

# Progress in the Core Competencies at an Academic Medical Center

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Ellen Solomon, MD

# Agenda

- Introductions and Background of speakers: 5 minutes
- Background of Competency Committee: 5 minutes
- Objective Structured Competency Assessment of Residents: 25 minutes
- Continuous Quality Improvement (CQI) Training: 25 minutes
- Standardization of Morbidity & Mortality and Error reporting: 25 minutes
- Closing Comments: 5 minutes

# Introductions

- Site: 752-bed academic medical center, affiliated with Case Western Reserve University, which serves as the public hospital for Northeastern Ohio.
- Speakers:
  - Aleece Caron, PhD, Senior Medical Educator
  - Ellen Solomon, MD, OB/Gyn Resident



# Background

- 2007: Approval to hire Senior Medical Educator (SME)
- 3/08: SME begins assessment of programs
- 5/08: SME attends program retreats
- 7/08: Report to Graduate Medical Education Committee on program assessments

# Background

- 9/08: Established Competency Committee initial meeting with representation from:
  - Internal Medicine: Communication
  - Pediatrics: Practice Based Learning and Improvement (PBLI)
  - Psychiatry: Professionalism
  - OB/Gyn: Systems-Based Practice (SBP) - Patient Safety
  - Emergency Medicine: Systems-Based Practice -other

# Competency Committee Goal

- To create standardized educational initiatives for the competencies that are difficult to implement and evaluate
- To create modules that can be implemented in every residency/fellowship program





Objective Structured  
Competency Assessment of  
Residents

# Background



- Interpersonal and Communication Skills Competency
  - This competency incorporates communication with patients, families, other members of the healthcare team, and scholarly communication.
  - Any assessment tool must provide valid data showing a learner's current level of competence, and areas where skill enhancement is needed.



Communication issues are a top contributing factor in medication-related claims



# MISTER BOFFO by Joe Martin



See, Bernard? Julia's approach was just that tad more sensitive. OK- so who wants another crack at breaking the bad news?



Millard



*"I need more MAGIC pills"*



# Methods

- We developed the OSCAR with four clinical stations to assess intern oral and written communication skills.
- Our goal was to create scenarios that the majority of incoming residents would have to face during their training. The four stations were:
  - Disruptive Patient
  - Phone Call for Narcotics Refill
  - Disclosing Medical Mistake
  - Bad News

# Phase 1



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- In the pilot study, 18 Internal Medicine interns were evaluated by the standardized patient on 3 areas of communication:
  - Relationship Development
  - Case Goals
  - Organization and Time Management



# OSCAR Methods

- Standardized patients (SPs) recruited by Program Directors
- Training of SPs
- 10 minute stations
  - 2 minutes to read station objectives
  - 5 minutes to achieve station objectives
  - 2 minutes for immediate feedback and summary
  - 1 minute to change stations

# OSCAR Results

- Positive feedback from all involved
- Evaluation forms too long
- Need a little more scripting or probing questions
- Interns felt that the bad news station should have been a more challenging situation to discuss

# Phase 2

- Revised and shortened the evaluation form
- Revised bad news station to have residents deliver worse news
- 83 interns from 12 different programs participated in the OSCAR in 6/09
- Met with program directors to review results within 30 days
- Very positive feedback overall

# Results

Station	Mean (SD)	Range
Medical Error	44.3 (3.8)	32.0-61.0
Bad News	41.3 (6.8)	21.0-59.0
Disruptive Patient	43.3 (5.5)	30.0-60.0
Narcotics Refill	31.2 (5.4)	16.0-50.0

Total possible points=65

# Results

- There were differences among the scenarios and also among the domains within the scenarios.
- This pattern was also illustrated in most of the programs, but there were no significant differences across programs.

# Phase 3

- Reassessed interns on all four stations in March 2010
- Added new station on Informed Consent
- Conducted psychometric testing on the evaluation tool

# Phase 4

- Recruit residents to run OSCAR with faculty supervision
- Develop self-reflection tool for standardized patients
- Establish performance thresholds
- Assess inter-rater reliability

# Barriers to Implementing the OSCAR

- Faculty Time
- Resident Time
- Space to conduct the OSCAR
- Scheduling
- \$\$\$\$\$



# Summary

We believe that incorporating the OSCAR into resident assessment provides a unique opportunity to both teach and assess interpersonal and communication skills.

