When the Worst Happens: handling low occurrences and high risk unforeseen events

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University of Kentucky
Lucille P. Markey Cancer Center
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Disclosures

Nothing to disclose.
Patient Safety Organization
• Identify safety improvement opportunities while maximizing discovery protections

Patient Safety Evaluation System
• Collection, management, or analysis of information

Patient Safety Work Product
• SWARM
IT MTX administered to the wrong patient
What can we do to be sure it will never happen again?

SWARM
Steven Spear Identified 4 Key Capabilities of High Performing Organizations

**KEY CAPABILITY #2 SWARMING**

Concept borrowed from automotive and aerospace industries, where safety is paramount.

This is a characteristic of high velocity (high performing) organizations. They don’t allow workarounds or allow delays between when a problem happens and when it is solved. They don’t let problems be solved by people not directly involved with the problem. Delays in solving the problem can mean information and material can be lost. It can also mean the problem can multiply before it is fixed.
Looks Like

- Shortly after the event call a meeting with all people who were involved
- Blame free zone
- Quickly analyze what happened (why and how)
- Determine what needs to be done to keep the problem from occurring again
How to do it

• Do your homework
  Bring background information, create a timeline of just the facts, encourage familiarity with record by sending to participants.

• Call the meeting
  Apply a filter (not every event can and should be addressed). Invite those directly involved with the incident and someone who is in the decision-making role.

• Use time wisely
  Set the meeting for one hour, outline expectations.
• Opening Statement
  Blame free, need for candor, focus on facts, problem identification, and solutions

• Introductions
  Break the ice – who are you, what is your role, and how were you involved?

• Review
  Go over the facts that prompted the SWARM

• Analyze (Root Cause Analysis)
  Discuss *what* happened, discuss *why* it happened, and discuss *how* it happened
  (The 5 Why’s)
5 Whys Worksheet

(Provided as a free template by The IPL LLC)

Define the Problem: (Insert one of the top prioritized student needs)
Two patients received the wrong intrathecal chemotherapy (same drug, same dose, no harm came to the patients).

Why is it happening?

1. Pharmacy prepared both doses properly and placed each in the wrong transport bag. Both bags were placed in same tube and sent to the unit.

2. APP and RN performed double checks against label on transport bag instead of label on syringe and did not scan barcode.

3. APP was unaware that barcode on syringe should be scanned thinking syringe is in sterile bag.

4. APP unaware of proper scanning procedures and never filed complaint about difficulties scanning through bag. Never audited to see trend in missing barcode scans.

5. Poor communication and lack of communication. It has always been a pain! (We have always done it this way!)

Caution:
- If your last answer is something you can’t control, go back up to the previous answer on 1 reason
- Cannot because of a person

You don’t want to list 5 different reasons; you want to go deep on 1 reason.
Action

• Conclude with proposed focus areas for action
• Set date and assign responsible person for tasks
• Reinforce blamelessness and privileged nature of SWARM process

Process includes developing standard work, forms, tracking
Action Plan

- **Change policy** - only MD and APP can initiate administration and only patients [shift] nurse can perform check

- **In-service**
  - MDs, APPs, Fellows, Residents, and nursing staff: Scan actual syringe and armband PRIOR to procedure
    - Barcode on syringe must be scanned
    - Only MD/APP can administer
    - Only shift nurse can perform check
  - Refresher in-service for pharmacy
SWARM Process

Figure 1. The SWARM process most often begins when frontline staff complete an incident report regarding an event. Initially, this report, or a known event, is reviewed by a patient safety specialist, and a decision is made to promptly conduct a root cause analysis or full SWARM.

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That’s great, but...

Dennis Gastineau, MD

- President of FACT Board of Directors and member of Education, Accreditation, and Clinical Outcomes Improvement Committees
- FACT Inspector

HealthCare Markey Cancer Center
An NCI-Designated Cancer Center
Validation

Low occurrence, high-risk incident...

How do you validate that the changes you made are making a difference?

1. Run BCMA to confirm order
2. Compare to order status complete date (SCM)
3. Audit for name and role of person administering drug
4. Investigate Null/Incomplete in eMAR (SCM)
5. Analyze for trends

Basically, validate that all patients with an order for IT chemo got the correct drug and correct dose.

Data was easy to access...
### Change post in-service?

**UK Hem/BMT**

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June 8, 2016

Roger Herzig, MD, Program Director
University of Kentucky Blood and Marrow Transplant Program
Markey Cancer Center
800 Rose Street CC 301
Lexington, Kentucky 40536

Dear Dr. Roger Herzig:

The Foundation for the Accreditation of Cellular Therapy (FACT) is pleased to award accreditation to University of Kentucky Blood and Marrow Transplant Program. The accreditation for your organization is effective for three years beginning December 23, 2015. This accreditation applies to all services and facilities that were inspected by FACT, specifically adult allogeneic and autologous hematopoietic progenitor cell transplantation, marrow and peripheral blood cellular therapy product collection, and cellular therapy product processing with minimal manipulation.
Whew!!!
Validation Revealed

**Low occurrence, high-risk incident...**

How do you validate that the changes you made are making a difference?

What will we audit?
- Only performing APRN/MD and patients assigned RN can perform checks

The audit is far more challenging than the validation!
Analysis of Audit

**Outcome**
- 30% Administered by MD/APP

**Additional Observations**
- 69% Fellows perform checks
- 57% Barcode not scanned
- 40% No Time-out documented

**Real Concerns**
- Invasive procedure by Fellow
- Time-out overlooked
- Pharmacy safety procedures overlooked
Outcome of Audit

**Hard-wired Changes**

- Pharmacy placed “Time Out” stickers on all IT chemo bags
- Portable bar code scanners placed in all outpatient areas
- Mandatory in-service for Time-Out and policy
  - BMT Physicians
  - Advanced Practice Providers
  - Fellows
  - Residents (teach them early!)
  - Inpatient and outpatient nursing staff
**SWARM Process**

**Figure 1.** The SWARM process most often begins when frontline staff complete an incident report regarding an event. Initially, this report, or a known event, is reviewed by a patient safety specialist, and a decision is made to promptly conduct a root cause analysis or full SWARM.

Mostly because of the audit!
George Selby, MD

George Selby, MD, has been a participant in the Blood and Marrow Transplantation Program at the OU Medical Center since its founding and established the pediatric component of the program in 1993. He is currently the Director of the OU Blood and Marrow Transplant Program and has been named to the McKinney Chair of Bone Marrow Diseases.

Dr. Selby is also a member of the FACT Clinical Outcomes Improvement Committee.

Making Outcome Analysis Work for You

George Selby, MD
Director, Blood And Marrow Transplant Program
University of Oklahoma
We don’t know what we don’t know...

IDIOM OF THE DAY

HAVE EGG ON YOUR FACE

Meaning: be left feeling stupid or embarrassed because of something you did

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