Restructuring Radiology Resident Morbidity and Mortality Conference: A New Approach to Promote Patient Safety through Creation of a Just Culture

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Introduction

Historically, physicians have been reluctant to discuss errors openly. One of the most powerful reasons that doctors hesitate to disclose mistakes is fear that they will be punished, either by the patient in the form of legal action or by their colleagues in the form of humiliation or persecution.[1] Richard Boothman, the Executive Director for Clinical Safety at The University of Michigan and a pioneer in developing the Michigan Model, has long been an advocate of shifting the culture of error disclosure away from one founded in fear toward one founded in accountability and patient safety. The basis of the Michigan Model is that "when a mishap or near-miss occurs, we're committed to confronting its causes in a blame-free way, and learning from it so that it doesn't happen again."[2] This model emphasizes how mistakes and near-misses should compel providers to ensure the errors are not recurring rather than punish the provider who disclosed the error.

In the spirit of The Michigan Model, the authors sought to create a Just Culture by restructuring the delivery of resident Morbidity and Mortality (M&M) conference. The changes to the conference are designed to emphasize individual resident accountability while acknowledging that we, and the system in which we work, are imperfect. Honest and open communication about the nature of the error and the measures which can be taken to prevent it from happening in the future are central tenants in the new style of M&M conference.[2, 3, 4]

Specific Aim

Aim 1

Uncouple mistakes and personal failure. Through the creation of a Just Culture, we hoped to create an environment where the discussion of missed cases and near misses was common place which will ultimately improve patient care.

Aim 2

Generate substantive Quality Improvement (QI) projects. Sharing misses can help identify areas where systems break down which can, in turn, identify sources of impactful QI projects. This serves the dual purpose of improving patient care and fulfilling an ACGME program requirement.

Initial Investigation

Residents present at annual M&M conference were straw polled prior to intervention to assess perception of Morbidity and Mortality conference frequency and utility

Pre intervention straw poll responses

- Overwhelming agreement that more frequent M&M conferences would be better
- Unanimous agreement that the potential from learning from prior errors is great

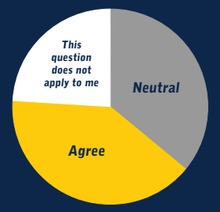
Proposed interventions

- Institute a quarterly Morbidity & Mortality conference which is directed at the resident level
- Have two senior residents prepared with five to six cases of their own misses. Show the case and describe the findings.
- Emphasis on the reason that the finding was missed, whether it was clinically significant, and a brief discussion (2-3 slides) of why it's important and what type of miss it was.
- Open up the case to discussion from audience members with respect to whether they have had the same issues arise and any potential solutions.

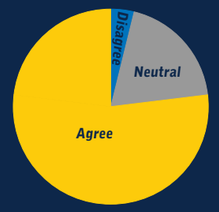
Preliminary Survey Data (n=26/42)

The frequency of M&M conferences should remain the same, increase or decrease.

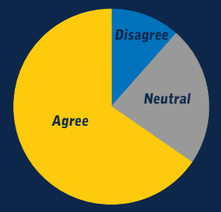
Second, third and fourth year residents: Compared to the prior missed case conference, the new morbidity and mortality conference is improved.



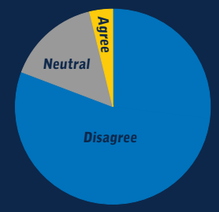
When residents take ownership of cases they miss, it decreases the perceived stigma of missing findings.



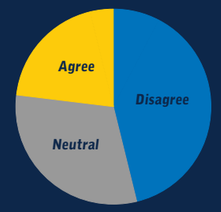
I worry about being judged harshly when I share my missed cases.



I doubt the competency of residents when they show me cases they missed.



I feel comfortable showing cases that I have missed.



Conclusion

Overall, the changes have been warmly received by the residents. There has been overwhelming departmental faculty support and several attending physicians have expressed interest in participating in the conference.

The vast majority of residents believe the change in the style of M&M presentation decreases the perceived stigma of a miss; this finding suggests that we are achieving our aim to create a Just Culture among trainees.

Future Aims

One unexpected finding has been the number of shared experiences among residents who have missed cases. We have identified several recurring issues from the presenting residents and reinforced by similar experiences among the residents in the audience.

These shared experiences identify areas where systems repeatedly break down, which lends itself to the creation of a repository of issues that can serve as targets for future substantive quality improvement projects.

	Old conference style	New conference style
How often is conference?	Annual	Quarterly
Does this satisfy the ACGME requirement?[5]	Yes	Yes
Who presents?	Chief residents	Any resident
How are the cases presented?	Anonymized missed cases	Residents present their own cases
What is the conference emphasis?	Radiographic findings	How the radiology read impacted patient outcome
What types of cases presented?	Diagnostic radiology exams	Diagnostic radiology exams, procedures, protocoling issues, errors of communication
Who discusses learning points?	Chief residents	Town hall style discussion facilitated by the presenting resident
Analysis of the systems errors which contributed to the mistake?	No	Yes
Analysis of source of error (i.e. cognitive, systemic, technical, etc)?	No	Yes

Typical Radiology M&M Agenda

1. *Goals and brief discussion of Just Culture*

2. *Case presentation*

- History
- Describe your role in the situation (i.e. reading case, performing procedure, talking with service, etc.)
- Describe what happened
- Patient outcome

3. *Identify error(s) and sources of error*

Potential sources of error:

- Cognitive (perceptual or interpretative)
- Systemic
- Technical
- Communication

June 2014

Annual M&M is recognized as being too infrequent to have significant educational impact and is identified as a missed opportunity for substantive learning.

PLAN

July 2014

Criteria were developed for a robust M&M conference format (Figure 2).

Feedback is solicited from Department faculty and residency leadership.

DO

September 2014

Authors conducted a straw poll of resident perceptions about the current M&M structure which indicated resident agreement with the hypothesis that an annual M&M is too infrequent.

New M&M conference format begins on 9/10/2014 with two of the authors presenting their missed cases.

STUDY

March 2015

Following three M&M conferences, residents were surveyed about their perceptions of the new conference format. Results were presented at a Department of Radiology Grand Rounds.

ACT

March 2015 - present

Creation of a repository of substantive QI projects which residents can access and draw upon as a basis for a QI project

Maintain conferences at a bimonthly basis

Foster just culture mentality on a daily basis with the ultimate goal of improving patient care

References

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Disclosure

The authors have no pertinent disclosures or conflicts of interest