# Identifying Medical Errors: An Interactive and Case-Based Workshop

Matthew Parrish, MS4 04-27-2022

BRODY SCHOOL OF MEDICINE

8 th Annual Medical Education Day



# Disclosures



## **Collaborative Team Members**

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  - Project Mentor and Advisor
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# Background

Medical errors are unfortunately common and often go unrecognized.

- ■*To Err is Human*, 1999
  - Estimated 98,000 annual US healthcare deaths were reportedly due to medical errors¹
- Annual deaths due to medical errors:
  - Upwards of 250,000 per year or approx. 10% of deaths in the US healthcare system<sup>2</sup>

### Rationale

- Medical education often lacks experience in <u>identifying</u> and <u>disclosing</u> medical errors
  - Students are shielded from disclosing errors to patients
- With little education, physicians are forced to rely on experience and trial and error

"...how can we help medical student gain experience with identifying and disclosing medical errors?"

# Project Learning Objectives

- 1. Identify medical errors in patient care across interprofessional settings
- Discuss the types of communication related errors that occur in the patient care setting
- 3. Review strategies and systems to prevent medical errors.
- 4. Develop skills and practice communication of medical errors to patients, families, as well as interprofessional.
- 5. Practice debriefing and discussing a medical error and the aftermath.



## Methods

Case-based workshop:

- 1. Didactics
- 2. Author created video simulation
- 3. Participant Role play



Likert Scale pre and post-surveys administered



Workshop piloted to 10, M4 students to assess feasibility



Workshop administered during Transitions to Residency course



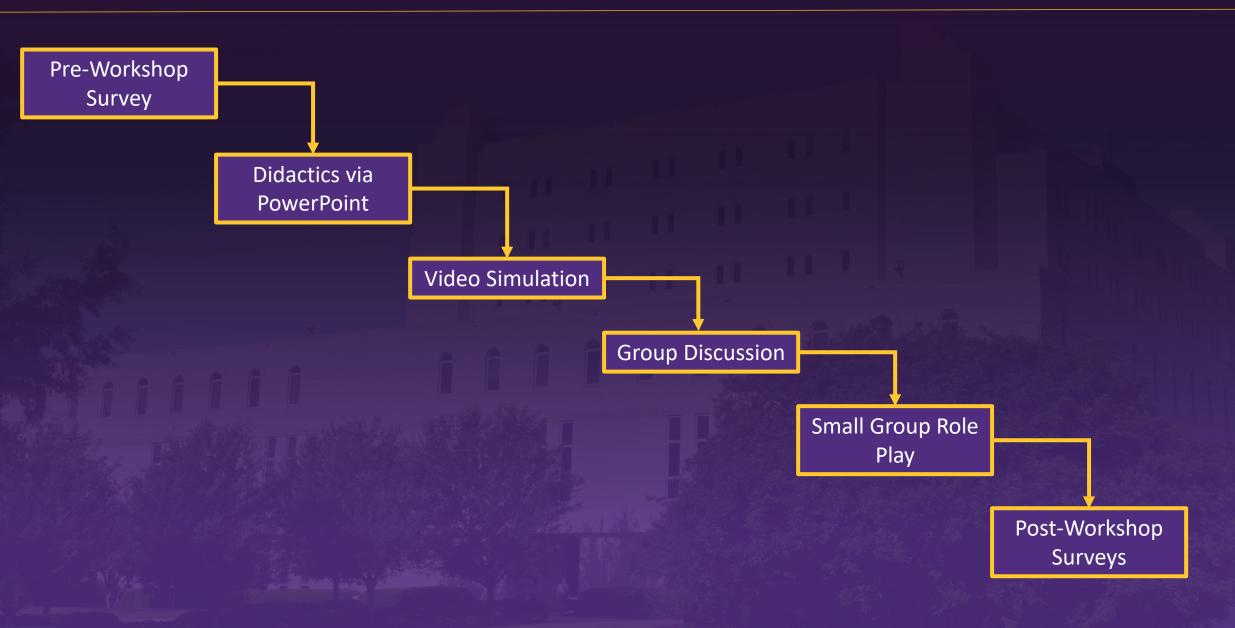
18 graduating M4 students completed the workshop

