Transitioning M&M to Process Improvement and Patient Safety

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Objectives

- Implement a new format for M&M conferences that will emphasize patient safety and improve systems of care.
- Systematically analyze an adverse event and the processes leading up to it using a fish bone diagram.
- Identify solutions to adverse events utilizing a “pick” chart.

Poll Question:

What is the purpose of a morbidity and mortality conference?

A. To present interesting cases.
B. To find what went wrong in a case and fix the blame.
C. To provide residents the opportunity to teach.
D. To identify adverse events and how system and cognitive factors contributed to the event and what can be done to improve quality and safety.
E. To offer a sacrificial lamb (the resident) to the demi-god attending physicians to assure their continued favor.

Poll Question

According to the 2014 ACGME requirements for family medicine residencies:

A. M&M conferences must occur monthly.
B. Patient deaths must be reviewed by residents and faculty.
C. There are no requirements for M&M conferences.
D. Residents should analyze their practice to improve quality of care.
E. Faculty should inform residents when they have made an error that has resulted in an adverse event.

Why have an M&M conference?

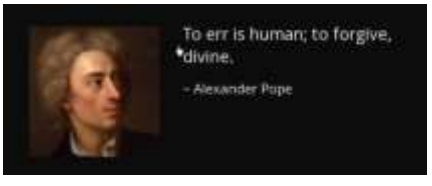
- Tradition…
  …it's a big thing in medicine.

Why have an M&M conference?

- Better reasons:
  - Improve physicians' patient care/knowledge/skills
  - Provide an educational tool for learners
  - Improve communication skills among healthcare team members
  - Accept/recognize fallibility of physicians
  - Identify system factors that lead to adverse events
  - Identify cognitive factors that lead to adverse events
  - Attempt to correct system & cognitive factors that led to adverse event

We Make Mistakes

- At least 44,000 and as many as 98,000 people die in hospitals each year as a result of medical errors that could have been prevented, according to estimates from two major studies.
- M&M is an opportunity to talk about our errors.



Institute of Medicine. *To Err is Human: Building a Safer Health System.* Washington, DC: National Academy Press, 1999.

Poll Question

An unintended injury to a patient defines:

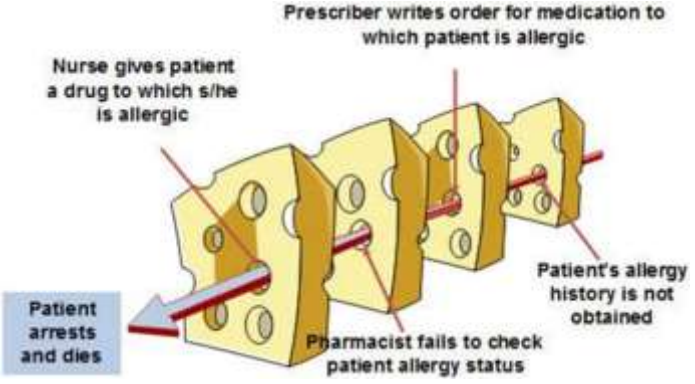
A. An adverse event.
B. A medical error.
C. A near miss.
D. Negligence.
E. My Friday afternoon clinic.

- Error: missing the nail
- Adverse event: hitting my thumb

Some Definitions

- **Adverse event**: unintended injury to a patient caused by the healthcare system.
- **Medical error**: failure of a planned action to be completed as intended.
- **Near miss**: an error that does not reach the patient or reaches the patient but does not result in injury.
- **Negligence**: failure to meet the standard of care expected of a qualified physician or care system.
- **Sentinel event**: adverse event resulting in the death of or serious injury to a patient.

How do errors result in adverse events?



James Reason's "Swiss Cheese" model of error causation. *Can J Surg* 2005;48(1):39-44.

How can M&M help?

- The traditional M&M conference is a natural foundation upon which to build a conference – and hopefully a culture – devoted to quality and safety.
- It can also help to satisfy some ACGME requirements!

What does the ACGME say?

- ACGME RRC Requirements 2014:
  - IV.A.5.c).(4) - systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement
  - IV.A.5.f).(5) - work in interprofessional teams to enhance patient safety and improve patient care quality
- ACGME Milestones 2014:
  - SBP-2: Emphasizes patient safety
  - PBLI-3: Improves systems in which the physician provides care

M&M in Residency Programs

- Ubiquitous in surgical residencies
- 90% of internal medicine residencies
- Two-thirds of family medicine residencies

Liu V. *Virtual Mentor* 2005;7(4).
Gillies RA et al. *Family Medicine* 2007;39(2):82-3.

Poll Question

Does your program have a regularly scheduled M&M conference?