Program reviewers will look for effective educational efforts with measurable outcomes.



# PBLI/SBP: Continuous Quality Improvement (CQI) Training


# Inspiration: Ernest Amory Codman

- The “End Result Idea”
  - Simply put - Doctors should follow all their patients long enough to assess results of their treatment.
  - The “Ether Record”
  - In medicine searching to record not only what he had done but also *how he could have done it better.*



Ernest A. Codman, M.D.

A factory “takes pains to assure itself that the product is a good one.” Codman wrote. But “the hospital does not.”



# Why should we work on quality improvement?

- Practice Privileges/Recertification
- Data are everywhere
- Medical students are learning these tools
- CQI projects are fundable and publishable
- Part of the past, present and future of healthcare
- Required by many specialty training programs
- Right thing to do



# CQI Overview

- Pretest for all incoming residents
  - Quality Improvement Knowledge Assessment Pre-Test (QIKAT)\*
- Trainees
  - Med/Peds, Pediatrics, Physical Medicine & Rehabilitation, Pulmonary Medicine
- Total of 8 one-hour training sessions
- Post test
  - Quality Improvement Knowledge Assessment Post-Test (QIKAT)\*
- Project evaluation
  - Standards for Quality Improvement Reporting Excellence (SQUIRE) guidelines\*\*

\*Ogrinc G, Headrick LA, Morrison LJ, Foster T. Teaching and Assessing Resident Competence in Practice-Based Learning and Improvement. JGIM. 2004;19:496-500.

\*\* Davidoff, et al. Publication Guidelines for Improvement Studies in Health Care: Evolution of the SQUIRE Project. Ann Intern Med November 4, 2008 149:670676

# Curriculum

- Session 1:
  - Principles of Continuous Quality Improvement
- Session 2:
  - Principles of team-building and brainstorming
  - Practice building a team and brainstorming

