A “PEaRL” of Support and Cooperative Learning:
Shifting the Sands of the Dreaded Morbidity and Mortality Conferenc

Innovations in Healthcare Education Research Conference
September 21, 2022

Sarah Yale, MD, Kelsey Porada, MA, Patrick McCarthy, MD, MME
Section of Hospital Medicine, Department of Pediatrics

IDENTIFYING A NEED

Background

Providers are impacted by unanticipated and/or poor patient outcomes

Situation

Providers may have emotional responses, including:

- Guilt
- Anger
- Frustration
- Psychological distress
- Fear

Assessment

Peer support and facilitated conversations about unanticipated and/or poor patient outcomes and medical error are needed

Traditional morbidity and mortality (M&M) conferences focus on the critique of care delivered and may intensify these feelings

RECOMMENDATION FOR INTERVENTION

Knowing the potential negative effects on the wellbeing of healthcare providers **AT ALL LEVELS OF MEDICAL TRAINING,** provision of a “safe space” is needed for:

- open discussion
- learning from shared experiences
- psychological support

A “PEaRL” was hatched!

GOALS

The “Pediatric Event Review and Learning” (PEaRL) curriculum was developed to:

- Discuss unanticipated and/or poor outcomes in a psychologically safe environment
- Teach patient safety principles in a case-based format
- Provide support after unanticipated and/or poor patient outcomes

SETTING

- Section of Pediatric Hospital Medicine (PHM) at the Medical College of Wisconsin
  - Over 5,000 annual admissions at Children's Wisconsin
  - Robust teaching service
  - 36 physicians, 11 advanced practice providers and 4 fellows
- Sessions were incorporated into existing conference time slots to facilitate attendance

DEVELOPMENT & IMPLEMENTATION

The PEaRL curriculum was introduced to the PHM section with specific guidance about the conference series overarching goals and ground rules.

PEaRL is:	PEaRL is NOT:
• Confidential • A safe environment for individuals to share and learn together • A shared learning model for patient safety topics using real patient cases	• An M&M • An official “system review” • Punitive • Judgmental

LEARNING OBJECTIVES

1. Define and understand terms such as patient safety, adverse event, near miss, root cause analysis and healthcare failure mode and effects analysis.
2. Identify the potential for error within the system.
3. Recognize and define key types of medical errors.
4. Describe the different types of cognitive errors and how these are intertwined with system errors.
5. Demonstrate the ability to use a diagnostic time-out.
6. Demonstrate effective teamwork skills involved in error analysis.
7. Draw and illustrate a written diagram of an Ichikawa fishbone.
8. Identify areas in their own practice and local system that can be changed to improve the processes and outcomes of care.
9. Develop an action plan for the prevention of error in the future.
10. Demonstrate collaborative teamwork skills using a shared learning model with peers

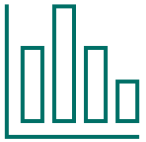
DEVELOPMENT & IMPLEMENTATION

Goals and objectives were created → Instruction methods were devised → Created a presenters' guide → Recruited presenters → Preparatory sessions were conducted with the PEaRL director → Sessions were held

Sessions were not recorded to preserve confidentiality and attend to psychological safety

ASSESSMENT

- 12-month pilot of the curriculum was conducted
- Surveys were conduced at baseline and 6- and 12-months post-implementation
- Results were analyzed using descriptive and comparative statistics



Baseline Survey

- Please select your role within the Section of Hospital Medicine. *(Attending, Fellow, APP, other)*

- Please indicate your level of agreement with the following statements

  (Strongly disagree = 1, Disagree = 2, Agree = 3, Strongly Agree = 4, Uncertain/Unable to Evaluate)

  - Reviewing patient cases with unanticipated and/or poor outcomes should be an important aspect of my job in pediatric hospital medicine.
  - Patient cases with an unanticipated and/or poor patient outcome affect my mood, functioning and/or well-being.
  - Discussing patient cases with unanticipated and/or poor outcomes helps with my coping and wellness.
  - I feel supported after an unanticipated and/or poor patient outcome.
  - Discussing unanticipated and/or poor patient outcomes helps our section to learn about important patient safety principles.
  - Discussing other section members' unanticipated and/or poor patient cases is valuable for my learning.
  - The Section of Hospital Medicine currently provides a safe environment to discuss patient cases with unanticipated and/or poor outcomes.

