

FOUR TO THE FLOOR: OPTIMIZING ED-to-FLOOR PATIENT FLOW

Learning Objectives

- Describe a framework to optimize hospital patient flow from the ED to the floor.
- List interventions to improve patient flow in a hospital.
- Discuss potential outcomes of such interventions in a hospital.

Introduction

Optimizing patient flow is paramount to improve care quality and access. Emergency department (ED) to floor patient flow involves multiple steps with opportunities to streamline. We aimed and achieved a hospital discharge order to next patient occupy time for a patient from the ED to less than four hours (Four to the Floor).

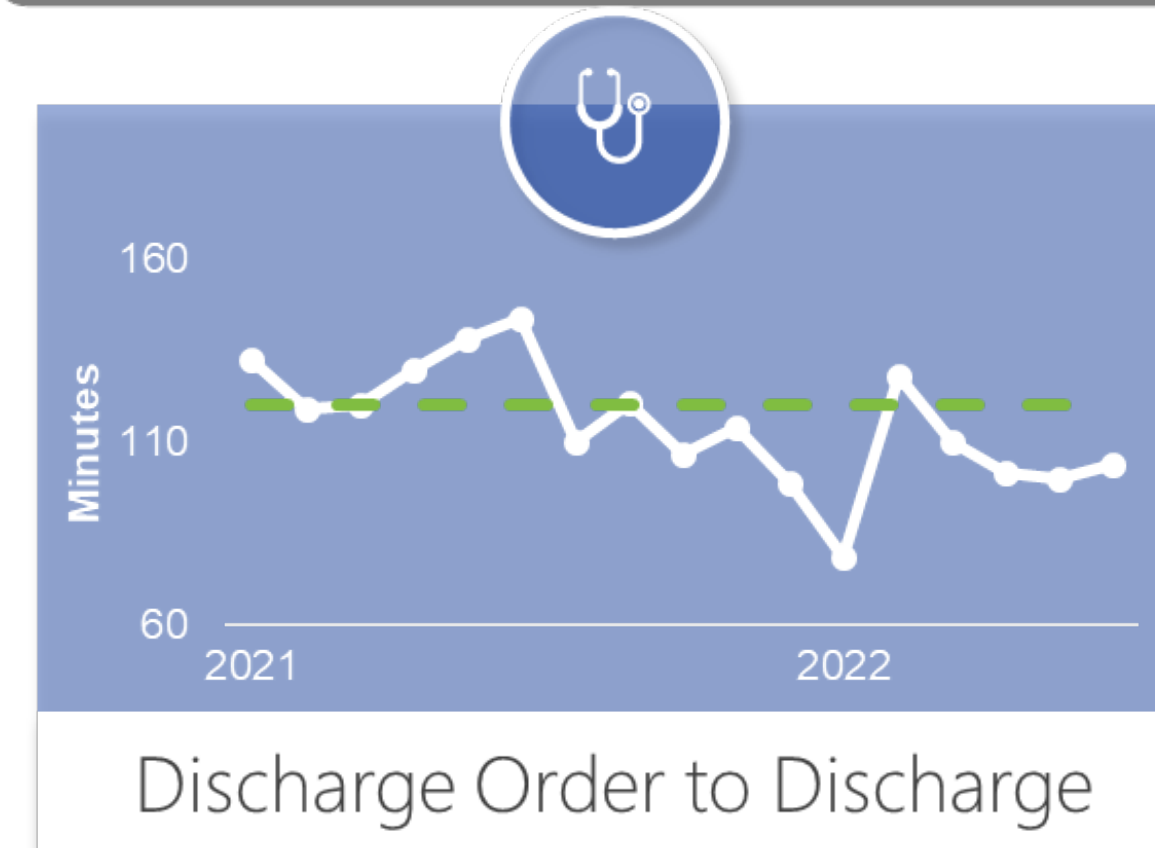
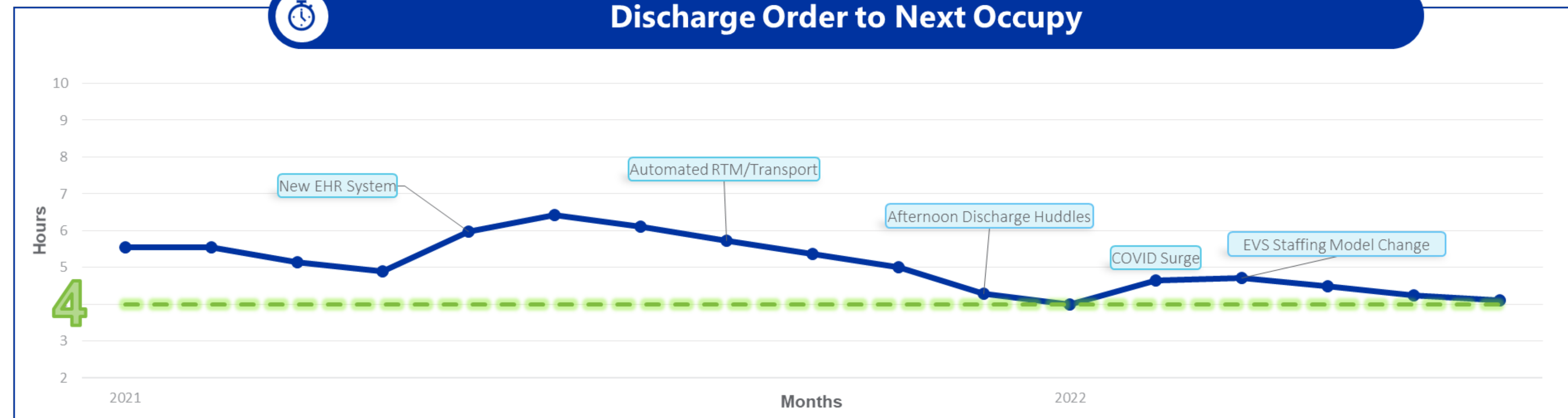
Background

