MAYO CLINIC

Title: Discharge by Noon: Effective Hospital Capacity Management
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Objective of program: Throughout the pandemic and with ongoing staffing challenges, Mayo Clinic set out to optimize postoperative patient flow and to optimize hospital capacity. Day of discharge delays were identified as a significant bottleneck. Initial assumptions placed much of the delay on staffing challenges throughout the hospital, when in fact there are multiple steps in the process that can cause delayed discharge for certain patients. Some of these challenges include ancillary services and practice performance regarding communication and prioritization of patients eligible for discharge.

This project focused on closing the gap with team performance, and expectations around timeline for discharge, including
- Utilizing the pre-op visit to set expectations with patients and family members
- Providing data to each discharging provider to increase commitment to discharge strategies
- Highlighting process-specific milestones leading towards timely discharge, inclusive of discharge orders in the EMR, and ePrescribing
- Importance of care team empowerment (residents, nurse practitioners, physician assistants, and nursing) through protocolized care, and allowing members of the team to practice at the top of scope of their licensure
- Long-term sustainability of realized gains

Planning: This project initially began with anecdotal stories of discharge barriers and roadblocks. With endorsement from leadership, the project team was able to engage with a team of health system engineers, to effectively map current state and ensure appropriate data analysis.

Implementation methods: The pilot group focused on clinically diverse patient populations that represented a comprehensive sample of practices at two adult acute care campuses. This group included five pilot surgical groups (plastics, colon and rectal, thoracic, breast, endocrine and metabolic) with patient populations distributed across both hospitals and set a goal of 75% of patient dismissals completed by 12:00 p.m. A noon goal was created based on observations that patients discharged after the noon hour impact post-operative admissions that are beginning to arrive at 11:00 a.m. and require a bed. If the current population that is planned for discharge does not leave until after 12:00 p.m., there is a natural delay and bottleneck for the arriving admissions from the operating room.

Results: Initial baseline data showed 24% dismissal by noon daily, with an average time of dismissal of 1:04 p.m. Within the data set, only patients located on the dedicated inpatient unit for the services were included. Post implementation, the average discharge by noon is now 42%, with a median discharge time of 12:24 p.m. Time of discharge order placement was also determined to not be a factor in discharge time.

Conclusion: The project team had six key learning takeaways:

- Communication and patient involvement in discharge planning
- Leveraging tools in the EMR
- Encouraging prioritization of discharge with care teams by setting expectations
- Timely placement of medication orders
- Active participation in discharge rounds by all members of the care team
- Prompt predischarge testing and procedure completion

The success of the pilot group resulted in expansion to the rest of the Department of Surgery. The second group began this project with a 27% discharge by noon average. Median time to discharge was 1:31 p.m. at project initiation with this group. Median discharge time improved to 12:13 p.m. and 36-42% of patients being discharged by noon.
One key barrier not addressed in this project is the ongoing challenges with skilled nursing facility bed availability. Sustainability of initiatives continue to be an iterative process, with ongoing opportunities for improvement.

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