

Patient Safety: It's Not Rocket Science



James P. Bagian, MD, PE

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jbagian@yahoo.com



IOM Goals

- Safe
- Timely
- Efficient
- Effective
- Equitable
- Patient-Centered



Patient Safety - The Problem

- Not New
- 1964 - Schimmel (Ann. Int. Med.)
- 1981 - Steel (NEJM)
- 1991 - Harvard Practice Study (NEJM)
- 1995 - Family Practice MDs (JFamPrct)
- 11/99 - IOM Report
 - Deaths due to Preventable Adverse Events greater than MVA, Breast Cancer, or AIDS



Where Healthcare Was/Is

- Cottage Industry Mentality
- Virtually Total Reliance on:
 - Professional/Individual Responsibility
 - Individual Perfection
 - Train and Blame
- Little Understanding of Systems Relative to People and Processes
 - Ignorance vs Arrogance

Culturally Different!!!!



Typical Approach

- New Policies, Regulations, Reporting Systems, Training
- Good First Step But.....
 - Lack of Systems Insight
 - Superficial Solutions (?Answers)
 - Inadequate Follow-Up
 - Lost Opportunity



Typical Missing Features

- Clear Understanding of Goal
- Preventive Approach
- Field Understanding & Buy-In
- Systems Approach
- Sustainability
- Trust/Culture of Safety

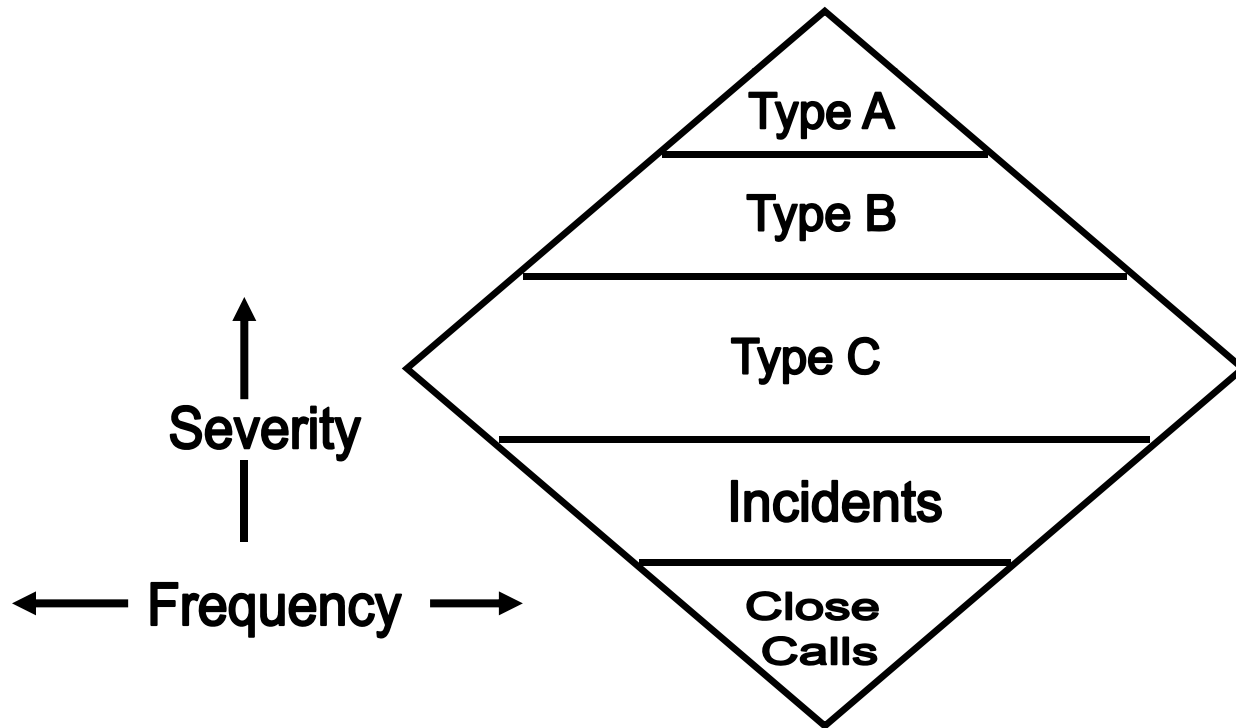


Safety System Design

- High Reliability Organizations
- Role of Reporting
 - Learning or Accountability
- Systems-Based Solutions
 - Patient Centered – DUH!!!!
- Importance of Close Calls