# Content

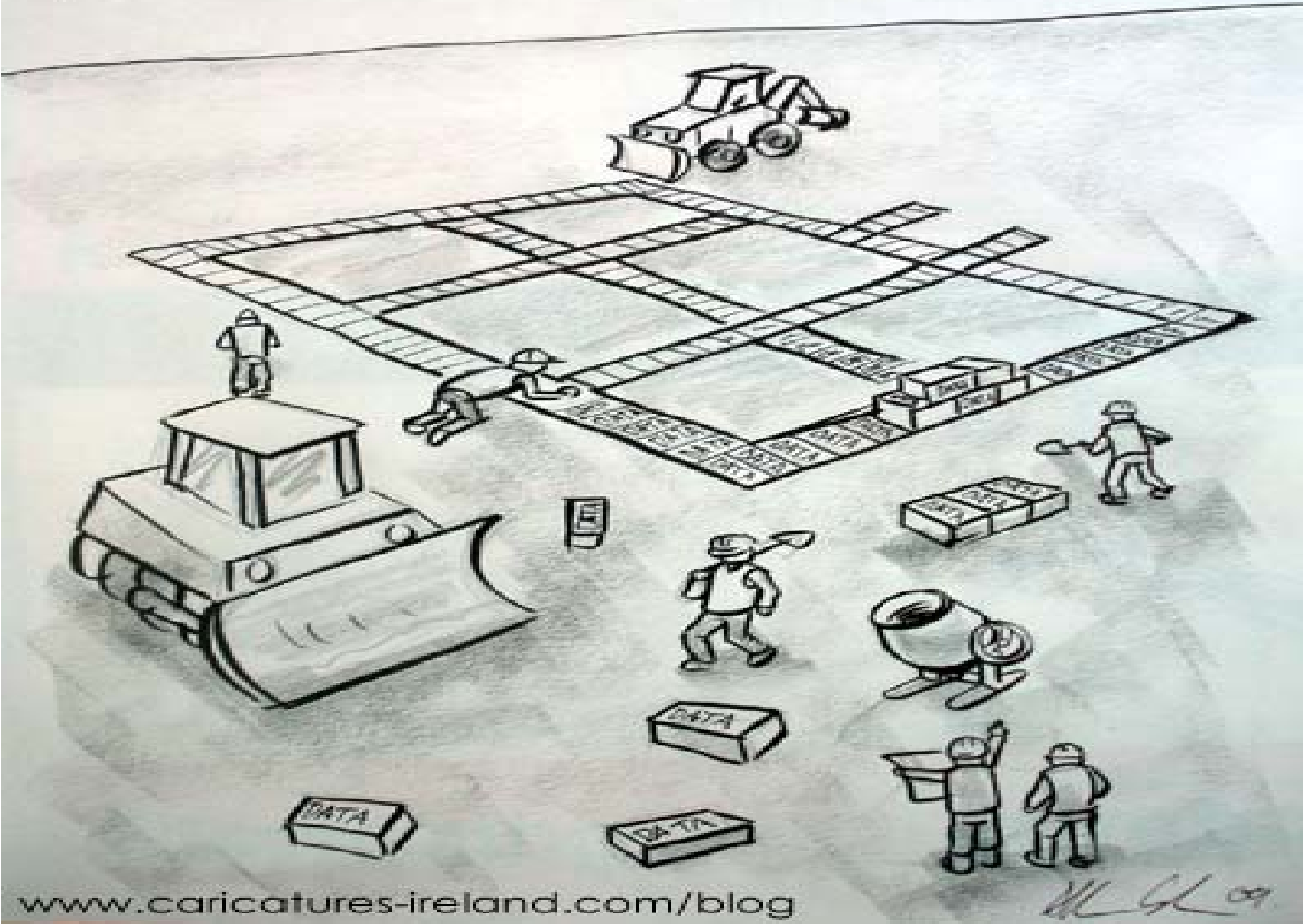
- Session 3:
  - Teams brainstorm improvement opportunities. Conduct multi-voting to select projects.
- Session 4:
  - Overview of QI diagnostic tools (flowchart, pareto chart, fishbone, change concept, aim statement)
  - Overview of measures
  - Provide SQUIRES guidelines to prepare the project

