

# Outpatient Safety Rounds:

Retooling the morbidity and mortality conference  
and your medical error curriculum

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UPMC St Margaret Family Medicine Residency Program

5/8/18

**No disclosures**

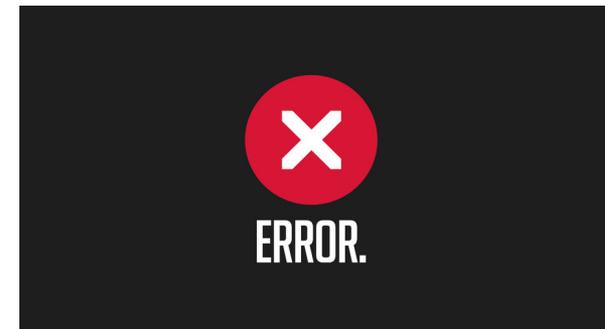
# Learning Objectives

Active participants will be able to:

- **Describe 2 models** of reviewing medical errors
  - Root cause analysis
  - National Coordinating Council for Medication Error Reporting and Preventions (NCC MERC) algorithm
- **Apply** those models to **real-life** outpatient safety cases
- Begin to **create a outpatient safety curriculum** in your own institution using the toolbox provided

# Medical Errors Curriculum

ERROR



# Patient Safety Curriculum

# Safety is important to the ACGME

## VI.A.1.a) Patient Safety

### VI.A.1.a).(1) Culture of Safety

*A culture of safety requires continuous identification of vulnerabilities and a willingness to transparently deal with them. An effective organization has formal mechanisms to assess the knowledge, skills, and attitudes of its personnel toward safety in order to identify areas for improvement.*

VI.A.1.a).(1).(a) The program, its faculty, residents, and fellows must actively participate in patient safety systems and contribute to a culture of safety. (Core)

VI.A.1.a).(1).(b) The program must have a structure that promotes safe, interprofessional, team-based care. (Core)

### VI.A.1.a).(2) Education on Patient Safety

Programs must provide formal educational activities that promote patient safety-related goals, tools, and techniques. (Core)

### VI.A.1.a).(3) Patient Safety Events

*Reporting, investigation, and follow-up of adverse events, near misses, and unsafe conditions are pivotal mechanisms for improving patient safety, and are essential for the success of any patient safety program. Feedback and experiential learning are essential to developing true competence in the ability to identify causes and institute sustainable systems-based changes to ameliorate patient safety vulnerabilities.*

VI.A.1.a).(3).(a) Residents, fellows, faculty members, and other clinical staff members must:

VI.A.1.a).(3).(a).(i) know their responsibilities in reporting patient safety events at the clinical site; (Core)

VI.A.1.a).(3).(a).(ii) know how to report patient safety events, including near misses, at the clinical site; and, (Core)

VI.A.1.a).(3).(a).(iii) be provided with summary information of their institution's patient safety reports. (Core)

VI.A.1.a).(3).(b) Residents must participate as team members in real and/or simulated interprofessional clinical patient safety activities, such as root cause analyses or other activities that include analysis, as well as formulation and implementation of actions. (Core)

### VI.A.1.a).(4) Resident Education and Experience in Disclosure of Adverse Events

*Patient-centered care requires patients, and when appropriate families, to be apprised of clinical situations that affect them, including adverse events. This is an important skill for faculty physicians to model, and for residents to develop and apply.*

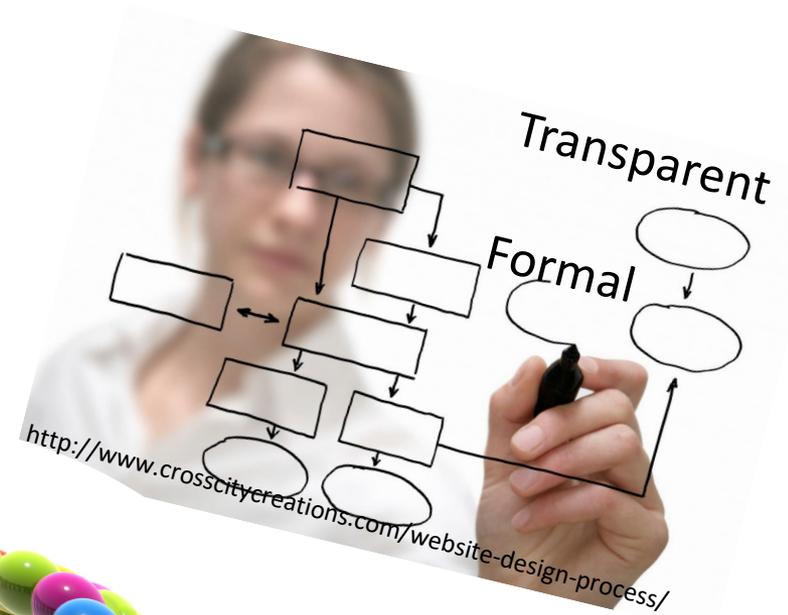
VI.A.1.a).(4).(a) All residents must receive training in how to disclose adverse events to patients and families. (Core)

VI.A.1.a).(4).(b) Residents should have the opportunity to participate in the disclosure of patient safety events, real or simulated. (Detail)

IV.A.5.f).(5) work in interprofessional teams to enhance patient safety and improve patient care quality; and, (Outcome)

IV.A.5.f).(6) participate in identifying system errors and implementing potential systems solutions.

