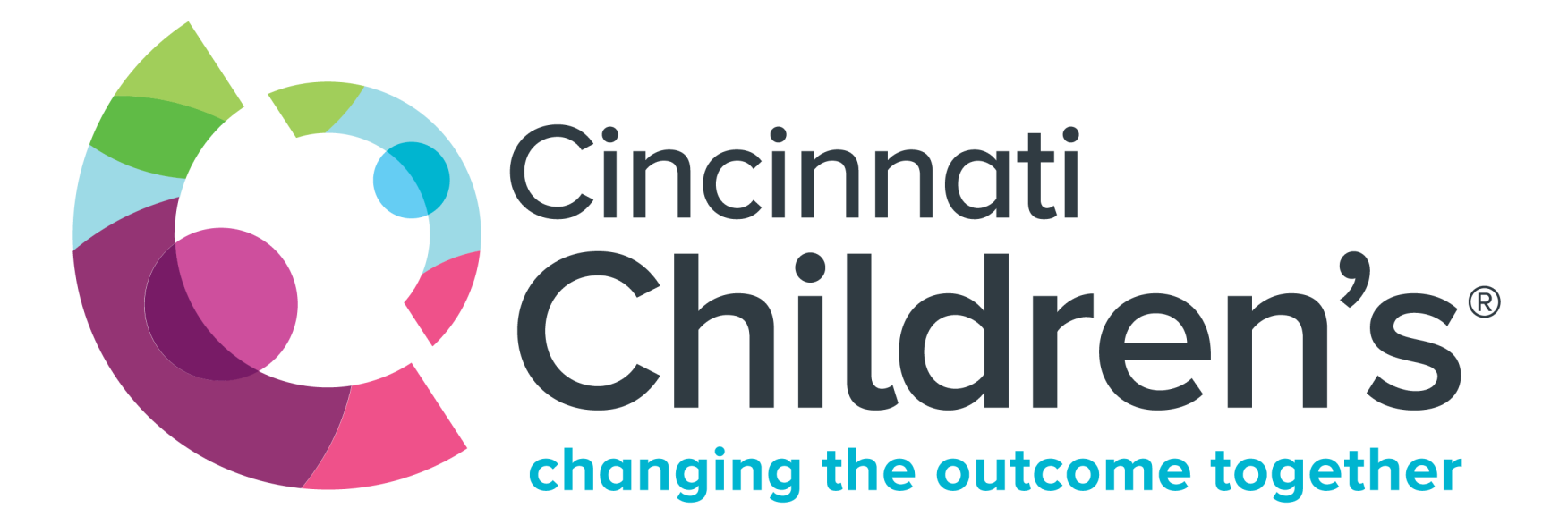


PEERS: Promoting Early Exposure to the Responsibilities of Seniors

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Background

- Acquisition of effective clinical supervisory and leadership skills is a recognized priority of post-graduate medical education. A system of graduated responsibility within residency programs allows senior residents the opportunity to function as frontline leaders in clinical areas.
- Many successful residents indicate difficulties with transitions to more senior level clinical positions due to abrupt changes in responsibility and lack of prior exposure to the stresses and tasks of a supervisory role.
- Experiential learning* is a widely accepted theoretical framework for curricular development in medical education, such that learning is achieved by "doing".⁽¹⁾ This proposed educational experience targets intern level trainees by providing the opportunity to experience and perform the tasks of a senior resident with allotted time for self-reflection and immediate supervisor feedback.

Study Objectives

Aim 1: Create a formal experience for intern trainees to assume the role of senior resident to provide exposure to leadership and autonomous clinical practice.

Aim 2: Evaluate the impact of a practice senior day experience on self-efficacy and understanding of necessary senior resident responsibilities.

