PENDING OF ORDERS AT MEDICATION RECONCILIATION

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BACKGROUND/RATIONALE

- Request of System Medication Reconciliation Steering Committee
- Pharmacy department transitions of care services across AHC
  - Medication histories
  - Admission and discharge medication reconciliation review
  - Patient education
  - Bedside delivery of discharge prescriptions
- Admission and discharge medication reconciliation can be time-consuming and cumbersome for providers
- Verification of orders and review of medication reconciliation by pharmacists often requires provider contact

OBJECTIVES

- Implement pharmacist pending of orders on admission and discharge medication reconciliation through a series of pilots within multiple Aurora Health Care facilities
- Assess the feasibility of system-wide implementation of pending of orders for medication reconciliation

METHODS

1. Gain stakeholder approval and collaborate with providers
2. Develop workflow within electronic health record (EHR)
3. Define a pharmacist scope and standards of practice for pending of orders
4. Create a pending of orders resource guide and training materials
5. Establish pilot roll-out plan
6. Identify barriers to completion of pending workflow, optimize workflows

WORKFLOW/PILOT ROLL-OUT

DESCRIPTION OF SERVICE

- Pharmacists pend or “tee-up” prior to admission orders for providers by utilizing electronic health record functionality
- Pharmacists pend appropriate formulary conversions, renal dose adjustments, etc. for the provider at admission and discharge

ADMISSION

- Medication History (Technician/BM)
- Pending Orders for Admission (RPh/COV RPh)
- Review or Modify Orders (Provider)
- Order Verification (COV RPh)
- Medication Reconciliation (RPh)

DISCHARGE

- Pending Orders for Discharge (Site RPh)
- Review or Modify Orders (Provider)
- Medication Reconciliation (Site RPh)
- Bedside Delivery of DC Prescriptions (optional)
- Review of DC education materials (BM)

PILOT ROLL-OUT

Location

- Aurora Lakeland Medical Center
  - Administration Date: 8/20/2015
  - Target Population: Hospitalist patients
  - Service Provided: Admission and Discharge Pending
- Aurora St. Luke’s Medical Center
  - Administration Date: 12/15/2015
  - Target Population: Hospitalist patients
  - Service Provided: Admission and Discharge Pending
- Aurora BayCare Medical Center
  - Administration Date: 2/2/2016
  - Target Population: Ortho, Gen/Vascular

RESULTS

Provider Survey Results from ASLMC (n=12)

1. The pending of orders by pharmacists for admission/discharge med rec saves me time.
2. The pharmacy department should continue to pend orders for admission/discharge med rec.

RESULTS CONTINUED

3) Which of the following pending actions provides you with the most benefit as a provider?

Pharmacist Survey Results from all sites (n=43)

1. At order verification, if admission orders are pending do you find the orders require less modification? (COV RPh responses n=12)
   - Yes: 10 | Unsure: 1 | No: 1
2. At discharge med rec review, if discharge orders are pending do you find you contact (page/call) the provider less? (Site RPh responses n=31)
   - Yes: 9 | Unsure: 10 | No: 6 | Not applicable: 6

Average time to pend as captured by EHR workflow: February 2016

<table>
<thead>
<tr>
<th>Service</th>
<th>Time (minutes)</th>
<th>Number of Patients</th>
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</thead>
<tbody>
<tr>
<td>Admission pending</td>
<td>8</td>
<td>608</td>
</tr>
<tr>
<td>Discharge pending</td>
<td>4</td>
<td>507</td>
</tr>
</tbody>
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CONCLUSIONS

- Time savings noted by providers and pharmacists when admission medication reconciliation is pending
- Providers indicated greater benefit with admission rather than discharge order pending service
- Recommendation for further expansion
  - Conduct admission pending for all emergency department admissions, 24/7/365
  - Explore a provider “opt-in” workflow for discharge pending