# ACGME HIGHLIGHTS



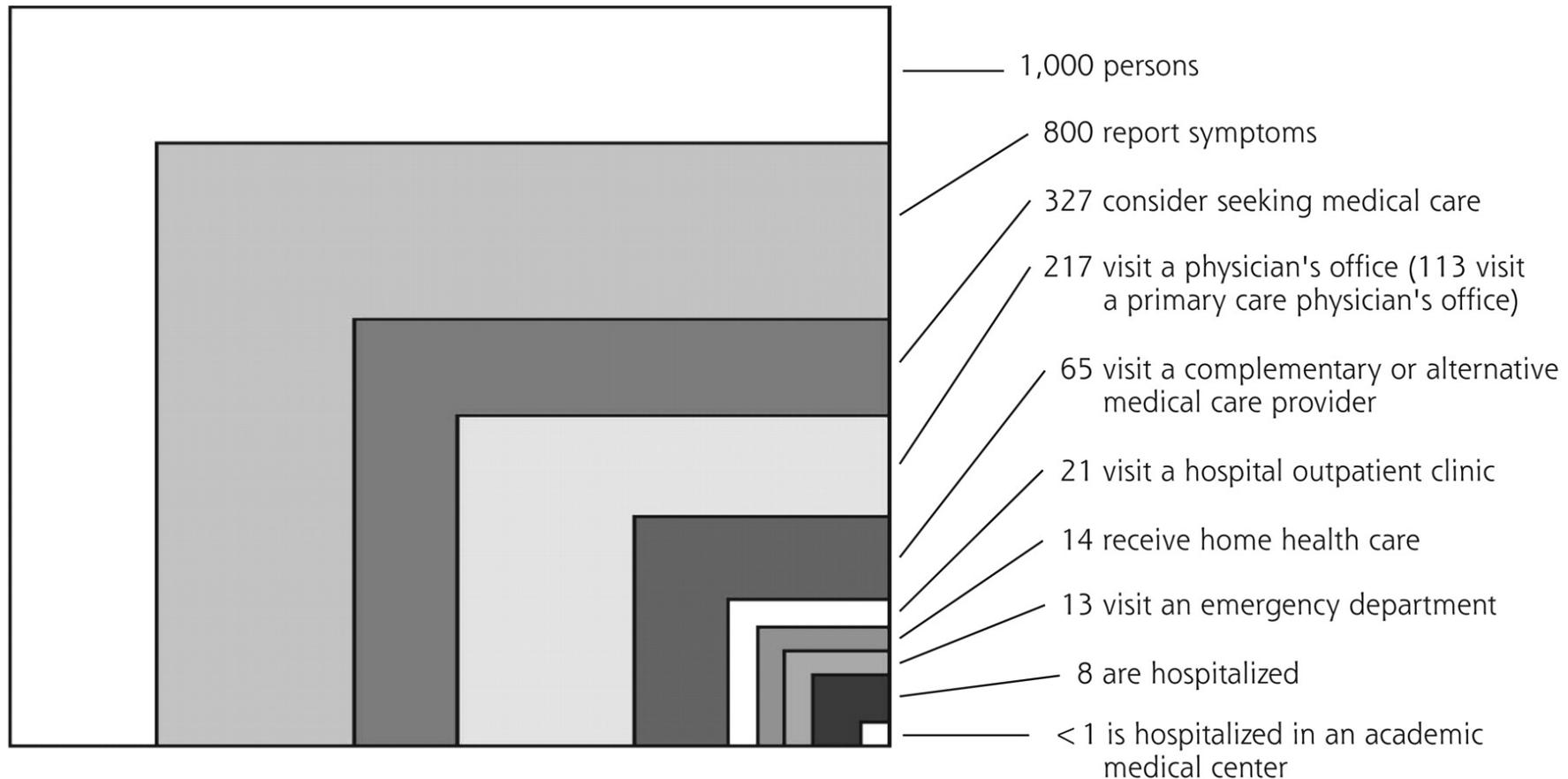
Team



# Improving Ambulatory Patient Safety: The Role of Family Medicine

Melly Goodell, MD

(Fam Med 2017; 49(2): 152-4.)



N Engl J Med 2001; 344:2021-2025

DOI: 10.1056/NEJM200106283442611

# Outpatient Safety Rounds (OPSR)

1. Promotes a culture of safety
2. A curriculum to formally address **outpatient** medical errors

# OPSR General Guidelines

- Case Based format
- Self initiated
- Safe space
- Non-punitive
- Protected legally
- Not criticism, focus on appraisal
- Improve systems
- Improve patient care

# Determining Cases

- Institute of Medicine:
  - “Improve patient safety by recognizing the need for participation in voluntary error identification and reporting”
- What circumstances led **reasonable people** to make **reasonable decisions** that resulted in an undesirable outcome?

# Just Culture: A Foundation for Balanced Accountability and Patient Safety

Philip G. Boysen II, MD, MBA, FACP, FCCP, FCCM

*The Ochsner Journal* 13:400–406, 2013

## ABSTRACT

**Background:** The framework of a just culture ensures balanced accountability for both individuals and the organization responsible for designing and improving systems in the workplace. Engineering principles and human factors analysis influence the design of these systems so they are safe and reliable.

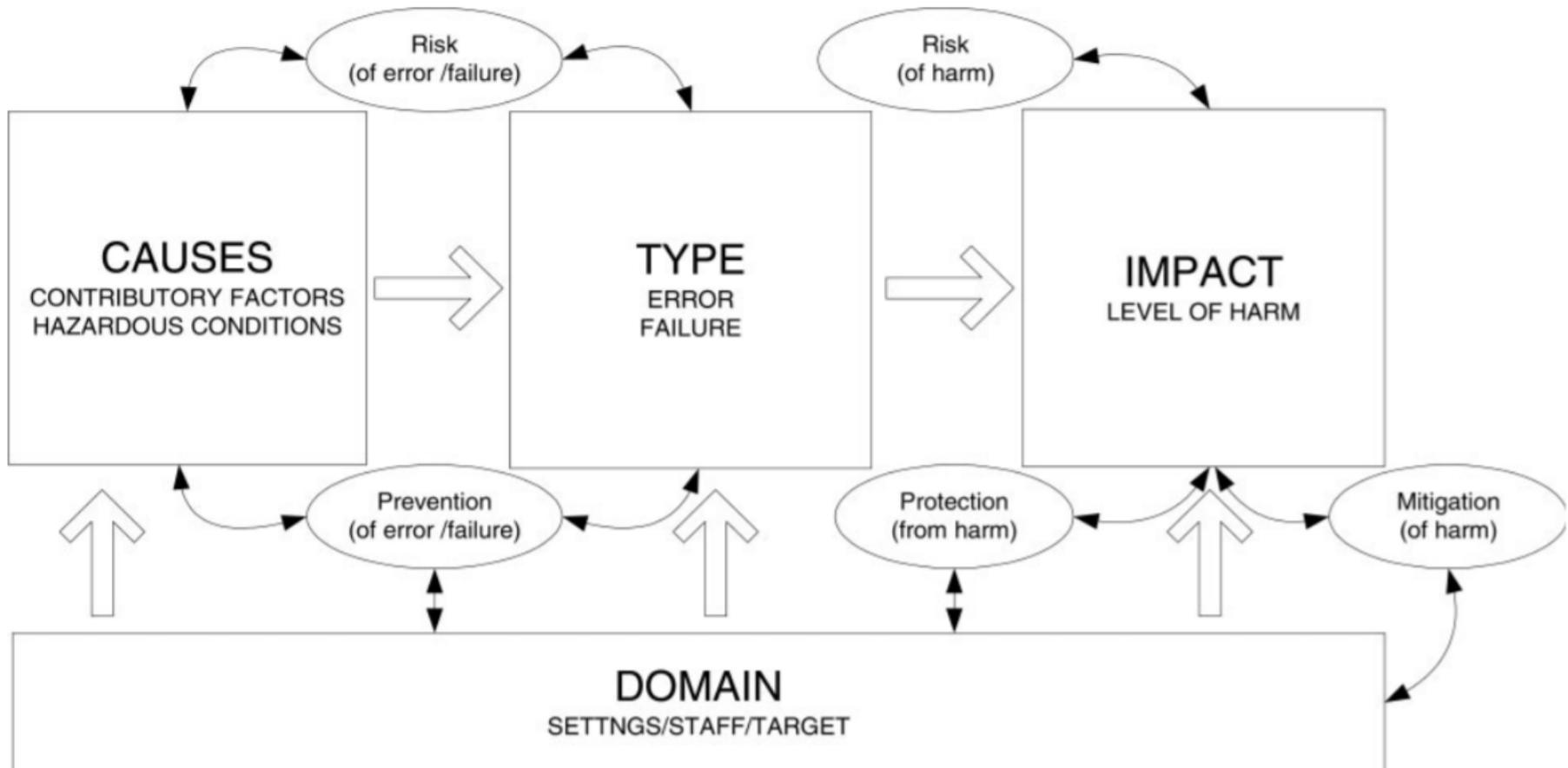
**Methods:** Approaches for improving patient safety introduced here are (1) analysis of error, (2) specific tools to enhance safety, and (3) outcome engineering.

