow processes must review the measurement results
- This is done to assess if the goals made were achieved
- Data required was discussed in EP 5

LD.04.03.11 Data Guides Improvements

- EP8 revision was effective January 1, 2013
 - EP8 Requires leaders to take action to improve patient flow when the goals were not achieved
- Leaders who must take action involve the board, medical staff, along with the CEO and senior leadership staff
 - References PI.03.01.01, EP 4, which states that the hospital takes action when it does not achieve or sustain planned improvement

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LD.04.03.11 Boarding of Psych Patients

- EP9 was effective January 1, 2014
- EP 9 States that the hospital determines if it has a population at risk for boarding due to behavioral health emergencies
- Hospital leaders must communicate with the behavioral health providers to improve coordination and make sure this population is appropriately served
- There is a shortage of behavioral health beds in this country leading to times where these patients have camped out in the ED sometimes for days

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Boarding of Behavioral Health Patients PC

- Hospitals should also be familiar with two sections of PC.01.01.01 under EP4 and EP24
- EP 4 Hospitals that do not primarily provide psychiatric or substance abuse services must have a written plan that defines how the patient will be cared for which includes the referral process for patient who are emotional ill, or who suffer from substance abuse or alcoholism
 - This means that hospitals that do not have a behavioral health unit or substance abuse unit, how do you care for the patient until you transfer them out?

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Boarding of Behavioral Health Patients PC

- PC.01.01.01 EP 24
- EP 24 requires boarded patients with an emotional illness, alcoholism or substance abuse be provided a safe and monitored location that is free of items that the patients could use to harm themselves or others
- Hospitals often use sitters and have a special safe room
- EP24 requires orientation and training to both clinical and non-clinical staff that care for these patients

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Boarding of Behavioral Health Patients PC

- PC.01.01.01 EP 24 (Continued)
- This includes medication protocols and de-escalation techniques
- Assessments and reassessments must be conducted in a manner that is consistent with the patient's needs
- Free guide on how to create a safe room called the Design Guide for the Built Environment of Behavior Health Facilities, at <https://www.naphs.org/index>

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Examples of Compliance

- LD should be aware of data to show if overcrowding has occurred
- Are patients camped out in the ED for hours awaiting a bed?
- If so what plans did leadership put in place to help resolve issue
- Was staff provided appropriate cross training?
- Evidence of minutes of patient flow committee
- Do pull to full

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Patient Flow Tracer TJC LD.04.03.11

- Look at patient flow and back flow issues
- Evaluate process issues leading to back flow
- Identify temporary holding area such as are patients held in the emergency department or waits for surgery or critical care units
- Treatment delays, medical errors and unsafe practices can thrive in presence of patient congestion
- TJC hospitals are expected to identify and correct patient flow issues

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Patient Flow Tracer TJC LD.04.03.11

- Look at how the hospital plans for staffing and trains staff about differences in emergent and hospital care
- What you have done to improve and plan for diversion
- Look at past data collection
- How do you identify problems and implement improvements
- LD needs to share accountability with MS

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Triggers Indicative of Patient Flow Problems

- Delay in blood draws or x-rays
- Delay in communication such as reporting handoff from one area to another
- Delay in discharge due to discharge processes
- Delay in OR scheduling
- Hospital process that stop flow of patient in ED such as work up in ED or housekeeping protocols
- Misuse of ED for direct admits

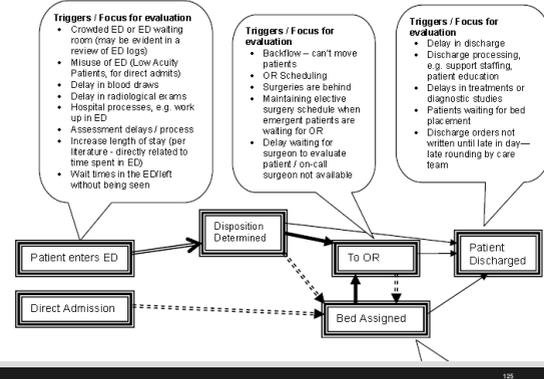
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Triggers Indicative of Patient Flow Problems

- Increase length of stay in the ED
- Insufficient support and ancillary staffing
- Misuse of ED for low acuity patients and direct admits
- Patients experiencing delays with transfers
- Indicators such as MI get ASA and beta blockers on arrival and fibrinolytic with 30 minutes and PCI within 90 minutes
- Pneumonia patients blood cultures and antibiotics timely?

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Patient Flow Triggers



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Patient Flow Tracer

- Look at back flow issues and identify temporary holding area
- How does the hospital plans for staffing and train staff about differences in emergent and hospital care
- What you have done to improve, plan for diversion, and what data has been collected
- How you identify problems and implement improvements
- ACEP has good resources at <http://www.acep.org/crowding/>

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Consensus Statement, Definitions for Consistent Emergency Department Metrics **NEW**

Emergency Department Crowding: High Impact Solutions
 This comprehensive 2008 report from the ACEP Boarding Task Force includes low and no-cost solutions to the practice of boarding patients in the emergency department.

ACEP's Suggested Boarding Solutions Generate National Support
 May 30, 2008

Crowding Case Studies
 Submit your case study for publication on ACEP.org.

Related ACEP Policy Statements

- Boarding**
 - Boarding of Admitted and Intensive Care Patients in the Emergency Department
 - Boarding of Pediatric Patients in the Emergency Department
 - Definition of Boarded Patient
 - Health Care System Surge Capacity Recognition, Preparedness, and Response
 - Responsibility for Admitted Patients
 - Writing Admission and Transition Orders
- Diversions**
 - Ambulance Diversion
 - PREP for above policy:
 - Guidelines for Ambulance Diversion
 - Crowding
 - Emergency Ambulance Destination

Information Papers

- Publishing Wait Times for Emergency Department Care, June 2012
- Optimizing ED Front End Operations, February 2010
- Approaching Full Capacity in the Emergency Department, October 2006

ACEP Boarding of Patients in the ED

Boarding of Admitted and Intensive Care Patients in the Emergency Department

Approved April 2011
 Revised and approved by the ACEP Board of Directors January 2007; April 2008; and April 2011
 Originally approved by the ACEP Board of Directors October 2006