# Content

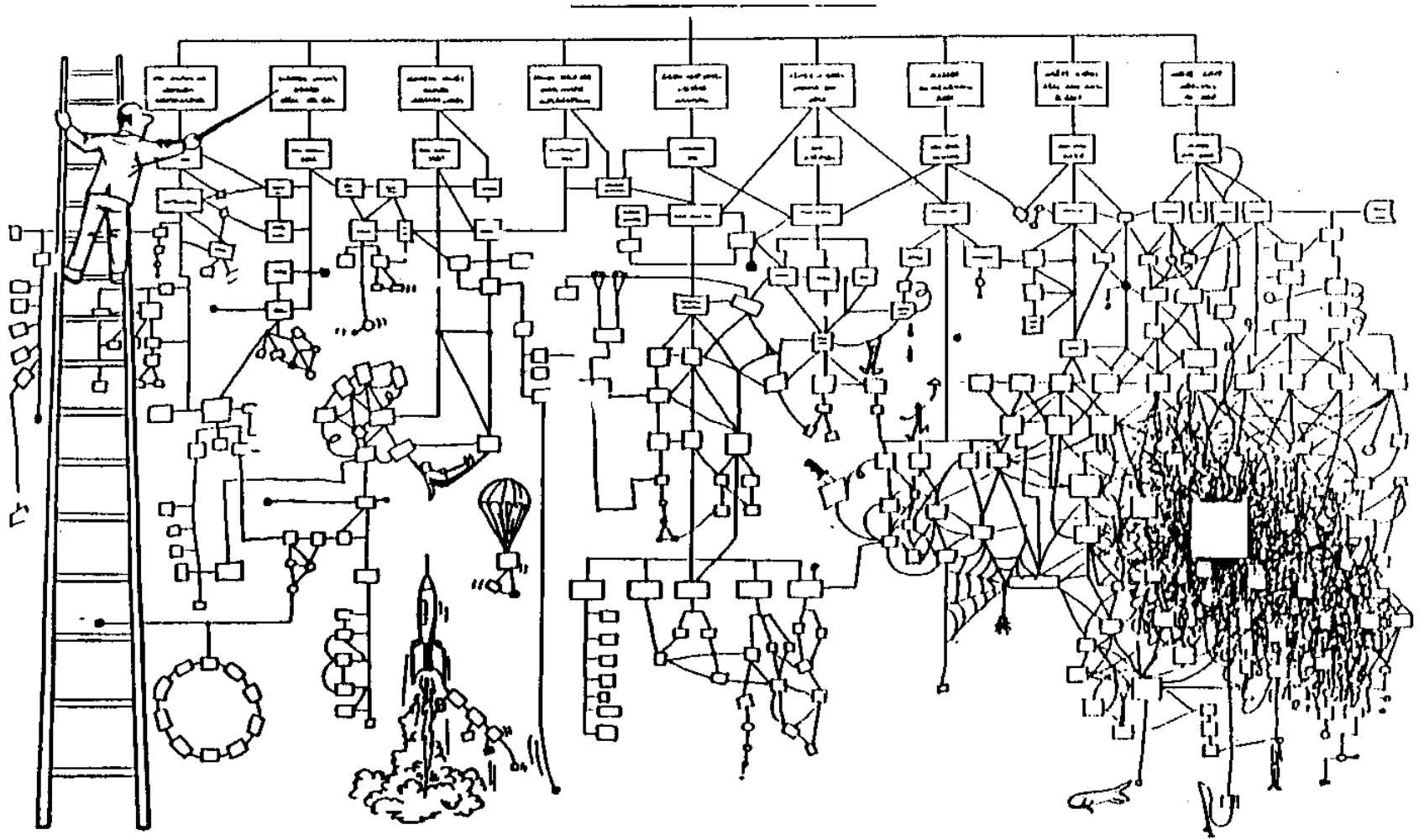
- Session 5:
  - Teams present their plan for intervention
  - Learn measurement and variance
- Session 6:
  - Present an update of the project
  - Discuss any hurdles
- Session 7:
  - Discuss results and plan final presentation



MEASUREMENT IS THE FOUNDATION OF BUILDING IMPROVEMENT.



Every system is perfectly designed to achieve the results it achieves



# Examples of QI Projects

- Improving discharge summaries.
- Speeding up the rounds on floor.
- Narcotic drug refill.
- Utility of a pre-clinic questionnaire.
- Screening for domestic violence.
- How to be seated in a car seat.
- Screening for obesity.
- Reducing the delay for immunizations in clinic.