**Conclusion:** The just culture is a learning culture that is constantly improving and oriented toward patient safety.

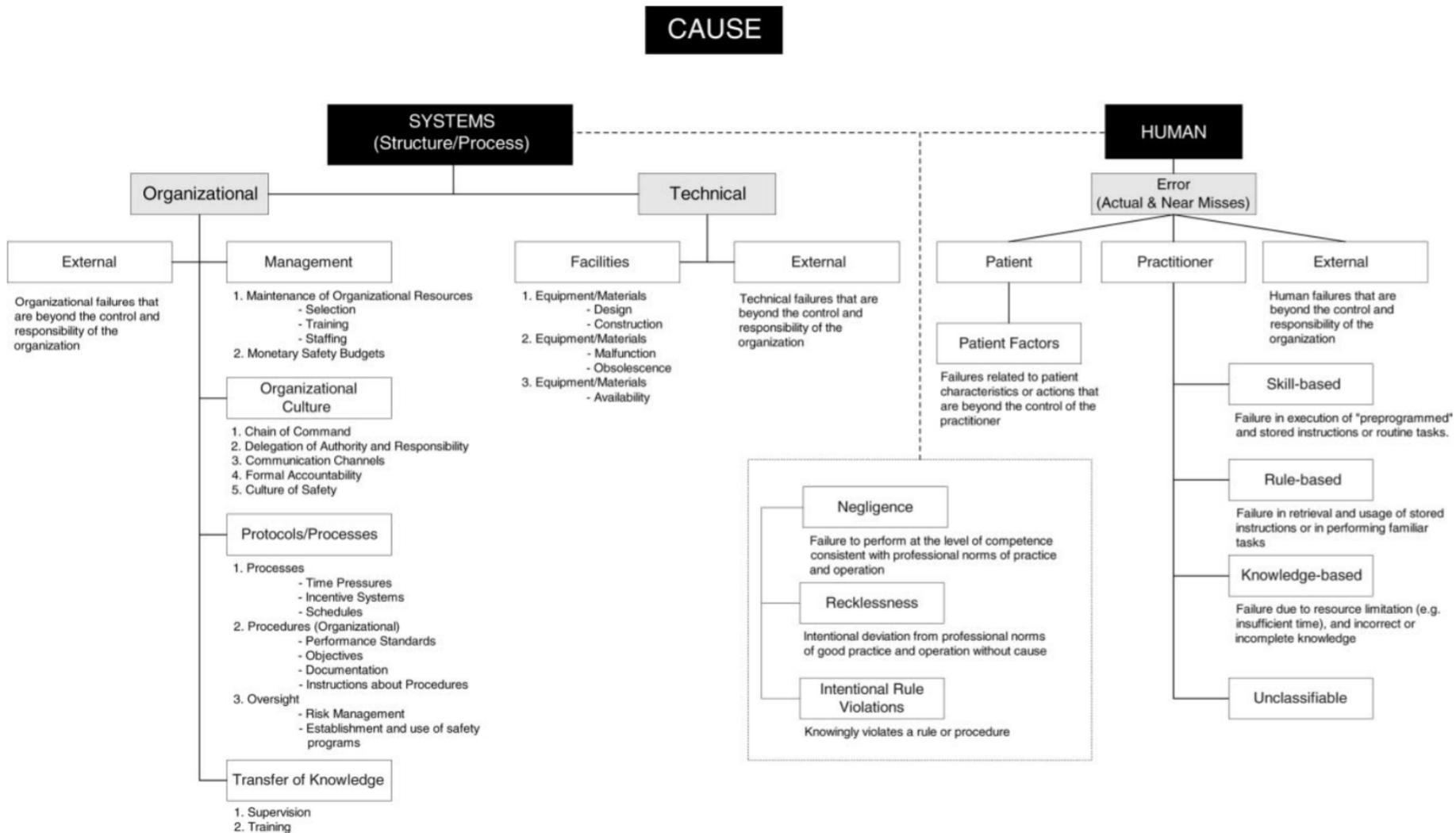
# Approaches to Error Analysis

- JCAHO Analytical Framework
- Root Cause Analysis/5 Whys
- National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP) Model

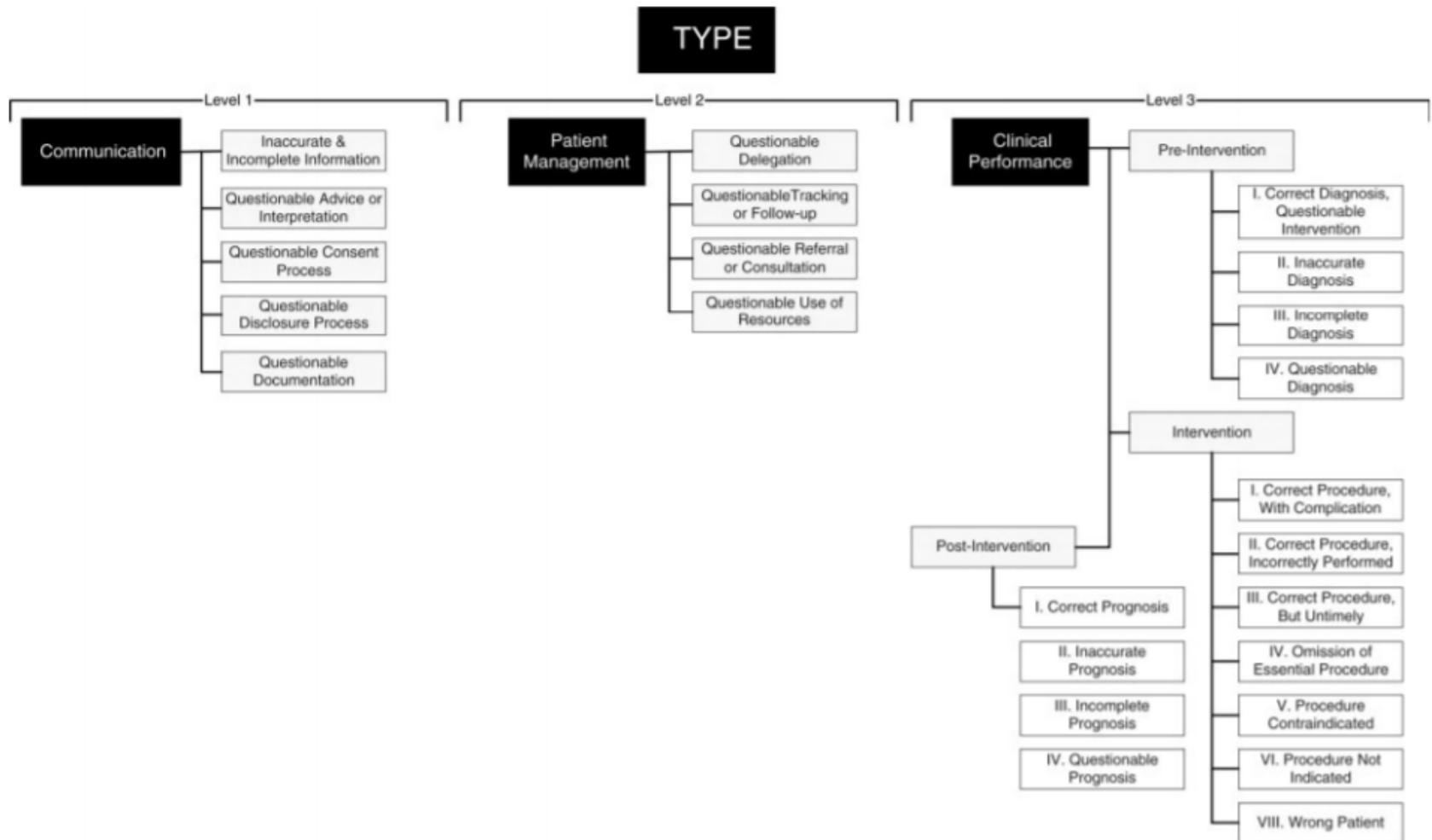
# Analytical framework of the JCAHO patient safety event taxonomy