- What do you feel is important to include in the PEaRL sessions? *(free text)*

Additional Questions Added to 6- and 12-month follow-up surveys:

- Currently PEaRL conference sessions are quarterly. I think these sessions should occur *(more frequently, less frequently, stay quarterly)*
- What are strengths of the PEaRL Conference Series? *(free text)*
- What can be improved for the PEaRL Conference Series moving forward? *(free text)*
- Please provide any additional comments. *(free text)*

RESULTS

At baseline, **100%** of respondents felt that a new standardized process to discuss and review unanticipated and/or poor patient outcomes was needed

(74% strongly agreed and 26% agreed)

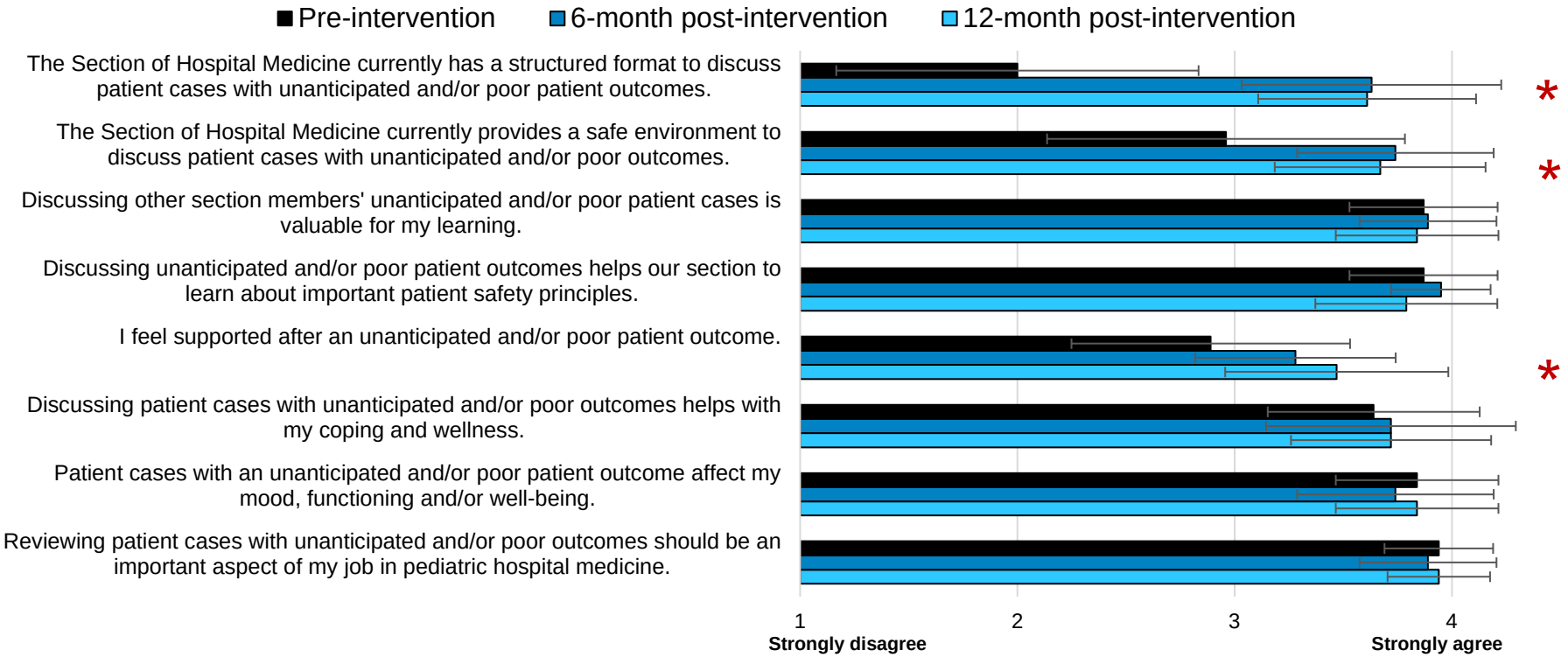
RESULTS

Demographics

	Baseline		6-month		12-month	
	N	%	N	%	N	%
Hospitalist Attending	23	74%	14	74%	15	79%
Hospitalist Fellow	2	7%	2	11%	2	11%
Hospitalist APP	5	16%	2	11%	2	11%
Other (please specify)	1	3%	1	5%	0	0%

