

Improving Discharge on 12 MSU/MSE

Bethany Zablotsky and Lorelyn Gacutan

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CS&E Group #5



The Team

- ▶ Bethany Zablotzky - Hospitalist PA-C (Team Leader)
- ▶ Lorelyn Gacutan - PCC 12th floor (Team Leader)
- ▶ Nelson Tuazon - Sponsor
- ▶ Katia Wilson- Case Manager
- ▶ Mishelle Kottage- Charge Nurse (day shift)
- ▶ May Roa- Charge Nurse (night shift)
- ▶ Anthony Funari- Meds to beds Technician
- ▶ Elijah Martinez - PharmD
- ▶ Sean Garcia - Hospitalist MD

Our Aim Statement

To improve the average median
discharge time on 12MSU/MSE
from 14:50 to less than 14:15
by March 2022.

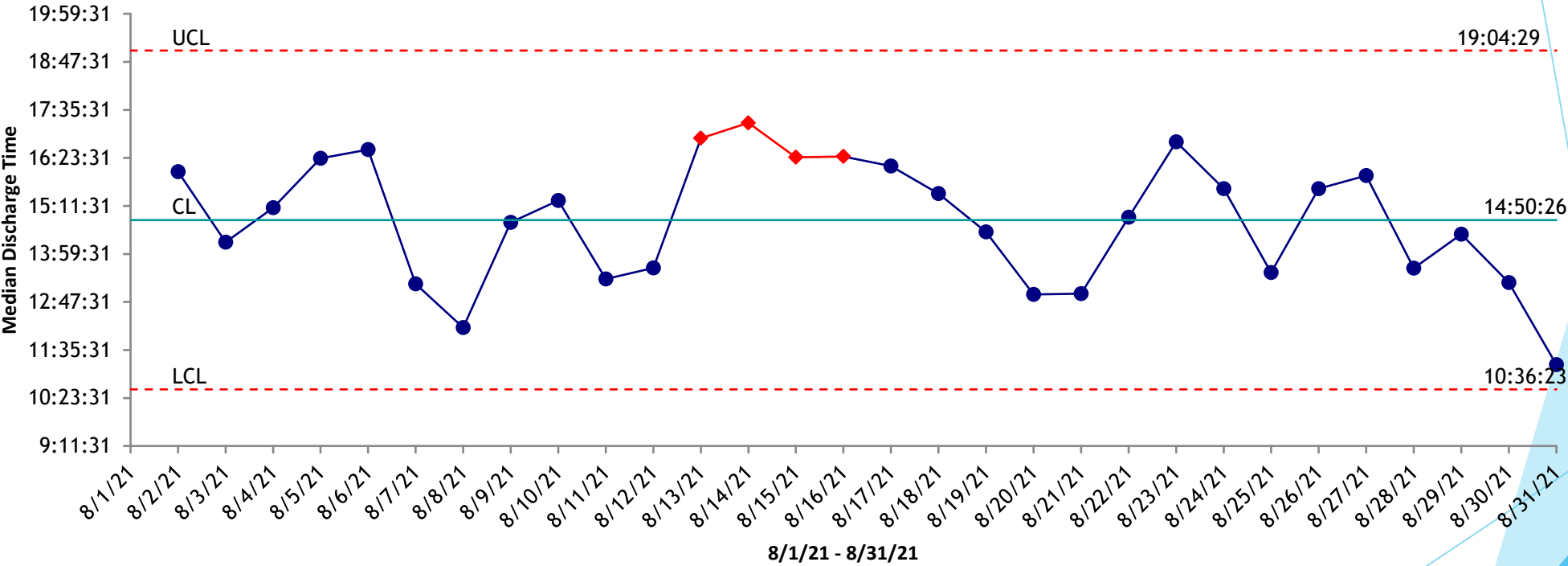
Background - What are the benefits of early discharge?