Optimal utilization of the emergency department (ED) includes the timely evaluation, management, and stabilization of all patients. Boarding of admitted patients in the ED contributes to lower quality of care, reduced timeliness of care, and reduced patient satisfaction. The ED should not be utilized as an extension of the intensive care and other inpatient units for admitted patients, because this practice adversely affects patient safety, quality, and access to care. ED leadership, hospital administrators, EMS directors, community leaders, state and federal officials, hospital regulators and accrediting bodies should work together to resolve this problem. ED boarding is a hospital-wide problem and the most effective care of admitted patients is provided in an inpatient unit. ED crowding is a direct result of diminished bed and resource capacity created by boarding. In order for the ED to continue to provide quality patient care and access to that care, the American College of Emergency Physicians (ACEP) believes that:

- Hospitals have the responsibility to provide quality patient care and optimize patient safety by ensuring the prompt transfer of patients admitted to inpatient units as soon as the treating emergency physician makes such a decision. If such a transfer cannot be promptly effected for whatever reason, the hospital must provide the supplemental nursing staff necessary to care for these inpatients boarded in the ED.
- In the event that the number of patients needing evaluation or treatment in an ED is equal to or exceeds the EDs treatment space capacity, admitted patients should be promptly distributed to inpatient units regardless of inpatient bed availability.
- Hospitals should have staffing plans in place that can mobilize sufficient health care and support personnel to meet increased patient needs.
- Hospitals should develop appropriate mechanisms to facilitate availability of inpatient beds.
- Emergency physicians should work with their hospital administration and medical staff to monitor and improve the use of inpatient resources.

ACEP Resources Crowding and Boarding

THE PRACTICE OF EMERGENCY MEDICINE/CONCEPTS

Optimizing Emergency Department Front-End Operations

Jennifer L. Miller, MD, MBA
 Christopher Gentile, MD
 James M. Hoffberger, DO
 Alan Hohn, MD
 Arni Mikkelsen, MD
 Michael G. Robinson, MD
 Diana Fle, MD

From the Division of Emergency Medicine, Washington University in St. Louis School of Medicine, St. Louis, MO (Miller); the Department of Emergency Medicine, Creighton University School of Medicine, Omaha, NE (Gentile); the Department of Emergency Medicine, Creighton University School of Medicine, Omaha, NE (Hoffberger); the Department of Emergency Medicine, University of South Alabama College of Medicine and Medical Center, Mobile, AL (Hohn); the Department of Emergency Medicine, University of North Carolina, Chapel Hill, NC (Mikkelsen); the Department of Emergency Medicine, St. Joseph Mercy Hospital, Ann Arbor, MI (Robinson); and the Department of Emergency Medicine, University of Texas Medical School at Houston, Houston, TX (Fle).

As administrators evaluate potential approaches to improve cost, quality, and throughput efficiencies in the emergency department (ED), "front-end" operations become an important area of focus. Interventions such as triage, code blue, fast-track, admission, registration, and rooming (triage to admit unit protocols, physician to triage at triage desk, code blue fast-track, admission, triage systems and verification systems) have been shown to decrease wait times and improve patient satisfaction. However, these interventions have not been shown to decrease ED crowding and improve patient flow. Although such front-end operations improvement strategies have been described in the lay literature, careful reports exist in the academic literature about their effect on front-end operations. In this report, we present a review of the current body of academic literature, with the goal of identifying select high impact front-end operations improvement activities. (Ann Emerg Med. 2010;56:343-350.)

0192-0644/Issue from number
 Copyright © 2009 by the American College of Emergency Physicians
 doi:10.1016/j.annemergmed.2009.06.003

INTRODUCTION

The emergency department (ED) is a critical link in the health care system. For nearly 3 decades, emergency department (ED) crowding has been recognized as a national problem. From 1995 through 2005, the annual number of ED visits in the United States increased nearly 20%, from 85.5 million to 115.5 million, yet

we emphasized the need for smoothing ED patient flow and, in January 2005, implemented a new boarding method, managing patient flow, which resulted in the hospital's...
 ...develop and implement plans to identify and manage congestions to efficient patient flow that respect the budget.^{1,2} Other organizations, including the Institute for Medicine, Agency for Healthcare Research and Quality

ACEP TASK FORCE REPORT ON BOARDING

Emergency Department Crowding: High-Impact Solutions

<http://www.acep.org/crowding>



APRIL 2008

Ideas to Reduce Crowding Boarding

- Diversion of ambulances when no beds or not enough staff
- Direct admits do not go through the ED
- Initial orders can be done on admitted patients who are stable and detailed orders can be written upstairs
- Bedside registration to allow rapid intake of patient into the system
- Tracking systems and white boards
- Triage based protocols/standing orders or protocols

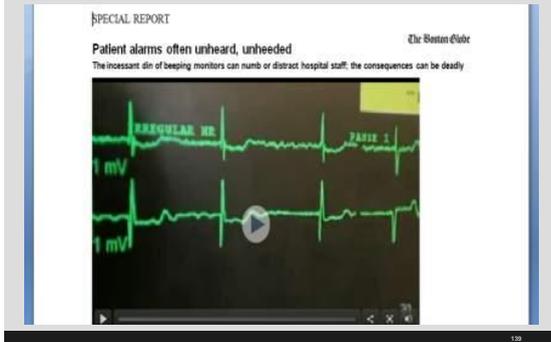
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Ideas to Reduce Crowding Boarding

- Standardized pathways for specific disease conditions
- Addition of physician or physician extender to triage assessment
- Urgent care and fast track
- Immediate bedding (pull to full)
- Adequate staffing
- Consolidate all boarders in one area or over flow unit

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Patient Alarms Often Unheard or Unheeded



Alarm Fatigue

- ECRI Institute issues a report and finds 216 deaths from 2005 to mid 2010 in which problems with monitor alarms occurred
- ECRI published top hazards for 2015 and alarm hazards makes the top ten list AGAIN
- Staff overwhelmed by sheer number of alarms
- Staff improperly modified the alarm settings
- Staff become desensitized to alarms leading to slow response time
 - CMS cited hospital under staffing when staff did not respond timely and hospital gets monitor watchers

Alarm Fatigue

- Alarm settings not restored to their normal levels
- Alarms not properly relayed to ancillary notification systems
 - Paging systems, wireless phones, etc.
- ECRI makes recommendations
 - Establish protocols for alarm system settings
 - Ensure adequate staffing
 - Establish alarm response protocols and ensure each alarm will be recognized
 - Assign one person responsible for addressing the alarm

Alarm Problems in the ED



Addressing Alarm Problems in the Emergency Department

By Kathryn M Polczarski
Director, Applied Solutions Group, ECRI Institute
September 2012

Stand for a few moments in the middle of your emergency department (ED) to just listen and observe. How many alarms do you hear? Can you distinguish where each alarm is coming from and whether it's a physiologic monitor or ventilator or infusion pump alarm? Does each alarm convey the level of urgency needed for the nurse to respond promptly and appropriately? Do you observe the nurses scurrying to respond? Or do the alarms continue to perpetuate while no one responds?

