Accelerating Admissions from the Emergency Department

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Session Objectives

After this session, participants will be able to:

- Understand what can be worked on within the ED to facilitate admissions.
- Understand the potential improvement to hospital-wide flow by focusing on specific patient streams.

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There are a number of strategies that can help into and thru the hospital.

There is an extensive body of literature on the negative impact of boarders in the ED.

There are a number of strategies that can help decrease ED boarding and accelerate movement into and thru the hospital.
ACCELERATING FLOW INTO YOUR HOSPITAL

Early Decision To Admit

- In most cases, an experienced emergency physician or nurse will know if a patient needs hospital admission within minutes of entering the patient’s room and performing a brief assessment.
- Delaying admission until every lab and diagnostic study is back is an unrealistic expectation on the part of the admitting team.
- Early consultation for admission is often resisted, despite the obvious improvement in patient flow.
Expedited Testing

- At times, diagnostic testing may be necessary to determine the need to admit or the bed location (such as ICU versus floor).
- There is a role for expedited testing within the ED.

Express Admitting Units (EAUs) And ED Holding Areas

Busy EDs need to decompress before the number of boarders starts to grow.
After evaluation, admitting service can select the most appropriate in-hospital bed.
Holding (or “Bridge Orders”) - a few comments...

Holding orders (or “bridge orders”) can decrease time to admission and decrease ED LOS. Holding orders are part of the emergency medicine practice in many EDs.

- (Patterson J, Dutterer L, Rutt M. et. Al. Bridging orders and a dedicated admission nurse decreases emergency department turnaround times while increasing patient satisfaction Ann Emerg Med. 50(5):351-2, 2007 Sep.)
- Holding orders are NOT admission orders. Holding or Bridging orders are time-limited orders that permit stable patients to be moved safely from the ED to an inpatient setting or holding unit.
- In the past, some experts believed that Emergency Physicians should NOT write admission orders as it could unnecessarily extend their medicolegal liability to the inpatient setting. However, current thinking suggests that there is little additional legal risk for the emergency physician who writes holding orders. Holding orders must be properly written. The orders should make clear that the inpatient team is responsible for all further orders and the admitting team (and NOT the emergency physician) must be notified of any change in the patient’s condition.

Below, the current position statements of AAEM and ACEP:

- The American Academy of Emergency Medicine states that “The Academy believes that it is acceptable for emergency physicians to write Holding Orders, which define any necessary treatment and assessment parameters required in the interval until completion of admission orders.” (http://www.aaem.org/positionstatements/admissions.php)
- In their April 2010 policy revision, the American College of Emergency Physicians (ACEP) stated: “…in the interest of patient care and safety, an emergency physician may be compelled to write transition orders. These transition orders may include essential treatment and assessment parameters required before preparation of suitable admission orders.” (ACEP Policy ‘Writing Admission and Transition Orders’ April 2010)

There appears to be more legal risk in boarding patients in an overcrowded ED than in using holding orders.
Consider ICU “Fast-Tracking” – One Example

POLICY - A Critical Care Alert can be called for patients meeting the following inclusion criteria:

- Sepsis/Sepsis syndrome
- Acute respiratory failure requiring mechanical ventilation
- Resuscitation post-arrest
- Unstable hemodynamics requiring vasopressor intervention
- Intracranial hemorrhage with evolving neurological deficits or airway compromise

- Patients meeting inclusion criteria will have a Critical Care Alert called at the time they are recognized to meet inclusion criteria.
- A 30 minute response time (from notification to arrival in ED) is required from patient’s physician or the intensivist.
- Critical Care Unit will respond within 30 minutes of notification with both a bed assignment and a team for transporting the patient to Critical Care.
- All immediate diagnostic radiology needs should be completed prior to transport.
- The patient’s ED nurse will accompany the team to the Critical Care Unit to give bedside report.

Fast Track is a Process and Not a Place

- Code Blue
- Code STEMI
- Code Stroke
- Code Sepsis
- Code Vascular
- Code...
No Delay Nurse Reports

Adopt-A-Boarder Program

Started independently at Inova Fairfax Hospital and Stonybrook

- Admitted patients routinely spend hours in the ED hallway while they await an inpatient bed
- On a busy day an ED can have up to 10 patients at any one time in their hallway awaiting bed placement
- Some patients wait 12 hours or more in the hall

Instead of having all 10 patients wait in a single hallway in the ED, what if we placed 1 patient each in 10 different hallways on inpatient wards?
- Would they get better care?
- Would they be more satisfied with their boarding stay?

