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Shifting Patient Safety into High Gear

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PSO: Theory to Practice

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Agenda

- Goals and Objectives
- Current Activities
  - Pilot to Present
- Future Vision

AMC|PSO Objectives:

- Create a bridge between malpractice and real-time data
- Create a secure, protected space to convene member organizations in response to real-time events

Bridging Malpractice Data with "Real-time" Data

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New Data Sources

- Adverse Event Data
- Root Cause Analysis Data
- Patient Complaint Data

9-month pilot

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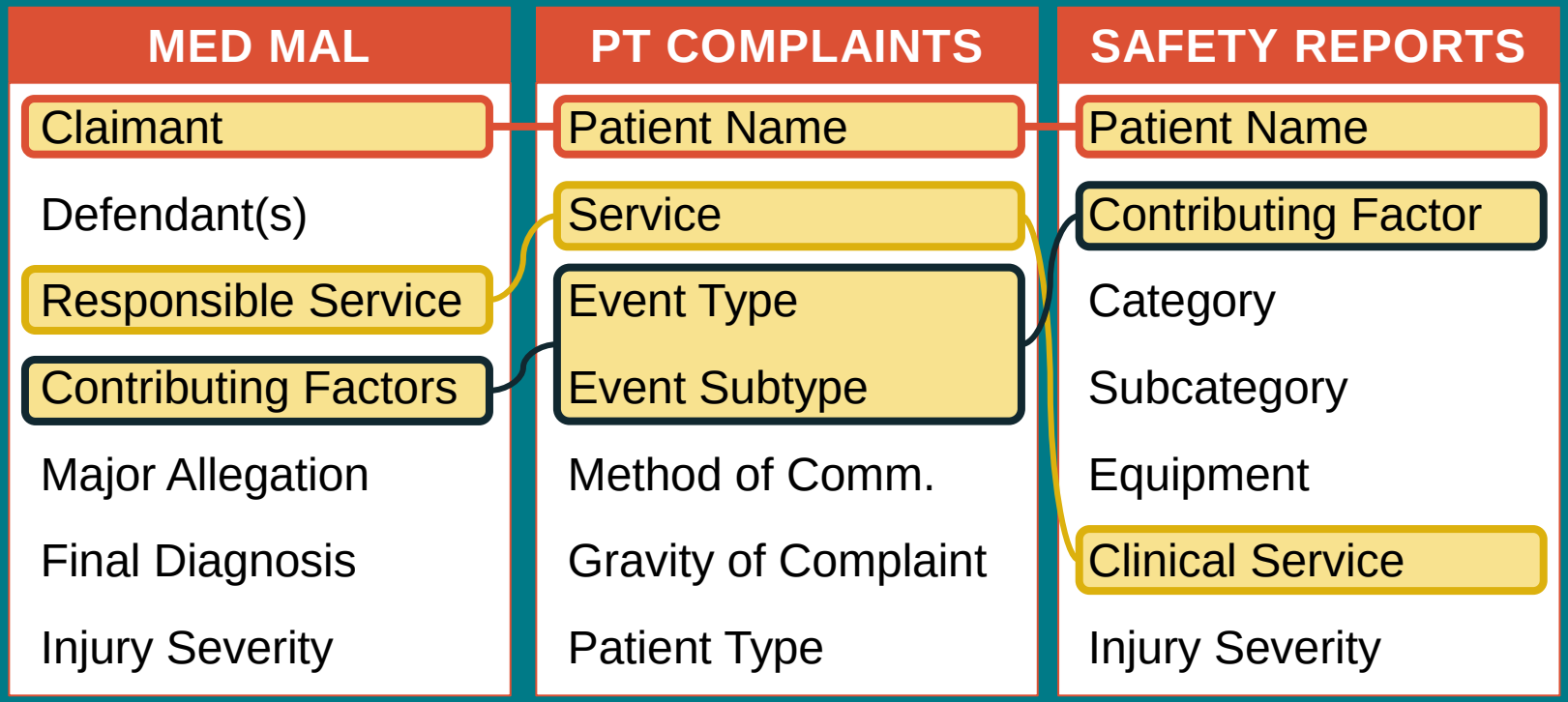
Linking the Data Sets (aka “Mapping”)



Note: The same event can be mapped to several categories or to multiple values of the same category

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Data Limitations

- Different Data Structure
- Different Definitions
- Different Interpretation of the Event