Device alarms should provide an effective safety net to alert caregivers to critical changes in patient conditions or safety-related problems with devices. Does this statement hold true in your organization? Do device alarms provide an effective safety net in your ED?

Unfortunately, as many experts agree, there are serious problems with both the design and use of clinical alarms. In fact, ECRI Institute identified alarm hazards as Number 1 in its Top Ten Technology Hazards in 2012.¹ Many medical devices such as physiologic monitors, ventilators, and infusion pumps rely on alarms to help protect patients, but these are issues when alarms actually contribute to the occurrence of adverse events. The reality is that alarm events frequently occur, and the consequences of these events are often serious. Alarm events are those accidents waiting to happen, the results of a perfect storm in a error-prone system.

Most EDs are plagued by a myriad of alarm problems, such as:

TJC Sentinel Event Alert 50 Alarm Safety

The Joint Commission Sentinel Event Alert

A complimentary publication of The Joint Commission Issue 50, April 8, 2013

Medical device alarm safety in hospitals

Published for Joint Commission accredited organizations and interested health care professionals. Sentinel Event Alerts describe specific types of sentinel events, describe their causes, underlying causes, and suggest steps to prevent recurrence in the future.

Accredited organizations should consider interventions in an Alert when recognizing or investigating sentinel events, implementing relevant requirements contained in the Alert or responsible alternatives.

Please note this issue is appropriate only when used in conjunction with the Alert. Alert may only be referenced in the context and created by The Joint Commission. To receive by email, go to www.jointcommission.org.

Many medical devices have alarm systems, among them are bedside physiologic monitors that include ECG (electrocardiogram) machines, pulse oximetry devices, and monitors of blood pressure and other parameters, bedside laboratory, central station monitors, infusion pumps, and ventilators. These alarm-equipped devices are essential to providing safe care to patients in many health care settings. Alerts are designed for these devices to inform them they need to deliver appropriate care and to guide treatment decisions. However, these devices present a multitude of challenges and opportunities for health care organizations when their alarms create similar sounds, when their default settings are not changed, and when there is a failure to respond to their alarm signals.

The number of alarm signals per patient per day can reach several hundred depending on the unit within the hospital, resulting in thousands of alarm signals on every unit and tens of thousands of alarm signals throughout the hospital every day. It is estimated that between 80 and 90 percent of alarm signals do not require clinical intervention, such as when alarm conditions are set too high, default settings are not adjusted for the individual patient or for the patient population, ECG electrodes have dried out, or sensors are mispositioned.² As a result, clinicians' attention — in short, they suffer from "alarm fatigue" — is required to this constant barrage of noise. Clinicians may turn down the volume of the alarm, turn it off, or adjust the alarm settings outside the limits that are safe and appropriate for the patient — all of which can have serious, often fatal, consequences.³ One such example occurred in the summer of 2010. According to a Boston Globe article, a 60-year-old man died in the intensive care unit of a hospital — not from the injury he suffered in his head from a fall on his stomach — but from a system failure that resulted in delayed response to an alarm signal that indicated significant changes in his condition.⁴ These changes — that set off alarms — included readily increasing heart rate and falling blood oxygen levels. Staff responded only after one hour when a critical alarm condition signaled that the patient had stopped breathing.

Excellent Resource Extension Healthcare

Is your hospital ready for the January 1, 2016 alarm safety compliance deadline?

103 HOSPITALS 6 MONTHS 42 WEEKS 29 DAYS

<http://go.extensionhealthcare.com/joint-commission-alarm-safety-compliance-deadline>
The countdown has begun

Find Your Question In our Knowledge Base

How To Get Started

- + Defining the Scope of TJC's NPSG on Clinical Alarms
- + Leveraging Alarm Safety Middleware to Reduce Clinical Interruptions
- + Regulatory Directives Related to Alarm Safety
- + Best Practices for Alarm Safety and Clinical Systems Integration
- + Deployment and Maintenance of an Alarm Safety System
- + Quantifying the Value of an Alarm Safety System
- + Staying Ahead Of The Curve - The Future Of Alarm Safety
- + Additional Alarm Safety Resources



We take care of alarms so you can take care of patients.
A NEW CARE ALARM MANAGEMENT (NCAM) PANEL

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www.aami.org/NCAM

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Related Links

Clinical Alarms www.aami.org/htsi/alarms

Medical device alarms provide essential warnings to alert caregivers of changes in a patient's condition. When alarms work well, the environment of care is enhanced. When alarms don't work well, they pull caregivers away from other duties and other patients — or worse, train caregivers to ignore the alarm sounds altogether. Alarms that are ignored can and have resulted in patient deaths.

Experts agree that resolving problems with medical device alarms requires an interdisciplinary effort and buy-in from a wide array of players at the highest levels.

What's New

- National Coalition for Alarm Management**
The Coalition is a group of thought leaders in the alarm management field who are driving improvement in alarm management nationwide, and seeking standardization where possible. Members come from all aspects of alarm management—the clinical community, industry, device regulators, hospital accreditors, and professional societies. [Learn more.](#)
- Pioneering Spirit Award**
The American Association of Critical-Care Nurses (AACN) bestowed the GE Healthcare-AACN Pioneering Spirit Award upon HTSI for its efforts to advance high acuity and critical care nursing regionally and nationally. [Read more about this award.](#)
- VHA Patient Safety Assessment Tool (PSAT)**
The PSAT application is only available to VHA staff that have been granted permission by NCPSS. However, non-

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Clinical Alarms Best Practices Library AAMI

Foundation Library: Clinical Alarms

AAMI Resources www.aami.org/thefoundation/content.aspx?ItemNumber=1730&navItemNumber=674

- Alarm Parameter Invention
- Alarm System Publication 2011
- Alarm System Vocabulary according to industry accepted standards. IEC 60601-1:2006+A1:2012
- Carex, Alarms, MDS, PHS, Medical Alarm Fatigue: An Integrative Review. *Biomedical Instrumentation & Technology*, July/August 2012, 266-277
- Taming the Alarm Problem, Lane Deaconborough, *Medronic Diabetes*

Alarms Best Practices Literature Review

Documents in this library were reviewed and recommended by the Alarm Best Practices workgroup to identify areas for potential research and to share best practice strategies to reduce alarm fatigue, increase patient safety and encourage the delivery of high quality healthcare.