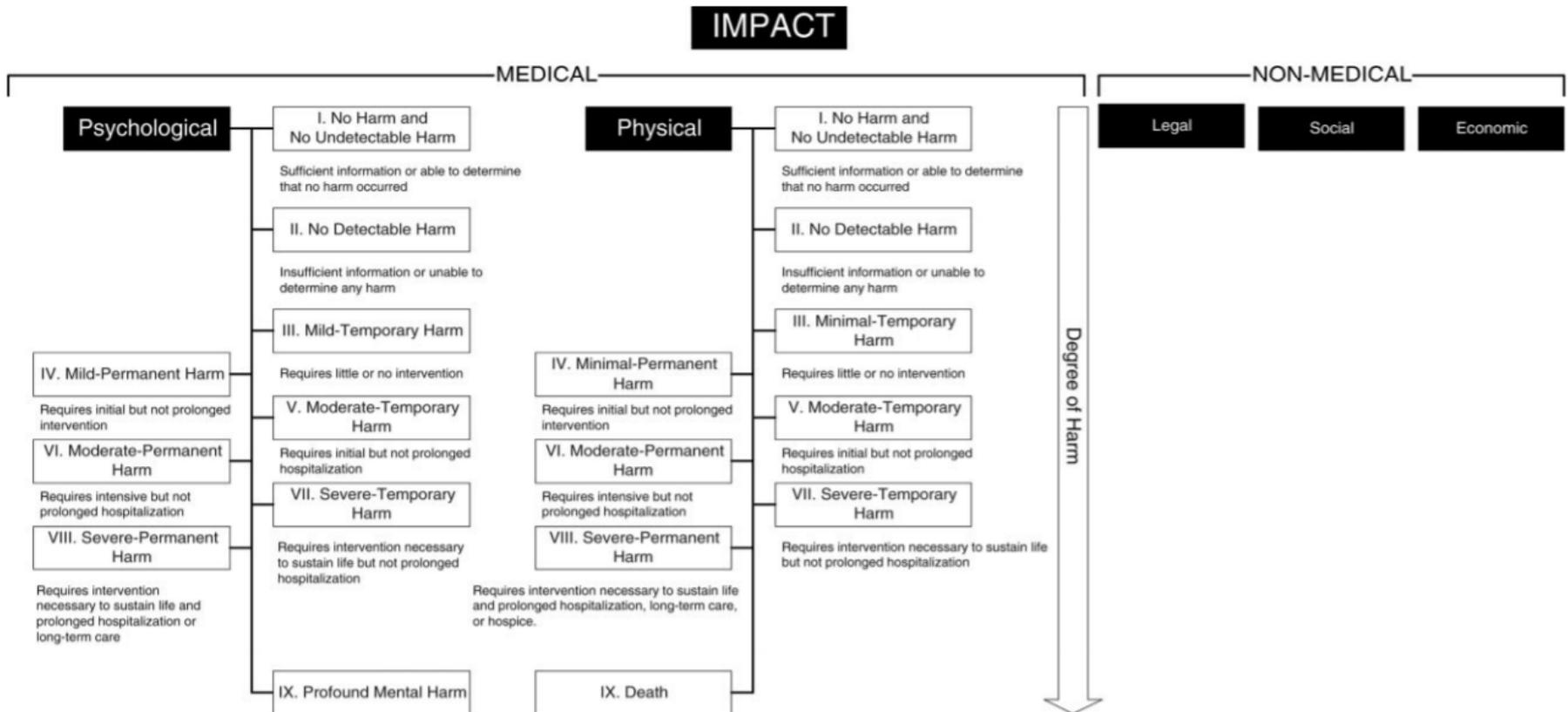
# Analytical framework of the JCAHO patient safety event taxonomy



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# Analytical framework of the JCAHO patient safety event taxonomy



```
graph TD; Cause[Cause] --> Type[Type]; Type --> Impact[Impact];
```

Cause

- Systems
- Human

Type

- Communication
- Pt Management
- Clinical Performance

Impact

- Medical
- Non-Medical

# Root Cause/5 Whys

**EVENT. What happened?** Define the problem as an *event*:

**STRUCTURE. Why is it happening?** What are the tangible and intangible structures determining the results we see?

# Patient KS

55 year-old female with partial quadraplegia since 1997 C5-T2 (s/p ependymoma removal) and has been wheelchair bound since (insensate below nipple)



<https://www.shutterstock.com/search/cartoon+wheelchair>  
shutterstock.com 349781456

PMH:

- Chronic indwelling foley catheter
- Recurrent VTE
- R renal hematoma
- Left hydronephrosis requiring emergent nephrectomy and splenectomy

# Saturday

Patient Email



UPMC ST MARGARET NEW KENSINGTON FAMILY HEALTH CENTER  
3/26/2016

Conversation: Non-urgent medical question .....

(Newest Message First)

March 20, 2016

“I have that mucus cough again. The other day, I was coughing as my daughter was putting the hoyer sling on me. I slid off the bed but since I was attached to the hoyer, I didn't fall the whole way down but my ankle twisted against the floor. I had it xrayed and it is chipped. Now I am taking otc Mucinex. I have a UTI again and have a script for **nitrofurantoin**.

**This is day 3 and my urine is still murky. Can you recommend something else? I usually take cipro.**

Also you can pick a cholesterol med for me. I was on niacin before that caused severe flushing.”

