MHA Lean Six Sigma Project Summary

INITIATIVE TITLE: Admission Time from ED to MedSurg
ORGANIZATION NAME: *Mercy Hospital Carthage*
ELECTRONIC MED RECORD: Epic

PARTICIPANT / CONTACT INFORMATION

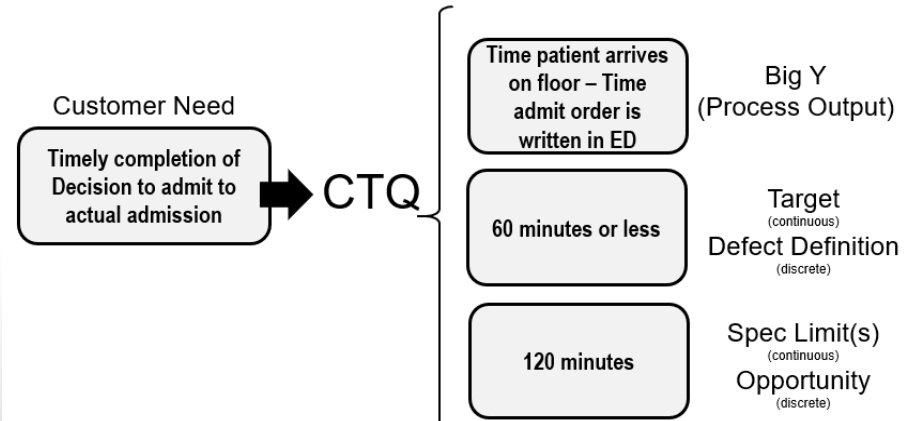| Team Leader Name	Title	Preferred contact-type email address/phone#
Mindi Wilks	Manager- Operations	Mindi.Wilks@mercy.net

DEFINE – Problem Statement & Goal

The time from the decision to admit to the time the patient reached the MedSurg unit currently ranges from 0 to 1,047 minutes, with an average time between inpatient order received from ED to patient arrival on MedSurg was 116 minutes with a standard deviation of 179 minutes. Extended times lead to delays in patient care, impeded ED throughput, and creates tensions among patient care teams.

The goal of the project is to reduce the DPMO from 205,479 (Sigma Score of 2.3) to 20,547 (Sigma Score of 3.5), which represents a 90% reduction in defects.

DEFINE - Initiative Scope

Patients coming through the ED that need to be admitted to the medical surgical floor for care.

DEFINE –BIG Y

Customer Need: Timely completion of Decision to admit to actual admission → CTQ

Time patient arrives on floor – Time admit order is written in ED — Big Y (Process Output)

60 minutes or less — Target (continuous) / Defect Definition (discrete)

120 minutes — Spec Limit(s) (continuous) / Opportunity (discrete)

MEASURE - Data Collection / MSA

Collection of data is performed by utilizing reports from Epic and Qventus.

A notable discovery that trends were departmental workflow and not individual employee based.
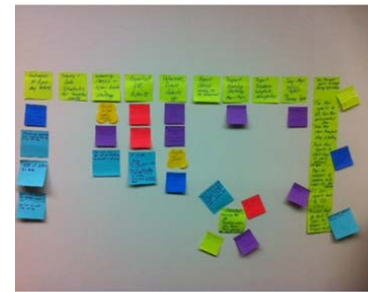
ANALYZE - Critical Xs / Root Causes Identified

The critical Xs identified were:
- *Time Elapsed between Disposition to Admit and Bed Assigned.*
- *Time Elapsed between Bed Assignment and ED Departure.*
- *ED Volume*
- *Number of ED Admits*
- *MedSurg Floor Census*

IMPROVE - What was Implemented

Through our conversations with nurses from each department, it was discovered that there was a marked delay in the bed assignment. This delay was reflected in our baseline data. The group thought of modifying and expanding the audience for our current bed tool and changing it to a Status Tool for the facility. This tool has become a communication device that gives a full picture of what is going on in the facility during the shift and looks ahead to the next. This tool also has a Room Reservation on it, so the MedSurg nurses are aware of what room is ready to go and who should be prepared to accept the next admit. This **tool removed waste** by removing the step of calling for a room assignment and allows the admitting team to move forward in the admission process.
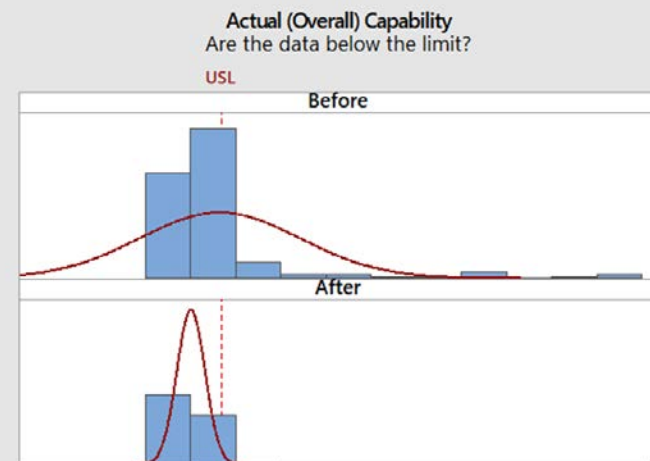
IMPROVE – What was Implemented

IMPROVE – Results to Date

Actual (Overall) Capability
Are the data below the limit?

USL

Before

After

CONTROL – Next Steps

Status Tool				
	Date			
	Time			
Census		**Staffing**		
Inpatients		On-coming Scheduled Staff		Standby / LCD
Swings		RN/LPN		
OBS/Extended Care		Tech		
Respite		Sitter		
Total		ED RN		
Admits/Discharges		ED Tech		
ROOM RESERVATION (#1)	1720	**Operating Room (0500 -current day) (1700 -next day)**		
ROOM RESERVATION (#2)		Inpatient Surgeries		
ED Admits		Outpatient Surgeries		
Swing Admits		**ENDO/GI Lab (0500 -current day) (1700 -next day)**		
OR admits		Endo procedures		
Direct Admits		**Emergency Department**		
Discharges		(0500- report previous day) (1700- report current day since midnight)		
Expirations		Transfer to Mercy		
Transfer from MS to Mercy		Transfer to Non-Mercy		
Transfer from MS to Non-Mercy		Total		
Additional Services		LWBS		
Outpatient Infusions		AMA		
Isolations		Current Boarders for admit		
Anticipated Movement		Current Boarders for transfer		
Next shift Anticipated Admits		Notes:		
Next shift Anticipated Discharges				

Each shift charge nurse is responsible for completing the Status Tool. This not only goes out to the on-coming nursing staff, but it also goes out to the leadership team. The next shift has become accustomed to expect this report along with leaders expect to have it in their Inbox as well. With this attentive audience and expectation, the responsible nurses are notified if/when it is not completed.

The implementation of the plan is completed, and it has been handed off to the MedSurg nurse manager.

OVERALL LESSONS LEARNED

We were reminded continually in our conversations with staff that we need more transparency and open communication. Things we think the staff are not concerned with; they value by being kept in the loop as a valuable member of the team.

We would have loved to be able to pull more nurses in for our work session, the current staffing struggles prevented being able to pull a good cross section at a time for a collaborative meeting and smaller sessions had to be completed and the information pieced together.

NEXT PROJECT(S)

We are currently looking at our Sepsis Bundles and opportunities for improvement and response.

REWARD AND RECOGNITION

We'd like to thank MHA and Scott Watson for the opportunity to take part in this Lean Six Sigma Green Belt training. We'd also like to thank the nurses that helped us gather information and work on an improvement strategy.