

### Introduction

The purpose of this QI project is to increase utilization of an electronic handoff ("e-handoff") tool.

#### The problem is:

- Handoff in the ICU involves large volumes of information.
- Despite evidence emphasizing the need, handoff is still prone to errors.
- In the current setting, a CV-ICU, there is no standard method taught or required for shift handoff.

However, there is an EMR-integrated handoff tool readily available, but it is extremely underutilized by the staff.

### Background/Significance

#### Why Handoff?

- Handoff communication drives every healthcare encounter.
- The single greatest tragedy during in-patient care is a preventable injury caused by miscommunication.
- Medical errors related to poor communication remain unacceptably high.
- Poor communication can trigger a cascading series of failures that adversely affect patient care.

#### Why e-handoff?

- standardized e-handoff tool decreases errors, sentinel events, and increases provider/patient satisfaction.
- handoff content in real time. (provides auto-population of objective data from the EMR to improve handoffs.)

The EMR is the gold standard where all members of the multi-disciplinary team look to get the most up-to-date information.

### Methods

A prospective observational study of shift handovers at 7am, 11am, and 7pm will be assessed for e-handoff compliance.

- 50 direct handoff observations were used to explore shift handover communication, and process, in relation to e-handoff compliance.

#### Interventions:

- Collect baseline compliance data (thru anonymous web-survey).
- Re-implement the e-handoff tool:
  - Conduct staff education through Health Stream.
  - Go live with the e-handoff tool.
- Evaluate compliance.

### Results

Results showed compliance rates increased from 0% pre-intervention to 24% post intervention: a total increase in compliance rates of 24%. This indicated a positive correlation between e-handoff education and e-handoff tool usage. Support from senior staff and buy-in from the frontline all contributed to the success of the re-implementation.

Compliance rates	Pre intervention	Post Intervention
E-handoff used	0%	24%

Questionnaire results	Percentage
Q1 – Which method of handoff do you currently use? (select all that apply)	
EMR integrated handoff (also known as electric handoff or e-handoff)	0%
Other	1.72%
Printed (example: interim care summary)	25.86%
Verbal	62.07%
Written	10.34%

Questionnaire results	Yes	No
Q2 - Do you review online documentation prior to giving/receiving reports (i.e., labs, VS, meds, history, etc.)?	84.21%	15.79%

Questionnaire results	Yes	No
Q11 - Do you receive the patient as you expected based on the report you were given?	62.79%	37.21%

Q12 - Which system barriers have you experienced that impede giving/receiving rep...



background noise (23%) frequent interruptions (28%) insufficient staffing (20%)  
insufficient time to devote to handoff (10%) nurse giving/receiving report is not prepared (16%)

### Discussion

Improving handoff processes is a staple of the healthcare industry; regulatory guidelines have dictated improvements be made to insure safe transitions of care. The literature reviewed supports providing an e-handoff tool to improve handoff quality and standardize the handoff process; helping ICU staff to gather pertinent information efficiently and concisely would in turn streamline the handoff process and increase utilization of the e-handoff tool.

Facilitators to the project success included:

- support from leadership and unit educator.
- Increased face-time with staff kept project momentum.

Barriers included:

- Lag time between email "consent phase" and "survey phase" required increased facetime to keep project momentum.
- Poor survey design.

Unintended consequences:

- Announcing leadership presence to view "bedside handoff" simultaneously as project "observations" began had unexpected positive impact on handoff process productivity and compliance.

Implications for clinical practice include that a consistent and structured approach to handoff communications, that are provided from an EMR-based e-handoff tool, could help maintain information and patient-management continuity between providers; being able to provide handoff content in "real time" can decrease the chances for communication-related patient care errors.

### Reference list



### Contact Information

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