# Monday

Triage -

Pt called

Asking for Cipro

States that still coughing

Passing around house

Mucous sometimes white, sometimes green

Sounds very hoarse on phone

Pt at \*\*\*\_\*\*\*\_\*\*\*\*\*

Called and LMOM (left message on machine) later during the day

# Tuesday

Triage -

Pts daughter called

Went to ER

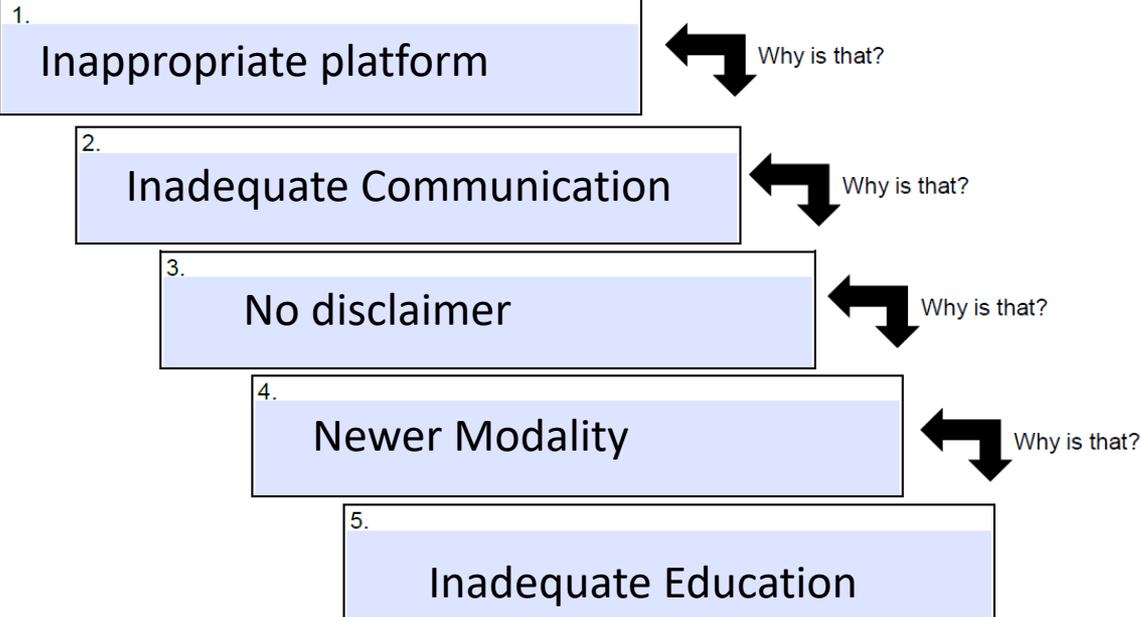
Being admitted to [Outside Hospital] with UTI

# Root Cause/5 Whys

**EVENT. What happened?** Define the problem as an *event*:

Delayed diagnosis leading to hospitalization

**STRUCTURE. Why is it happening?** What are the tangible and intangible structures determining the results we see?



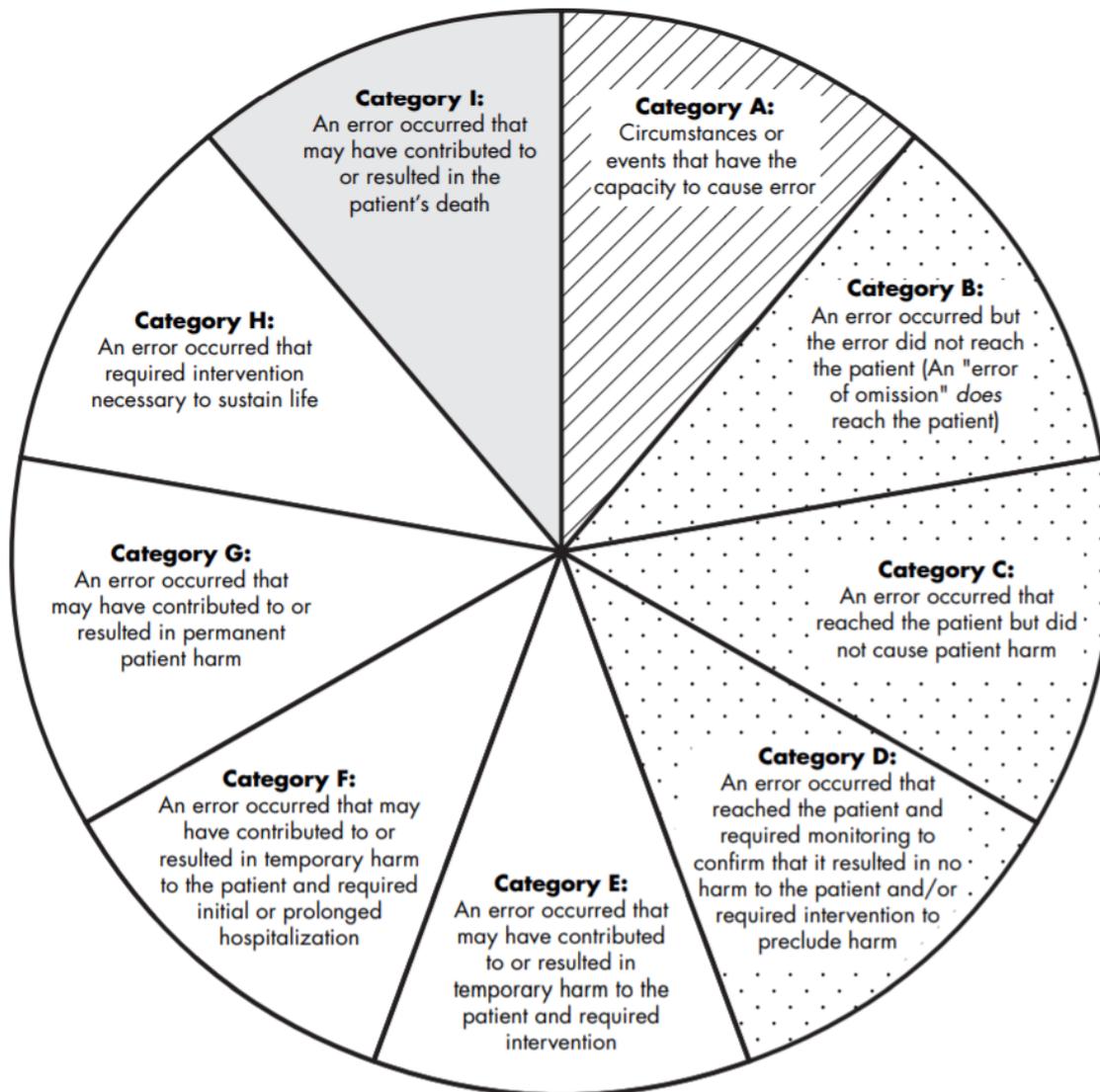
**ACTION. What are the implications for action?** What can you do to change the results?

Educate the patient on appropriate use of EHR  
Communication

# Implications for Action

- Making patients aware of electronic messaging appropriateness
- "Please be advised that MyUPMC is meant for non-urgent communication. If you have a more pressing need, please call the office/on-call physician"
- *"For life threatening illnesses or emergencies, please call 911 or present to your nearest Emergency Room."*

# National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP) Model



-  No Error
-  Error, No Harm
-  Error, Harm
-  Error, Death

## Definitions

### Harm

Impairment of the physical, emotional, or psychological function or structure of the body and/or pain resulting therefrom.

### Monitoring

To observe or record relevant physiological or psychological signs.