Examples of Event Severity

AHRQ	A	B	D	E
Severity Desc	**Severity_desc**	**Severity_desc**	**Severity Desc**	**Severity Desc**
A: Unsafe Condition: (Non Event)	1: No Injury	1. No Injury	0. Near Miss	0-Near Miss / Potential Harm / Damage
B1: Near Miss: No harm; didn't reach patient/caught by chance	2: Minor Injury	2: Minor Injury	1. No injury / monitoring only	1- No Harm / Damage
B2: Near Miss: No harm, didn't reach patient b/c active recovery by caregiver	3: Moderate Injury	3: Moderate Injury	2. Minor	2- Temporary or Minor Harm / Damage
C: No harm: Reached patient; no monitoring required	4: Major injury	4: Major Injury	3. Moderate	4- Death
D: No harm, Reached patient; monitoring required	5: Death	5: Catastrophic	4. Majority	
E: Harm, Temporary, Intervention needed			5. Death	
F: Harm, Temporary, hospitalization needed				
G: Harm, Permanent				
H: Permanent, Intervention required to sustain life				
I: Death				

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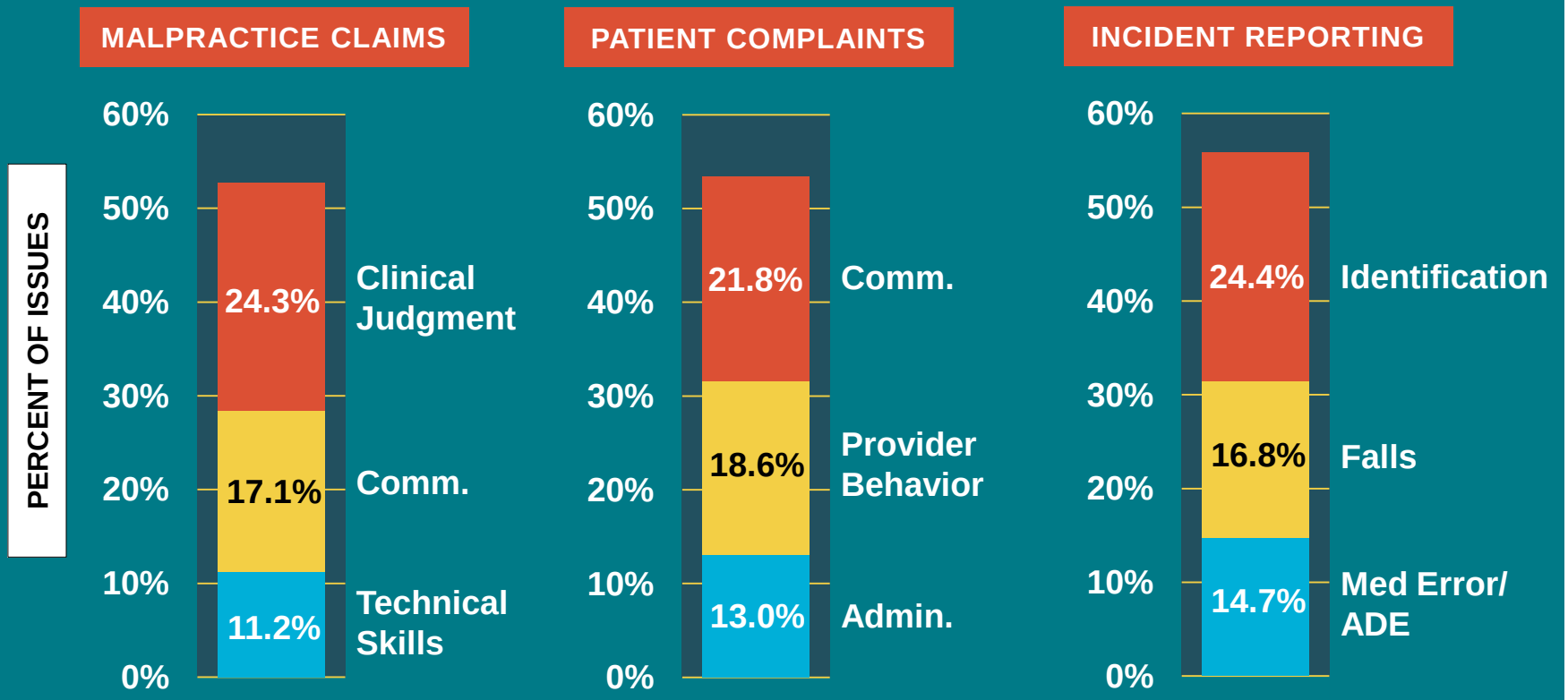
Issues Identified in Existing Reporting Systems



Source: Levtzion-Korach, O, et al. Joint Commission Article on Quality & Patient Safety, September 2010