A. Yes
B. No
C. I don't know.

M&M in Family Medicine Residencies

- Academic centers more likely than community hospitals to have M&M (82% vs 43%).
- Topics addressed:
  - Diagnostic challenges (29%)
  - Adverse events (26%)
  - Medical errors (17%)
  - Therapeutic interventions (15%)
  - Problems with healthcare delivery systems (11%)
- Systemic or educational changes as a result – 57%

Gillies RA et al. *Family Medicine* 2007;39(2):82-3.

Recent History of M&M at UIHC

- Until 2014-15 academic year: forum for interesting cases – diagnostic dilemmas, therapeutic debates, and “zebras.”
- In 2015-16 academic year: transitioned to a focus on quality improvement.

What's in a name?

We changed the title of the conference to reflect its new purpose:

"Morbidity and Mortality: Quality Improvement / Patient Safety"
or
"MMQIPS"

Old M&M	New M&M
Overview of the month/block by the senior	Common diagnoses, but systems errors
Rare or missed diagnoses	Take apart complex systems
Interesting cases	Look for ways to prevent errors
Emphasis on details of the case and final diagnosis	Identify a change to implement
Pearls regarding the cases presented	

New Format

- Goals:
  - Identify adverse events
  - Systematically analyze the adverse event and the processes leading up to it
  - Provide a safe, non-judgmental, privileged environment for frank discussion of potential errors
  - List all possible sources of medical error
  - Categorize possible errors and create a list of possible interventions
  - Choose an intervention – ideally, should be attainable and high-yield
  - Develop an action plan and identify a responsible party and time frame for reporting back

New Format

- Moderator provides follow up from previous M&M discussions
- Moderator briefly presents the case (less than 5 minutes)
- A fishbone diagram is projected
- Brainstorm errors that *could* occur in each category on the fishbone diagram (not necessarily what *did* occur)
- Discuss and reflect on the potential errors: was the error a systems error or a cognitive error; were the errors preventable; if preventable, how could they have been prevented?
- Create a list of recommendations using a "PICK" chart (four square chart with low-to-high payoff on the y-axis and easy-to-hard to implement on the x-axis).
- Choose one action item in the easy-high-payoff square to put in place to prevent the adverse event
- Assign a responsible party with the charge to implement the action item
- Keep an inventory for follow-up

The details of the case…

- Excruciating detail of the case will not be the focus of the M&M conference

Teflon for the doctor?

- Excoriating, roasting and otherwise damaging the health care providers involved is strictly forbidden.

Year One

- MMQI scheduled every 4 weeks
- Led by faculty physicians
- Emphasized fixing problem, not blame
- Cases from inpatient service, OB service and clinic
- Purposely limited case discussion
- Focused on brainstorming potential causes of adverse event or near miss
- Goal: to end each conference with a task that was deemed achievable and impactful

Feedback: Representative Sample

- This was a helpful way to look at a complex problem.
- Great open forum discussion to solving current issues.
- I hope that we are able to keep things moving in a positive direction with this approach.
- Good discussion, liked the new format. (*Many comments like this*)
- This format takes significant time and allows us to delve into one case in detail, which means that we miss out on discussion of other case.
- I think it was so successful because Dr. XX did it without putting any blame on anybody
- At times, morbidity is due to an individual and not a system.
- I do think that brainstorming issues and solutions should be kept more open for future M&Ms.
- I am uncertain about how helpful this format is.
- Would be useful to know if our ideas were ever followed through on.

Challenges

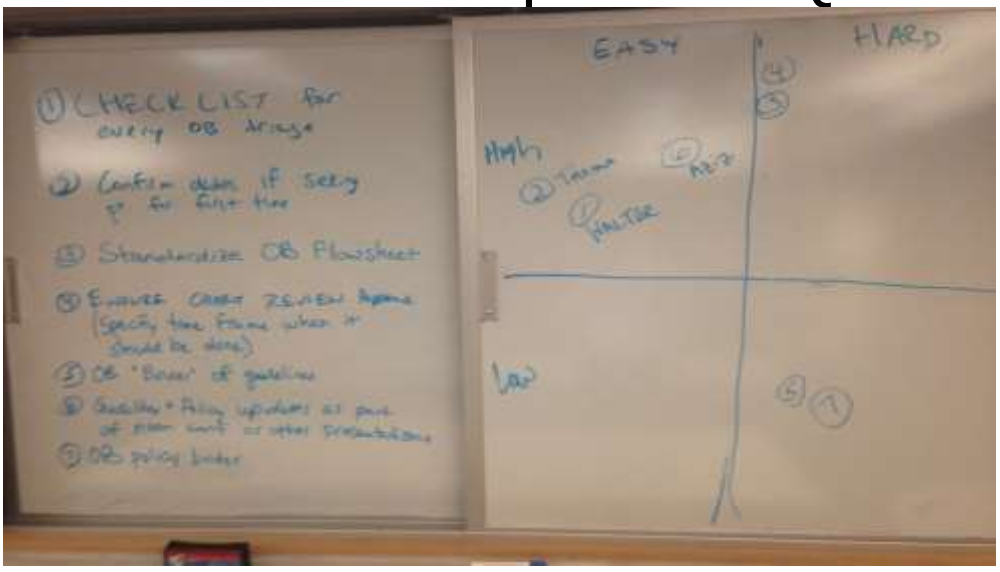
- Case-finding
- Steering group away from natural tendency toward curiosity regarding case details
- Creating a safe environment for physicians to disclose errors
- Facilitating brainstorming
- Branching out to other members of the healthcare team
- Accomplishing tasks decided upon at the end of the session
- Closing communication loop on tasks