- Adhoun V, Mohrland B, Pifer C, et al. False alarms in very low birth weight infants: a comparison between three intensive care monitoring systems. *Crit Care Practice*. 2009; 24(3): 97-105.
- Beauchamp R, Riedel K, Smith A. Data mining strategies to reduce the false alarm rate of patient monitors. *Sixth Annual International Conference of the IEEE EMBS on Signal Design, Cambridge, USA, 26 August - 1 September, 2012*. 6036-6038.
- Beauchamp R, Riedel K, Schreiber U, Kinnel A. A Web-based Survey for Expert Review of Monitor Alarms. *Computing in Cardiology*. 2012; 39: 208-213.
- Bell Hogg, P., Fokawa, T., Nakata, A. On the use of the environmental impact indicator measures for monitoring systems in intensive care unit. *Technological Advances in Electrical, Electronics and Computer Engineering (TAEECE) 2013 International Conference on May 19-21, 2013*.
- Blanc, V., Meyer, J., Sfrayer, D., Zhou, E. Nurses' reactions to alarms in a neonatal intensive care unit. *Cough Tech Wash* (2004) 6: 230-240.
- Block, P.E. Jr., Faulstich, L., Bullard B. Optimization of Alarms: A study on alarm levels, alarm sounds, and false alarms. Intended to reduce annoyance. *Journal of Clinical Monitoring* 1999; 16: 76-83.
- Borowski, M., Grogan, M., Pined, P., et al. Medical device alarms. *Biomed Tech (Oxf)* 2011; 56(2): 73-83.
- Chandrasekhar, M. Alarms in the intensive care unit: how can the number of false alarms be reduced? *Crit Care* 2001; 5(4): 164-168.
- Clinical Alarms Task Force. Impact of Clinical alarm on patient safety. *J Clin Eng* 2007; 32 (1): 22-33.
- David V., Clark T. Hospital Alarm Fatigue: A 3-year Comparison of Issues, Improvements and Priorities. *Clinical Alarms*. www.aami.org/htsi/alarms, 2014 152pp.
- Edworthy J. Changing Electrical Alarm Sounds. *IBST*, 2011 45(4): 200-204.
- Edworthy J., Heiler E. Fewer but better auditory alarms will improve patient safety. *Crit Care Health Care* 2005; 14(3): 212-15.
- Geigley, M., Shearman, B., Underwood, C. Improving alarm performance in the medical intensive care unit using delays and central console. *Anaesth Analg* 2006; 103 (5): 1340-52.
- Geigley, M., Shearman, B., Underwood, C. Improving use of physiological monitors with sound and light. *Medicine*. *Ann J Clin Geriatr* 2010; 18(1): 26-34.

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Proposed Changes in 2016 CAUTI

- TJC is proposed five changes to catheter-associated urinary tract infections
- Implement evidence-based practices to prevent indwelling CAUTI
 - Discusses located in the Compendium on Strategies to Prevent HAI in Acute Care Hospitals
- Staff and LIPs must be educated in the use of indwelling catheters and the importance of prevention
 - Training required in orientation and annual and if added to person's job description

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Verbal Orders

- Physician must sign off the VO (including date and time) within time specified by state law
 - Most states say 24 or 48 hours
 - If state does **not** say then it use to 48 hours and now what your P&P says so many picked 30 days if no state law
- CMS will allow PA or NP to sign off VO for the physician if state and hospital allows and within their scope of practice
- Any physician on the case can sign off the VO for any other doctor including ED doctors signing for each other when relieving them (June 7, 2013)

Verbal Orders

- Have a P&P on who can accept VO in your facility
 - Must be qualified staff
 - Policy may allow pharmacist for pharmacy orders, dietician for dietary orders, nurses, etc.
- Include in P&P when will not take VO
 - Such as many hospitals do not take a VO for chemotherapy
 - CMS 407-408 and 454 and 457
 - TJC RC.02.03.07. PC.02.02.07 and PC.01.01.01

Restraints #1 Problematic CMS Standard

- Many changes were made to both TJC and CMS Restraint and Seclusion standards
- CMS Hospital CoPs has 50 pages of restraint standards from Tag 0154-0214
- TJC has 10 standards in PC chapter (deemed status)
- Need to rewrite policies and procedures, order sheet and documentation sheet to comply
- Need to train all staff in accordance with requirements
- Physicians must be trained on R&S P&P

Restraint Patient Safety Brief



Restraint and Seclusion Patient Safety Briefing Emergency Medicine Patient Safety Foundation

Written by: Sue Dill Calloway RN MSN JD CPHRM
Michael Gerardi, MD, FAAP, FACEP
John (Jack) Kelly DO, FACEP, FAAEM

March 2012
Revised July 16, 2012

Introduction

Restraint and seclusion is a very important patient safety issue. Appropriately applied restraints can protect patients from harming

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Emergency Medicine Pt Safety Foundation



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Restraint Worksheet

- Revised CMS restraint worksheet is available off the internet at
- R&S reports are to the regional office not the state agency
- List of regional offices (to put in your P&P) at www.cms.hhs.gov/RegionalOffices/01_overview.asp
- Must still notify regional office by phone the next business day and document this in medical record
- Patient dies in restraint, within 24 hours of being in a restraint or 7 day rule if death caused by R&S
 - Except if patient dies in **wrist restraints** as long as the restraint does not cause the death

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Restraint and Seclusion

- Patient has a right to be free from unnecessary R&S
- Leadership has responsibility to create culture that supports right to be free from R&S
- Should not considered as part of routine part of fall prevention
- If use protocol you still need an order
- Know the CMS definition of restraint and seclusion
- Know if drug used as a restraint

Restraint and Seclusion

- CMS calls it violent and or self destructive as opposed to TJC who calls it behavioral health
- CMS calls it non violent/non self destructive and TJC calls it non behavioral health patient
- Know what restraints do not include such as forensic restraints, orthopedically prescribed devices, holding for medical test, surgical dressings, or postural supports
- Mitt is restraint if boxing glove style

