Making Your OU Rated G – Why Including Infants and Children in Your OU Makes Sense

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“Observation Medicine Principles and Protocols”
• Cambridge Medical Publishers
• Research
• No COE
• CDU
• CCF
• 1994-2019
• 26 year experience

Which Patient is Easiest to Care for in the ED (or OU)?
• 45 yo F c/o pain requesting pain meds, PMH: chronic abdominal pain
• 74 yo F weak, dizzy, felt like passing out, arm numbness, PMH: CHF, COPD, DM, HT, hx of MI, on 12 meds qd
• 16 yo M s/o sore throat, not taking po
• 8 yo F c/o SOB, wheezing, known asthmatic, has a URI
• 5 yo M with vomiting, diarrhea, has gastroenteritis, dehydration

• Which patient is simple, straightforward, has an easy disposition?
• Which patient has the shortest LOS in ED and OU?
• Which patient uses the least resources, takes least time?

Why Observation Medicine
• Avoids inpatient admission, ↓ inpatient LOS
• ↑ referrals, contracts, new product line
• Clinical pathways, risk stratification
• Cost containment, ↓ cost, value, improved care
• Better use of services at lower cost, ROI
• ↑ patient satisfaction, better public relations
• ↓ risk, ↓ malpractice, ↓ liability, ↑ patient safety
• Fast, efficient, less expensive workup
• Improved flow: ↑ ED efficiency
• ↑ patient volume: physicians, hospital
• Financial: ↓ denials, ↓ penalties, ↑ revenue
• Easiest way to build beds

Pediatric Patients in the OU Why Not?
• You are competent and able to care for children and infants in the ED.
• Why not care for them in your OU?
• Nationally, in the US, pediatric patients make up 25% of all ED visits
• 85% of pediatric patients are seen in general (not pediatric) EDs
• Would you divert one-fourth of your patients from your ED?
• Why turn away 25% of your patients away from the OU?
• In US, 6% of OUs have combined adult and pediatric (“hybrid”)

Under-utilization of OUs
• 10% of adults, 5% of pediatric ED patients placed in OU
• 25% of adults, 39% of pediatric patients could be treated in OU instead of inpatients (Canada Health Policy report)
• In US, 1/3 pediatric admissions are short stay ≤ 1 night
• In US, 70% of pediatric asthmatics could be in OU
• Another study in US, 2/3 to 3/4 pediatric asthmatics could be in OU
• In US, “nearly all children hospitalized for simple acute gastroenteritis might be eligible” for OU
**Many Benefits of Placing Pediatric Patients in Your OU**

- "Usual known benefits plus additional benefits for
- Hospital
- Emergency Department
- ED Physicians
- Physician colleagues in practice: primary care (family practice, pediatricians), specialists
- Positive fiscal impact
- Could make difference between hospital closing or staying open
- Community, societal impact
- Family, Patient
- Better patient care and outcomes

**Who is the Ideal OU Patient?**

- Inclusion Criteria
  - Stable vital signs: T, P, R, BP (stable ≠ totally normal)
  - Non-critical
  - Do not need "intensive" nursing care
  - Do not need "intensive" physician care
  - Expected to have a disposition in a “reasonable” short time frame: monitoring, diagnosis, treatment for < 24 hours
  - Isn’t this the previously healthy child or infant with an acute illness or injury?
  - The pediatric patient also lacks the major OU exclusions

**Which patient should not go to the OU?**

- Exclusion criteria
  - Critically ill
  - Unstable vital signs
  - Need “intensive” nursing care
  - Need “intensive” physician care
  - Anticipated length of stay is > 24 hours
  - Needs SNF placement
  - Lacks social supports, Lacks caregiver
  - Readmissions
  - Medicine reconciliation
  - Secondary gain: does not want to go home, drug seeking, chronic pain, other

**What Age and Types of Pediatric Patients in the Combined OU?**

- Adolescents
- Children
- Infants
- Neonates
- Community hospital with no pediatric inpatients ≥ 5 yr
- General hospital (hybrid unit) initially ≥ 6 months then ≥ 2 months
- Childrens hospital: neonates
- Additional training/experience for staff
- Resources: equipment, supplies, medications, monitoring

**Similarities and Benefits of Pediatric and Adult Observation**

- Benchmark for Obs: 80% discharged, 20% admitted as inpatients but depends on diagnosis, maybe age, and …
- Both use protocols, order sets, care paths
- LOS = 15 hours but depends on diagnosis
- LOS is less for pediatrics
- Similar benefits: ↓ ED LOS, ↓ malpractice, ↓ risk, ↑ patient satisfaction, ↑ Press Ganey, ↓ missed diagnoses, better patient outcome, ↓ costs

**Differences Between Pediatric and Adult Observation**

- ↓ need for cardiac monitors in pediatrics
- ↑ need for isolation: diarrhea, respiratory
- ↑ need for respiratory therapy: aerosols
- ↑ need for IV fluids for rehydration
- ↑ incidence: respiratory, infections
- ↑ Consults, radiology, ancillary tests
- Seasonal
Community (Suburban) Hospital Combined OU - United States

