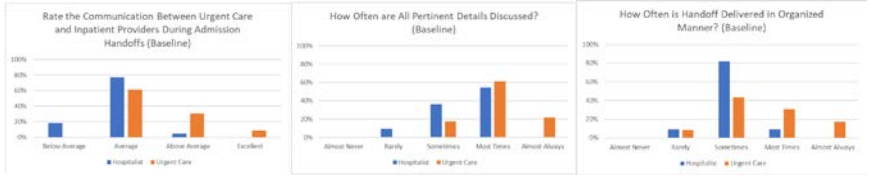
Using a Standardized Admission Handoff (I-PASS) to Improve Communication Between Pediatric Urgent Care and Inpatient Providers

Amanda Nedved, MD; Kathleen Berg, MD; Amanda Montalbano, MD MPH

Children's Mercy Kansas City

Background

Ineffective hand-off communication is recognized as a critical **patient safety problem** in health care. An estimated 80% of serious medical errors involve miscommunication between caregivers **during the transfer of patients.** Standardized handoffs associated with significant decrease in medical errors. A pre-interventions survey of pediatric urgent care providers and pediatric hospitalists demonstrated an opportunity for improvement of communication during admission handoffs.



All providers at Children's Mercy Urgent Cares will use complete I-PASS (all 5 components verbalized) during verbal admission handoffs to general pediatric (med/surg) teams at least 75% of the time by May 31, 2019.

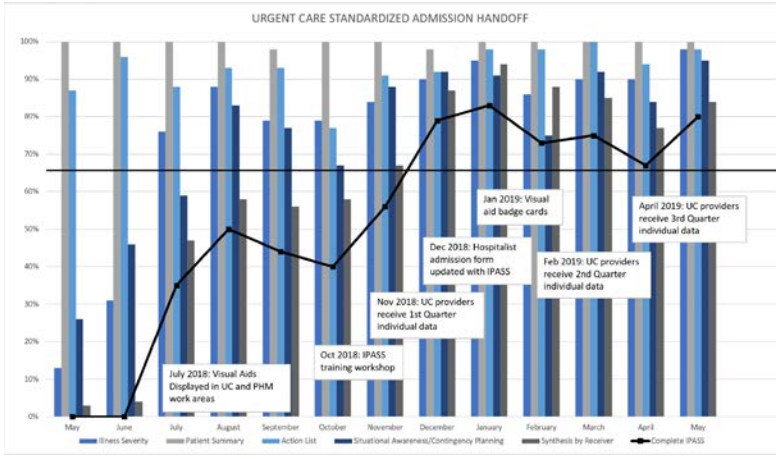
Methods

In July 2018, a team of PUC and pediatric hospital medicine (PHM) physicians launched a customized I-PASS handoff tool to highlight essential elements during admission handoff. Multiple PDSA were completed. Scoring of handoffs was done by individual reviewers who listened to recordings of the phone call and entered the results into a REDCap database. A handoff was considered to have a component if the provider mentioned at least one element from the "Description". In order to provide feedback to UC providers, scoring was not blinded.

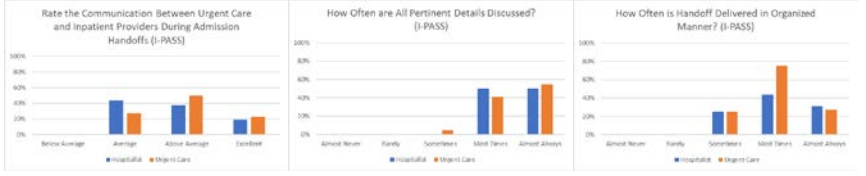
Intevention Period: July 1, 2018 – May 31, 2019
Inclusion Criteria: All admits by all core providers from Children's Mercy Urgent Care to general pediatric teams at Children's Mercy
Exclusion: Admissions from moonlighters or to subspecialty or critical care teams

Verbal Mnemonic	Description
Illness Severity	Identify as stable, "watcher" or unstable Kansas vs. Adele Hall (consider risk of decompensating and need for subspecialties)
Patient Summary	Summary statement Events leading up to UC arrival UC course including Meds given Ongoing assessment Plan
Action List	To do list Timeline and ownership Type of Transport Pending labs/rad
Situation Awareness/ Contingency Planning	Plan for what might happen When to provide update and what could change admitting destination (Kansas v. Adele Hall)
Synthesis by Receiver	Ensures receiver summarizes what was heard, asks questions and restates key action/to do items

Results



- This was a new process for admission handoffs. Our baseline was 0%.
- In May 2019, providers completed I-PASS in 80% of admission handoffs to general inpatient teams.
- Duration of handoff at baseline was 4 minutes and remained 4 minutes during the intervention period.
- Complete I-PASS improved significantly after urgent care providers completed I-PASS training.
- Synthesis by Receiver improved after hospitalists updated their admission handoff form.
- Perception of communication during admission handoffs improved from baseline.