RESULTS

Survey Responses



RESULTS

Survey Items with Significant Increases

	Pre-intervention	6-months post-intervention		12-months post-intervention	
	Mean (SD)	Mean (SD)	*p*	Mean (SD)	*p*
The Section of Hospital Medicine currently has a structured format to discuss patient cases with unanticipated and/or poor patient outcomes.	2.00 (0.83)	3.63 (0.60)	<.001	3.61 (0.50)	<.001
The Section of Hospital Medicine currently provides a safe environment to discuss patient cases with unanticipated and/or poor outcomes.	2.96 (0.82)	3.74 (0.45)	<.001	3.67 (0.49)	0.003
I feel supported after an unanticipated and/or poor patient outcome.	2.89 (0.64)	3.28 (0.46)	0.036	3.47 (0.51)	0.004

CONCLUSIONS

- A new standardized process to discuss and review unanticipated and/or poor patient outcomes was needed
- Unanticipated and/or poor patient outcomes affect providers' mood, well-being, and functioning
- Reviewing unanticipated and/or poor patient outcomes was viewed as an important aspect of providers' jobs and helped with coping and wellness

CONCLUSIONS

- At 6- and 12- months post-PEaRL implementation, providers endorsed:
  - More support after unanticipated and/or poor patient outcomes
  - Existence of safe environment to discuss unanticipated and/or poor patient outcomes
  - Presence of a structured format to discuss patient cases

LIMITATIONS

- Single discipline healthcare group with a small sample size, and therefore might not be generalizable to other institutions
- The data is primarily focused on self-reported reaction data

SUMMARY

- The PEaRL curriculum provides a psychologically safe environment to discuss cases, review safety concepts, and gain peer support after unanticipated and/or poor patient outcomes
- Investing in a support system for healthcare providers is important
- Attending to psychological safety may open the doors for further discussion, potentially benefiting patients in the future
- Dissemination to other provider groups and/or creation of a multi-disciplinary conference venue may help to increase its positive impact

REFERENCES

1. Seys D, Wu AW, Van Gerven E, et al. Health care professionals as second victims after adverse events: a systematic review. *Eval Health Prof.* 2013;36(2):135-162.
2. Boysen PG. Just culture: a foundation for balanced accountability and patient safety. *Ochsner J.* 2013;13(3):400-406.
3. Busch IM, Moretti F, Campagna I, et al. Promoting the Psychological Well-Being of Healthcare Providers Facing the Burden of Adverse Events: A Systematic Review of Second Victim Support Resources. *Int J Environ Res Public Health.* 2021;18(10).
4. Education ACfGM. Program Requirements and FAQs. https://www.acgme.org/specialties/pediatrics/program-requirements-and-faqs-and-applications/. Published 2021. Accessed.
5. Pediatrics ABo. Pediatric Hospital Medicine Content Outline. https://www.abp.org/content/content-outlines-subspecialties. Published 2022. Accessed.
6. Tad-Y DB, Pierce RG, Pell JM, Stephan L, Kneeland PP, Wald HL. Leveraging a Redesigned Morbidity and Mortality Conference That Incorporates the Clinical and Educational Missions of Improving Quality and Patient Safety. *Acad Med.* 2016;91(9):1239-1243.
7. Torralba KD, Jose D, Byrne J. Psychological safety, the hidden curriculum, and ambiguity in medicine. *Clin Rheumatol.* 2020;39(3):667-671.
8. Pang S, Warraich HJ. Humanizing the Morbidity and Mortality Conference. *Acad Med.* 2021;96(5):668-670.


QUESTIONS?

THANK YOU!