

# Improving Transitions of Care Through Implementation of the I-PASS Standardized Handoff Tool

Charles Hill, DO PGY-3

Lauren Brankle, DO FAAP Rebecca Rothstein, DO FAAP

## Objectives

- Implement a standardized transition of care tool, including education and training
- Create an effective strategy to routinely evaluate learners in the use of the tool and provide real-time feedback
- Use the information collected in evaluations and feedback to assist in optimizing the use of the I-Pass system in our institution

## Introduction

- The purpose of this QI project is to implement a standardized tool for transition of care in the pediatric inpatient setting
- Communication errors account for 66% of sentinel events in the hospital, and approximately 50% of these errors occur during handoff of care<sup>1</sup>
- Prior to the study, transition of care was based on the preference of both the team signing off and the receiving team
- We utilized the I-PASS system as our transitions of care tool



<b>I</b> Illness Severity	<ul style="list-style-type: none"> <li>• Stable, “watcher,” unstable</li> </ul>
<b>P</b> Patient Summary	<ul style="list-style-type: none"> <li>• Summary statement</li> <li>• Events leading up to admission</li> <li>• Hospital course</li> <li>• Ongoing assessment</li> <li>• Plan</li> </ul>
<b>A</b> Action List	<ul style="list-style-type: none"> <li>• To do list</li> <li>• Timeline and ownership</li> </ul>
<b>S</b> Situation Awareness & Contingency Planning	<ul style="list-style-type: none"> <li>• Know what’s going on</li> <li>• Plan for what might happen</li> </ul>
<b>S</b> Synthesis by Receiver	<ul style="list-style-type: none"> <li>• Receiver summarizes what was heard</li> <li>• Asks questions</li> </ul>

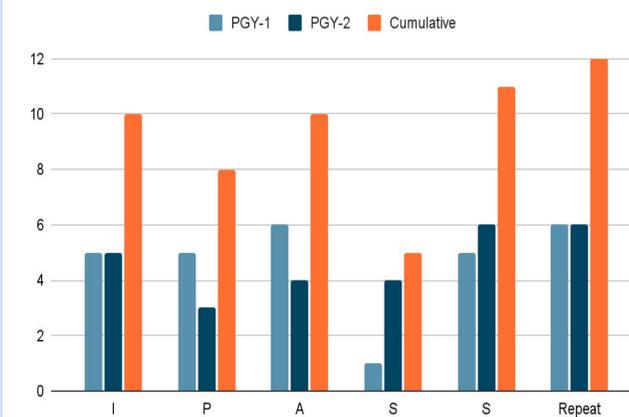
## Methods

- The project was split into two distinct cycles: Implementation Cycle and Evaluation/Feedback Cycle
- The study was performed on the PGY-1/2 residents inpatient rotation and included both day and night shift teams
- The implementation cycle took place in June 2020 and involved a lecture and multiple workshops introducing the I-PASS system
- The evaluation cycle lasted 5 months (11/20-03/21), each resident was evaluated twice during the study period, once at the beginning of rotation and once at the end
- Evaluations were performed by a core group of evaluators, evaluation forms semi-quantitatively measured each residents frequency of the use of each letter of the IPASS mnemonic
- Feedback was given after the initial evaluation and acted as the intervention point
- We then aggregated the data from both observation points to see if there was a change in the frequency of its use
- Residents were given a follow-up survey which queried their frequency and comfort of use, improvement of organization, evaluation efficiency and feedback timing.

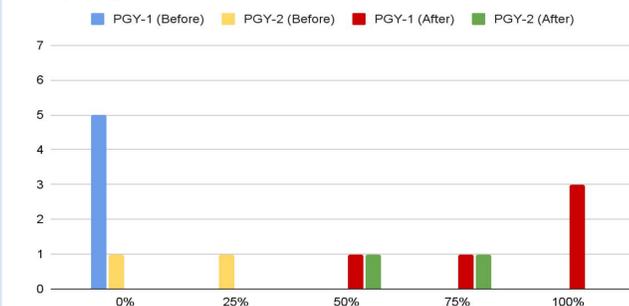
## Results

- We found that all areas, cumulatively across both PGY-1 and PGY-2 level residents, had improvements in the frequency of use of the I-PASS mnemonic
- There were individuals who did not have improvements in certain areas but when aggregated, there was overall improvement
- No single resident had more than 2 areas where they did not show improvement.
- 7 residents responded to the follow-up survey and the frequency varied between 50% and 100% for its use since the study

Improvement in Utilization



Frequency of Use



## Discussion

### Implementation

- Able to successfully implement a standardized transitions of care tool using the I-PASS system
- We will build the I-PASS system into our orientation program to make sure that all incoming pediatric residents are equipped to utilize this tool

### Evaluation

- The evaluation process was able to highlight that interval feedback allowed for improved use of the I-PASS system
- We found that certain aspects of the evaluation forms were cumbersome and excessive, we also found that the use of a core group of evaluators and the frequency of evaluations was a barrier to consistent evaluations

### Next Steps

- We will continue to utilize the lecture/workshop system to implement/reinforce the use of the I-PASS system
- We will establish a more sustainable evaluation system that shifts from a core group of evaluators and plan to incorporate senior residents as the lead in evaluating and determining competency

## References

1. Sectish TC, Starmer AJ, Landrigan CP, Spector ND; I-PASS Study Group. Establishing a multisite education and research project requires leadership, expertise, collaboration, and an important aim. *Pediatrics*. 2010;126(4):619–622
2. Starmer AJ, Spector ND, Srivastava R, Landrigan CP, and Sectish TC. I-PASS, a Mnemonic to Standardize Verbal Handoffs. *Pediatrics* 2012; 192(2): 201-204. PMID:22232313.
3. Starmer AJ, Sectish TC, Simon DW, Keohane C, McSweeney M, Chung EY, Yoon CS, Lipsitz SR, Wassner AJ, Harper MB, Landrigan CP. Rates of Medical Errors and Preventable Adverse Events Among Hospitalized Children Following Implementation of a Resident Handoff Bundle. *JAMA* 2013; 310(21): 2262-2270. DOI: 10.1001.