Managing Medication Errors

IN LONG TERM CARE

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Med Errors- Outline

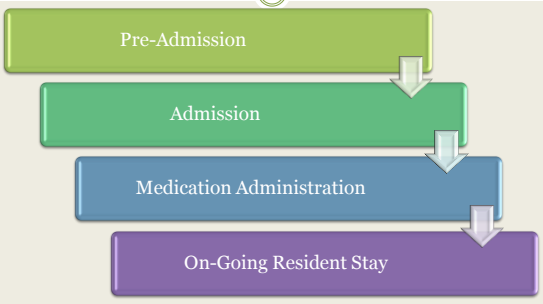
- Types of Errors
- Contributing Factors
- Why is LTC more prone?
- Pharmacy – A Key Component
- A parallel industry
- How can they be avoided?
- Quality Improvement
- Criminalization- An alarming trend

Med Error - Definition

Any ***preventable event*** that may cause or lead to inappropriate medication use or patient harm

National Coordinating Council for
Medication Error Reporting and Prevention

Timeline of "Preventable Events"



Types of Errors

MECHANICAL VS. HUMAN

Human Error - Definition

Human error is any human action or lack thereof that exceeds the tolerances defined by the system with which the human interacts.

D.K. Lorenzo, *A Manager's Guide to Reducing Human Errors*

Unintentional errors

Actions committed or omitted with no prior thought

- misreading an order
- bumping the wrong switch
- forgetting to properly set the dose on an X-ray device
- usually thought of as accidents

Intentional errors

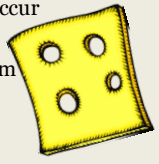
Actions deliberately committed or omitted because staff believe their actions are correct or better than the prescribed actions

- Shortcuts
- "Improved" methods
- Don't always result in harm

The Swiss Cheese Organizational Model

Developed by James Reason , University of Manchester

- A series of events which must occur in a specific order and manner for an accident to occur
- Holes are opportunities for failure
- Each slice is another layer of the system

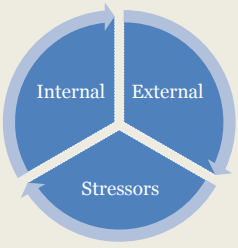


Contributing Factors

WHAT MAKES THEM HAPPEN?

Performance Shaping Factors (PSF)

Anything that affects staffs' performance of a task



Internal PSFs

Individual skills, abilities, attitudes and other characteristics staff bring to the job

- **Experience**
- **Knowledge of standards**
- **Intelligence**
- **Motivation/work attitude**
- **Personality**
- **Emotional state**
- **Physical condition/health**

External PSFs

Influence the environment in which tasks are performed

- Facility Layout
- Temperature, lighting, noise
- Shift rotation/Staffing levels
- Procedures: written or not written
- Frequency/repetitiveness

Stressors

- Heavy task load
- Threats of failure or loss of job
- Degrading or meaningless work
- Long, uneventful vigilance periods
- Distractions
- Fatigue
- Lack of rewards, recognition or benefits

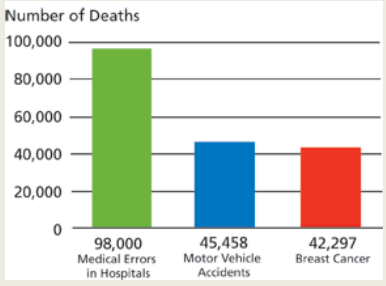
Long Term Care

EVEN MORE ERRORS

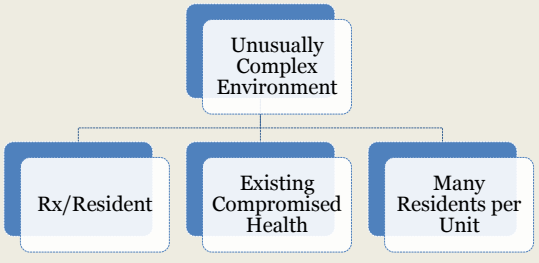
Concerning Statistics

- 7,000 yearly deaths due to sloppy handwriting
- 106,000 yearly deaths from adverse drug reaction
- Only 6% of ALL adverse drug reactions are properly identified
- 800,000 preventable drug-related errors occur in long-term care settings

Concerning Statistics (Cont.)