- Admitted ED patients very much preferred the inpatient hallway to the ED hallway
- Adopted boarders felt they got more personal attention and better care in the inpatient hallways than in the ED.
- Nearly all patients stated that they were happy to be closer to their inpatient bed
- Studies from Stonybrook, Inova hospitals, and UCLA showed that the Adopt-a-Boarder program accelerated bed turnover
- Many patients destined for inpatient hallway beds instead went straight to inpatient room
- Beds were cleaned in a fraction of the usual time
- Patient satisfaction with the program was extremely high at all hospitals studied

Further discussion of this program can be found at http://www.hospitalovercrowding.com

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PARTNERING WITH YOUR HOSPITALISTS

From Door to Discharge

DOOR
Patient seen in ED by a physician

COLLABORATE
ED and Hospitalist physicians collaborate during the admission process

HOSPITALIST CARE
Hospitalist physician oversees patient’s care during inpatient stay

DISCHARGE
Patient discharged by Hospitalist

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From Door to Discharge

- Seamless patient care from the Emergency Department (Door) to Inpatient treatment and Discharge
- Two Groups Working Together as ONE
  - Improved Admission Process
  - Open Communication
  - Less Patient Boarding
  - Shared Goals
  - Better Relationships

So Happy Together…

Ideal ED Doctor

- Now/later?
- Sick/not sick?
- Accurate drug list
- Proper bed/location ??
- Plays well with others
- Oriented to our culture
- Oriented to resources
- Mutual professional respect
  - Standard work
  - SBAR
  - Case discussions
- No batching
- Shared governance
- Has a diagnosis

Ideal Hospitalist

- Call back on time
- Just say yes!
- 1-800-ADMIT
- Healthy/Professional dialogue
- Good communication (Problem Child)
- The decision to admit ***
  - Bed ahead
- Allows bridge orders
- Can multi-task/serial admits/parallel process
- Aware of ED metrics
Demand-Capacity Management: An Administrative System For Flow

Admissions

A Bed Management Process

Real Time Demand/Capacity System

An Early Warning + Response System

Forecasting and Planning

Discharges

Transfers
Optimize Bed Capacity AND Utilization

Patients should be in a bed only if it is medically necessary and only as long as medically necessary

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TABLE TURNS - How many times a table in a restaurant is used to serve a new customer

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Bed Turns-
How Many Patients a Bed Can Serve per Unit of Time

Flow As A System

Many units/departments attempt to optimize patient flow

- Sub-optimizing flow in other areas
- Sub-optimizing flow throughout the entire acute care system
This Is Not Your Typical Hospital-Wide Bed Meeting

Hospitals require an administrative system for flow that:

- **Predicts** at a unit level the **capacity** to accept admissions within a designated time period
- **Predicts** at a unit level the **demand** within a designated time period
- **Documents a plan** at a unit level if demand is predicted to be greater than capacity
- **Evaluates the success or failure** of predictions and plans
- **Uses failures and successes of predictions and plans to develop the key improvement projects to improve flow**

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Hospital Wide Patient Flow and Real Time Demand Capacity-An Overview

![Diagram](image)

- **Real Time Demand Capacity (RTDC)**
  - Focused on and Funneled Through the Bed Meeting
  - A Proactive Bed Huddle
  - A Good Day
  - A Not So Good Day

**Smooth Daily Flow**
- **A Plan**
- **Identification of Chronic Barriers**
  - Process Changes
  - Improvement Projects

**Improvement Through Focus and Leverage**

1. Predicts **capacity** to accept admissions
2. Predicts if capacity matches the **demand**
3. Assesses and creates a **plan** to match capacity and demand.
4. Evaluates the success or failure of the documented **plan**
5. Uses plan failures or successes to develop the key improvement projects to improve flow.

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Leadership, Rounding, and You...

( MBWA )
Rounding on admitted patients /Optimized rounding practice

- Look
- Listen
- Ask
- Coach
- Problem-solve
- Communicate
- Plan

The Hospital-Wide Patient Flow Committee

JCR Leadership Standard
LD.3.10.10

- The leaders develop and implement plans to identify and mitigate impediments to efficient patient flow throughout the hospital.

- Effective for all accredited hospitals on January 1, 2005
Lean Admissions at ThedaCare

“Encircle Health”

- Anticipates and structures to meet all needs in one visit
- Lab designed to get results to patient record within 15 minutes
- Patients leave with one plan, all results

From Admission To Discharge: Ideally a Nested Network of Processes

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Admissions and Discharges

Problem: Mid-day bed crunch due to misalignment of admissions, discharges

Contributing Factor: Late mounding by PCPs, non-hospitalists

Patient Flow

6a  7a  8a  9a  10a  11a  12p  1p  2p  3p  4p  5p  6p  7p  //  12a
Peak Admission Period  Peak Discharge Period

of admissions, discharges

Discharges

“Everybody Out By 11…”

...discharge orders improved from 29.5% to 56%, but the mean length of stay was unchanged...

...although the timing of the discharge orders decreased by 78 minutes during the period, patients actually left the hospital only 12 minutes earlier—still around 4 p.m...
In many hospitals, the rallying cry of “everyone out by 10 a.m.” drives the patient discharge system. Yet despite the frantic morning rush this directive creates for the staff, data shows that most patients do not go home until late afternoon. Why? First, the processes involved in discharging a patient are complex and time-consuming, requiring action from the dietary, pharmacy, respiratory therapy, nursing, and other hospital departments. When the schedule demands that all these processes be completed throughout the hospital at the same time, a bottleneck forms that can create delays throughout the system—from the emergency department to the ICU to rehab. Often, the discharge work is not completed on time due to delayed lab work, no physician discharge orders, or communication breaks down as each department acts independently of the others, following its own procedures. The whole process may not be well planned, resulting in a disorganized sequence of events. The consequent delays slow or stop the flow of patients through the hospital. As they constantly operate, most hospital flow systems are push systems: patients are pushed through as staff tries to coordinate a complex series of events on a schedule impossible to meet.
What Makes Hospital Census Variable?

