

## ED Process Improvement Team (Driving Significant Change with Lean)



St. Joseph Medical Center  
Towson, Maryland



### Team Charter

■ **PROJECT TITLE:** *Increase ED Visits by Improving ED Capacity*

■ **PROBLEM STATEMENT:** *ED visits (Volume) is a function of a patient's decision to come here (Demand) and our ability to efficiently and effectively service their need (Capacity). Evidence suggests that we are not meeting the current demand. We turn away business (Ambulance Diverts), take too long to process patients (Length of Stay), and take too long to get admitted patients up to their assigned beds on the floor (Clean/Assigned to Occupied cycle time). **The problem seems to be an inability to handle the "surges" in volume.** The focus of this team is on the Capacity side of the equation – realizing that improvements in Capacity will also drive improvements in Demand (less diverts and improved patient perception of our capabilities). Other measures can be put in place to grow demand once we are successful in improving our capacity.*

■ **OBJECTIVE, GOAL STATEMENT:**

- Reduce Average **Length of Stay** by 25% for top 5 Chief Complaint Categories
- Reduce Avg Cycle Time (**Clean/Assign to Occupied**) to 45 minutes or less
- Reduce **Yellow Diversions** by 50% monthly year over year (e.g. 9/08 vs 9/07)
- Eliminate **Red Diversions**

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## Lean Approach

- Standard Work
- Workplace Organization
- Flow / Value Stream Maps
- Employee Involvement
- Quality
- Visual Controls
- Kaizen Spirit

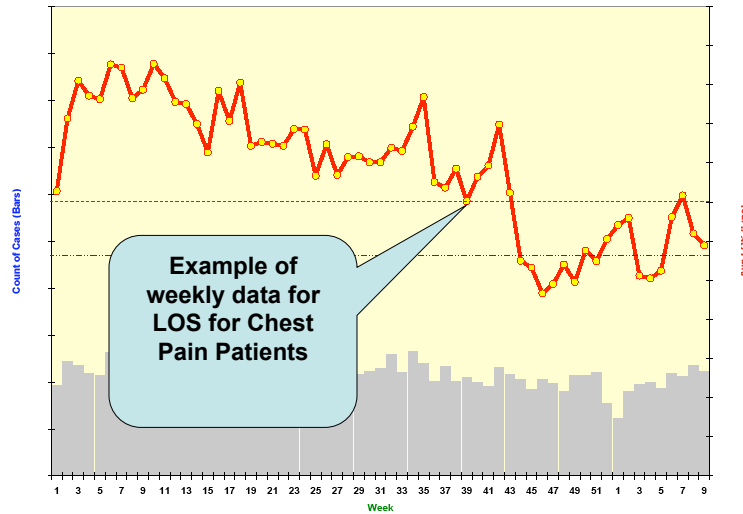
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## Summary of Key Areas Of Improvement

- **Bed Placement Process**
  - Moving patients upstairs more safely and quickly
- **RN Assessment Improvements**
  - Simplifying the documentation process
- **Advanced Protocols**
  - Moving everything we can up as early as possible; converting from virtual to visual
- **Communications, Response Time Improvements**
  - Eliminating the communication barriers and related delays
- **Patient Tracker Enhancements**
  - Knowing the latest status on the pt and their test results and making everything visible

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## Data Example



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## Summary of Impact to Metrics

- Triage time from door to EKG was reduced by 60%.
- Patient walking in the triage process was reduced by 90%.
- Average Length of Stay for all complaints in the ED was reduced by 26%.
- Bed Placement cycle time was reduced by 75%.
- Diversions were reduced by 95% for Red Divert and 50% for Yellow Divert.

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## Keys to Success

- Crisis – created action
- Clear metric – simple, focused, weekly
- Teamwork – Lean Sensei and Strong Process Owner
- Structured Implementation – Communicate<sup>3</sup>
- Gemba Mentality – Walk the processes
- Warroom – Visual
- Attention to Detail – Reinforced Std Work
- Have Fun - Celebrate

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## Challenges

- Getting clinical-level support given hourly schedule mentality
- MD patience
- Communicating across multiple skills, shifts, managers
- Acceptance of Standard Work
- Sustaining improvements
- Visual Controls in a Litigious Environment

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