Identifying Medical Errors: An Interactive and Case-Based Workshop

Cassandra Bradby[1], MD, Matthew Parrish[2], Jennifer Stahl[3], MD

[1]ECU Department of Emergency Medicine, [2]The Brody School of Medicine, [3]ECU Division of Critical Care, Department of Internal Medicine

Matthew Parrish
The Brody School of Medicine
East Carolina University
Greenville, North Carolina 27858
parrishm18@students.ecu.edu

BACKGROUND

- Medical errors are common and often go unrecognized.
- Medical education often lacks experience in identifying and disclosing medical errors.
- We sought to create a workshop that provided participants the opportunity to examine, identify, and disclose medical errors through a case-based example.
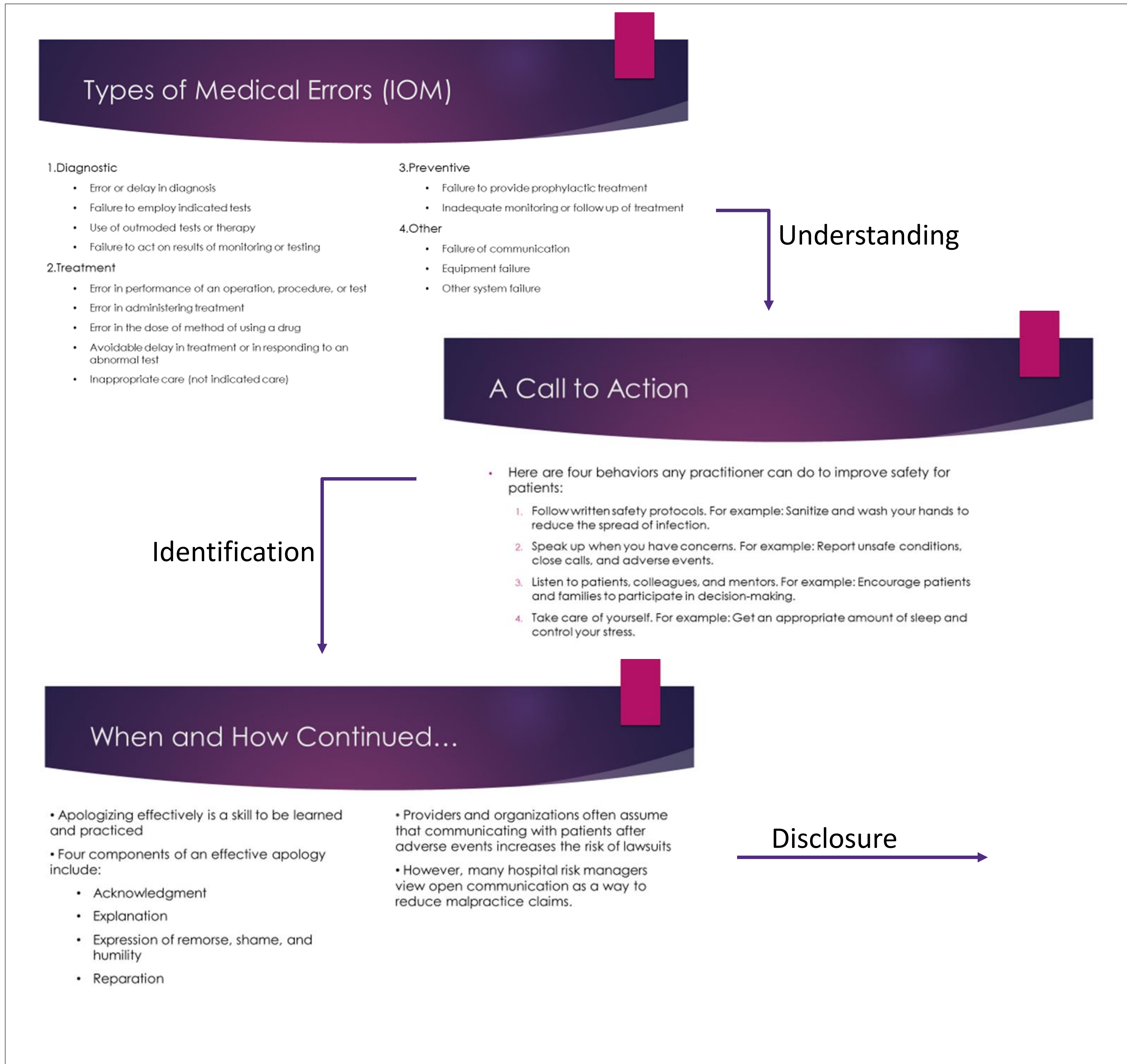
METHODS