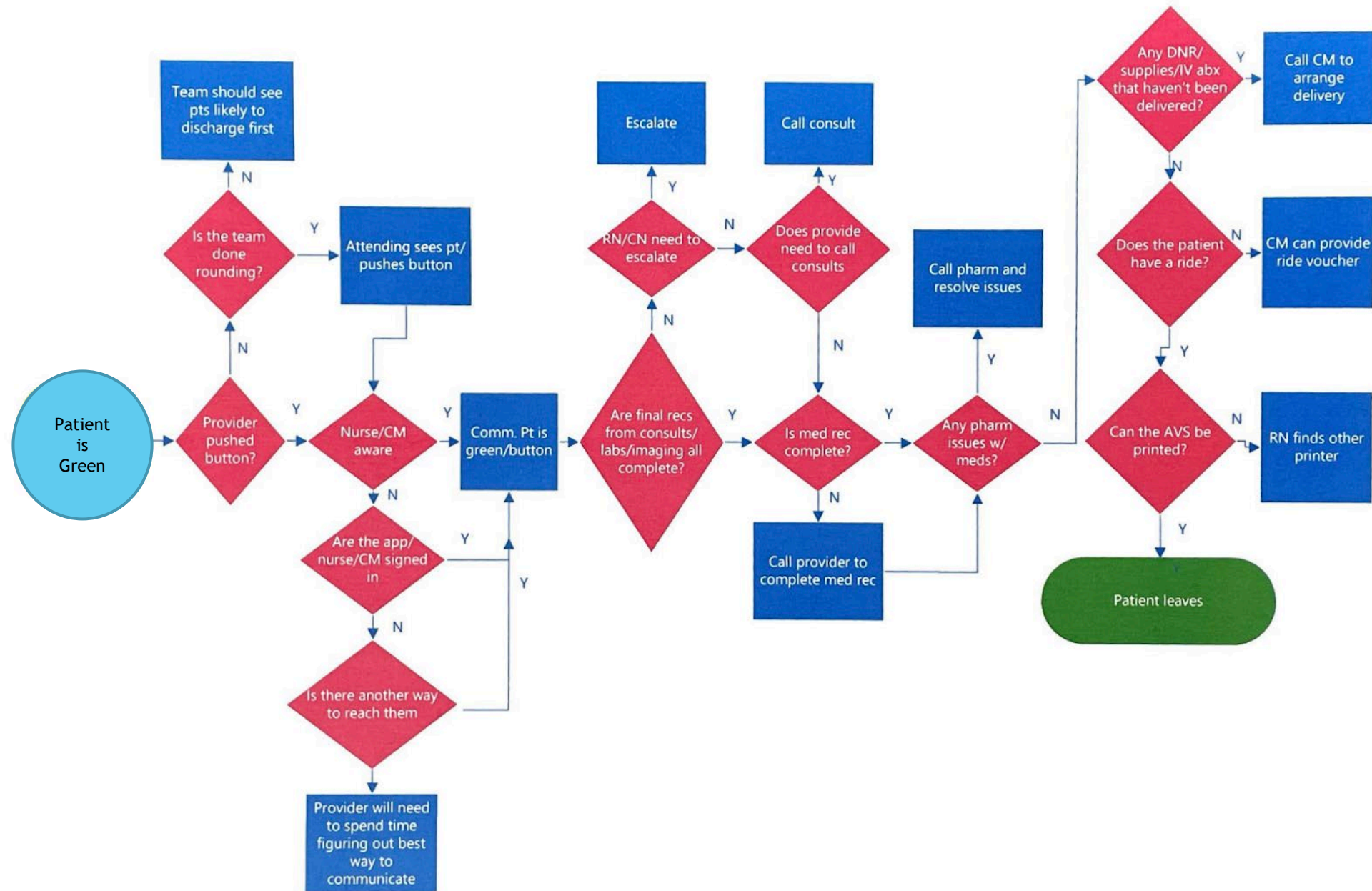
- ▶ Improves length of stay and reduces ER hold times
 - ▶ Increased ER hold times associated with increased mortality, LOS, and patient dissatisfaction
- ▶ Improves lack of care if patient gets admitted at night, as there are traditionally more staff during the day. (EVS staff are reduced by 50 % at night)
- ▶ Makes a bed available to another patient who may need a high level of care and distribute help that RN teams can give to other units.
- ▶ Can help reduce the chances of readmission.
- ▶ Allows the care team to identify any services, equipment or follow-up that may be needed to safely transition patient to home or elsewhere.

