How a Hospital Medicine Program can Improve Patient Care and Medical Education

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Definitions

Hospital medicine: A medical specialty dedicated to the delivery of comprehensive medical care to hospitalized patients. In addition to their core expertise managing hospitalized patients, work to enhance the performance of hospitals and healthcare systems by:

- Prompt and complete attention to all patient care needs
- Employing quality and process improvement techniques
- Collaboration, communication, and coordination with all physicians and healthcare personnel caring for hospitalized patients
- Safe transitioning of patient care within the hospital, and from the hospital to the community, which may include oversight of care in post-acute care facilities.
- Efficient use of hospital and healthcare resources

http://www.hospitalmedicine.org/AM/Template.cfm?Section=Hospitalist_Definition&Template=/CM/HTMLDisplay.cfm&ContentID=24835

Core Hospitalist Roles

- Clinical care
  - Development of expertise related to clinical content and efficiency
  - Availability for all inpatient needs, PCP needs
  - High level of accountability
  - Communication
- Improving the System
  - Standardization
  - Clinical pathways
  - Systems Approach
  - QI Methodology

Core Hospitalist Roles

- **Education** – clinical and systems
  - Other Attending Physicians, PCP’s
  - Residents, interns
  - Medical Students
  - Nursing, RT, other

- **Patient Safety**

- **Research**
  - Mostly clinical and QI


Hospitalist Roles

- More than many other specialties, the various roles are very interdependent and intertwined, allowing for **synergy** and ability to improve care
- Since HM programs often receive financial support from their employer-institution, they are uniquely motivated to pursue system level improvements
  - **Have the time, motivation, and skill set**


Example - PEWS

**Pediatric Early Warning Score**
- Began as a clinical project using quality improvement methodology to decrease preventable codes on the floor (pt safety)
- With successes, then education became important to spread and improve the system
- Later, research (including publications, grand rounds, etc.) to spread the knowledge


High Quality Care is:

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<tr>
<th>IOM Definition</th>
<th>Hospitalist “tools”</th>
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<tr>
<td>Safe</td>
<td>PEWS, Med Reconciliation</td>
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<td>Timely</td>
<td>Discharge planning, availability</td>
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<td>Effective</td>
<td>EBM, clinical pathways</td>
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<td>Efficient</td>
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<td>Equitable</td>
<td>Standardization, FCR</td>
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<td>Patient Centered</td>
<td>FCR</td>
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Hospitalists and Improving the Quality of Care

- **Natural synergy** due to:
  - Hospital based specialty
  - Well versed in hospital processes and policies
  - Intimately involved with admission and discharge process, coordination of care, nursing, residency leadership, ancillary services


Pediatric Hospitalists and Improving Quality

- Studies have demonstrated that pediatric hospitalist programs are associated with:
  - Decrease hospital costs (10% avg) and LOS (10% avg)
  - **Not** translate into increased hospital revenues
  - **No** adverse effects on provider, parent, or housestaff experience

Landrigan CP, Conway PH, Edwards S, Srivastava R. *Pediatric Hospitalist: a systematic review of the literature.* Pediatrics 2006 May; 117(5); 1736-44.

Variations in Care of Common Pediatric Inpatient Conditions

- Pediatric Hospitalists compared to community pediatricians:
  - Greater adherence to evidence-based therapies/tests
  - Less use of therapies/tests that have unproven benefit
  - Asthma, UTI, Gastroenteritis


Family Centered Rounds

**Family-Centered Care & the Pediatrician’s Role**

- Conducting attending physician rounds (i.e., patient presentations and rounds discussions) in patients’ rooms with the family present should be standard practice.

Family Centered Rounds - Overview
• Include family, nurses, physicians and other allied health personnel relevant to the particular patient’s care
• Involve the family in the decision-making process and recognize the family is the focus of care
• Include opportunities for teaching both the family and health care learners
• Facilitate the use of evidence-based medicine
• Improve the process of care
• Improve satisfaction with care delivery
• Provide families with choices, including not to participate in rounds or to move rounds somewhere besides their child’s

Families Like Bedside Rounds
• Author, year
  - Romans 1961
  - Linford 1980
  - Simone 1993
  - Wang Cheng 1999
  - Lehmann 2007
  - Haer 2007
  - Fletcher 2005
  - Landry 2007
  - Babar 2007
  - Latta 2008
• Outcome Measure
  - Satisfaction Surveys
  - Anxiety Scales
  - Clinical Indicators
  - Structured Interviews
  - Focus Groups

Landry’s RCT Bedside vs. Conference Room
• 81% of parents wanted next day’s rounds to be at bedside (PICU, n= 27 parents)
• Strong preference for both presentations and teaching to occur at the bedside (p<.0001).
• Parents perceived...
  - Better understood what doctors said
  - More questions answered and more confidential/private
  - More time spent, more respected, taken more seriously
  - More information about tests and plan for day

Landry and Inpatient Learners
• No difference in resident comfort during presentation between bedside and conference room
• More comfortable asking questions and being questioned in conference room
• Residents felt more competent in conf. rm. BUT parents found resident more competent at bedside
• Residents felt bedside more beneficial for patient and perceived parents more satisfied

Landry MA, Pediatrics 2007
Percentage of Families ranking the hospital a “10” on a scale from 0-10

Discharge - Time of Day
Hospitalists and Education

• Several studies suggest that hospitalist programs at academic centers improve medical education

• Introduction of HM program at Boston Children’s was associated with an improved intern experience and self-reported general pediatric knowledge

• Hospitalist attendings associated with reduced LOS and resource utilization while improving resident education at community-based teaching hospitals (internal med)


Putting it all together...

• Hospitalists can use the “tools of the trade” to improve quality of care and medical education
  - Clinical expertise
  - FCR
  - EBM
  - Clinical pathways
  - Availability
  - Accountability