Medication Challenges in Care Transitions: Issues Faced by Patients, Providers & Community Professionals

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Introductions

GROUP WORK
Objectives

• Identify high-risk medications and errors associated with care transitions
• Review strategies for improvement in medication reconciliation and management
• Discuss metrics to be used to evaluate program success
Work with 3-4 others to review the discharge instructions
4 minutes

DISCHARGE CASE - KE
WHAT CONCERNS DID YOU NOTE?
A few problems we noticed...

- Inconsistent follow-up dates
- Inconsistent medlists
- New unfamiliar medication packaging
- Medication changes unclear
Scope of the problem: Medications

- Overall drug-related morbidity/mortality costs >$170 billion (ER, hospital/readmissions, SNF use, etc.)
- 700,000 ED for Adverse Drug Events annually
- 48% of elderly people in the community have medication related problems (MRPs)

Emergency hospitalizations for adverse drug events in older Americans

CMS targeted conditions

• Acute Myocardial Infarction (AMI)
• Heart Failure (HF)
• Pneumonia (PNA)

Coming soon in 2015

• Chronic Obstructive Pulmonary Disease (COPD)
• Elective total knee arthroplasty (TKA)
• Elective total hip arthroplasty (THA)

SOLUTION IS NOT AS SIMPLE AS JUST TARGETING SPECIFIC MEDICATIONS OR POPULATIONS
Scope of the problem

- **36% medication error rate** on hospital admission (general population)

- Post-discharge, 72 - 81% of patients encountered MRPs
  - 24% involved hospital error at discharge
  - 60% due to lack of understanding of medication changes


Leading Age. “Preventing Hospital Readmissions: It’s All about the Medications.”
[http://www.leadingage.org/Preventing_Hospital_Readmissions_Its_All_About_the_Medications.aspx](http://www.leadingage.org/Preventing_Hospital_Readmissions_Its_All_About_the_Medications.aspx). Dec 21, 2013
Hospital discharge

• 20% of hospitalized Medicare patients are readmitted within 30 days
  – $25 billion a year nationally

• 40% of Medicare patients discharged are admitted to a skilled nursing facility (SNF) or rehabilitation facility


Health Affairs. “The revolving Door of Rehospitalization from Skilled Nursin Facilities.” [http://content.healthaffairs.org/content/29/1/57.full](http://content.healthaffairs.org/content/29/1/57.full). January 20, 2014
Use your worksheet!

Individual work: 2 minutes
Share with your group: 3 minutes

MED RECONCILIATION: REFLECTION
Questions for medication reconciliation

• Are there any high-risk medications?
• Does the patient have more than one medlist?
  Are there any discrepancies?
• How is the patient getting the medications?
• How does the patient manage their medications?
• How does the patient actually take their medications?
• What has changed for this patient?
Methods to improve medication utilization in care transitions

- Johns Hopkins Hospital
- University of Kansas Hospital
- Duke University Hospital
- HomeMeds – Partners in Care Foundation
Delivery of service

- Nurse-driven with pharmacist consult
- Pharmacist-driven
- Social work-driven with nurse/pharmacy consults
- Where is care being delivered?
  - Telephonic
  - In-clinic
  - In-home
Identify high risk patients for advanced care services

- Specific Diagnoses: AMI, HF, PNA, COPD
- Age >65
- Medication regimen
- Patient educational needs
- Number of changes in meds
- History of ER visits and readmissions
- Clinical judgment
BACK TO OUR PATIENT: KE
What actually happened...

- Multiple changes
- Medication source (multiple pharmacies, unable to pick-up meds)
- Home medication “stash”
- Non-adherent
Value of pharmacist with in-home assessment

• Vanderbilt Study (pharmacist/nurse collaboration)
  – 19% of patients with potential MRPs
  – Medication use improved in 50% of patients vs. 38% with standard of care

• USC and AoA evaluation study
  – 49% of patients had potential MRP
  – After pharmacist review, 29% of all clients required physician intervention
    • Medication use improved in 61% of clients

Some examples of MRPs

- Specific drug interactions
- Drug-related Adverse reactions
- Medication-related fall risk assessment
- Potentially inappropriate medications
- Appropriate monitoring of medications
- Storage issues
- Therapeutic duplications and omissions
- Complex regimen
In-home medication “red flags”

- Medications located throughout the home
- Meds >3 months old
- Stock of >3 month supply
- Polypharmacy
- Dirty Bottles
- Multiple strengths of medications
- More than 1 bottle of same medication
- More than 1 kind of tablet in one bottle
HOW CAN YOU IMPROVE AT YOUR FACILITY?

Brainstorm!
What can I do to implement/improve care transition services

• What are the goals for my service/facility?
• Do we currently have policies and procedures in place to reduce readmissions?
• Do we have preventable readmissions that are related to medication availability?
• Do we have preventable readmissions that are related to medication-selection process?
Measuring success of service

**Process Metrics**
- Number of patients
- Time to first interaction and completion of service
- Number of interventions and changes made
- Patient satisfaction
- Staff satisfaction

**Outcome metrics**
- Readmission rate
- Time to readmission
- ER visits
- HCAHPS scores
- Clinical metrics (BP, HgA1c, Lipid profile, etc.)

Measuring success of service

Medication-Specific Metrics

- Number of medications per patient
- Time for delivery of medications
- Patient understanding/confidence in their medications
- MRPs identified and resolved
Medications in care transitions

• Only one part of the problem
• Requires interprofessional collaboration for success
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