Improving Hospital-Wide Patient Flow Throughput

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INTRODUCTION

Hospitals have been challenged for decades on managing hospital-wide throughput to efficiently and effectively process ED patients– either to be treated and discharged from the ED or to be admitted to an inpatient bed. Effective capacity management is a critical component to maintain and improve healthcare quality, patient safety and improve patient satisfaction and outcomes.

OBJECTIVES

Improve patient flow efficiency from ED arrival to ED departure or inpatient admission. Utilizing the multidisciplinary Hospital-Wide Patient Flow Committee, develop and implement improvement strategies to improve patient throughput.

ED Process Improvements

1. Team Triage

– Create improved Triage process with RN, PA and Registration clerk to reduce time and improve throughput

2. BHU Suite

– Relocate stable BHU patients that need medication stabilization into separate area to improve turnaround and discharge of patients

3. Bed Ready to Depart

– Improve bed request process for patients being admitted to reduce inpatient bed delays

Inpatient Discharge Process Improvements

1. Hospitalist Contract Alignment

– Align Hospitalist metrics to increase discharge orders written prior to 1300 and actual time of discharge

2. Discharge Concierge Service

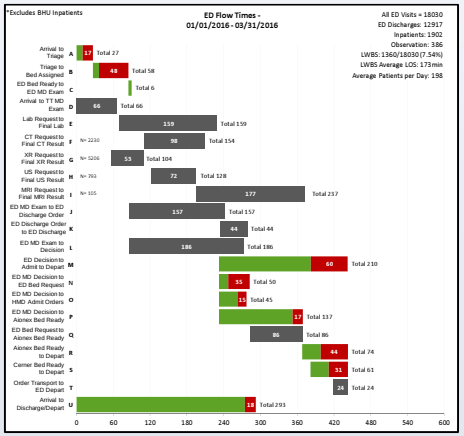
– Utilize services to assist with discharge support for patients without immediate family support

3. Discharge Lounge

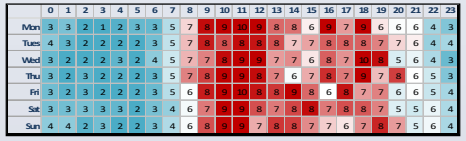
– Move stable patients to area if rides are delayed

DATA TRACKING

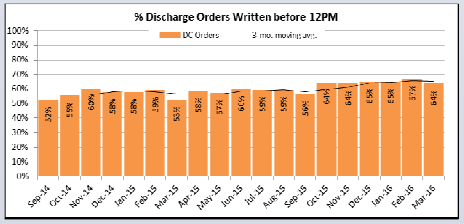
ED Flow Times Report – Allows Committee to look at metrics for each component of ED visit to analyze daily ED flow process.



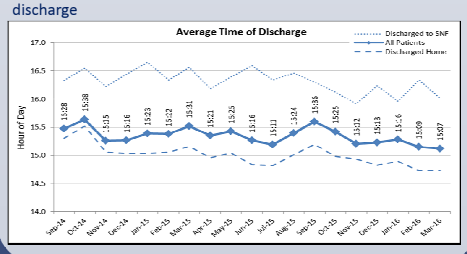
Heat Map - Avg. ED Arrival Days and Times, 1/16-3/16



Discharge Order Report- Provides objective data on physician performance for discharge orders.

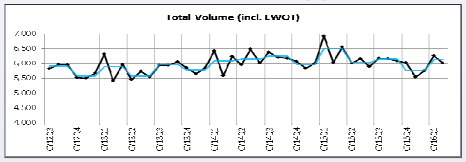


Discharge Tracking Report – Provides data on time of discharge

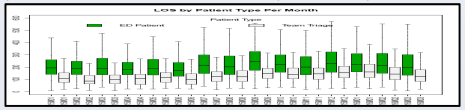


RESULTS

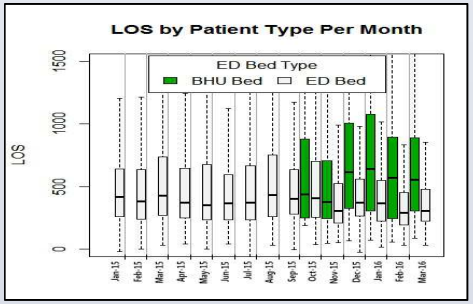
ED Volume - Since Q3 of 2012 there has been a 1.29% increase in ED volume every year.



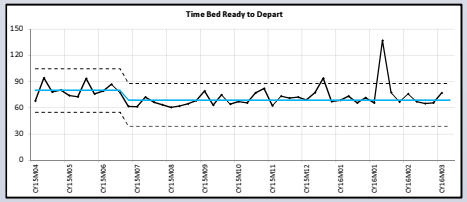
ED Team Triage –Decreased LOS by 70 minutes for patients with level 4 or 5 acuity since July, 2015.



BHU Suite – Reduced median time for inpatient BHU ED stays and allowed more focused intervention for stabilization of patients in the BHU Suite.



Bed Ready to Depart – Reduced time from 80 minutes average in July 2015 to 68 minutes in March 2016, time improvement by 12 minutes.



Discharge Orders and Discharge Times –Written time for discharge orders has improved by 30 minutes since January, 2014, and time patients are discharged has improved by 16 minutes since January, 2014.

CONCLUSIONS

Working on multiple improvement processes, both on ED throughput processes as well as inpatient discharge processes, can help improve overall patient throughput metrics. TCMC has used detailed data to analyze all aspects of patient throughput and try tests of change for process improvements.

There is a high variability of issues that effect the efficiency of the admission and discharge process. The physical bed and staffing limitations when census is high is the biggest cause for delays despite solutions that have been implemented.

TCMC will continue to monitor and try various solutions to see which will be the most effective.

- **ED Team Triage –** Effective in decreasing LOS, but challenging to find consistent full PA and registration staffing to keep operational during high activity times.
- **ED BHU Suite** – Effective in providing more focused intervention on up to 8 BHU patients at a time in a separate location, freeing up main ED beds for higher acuity medical patients and prevent frequent readmissions.
- **Bed Ready to Depart** – Not meeting goals of 30 min, challenged with handoff report process.
- **Earlier Discharge Order Times** – Seeing earlier orders for discharge, but only slight improvement in time patients actually leave.
- **Discharge Concierge Service and Discharge Lounge -** Implementation of Discharge Concierge Service and Discharge Lounge has been too inconsistent to pull reliable data.

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