- If ER cases are 50% of admissions
  
  and...

- Elective-scheduled OR cases are 30% of admissions
  
  then...

- Which would you expect to be the largest source of census variability?
The Answer Is ...

The E.D. and elective-scheduled O.R. have approximately equal effects on census variability.

Why?

Because of another (hidden) type of variability ...

Artificial Variability

- Non-random
- Non-predictable (driven by unknown individual priorities)
- Should not be managed, must be identified and eliminated

Natural Variability

- Clinical variability
- Professional variability
- Flow variability

You Must Manage Preoperative and Perioperative Flow
Smoothing Surgical Flow

- The **operating room** has a significant impact on the flow of patients through the hospital.
- Smoothing surgical patient flow patterns leads to **smaller ranges between high and low volume** and **opens capacity** in both the OR and the **inpatient** areas of the hospital.
- Adjust the block schedule based not only on utilization but also on where the patient should go post-operatively.
- Fewer patients are placed off-service, which leads to a reduction in length of stay.
- An additional benefit is that placing patients in the appropriate bed and unit improves not only patient satisfaction but also physician satisfaction.

KEYS TO SUCCESS
Why Do Patient Flow Improvement Efforts Often Fail?

- The improvement projects are seldom tied to the true bottlenecks in flow
- The changes resulting from the projects optimize flow at one stage (or unit) but do not optimize flow throughout the hospital
- Too few hospitals have the will or resources to sustain flow improvement efforts

Key Principles

- Patient flow is a complex technical problem
- The Myth Of 100% Utilization
- Patient flow cannot be solved by just one discipline or one department within the hospital
  - The solutions require high levels of cooperation and integration
  - Effective diagnosis of problems and effective testing of changes using PDSA cycles are required
  - The solutions cannot just be installed
Focusing on Your Opportunities and Not Your Problems…
Thank You
Improving Patient Flow
In the Emergency Department

By Robert W. Strauss MD, Thom A. Mayer, MD
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Strauss and Mayer’s Emergency Department Management
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The Patient Flow Advantage: How Hardwiring Hospital-Wide Flow Drives Competitive Performance
Kirk Jensen/Thom Mayer
Fire Starter Publishing, January 2015

Chapter 9: Real-Time Demand and Capacity Management
Section 2 — Advanced Flow Concepts

References
About the Authors
Acknowledgments
Additional Resources
Additional Reading by Authors

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Emergency Department Leadership and Management: Best Principles and Practice

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Hardwiring Flow
Systems and Processes for Seamless Patient Care

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- Why patient flow helps organizations maximize the “Three Es”: Efficiency, Effectiveness, and Execution
- How to implement a proven methodology for improving patient flow
- Why it’s important to engage physicians in the flow process (and how to do so)
- How to apply the principles of better patient flow to emergency departments, inpatient experiences, and surgical processes

1. Modeling Patient Flows Through the Healthcare System- HALL, BELSON, MURALL, DESSOUKY
2. Hospital-wide System Patient-KOLKER
3. Hospitals And Clinical Facilities, Processes And Design For Patient Flow-WILLIAMS

   Randolph Hall, PhD Editor
   Springer, January 2014

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   Randolph Hall, PhD Editor
   Springer, January 2014
Leadership for Smooth Patient Flow:
Improved Outcomes, Improved Service, Improved Bottom Line

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Thom A. Mayer, MD, FACEP, FAAP
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The heart of the book focuses on the practical information and leadership techniques you can use to foster change and remove the barriers to smooth patient flow.

You will learn how to: Break-down departmental silos and build a multidisciplinary patient flow team. Use metrics and benchmarking data to evaluate your organization and set goals. Create and implement a reward system to engage and sustain employee effort. Adapt to the new patient flow realities of the ED. Use the ED effectively as both the process and the patient interface. Identify problem areas in the ED. Use the ED as the main point of entry into your organization. The book also explores what healthcare institutions can learn from other service organizations including Disney, Ritz Carlton, and Starbucks. It discusses how to adapt their successful demand management and customer service techniques to the healthcare environment.

“This book marks a milestone in the ability to explain and explore flow as a central, improvable property of healthcare systems. The authors are masters of both theory and application, and they speak from real experiences bravely and well.”

Donald M. Berwick, MD
President and CEO
Institute for Healthcare Improvement (from the foreword)

ACHE + Institute for Healthcare Improvement

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Managing Patient Flow in Hospitals:
Strategies and Solutions, Second Edition

Real-Time Demand Capacity Management and
Hospital-Wide Patient Flow

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The Joint Commission Journal on Quality and Patient Safety
May 2011 Volume 37 Number 5
The Definitive Guide to Emergency Department Operational Improvement

The Improvement Guide and Rapid-Cycle Testing

Langley GL, Nolan KM, Nolan TW, Norman CL, Provost LP.

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