# Barriers to Implementing the CQI Curriculum

## Stress Reduction Kit

- Faculty Support
- Resident Time
- Faculty Time
- Faculty Skills and Knowledge



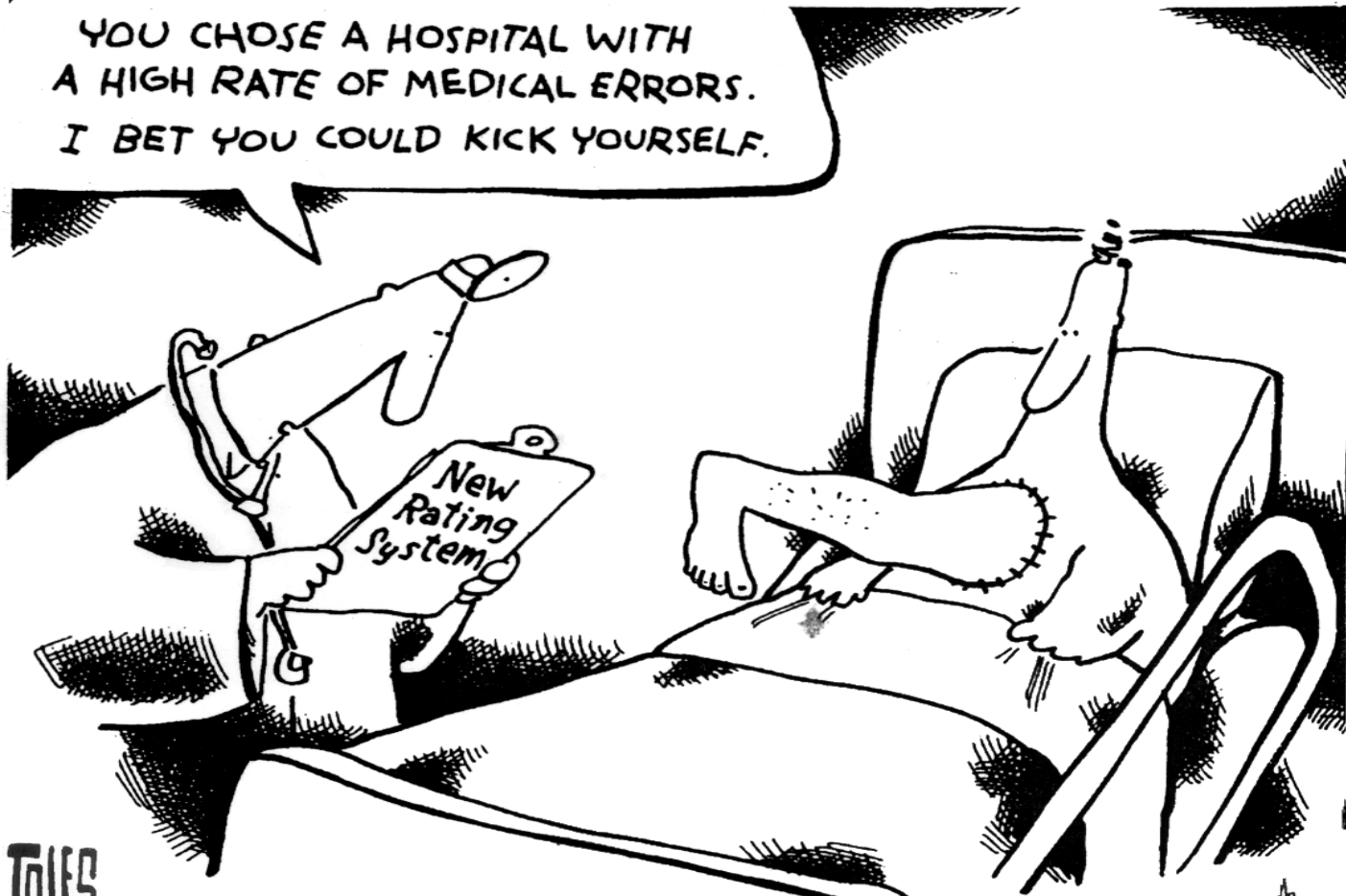
Directions:

1. Place kit on FIRM surface.
2. Follow directions in circle of kit.
3. Repeat step 2 as necessary, or until unconscious.
4. If unconscious, cease stress reduction activity.



# Standardization of M&M and Error Reporting

YOU CHOSE A HOSPITAL WITH  
A HIGH RATE OF MEDICAL ERRORS.  
I BET YOU COULD KICK YOURSELF.