Why is LTC More Error Prone?



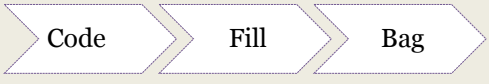
Additional Factors

- Transition from one care setting to another
  - Prescribing or transcription errors
  - Medicare Part D
- Time Constraints/ Understaffed
- Inadequate pharmacological knowledge
- Failure to comply or lack of procedures

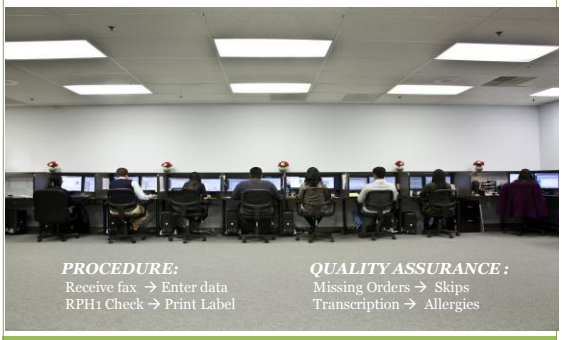
PHARMACY

A KEY COMPONENT

The Fill Process - Oversimplified



Pharmacy Step 1 - Code



PROCEDURE:
Receive fax → Enter data
RPH1 Check → Print Label

QUALITY ASSURANCE :
Missing Orders → Skips
Transcription → Allergies

Managing Medication Errors: Saul Greenberger

Pharmacy Step 2 - Fill

PROCEDURE:
Pre-Pack → Affix Label → RPH2 Check

QUALITY ASSURANCE:
Mismatch → Skips

Pharmacy Step 3 - Bag

PROCEDURE
- Package Totes
- Create Manifests
- On Time Delivery

QUALITY ASSURANCE
- Mixed Totes
- Skips

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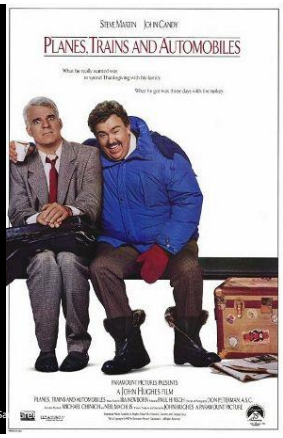
A Parallel Industry

ERRORS FROM ANOTHER PERSPECTIVE



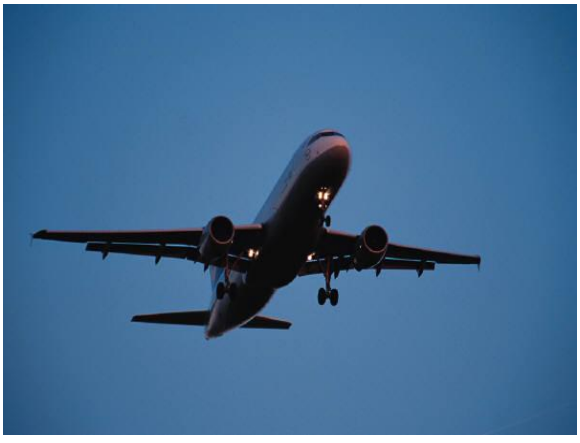
Transportation Facts

Odds of fatal accident

- Airline = 1/ 7,000,000
- Train = 1/ 1,000,000
- Driving = 1/14,000

General Odds of Death

- Cardiovascular disease: 1 in 2
- Smoking : 1 in 600
- Bicycle accident: 1 in 88,000
- Tornado: 1 in 450,000
- Lightning: 1 in 1.9 million
- Bee sting: 1 in 5.5 million



Airline Strengths

- Minimized distractions
- Checklist centered/ Verbalization
- Set up to avoid work fatigue
- Unprecedented training routines
- Thorough investigation after even MINOR accident

Delta Flight 1141 : August 31, 1988


Dallas Times Herald

Miraculously, 94 survive

13 die in fiery Delta crash – search for clues begins

How Can We Control Med Errors?

