Improving Patient Throughput With an Innovative Discharge Command Center

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Learning Objectives
1. Understand barriers to discharge and be able to describe barrier categorization.
2. Outline effective communication strategies to remove discharge barriers.
3. Describe staffing model and key command center processes.

Background

The Problem
From 2021 to 2022, throughput issues began to arise...

<table>
<thead>
<tr>
<th>ER Waiting Times</th>
<th>+150%</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Transfers</td>
<td>-30%</td>
</tr>
<tr>
<td>PACU Holds</td>
<td></td>
</tr>
<tr>
<td>Length of Stay (LOS)</td>
<td></td>
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<tr>
<td>Hospital Gridlock</td>
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The Solution
• In early 2022, hospital leadership determined a team dedicated to managing hospital-wide throughput was needed
• A multi-disciplinary team was assembled with an experienced nurse practitioner, case manager, nurse, and operations manager
• Several DCC processes were developed to identify and resolve barriers while providing a hospital-wide escalation structure
• Education was delivered to all hospital departments and staff on best practice throughput management
• A discharge command center was formed with the mission to:

Mission: Effectively identify and discharge medically appropriate patients by supporting physicians and nursing staff to remove patient progression and day-of-discharge barriers to improve hospital capacity

Intervention Methodology

Barrier Identification & Escalation Structure
• Two daily house-wide throughput huddles
• Web-based tool shared with units to insert daily unit capacity and related barriers
• House-wide EMR group chat used to escalate barriers that are managed in real-time by DCC staff

Education
• Real-time feedback on escalated barriers
• Nursing education provided to all units
• Case management education across the hospital
• Physician education delivered across physician groups and service lines

Performance Reporting Tools
• Real-time EMR Discharge Monitor to display daily discharge performance
  – Projected discharges today
  – Next day discharges
  – Categorized barriers for discharging patients today or tomorrow
• Historical dashboard with metrics to identify high performers and opportunity areas
  – Discharge volume
  – % of discharges by 2P
  – Greenlight placement times
  – Discharge accuracy

Outcomes

Discharge Performance

Average Discharges by Day of Week

<table>
<thead>
<tr>
<th>Sun</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
</tr>
</thead>
<tbody>
<tr>
<td>86</td>
<td>126</td>
<td>140</td>
<td>198</td>
<td>193</td>
<td>176</td>
<td>134</td>
</tr>
</tbody>
</table>

% Discharges by 2P

<table>
<thead>
<tr>
<th>Q1 '21</th>
<th>Q2 '21</th>
<th>Q3 '21</th>
<th>Q4 '21</th>
<th>Q1 '22</th>
<th>Q2 '22</th>
<th>Q3 '22</th>
<th>Q4 '22</th>
<th>Q1 '23</th>
<th>Q2 '23</th>
</tr>
</thead>
<tbody>
<tr>
<td>33.4%</td>
<td>33.2%</td>
<td>32.3%</td>
<td>33.2%</td>
<td>33.1%</td>
<td>33.8%</td>
<td>34.6%</td>
<td>36.7%</td>
<td>31.8%</td>
<td>31.1%</td>
</tr>
</tbody>
</table>

Hospital Gridlock

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References: All information is sourced from Houston Methodist Hospital System Quality Analytics and EMR reporting

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