Background Data

August 2021 Median Discharge Time

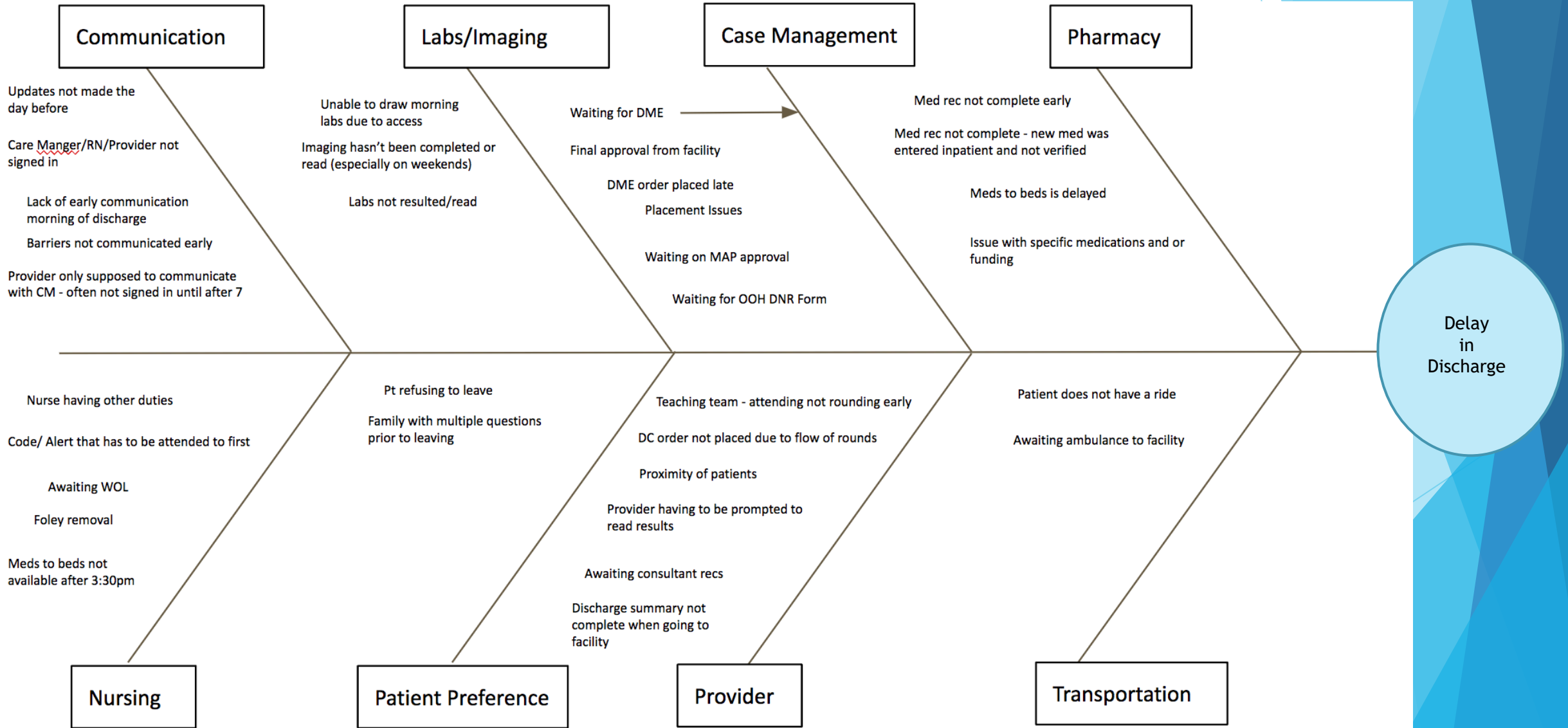
August 2021 Median Discharge Time - X Chart