Conclusions

Standardardized handoffs improve communication without impeding provider workflow. We learned that subjective terms for illness severity ("stable", "watcher" and "unstable" did not translate well from urgent care to inpatient. We are planning on implementing and objective standardized tool (PEWS) to improve the communication of illness severity. We have also updated the I-PASS visual aid based on feedback. We plan to use more communication workshops to focus on individual components of I-PASS, specifically to improve the quality of Patient Summary.

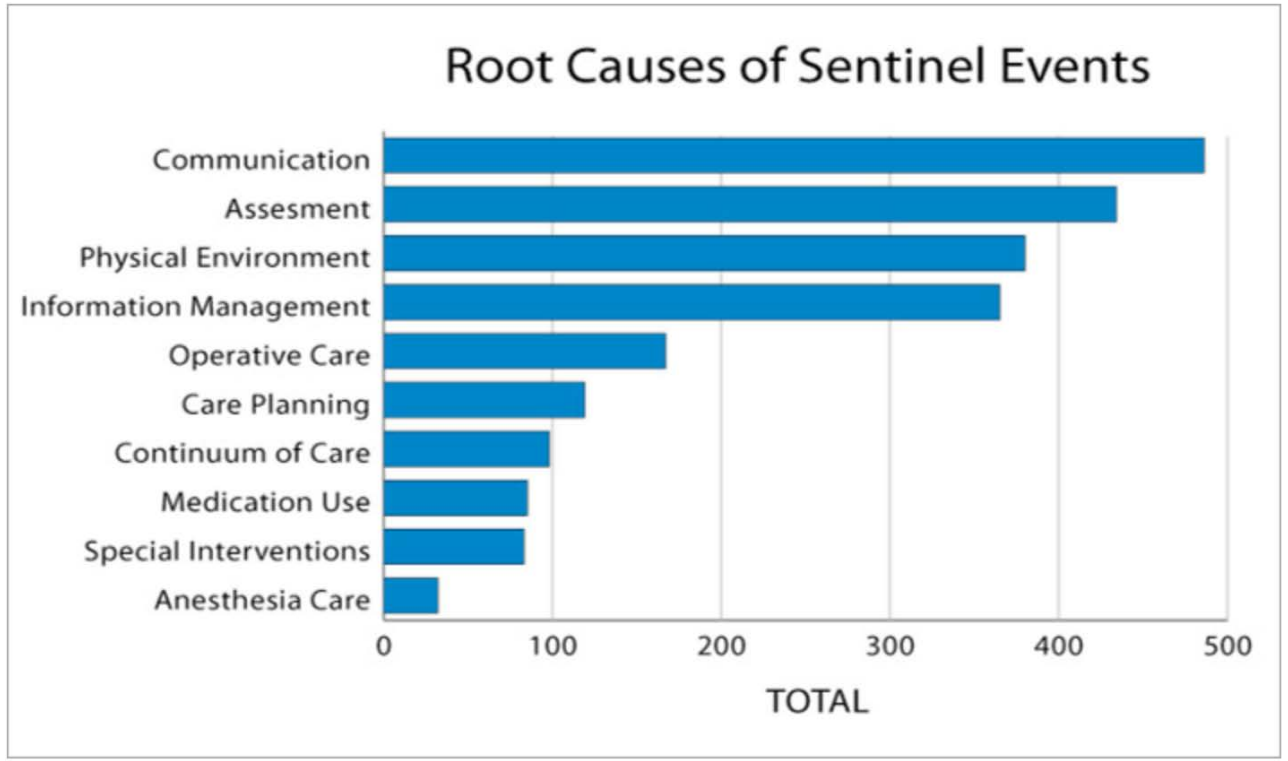
Children's Mercy KANSAS CITY

Disclosure

All authors have no relevant financial relationships or conflicts to disclose

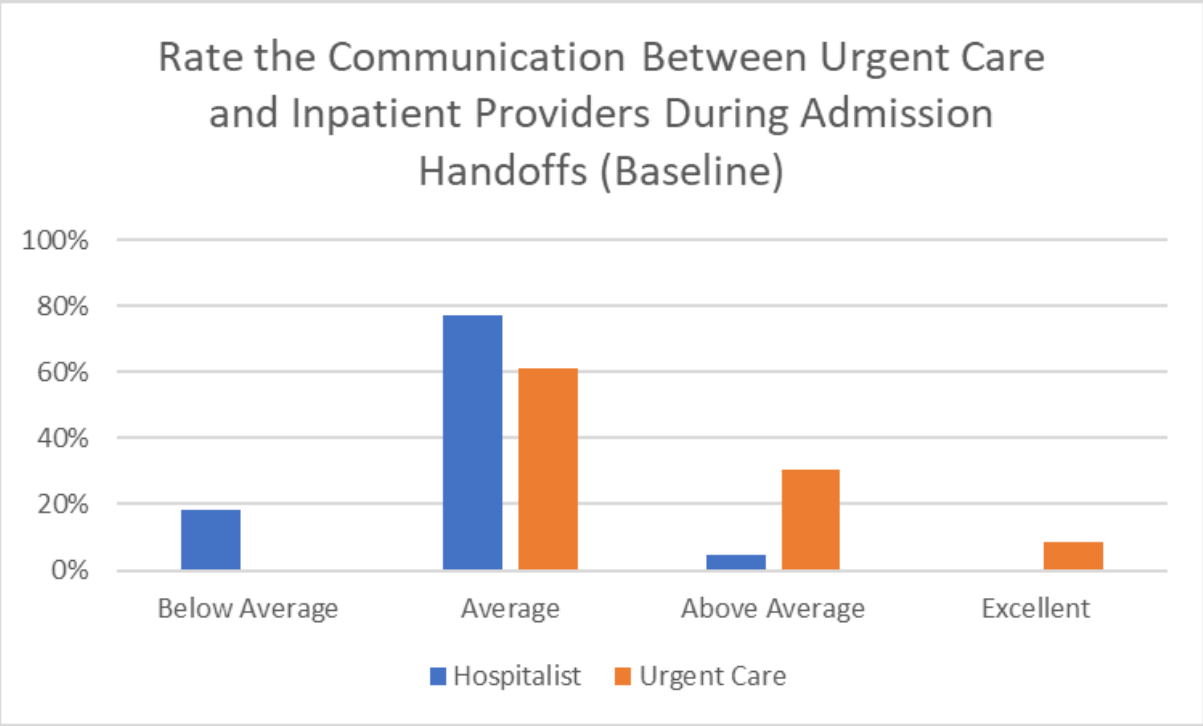
Background/Problem

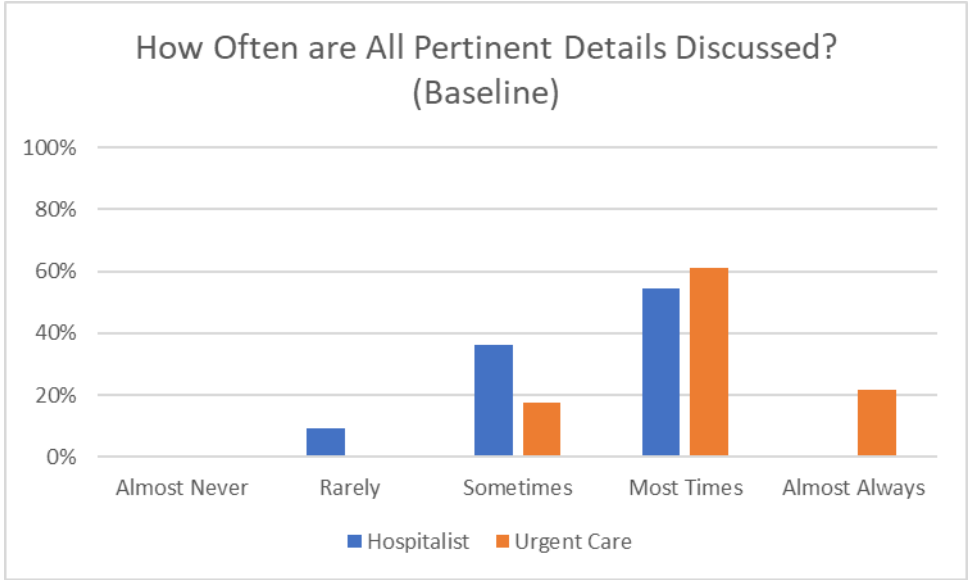
- Ineffective hand-off communication is recognized as a critical **patient safety problem** in health care
- An estimated 80% of serious medical errors involve miscommunication between caregivers **during the transfer of patients**
- Standardized handoffs associated with significant decrease in medical errors

