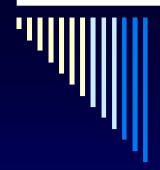


Sarasota Memorial Hospital Implementing Emergency Department Pharmacists

- Michelle Malatlian, R.Ph.,Pharm.D., C.Ph.
- Dave Jungst, Pharm.D, BCPS, Director of Pharmacy
- Lynne Grief, RN, Ph.D., CEN, Director Emergency Care Center



Sarasota Memorial Hospital ED Statistics

- Approximately 80,000 ED visits per year
 - 13,000 of these are admitted (1EA, 1EB, 1EC, 1EH, and 1EJ)



Agency for Healthcare Research and Quality (AHRQ)

- Department of Health and Human Services
- Mission: improve quality, safety, efficiency, and effectiveness of health care for all Americans
- Conduct and support health services research



Examples of AHRQ supported research projects

- The ED Pharmacist as a Safety Measure in Emergency Medicine- focuses on workflow, intervene to improve medication safety.
- Banner Health/ASU Partnership for ED Patient Safety- reduce patient risk in ED using Door to Doc.



American Society of Health-System Pharmacists (ASHP)

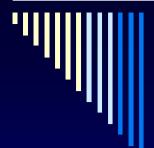
- Patient Care Impact Program funded by a grant from AHRQ: Introducing an Emergency Department Pharmacist in Your Institution
- May 16, 2007 we were 1 of 20 hospitals accepted into this program out of more than 50 applicants (only Florida hospital)



The Ideal Emergency Department

- No patient feels forgotten
- Every nurse and every doctor has adequate support
- All patients rest assured that there are no adverse events....

Academic Emergency Medicine, vol. 7; 2000



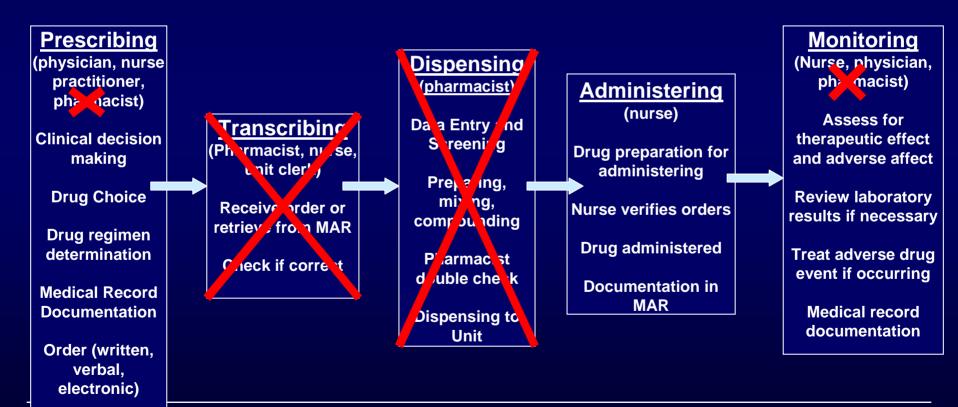
In Reality, Ideal Does NOT Exist

- High volume of diverse patients
- Pediatrics in an adult ED
- Patient history not available, fragmented, or wrong
- Frequent interruptions / distractions
- Fast paced environment
 - Frequent verbal orders
 - No routine pharmacy review
 - Multi-tasking

Academic Emergency Medicine, vol. 7; 2000



Structure and Function of the Medication Use System (Chasm)



IOM Report, 2007



Patient Safety is at Risk

- Established safety mechanisms are normally <u>not</u> available in the ED
 - pharmacy review for ED medications
 - pharmacy consult for high risk medications pharmacy oversight for verbal orders
 - pharmacy preparation of medications
 - pharmacist involvement in clinical decision making
 - Drug calculations in an emergent situation
 - RN travelers (different practices)



Pediatric Safety is at Risk

- ED's are not well equipped to manage pediatric care
 - Nationwide, pediatric patients make up 27% of ED visits however, only 6% of ED's are prepared for pediatric patients
 - Pediatric patients are not just small adults
 - All children need weight based dosing, which increases the risk of an adverse event.



ED Pharmacists add extra layers of protection at SMH by:

- Reviewing all high risk medication orders
- Consulting with medical staff to optimize therapy
- Improving core measure compliance
- Focusing on allergies and medication histories
- Facilitating medication access and improving patient flow
- Responding to codes and critical patients (including pediatrics)
- Monitoring conscious sedation (peds/adults)
- Serving as a patient advocate (e.g., Propofol)

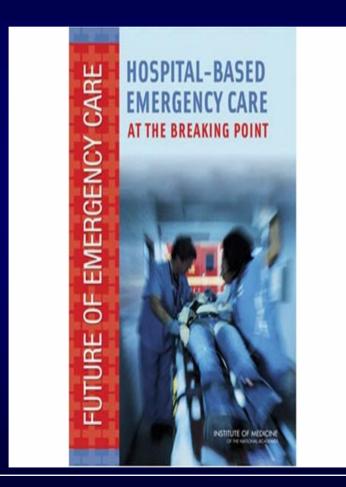


ED Pharmacists add extra layers of protection at SMH by:

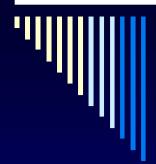
- Improving Joint Commission compliance
 - All prescriptions or medications are reviewed for appropriateness
 - The effects of medication(s) on patients are monitored
 - The hospital responds to actual or potential adverse drug events and medication errors
 - The hospital implements processes for managing high risk or high alert medications



Pharmacists on the ED care team



- Ensure patients' medication needs are met safely
- Decrease medication errors
- Medication costs are rising



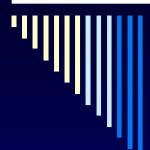
Pharmacists on the ED care team

- Staff value the ED pharmacist
 - 26 item survey to random ED staff with 82% responding.
 - 99% felt EPh improves quality of care.
 - 96% felt EPh was an integral part of ED team.
 - 95% indicated they had consulted with EPh at least a few times during last 5 shifts.



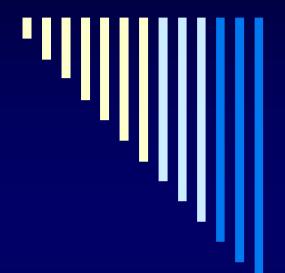
Goals of Emergency Department Pharmacists

- Reduce medication errors
- Reduce preventable adverse events
- Improve allergy checking
- Improve medication history
- Improve patient outcomes
- □ Prove cost savings



Clinical and cost-saving Pharmacy Intervention in the Emergency Room: A Four Month Study

Type of Intervention	No.Interventions	Average Cost Avoidance per Intervention (\$)	Cost Avoidance (\$)
Drug-drug or drug disease interactions or drug incompatibilities identified	334	1,647	297,053
Therapeutic recommendation	523	1,188	273,383
Adverse drug event prevented	48	1,098	23,190
Medication error prevented	488	1,375	436,150
Total	1393		<u>1,029,776</u>



Not Not To Have Emergency Department Pharmacists????