- Case based workshop created that centered on identification and disclosing of medical errors.
- Workshop included didactics, video simulation, and participant role play.
- Video simulation is owned by authors and is based on a real case that occurred at our facility
- Participants took pre and post-session surveys regarding ability and comfort with identifying and disclosing medical errors.
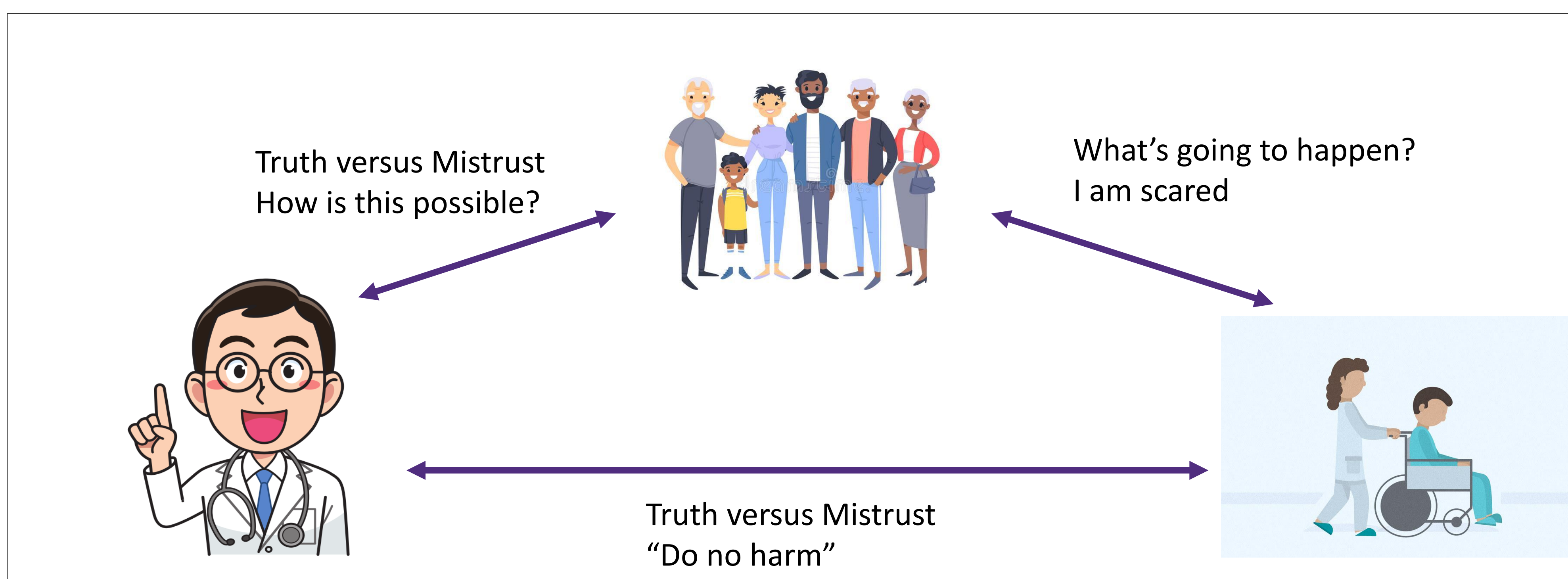
WORKSHOP CASE OUTLINE