Restraint and Seclusion

- Know what it does include such as freedom splints, and all 4 side rails if patient can not lower them
- Try or consider and document less restrictive interventions and alternatives
- Document the assessment
- Need order from physician or LIP
- If LIP gives order notify doctor ASAP
- Amend plan of care
- Consider debriefing although not required by CMS on V/SD patients

Restraint and Seclusion

- End at the earliest time
- Do PI
- Use as directed
- If V/SD need one hour face to face
- Time limited orders for V/SD patients
- Need P&P on R&S
- Educate staff and document this
- Follow any stricter state law, and
- Report restraint deaths as required

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ACEP Position on Restraints 2014

Use of Patient Restraints

www.acep.org/Clinical-Practice-Management/Use-of-Patient-Restraints
 Revised and approved by the ACEP Board of Directors with the same title April 2014, April 2001, June 2006, January 1996
 Restraints <http://www.acep.org/Clinical-Practice-Management/Use-of-Patient-Restraints>
 Reaffirmed by the ACEP Board of Directors October 2007
 Originally approved by the ACEP Board of Directors January 1991

The American College of Emergency Physicians (ACEP) supports the careful and appropriate use of patient restraints or seclusion. ACEP recognizes that patient restraints involve issues of civil rights and liberties, including the right to refuse care, freedom from imprisonment, and freedom of association. However, there are circumstances when the use of restraints is in the best interest of the patient, staff, or the public.

Patient restraints should be considered when a careful assessment establishes that the patient is a danger to self or others by virtue of a medical or psychiatric condition and when verbal de-escalation is not successful.

ACEP endorses the following principles regarding patient restraints:

- Restraints should be instituted only after verbal de-escalation has been attempted.
- Restraint of patients should be individualized and employed in a manner that makes all reasonable attempts to maintain the patients' privacy and dignity.
- The method of restraint should be the least restrictive necessary for the protection of the patient and others.
- Staff should be properly trained in the appropriate use and application of restraints and in the monitoring of patients in restraint and seclusion.
- Protocols to ensure patient safety should be developed to address observation and treatment during the period of restraint and periodic assessment as to the need and means of continuing or discontinuing restraint.
- The use of restraints should be carefully documented, including the reasons for and means of restraint alternatives to restraint, and the periodic assessment of the restrained patient.
- ACEP opposes any requirement by hospital representatives or medical staff that emergency physicians provide inpatient restraint or seclusion orders. Patient restraint or seclusion requires comprehensive patient assessment, and the emergency physician's principal legal and ethical responsibility is to patients who present to be seen and treated in the emergency department.
- The use of restraints should conform to applicable laws, rules, regulations, and accreditation.

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Grievances and Complaints

- Every ED practitioner should be aware that CMS has grievance standards
 - CMS standards start at tag 118 and complete copy of the hospital CoP can be downloaded off the CMS website
 - TJC has also but calls them complaints under RI.01.07.01
 - CMS has BFCC QIO in which patients can report grievances to and include their name and information in patient rights to patients

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Location of CMS Hospital CoP Manuals

Medicare State Operations Manual Appendix

- Each Appendix is a separate file that can be accessed directly from the SOM Appendices Table of Contents, as applicable.
- The appendices are in PDF format, which is the format generally used in the IOM to display files. Click on the red button in the 'Download' column to see any available file in PDF.
- To return to this page after opening a PDF file on your desktop, use the browser's "back" button. This is because closing the file usually will also close most browsers.

CMS Hospital CoP Manuals new address
www.cms.hhs.gov/manuals/downloads/som107_Appendixtoc.pdf

App. No.	Description	PDF File
A	Hospitals	2,185 KB
AA	Psychiatric Hospitals	606 KB

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Grievances and Complaints

- Patients have the right to file a grievance
- ED must investigate
- If meets definition of grievance then CMS requires the patient be given information in writing as to what was done and when it was done
- Must provide in writing the name of person at the hospital that patient can contact with a complaint
- Make sure know P&P
- Must investigate timely and can not resolve in 7 days must send the patient a letter

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Grievances and Complaints

- If patient is not competent then give information to surrogate decision maker
- A written complaint is always a grievance
- Billing issues are not generally a grievance unless a quality of care issue
- Information on a patient satisfaction survey is not a grievance unless patient asks for resolution
- Staff should know the definition of what constitutes a grievance
- Should document process in case CMS shows up

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Grievance Process A-0118

- **Definition:** A patient grievance is a formal or informal written or verbal complaint
 - When the verbal complaint about patient care is not resolved at the time of the complaint by **staff present**
 - By a patient, or a patient's representative,
 - Regarding the patient's care, abuse, or neglect, issues related to the hospital's compliance with the CMS CoP
 - Or a Medicare beneficiary billing complaint related to rights and limitations provided by 42 CFR 489.

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Have a Policy to Hit All the Elements

POLICY

All internal and external customer (patient, physician, staff or visitors) complaints and problems will be addressed at the time of the occurrence in an effort to resolve the customer complaint or grievance and to review and improve the process. All patient and or family complaints received must be responded to promptly. Patients have a right to complain without any fear of reprisal. Any patient or patient's representative who expresses an issue or grievance is assured that this process is welcome and not fear that there would be any retaliation for initiating this action.

Patients are informed to contact the Nursing Service Supervisor while in the hospital. Patients are also informed of their ability to contact the New York State Department of Health and the telephone number is provided to them at their request.

Any individual who believes his or her rights granted by the Health Insurance Portability and Accountability Act (HIPAA) Privacy regulations or any other state or federal laws dealing with privacy and confidentiality of health information have been violated may file a complaint regarding the alleged privacy violation to the Hospital's Privacy Officer (716)296-2047. The Privacy Officer will investigate alleged privacy violations and complaints made by patients or other individuals regarding alleged breaches of privacy.