Family Medicine Residency Morbidity and Mortality Quality Improvement Conference: Demonstration

April 1, 2020

Dr. Knowital

Review from past MMQI



Review from past MMQI

Opportunities

Plans

Ground rules for MMQI

Do:

- Participate with ideas for improvement, observations of what errors may have or could have occurred
- Brainstorm – no bad ideas
- Get involved – help determine what we can and should try to change; offer to lead change

Avoid:

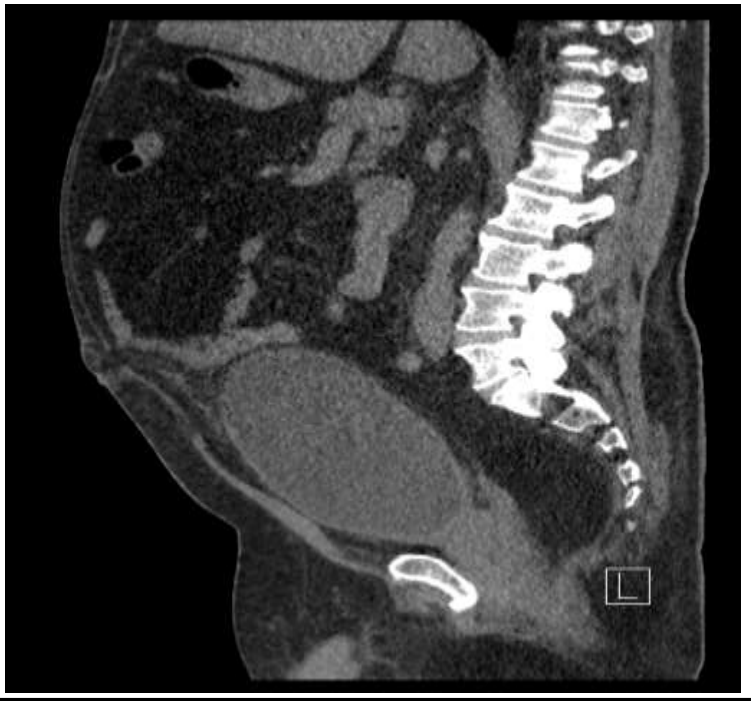
- Attacking – verbally, physically, mentally – the presenter or the persons/team involved in the care
- Dwelling on details of the case

Today's Case

- 11/29/14 – 60 year old male with CAD, CABG presented to UIHC Fam Med clinic to establish care (new MD) "needing med refills" – history had "BPH" and pt's tamsulosin dose was doubled
- 1/2/15 – returned with urinary symptoms, saw 1st MD's partner, dx'ed with diabetes
- 1/16/15 – better BG control on metformin but persistent dysuria, urgency self-treated with cranberry juice; terazosin added to tamsulosin
- 1/20/15 – urgent care – another MD – treated for UTI; noted inability to void more than "dribbling"

