Patient Flow in a Pediatric Emergency Department

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July 31st, 2015
Collaborators

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Agenda

• Background
• Motivation
• Results
• Implications
• Continuing work
• Center for Healthcare Engineering and Patient Safety
  – Multidisciplinary teams
  • Engineering
  • Nursing
  • Pre-med/Medical
  • Computer Science
  • Clinical faculty
C.S. Mott Children’s Hospital

• Nationally recognized for excellence in clinical services, research and education
• 348 beds
  – 28 ED beds
• Integrate clinical care, education, research and advocacy to advance the health of children, women, and families
Motivation

Emergency Department

- Emergency
- Unstable
- Complex
- Interactive

Inpatient Units

- Treatment
- Stable
- Complex
- Interactive
Our Goal

Improve quality care delivery and help patients, families, and healthcare providers understand hospital processes
Method

- **Observations:**
  - Over **100 hours** of observations in the ED/Inpatient Units
    - Observed day to day activities of attendings, residents, nurses
    - Observed patient hand-offs between the ED and the Inpatient Units
    - Spoke to social workers, care management teams, etc.
Results

ED Flowchart
Implications

• Provide patients/families with knowledge of interactions and behind the scenes work during their hospital stay
• Help healthcare providers understand the impact that each provider has on the system
• Understand the reactions of ED processes and the effects on Inpatient Units
Continuing Work

• Make flowchart app more user friendly
  – Implement flowchart in the hospital
• Continue observations to further enhance the flowchart
• Identify areas of opportunity to further our research in collaboration with C.S. Mott Children’s Hospital
Acknowledgements

• Center for Healthcare Engineering and Patient Safety
• C.S. Mott Children’s Hospital
• The Seth Bonder Foundation
• The U of M Center for Research on Learning and Teaching (CRLT)
• The TDC Foundation
Thank you!

QUESTIONS?

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