Boston Medical Center—Front-End Process Mapping & LOS Reduction
Boston Medical Center - Emergency Department, Boston, MA
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**Problem Statement:**
1. Patient length of stay (LOS) exceeding 260 minutes; benchmark: 192 minutes
2. High rates of patients left without being seen (LWOS)

**Objective:**
Map ED process & identify opportunities to reduce LOS & LWOS

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**Analysis**

**Recommendations**

<table>
<thead>
<tr>
<th>Pain point</th>
<th>Finding</th>
<th>Proposed solution</th>
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<tbody>
<tr>
<td>Patients not requiring ED service</td>
<td>Patients that do not require and ED service have to go through the formal ED. Outpatient option for behavioral (bridge clinic/Telehealth)</td>
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<tr>
<td>Optimization of labor and resources given union constraints</td>
<td>Optimizing allocation of labor with different job peaks per area is a constraint given unionization</td>
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<td>Flow management and space optimization</td>
<td>There is not a centralized management of the flow and resource requirements across the ED</td>
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<td>Interaction between FT and other required services (Commutes and Labs)</td>
<td>Patients spend time commuting to the FT area, waiting to be assigned to labs, waiting for transportation or for the labs results</td>
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<td>Efficiency and automation</td>
<td>A high percentage of patients are assigned to ESU 3 and some move to FT while others remain in the main ED, the distinction could be more clear out</td>
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<td>Consider additional training and observation of triage process. Review current triage questionnaire to identify potential efficiencies (review board)</td>
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**Flowchart:**

- **Disposition to Discharge**
  - 17.9 minutes
  - Time from patient "ready to discharge" to discharged

- **COVID Testing**
  - 2%
  - Patients Main Complaint is looking for COVID Testing

- **FastTrack LOS**
  - 161 minutes
  - April-October 2021 Patient Length of Stay (LOS) - FT
  - 3019 LOS = 148 minutes, 2020 LOS = 135 minutes

- **ED Volume and Performance**
  - Overall ED LOS
  - 325 minutes
  - April-October 2021 Patient Length of Stay (LOS) – ED All
  - Benchmark = 192 minutes