Acute Medicine in the UK: An American Hospitalist’s Perspective

G. Randy Smith, Jr. MD FHM
Clinical Lead Consultant, Acute Medicine
Royal Infirmary of Edinburgh

Society for Acute Medicine
4th Annual International Conference
8 October 2010
- Fragmentation of care and its effects
- Measuring efficiency in the MAU
- Clinical information processing
- The Proceduralist and other opportunities
10,977 patients with heart failure or pneumonia

- Fragmentation of care (FOC) = % of care given by hospitalist other than the hospitalist who saw the patient the majority of the stay
- 10% increase in FOC = ↑LOS 0.30 days for heart failure, 0.39 for pneumonia (p<0.00001)

Fragmentation of Care:
Your Worst Enemy, Your Greatest Opportunity
Efficiency—How Much is Enough?
The Financial Terms of Efficiency: The US Model

- Medicare: US govt. health insurance for 65+, special groups (disabled, dialysis)

- DRG: Diagnosis Related Grouping
  - Example: Pneumonia
    - “Pneumonia” = payment for 4 hospital days
    - “Hospital Acquired Pneumonia with hypoxic respiratory failure and AKI in noncompliant smoker with COPD” = 2 + 4 + 3 + 1 + 1 + 2 = payment for 13 days
The Financial Terms of Efficiency: The UK Acute Medicine Model

- ?
  - % discharged
  - LOS (days in ward, patient bed hours in MAU)
  - Patient contacts / PA
  - Hospital discharges / PA
  - Readmission rate
  - Adverse events

- What is the baseline?
How to Rate Acuity?

<table>
<thead>
<tr>
<th>Time</th>
<th>Temp</th>
<th>RR</th>
<th>SpO2</th>
<th>FIO2</th>
<th>Date</th>
<th>Wt(kg)</th>
<th>Wt(lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/04 08:00</td>
<td>36.7</td>
<td>96</td>
<td>96</td>
<td></td>
<td>09/28</td>
<td>110.7</td>
<td>244</td>
</tr>
<tr>
<td>10/04 09:00</td>
<td>35.8</td>
<td>91</td>
<td>95</td>
<td></td>
<td>09/28</td>
<td>110.8</td>
<td>244</td>
</tr>
<tr>
<td>10/04 19:57</td>
<td>36.7</td>
<td>97</td>
<td>95</td>
<td></td>
<td>09/28</td>
<td>110.8</td>
<td>244</td>
</tr>
<tr>
<td>10/03 00:00</td>
<td>36.6</td>
<td>94</td>
<td>94</td>
<td></td>
<td>09/28</td>
<td>110.8</td>
<td>244</td>
</tr>
</tbody>
</table>

Vitals Signs are the last 5 in the past 48 hours. Weights display the last 5 within 7 days.

Initial Wt: 110.8 kg 244 lb

**Active Inpatient Medications:**
- bupROP/Im (Wellurin Sr) 150mg = 1tab(s) PO q4h
- doxycine 100mg = 1cap(s) PO q2h
- dextrose (Dextrose 30mg capsule) 90mg = 3cap(s) PO qHS
- enoxaparin 30mg = 0.3ml, Subcut q12h
- ferrous sulfate (ferrous sulfate enteric coated) 325mg = 1tab(s) PO w Meals
- folicacid nasal 0.05mg = 1sprays Nasal qDay
- folicacid-salmeterol (Advair HFA 230/1) 1 puff(s)
- Inhale BID
- hydrochlorothiazide 25mg = 1tab(s) PO q4h
- levophylaxine (Synthroid) 100mcg = 1tab(s) PO qDay
- pantoprazole (Protonix) 40mg = 1tab(s) PO w Breakfast
- pravastatin 40mg = 1tab(s) PO qHS

**Valsalvm 40mg = 1tab(s) PO qDay**

**Active PRN Medications:**
- acetaminophen--codeine (Percoct 5/325) = 2tab(s) PO q4h
- acetaminophen 650mg = 2tab(s) PO q4h
- albuterol inhale 2puffs(s) = Inhale q4h
- diphenhydramine (Benadryl) 25mg = 0.5ml IV q4h
- diphenhydramine (Benadryl) 25mg = 1tab(s) PO q4h
- hydromorphone 0.5mg = 0.25ml IV q4h
- loratadine 10mg = 1tab(s) PO qDay
- ondansetron 4mg = 2ml IV q6h

**One Time Medications in the Past 36 hours:**
- Continuous Infusions: Dextrose 5% with 0.45% NaCl 1,000 ml, 1,000 ml IV 100 ml/hr
Acuity and Coding

- Hospitalist Time-Motion Study:
  - 17% of time on direct patient contact
  - 34% of time on medical record documentation

- Alternatives to Coding
  - Initial SEWS?
  - Initial and discharge/transfer SEWS?

Proceduralists

- Hospitalists with 1 WTE dedicated to bedside procedures
- Reduced complication rates (< 1%)
- Improved training of junior physicians
- Improved compliance with work-hour rules for trainees

- Average daily cost of hospitalist = $1,607
- Average CVC, LP, pleural/peritoneal drain = $90–150 per procedure

Surgical targets: Perioperative / Postoperative Surgical Outcomes
- Preoperative screening / optimization
- Postoperative care

Malignancy:
- Referral systems
- Streamlined diagnostic approach

Adverse error reduction:
- Care handover (including medicine reconciliation)
Thank You

Dr. Maged N. Doss
Assistant Director for Education
Emory University Hospital Medicine Service
Atlanta, Georgia, USA

Dr. Mark V. Williams
Division Director, Hospital Medicine
Northwestern University
Chicago, Illinois, USA