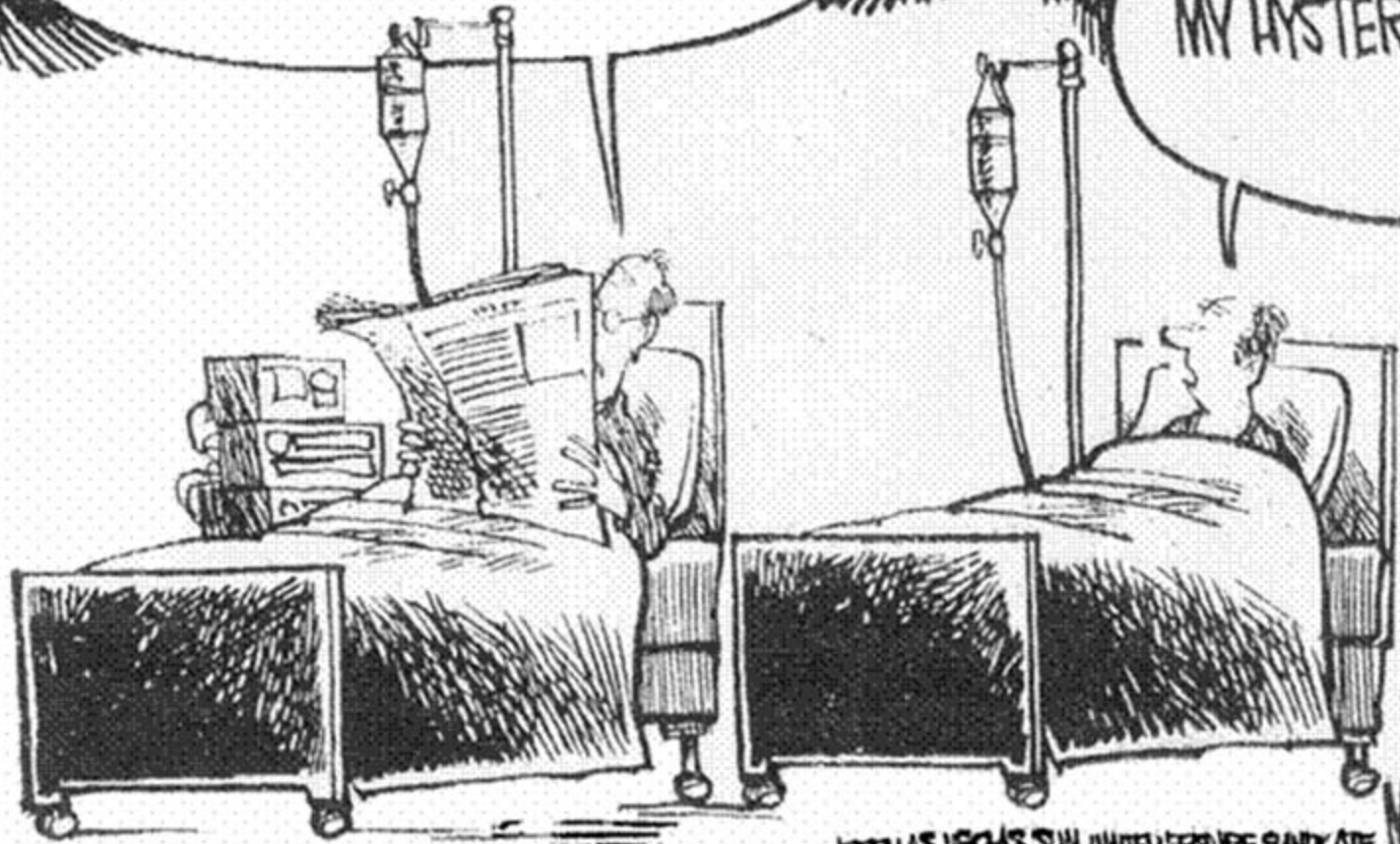


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SO NEXT TIME, LOOK BEFORE  
YOU.... WELL, WHATEVER. -

IT SAYS HERE THAT THE RATE OF  
MEDICAL ERRORS IS STUNNINGLY  
HIGH.

THAT EXPLAINS  
MY HYSTERECTOMY.



PHOTOGRAPH BY SUN UNITEV/FEENRE SANDATE MIKESMITH

# Purpose of Project

- **Project goal – develop a tool to facilitate knowledge & skills in SBP through application in clinical environment**
  - Educate residents on importance of error reporting and how to report errors
  - Design and implement error reporting system for residents
  - Facilitate identification of medical error and systems failures in daily practice
  - Examine error patterns and design system solutions



# OB/Gyn Pilot Program: Phase 1

- Overview of Error Workshop:
  - Introduce the concept of a system and relate it to healthcare
  - Discuss the evidence for the medical error problem
  - Introduce the concept of hazard
  - Explain the epidemiology of medical errors
  - Describe System failures/Gaps, current error report systems, and current medical culture

# OB/Gyn Pilot Program: Phase 1

- The group was then introduced to the computer based error reporting system on the MetroHealth Medical Center website
- Residents were then asked to report at least two errors weekly on this website
  - Reported errors were to be anonymous, and to look at system failures and not individuals
  - The values of resident leadership and self assessment were stressed to the residents.....

