

## **ABSTRACT: 2013 ELAM Institutional Action Project Poster Symposium**

**Project Title:** Development of a Multidisciplinary Graduate Medical Education Tool for Transfer of Care (“Hand-offs”)

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**Background, Challenge or Opportunity:** The Accreditation Council for Graduate Medical Education (ACGME)-mandated trainee work-hour limitations have led to a marked increase in the number of hand-offs among trainees and other providers. Handoffs occur at shift changes, as well patient care moves between medical services (e.g., intraoperative to ICU care). An effective hand-off can be defined as the transfer and acceptance of patient care responsibilities achieved through effective communication. The Joint Commission estimates that 80% of serious medical errors involve miscommunication between providers during transitions in care. Effective hand-offs may reduce medical error. The Joint Commission currently requires accredited organizations to use a standardized approach to hand-off communications. The ACGME Common Program Requirements mandate that sponsoring institutions and training programs develop a common structure for transitions in care as well as comprehensive curricula to teach and evaluate hand-offs. Some experts advise that “flexible standardization” be used to develop hand-off processes that contain minimal core clinical content. Training which may include simulation has been shown to improve the quality of hand-offs.

**Purpose/Objectives:** The purpose of the project is to 1) develop a standardized tool and process hand-off tool development for physician hand-offs at Northwestern Memorial Hospital, and 2) use the standardized tool/process to help develop patient-care-area and speciality-specific handoff tools across training programs and across the hospital, 3) develop hand-off training and evaluation tools.

**Methods/Approach:** A literature search has been conducted to identify current and best practices. A needs assessment is currently underway to identify current physician hand-off practices (baseline). A DMAIC taskforce with members from all constituencies will be formed, led by a hospital quality expert. The taskforce will develop a minimal tool and process for developing hand-off tools. This process will then be used by subgroups to develop hand-offs tools/processes specific to physician services. The taskforce will also help develop core teaching of hand-offs for all trainees which may include on-line and interactive (simulation) training. Finally, the taskforce will develop a core evaluation tool that may be used for assessing hand-off quality in training programs.

**Outcomes and Evaluation:** Outcomes will include a standardized process for physician hand-offs, and well as curricula for teaching and evaluating hand-offs at Northwestern Memorial Hospital training programs. The ultimate outcome will be an improvement in patient safety as measured by a fewer critical events, near misses, claims, and dollars held in reserve to process claims.

# Development of a Multidisciplinary Graduate Medical Education Tool for Transfer of Care (“Hand-offs”)



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## Background, Challenge or Opportunity:

- The ACGME mandated trainee work-hour limitations in 2003.
- There has been a marked increase in the number of “hand-offs”
- Hand-offs occur at shift-change, when patient changes service (e.g., OR to ICU), at discharge
- An estimated 80% of serious medical errors involve miscommunication between providers during transitions of care (TJC)
- An effective hand-off can be defined as the “transfer and acceptance of patient care responsibilities achieved through effective communication.”
- Effective hand-offs may reduce medical error.

## Current mandates

- The Joint Commission: Accredited organizations must use a standardized approach to hand-off communications (National Patient Safety Goal).
- ACGME Common Program requirements (July 2011): Sponsoring institutions and training programs must develop a common structure for transitions in care as well as comprehensive curricula to teach and evaluate hand-offs.

## Possible Approaches

- “Flexible standardization”: Common process with minimal core clinical content developed to fit each type of hand-off.
- Training to include simulation/practice.

## Currently at Northwestern Memorial Hospital

- Hand-off policy

## Purpose/Objectives:

- Develop a standardized minimal hand-off tool for use by physicians throughout the hospital
- Develop a standardized process for each service(s) to develop hand-off tool to fit its needs.
- Develop general hand-off training program for trainees.
- Develop hand-off evaluation tool(s). Train evaluators (peer and faculty).
- Involve trainees in all levels of the process (learning through participation in the development of Patient Safety and Quality Improvement initiatives)

## Needs Assessment:

### Hand-off/Sign-out Tools:

1. Do you have a standard tool used for TOC across the training program? Y N  
Comments
2. If YES, who developed this tool?
3. Do you have standard tools for TOC for specific services/clinical areas? Y N  
Comments
4. If YES, who developed these tools?
5. Is the tool (a) Handwritten, (b)EMR (Cerner)-based (c) Separate Excel/other software-based or (d) Other: Describe:
6. Please estimate the number of different hand-off tools used in your program: (a) 0-5, (b) 5-10, (c) 10-15, (d) 15-20., or (e) Greater than 20
7. Is the hand-off (a) Verbal face-to-face only, (b) Verbal phone only, (c) Verbal face-to-face with printed/written tool, (d) Verbal phone with printed/written tool, or (e) Written/printed only
8. Is there an opportunity for the receiver to ask questions during the normal TOC in your training program? (a) Yes-always, (b) Yes-some services, or (c) No-never
9. Please upload or email copies of printed/written tools

### Training and education:

10. Do you have formal curricula for trainees in transition of care (hand-offs)? Y N  
Comments
11. When is this training implemented? (a) Before arrival on campus as an R1 (or equivalent start of training program), (b) During R1 orientation, (c) During the first year of training, or (d) After the first year of training
12. Is the training repeated? Y N
13. If YES, how often? (a) Less than yearly, (b) Yearly or (c) More than yearly
14. Do you have formal curricula for faculty in transition of care (hand-offs)? Y N  
Comments

### Evaluation:

15. Do you have a formal method for evaluating TOC? (a) between trainees Y N  
Comments or (b) between and other providers? Y N Comments
16. Do you have a formal method for providing feedback about TOC? Y N Comments
17. If YES, if the feedback (check all that apply): (a) Verbal only, (b) Written only, (c) Verbal and written, (d) Immediately after the TOC, (e) Within a day of the evaluation, or (f) More than a day after the evaluation
18. Who performs the evaluation and provides feedback (check all that apply): (a) Faculty, (b) Peer, (c) More advanced trainee

## Methods/Approach:

- Literature search to identify current approaches and best practice
- Needs assessment to identify current physician hand-off practices (baseline)
- DMAIC taskforce lead by hospital quality expert to
  - Develop basic/minimum hand-off tool
  - Develop final tool hand-off development process
  - Develop core teaching material/process
  - Develop core evaluation tool
  - Develop process to teach evaluation

## Outcomes and Evaluation:

- Annotated literature review: January 2011 through March 2013: N = 176
- Standardized process for trainee-to-trainee hand-offs
- Standardized process to evaluate trainee hand-offs
- Improvement in patient safety as measured by number of
  - Critical events
  - Near misses
  - Claims
  - Dollars held in reserve

## Discussion:

- The ACGME and THC hand-off mandates represent an opportunity to improve the art and science of effective communication in patient hand-offs.
- Hand-off skills should be actively taught and practiced in training programs, and hand-off tools should facilitate safe and effective hand-offs. Within an institution, there should be commonality among hand-offs process with the ability to customize hand-offs for specific circumstances.
- The use of a common hand-off tool is expected to improve patient safety. Participation in this project by trainees will result in a better end-product and will also serve to teach process improvement.

## Summary/Next Steps:

- Complete needs assessment.
- Organize DMAIC project and develop basic hand-off tool and process for customizing tool as well as evaluation tool.
- Pilot tool and process.
- Develop education and evaluation tools.
- Make changes and continue to expand use of the tool throughout the institution.

## References:

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- 4) Raduma-Tomas MA. Qual Saf Health Care 2011;20:18-33.
- 5) DeRienzo CM. Acad Med 2012;87:403-410.