Observation Units 2.0

*Ideas on expansion*

Pawan Suri, MD

The presenter has no conflicts of interest, commercial or otherwise related to the contents of this talk.

Objectives

1) Discuss the evolution and principles of observation medicine
2) Review existing models of observation care
3) Pros and Cons of expanding your unit’s scope or size

Principles of Obs. Medicine

- The 80/20 rule
- Share the same vision as the ED
- Protocol Driven
- Flexibility
- Strong Leadership
- Institutional buy-in

Natural History of OU’s

- Usually built with great fanfare
- Initial resistance – especially cardiology, hospitalists
- Under Resourced
- Inconsistent leadership
- Inability to keep the unit full
- Quickly morphs into a holding unit, ED overflow, Post-procedure unit or worse a storage area

The VCU Experience

10 bed unit - opened in Feb ’06; started with 14 protocols
Two joint directors (EM/IM boarded)
Staffing:
- 2 Nurses/10 beds
- One Patient care technician
- One desk clerk
- 24 hours of APP coverage
- 6 hours of onsite physician coverage
Initial census was only 5-6 patients/day
What were we missing?

- "Observation eligible patients NOT captured by current protocols: Example - Blunt trauma, select overdoses, snakebites
- ED extended-LOS patients
- Post- procedure and ED holds
- Pediatric patients
- Complex Observation” cases, not meeting protocol

The Hot Potato

- ED physician calls the hospitalist for a potential admission
- Hospitalist service either “full” or “patient does not meet inpatient criteria” - request admission to the Observation Unit
- Observation Unit provider says “patient is excluded from our protocol”, refer back to hospitalist
- Now ED physician is on his 4th phone call

Expansion Idea #1

- Review & Revise Existing Protocols
- Add Missing Protocols

Top Observation Diagnosis

- Chest pain: NOS/NES/CAD
- Acute Renal Colic
- Syncope and Collapse
- Atrial Fibrillation
- Dehydration
- CHF
- Pneumonia
- Abdominal Pain
- Acute Gastroenteritis
- Asthma
- Pyelonephritis
- Anemia

Protocols: the double edged sword

Standardize care but discourage creative thinking
One size fits all philosophy

Have to be resource sensitive and hospital specific
Inpatient Vs outpatient Observation

Do not capture:
“Outside the box” Obs. (20%)
“Complex Observation Patient”: multiple chronic problems, yet not meeting acute inpatient criteria.
23 y/o Female presents to the ED at 8 AM with nausea, vomiting and diffuse abdominal pain. She has a history of endometriosis, ovarian cysts, chronic lymes disease and POTS syndrome. Initial workup reveals a slightly elevated white count of 10.7, UA is LE +, Nitrite - with 7 WBCs and many squamous cells. Acute series is negative. Patient remains in excruciating pain despite a dose of morphine, IV fluids and antiemetics. An Abdomen/Pelvis CT with contrast is ordered. Appendix not visualized. Next a pelvic exam is done. Bilat adnexal tenderness. OB called - want ovarian dopplers to r/o torsion……….patient is discharged from the ED after 12 hours

**Expansion Idea #2**
- Extended Emergency Department LOS Patients
  LOS>4 hrs; 30% of these patients met Observation Criteria

**Expansion Idea #3**
- Consider a Hybrid Unit

The Hybrid Unit

Jack of all trades, master of none
Possible uses:
- Admit holds
- Extended ED workups
- Post-procedure unit
- “Fast-track” ED patients

If used as an option, Must have strictly defined criteria
Can move the bottleneck up

**Expansion Idea #4**
- Reevaluate Staffing Needs
  Consider adding or increasing Nursing +/- APP coverage to achieve shorter LOS
Use of APPs

• Who will pay for APPs?

• Advantages
  - Flexibility in implementing protocols
  - Patient turnover
  - Complex observation patients
  - Can perform minor procedures
  - Help out in other areas

• Disadvantages
  - Expensive

Use of APPs

Must have
  - Clearly defined expectations
  - Strong and dedicated physician leadership
  - Training manual, continuing education
  - Rotate in other areas of the ED
  - Scheduled Unit meetings with physicians and nursing staff
  - Preferably have prior experience in the ED and/or inpatient setting

20 y/o F presents to the ED with a 3 day history of fever, body aches, nausea, vomiting, right flank pain and dysuria.

ED work up reveals a temp of 104 F, HR 126, white count of 14K and a dirty UA.

She is given 1 gm Ceftriaxone IV and 4 mg Zofran and fluid challenged but vomits after 30 mins.

She is admitted to the Observation Unit under "Acute Pyelonephritis" protocol.

"Simple"?

20 y/o F presents to the ED with a 3 day history of fever, body aches, nausea, vomiting, right flank pain and dysuria.

ED work up reveals a temp of 104 F, HR 126, white count of 14K and a dirty UA.

She is given 1 gm Ceftriaxone IV and 4 mg Zofran and fluid challenged but vomits after 30 mins.

Oh BTW: She has a hx of Kidney/Pancreas transplant 3 years ago and her med list is 17 deep.

"Complex"?

Simple Observation

• Single active problem
• Limited co-morbidities, medication needs
• Easily managed through standardized protocols
• Limited nursing needs
• Ideal for nurse or advanced practice provider run
  Obs unit with some physician oversight
• Can be initiated in the ED (virtual obs)
Complex Observation

- More than one active problem
- Multiple co-morbidities, poly pharmacy
- Not easily protocolized
- Resource intensive, demanding care
- Need considerable physician oversight
- Increased LOS

No Gatekeeping

“ED physician is King” – the NJ Model
No front-end screening. Take all comers.
Mis-triaged patients become direct admits
Unstable patients sent back to ED (very rare)
Very resource intensive
Constant feedback to ED physician on patient outcomes

Direct Admissions/Transfers

- Additional source of patients for the unit
- Mandate direct communication with the physician requesting admission
- Set up an “accelerated triage” through the ED
- Try to provide feedback to the referring physician

Other Non-Traditional and Radical Expansion Ideas

Expanding the horizon

- Pediatric patients
  Nurse and APP training
  Simple protocols
  Age criteria
- Trauma Patients
- Other Surgical Observation
  ENT
  Ophthalmology
  Orthopedics

Pushing the Envelope

- Design the unit to include some or all licensed inpatient beds
- Ability to bill both Observation and inpatient CPT codes