Methods

- PGY-1 pediatric residents actively completing their final month on an inpatient Pediatric Hospital Medicine service were recruited for study participation. Each intern was assigned a date to function as the supervising resident for their team, while the true senior resident was asked to assume the role of intern on this date.
- Based on review of current literature and consensus of physician leaders in graduate medical education, eight necessary skills expected of senior resident inpatient team leaders were selected for assessment.⁽²⁾
- Interns completed a pre- and post- intervention survey evaluating perceived self-confidence in ability to perform each of the eight pre-defined supervisory tasks before and after their experience. Perceived self-confidence was rated on a 4-point Likert scale for comparison.
- Participants were additionally asked to share feedback regarding their general understanding of the senior resident role and how this experience would impact future preparation.
- Surveys were distributed and responses stored by use of REDCap Database. Analysis included descriptive statistics and use of standard paired t-test for comparison of confidence scores with a significance value of p<0.05. Qualitative feedback was reviewed by study team members to identify common themes.

Results

Figure 1. Self-reported efficacy scores for completion of senior level supervisory tasks. Participants were asked to rate their self-confidence in ability to complete each task on a 4-point Likert scale both prior to and following completion of their practice senior experience. (* indicates p-value <0.5).

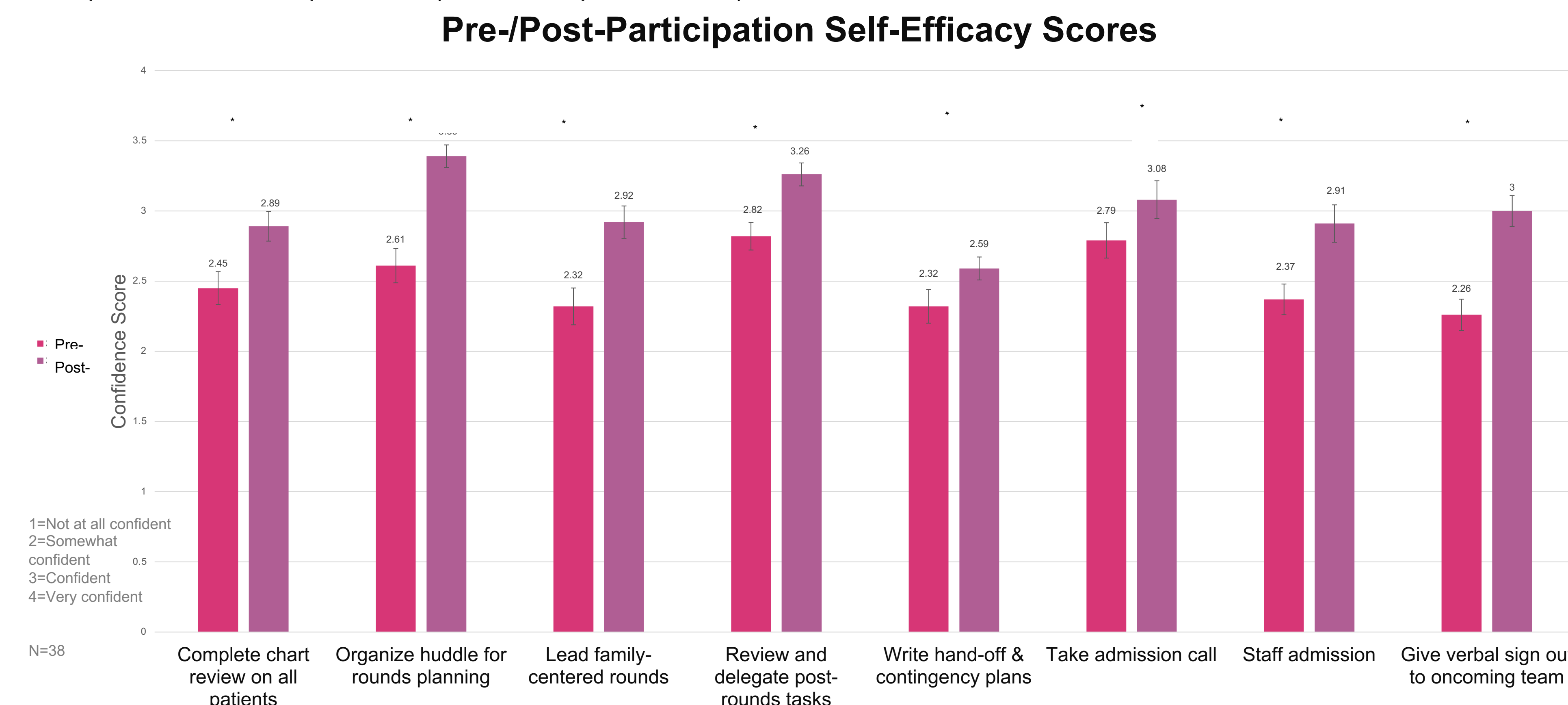


Table 1. Feedback regarding overall experience. Participants answered general questions regarding the utility and feasibility of the Practice Senior Day both before and after participation, and whether it impacted their preparedness.

