The Optimized Emergency Pharmacist Role

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Outline

- Why do we need a pharmacist in the ED?
- Intro to our ED Pharmacist Project
- Presentation of phase 1 findings
The Need

- Medication events are a significant cause of adverse events in the ED
  

- Higher prevalence of preventable adverse events in the ED
  
What’s different about the ED?

- No pharmacy check as occurs in rest of hospital
  - Redundancy step missing – 2 vs 3 people
  - Medications ordered, dispensed and administered in ED
- Higher prevalence of verbal orders
- Urgent and high stress situations
- Multitasking, interruptions
- High risk intravenous medications
What’s different about the ED?

- Unfamiliar patients
- Often no access to the medical record
- No direct follow-up
- Crowding (due to inpatients)

Bottom Line: Emergency Medicine lacks redundancies and system protections afforded inpatients
Clinical Pharmacists Work

- Pharmacists as members of an inpatient care team reduce the number of adverse drug events

Folli HL, Poole RL, Benitz WE, Russo JC. Pediatrics 1987; 79(5)
Kane SL, Weber RJ, Dasta JF. Int Care Med 2003;29(5):691-8
Who is doing it? (2004)

- 4079 emergency departments in US
- 43 with dedicated pharmacists in ED (1%)
  - Vast majority not clinically emerged
  - (dispensing, stocking, etc)
Emergency Pharmacist since 2000

- **Clinical consultation**
  - Nurses, physicians
  - Portable phones
- **Order screening**
- **Critical patients**
- **Education**—patients, nurses, physicians
  - Very well received among providers

Typical consults

- Medication choice
- Dose, route
- Interactions
- Dilemma posed by allergies
- Administration details
- Medication reconciliation
- Emergency med preparation
Preliminary Data - Trauma Care

- Improved key measures
- Reduced costs
- Sought out by physician and nursing staff


Overview of ED Pharmacist Project

AHRQ Partnerships in Implementing Patient Safety

• Phase 1– optimize the role
• Phase 2– evaluate the impact
• Phase 3– assess staff acceptance/satisfaction
• Phase 4– impact national practice
Overview of ED Pharmacist Project

AHRQ Partnerships in Implementing Patient Safety

- Phase 1– optimize the role
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Optimization Phase

● Objective
  - Optimize Emergency Pharmacist Role

● Methods
  - Qualitative: interviews (purposive sampling)
    ● ED staff, patients, inpatient providers, pharmacists
    ● How can we maximize the patient safety role…
  - Field notes transcribed, coded and thematically analyzed by review committee
  - Recommendations developed
Results: 43 Interviews

1. Maintain high visibility

2. Focus on ED patients
   - avoid care of inpatients boarding in the ED, who should receive inpatient pharmacy services

3. Focus coverage on peak volume periods including evenings and weekends
Results: 43 Interviews

4. Maintain surveillance of provider orders
   - increase likelihood of intercepting problem drug orders

5. Respond to all trauma and medical resuscitations

6. No dispensing

7. No stocking
Results: 43 Interviews

8. Minimize administrative responsibility

9. Mandatory review
   - Ex) pediatric orders: patients <1 year or <10kg

10. Easy Access
    - Portable phone
    - Pager
    - etc
Conclusions

- EDP was felt to enhance patient safety
- Several factors were seen as enhancing role.
- These have been implemented
- Phase 2 will now study effectiveness
  - Quality measures
  - Adverse events
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