The Impact of a Pharmacist-Led Transition of Care Clinic

Amber Beals, PharmD, BCACP
Karen Francoforte, PharmD, CPh
Florida Hospital East Orlando

Disclosure

- The following individuals do not have (nor does any immediate family member have) a vested interest in or affiliation with any corporate organization offering financial support or grant monies for this continuing education activity, or any affiliation with an organization whose philosophy could potentially bias my presentation:
  - Amber Beals, PharmD, BCACP
  - Karen Francoforte, PharmD, CPh
  - Brian Leonard, PharmD, BCACP
  - Ashley MacWhinnie, PharmD

Objectives

- Describe the purpose for developing pharmacy transition services
- Review clinic operations and services provided
- Assess patient demographic data
- Discuss outcomes data including readmission rate and discrepancies identified
- Review financial data associated with prevented readmissions

Background

- National 30-day all-cause hospital readmission rate in the United States is approximately 15.2%
  - 13.3% are preventable
- Readmissions account for more than $17 billion in expenditures
- 1 in 5 Medicare patients are readmitted within 30 days
- Half of those had no physician follow-up
- Affordable Care Act of 2010 (Hospital Readmissions Reduction Program) imposes financial penalties for readmissions

Why Pharmacy?

- Medications errors are a leading factor associated with increased readmissions
- As many as 70% of patient care transitions from inpatient to outpatient result in medication discrepancies
  - 1/3 of these lead to an adverse drug event
- Patients with 1 or more medication discrepancies have higher 30-day readmission rates (14.3% vs. 6.1%)
- Pharmacists are trained to detect and resolve medication discrepancies, adverse drug reactions and nonadherence

Transition Clinic

Clinic Facts
- Based in a 305-bed community hospital
- Doctorate-level, residency-trained pharmacists practicing at the top of their licenses
  - 2 FTEs
  - PGY1 hospital system residents
  - 4th-year student pharmacists on clerkship
- 100% physician-driven referrals

Goals
- Improve patient safety
- Reduce hospital readmissions
- Enhance patient experience
Target Population

Clinic Patients
- Patients ≥ 18 years of age
- Focus on CMS-determined disease states at highest risk for readmission
  - Heart Failure
  - COPD
  - Pneumonia
  - Myocardial Infarction
  - Stroke
- All contracted payors and uninsured who met income qualifications

Non-Clinic Patients
- No show for scheduled appointment
- Non-contracted insurance
- Unable to obtain prior authorization for insurance
- Services declined by patient
- Discharged to SNF/LTC
- Out-of-state and returning home

Services Provided
- Medication reconciliation (discharge vs. home medications)
  - Clarify discrepancies with prescribing physicians as necessary
- Provide an up-to-date medication list
- Pharmacist updates EMR
- Optimize medications
- Educate patient on medications and assess adherence
- Verify and/or schedule physician follow-up
- Order labs to monitor disease state and medications

Referral Process

Physician enters order through Cerner
- Prints to secure printer in the clinic

Order evaluated for appropriateness
- Insurance contracted, charity assistance approved, discharge plan to home

Appointment made
- Entered into patient’s discharge paperwork in Cerner

Meet with patient prior to discharge
- Provide welcome letter and discuss service

Strengths
- Access to pill bottles/pill counts
- Assess understanding through non-verbal cues
- Provide and organize medical portfolio and pill box
- Facilitate follow-up appointments
- Physical assessment
- Provide patient written “to do” list and medication list
- Get family member involved
- Bill for service
- Develop a relationship with patient
- Provide the patient with a point-of-contact to reach out to with questions/issue after discharged from the hospital

Weaknesses
- 52.5% no show rate
- Patient understanding the need for visit
- Transportation issues
- Limited to contracted insurances

Face-to-Face Visits

Patient Visits Timeline

Interview
Team Huddle
Action Plan and Wrap-up

Patient Visits
January 2015-December 2016

228 patients
551 visits
Average visit length: 72 minutes
### Patient Demographics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Clinic Patients (n=228)</th>
<th>Non-Clinic Patients (n=449)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age (years)</td>
<td>61</td>
<td>56</td>
</tr>
<tr>
<td>Male, n (%)</td>
<td>98 (43%)</td>
<td>209 (47%)</td>
</tr>
<tr>
<td>Diabetic, n (%)</td>
<td>103 (45%)</td>
<td>167 (37%)</td>
</tr>
<tr>
<td>Heart Failure</td>
<td>39 (17%)</td>
<td>42 (9%)</td>
</tr>
<tr>
<td>COPD</td>
<td>66 (29%)</td>
<td>152 (43%)</td>
</tr>
<tr>
<td>Stroke</td>
<td>33 (14%)</td>
<td>22 (5%)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>124 (54%)</td>
<td>233 (52%)</td>
</tr>
<tr>
<td>Hypertension</td>
<td>184 (81%)</td>
<td>302 (67%)</td>
</tr>
</tbody>
</table>

#### 30-day Hospital Readmission Rate

- **Clinic Patients**: 8%
- **Non-Clinic Patients**: 28%

\[ p < 0.001 \]

#### Discrepancies

**System Level**
- Discharge instructions incomplete, inaccurate, illegible
- Conflicting information from different information sources
- Duplication, no indication, interaction
- Untreated medical problem/omission
- Omitted from discharge list but taking

**Patient-Level**
- Adverse drug reaction
- Didn’t fill prescription
- Intentional non-adherence
- Non-intentional non-adherence
- Lifestyle and patient self monitoring

#### Prevented Admission Cost Savings

- In 2 years, the Transition Clinic saved the hospital **over $1 million** in readmission costs alone
  - $8000 per hospital admission
- This value does not account for:
  - The dollar amount saved in penalty fees from CMS
  - Billable services provided by the clinic utilizing facility E&M codes
  - Office visit CPT 99213 (level 3) or 99214 (level 4)
  - 2017 Medicare Reimbursement $98.22
### Conclusion

- As medication experts, pharmacists are in an ideal position to identify and resolve medication-related discrepancies at both the system and patient level.
- Since opening the clinic in 2015, an average of 8.5 medication-related discrepancies per patient have been discovered.
- In 2016, patients with at least one appointment at the clinic were 4 times less likely to be readmitted within 30 days.
- A pharmacist-led transition of care clinic significantly decreased the 30-day readmission rate.

---

**The Impact of a Pharmacist-Led Transition of Care Clinic**

Amber Beals, PharmD, BCACP
Karen Francoforte, PharmD, CPh
Florida Hospital East Orlando