# MHMC System



University HealthSystem Consortium

Sunday, August 30, 2009

## UHC Patient Safety Net Event Report

Organization: The MetroHealth System

Training mode

Who was harmed or nearly harmed: *(Required)*

- Patient
- Staff
- Visitor
- Other (to report unsafe conditions and suggest improvements) \*

\* Please do not select this category if the event involves a patient.

[Next](#)



Sunday, August 30, 2009

Time remaining **13 : 55** [Reset Timer](#)

### C Patient Safety Net Event Report

Organization: **The MetroHealth System**

Who was harmed or nearly harmed: **A. Patient**

Inpatient/Outpatient Event (check one): **(Required)**

- Inpatient
- Outpatient

How did you learn about the event (check all that apply): **(Required)**

- Witnessed/Involved
- Report by patient
- Report by family or visitors
- Report by another staff member
- Assessment after event
- Review of record or chart

Name of person affected:

Last Name:  First Name:  MI:

Medical record number: **(Required)**

Gender (check one): **(Required)**  Male  Female

What Happened?

NOTHING!!!!!!

# Phase 2

- We discussed different options on how to encourage residents to report system errors.
- It was decided that the only way our residents would include error reporting in their medical practice was to make the process mandatory.



## Phase 2: Intervention

- The Ob/Gyn residency program holds bimonthly morbidity and mortality rounds .
- Error reporting was made **mandatory** and two errors were to be discussed every M +M from the error reporting website

# Phase 3

- Looking at attitudes towards error reporting for attendings and residents
  - Data analysis in progress
- Compile list of reported errors and create systems solutions
- Roll out in other programs
  - Peds, PM&R

# Using Error Reporting System in M & M Rounds

- Questions are answered from the prompted questions within the error reporting system such as:
  - Was standard of care met?
  - Did we fail to employ indicated tests?
  - Was there an error in performance of a procedure or test?
  - Was there inadequate monitoring or follow-up of treatment?
  - Was there an error in dose or method of using a drug?

## Was the standard of care met...for patient care?

	Yes	No	Comment
Safe Care		X	Delay in placement resulted in significant bladder distention and abdominal pain
Care Delayed	X		Approximate 5 hr delay in foley placement
Diagnostic error			NA
Delay in treatment	X		
Unnecessary tests			NA
Failed to act on results of test			NA
Inappropriate care	X		Order was not completed by nursing or resident staff
Appropriate use of resources		X	
Barrier to providing care		X	
Access affected based on pt resources		X	
Pt/family involved in decision making			NA

# Was the standard of care met...for medical knowledge?

	Yes	No	Comment
Employed indicated test			NA
Error in performance of test			NA
Error in procedure			NA
Inadequate monitoring of f/u	X		Failed to follow-up on desired plan of care
Error in dose of drug			NA
Error in administration of drug			NA
Appropriate use of resources		X	Failure to use available medical personnel to assist with plan of care
Treatment Error			NA

## Was the standard of care met...for communication?

	<b>Yes</b>	<b>No</b>	<b>Comment</b>
Between Departments			NA
With patient/family			NA
Between Staff		X	Nursing staff and resident did not communicate sufficiently to ensure plan of care carried out
Handoff Issues			NA

## Was the standard of care met for...professionalism?

	Yes	No	Comment
Ethical issues that affected pt's outcome			NA
Everyone accountable for their actions?	X		
Errors/omissions communicated	X		To the resident and nursing staff
Gaps in knowledge/skills addressed	X		
Tasks completed reliably	X		Attending physician completed treatment plan
Tasks completed timely		X	Delay in treatment plan
Confidentiality maintained			NA

# Was the standard of care met for...system based practice?

	Yes	No	Comment
Did the team work effectively		X	
Utilize system resources effectively		X	Order for foley never successfully placed
Everyone understood role in patient's care			NA
Worked effectively with consulting services			N/A