- Discharge order placed by the provider, discharge preparation by a multidisciplinary team, final discharge of the patient from the room, transport of the patient out of the room, room cleaning by environmental services (EVS), room assignment by the bed assignment team, nursing handoff from ED nurses to the floor nurses, transport of the patient from ED to the cleaned room on the floor.
- Opportunities were identified to streamline the process. Rapid PDSA cycles of change were implemented. The voice of the customer (patients) was gathered through our incident reporting systems and was judiciously addressed.

Outcomes

- Process and outcome metrics were measured and monitored through an electronic dashboard which was shared weekly. The baseline period of measurement was from March to April 2021 for a total of 105 patients. Final improved outcomes were measured in June 2022 for a total of 79 patients.
- Discharge Order to Next Occupy time decreased from 311 minutes to 246 minutes with a percentage change of -21%. Discharge Order to Discharge time decreased from 120 minutes to 104 minutes (-13%). Discharge Transport Response Time decreased from 28 minutes to 7 minutes (-75%). Discharge Lounge Utilization percentage improved from 27% to 41%. EVS turnaround time decreased from 77 minutes to 74 min (-4%).
- Clean to Next Occupy time decreased from 75 minutes to 48 minutes (-36%). ED Transport Response Time increased from 20 minutes to 29 minutes (+45%). Transport utilization increased from 19% to 85% (+347%!). Patients and staff expressed improved satisfaction with improved flow from the ED to the floor.