Patient Safety System Design

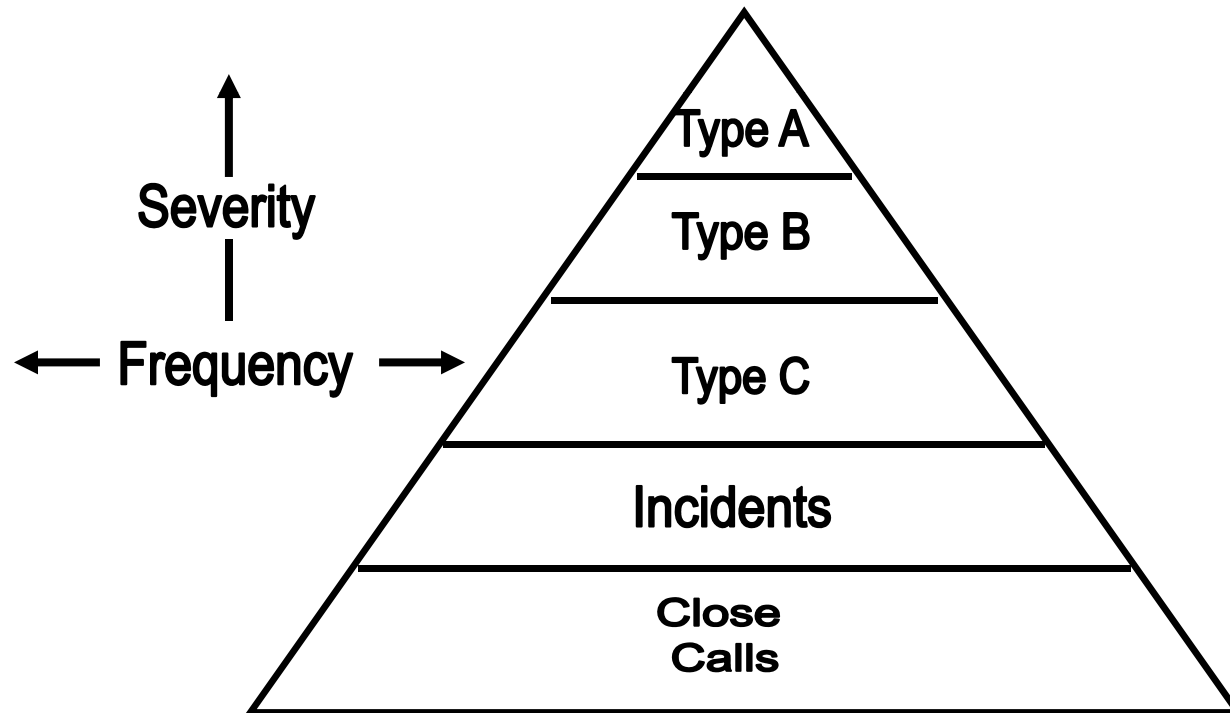
THE "MISHAP DIAMOND"



Weak Program Model

Patient Safety System Design

THE "MISHAP PYRAMID"



Strong Program Model



Guiding Principles For Patient Safety System

- ***Learning, Not Accountability System***
- Reporting System Characteristics
 - Non-punitive - Confidential and De-identified
 - Internal and External
- Importance of Close Call
- Reports Should Emphasize Narratives
- Interdisciplinary Review Teams
- About Identifying Vulnerabilities **NOT** Statistics
- Prompt Feedback
- Open to All Comers



Safety & Human Error: Challenges

- Healthcare Views Errors as Failings Which Deserve Blame - Fault
- Train and Blame Mentality
- Blind Adherence To Rules
- Corrective Actions Focusing on Individual
- No Blood No Foul Philosophy



Safety & Human Error: Cornerstones

- People Don't Come to Work to Hurt Someone or Make a Mistake
- Must Keep Asking "Why?"

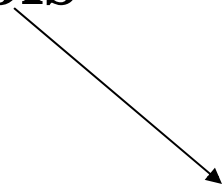


Patient Safety - Strategy

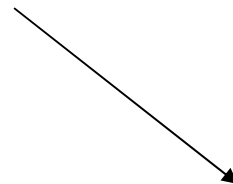
- Invite People to Play
 - Problem Recognition
 - Remove Barriers (Punitive, Difficulty, Black Hole Effect)
 - Learning **NOT** Accountability System
- Importance of Close Call
- ***Blameworthy Definition***
- Training (Middle thru Top Management)
Leadership At All Levels
- Human Factors Approach
 - Tools That Guide Behavior

Changing Culture

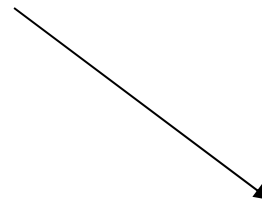
Tools



Behavior



Attitude



CULTURE!!!





Prioritize

- Risk Based
 - Severity
 - Probability
- Must Make Sense
 - Business Processes
 - Regulatory Environment



Systematic

- Cause and Effect
- Human Error Must Have Preceding Cause
- Failure to Follow Procedure By Itself Is **NOT** a Root Cause
- Negative Descriptors Aren't Actionable
- Failure To Act Is **Not** A Cause Without Pre-existing Requirement To Act
- Why, Why, Why



Causation/Actions:

Who vs. What & Why

■ Who

- ‘Whose Fault Is This?’
- Actions focused on correcting individual
- ‘Corrects’ only after problem occurs
- Limited scope of action and generalizability

■ What & Why

- Actions focus on systems level causation
- Widespread applicability
- Stronger preventive strategy



Human Factors Engineering and “Actions”

- **Warnings and labels** (watch out!)
- **Training** (don't do that)
- **Procedure changes** (work around that)
- **Interlock, lock-in, lock-out, etc** (let me design it so you can not do that – forcing functions)
- **Is there one right action???**