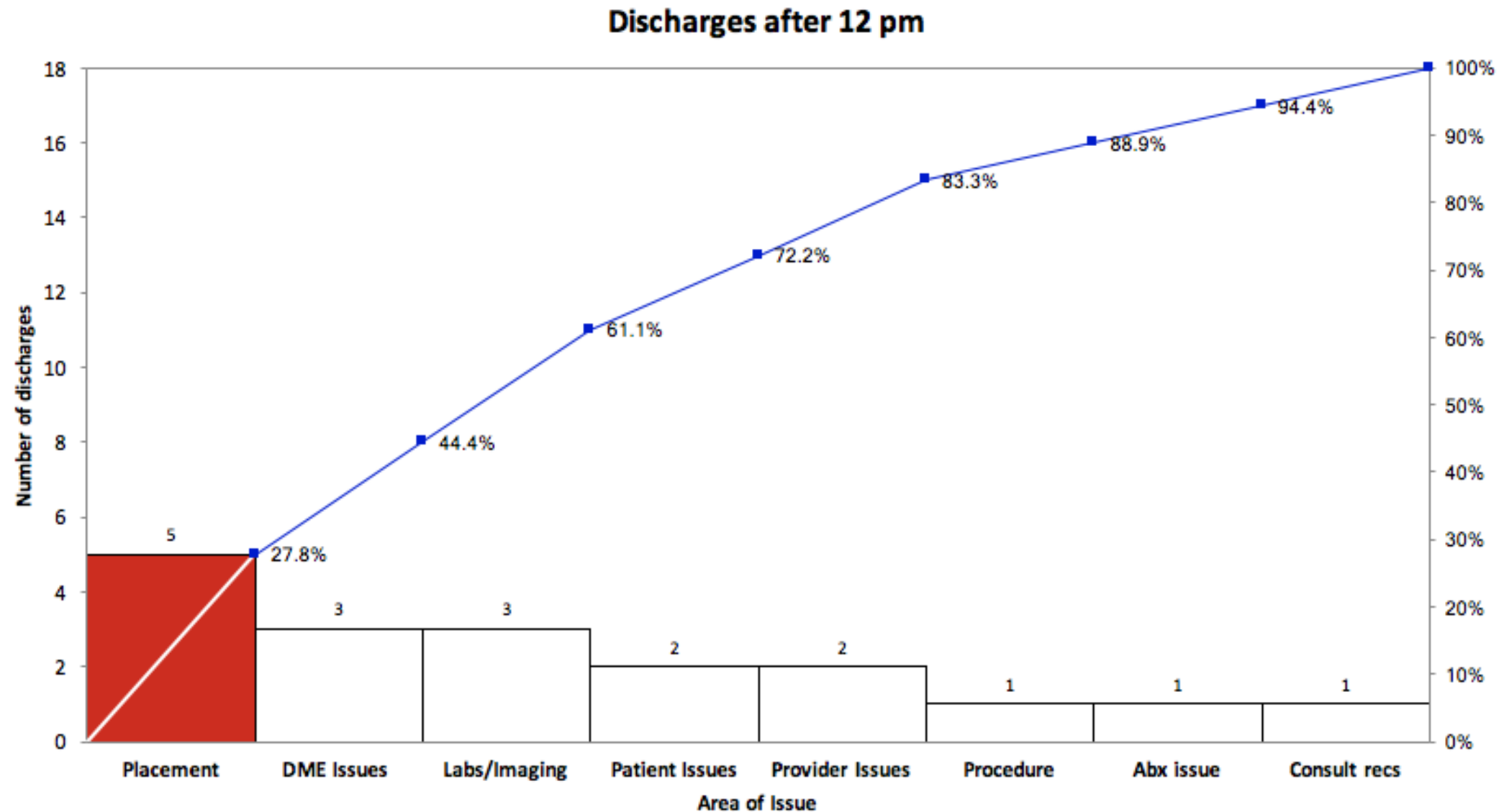


Discharge Process Diagram

Fishbone



Pareto Diagram



Driver Diagram

Goal	Primary Driver	Intervention	Measure	Responsibility
To reduce median discharge time	Communication between providers/RNs/CMs	Day of discharge - provider will add primary RN to AM conversation with CM	Compliance measure	Lorelyn - data collection
		Primary RN will add PCC or charge to chat	Outcome measure - Discharge time	Bethany - data organization/statistical analysis
	Discharge to SNF/IRF - often occur later in the day	Prepare discharge summary on day SNF referral placed	Compliance Measure Outcome measure - Discharge time (of patient's going to SNF)	Bethany - data collection and analysis
	Indirect communication using Epic resources	Updated EDD	Compliance measure	Bethany - data collection and analysis
		Move "dispo" in notes	Outcome measure	
	AM labs on day of discharge	Expedite AM labs/creating a way to mark labs "urgent" in epic	Outcome measure - Specifically for patients that had AM labs day of discharge	Lorelyn - data collection