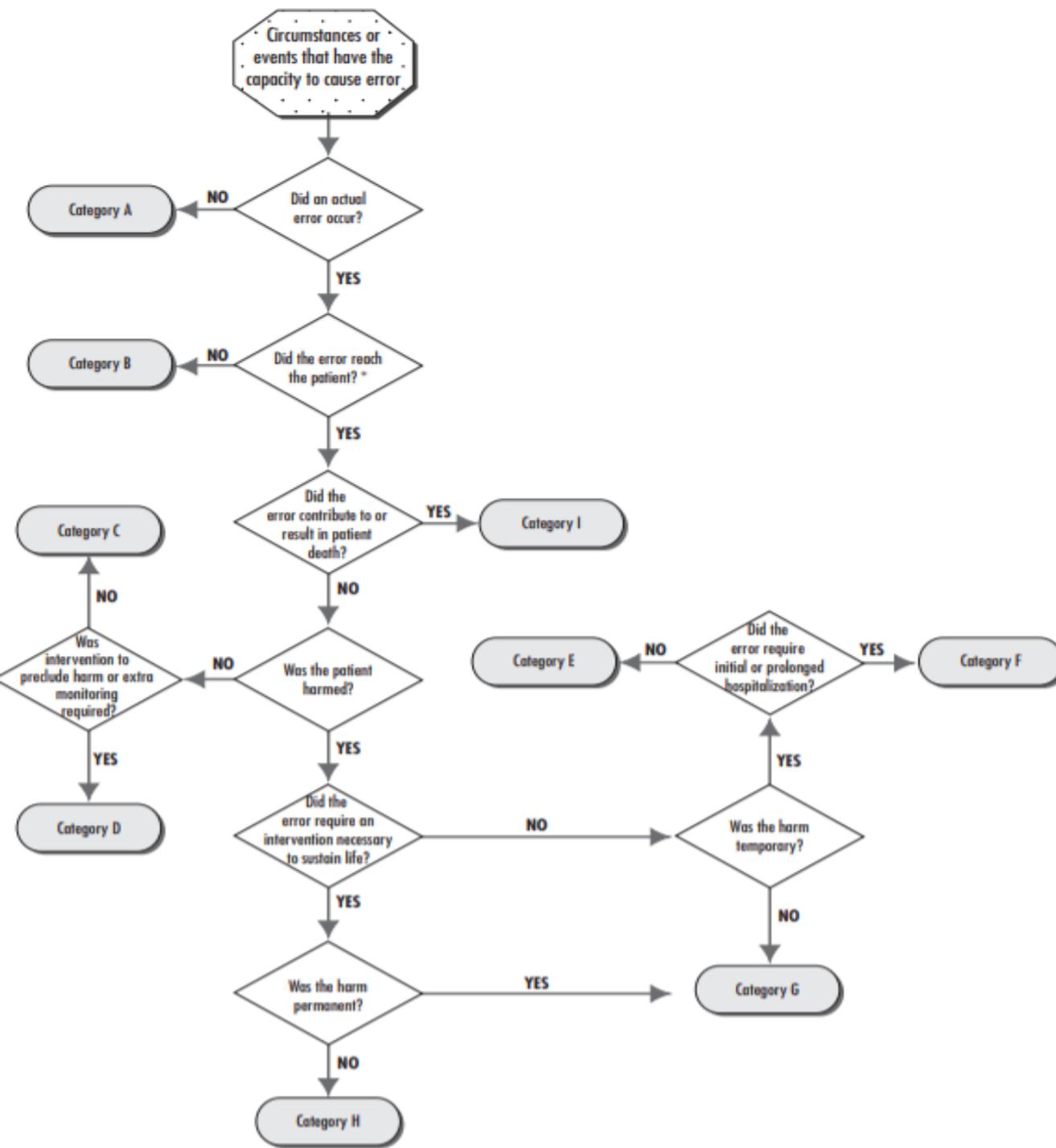
### Intervention

May include change in therapy or active medical/surgical treatment.

### Intervention Necessary to Sustain Life

Includes cardiovascular and respiratory support (e.g., CPR, defibrillation, intubation, etc.)

# NCC MERP Index for Categorizing Medication Errors Algorithm



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Impairment of the physical, emotional, or psychological function or structure of the body and/or pain resulting therefrom.

## Monitoring

To observe or record relevant physiological or psychological signs.

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May include change in therapy or active medical/surgical treatment.

## Intervention Necessary to Sustain Life

Includes cardiovascular and respiratory support (e.g., CPR, defibrillation, intubation, etc.)

\*An error of omission does reach the patient.

# Patient SH

31yo primigravida

History of bulimia

B+/Ab-

Negative serologies

1-hr glucola: 69

Very supportive partner



## Prenatal Vitals

Enc. Date	Reading			Weight	Edema	Fundal		Mvmt
	Date	GA	BP			Height	FHR	
12/27/17	12/27/17	34w2d	114/80	155 lb (70.3 kg)	1+ Trace	33	125	Pres
11/10/17	11/10/17	27w4d	110/72	143 lb (64.9 kg)	None	26	130s	Pres
9/29/17	9/29/17	21w4d	108/66	136 lb (61.7 kg)	None	21cm	130s/140s	Pres
8/28/17	8/28/17	17w0d	108/70	131 lb (59.4 kg)	None		130	
7/13/17	7/13/17	10w3d	110/76	126 lb (57.2 kg)	None		135 (visually)	
6/23/17	6/23/17	7w4d	104/82	126 lb 2 oz (57.2 kg)				
6/2/17	6/2/17	4w4d	100/70	126 lb 6.4 oz (57.3 kg)				

## Prenatal Vitals

Enc. Date	Reading		BP	Weight	Edema	Fundal		Mvmt
	Date	GA				Height	FHR	
1/11/18	1/11/18	36w3d	128/78	155 lb 8 oz (70.5 kg)				
12/27/17	12/27/17	34w2d	114/80	155 lb (70.3 kg)	1+ Trace	33	125	Pres
11/10/17	11/10/17	27w4d	110/72	143 lb (64.9 kg)	None	26	130s	Pres
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## Prenatal Vitals

Enc. Date	Reading		BP	Weight	Edema	Fundal		Mvmt
	Date	GA				Height	FHR	
1/25/18	1/25/18	38w3d	110/84	157 lb (71.2 kg)	None	34	140	Pres
1/11/18	1/11/18	36w3d	128/78	155 lb 8 oz (70.5 kg)				
12/27/17	12/27/17	34w2d	114/80	155 lb (70.3 kg)	1+ Trace	33	125	Pres
11/10/17	11/10/17	27w4d	110/72	143 lb (64.9 kg)	None	26	130s	Pres
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## Prenatal Vitals

Enc. Date	Reading Date	GA	BP	Weight	Edema	Fundal Height	FHR	Mvmt
2/2/18	2/2/18	39w4d	112/76	157 lb (71.2 kg)	None	34		Pres
1/25/18	1/25/18	38w3d	110/84	157 lb (71.2 kg)	None	34	140	Pres
1/11/18	1/11/18	36w3d	128/78	155 lb 8 oz (70.5 kg)				
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## BIOPHYSICAL PROFILE

Breathing: 2  
Movement: 2  
Tone: 2  
Amniotic Fluid: 2  
Total: 8 out of 8

## REPORT COMMENTS

Neither ovary is visualized on today's ultrasound examination.

A Doppler study is performed. The umbilical artery S/D ratio of 3.46 is elevated for the patient's gestational age.

A preliminary report was previously generated.

## IMPRESSION

1. 40W 1D INTRAUTERINE GESTATION BASED ON A LAST MENSTRUAL PERIOD OF 05/01/2017 (EDC: 02/05/2018)
2. SMALL FOR GESTATIONAL AGE FETUS
3. BIOPHYSICAL PROFILE SCORE: 8/8
4. ELEVATED UMBILICAL ARTERY DOPPLER STUDY

# Labor...

Admitted right after ultrasound

C-section for fetal intolerance the next day

2816g, baby boy

Now doing really well



How reliable is fundal height?