DEFINITION

Patient Grievance – (as defined by Centers for Medicare & Medicaid Services, ref. 482.13(a)(2)(i)) – is a written or verbal complaint (when the verbal complaint about patient care is not resolved at the time of the complaint by staff present) by a patient, or the patient's representative, regarding the patient's care, abuse or neglect, issues related to the hospital's compliance with the CMS Hospital Conditions of Participation (COP)

- **Staff Present** – includes any hospital staff present at the time of the complaint or who can quickly be at the patient's location (i.e. nursing supervisor, nursing administration, etc.)
- If a verbal patient care complaint cannot be resolved at the time of the complaint by staff present, is postponed for later resolution, is referred to other staff for later resolution, requires investigation, and/or requires further actions for resolution, then the complaint is a grievance for the purposes of these requirements. A complaint is considered resolved when the patient is satisfied with the actions taken on their behalf.
- Billing issues are not usually considered grievances for the purposes of these requirements. However, a Medicare beneficiary billing complaint related to rights and limitations provided by 42 CFR 489 are considered a grievance.
- A written complaint is considered a grievance, whether from an inpatient, outpatient, released/discharged patient or their representative regarding the patient care provided, abuse or neglect, or the hospital's compliance with the COP.
- Information obtained with patient satisfaction surveys does not usually meet the definition of a grievance. If an identified patient writes or attaches a written complaint on the survey and requests resolution, then the complaint meets the definition of a grievance.

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MRI Guidelines

- Have patients completely undress and in hospital gown
- Use MRI screening form for all patients
- Consider doing FMEA on MRI safety
- Appoint a safety officer to make sure P&P in place
- Make sure consistent with ACR MRI recommendations
- Provide ear plugs to patients
- Note: CMS rewrites all of the radiology standards for hospitals July 2015 and TJC new standards effective July 1, 2015

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MRI Guidelines

- Audit compliance with MRI safety P&Ps
- Show staff multiple pictures of objects pulled into MRI machine
- Carefully screen all patients for magnetic objects in their hair or body
- Have ferromagnetic detector
- Know what devices are harmful
- Divide MRI into 4 zones
- Know the 5 G line of safety



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MRI Guidelines

- Do not bring anything of metal into the MRI room as it can become a missile
- Be aware of what can cause patient burns during MRI such as nitro patches or staples or touching the inside wall (bore) of the MRI scanner
- Be aware that the magnetic field can affect the operation and reliability of medical devices such as PCA pumps, ventilators, monitors
 - FDA just approved first MRI safe pacemaker
- Injury can occur from dislodging implants such as cochlear implant, cerebral aneurysm clips etc

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MRI Safety

- Consider a yearly seminar on MRI safety and include in orientation for new staff
- Have MRI safe equipment such as a special wheelchair
- Cases where oxygen tank brought in room and killed child, Guard came in and bullets came out of gun,
- TJC Sentinel Event Alert on MRI safety
- Careful about ED nurses carrying metal objects like scissors, and stethoscopes
- Patients have received burns from patches like nitro patch
- Nurse take metal IV cart to MRI door and flew across room into the MRI machine

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ACEP Position Nurse Implemented Orders

The screenshot shows a webpage with a navigation menu on the left containing 'Clinical Policies', 'Policy Statements', 'Resources', 'EMS & Disaster Preparedness', and 'Find a Physician Group'. The main content area is titled 'Use of Nurse Implemented Order Sets' and includes the following text:

Approved by the ACEP Board of Directors June 2010

The American College of Emergency Physicians (ACEP) recognizes the practice of utilizing nurse implemented **order sets**. These sets are predetermined collections of departmental orders initiated based upon nursing assessment of the patient and are consistent with high-quality emergency care, enhanced patient safety and satisfaction.

It is the position of the College that the use of such **order sets** does not, in and of itself, create a physician-patient relationship.

The URL at the bottom of the page is www.acep.org/Content.aspx?id=48946&terms=order%20sets.

Standing Orders

- CMS issued standing orders
 - Includes order sets, preprinted orders, electronic orders, and protocols
- Primarily located in tag 457 but also in 405, 406, and 450
- Make sure all standing orders approved by the Medical Staff (MEC)
- If medications then must be approved by nursing and pharmacy leadership
- Must educate staff on all standing orders

Standing Orders 457

- Must make sure P&P reflects these requirements
- Must be consistent with national recognize standards and standards of care
- Must be well-defined clinical situations with evidence to support standardized treatments
- Can be initiated as emergency response
- Document in order sheet and practitioner must then sign, date and time the standing order
 - if electronic make sure entire order is present
- Must be medically appropriate

Standing Orders 457

- Make sure there is periodic and regular review of the orders and protocols to determine the continued usefulness and safety
- P&P must address how it is developed, approved, monitored, initiated by staff and signed off or authenticated
- Make sure new ED physicians and staff are trained on existing protocols
- Audit to make sure they are dated, timed, and authenticated both by the person taking the order and the practitioner

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EMPSF Patient Safety Brief



Patient Safety Brief
Emergency Medicine Patient Safety Foundation

CMS Requirements on Order Sets, Protocols, Preprinted Orders, and Standing Orders
Sue Dill Calloway RN MSN JD

There are three separate tag numbers that hospitals must review in order to understand the Center for Medicare and Medicaid Services (CMS) requirements for standing orders, protocols, and order sets. Additionally, CMS included information on this topic in the changes to the hospital CoPs which was published in the Federal Register and which became effective July 16, 2012. Any hospital that accepts Medicare or Medicaid reimbursement must follow the conditions of participation (CoPs) and they must be followed for all patients seen in the hospital.

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Patients Who Leave Without Being Seen (LWBS)

- ED should track these for QI
- More recently refer to them as left before or after medical screening and AMA (2.8% in 2010 data)
- Good indicator of the quality of your ED
- If large number then look for opportunities for improvement including how to decrease wait times
- Document on the chart when it is first discovered that the patient left before screening
- Call patient three times and document times

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Left Before Medical Screening Examine

- TJC and CMS (EMTALA) requires the medical record be maintained on these patients
 - Even if just a patient name or if LBMS before being triaged
- Exponential rise in lawsuits after 2 hour waits
 - How does rate compare with the average rate of LWBS at 2% and AMA at 1.3% in 2009
 - Left before 1.7% or 1,928 and left after medical screen is 1.1% or 1,289 patient and Left AMA rate is 1.2% or 1,381 patients in 2010
 - AMA recommendations addressed in the EMTALA interpretive guidelines

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Refusal of Treatment

- Both CMS and TJC in the patient rights section allows a competent patient to refuse treatment
- However, they must be informed of the risks and benefits
- The risks and benefits should be clearly documented and the patient should sign the form
- The patient must be competent to make an informed decision to refuse care and not under the influence of drugs or alcohol