APPLIED LEARNING

Minimize Distractions

- Impossible to AVOID but can be CONTROLLED
- Cell Phones
- Other interruptions
- ***Restart individual med pass if interrupted***

Checklists

- Keep them brief
- Easy to understand
- Make them available
- Wide range of scenarios
- Verbalizing

Work Fatigue

- Shortage of staff
- Pool of per diem staff
- Look out for signs of extreme fatigue
- Keep an eye out for talent

Training

- Re-examine orientation procedures
- On-going competency exams
- Perform routine drills
- Real life testing

Investigate

- Internal poc's
- Take A/I reports more seriously
- Look for systemic breakdowns
- Identify training weaknesses
- Share lessons with other facilities

eMars

Dispensing & Delivery

Quality Improvement

FROM TEXTBOOK TO PRACTICE

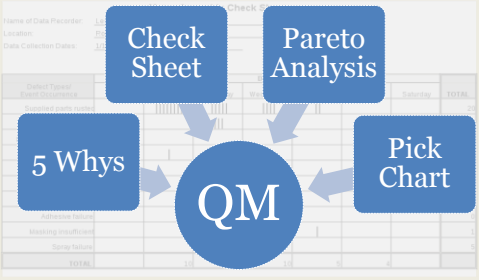
MOTOROLA

Six Sigma

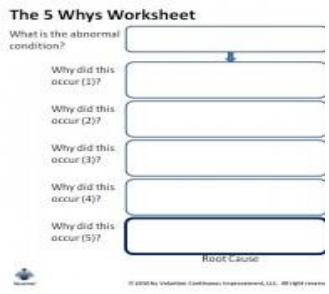
6σ

- Identifying and removing the causes of defects (errors)
- Minimizing variability
- Uses Quality Management methods
- Infrastructure of experts within organization

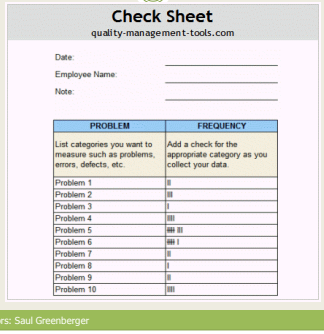
Quality Management Tools



Five Whys



Check Sheet

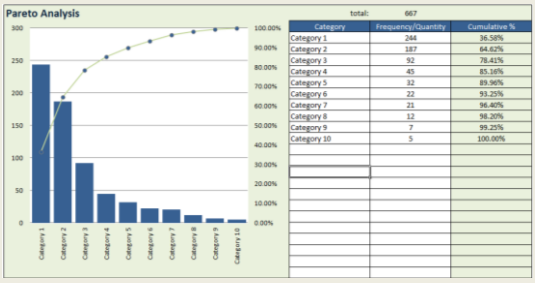


Check Sheet
quality-management-tools.com

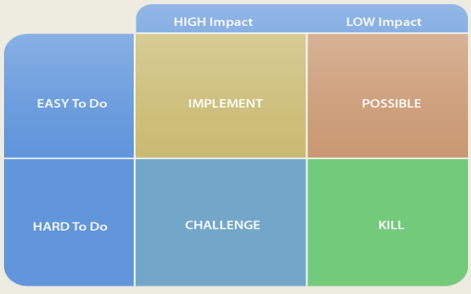
Date: _____
Employee Name: _____
Note: _____

PROBLEM	FREQUENCY
List categories you want to measure such as problems, errors, defects, etc.	Add a check for the appropriate category as you collect your data.
Problem 1	II
Problem 2	III
Problem 3	I
Problem 4	IIII
Problem 5	卌 II
Problem 6	卌 I
Problem 7	II
Problem 8	I
Problem 9	II
Problem 10	IIII

Pareto Analysis



Pick Chart



National Quality Forum (NQF)

- Setting priorities and goals for performance improvement
- Creating standards for measuring and reporting
- Education and outreach

Measuring

Cornerstone of any quality improvement program

- Can't change what you can't measure
- Gives true scope of any problem area
- Lets you know when you've reached the goal
- Lets you compare to others

"Vulnerable Adult Abuse"

Any knowing, intentional, or negligent act by a caregiver or any other person that causes harm or a serious risk of harm to a vulnerable adult.

Washington State Office of the Attorney General

Who is a Vulnerable Adult ?

One who is unable to independently provide for their own basic necessities of life by virtue of:

- Age
- Physical injury
- Disability
- Disease
- Emotional or developmental disorders

Death of Michael Jackson

Summary & Conclusion

WHAT TO TAKE HOME