Feedback solicited:

- 1. Increase to 90 mins
- 2. Trim
  PowerPoint
- 3. More time for role play



# **Workshop Format**





## Results

| Table | 1 Average Li | kert Scal | e Responses |
|-------|--------------|-----------|-------------|
|-------|--------------|-----------|-------------|

| Prior to this<br>Workshop (N=28):  | Average response out of 5 <sup>a</sup> | After completion of this workshop (N=26):  | Average response out of 5 <sup>a</sup> | P-Value <sup>b</sup> |  |
|--|--|--|--|----------------------|--|
| How knowledgeable are you about the different types of medical errors?   | 2.89                                   | How knowledgeable are you about the different types of medical errors?   | 4.19                                   | <0.001               |  |
| How comfortable are you in disclosing medical errors to patients and their families?   | 2.46                                   | How comfortable are you in disclosing medical errors to patients and their families?                                     | 4                                      | <0.001               |  |
| After completing this workshop, I hope to be more knowledgeable and comfortable about identifying and disclosing medical errors. | 4.57                                   | After completing this workshop, I am more knowledgeable and comfortable about identifying and disclosing medical errors. | 4.42                                   | <0.001               |  |

<sup>&</sup>lt;sup>a</sup>5-point Likert Scale with 1 indicating not comfortable/no prior knowledge and 5 indicating extremely comfortable/Very knowledgeable

<sup>&</sup>lt;sup>b</sup>Two-sample T-Test use as N of pre-workshop survey is different from post-workshop survey.

## Results

| Table 2 | <b>Post-works</b> | hop Feed | lback Resp | onses |
|---------|-------------------|----------|------------|-------|
|         |                   |          |            |       |

| Survey Question (N=26)   | Average Response out of 5 <sup>a</sup> | Percent scoring 4 or 5 |
|--|--|------------------------|
| After this session, are you more comfortable in identifying patient errors?  | 4.42                                   | 96.15                  |
| Did this session increase your ability to disclose medical errors to patients?   | 4.35                                   | 92.31                  |
| Will you make changes to your practice based off of this Patient Safety session?   | 4.42                                   | 92.31                  |
| Do you feel more sessions centered around patient safety, identifying medical errors, and disclosing errors to patients should be incorporated into medical education? | 4.65                                   | 96.15                  |
| How beneficial was this session to your role as a physician in the future?   | 4.54                                   | 96.15                  |

<sup>&</sup>lt;sup>a</sup>5-point Likert Scale with 1 indicating strongly disagree and 5 indicating strongly agree

#### Discussion

- Workshop was developed out of the need for more patient safety and quality improvement related medical education
  - Mandated by the LCME and ACGME
- Student knowledge and comfort with disclosing a patient error improved
  - Practice disclosing errors was best benefit
- Participants generally felt that the workshop was relevant to their role as future physicians
- Participants noted that they would make a change to their practice after this workshop.

### **Lessons Learned**

- Students are eager to practice!
- Using multiple learning modalities is key.
- Disclosing medical errors takes practice.
- Apologizing effectively is a skill to be **learned** and **practiced**.
- Four components of an effective apology include:
  - 1. Acknowledgment
  - 2. Explanation
  - 3. Expression of remorse, shame, and humility
  - 4. Reparation

# Next Steps

■ Boost numbers

- Expansion to include to residents
- Curriculum implementation needs assessment?

#### Citations

- 1. Institute of Medicine (US) Committee on Quality of Health Care in America, Kohn LT, Corrigan JM, Donaldson MS, eds. *To Err is Human: Building a Safer Health System*. Washington (DC): National Academies Press (US); 2000.
- 2. Makary MA, Daniel M. *Medical error-the third leading cause of death in the US*. BMJ. 2016;353:i2139. Published 2016 May 3. doi:10.1136/bmj.i2139

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