General Feedback Regarding the Practice Senior Day Experience			
	Pre-Intervention	Post-Intervention	Significance (p <0.05)
"I understand the role and responsibilities of the senior resident"	3.97 (Somewhat Agree)	4.05 (Somewhat Agree)	0.606
"My exposure to the role and responsibilities of senior residents has been _____"	3.53 (Adequate)	3.68 (Adequate)	0.323
Preparedness to transition to the senior role	2.32 (Somewhat Prepared)	3.79 (Well Prepared)	1.58E-11
I found this experience to be helpful	3.68 (Very Helpful)	4.18 (Very Helpful)	0.007
I received feedback from my attending and senior resident		34/38 (89%)	
I will change the way I prepare to be a senior resident		29/38 (76%)	

Table 2. Common themes identified in how participants indicated they will change the way they prepare for the senior role. At the conclusion of each post-participation survey, intern participants shared open ended feedback regarding their experience and what they plan to focus on prior to their upcoming senior rotations.

Change in Preparation for Advancement to Senior Role	
Common Theme	Direct Quotes
Efficiency Pre-rounding	"I realized I need to develop a more efficient way to pre-round on all of the patients on the team and an organization system to keep track of tasks during the day."
Team management skills (how to guide Family-Centered Rounds, task delegation)	"This helped me reflect more on what I, as the senior, would need to say on rounds to not be repetitive and guide understanding."
Contingency Planning	"I will focus more on contingency planning for my patients and have been thinking through how and when to jump in during a presentation and summarize plans to optimize family understanding."
Discharge Planning	"I will spend more time considering discharge goals and how to best prepare patients for discharge (i.e. considering care management needs, medications, home care supplies)"
Maintaining the "big picture" when thinking about patients	"I will be more intentional about looking at patients' clinical status from a big picture perspective. This was a great way to experience graduated autonomy."
Incorporation of Education	"The practice senior role helped me identify multiple areas I can improve as I transition to being a senior, including incorporating more teaching on rounds."

Results

- 45 interns participated in the experience, with a survey completion rate of 84% (n=38) to be included in analysis.
- Average, paired pre-/post- participation self confidence ratings for each senior resident supervisory task are shown in **Figure 1**. Pre-intervention confidence scores were globally low, however a statistically significant increase in perceived ability to complete each task was seen across all domains in the post-participation group.
- Feedback regarding overall experience was collected on various applicable 4-point Likert scoring, as evidenced in **Table 1**.
 - Participants were also asked to indicate if they felt the practice date would change the way in which they plan to prepare for the senior role. Majority of interns reported they found the experience to overall be helpful, with 76% stating it changed the way in which they plan to prepare for senior rotations in the future.
- Table 2** demonstrates suggested ways in which respondents reported this experience changed the way they plan to prepare for their senior resident rotations. Majority of participants recognized a need to develop efficient ways to pre-round and focus on team management skills, particularly related to leading family-centered rounds.

Conclusions and Future Directions

- Our findings highlight an opportunity for continued improvement in development of proficient leadership skills amongst early resident trainees, as pre-intervention confidence scores were relatively low in all domains.
- A Practice Senior Day experience may be a feasible and effective intervention to provide early exposure to leadership skills and improve overall preparedness for expectations during advancement in residency training.

References

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- Miller, K. A., Collada, B., Tolliver, D., Audi, Z., Cohen, A., Michelson, C., & Newman, L. R. (2020). Using the Modified Delphi Method to Develop a Tool to Assess Pediatric Residents Supervising on Inpatient Rounds. *Academic Pediatrics*, 20(1), 89-96. doi.org/10.1016/j.acap.2019.07.012