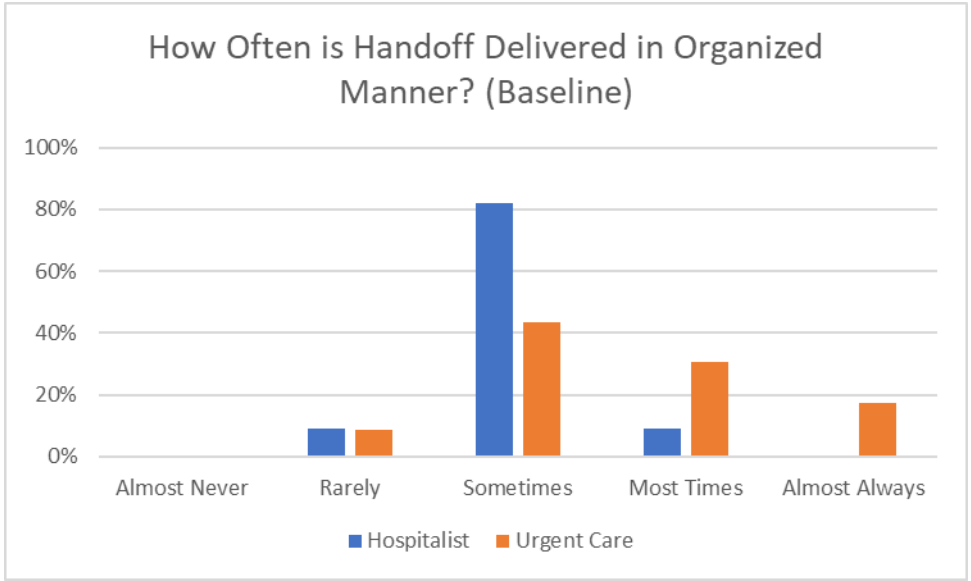


Joint Commission. (2011). Sentinel Event Statistics Data - Root Causes by Event Type (2004 - Third Quarter 2011)