- 5714 EDOU patients over 44 mo. (3.7 yrs), 6 beds
- 75% adults, 17% geriatric, 6.7% pediatric
- Average LOS (hours) 14.92 overall, pediatric 11.2, adult 15.1, geriatric 15.4
- Inpatient admits from OU: pediatrics 19.0% (69/363), adults 22.1%, geriatric 30.2%
- Patient care rating (7 items) excellent 72% - 88%, good 12% - 25%, fair all 0s except one category fair 3%, poor 0%, good/excellent combined 90-100%
- No data on pediatric diagnoses (Chicago area)

Success in Small Community Hospital - Pediatrics

- Local pediatricians not available 24 hours/day
- Joint management with ED
- Concerns
  - Training of personnel
  - Require at least 1 parent at all times
  - Lower age limit: 5 years
- Limit diagnoses: asthma, dehydration, UTI, cellulitis, undifferentiated abdominal pain →
- Select population
- No codes, no deaths, no adverse events, high satisfaction

Success in Small Community Hospital

- Community Hospital: small rural town
- Hospital beds 99, ED census 26,700
- Obs LOS (hours): inpatient 27, ED 15
- 1 year: 848 patients, saved hospital 424 patient days, ↓ ED LOS, ↑ ED TAT
- Included pediatrics with adults → hybrid unit
- Management: ED and pediatricians
- No inpatient pediatric beds

Why Do Pediatric Observation?

- Eliminate or decreases transfers with its attendant problems, risks, costs
- Cost: not just for the ambulance, but also personnel time (MD, NP/PA, nursing, others)
- Transfers are a lengthy process
- Impacts LOS for other non-transferred patients
- Risk incurred during the transport: patient deterioration, escape, MVA
- Family disruption: separation of child from other family members: parents, caregivers, grandparents, siblings, significant others
- Negative economics: impact on parent’s job, other

Typical Pediatric Case: Time Line for Transfer

- 6 yo asthmatic treated in your ED, improved but still wheezing, retractions, tachypneic, sat 98% on oxygen
- Decision: tie up ED bed or transfer to Childrens hospital
- Call to receiving hospital, accepts patient 1 hour
- Arrange wait for ambulance to transport patient 1 hour
- There is a 2 hour ride to Childrens Hospital
- Child waits to be seen in Childrens Hospital for 1.5 hours
- By then, the meds you gave in Community hospital ED almost 6 hours ago have started to work
- Resident in pediatric ED, says the nothing is wrong with the child and discharges the child
- How does the family view you and your referring ED?

Transfer to Childrens Hospital: Burden for the Family

- Single mother, another child at home, she has no car
- Mother want to go with the sick child but has no one to care of other child
- She has a job, employer is not happy that she will miss work and she may be fired if she doesn’t show up
- If child is treated and not transferred, a neighbor will baby sit the other child for a few hours, the mother does not miss work, etc.
**Pediatric Patients are Ideal for OU Care**
- Most have no preexisting comorbidities (except asthma)
- Narrow spectrum of rapidly responsive conditions
- Have an adult caregiver who will continue their care at home
- Don’t need SNF placement, no daily meds
- Concern: pediatric illnesses are protean in their early manifestation (nonspecific signs/symptoms) so observation is required to differentiate mild from severe
- Risk stratification for children such as fever (as in adults with chest pain)
- Expose children to unnecessary risks if inpatient
- Avoid major criticisms of OU: drug costs (routine meds), SNF placement, still may have copays

**Compare the Pediatric Patient with the Adult Patient**

**Pediatric Patient**
- Shorter LOS (ED and OU)
- No comorbidities
- Few lab tests
- Few radiology studies
- No or few consults
- Special studies are rare
- Rarely drug seeking
- Rarely secondary gain
- Less factitious disorders
- Less hypochondriasis

**Adult Patient**
- Longer LOS
- Multiple comorbidities
- Many lab tests
- Multiple radiology studies
- More frequent consults
- Special studies (e.g. stress tests) are common
- Often, hidden agenda
- More psychiatric overlay
- "Medical sophistication"

**Considerations for Patient Inclusion in the OU**
- Use of resources
- Ancillary tests, special studies: lab, radiology, cardiology, GI
- Personnel time: lab draws, doing ECGs, monitors, giving meds, IVs
- Labor intensive
- Ancillary testing
- Reimbursement: bundled payments
- One payment no matter how many tests or studies are done

**There are two distinct Pediatric Populations**

**"Previously well"**
- Healthy
- Acute illness that should get better quickly, < 24 hr
- No comorbidity
- Vomiting, diarrhea, cellulitis, peritonsilar abscess, pneumonia, acute abdominal pain
- Low risk, few resources
- Easy to diagnose, treat
- Short LOS, low admit rate

**"High Risk"**
- Have chronic illnesses
- Prior surgery
- Often have multiple pediatric specialty physicians
- Pediatrician/FP in their community plus
- Specialists at the tertiary childrens hospital
- Complex
- High liability
Summary

- Pediatric patients are easier, require less time and resources, probably less expensive (fewer meds, supplies, tests, etc.) to care for than adults
- Pediatric patients can be successfully managed in a combined (hybrid) OU (pediatric + adults)
- Can be done in any hospital: small or large hospital, community or academic hospital, rural, suburban or urban
- Benefits everyone: ED, hospital, physicians, patient, family
- Even neonates can be cared for in EDOU
- Consider starting with teenagers with selected diagnoses such as asthma, dehydration, then expand
- Maybe even high risk SHCN patients
- Future: complex observation for pediatrics (and geriatrics)

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