# Practice Based Learning and Improvement

<p>What could we have done to prevent the patient's outcome?</p>	<p>Order for foley placed in EMR Follow Up with nursing regarding treatment plan (was the foley placed? What was UOP?) Offered assistance if nursing short staffed and unable to complete treatment plan</p>
<p>Are there system solutions we can implement to prevent this from happening in the future?</p>	<p>Don't rely on verbal orders; make sure to put all orders into EMR! Reiterate importance of follow-up for procedures/treatment plans</p>

# Results

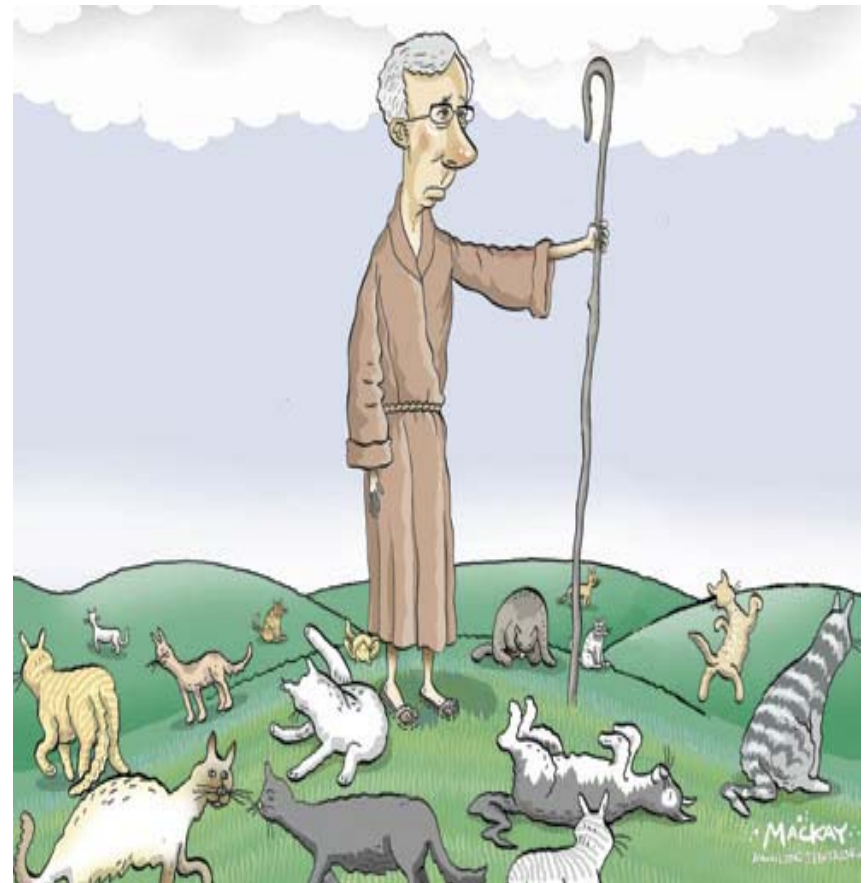
- We are now able to formally analyze errors
- We are utilizing Systems Based Practice in our educational meetings, thus meeting the requirements for ACGME and residency training

# Learning to live with error

- Recognise that fallibility is the norm
- Errors can't be eliminated, but they can be managed.
- Errors are consequences as well as causes.
- Errors are opportunities for learning (double-loop).
- Naming, blaming and shaming have no remedial value.
- Design healthcare systems for real human beings—warts and all.

# Barriers to Implementing the Error Reporting

- Faculty Support and Knowledge
- Resident Buy-in
- Resident Time





# **SQUIRE Guidelines**

## **(Standards for QUality Improvement Reporting Excellence)**

**Final revision – 2-20-08**

- These guidelines provide a framework for reporting studies that formally assess the nature and effectiveness of interventions designed to improve the quality and safety of care.
- It may not be possible to include information about every numbered guideline item in reports of original formal studies, but authors should at least consider every item in writing their reports.
- Although each major section (i.e., Introduction, Methods, Results, and Discussion) of a published original study generally contains some information about the numbered items within that section, information about items from one section (for example, the Introduction) is often also needed in other sections (for example, the Discussion).