Reducing COPD Readmission Rates: The Pharmacist’s Role in Transitions of Care

Letitia Warunek, Pharm.D.
PGY2 Internal Medicine Pharmacy Resident
Buffalo General Medical Center
April 13, 2019
Disclosures

I have no conflicts of interests to disclose
Learning Objective

Describe the pharmacist’s role in transitions of care and reduction of hospital readmissions for patients with COPD.
Chronic Obstructive Pulmonary Disease (COPD)

- 16 million people living with COPD
  - Estimated over 15 million people with under-recognized and under-diagnosed disease

- Third leading cause of death in the United States
  - Major cause of morbidity and mortality
  - Social and economic burden
COPD Transitions of Care

Readmissions
>20% of patients with COPD exacerbation are re-hospitalized within 30 days post discharge

Care Gaps
Need for evidence-based strategies to reduce hospital readmissions

Reimbursement
COPD was added to the Centers for Medicare and Medicaid bundle payments in 2014

CMS.gov. Readmission reduction program [Internet]. Baltimore, MD; Centers for Medicare and Medicaid Services.
COPD Transitions of Care

Symptoms of Exacerbation

Outpatient

Discharge

Hospital Admission
Hospitalization

• Medication Therapy Management
  – Evaluate outpatient COPD medication regimen
    • Accurate medication reconciliation
  – Identify and address discrepancies
    • Ensure appropriate therapies
    • Assess administration technique
    • Verify cost and insurance coverage
    • Address comorbidities

Discharge Medication Reconciliation

  
  – **Objective**
  
    • To determine whether pharmacist-conducted medication reconciliation at discharge decreased medication discrepancies and reduced 30-day readmission rates for patients admitted with COPD exacerbation
  
  – **Intervention**
  
    • Medication reconciliation at time of hospital discharge
  
  – **Results**
  
    • 29 patients included in the study
    • 6 medication discrepancies were identified and corrected
    • 4 patients were readmitted for respiratory causes within 30 days of discharge
Outpatient Management

• Post Discharge Follow-Up
  – Ensure follow-up with primary care within 30 days
  – Reassess medication adherence and administration technique

• Strategies to Reduce Exacerbation Risk
  – Smoking cessation
  – Medication adherence
  – Patient education
  – Vaccinations

Outpatient Management

• Reinforcing Medication Education
    • Uncontrolled, pre-post study
    • Implemented a community pharmacist-led inhalation technique assessment service (ITAS)
  
– Results
  • Primary outcome: improvement in inhalation technique (n=250)

<table>
<thead>
<tr>
<th>Technique</th>
<th>Baseline</th>
<th>Follow-up 1 (Same day)</th>
<th>p-value</th>
<th>Follow-up 2 (3 months)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimal (all steps correct)</td>
<td>8%</td>
<td>72%</td>
<td>&lt;0.001</td>
<td>52%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Acceptable (all critical steps correct)</td>
<td>31%</td>
<td>86%</td>
<td>&lt;0.001</td>
<td>75%</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Key Points

There are multiple pharmacist-led strategies with demonstrated evidence for reducing hospital readmissions in COPD exacerbation.

Evaluate which strategies would best fit into your practice setting.

Combine efforts with other services to ensure the most success.
Reducing COPD Readmission Rates: The Pharmacist’s Role in Transitions of Care

Letitia Warunek, Pharm.D.
PGY2 Internal Medicine Pharmacy Resident
Buffalo General Medical Center
April 13, 2019