Original Article

# Fundal height: a useful screening tool for fetal growth?

Teresa N. Sparks, Yvonne W. Cheng, Blake McLaughlin, Tania F. Esakoff & Aaron B. Caughey 

Pages 708-712 | Received 04 May 2010, Accepted 11 Aug 2010, Published online: 17 Sep 2010

 Download citation  <https://doi.org/10.3109/14767058.2010.516285>

 Full Article

 Figures & data

 References

 Citations

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## Abstract

*Objective.* To determine the utility of fundal height in screening for small-for-gestational-age (SGA) and large-for-gestational-age (LGA) neonates at term.

*Study design.* This was a retrospective cohort study of 3627 women at University of California, San Francisco from 2002 to 2006 with term, singleton pregnancies specifically examining the 448 who had third trimester ultrasounds for size unequal to dates by fundal height.  $\chi^2$  analyses determined the sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV) of fundal height

People &

Article

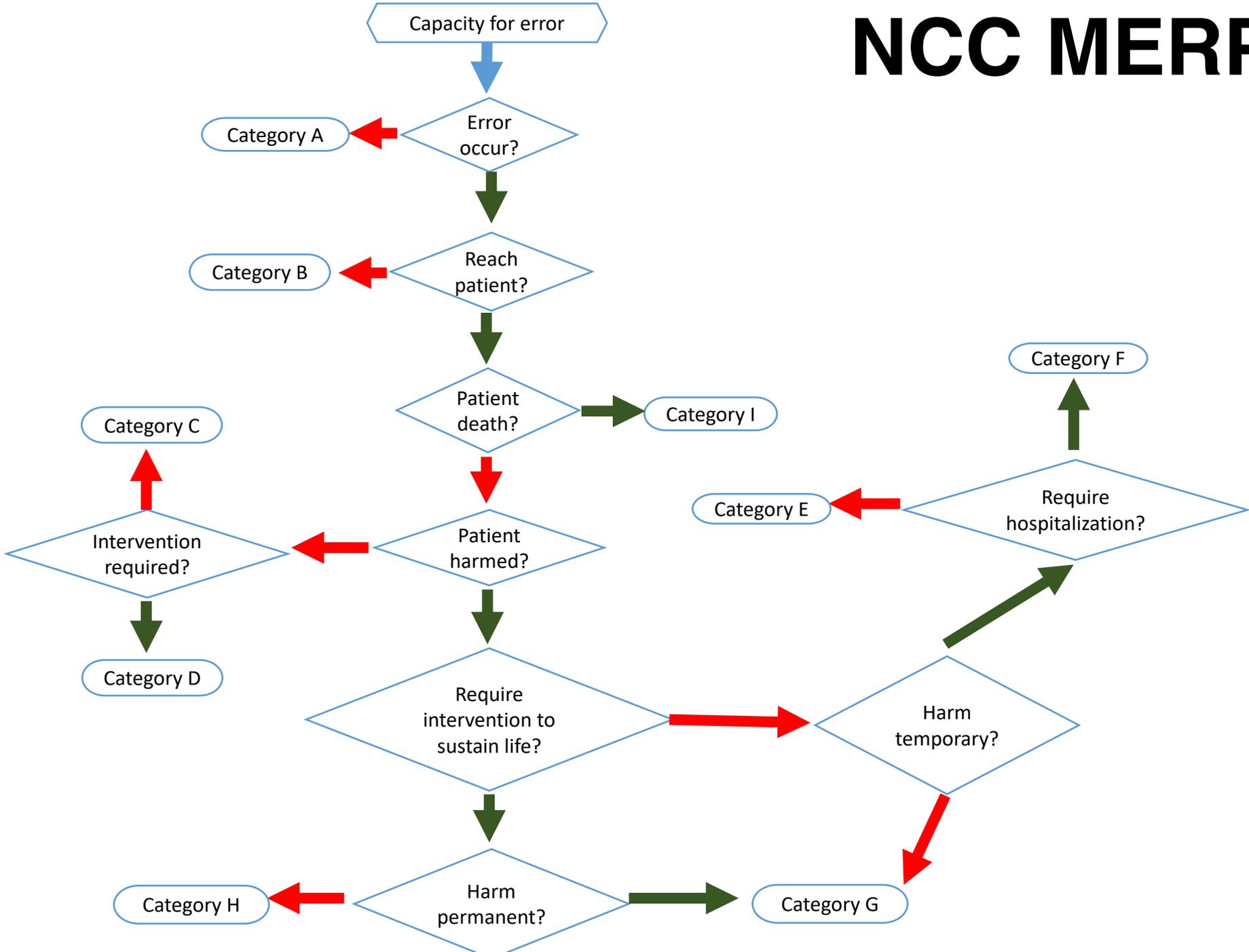
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tool for  
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# Optimism bias

- I think I “dropped”
- What about the OB documentation?