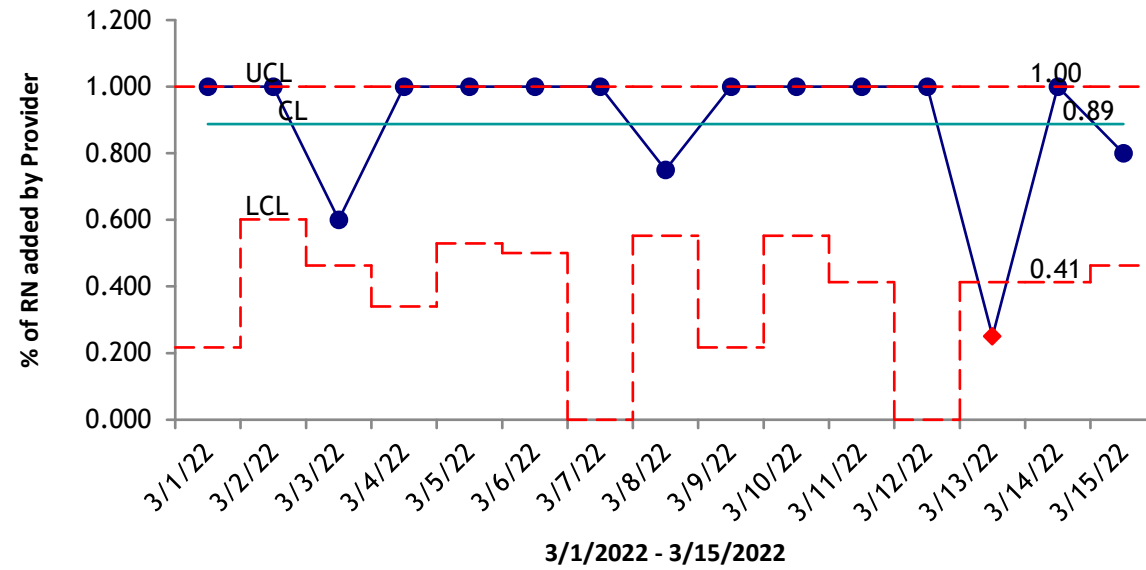
What intervention will be most effective and easy to implement?

Proposed Intervention	Ease	Effectiveness
Primary RN communication	7.6	7.4
Prep Discharge summary	6.2	5.1
Update Expected Date of Discharge	5.2	4.9
Move “Dispo” to top of daily progress note	3.3	6.6

