AAMC’s Approach to Managing Patient Throughput

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Our Original State – June 2016

- 375 Licensed beds
- 97,000 Emergency Department visits per year
- 26,000 Inpatient Admissions

- ED Diversion was 25%
- ED Door to Bed TAT in the lowest 2% in the country (570 m)
- ED TAT for discharged patients 200m+
- 180 hours of boarders per day/5000+ hours per month
- Patient Satisfaction in ED averaging 65%
Original State
Another way we look at it (Fiscal Year 2016)
No improvement in ED Throughput measures or LOS
Target State – A Call to Action

• Improved patient flow through ED and inpatient units
• No diversion
• Appropriate room and care assignment especially with Observation and IMU
• Increase Patient Satisfaction
What were the Gaps?

• Lack of standard work throughout

• Inpatient bed alignment
  – Not aligned with patient demand
  – Many “rules” governing placement
  – Variability in pulling patients to open beds from ED
  – Variability in right patient status

• Inefficient use of ED space
  – Too much patient movement
  – Flow and siloes prohibited team based approach to care
  – Variable workflow and volumes led to traffic jams
  – Boarding patients stretched resources

• Data Rich-Information Poor

• Staffing Schedules and Structure Misaligned
How did we start the work?

• Meet Auntie Esther

• ED throughput improvement became a True North Objective
Solutions – The Puzzle Pieces

• Mix of leadership driven projects and PDSA
• Acute Care Pavilion bed alignment and flow improvements
  – Right sized our Observation, Medical and IMC beds
  – Increased inpatient bed capacity
  – Reduced rules to a medical bed (Cardizem drip process)
  – Focused on pulling patient out of ED
  – Focused on earlier discharges
• Redesign Observation hourly flow redesign
  Care Management Processes (Impact on Throughput and
  Denials)
  – Inpatient CM/Physician Pairing
  – ED CM to drive appropriate placement
  – CM workflow
• ED Value Stream based process improvement
Summary of New ED Flow

• Process running since Sunday, 5/21/17
• Process has been stressed (EDAs/high volumes) going
• Early Patient Satisfaction #s (top box) for discharges post 5/21 show 27% improvement from prior experience (59-75%)
• Patient TAT has decreased by 10-30%
• Average patient time has decreased as much as 40%

And........

• The Providers and Staff like the new process
Sustainment and Moving Forward

• **The Acute Care service Line**
• Executive Status Updates
• Ongoing Process Owner Led Workgroup Meetings
• Facilitation/PI Partnership Embedded in Each Effort
• CRM meetings
  – Data driven
  – Stakeholders represented
  – Supportive environment
  – Owning the results
- FY18 YTD 5.5% diversion
- 8th out of 23
June 2016 versus June 2017

- 28% improvement
- 3% increase in volumes
Patient Satisfaction

Top Box Trends

<table>
<thead>
<tr>
<th>Period</th>
<th>Respondents</th>
<th>Top Box %</th>
<th>Goal %</th>
<th>Mean %</th>
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</thead>
<tbody>
<tr>
<td>July-Sept 2016</td>
<td>912</td>
<td>62.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct-Dec 2016</td>
<td>672</td>
<td>63.7%</td>
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<tr>
<td>Jan-Mar 2017</td>
<td>709</td>
<td>65.3%</td>
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<tr>
<td>Apr-June 2017</td>
<td>733</td>
<td>70.6%</td>
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<tr>
<td>July-Sept 2017</td>
<td>862</td>
<td>74.2%</td>
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<td>Oct-Dec 2017</td>
<td>750</td>
<td>75.4%</td>
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<tr>
<td>Jan-Mar 2018</td>
<td>83</td>
<td>75.1%</td>
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Overall Emergency Department
Analytics & Lessons Learned

• High-level, strategic data is a compass, not a map
  • Keep it that way
  • Strategic vs Operational data

• Start with well-defined and visible KPIs, and then have PI and data teams work together to explore opportunities
Multiple Audiences

Executive Leadership (Clinical & Administrative)

Operational Leadership

Operational Staff
Take Home Learning Points

• There is a need to break down silos
• Culture building
• Organization wide accountability – true north