# NCC MERP

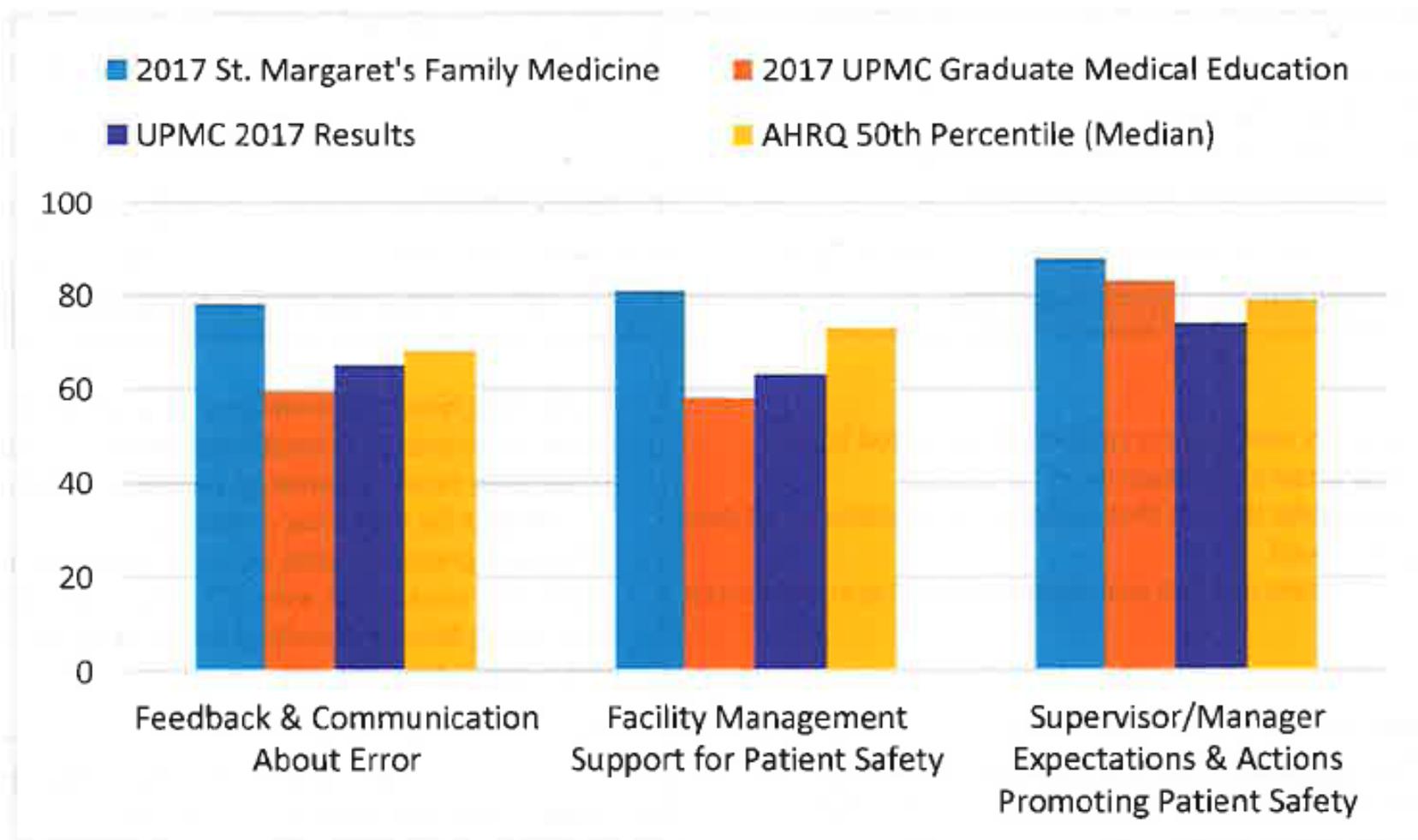


**“What circumstances led reasonable people to make reasonable decisions that resulted in an undesirable outcome?”**

- First OPSR was 1-14-16
- Consistently every 1-2 months since July 2016
- 33 Residents/Fellows present
- 9 Faculty Member Present

# Impact

## UPMC Culture of Safety Actionable Areas of Focus



## Program Specific Patient Safety Statistics

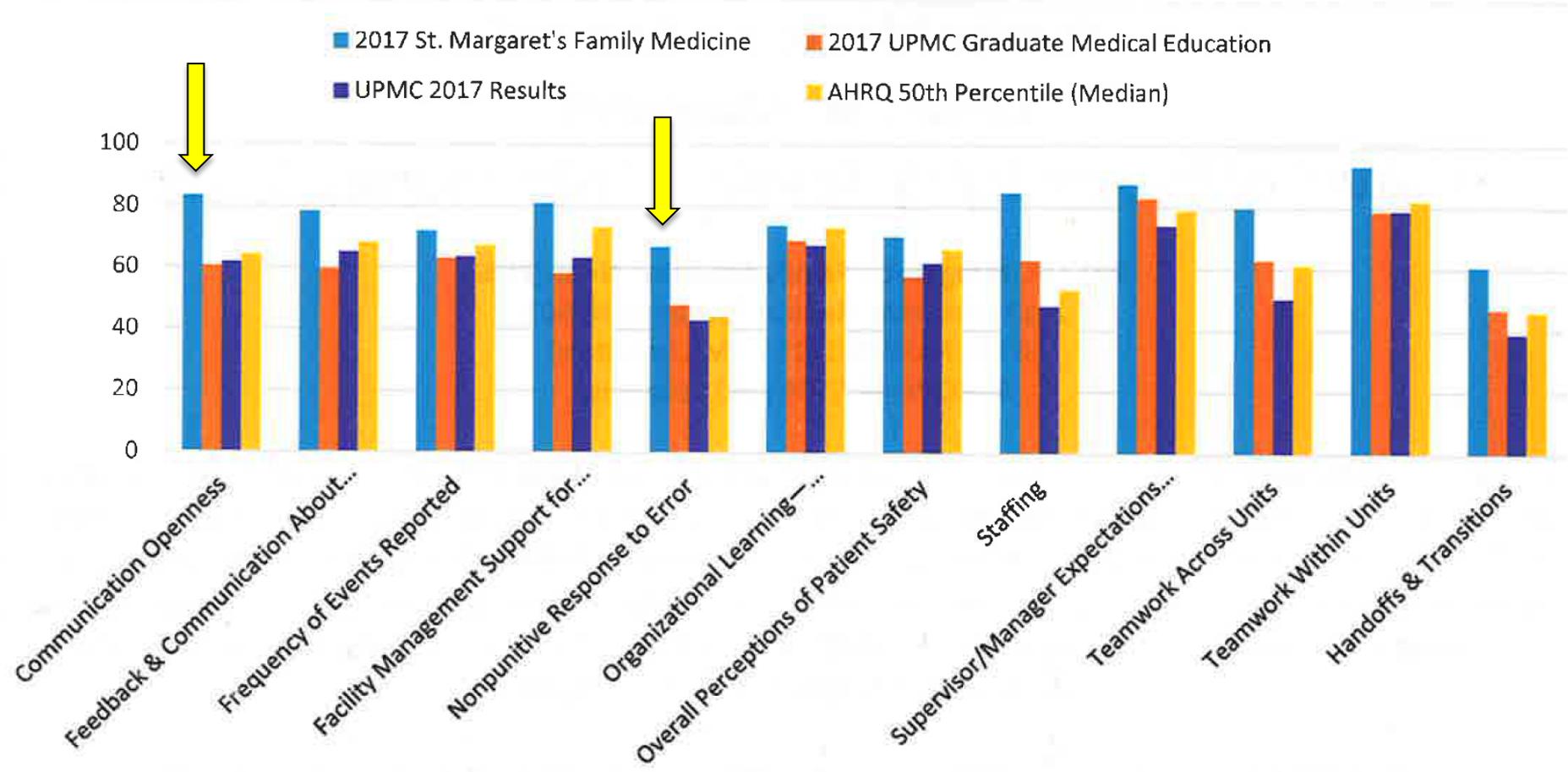
***% of respondents in your program who have NOT reported any patient safety events in the past 12 months.***

**30.8%**

***% of respondents in your program who say that patient safety is discussed during rotations.***

**96.2%\***

\*Responses rated Agree and Strongly Agree from the survey



# Approaches to implementing Outpatient Safety Rounds

1. Find time
2. Encourage "Just Culture"
3. Have faculty present
4. Utilize data
5. Use error models for analyzing outcomes
6. Facilitate change
7. Close the loop

Please evaluate this presentation using the conference mobile app! Simply click on the "clipboard" icon  on the presentation page.

# References

- Chang, et al. “The JCAHO patient safety event taxonomy: a standardized terminology and classification schema for near misses and adverse events” International Journal for Quality in Health Care 2005; Volume 17, Number 2: pp. 95–105 10.1093/intqhc/mzi021
- [https://www.acgme.org/Portals/0/PFAssets/bulletin/bulletin5\\_08.pdf](https://www.acgme.org/Portals/0/PFAssets/bulletin/bulletin5_08.pdf)
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- <http://www.stfm.org/Portals/49/Documents/FMPDF/FamilyMedicineVol49Issue2Goodell155.pdf>
- <http://www.ihl.org/resources/Pages/Tools/5-Whys-Finding-the-Root-Cause.aspx>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3776518/>
- <http://www.nccmerp.org/sites/default/files/algorBW2001-06-12.pdf>
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Active participants will be able to:

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