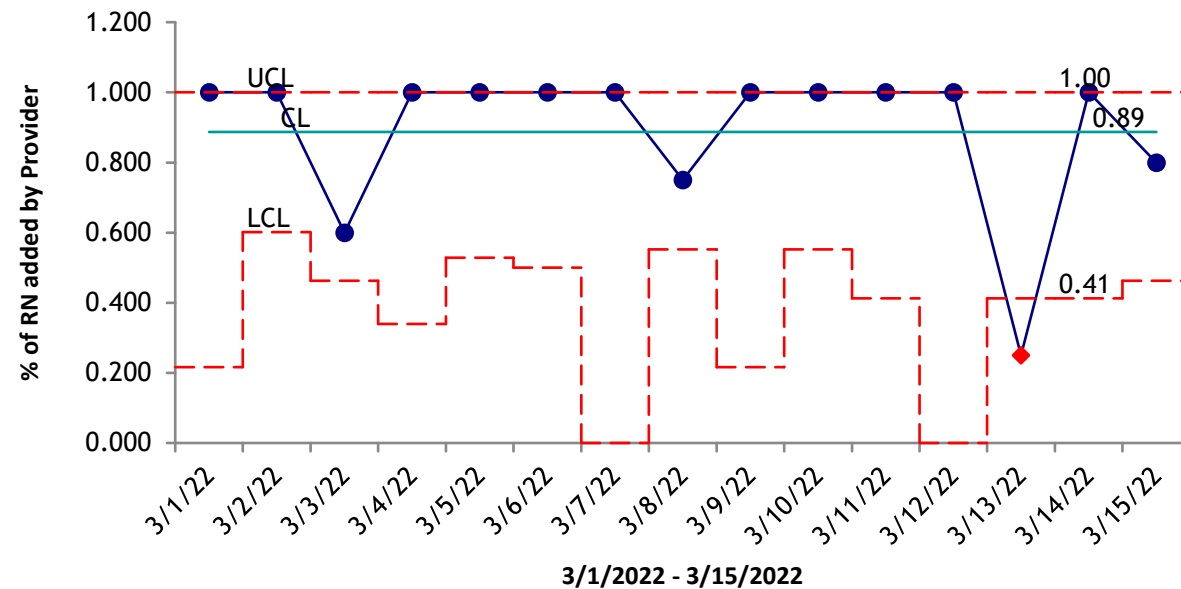
Data Collection

Type of Measure	Measure	Data Elements	Data Category	Data Source	Data Frequency	Data Steward
Outcome Measure	Discharge Time	Time	New/Automated	Epic	Monthly (Jan 1 - Mar 15)	Lorelyn - collection Bethany - analysis
Compliance Measure (%)	Provider added Primary RN to AM chat with CM	# of compliant providers/# of discharges that day	New/Manual	RN survey	Daily (March 1-15)	Lorelyn - collection Bethany - analysis
Compliance Measure (%)	Primary RN added PCC to chat	# of compliant RNs/# of discharges that day	New/Manual	RN survey	Daily (March 1-15)	Lorelyn - collection Bethany - analysis