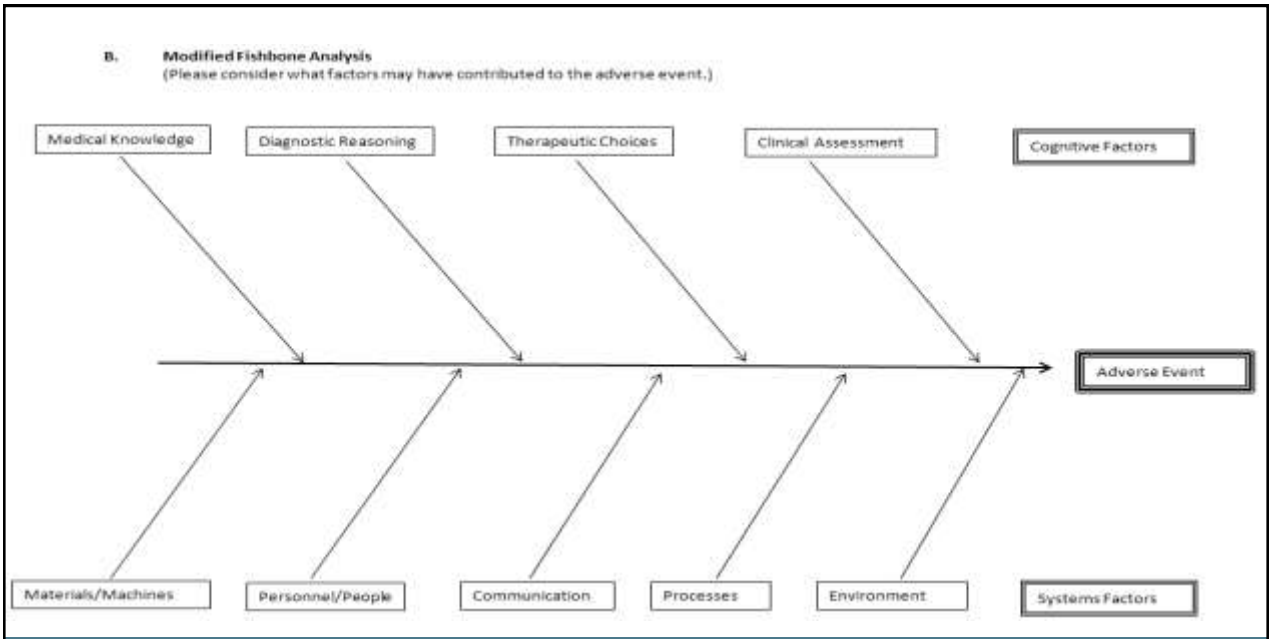
Today's case

- 1/23/15 - Admitted to Fam Med with AKI (Cr ~ 6, up from 0.8 on 1/2/15) and urethral obstruction.
- After cath, about 7.1 L of urine put out.
- Signs of pyelo on CT
- PSA 12; prostate large with hard nodule noted on exam



Clinical pearl(s)

- PSA and rectal exam are terrible screening tests for prostate cancer.
  - HOWEVER: in this case, they were used as ***diagnostic tests*** – a very different scenario.
- Don't avoid doing the uncomfortable, annoying, time-consuming, embarrassing, etc, exam when it's indicated.
- Terazosin + tamsulosin not likely to benefit BPH symptoms but could cause hypotension.



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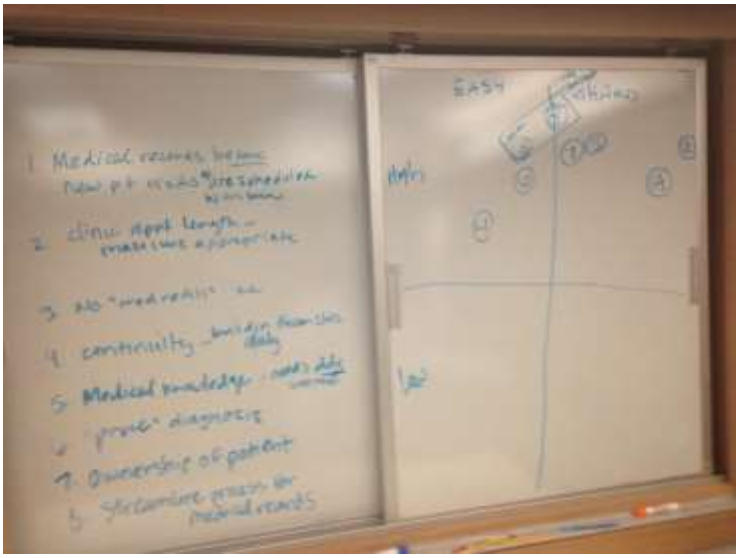
List of interventions and “PICK” Chart



C. Discussion & Reflection

1. Was there a medical error in the adverse event?
   Was that error preventable?

2. What health system forces contributed to the error or adverse event?
   How can those systems be changed to prevent a similar error in the future?

3. Was there a cognitive error that contributed to the error or adverse event?
   How would you address this?

4. Recommend ONE action item our institution can take to prevent such an adverse event in the future.
   Who should be involved in making this recommendation a reality?

5. Create a list of recommendations and a pick chart.

6. Keep inventory for each M&M or RCA with action items and person responsible.

What You Need to Make This Work

- A “champion” – faculty, resident or administrator – to push this forward
- A system for finding cases
- A system for tracking interventions/tasks/responsible parties
- A facilitator who will steer the conversation, avoid fixing blame, avoid dwelling on case details
- Time for your faculty and residents to buy into the new format

Poll Question

What will you do with this information when you leave here?

A. Change to a regularly scheduled conference similar to MMQIPS.
B. Continue our regularly scheduled conference similar to MMQIPS.
C. Continue our regularly scheduled traditional M&M conference.
D. Continue our current conference schedule, which does not have M&M, QI or PS elements.

During the break…

- Discuss / think about how you might implement the information you just heard.
- Fill out a session evaluation.

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