Care Coordination Rounds: A Multidisciplinary Approach to Improve Patient Throughput

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Introduction

Managing patient throughput is a vital hospital initiative. Hospitals that invest in improving throughput have improved quality outcomes and experience significant financial cost savings. Care Coordination Rounds (CCR) is a care delivery structure that improves patient throughput. This study aims to explore the effectiveness of CCR improving two key patient progression metrics: length of stay (LOS) and discharge by 2pm.

Problem

Examine the effective implementation of CCRs impact on patient throughput.

Background

- Hospital throughput is the process of moving patients through the hospital system from admission to discharge (digitalhealth, 2021).
- Evidence supports the implementation of hospital-wide patient throughput initiatives. Hospitals who prioritized patient throughput realized improvements in quality patient care, patient satisfaction, and a positive fiscal impact (Walker et al, 2016).
- Effective capacity management is a critical component to maintain and improve healthcare quality, patient safety and improve patient satisfaction and outcomes (Topp et al, 2017).
- Hospital discharges occurring late in the day results in an imbalance for hospital beds; delayed discharges affect hospital throughout resulting in delays in care, increased mortality, increased LOS, and higher costs (Burden et al, 2023).
- Research indicates that having multiple healthcare disciplines simultaneously at the patient's bedside improves interprofessional communication, collaboration,coordination of care, and patient-centered shared decision-making; studies have shown implementing interdisciplinary bedside rounding reduces LOS (Heip et al, 2022).
- Case Managers collaboration with nursing play a key role in these rounds as either leaders or participants in the process (Cesta, 2021).

Objective

- Define patient throughput.
- Examine care coordination rounds as an emerging care delivery structure improving patient throughput.
- Identify care outcomes improved by care coordination rounds.
- Recognize further implications impacting case management in completing this research.

Method

STUDY DESIGN

The study was a FOCUS-PDCA quality improvement initiative that demonstrates the practice of interprofessional collaboration to examine the effective implementation of CCR impact on patient throughput.

STUDY SETTING and PARTICIPANTS

Setting

The setting for this project was a 900-bed acute care, Magnet designated, academic teaching hospital. The unit designated to conduct the study is a 29-bed medical surgical, Prism Award
recipient unit.

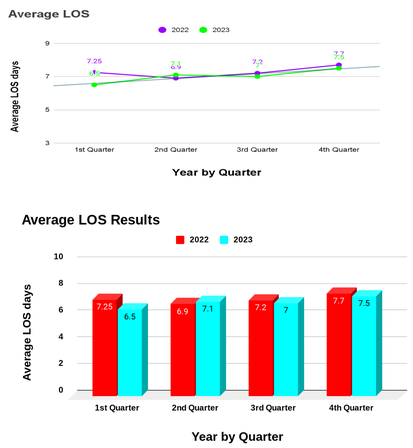
Participants

The CCR team included the nurse CM, SW, unit manager or charge nurse and bedside nurse.

INTERVENTION

In January 2023, the case management and the unit nursing leadership team collaborated to reignite CCR. The case management team and unit nursing staff focused on implementing CCR as a key strategy for improving patient throughput. Team members were given one month of training in their roles and their contribution to the patient CCR discussion. Rounds were made mandatory. CCR were held daily, beginning at 8:30 am Monday through Friday and held in each patient's room bedside. The average time to complete walking CCR was approximately 45 minutes to an hour. The project took place over a 12- month intervention period (January 2023 to January 2024). The data measured was the LOS quality metric and discharge before 2pm. LOS and discharge before 2pm were trended over 12 months.

Results

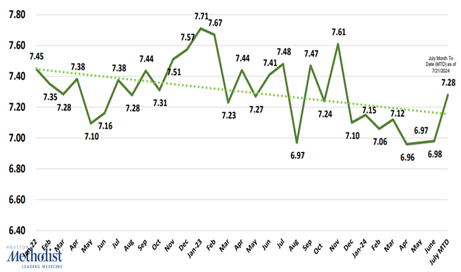


Results

January 2023 LOS Cost Savings

ADMISSIONS	LOS	INPATIENT DAYS	MED/SURG BED COST
# of patients	average LOS	# of days	~$2,624/ day
3,519	7.1- unit project	24,985	$65,560,640
3,519	7.2-budget/target	25,337	$66,282,288
3,519	7.71-hospital average	27,131	$71,191,744
ESTIMATED COST SAVINGS			
Jan 2023 project vs target	Jan 2023 project vs hospital	2023 1st Quarter (6.5 LOS)	12 month period
$721,648	$5,631,104	$19,391,098	$8,659,776

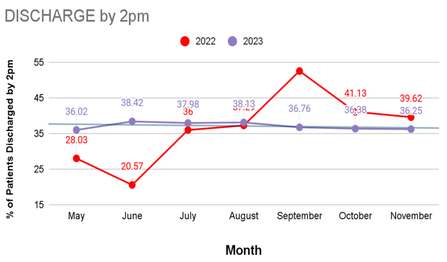
LOS Results 2022- 2024



2024 LOS Cost Savings

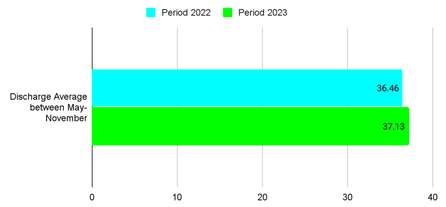
June 2024			Full Year 2024		
Actual Admissions	Actual/Budget June ALOS	Inpatient Days	Projected 2024 Admissions	Actual/Budget YTD ALOS	Inpatient Days
3,734	**6.98**	26,056	44,850	**7.11**	318,884
3,734	**7.25**	27,072	44,850	**7.25**	325,163
Saved Days		**1,016**	Potential 2024 Saved Days		**6,279**
Estimated Cost Savings		$2,664,672	Potential 2024 Cost Savings		$16,476,096
2023 direct cost per med/surg patient day:		$2,624			

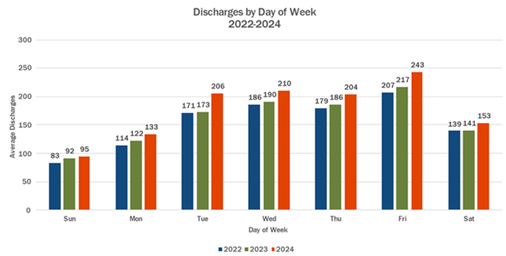
DISCHARGE by 2pm



Results

DISCHARGE by 2pm





Conclusion

The results of the study indicated CCR has a significant impact on the measured metrics. The average LOS markedly decreased by 0.9 in the first quarter of the project. In 2023, three of four quarters (Q1, Q3, Q4) average LOS performed better than 2022. In 2023, three of four quarters (Q1, Q2, Q3) were below the target LOS. In January 2023, the project unit average LOS was 7.20, with a reduction of 1,784 days and hospital cost savings of $3,962,264. Between May 2023 and November 2023, discharge before 2pm monthly average was 37.13% increasing bed availability, reducing hospital capacity and improving throughput. Between May 2023 and November 2023, discharge before 2pm monthly average was 37.13%. Discharge before 2 pm increase bed availability, reducing hospital capacity. Prioritizing CCR resulted in decreased LOS, more discharges before 2pm and millions of dollars in cost savings. The role of CCR is vital to the success of hospital throughput.

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