P-chart Compliance by Provider



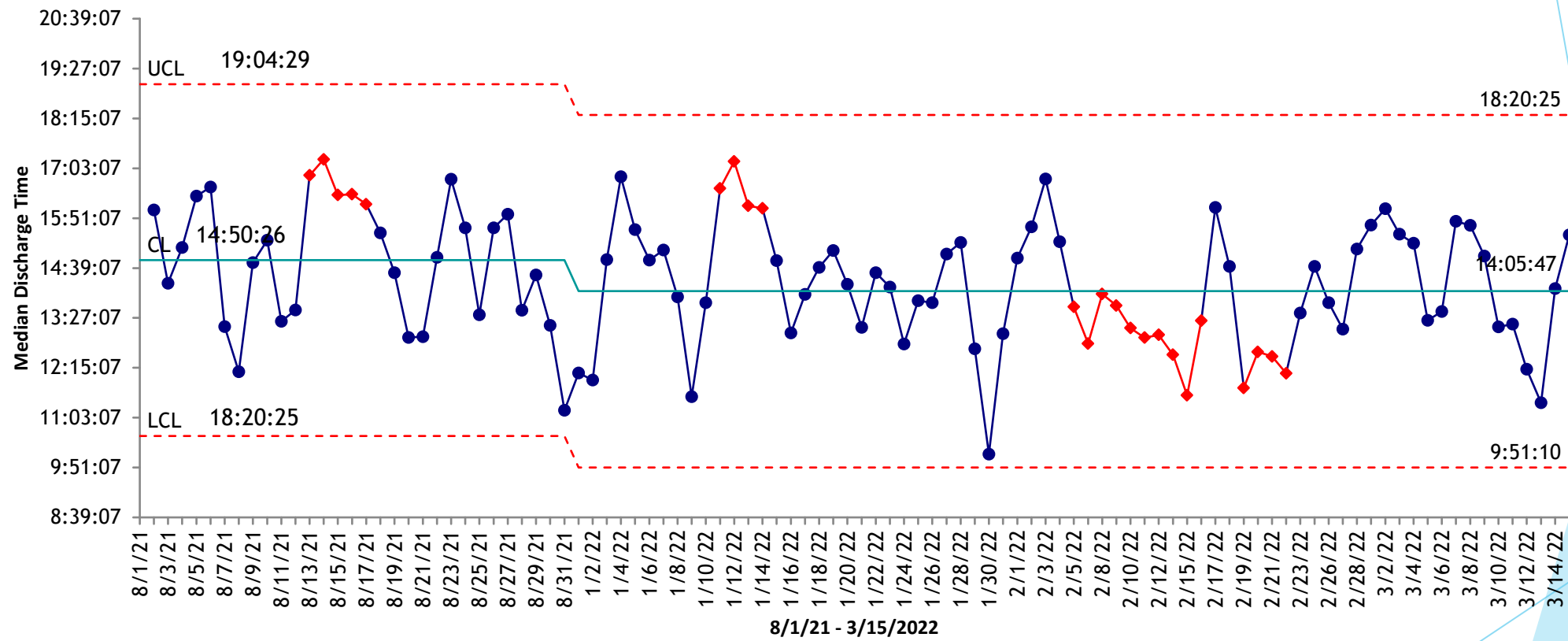
P-chart Compliance by Primary RN/CM



Compliance Results

Overall Results

Median Discharge Time - X Chart



Next Steps

- ▶ Power Through committee may continue to implement further interventions.
 - ▶ Discussed using EPIC more to its fully capacity: Updating Expected Date of Discharge (EDD)
- ▶ Communication regarding imaging and/or labs that are not completed.
 - ▶ Committee - improving time to MRI
- ▶ Consultant group providing insight

Return on Investment

- ▶ Journal Article - Delays in patient care in a teaching hospital in London in 2012
 - ▶ Delays in care the further delayed discharge in 50% of the patients they looked at
 - ▶ 30 bed ward costs 0.5 million euros (\$539,915)
- ▶ The average cost per day is \$1500/day not including medical supplies, labs, provider billing, meds, etc.
 - ▶ \$62.50 per hour
- ▶ 45 minute difference after intervention. This would equate to \$46.88.
 - ▶ 197 patients discharge (Jan 1st - Mar 15th)
 - ▶ \$9,235.36 for just cost of bed
- ▶ Decreased ED boarding
 - ▶ Decreased mortality, length of stay, adverse events and patient dissatisfaction

Obstacles

- ▶ Stakeholder and participant buy-in
 - ▶ Learning quickly that you need people on the team that have the ability to get things done
 - ▶ Difficulty in coordinating CMs, RNs, and providers
- ▶ Working in silos
 - ▶ There is a consultant group that had already pushed for several interventions.
- ▶ Complexity of the system and multiple variables that impact the outcome

How to sustain the project

- ▶ A consultant team has been hired to directly address improving discharge time.
- ▶ Anticipate the process will become team based within the next 3-6 months. Additionally, hospital medicine is currently working to geo-localize their teams.
- ▶ Until then, Leadership of Department of Hospital Medicine will continue to encourage early communication. There is a power through committee that will continue to address the discharge process.

Resources

- ▶ Hendy P, Patel JH, Kordbacheh T, Laskar N, Harbord M. In-depth analysis of delays to patient discharge: a metropolitan teaching hospital experience. Clin Med (Lond). 2012 Aug;12(4):320-3. doi: 10.7861/clinmedicine.12-4-320. PMID: 22930874; PMCID: PMC4952118.
- ▶ Liew D, Liew D, Kennedy MP. Emergency department length of stay independently predicts excess inpatient length of stay. Med J Aust. 2003 Nov 17;179(10):524-6. doi: 10.5694/j.1326-5377.2003.tb05676.x. PMID: 14609414.
- ▶ Richardson DB. Increase in patient mortality at 10 days associated with emergency department overcrowding. Med J Aust. 2006 Mar 6;184(5):213-6. doi: 10.5694/j.1326-5377.2006.tb00204.x. PMID: 16515430.
- ▶ Taylor C, Bengner JR. Patient satisfaction in emergency medicine. Emerg Med J. 2004 Sep;21(5):528-32. doi: 10.1136/emj.2002.003723. PMID: 15333521; PMCID: PMC1726409.