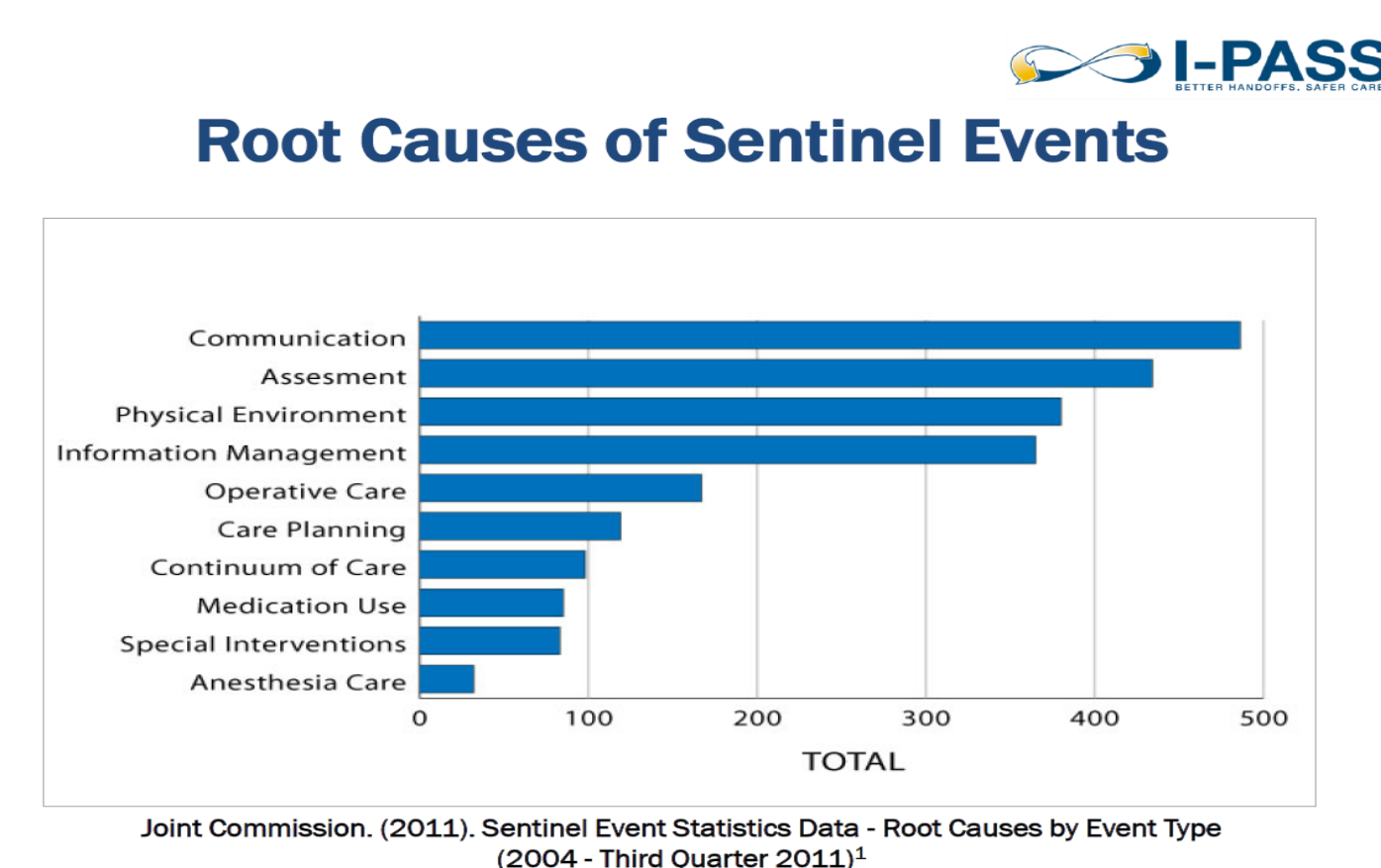


Background/Objectives

- The Joint Commission has linked communication failure as a root cause for a majority of sentinel events.
- The “I-PASS” system is a hand-off mnemonic that has been shown to decrease medical errors, prevent adverse events, and improve communication.
- Multiple Jefferson residency programs have adopted I-PASS training over the last year to standardize sign-outs between treatment teams and departments.
- Radiology residents also participate in hand-offs with other departments, especially in cases of adverse patient reactions that occur within radiology (ie: allergic reaction, seizure, contrast extravasation). In addition, radiology residents also participate in hand offs between daytime and overnight teams, including sign out of pertinent protocols, studies, and clinician communications.
- The aim of this study was to assess the adaptability of I-PASS training to the needs of a diagnostic radiology residency program.**



I Illness Severity	• Stable, “watcher,” unstable
P Patient Summary	• Summary statement • Events leading up to admission • Hospital course • Ongoing assessment • Plan
A Action List	• To do list • Time line and ownership
S Situation Awareness and Contingency Planning	• Know what’s going on • Plan for what might happen
S Synthesis by Receiver	• Receiver summarizes what was heard • Asks questions • Restates key action/to do items

Objectives

OBJECTIVE 1:

- To provide I-PASS training to 50% of radiology residents by April 1, and to 75% of radiology residents by Sept 30, as measured by logged attendance to training sessions.

