Improvements Impacting Medication Management and Administration

The Problem
- The Emergency Department (ED) at BIDMC has diverse needs around medication management and administration.
- The pharmacy department and the ED work together on a daily basis to provide medications to patients in an accurate and timely manner.
- The Emergency Department Pharmacy Workgroup was created to identify areas for improvement, decrease waste, and add value to patient care related to medication management.

Aim/Goal
- Improve the process around medication requests -> right medication, right patient, right time
- Adjust medication storage and transfer to decrease the amount of waste associated with missing or unused doses
- Decrease the number of IV medications prepared by nurses

The Team
Frontline ED & Pharmacy staff including nurses, pharmacists, and pharmacy techs
- Pharmacy Department: Kevin Dumas, Jean Beach, Andrea Cone, Ruchira Kumar, Bzunesh Abrha, Cheryl Avedissian, Sean Coughlin, Julie Lanza, Steve Maynard, Sonia Najdzien,
- Nursing Department: Eileen Broderick, Casey DeWalt, Laurel Hibbard, Kristin Reed, Roxane White, Joslin Rancourt, Karen Stockbridge, Heather McCallum

The Interventions
Dispensing/Requesting Meds
- Review the current process for requesting medications that need to be sent from the pharmacy
- Discuss ways to request multiple medications at the same time for one patient
- Develop a better process for dispensing critical discharge medications if unable to obtain at outpatient pharmacy
- Created a central location to secure medications that are tubed or delivered

Accessing Medications by Nursing
- Have medications where RNs need them
- Added frequently requested medications in each ED zone
- Updated the ED dashboard to alert the RN which Omnicell contains the medication needed
- Remove medications in the ED Omnicells that are low use or have the potential for error in prescribing and/or administration
- Determine some commonly made IV medications and propose solutions to limit a) time to delivery/administration b) number of IV medications made by nursing in the ED

The Results/Progress to Date
Requesting of medications sent from the pharmacy:
- Adding descriptive notes to the "fax to pharmacy" field
- Daily A.M. meds delivered to Clinical Decision Unit (CDU) Omnicell all at once
- Text paging instead of phone calls for non-STAT medications

Medications secured where you need them when you need them:
- Added 7 meds to zone specific Omnicells saving 167 doses sent in 6 months
- Centralized low use medications to the zone they are most likely to be used to reduce waste
- Removed non-STAT meds identified by pharmacist as high risk potential

Decrease amount of IV prep in ED or stocking frequently requested IVs:

Lessons Learned
- Importance of collaboration/communication - Understanding each other’s workflow goes a long way!
- Time spent observing/shadowing in each other’s department greatly increases the potential success of our interventions
- Increased pharmacy presence in ED would be beneficial ->Pharmacy techs for med rec, pharmacists for prospective order review / med policy development

Next Steps/What Should Happen Next
- Continue meeting on a monthly basis
- Look for programming solutions to aid in our ability to communicate medication related needs for patients
- Investigate medications that have the potential for error in prescribing and/or administration and need prospective order review by a pharmacist
- Expand delivery of daily medication deliveries to other zones of the ED
- Finish developing a better process for dispensing critical discharge medications

For more information, contact:
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