Fostering a Culture of Safety

June 11, 2017
Alabama Society of Health-System Pharmacists
Presenter: Trey Gwin, RPh, MBA, Medication Safety Coordinator, Infirmary Health
The speaker for today's talk, Trey Gwin, RPh, MBA, currently serving as the Medication Safety Coordinator for Infirmary Health, has no relevant financial relationships or conflicts of interest to disclose.
Upon completion of this program the pharmacist will be able to:

- Recognize and identify a medication error
- Evaluate and categorize a medication error by level of risk/harm category
- Interpret and analyze trends in medication error data
- Communicate lessons learned and apply them in practice to prevent recurrence
Upon completion of this program the pharmacy technician will be able to:

- Recognize the pharmacy technician’s role in safe medication use
- Discuss the value of a pharmacy technician safety advocate/coach
Summary

- Discuss the culture of safety
- Describe characteristics of highly reliable organizations
- Define barriers to embracing a culture of safety
- Discuss medication error causes and reporting
- Identify tools and strategies to prevent harm
Overview of Infirmary Health

- Largest non-governmental healthcare system in the state and the second largest not-for-profit healthcare system in Alabama
- Serves an 11-county area of south AL and north Escambia County, FL
- 5 acute care hospitals (> 900 beds)
- 2 post-acute care facilities
- Physician clinic network with more than 30 locations, three diagnostic centers, three urgent care clinics and other affiliates.
- 700 active physicians and more than 5,000 employees
- Care for over 800,000 patients annually
- Contributes nearly $1.8 million annually to local programs and agencies, through corporate gifts and sponsorships, employee volunteerism and uncompensated medical care.
Mobile Infirmary Medical Center

- Bariatric Center named a Center of Excellence
- Diabetes Center’s education program recognized by the American Diabetes Association
- Q2–2012 Medmined Surveillance System report– MI was ranked Excellent among state and national hospitals for infection prevention performance for the 8th consecutive quarter
- Q3–2012 National Health Care Safety Network (NHSN) report– MI was ranked better than most hospitals in 2 areas:
  - Central Line Related Associated bloodstream Infections (CLABSI) MI was ranked in the top 10 hospitals in the state with lower CLABSI rates.
  - Surgical Site Infections for Colon Surgery (SSI) MI was ranked in the top 5 hospitals in the state with lower Colon SSI rates.
- Silver level award from American Stroke Association/ Get with the Guidelines for performance in Stroke Care Measures
- Blue Distinction Center for Knee and Hip Replacement
- Blue Distinction Center for Spine Surgery
- MI’s pre op prep process for CABG surgery was highlighted by Joint Commission as a Best Practice for Surgical Site Infection Prevention.
- MI’s Fall Reduction Hospital Engagement Network (HEN) Project was featured as a Best Practice in the VHA–SE Bright Ideas Journal segment.
- MI GI Lab successfully met the requirements to be recognized as a unit that promotes quality in endoscopy through the American Society of Gastrointestinal Endoscopy (ASGE) Unit Recognition Program (EURP).

Thomas Hospital

- HealthGrades “Outstanding Patient Experience” Award 2013 – top 15% nationally
- Employee Opinion Survey – 85th percentile nationally
- Blue Distinction Knee & Hip Replacement Surgery
- Women’s Certified Awards for “Best Patient Experience”, “Obstetrics”, “Heart” and “Orthopedics”
- VHA Recognition for Venous thromboembolism project
What is Safety Culture?

Safety culture is the sum of what an organization is and does in the pursuit of safety.

The Patient Safety (PS) chapter of the TJC accreditation manuals defines safety culture as the product of individual and group beliefs, values, attitudes, perceptions, competencies, and patterns of behavior that determine the organization’s commitment to quality & safety.
How would you describe your organization’s safety culture?
Harm in Healthcare – “A 747 per Day Every Day”

1999 IOM report: “To Err is Human: Building a Safer Health System”
Estimates 44,000 to 98,000 Americans die annually from medical errors.
To Err is Human, Institute of Medicine (1999)

James estimates 210,000 to 440,000 patients, each year, suffer from preventable harm that contributes to their death.
James, John, A New Evidence-based Estimate of Patient Harms... Journal of Patient Safety, September 2013, Volume 9, Issue 3

That’s makes Death from Medical Errors the 3rd leading cause of death (CDC 2013)

- 210,000/365 = 575 people/day (#1 747)
- 440,000/365 = 1,206 people/day (#2 747)

Patient Safety. It Takes Everyone.
Just How Dangerous is Health Care?

How Hazardous is Health Care? (Leape)

- DANGEROUS (>1/1000)
  - Healthcare
- REGULATED
  - Driving
- ULTRA-SAFE (<1/100K)
  - Scheduled Airlines
  - European Railroads
  - Nuclear Power
  - Chemical Manufacturing
  - Chartered Flights
  - Mountain Climbing
  - Bungee Jumping

Source: 2002 Institute of Healthcare Improvement

Patient Safety. It Takes Everyone.
High Risk Situations in Healthcare
Make safety their number one priority at all times

It means getting things right EACH and EVERY time

Avoid catastrophes in environments where normal accidents can be expected

Focus improvement efforts on process improvements over seeking, blaming, & disciplining individuals (Just Culture)
Highly Reliable Industries

Air Traffic Controller

Military Operations Center

Aircraft Carrier, Flight Deck Operations
What is the ultimate goal of a safety focused or highly reliable organization?

ZERO events of harm

Does this mean ZERO events?
How Do We Achieve our GOAL: ZERO Events of Harm?