Discharge Order to Next Occupy



Lessons Learned/Key Takeaways

- Huddles between physicians and case managers were initiated to establish and review discharge dates, identify necessary preparation tasks, and discuss any current barriers.
- The criteria for the discharge lounge were re-evaluated to be less restrictive and this increased discharge transport utilization (as opposed to the unit staff).
- A transport pick-up automatically marked the room dirty, a previous delay point.
- EVS staffing switched to unit-based deployment during peak discharge hours.
- The hospital switched to a new EHR system that allowed for unified communication methods and devices, shared system visibility, and the capability to automate tasks.
- ED transfers changed to a pull-based process that automatically deployed transport to the ED at the time their assigned inpatient bed was marked clean.

Interventions

- Early identification of patient for discharge
- Discharge lounge use/ criteria for use
- Meds-to-bed delivered to the Discharge lounge
- Worked with EVS managers to ensure clean times
- Worked with Transport managers/ verified transport use from ED to the floor (dedicated transport staff for the ED)
- Utilize EHR dashboards for assigned patients
 - Change hand off process from a push from the ED to a pull from the floor



COMMITMENT TO DATA-DRIVEN APPROACH



Study the System



Prioritize Variation Reduction



Provide Visibility to Performance

Discharge Order to Discharge

▼ 13%

Discharge Hour of Day

▼ 1 Hr.