Weaker

Stronger



High Risk Situations for Bleeding During Dialysis

- Patients dialyzed outside the dialysis unit
 - 2% of treatments but 50% of severe bleeds (RCAs)
- Patients with marked mental status changes
 - 77% of patients with severe bleeds were disoriented, combative, confused, agitated or demented (RCAs)
- Patients with difficult to secure needles (interviews)
- Patients with previous access issues which have caused concern to dialysis nurses. (interviews)



Patient Safety Alert

*Veterans Health Administration Warning System
Published by VA Central Office*

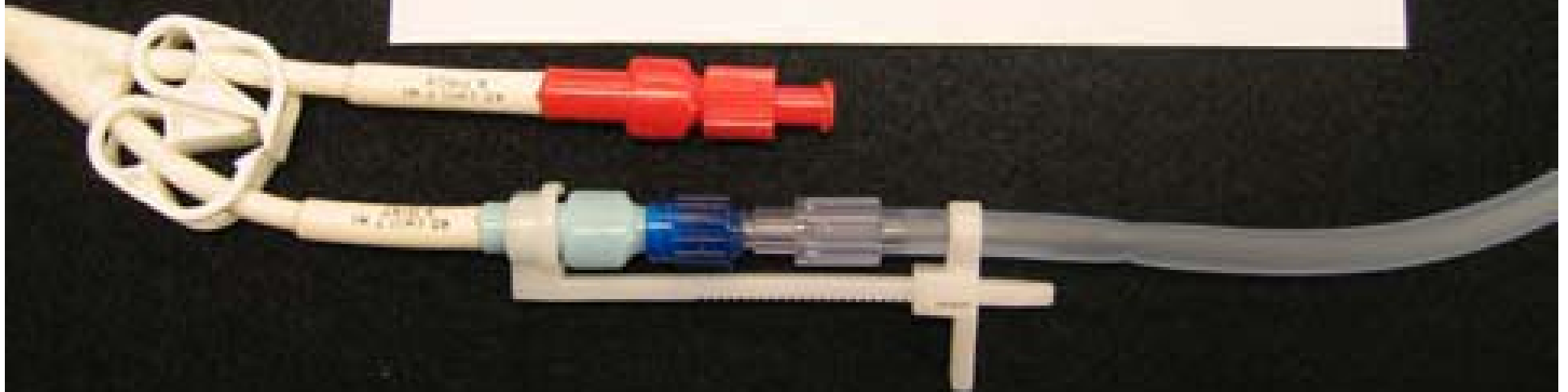
AL10-05

February 3, 2010

Item: Fresenius HemaClip used during dialysis

General Information: The VA National Center for Patient Safety (NCPS) analyzed reports of bleeding episodes during dialysis. Analysis of these adverse event reports with both dialysis catheter access and needle access usage revealed clinically significant bleeding episodes, some of which were catastrophic. Patient Safety Advisory AD09-02 (see Reference section) issued on 10/21/2008 outlined in detail the results of the analysis and gave recommendations for the early detection and prevention of these

BARD 40 cm





Management Involvement

- Formalized, Not Ad Hoc
 - Regular Part of Agenda For All Levels
- Safety Permeates the Fabric of All Activities
- Relentless



Action Assessment

- Characteristics of Actions
 - Temporary vs. Permanent
 - Procedural vs. Physical
- Action Evaluation
 - Process
 - Outcome



Is There A Business Case?

■ **YOU BET!!!**

■ **Examples:**

– “Easy CAP” CO₂ Detector

- \$125/detected esophageal intubation

– Ventilator Humidification System

- \$114k/facility/yr and reduced risk

■ RCA/40person-hrs X 12RCA/yr =

0.25FTEE



Sustainable Systems Approach

- Problem Identification
- Clear Goal Definition
- Involvement Of All Sectors
- Identify Systems Influences
- Identify Systems Controls
- Identify Constraints
- ***Critique – Go To Worst Critics Early On***
- Pilot – Volunteers First Then Others
- Evaluate



Essential Elements For Sustainable Improvement

- Appropriate Goal Identification & Selection
- Transparent Prioritization (**Close Calls Too!!**)
- Identification of Real Causes
- System-based Countermeasures That Address Underlying Causes
- Stronger Actions That Are Explicit
- Measurement of Actions
 - Process & Outcome
- Top Leadership Involvement/Visibility



Leadership - What Can You Do Right Now?

- Lead by Example
- Relentless Drumbeat
- Eliminate ‘Whose fault is it?’
- Encourage Skepticism
 - Devil’s Advocate is Valued
- Distinguish **Real** Priorities From Official Priorities
- ***What Happened?, What Should Have Happened?, What Usually Happens?***
- Part of Every Agenda



Closing Thoughts

- Not About Errors!!!
- Counting reports is not the objective, identifying Vulnerabilities is
 - Hope they increase
 - **Analysis, Action, & Feedback are the key**
- Prevention NOT Punishment
- Cultural change is the key – takes time
- ***Safety is the Foundation Upon which Quality is Built***