Transition to Wellness: The Impact of Community Pharmacist Discharge Education on Readmission Rates for Patients with Chronic Obstructive Pulmonary Disease, Heart Failure, or Diabetes

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BACKGROUND

• In 2012, Centers for Medicare and Medicaid Services (CMS) introduced payment penalties for readmission for patients with certain medical conditions.
• Patients may be more likely to be readmitted if they lack follow-up care post-discharge or do not understand discharge instructions or medications.
• Involving pharmacists in a transition of care process has the potential to reduce readmission rates.
• Realo Discount Drugs and Onslow Memorial Hospital collaborated to develop a transitions of care program entitled Transition to Wellness.

OBJECTIVES

• Primary Objective: Assess the impact of discharge education and follow-up by community pharmacists on 30-day readmission rates.
• Secondary Objective: Evaluate the number of drug therapy problems (DTPs) identified by community pharmacists.

METHODS

• Study Design: Prospective study conducted in conjunction with a rural hospital in eastern North Carolina and an independent community pharmacy
• Study Timeframe: October 5, 2016 to February 26, 2017
• Inclusion Criteria:
  • Patient ≥18 years
  • Admitted with a primary diagnosis of COPD, heart failure or diabetes
  • Discharged from the hospital to home
• Exclusion Criteria:
  • Discharged to nursing facility or other facility
  • Does not speak English
  • Decisionally impaired or does not have a healthcare power of attorney to provide consent

Enrollment and Readmissions

<table>
<thead>
<tr>
<th>Patient notified about service (n=1107)</th>
<th>Patient interested in service (n=149)</th>
<th>Patient eligible (n=48)</th>
<th>Patient not interested or response not documented (n=958)</th>
<th>Patient eligible (n=284)</th>
<th>Patient readmitted within 30 days of discharge (n=45)</th>
<th>Patient readmitted within 30 days of discharge (n=2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient enrolled in study (n=18)</td>
<td>Patient not enrolled in study (n=30)</td>
<td>Patient readmitted within 30 days of discharge (n=2)</td>
<td>Patient readmitted within 30 days of discharge (n=5)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RESULTS

Patient Demographics (n=18) N (%)

- Age in years, mean (range) 53 (43-77)
- Gender
  - Female 13 (72%)
  - Male 5 (28%)
- Medical Condition
  - COPD 10 (56%)
  - Heart Failure 9 (50%)
  - Diabetes 6 (33%)
- Number of medications, mean (range)
  - Prior to admission 8 (0-16)
  - At discharge 11 (4-23)

Type of DTP

<table>
<thead>
<tr>
<th>Indication</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dose discrepancies</td>
<td>11</td>
</tr>
<tr>
<td>New medication required prior authorization</td>
<td>4</td>
</tr>
<tr>
<td>No prescription given</td>
<td>28</td>
</tr>
<tr>
<td>Duplicate therapy</td>
<td>4</td>
</tr>
<tr>
<td>Other Discrepancies</td>
<td>1</td>
</tr>
<tr>
<td>Medication to be continued was omitted</td>
<td>1</td>
</tr>
<tr>
<td>Medication required prior authorization</td>
<td>1</td>
</tr>
<tr>
<td>New medication required</td>
<td>1</td>
</tr>
<tr>
<td>Dose discrepancies on discharge orders</td>
<td>1</td>
</tr>
<tr>
<td>Total Number of DTPs Found</td>
<td>42</td>
</tr>
</tbody>
</table>

DISCUSSION

• A large number of patients (86%) were eligible for the study but were not interested. Pharmacists are continuing to provide education to hospital staff to increase understanding of the service and improve marketing to potential patients.
• The most common DTP identified was no prescription given to patient for medications they were to continue after discharge. There is a common misconception among hospitalist if the patient was on a medication prior to admission the patient already has the medication at home.

CONCLUSIONS

• Transition to Wellness is a unique service developed by Realo Discount Drugs in partnership with a local hospital.
• Community pharmacists may serve a valuable role in preventing readmissions through patient education and resolution of identified drug therapy problems.

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