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Refusal of Treatment

- Patients can refuse part of care without being made to sign out AMA
 - Example is patient having a heart attack and will allow all tests except ABG's but pulse ox is allowed
- If patient wants to refuse a part of something then an informed signed refusal is done and patient is given treatment
- High number of patients return if sign out AMA
- CMS does not want to see ED with high AMA rate

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Patients Leaving AMA

- EMTALA requires that a medical screening exam be done on any patient who comes to the ED
 - Too many AMA may be EMTALA violation
- If the patient is in an emergency medical condition, then the patient must be stabilized
- There must be documentation of the exam that was done
- Documentation of the treatment refused

Patients Leaving AMA

- An attempt to obtain written AMA form signed if the patient refuses all treatment
- Patient can not be intoxicated or mentally incompetent
 - only competent patients are eligible to sign out AMA
- CMS says hospitals should be very concerned about patients leaving AMA
- Can still give prescription or other call or call to check on patient

Know How to Fill Out Your AMA Form

**AGAINST MEDICAL ADVICE/REFUSED TREATMENT/
EXAM/MEDICAL SCREENING CONSENT**

Select One Option

Against Medical Advice
I am leaving Bellin at my own insistence and against the advice of the health care organization's providers and the attending physician.

1. Risks and potential complications of leaving may include but are not limited to: _____
2. I accept risks/consequences of my decision to leave and release all health care providers from any adverse medical condition caused by my refusal of medical care.
3. Benefits of continuing care include: _____
4. Family/other involved in discussions and decision to dissuade leaving. If no, explain: _____
5. I have received discharge instructions and understand that I may return at any time for care.

Against Medical Advice – Pediatric Patients Only
I have been provided information on the risks associated with sleeping in the same bed as my child and have been advised to have my child sleep alone in the bed or crib provided. Even though I fully understand these risks, I intend to sleep in the same bed as my child while in the hospital.

Refused Treatment/Examination
I have been offered, and refuse to consent to _____

Patients Leaving AMA EMTALA

- First, offer the patient further medical exam and treatment as needed to stabilize their condition
- Second, inform the patient of the risks of withdrawal prior to receiving such exam and treatment (be specific such as you could die, infection, death, etc.)
- Third, takes all reasonable steps to ensure written informed consent. This should contain a description of the risks discussed and that it was refused

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Patients Leaving AMA

- If the patient leaves without notifying the staff, document that the person has been there, and what time the hospital discovered the patient had left
- Retain all triage or other records
- The burden is on the hospital to show that it has taken all the appropriate steps to discourage the patient from leaving

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AGAINST MEDICAL ADVICE (AMA FORM)

This is to certify that I, _____, a patient at _____ (fill in name of your hospital), am refusing at my own insistence and without the authority of and against the advice of my attending physician(s) _____, request to leave against medical advice.

The medical risks/benefits have been explained to me by a member of the medical staff and I understand those risks.

I hereby release the medical center, its administration, personnel, and my attending and/or resident physician(s) from any responsibility for all consequences, which may result by my leaving under these circumstances.

MEDICAL RISKS

- Death Additional pain and/or suffering
 Risks to unborn fetus Permanent disability/disfigurement

Other: _____

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ACEP and ENA Position on Triage Scale

Triage Scale Standardization

Revised and approved by the ACEP Board of Directors June 2010
Originally approved by the ACEP Board of Directors September 2003

Joint Statement by the American College of Emergency Physicians (ACEP) and the Emergency Nurses Association (ENA)

The American College of Emergency Physicians (ACEP) and the Emergency Nurses Association (ENA) believe that the quality of patient care benefits from implementing a standardized emergency department (ED) triage scale and acuity categorization process. Based on expert consensus of currently available evidence, ACEP and ENA support the adoption of a reliable, valid five-level triage scale such as the Emergency Severity Index (ESI).

ENA Triage Documentation

- Time seen by triage nurse
- Chief complaint,
- Medications and allergies
- Vital signs (weight, LMP, immunization status)
- Subjective and objective based on chief complaint
- Acuity category (ESI emergency severity index **five** level)
- Past medical/surgical history

ENA Triage Documentation

- Diagnostic tests initiated and care rendered
- Proper assessment
- Disposition
- Reevaluation
- Changes in condition
- Actions taken to comply with legal, institutional, and insurance company requirements

Triage

- Nurse should have specialty training (ACEP)
- Protocols should be in effect so nurse can order EKG, X-ray, U/A, etc
- Remember reassessment is important if beds are full
- Patients should never be registered first as matter of policy (EMTALA)
 - Can not delay medical screening exam to inquire about insurance or form of payment
 - Never call an HMO for authorization after triage (EMTALA)
- Flexible staffing as may need to increase staff temporarily with float nurse, MD, or charge nurse

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Triage Policy

http://ena.org/document_share/documents/pp-10triage.pdf

TITLE: EMERGENCY DEPARTMENT TRIAGE
CATEGORY: EMERGENCY DEPARTMENT

POLICY: To provide a standardized system whereby patients presenting to the Emergency Department are treated in order of priority based upon acuity utilizing the Emergency Severity Index Five-Level triage system (Gilboy, Tansler, Traves, Emsi and Wozniak, 2003).

1. An RN will triage all patients arriving to the Emergency Department to identify life-threatening conditions and prioritize patients according to acuity.
2. The following steps should occur when making the triage decision (ENA, 1995, p. 37):

Determine chief complaint, vital signs are not required during the initial triage unless the information is necessary to determine acuity category. The patient is prioritized into one of five acuity categories; (ESI, 2003) LMH ED approved resources are as follows. (please note that each bullet point is considered an individual resource)

- Labs
- ABG's
- Respiratory treatments
- EKG
- X-rays
- CT/MRI/ Ultrasound/angiography
- IV fluids
- IV/IM medications
- Specialty consultations
- Simple procedures etc.
- Lacerations repairs, Foley cath - 1 resource
- Complex procedures etc. (conscious sedation) - 2 resources

Level 1 Presentation

...

ED Pharmacist in the ED

- Some of larger EDs are placing a pharmacist in the ED
 - Pharmacist in the ED is not there to dispense pills
 - There to work as troubleshooters and consultants to ED physicians and staff
- Help with medications during code, review medication orders, and watch for patient allergies
- Help prevent IV errors which are common in the ED
- 1 to 3% of hospitals have a pharmacist in the ED in 2007 when pharmacy residency program was started

▪ Rochester Democrat and Chronicle, Oct. 16, 2007

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Figure. Clearly labeled pre-filled syringes containing (upper box) 0.3 mg of 1:10,000 concentration IM dose in an autoinjector labeled “for anaphylaxis use only.” Lower box contains 1 mg of 1:10,000 concentration IV dose labeled “for cardiac arrest use only.”