- 54 yo M with h/o aortic valve replacement on Coumadin, presents to ED with his wife after a tooth extraction for evaluation of bleeding from his dental extraction site.
- Pressure with gauze was attempted at home without stopping the bleed the bleeding.
- The patient did not stop his Coumadin due to his valve replacement
- The resident suggested giving Vitamin K to reverse the Coumadin in order to stop the bleeding.
- Attending thought since he had his valve replaced better to opt to use topically applied TXA at the extraction site
- TXA order goes into the EHR correctly with the assistance of the pharmacist and administration note
- Nursing side MAR does not reflect this note
- TXA is given by mouth instead of topically because nursing can't see the comment section of the order in the MAR.
- The TXA was a subtherapeutic dose, but there is no way for anyone to know exactly how this is going to effect the heart valve.

FRAMEWORK FOR IDENTIFICATION AND DISCLOSURE

Types of Medical Errors (IOM)

1. Diagnostic
   - Error or delay in diagnosis
   - Failure to employ indicated tests
   - Use of outmoded tests or therapy
   - Failure to act on results of monitoring or testing

2. Treatment
   - Error in performance of an operation, procedure, or test
   - Error in administering treatment
   - Error in the dose of method of using a drug
   - Avoidable delay in treatment or in responding to an abnormal test
   - Inappropriate care (not indicated care)

3. Preventive
   - Failure to provide prophylactic treatment
   - Inadequate monitoring or follow up of treatment

4. Other
   - Failure of communication
   - Equipment failure
   - Other system failure

Understanding

A Call to Action

- Here are four behaviors any practitioner can do to improve safety for patients:
  1. Follow written safety protocols. For example: Sanitize and wash your hands to reduce the spread of infection.
  2. Speak up when you have concerns. For example: Report unsafe conditions, close calls, and adverse events.
  3. Listen to patients, colleagues, and mentors. For example: Encourage patients and families to participate in decision-making.
  4. Take care of yourself. For example: Get an appropriate amount of sleep and control your stress.

Identification

When and How Continued...

- Apologizing effectively is a skill to be learned and practiced
- Four components of an effective apology include:
  - Acknowledgment
  - Explanation
  - Expression of remorse, shame, and humility
  - Reparation

- Providers and organizations often assume that communicating with patients after adverse events increases the risk of lawsuits
- However, many hospital risk managers view open communication as a way to reduce malpractice claims.

Disclosure

COMMON DYNAMIC OF MEDICAL ERROR DISCLOSURE

Truth versus Mistrust
How is this possible?

What's going to happen?
I am scared

Truth versus Mistrust
"Do no harm"

RESULTS

Table 1 Average Likert Scale Responses

Prior to this Workshop (N=28):	Avg. response out of 5[a]	After workshop (N=26):	Avg. response out of 5[a]	P-Value[b]
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

[a]5-point Likert Scale with 1 indicating not comfortable/no prior knowledge and 5 indicating extremely comfortable/Very knowledgeable

[b]Two-sample T-Test use as N of pre-workshop survey is different from post-workshop survey.

DISCUSSION

- 28 fourth year medical students attended workshop
- Well received by medical students, this feasible case-based workshop offers an opportunity to address an important part of medical training, identification and disclosure of medical errors.
- Results suggest that student knowledge and comfort with disclosing a patient error improved.
- Medical students generally felt that the workshop was relevant to their role as future physician.

REFERENCES

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
3. McDonough KA, White AA, Odegard PS, Shannon SE. Interprofessional Error Disclosure Training for Medical, Nursing, Pharmacy, Dental, and Physician Assistant Students. *MedEdPORTAL*. 2017;13:10606. Published 2017 Jul 21. doi:10.15766/mep_2374-8265.10606 May W, Wood B. Disclosing Medical Errors to Patients. *MedEdPORTAL*. 2017;13:10606. Published 2010 April 2. https://doi.org/10.15766/mep_2374-8265.1692