Event Rate

Time

100%

Awareness

Skill Acquisition

Habit Formation

Performance

20%
Serious Safety Event Rate (SSER) vs. Total Reported Med Variances (TRMV)

Infirmary Health, January 2015 – March 2017 (27 months)
Serious Safety Event Rate (SSER) vs. Total System Wide Incident Reports (SWIR)

Infirmary Health, January 2015 – March 2017 (27 months)
Barriers to Establishing Safety Culture
1. Senior leadership support is absolutely paramount!
2. Senior leadership support is absolutely paramount! All leaders must be on board, be all in & fully supportive, and speak the safety language.
3. Front line staff (sharp end) need to understand the “why” the organization is embarking on this safety journey.
4. Consistent feedback to staff is crucial to explain the “why” & check in with “how am I doing?”
5. Not as easy as flipping a switch, any culture change takes time, practice, & reinforcement
Medication Errors
Medication Error/”Variance” is defined as:

A medication error is any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer. Such events may be related to professional practice, health care products, procedures, and systems, including prescribing, order communication, product labeling, packaging, and nomenclature, compounding, dispensing, distribution, administration, education, monitoring, and use.
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National Coordinating Council on Medication Error Reporting (NCC MERP)
Categories of Medication Errors

- **Category I:** An error occurred that may have contributed to or resulted in the patient's death
- **Category H:** An error occurred that required intervention necessary to sustain life
- **Category G:** An error occurred that may have contributed to or resulted in permanent patient harm
- **Category F:** An error occurred that may have contributed to or resulted in temporary harm to the patient and required initial or prolonged hospitalization
- **Category E:** An error occurred that may have contributed to or resulted in temporary harm to the patient and required intervention
- **Category D:** An error occurred that reached the patient but did not cause patient harm
- **Category C:** An error occurred that reached the patient and required monitoring to confirm that it resulted in no harm to the patient and/or required intervention to preclude harm
- **Category B:** An error occurred but the error did not reach the patient (An "error of omission" does reach the patient)
- **Category A:** Circumstances or events that have the capacity to cause error

**Definitions**
- **Harm:** Impairment of the physical, emotional, or psychological function or structure of the body and/or pain resulting therefrom
- **Monitoring:** To observe or record relevant physiological or psychological signs
- **Intervention:** May include change in therapy or active medical/surgical treatment
- **Intervention Necessary to Sustain Life:** Includes cardiovascular and respiratory support (e.g., CPR, defibrillation, intubation)

**No Error**
**Error, No Harm**
**Error, Harm**
**Error, Death**
Assessment Question:

At what harm category (letter) does an error reach patient?

C
Assessment Question:
At what harm category (letter) does an error begin to cause harm?

E
How Do Errors Happen?

Sometimes multiple errors line up to allow a significant event or injury to occur

Sometimes an error occurs, but an event or injury is prevented by an internal system of checks

Significant events or injuries

Root cause analysis (RCA) generally initiated for any potential Serious Safety Event (SSE)
Three Ways Humans Perform

Skill Based Performance (Auto Pilot Mode)
3 in 1000 acts will be performed in error

Rule Based Performance (If-Then-Response Mode)
1 in 100 performed in error

Knowledge Based Performance (Figuring-It-Out Mode)
3 of 10 choices performed in error
How does Infirmary Health Foster a Culture of Safety?
Practices Encouraging Safety High Reliability

Infirmary Health Safety/Reliability Program consists of:

- Error Prevention Toolkit
- Hospital Huddles
- Unit Based Daily huddles
- Patient Safety Coaches
- Rounding to influence safety behaviors
- Serious Safety Event Committee
- Serious Safety Event Graphs
- Root Cause Analysis
- Safety Leadership Team – top 3
- Recognition Program – Lifeguard award/pin & Safety Hero
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Safety Heroes
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3 – Way Repeat Backs

When information is transferred… Use 3-Way Communication!

1. **Sender initiates** communication using Receivers Name. Sender provides an order, request, or information to Receiver in a clear and concise format.

2. **Receiver acknowledges** receipt by a repeat-back of the order, request, or information.

3. **Sender acknowledges the accuracy** of the repeat-back by saying, That’s correct! If not correct, Sender repeats the communication.

Train our ears to listen for “That’s Correct!” – it’s a codeword for “we understand each other”

A Safety Phrase: “Let me repeat that back…”
Importance of 3-Way Readback
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Importance of Cross Check

Individual reliability is limited:

1 defect per 1,000 opportunities

Peer Checking multiplies the error probability:

0.001 x 0.001 = 1 defect per million
What Does Bad Cross Checking look like?

www.officeclips.com
Summary

- Discussed the culture of safety
- Described characteristics of highly reliable organizations
- Defined barriers to embracing a culture of safety
- Discussed medication error causes and reporting
- Identified tools and strategies to prevent harm
Questions?

Trey Gwin can be reached at trey.gwin@infirmaryhealth.org and you can learn more about Infirmary Health @ www.infirmaryhealth.org
Relevant Definitions

**Harm:** Impairment of the physical, emotional, or psychological function or structure of the body and pain or injury resulting therefrom. (NCCMERP)

**Adverse Drug Event (ADE):** An injury resulting from medical intervention related to a drug. Source: Institute of Medicine (IOM)

**Medication Error (ME):** A medication error is any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer. Source: (NCC MERP).

**Adverse Drug Reaction (ADR):** Any response to a drug which is noxious and unintended which occurs at doses normally used in man for prophylaxis, diagnosis, or therapy of disease, or for the modifications of physiological function. Source: World Health Organization (WHO)