Incorporating Observation Medicine Teaching in your OU

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Disclosure of Commercial Relationships

• No Commercial Relationships

Why Teach Observation Medicine?

• 36% of EDs have dedicated Observation Units (OUs)¹
• 2/3rd of EM residency programs have a dedicated OU
• Only 9.8% have a required Observation Medicine (OM) rotation and only 25.5% have an OM elective²
• 85% of PDs believe OM is an important part of EM

Why Teach Observation Medicine?

• Observation Medicine is a cognitive skill
  - Understanding clinical pathophysiology of what can be managed in the OU
  - Optimal management protocols
  - Smooth transitions of care
  - Recognize potential risks and outcomes
  - Develop administrative skills

Why Teach Observation Medicine?

• Understanding natural history of disease
• Better disposition decisions
• Better manage boarded patients
• Bridge the gap between Emergency Care and Acute Inpatient Care

Why Teach Observation Medicine?

• Exposure to sub-acute diagnostic testing
• More time for direct resident observation and face to face teaching.
• Opportunity to provide direction and leadership for developing OUs

Background

• VCU Medical Center Clinical Decision Unit (CDU)
  – Opened in 2006
  – Two EM/IM boarded physicians as co-directors
  – 24/7 Mid-level provider services
  – Only ED physicians allowed to admit. No direct admits or holds accepted

Background

• Started with 15 protocols, expanded to 32 protocols
• Accepted “Complex” Observation and Extended ED LOS patients who met criteria.
• Able to meet admission and LOS benchmarks in 1st yr of existence.
• Offered elective in Obs Medicine starting July 2007

Background

• In July 2008, offered a core rotation in Observation Medicine to second year ED residents.
• Created an “Observation Medicine Track” within the EM residency program.
• 2009 – recognized as a separate “Division of Observation Medicine” by VCU board of reagents.

Observation Medicine Students

• Emergency Medicine Residents
• Mid-level Providers
• Medical Students
• Internal Medicine Residents
• Pharmacy Residents

Methods of Learning

• Web 2.0
• Web-based asynchronous learning
  • Longitudinal Curricula
  • Simulation-based curricula
• Didactic presentations
  • Group Learning

Prerequisites

• Dedicated leadership with a commitment to teach
• Institutional and Departmental support
• Preferably a closed unit
• Involve dual trained faculty (EM-IM, EM-FP)
• Unit that meets clinical benchmarks
Structure of Rotation at VCU

- Dynamic flow, mimics the ED multitasking approach
- 7A-5P: rotation starts with an AM sign-out.
- Disposition driven
- Working rounds, break off to admit/discharge

Model Curriculum

- Didactics, Clinical Experience and Self Directed learning
- As resident progresses, gradual escalation of involvement in observation care
- With an end goal of allowing a senior resident to be able to manage an observation unit under the supervision of an attending

Longitudinal Curriculum

- PGY-1 Year
  - Development of Knowledge Base
    - Basic Principles of Observation Medicine
    - Understanding unit protocols
    - Appropriate patient selection, management and disposition
    - Follow up on resident’s patients who underwent observation

- PGY-2 Year
  - Understand observation unit protocols
    - Inclusion/exclusion criteria
    - Interventions and further clinical testing
    - Disposition based upon observation unit stay
  - Learn patient management in greater detail
    - Interpretation of clinical results
  - Manage multiple observation patients

Structure of Rotation at VCU

- Bedside teaching
- “Field trips” – nuclear medicine, ECHO, Stress testing, EP, Endoscopy
- Didactic teaching
  - Teaching file, daily quiz
  - Observation Administration
Longitudinal Curriculum

• PGY-3 Year and beyond
  – Manage a group of observation patients both clinically and administratively
  – Understand the administrative aspect of observation medicine
    • Participation in quality assurance
    • Development of new protocols
    • Evaluation/Research based upon existing protocols
    • Billing and coding

Potential Pitfalls

• Overstaffing
  – Not enough patients to keep everyone busy

• Lack of institutional or departmental support
  – Inadequate release time for teaching

• Lack of clearly defined goals

Other Possibilities

• Integrate Observation Medicine teaching into existing EM department rotation

• Combine Observation Medicine Rotation with Ultrasound, Procedure, Toxicology or EMS rotation

Evaluating the Educational Impact of an Observation Unit Rotation for Emergency Medicine Residents

OBJECTIVE: To assess the educational utility of a 21 day rotation in an observation unit by second year Emergency Medicine (EM) Residents

METHODS: This is a quantitative and qualitative study assessing the educational utility of a required EDOU rotation. The study used two assessment instruments. The first was a ten question assessment of the residents' knowledge of criteria used to admit patients to the EDOU. The second was a 15-item survey utilizing a five point Likert scale designed to assess the key elements of ACGME general competencies.

RESULTS: EM residents improved their mean score on the medical knowledge assessment by 16% (5.96 vs. 6.92, 95% CI 0.41 to 1.51) and achieved statistically significant improvement in each of the other general competencies except interpersonal communication.

CDU-Pre-rotation evaluation

<table>
<thead>
<tr>
<th>Please rate your comfort level in the following:</th>
<th>Not at all...very Comfortable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independently managing patients</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Coordinating all aspects of patient care, including specialty providers, nursing, and social work</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Performing procedures</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Utilizing resources appropriately</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Making decisions regarding disposition of ED patients</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Making decisions regarding dispositions of CDU patients</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Communicating with patients</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Communicating with other care providers</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Advocating for my patients within the healthcare system (i.e. arranging timely follow-up and outpatient testing, etc)</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Diagnosing and treating:</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Asthma</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Soft-tissue infections</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Blunt trauma</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Chest pain risk stratification</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Complication of diabetes</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Syncope</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
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Reading List – PGY 2

Sepsis:

Congestive Heart Failure:

Pediatrics:

Geriatrics:

Abdominal Pain:

Reading List – PGY 3

Health Policy:

Financial Issues:

Unit Management:

National policy issues: