Discharge Medication Concierge Program:
A pilot project in heart failure to reduce readmission rates, improve patient satisfaction, and increase pharmacy business metrics

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Objectives

• For Pharmacists:
  – Describe the setup and outcomes of this discharge concierge program
  – Define goals and importance of the program with respect to patient satisfaction and hospital reimbursement
  – Describe challenges and opportunities in initiating and maintaining the discharge concierge program

• For Technicians:
  – Define the role of technicians in the discharge concierge program
  – Describe the importance of the discharge concierge program in terms of patient satisfaction and financial outcomes
Background

• Health care is changing to performance-based reimbursement instead of fee-for-service¹
• Need ways to improve the quality, efficiency, and outcomes of care
• Pharmacists can play a role in care coordination at discharge²
• The value of a pharmacist’s role in decreasing readmission rates has been underutilized³
• Nearly 1 in 5 Medicare patients is readmitted within 30 days of discharge⁴

Background

• Heart failure (HF) accounts for the highest readmission rates among Medicare beneficiaries ≥65\textsuperscript{5}
• Discharge medication non-adherence is the biggest driver of readmissions\textsuperscript{6}
  • Costs the U.S. $100-300 billion annually\textsuperscript{6,7}
• If quality goals, including lowering readmission rates, are not met, the government will withhold reimbursement\textsuperscript{8}
• Quality scores are public information and can affect where patients choose to receive their healthcare services\textsuperscript{1}

\textsuperscript{6}National Association of Chain Drug Stores, Pharmacies: Improving Health, Reducing Costs, July 2010. Based on IMS Health data.
\textsuperscript{7}Butterworth, S.W., Influencing Patient Adherence to Treatment Guidelines. J Manag Care Pharm. 2008;14(6)(suppl S-b):S21-S25
## Methods

<table>
<thead>
<tr>
<th></th>
<th>Prior to Concierge Program</th>
<th>Concierge Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days Supply Filled</td>
<td>15 days</td>
<td>30 days</td>
</tr>
<tr>
<td>Billing</td>
<td>Billed insurance</td>
<td>Billed insurance and collected patient copay at bedside</td>
</tr>
<tr>
<td>Pick-up and Delivery</td>
<td>Nurse picks up prescriptions from outpatient pharmacy</td>
<td>Pharmacy delivers medications to bedside</td>
</tr>
<tr>
<td>Prescription Counselling</td>
<td>Given by RN</td>
<td>Pharmacy actively initiating counseling</td>
</tr>
</tbody>
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Outcomes

• Primary Outcome
  – 30 day readmission rate

• Secondary Outcomes
  – 60 and 90 day readmission rates
  – Outpatient pharmacy prescription volume and revenue
  – Patient satisfaction scores
  – Discharge process time
Results

Other Financial Considerations

• Staffing Requirements
  – 1.0 Pharmacist FTE
  – 1.0 Technician FTE (September)

• Reimbursement
  – Increased reimbursement from CMS

• Prescription Revenue
  – Pre-implementation: $14.57 per patient
  – Post-Implementation: $26.51 per patient
Results

Percent of Patients Readmitted

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Pre-Implementation</th>
<th>Post-Implementation</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-30 Days</td>
<td>20%</td>
<td>15%</td>
<td>p=0.394</td>
</tr>
<tr>
<td>31-60 Days</td>
<td>25%</td>
<td>5%</td>
<td>p&lt;0.05</td>
</tr>
<tr>
<td>61-90 Days</td>
<td>10%</td>
<td>5%</td>
<td>p=0.094</td>
</tr>
</tbody>
</table>
Results

Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Questions Related to Discharge Medications

- **Explain About Medications**: 45% Pre-Implementation (March-April 2014), 88% Post-Implementation (August-September 2014)
- **Discharge Information**: 57% Pre-Implementation, 67% Post-Implementation
Results

• There was no change in the total discharge process time
• There was a decrease in number of discharge prescriptions per patient filled by the outpatient pharmacy but an increase in per patient profit
• A significant decrease in readmissions was seen between 31 and 60 days post discharge
• Patient satisfaction scores measured by HCAHPS increased during the study period
Limitations

- No demographic information was collected
- Patients were not randomized
- The two comparison groups were analyzed during late spring and early fall, potentially leading to differences in readmission rates due to seasonal variation
- Data was not available if the patient was readmitted to an outside hospital in the 90-day period post UCMC discharge
- Patient adherence was not assessed
- There was inconsistency in the average number of prescriptions per patient between the two cohorts
Conclusion

• There was no statistically significant change between readmission rates at 30 days post-discharge

• The differences in number of discharge medications between the two cohorts is likely multifactorial

• Overall, this pilot project met the goals of reducing readmission rates, improving patient satisfaction, and increasing revenue in the out-patient pharmacy
Next Steps

• Expand the program to additional units
• Streamline the process to become more efficient
• Collect the data and report
Lessons Learned

• Communication
  – Within the outpatient pharmacy
  – With key stakeholders

• Streamline your outpatient pharmacy workflow processes first

• Ensure the point of sale system supports the operation

• Utilize clinical pharmacists on the floor

• Utilize pharmacy technicians
References


5. Hospital thirty-day all-cause risk standardized readmission rate (RSRR) following heart failure (HF) hospitalization (READM-30-HF). HHS:004096