ISMP IV Push Medications Guidelines

- ISMP has published a 26 page document called “ISMP Safe Practice Guidelines for Adult IV Push Medications
- The document is organized into factors that increase the risk of IV push medications in adults,
 - Current practices with IV injectible medications
 - Developing consensus guidelines for adult IV push medication and
 - Safe practice guidelines
 - About 90% of all hospitalized patients have some form of infusion therapy

IV Push Medicine Guidelines

ISMP Safe Practice Guidelines for Adult IV Push Medications

A compilation of safe practices from the ISMP Adult IV Push Medication Safety Summit

Remember: CMS says you have to follow standards of care and specifically mentions the ISMP so surveyor can site you if you do not follow this.

Prepared by the Institute for Safe Medication Practices (ISMP)

ISMP
INSTITUTE FOR SAFE MEDICATION PRACTICES

IV Push Medications Guidelines

- Provide IV push medications in a ready to administer form
- Use only commercially available or pharmacy prepared prefilled syringes of IV solutions to flush and lock vascular access devices
- If available in a single dose vial then need to buy in single dose vial
- Aseptic technique should be used when preparing and administering IV medication
 - This includes hand hygiene before and after administration

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IV Push Medications Guidelines

- The diaphragm on the vial should be disinfected even if newly opened
 - The top should be cleaned using friction and a sterile 70% isopropyl alcohol, ethyl alcohol, iodophor, or other approved antiseptic swab for at least ten seconds to it dr
- Medication from a glass vial should be with a filter needle unless the specific drug precludes this
- Medication should only be diluted when recommended by the manufacturer or in accordance with evidence based practice or approved hospital policies

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IV Push Medications Guidelines

- If IV push medication needs to be diluted or reconstituted these should be performed in a clean, uncluttered, and separate location
- Medication should not be withdrawn from a commercially available, cartridge type syringe into another syringe for administration
- It is also important that medication not be drawn up into the commercially prepared and prefilled 0.9% saline flushes
 - This are to flush an IV line and are not approved to use to dilute medication

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10 Reasons Your ED May Not Be as Safe

- Article called "Ten Reasons Your ED May Not Be As Safe As You Think It Is" at <http://www.thesullivangroup.com/>
- The ED sent patients home with abnormal vital signs
 - Be sure to repeat any abnormal vital signs and reassess patient
 - Studies show association between discharging patients with abnormal vital signs and morbidity and mortality
- Risk Factor Analysis
 - John Ritter came the ED with chest pain

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10 Reasons Your ED May Not Be as Safe

- No one asked about a family history
- If they had he would have told them that his father died of a thoracic aortic dissection and likely doctor would have ordered a CT scan and discovered it (clinical decision support system can help)
- Patients in severe pain are not getting their pain meds within one hour
- ED is not taking full advantage of the power of discharge instructions
 - Patient riding his motorcycle gets something in his eye
 - ED doctor diagnosis as corneal abrasion and applied eye patch

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10 Reasons Your ED May Not Be as Safe

- Patient gets back on the motorcycle to drive home
- Hits and kills a mother and three children
- No warning about impaired vision
- Analysis of immunization status of febrile children is inadequate
- Also has new emerging patient safety and risk issues
- Evaluation of the immunization status is a critical part of the history
 - Some children are poorly immunized
 - Could fail to recognize a life threatening infection

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Ten Reasons Your Emergency Department May Not Be As Safe As You Think It Is

The Emergency Medicine Risk Initiative (EMRI) is a proven System Solution designed to reduce risk and improve patient safety in the emergency department. The Sullivan Group's work with over 600 hospitals in the United States and extensive research have identified a number of critical risk and safety issues of which you may not be aware.

The issues and comments below represent observations based upon an analysis of thousands of emergency medicine medical malpractice cases and TJC published research on over 170,000 high-risk patients in several hundred U.S. emergency departments. The data is powerful and compelling, and probably represents the profile of care in your facility. Unless you have implemented a System Solution in the following areas, then this is your department!



1 The ED Is Sending Patients Home With Very Abnormal Vital Signs

New Emerging Patient Safety and Risk

- Septic patients are severely under treated
- Patient are bleeding into the perispinal space
 - Hospitals are trying to reduce PE and DVT in post operative patients
 - Patients are increasingly being put on anticoagulants
 - Consider if severe back pain and no injury and look at medication list
- There is an increased incidence of perispinal abscesses
 - Use to be from drug addicts but now from community MRSA

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Infection Control

- Infection control is very important now
- CMS had 12 pages of infection control standards in the CMS Hospital CoP manual and has IC final Worksheet
- TJC has 12 pages of standards in the IC or Infection Prevention and Control Chapter
- Hand hygiene is big issue and compliance is still an issue in many EDs
 - Must follow CDC guidelines or WHO guidelines

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Infection Control

- The CDC says there are 1.7 million healthcare infection (HAI) in America every year
- There are 99,000 deaths in American hospitals every year
- Leadership need to make sure there is adequate staffing and resources to prevent and manage infections
- Healthcare-Associated Infections (HAIs) are one of the top ten leading causes of death in the US.

1 www.cdc.gov/nccidod/dhqp/hai.html

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Infection Control

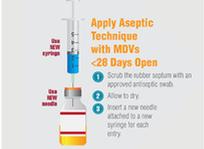
- Need policies and protocols to prevent catheter associated urinary tract infections
- Need to use the central line bundle to reduce catheter associated infections
- Clean glucometers between use
- Clean carts off between use
- Hospital needs a good infection control plan and program including safe injection practices
- Infection preventionist needs to have frequent contact with nursing

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SEA 52 Safe Injection Practices

Sentinel Event Alert Issue 52: Preventing infection from the misuse of vials

Use safe injection practices for multiple-dose vials



Apply Aseptic Technique with MDVs <28 Days Open

- 1 Scrub the rubber septum with an approved antiseptic swab.
- 2 Allow to dry.
- 3 Insert a new needle attached to new syringe for each entry.

Thousands of patients have been adversely affected by the misuse of single-dose/single-use and multiple-dose vials. [Learn More](#)

[Download PDF](#)

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PAUSE ← Back 1 2 3 4 5 6 Next →

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The End! Questions?



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