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Lessons learned

- Multiple data resides in multiple areas
  - Overlapping, complementary information
  - Difficult to merge
- Data sources vary by:
  - Timing
  - Severity
  - Reporter
  - Taken individually, highlight specific areas in need of attention
- Lack of common definitions and data structure creates disparate analytic results

The Journey to Root Cause Analysis: *A Roadmap to Action*

Challenges with current RCA process

- Lack of standardized definitions
- Lack of uniformity in how data is captured
- Thus…in existing state, unable to compare across different organizations

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RCA Workgroup
Mapping to MedMal Data

- Developed consensus on standard definitions
- Standard classification of events
- Standard categories

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Root Cause Analysis Information Exchange

DATA CAPTURED

- What happened ?
- Who was involved ?
- When did it happen ?
- Why did it happen ?
- How is it remedied ?

FEATURES

- Web-based
- Ease of Use
- Near Miss and Adverse Events
- Follows RCA workflow
- Structured data collection
- Codified using CRICO taxonomy
- Action Plans and Tracking
- Reporting Function

Convene members in a secure, safe environment…

"We live in a society bloated with data but starved for wisdom"

—Elizabeth Lindsey
Ethnographer

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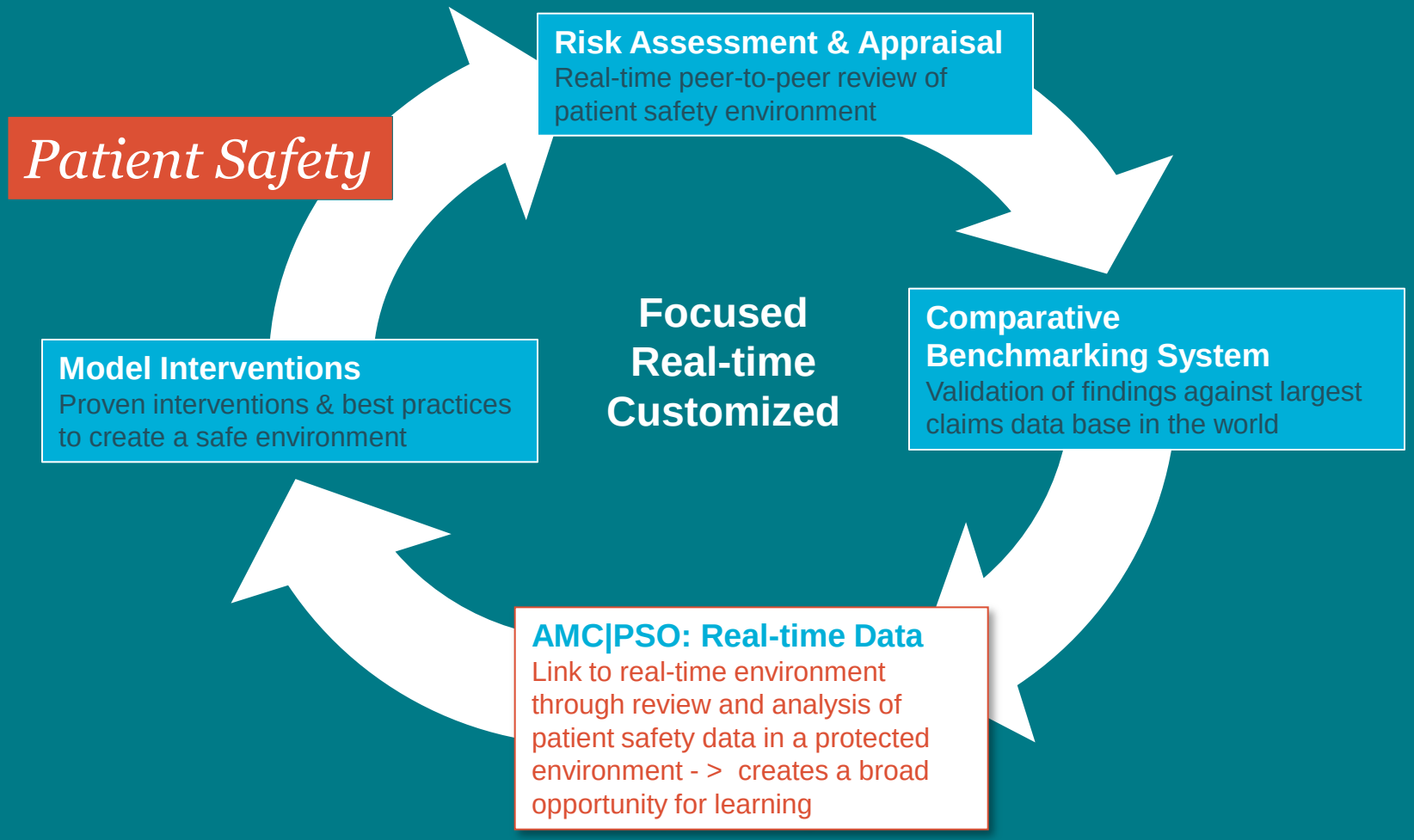
Patient Safety Continuum