Provider Perception of Communication During Admissions







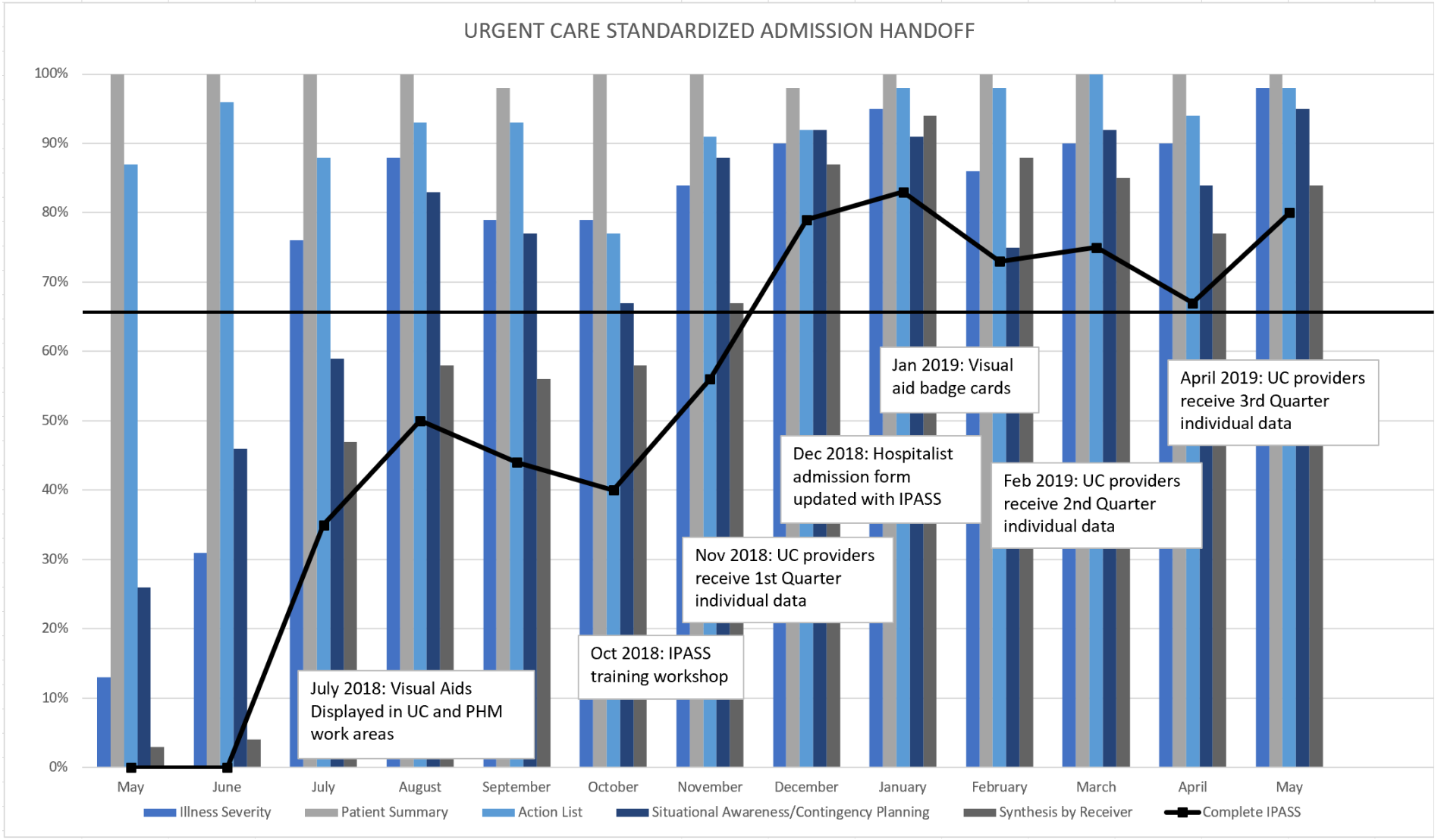
Aim

All providers at Children's Mercy Urgent Cares will use complete I-PASS (all 5 components verbalized) during verbal admission handoffs to general pediatric (med/surg) teams at least 75% of the time by May 31, 2019.

Interventions

- Visual aid
- I-PASS training workshop
- Monetary incentive (physician only)
- MOC Part 4 credit (physician only)

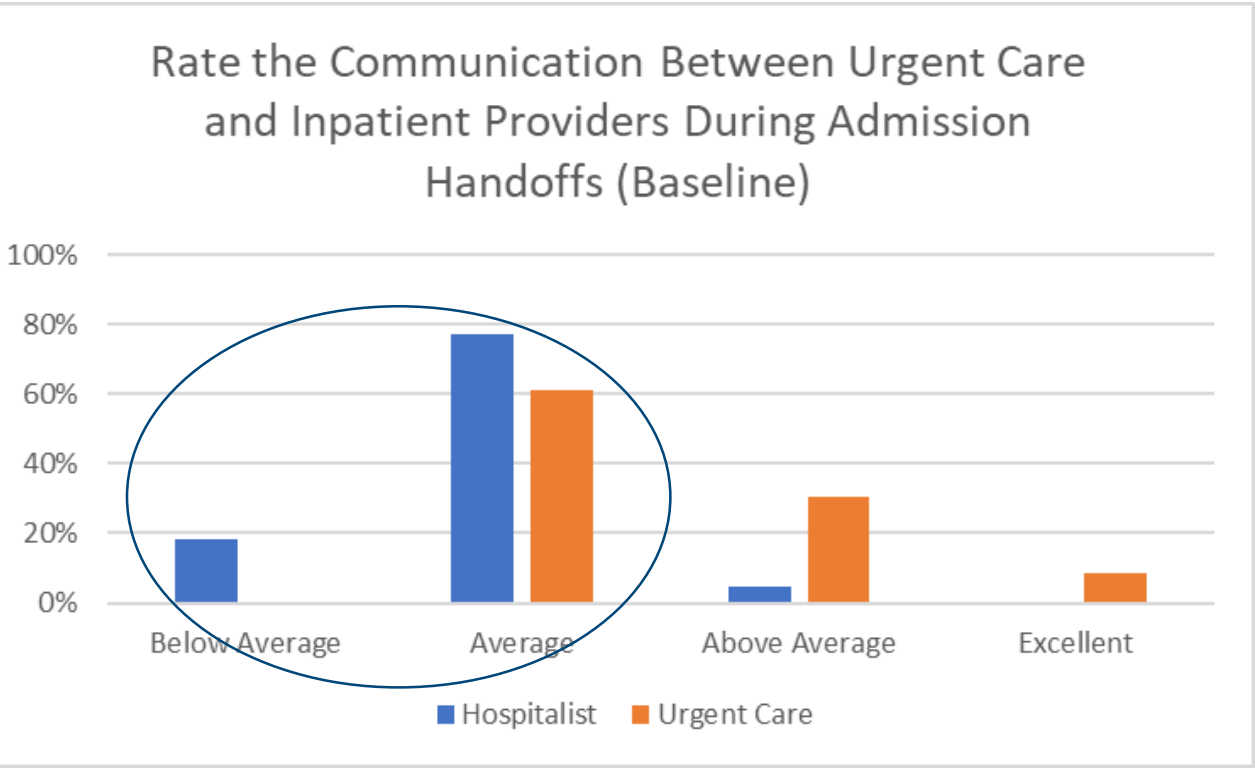
Verbal Mnemonic	Description
Illness Severity	Identify as stable, "watcher" or unstable Kansas vs. Adele Hall (consider risk of decompensating and need for subspecialties)
Patient Summary	Summary statement Events leading up to UC arrival UC course including Meds given Ongoing assessment Plan
Action List	To do list Timeline and ownership Type of Transport Pending labs/rad
Situation Awareness/ Contingency Planning	Plan for what might happen When to provide update and what could change admitting destination (Kansas v. Adele Hall)
Synthesis by Receiver	Ensures receiver summarizes what was heard, asks questions and restates key action/to do items