OBJECTIVE 2:

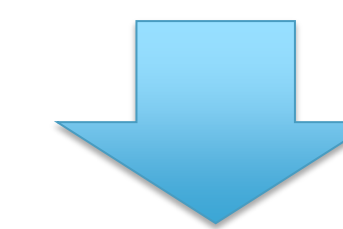
- To analyze resident knowledge of and receptiveness to standardized handoffs in radiology, as assessed by pre- and post-training questionnaires

*LONG-TERM OBJECTIVE: To utilize I-PASS in at least 75% of handoffs by Nov 1 and 100% handoffs by Dec 31, as measured by surveys of overnight residents who receive the majority of sign-outs.

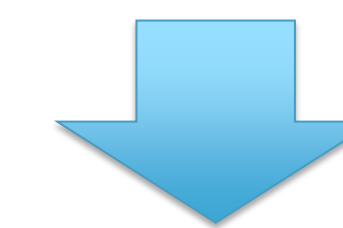
Methods

A “Transitions of Care” session was held during noon-conference for first through fourth year radiology residents (PGY2-5). Session goals included (1) defining I-PASS and (2) practicing I-PASS hand-offs using three radiology-based cases.

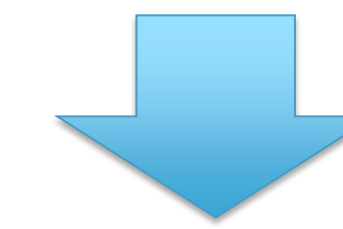
Before training, residents were given an optional anonymous survey of four questions that assessed prior experience with hand-offs and awareness of the current efforts to implement I-PASS at Jefferson.



During training, a power point presentation highlighted the importance of hand-offs, define when radiologists participate in hand-offs, outline the official I-PASS system, and review ways the I-PASS mnemonic could be applied to sign outs within radiology.



During training, residents practiced I-PASS handoffs in pairs using sample radiology-based cases, with structured feedback included by a third observer.



After training, residents were offered an optional, anonymous post-training survey based on the Likert Scale.

Results To Date

OBJECTIVE 1:

- 22 of 40 radiology residents (55%) attended the first I-PASS training session.

OBJECTIVE 2:

Before the session:

- 8 of 17 residents (47%) had participated in radiology patient events requiring handoffs with non-radiology teams
- Only one resident used a structured handoff, although four knew about I-PASS
- 47% of all residents were aware of Jefferson’s initiative to standardized handoffs between departments, however only half named “I-PASS” as the selected method

After the session:

- 17 of 18 residents (94%) agreed or strongly agreed to use I-PASS during patient hand-offs with a majority feeling more confident handing off a patient
- 77% agreed or strongly agreed that I-PASS was applicable to radiology; 23% were neutral about its relevance to their needs.

Systems Change:

- Feedback supporting a daily sign-out reminder on the PACS system has since been implemented via Primordial.

Significance and Lessons Learned

- Radiology residents are key members of the patient care team and participate in patient hand-offs with other departments and within their department.
- Almost half of radiology residents have already participated in a patient event requiring hand-off with a non-radiology team, and there is opportunity to better standardize this communication.
- A majority of radiology residents felt more confident with hand-offs after I-PASS training and agreed with the idea of adapting I-PASS into their daily practice.
- Although our data show the feasibility of adapting I-PASS to radiology, opportunities exist to better tailor hand-offs to the unique needs of sign-outs within radiology.

Next Steps

Objectives 1/2:

- To meet the goal of training 75% of radiology residents, we plan to hold another training session after matriculation of new first year radiology residents.
- Changes will be applied to the next session based on received feedback, including recommendation to shorten the length of the case scenarios and recommendation to avoid scheduling during national conferences, such as the AIRP conference during the first training session.

*Long Term Objective:

- Begin assessment of I-PASS usage after the second training session.
- If our initial goal to use I-PASS for at least 75% of handoffs by Nov 1 is not met, we will study and compare the information collected from overnight resident surveys, and use the PDSA template to figure out best actions for the next cycle of intervention.