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Convening Criteria

- Cluster of organizational events (e.g., retained sponges)
- High profile national event
- Individual concern related to a specific specialty
- NQF serious reportable events (SREs)
- Adverse event, near miss, or identified emerging risk that is a concern to the public and/or health care providers
- Any other significant adverse event that requires immediate review and response

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Power of Convening

- Everyone comes to the table
- Discussions are relevant, focused and transparent
- Subject matter experts talk about strategies available to correct the problem…mitigate the risk of reoccurrence
- Together we can develop best practice recommendations to mitigate risk and improve patient safety

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Wisdom from Convenings

Patient Safety Alerts

- Developed best practice guidelines to prevent harm
- Identified universal factors affecting front-line caregivers
- Promoted novel interventions to mitigate risk
- Identified emerging threats and near misses
- Identified common device failures

AMC|PSO:
Present State to Future Vision

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AMC|PSO Present to Future

- Medmal: lagging indicator although captures most egregious events
- Capture RCA information-more real-time
- Capture Transactional Data in EMR
    - Surveillance/Monitoring for early warnings
- Apply predictive analytics across data sets
- Broaden learning opportunities with PSO to PSO collaborations

Closing Story: Remember the Lessons….

2007: Dennis Quaid's Campaign

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NDC 0641-0410-21
Heparin
Sodium Inj., USP
10,000 USP units/mL
HEP-LOCK UP

In September 2006, three preterm infants in Indiana died as a result of lethal overdoses of intravenous heparin.

SATURDAY, SEPTEMBER 23, 2006 THE BOST

Deaths of 3 babies in Indiana spotlight medication mix-ups

By Tom Davies
ASSOCIATED PRESS

INDIANAPOLIS — Early last Saturday, nurses at an Indianapolis hospital went to the drug cabinet in the newborn intensive care unit to get blood thinner for several premature babies.

The nurses didn't realize that a pharmacy technician had mistakenly stocked the cabinet with vials containing a dose 1,000 times stronger than what the babies were supposed to receive. And they apparently didn't notice that the label said "heparin," not "hep-lock," and that it was dark blue instead of baby blue.

Those mistakes led to the deaths of three infants. Three others also suffered overdoses but survived.

Now, their families, hospital officials, and prosecutors are asking the same question: How could this happen?

Experts say last weekend's overdoses at Methodist Hospital illustrate that, despite national efforts to reduce drug errors, the system is still fragile and too often subject to human error.

"I see what happened here as depressingly normal," said Dr. Albert Wu of Johns Hopkins University, coauthor of an Institute of Medicine report that estimated more than 1.5 million Americans

MICHAEL CONROY/ASSOCIATED PRESS

Heather Jeffers (facing camera) was consoled by her mother Wednesday in Indianapolis. Jeffers's daughter, Thursday Dawn

- In **July 2008,** 17 infants received an overdose of heparin while being cared for in a Texas hospital
  - A preliminary investigation by the hospital indicated the error occurred during the mixing process within the hospital pharmacy.

Ref: Drug Daily Topic News

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From Safety Event to Actionable Response

Heparin Infant Overdoses & Mortality

September 2006	October 2007	November 2007	March 2008 / July 2008
SAFETY EVENT **3 Premature Infant Deaths** Automated Dispensing Cabinet Error - alerts, warnings, and advisories issued	**Pharmaceutical company** Medication labels approved for change	SAFETY EVENT **3 Infants receive overdose of Heparin** including Quaid twins, relabeling had not been implemented	*60 MINUTES* **Airs segment featuring** Dennis Quaid and Kimberly Buffington **July 2008,Texas** **17 infants** in a neonatal intensive care unit received heparin overdoses

AMC PSO & CRICO Patient Safety Response Timeline

October 4, 2012	October 18, 2012	November 1, 2012	December 1, 2012
SAFETY EVENT OCCURS **Safety Event Information reported in RCAIE**	AMC PSO **Identifies trigger** Convening session scheduled within 2 weeks of event notification	CONVENING SESSION **Members and Subject-Matter Experts** convene under federal confidentiality and peer-review protections	DISSEMINATE **AMC PSO** compiles, drafts, reviews and finalize actionable responses into patient safety alert

*Together we **can** move patient safety forward; Together we **will** move patient safety forward*