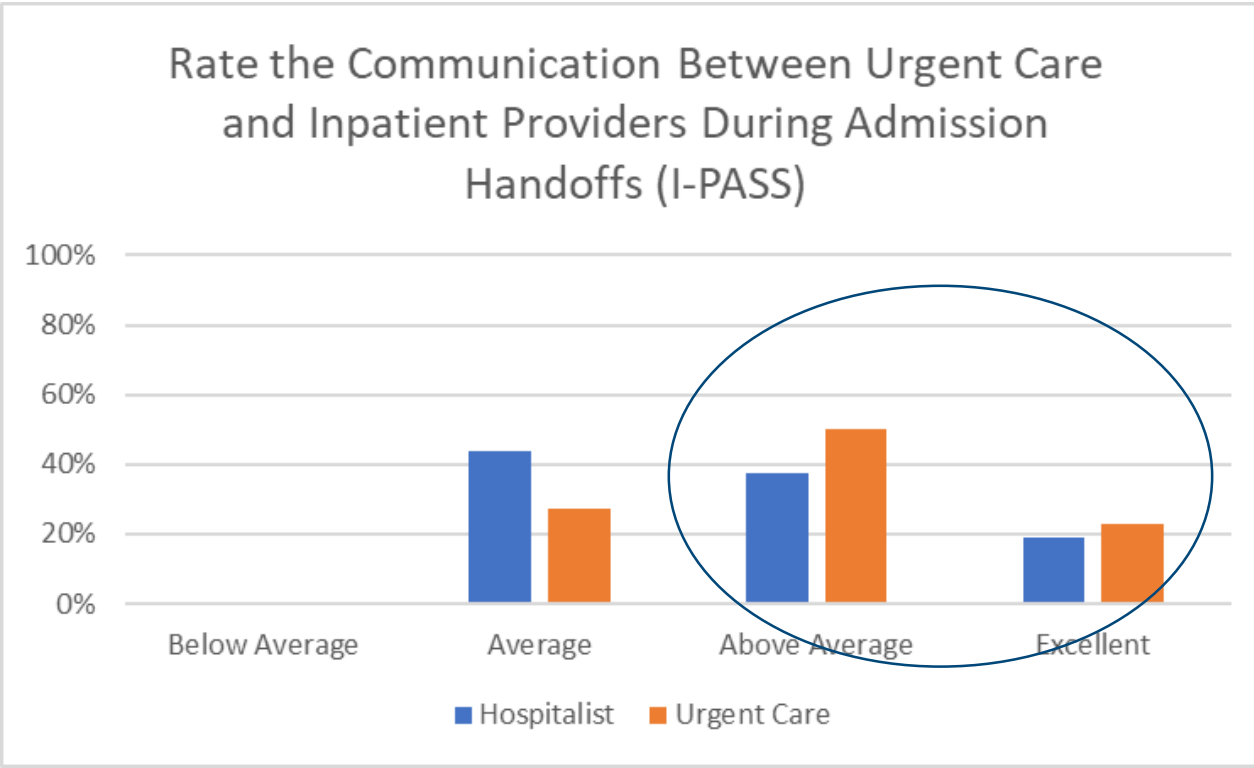


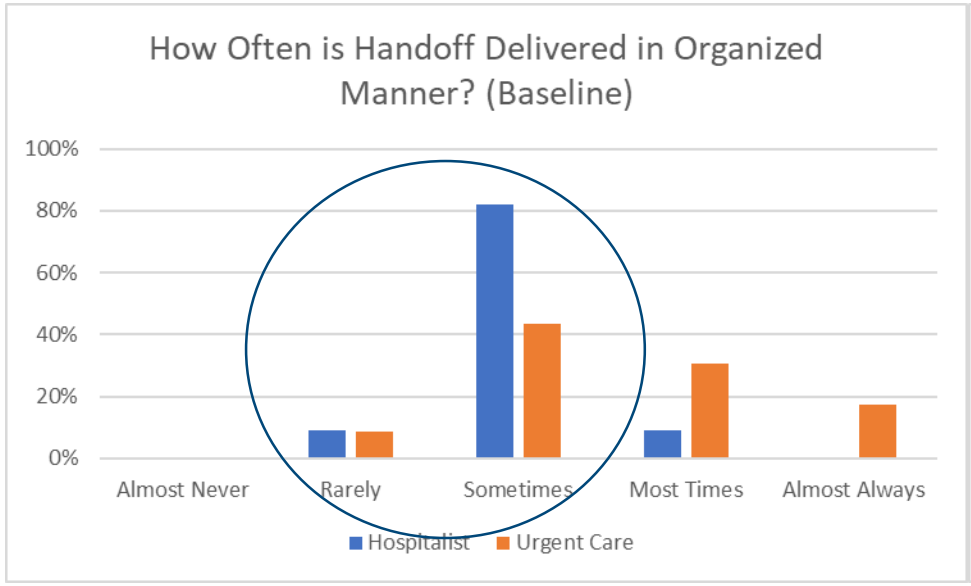
Mean Duration of Handoff

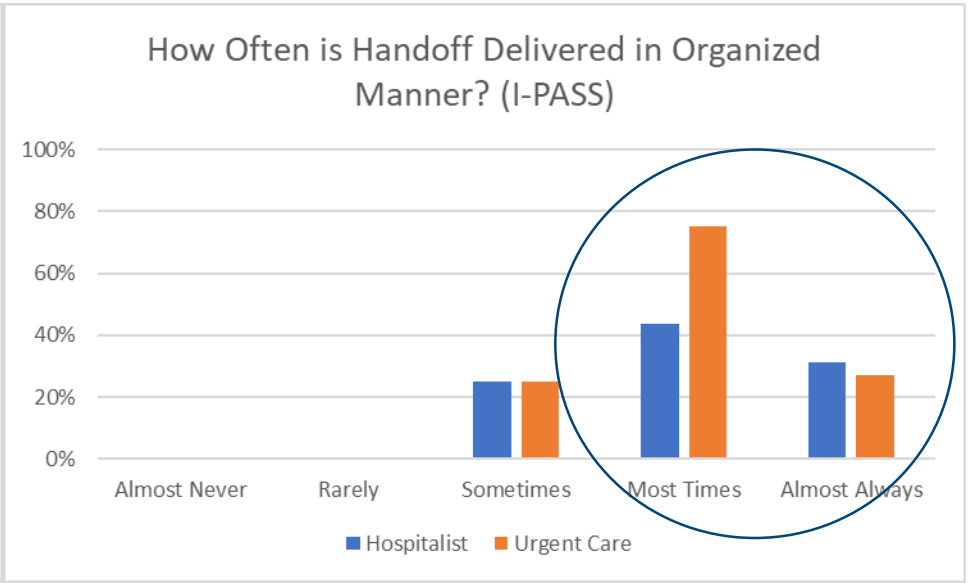
Baseline: 4 min

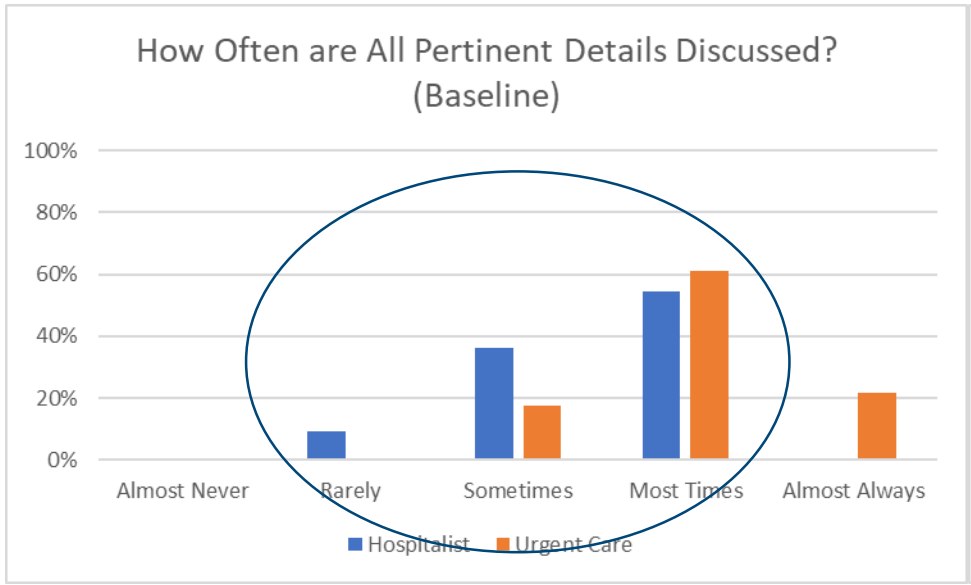
I-PASS: 4 min

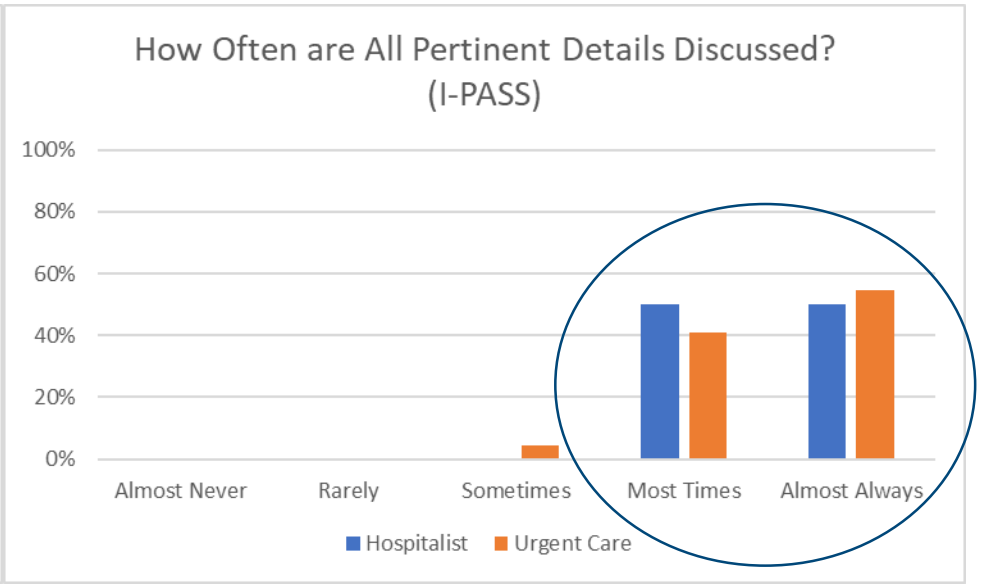

Rate the Communication Between Urgent Care and Inpatient Providers During Admission Handoffs (Baseline)
100%
80%
60%
40%
20%
0%
Below Average
Average
Above Average
Excellent
Hospitalist
Urgent Care


Rate the Communication Between Urgent Care and Inpatient Providers During Admission Handoffs (I-PASS)
100%
80%
60%
40%
20%
0%
Below Average
Average
Above Average
Excellent
Hospitalist
Urgent Care


How Often is Handoff Delivered in Organized Manner? (Baseline)
100%
80%
60%
40%
20%
0%
Almost Never
Rarely
Sometimes
Most Times
Almost Always
Hospitalist
Urgent Care


How Often is Handoff Delivered in Organized Manner? (I-PASS)
100%
80%
60%
40%
20%
0%
Almost Never
Rarely
Sometimes
Most Times
Almost Always
Hospitalist
Urgent Care


How Often are All Pertinent Details Discussed? (Baseline)
100%
80%
60%
40%
20%
0%
Almost Never
Rarely
Sometimes
Most Times
Almost Always
Hospitalist
Urgent Care


How Often are All Pertinent Details Discussed? (I-PASS)
100%
80%
60%
40%
20%
0%
Almost Never
Rarely
Sometimes
Most Times
Almost Always
Hospitalist
Urgent Care

What We Learned/Next Steps

"We are using I-PASS for handoffs, so this is the format I will be using."	
Illness Severity	**Stable** = Appropriate for Kansas **or** Adele Hall location Able to transfer by POV **or** transport **Watcher** = Inpatient physician should be **at bedside on arrival** **Transport** only to **Adele Hall** only *Pediatric Early Warning Score (PEWS) to replace these terms when available
Patient Summary	Summary statement (include **Reason for Admission**) Events leading up to UC arrival UC course including **Meds** given, **Labs**, **Rad** Ongoing assessment with **most recent Vital Signs**
Action List	Type of Transport Pending labs/rad
Situation Awareness Contingency Planning	What's the plan if patient status acutely changes? Examples: Bed Availability Transport Availability IV status?
Synthesis by Receiver	"Do you have any questions? Will you provide a brief summary?"

- Standardardized handoffs improve communication without impeding provider workflow
- Subjective terms for Illness Severity do not translate well from UC to inpatient
  - Objective standardized tool (PEWS)
- Updated visual aid based on feedback
- Work on improving quality and efficiency of Patient Summary


Children's Mercy
KANSAS CITY