Discharge Lounge Utilization

▲ 52%

Bed Clean to Next Occupy

▼ 33%

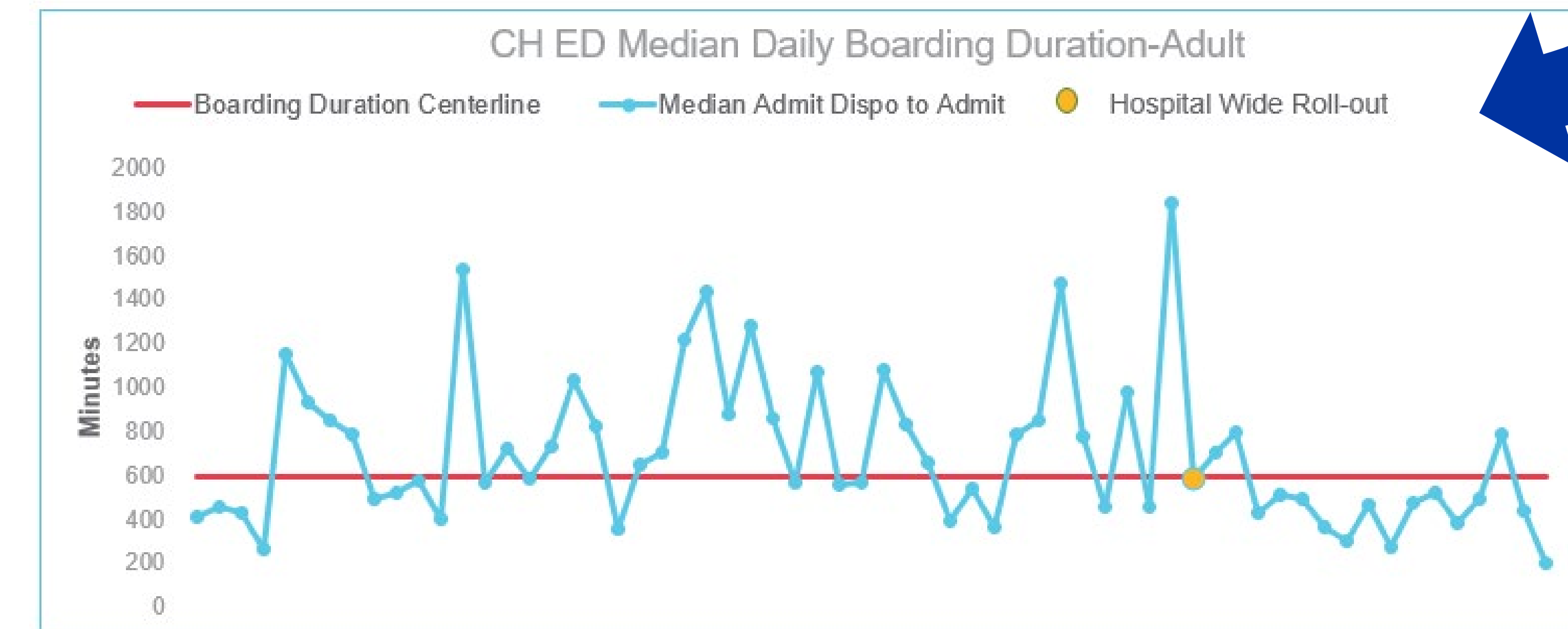
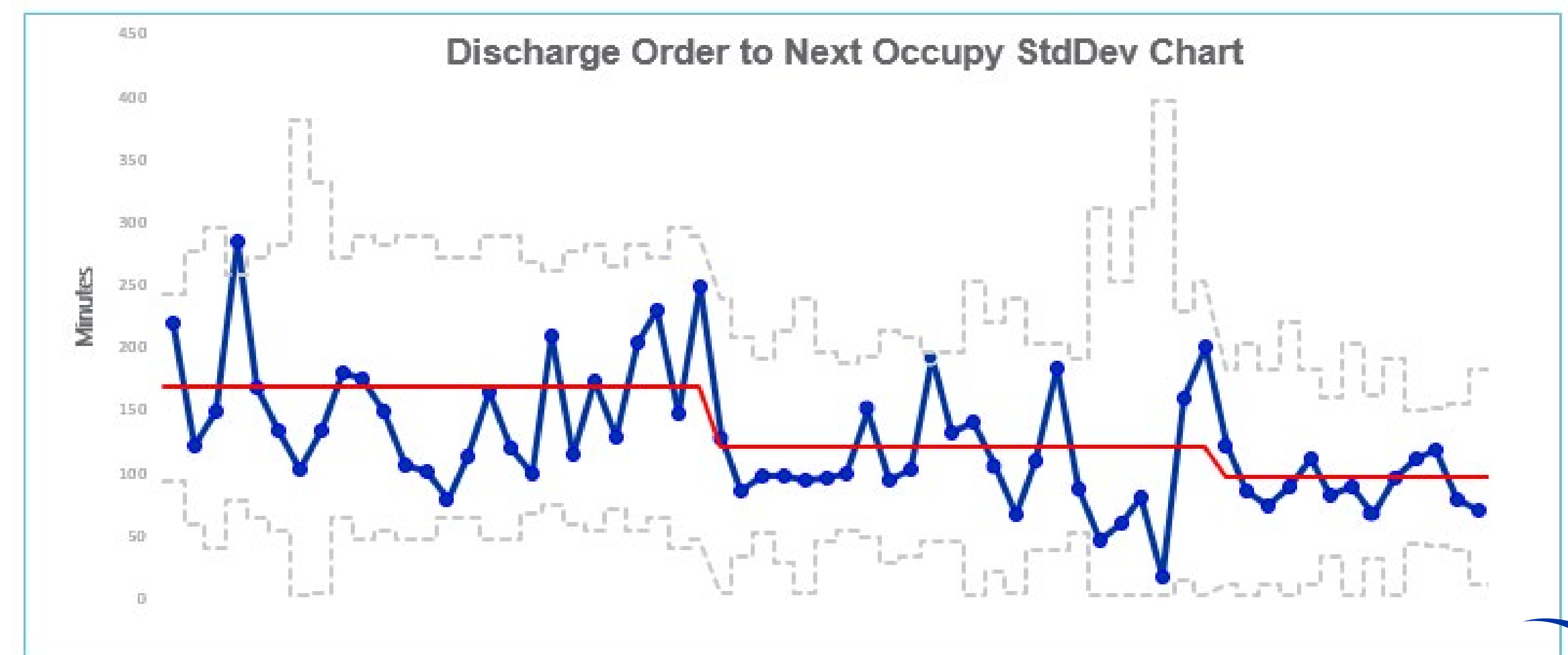
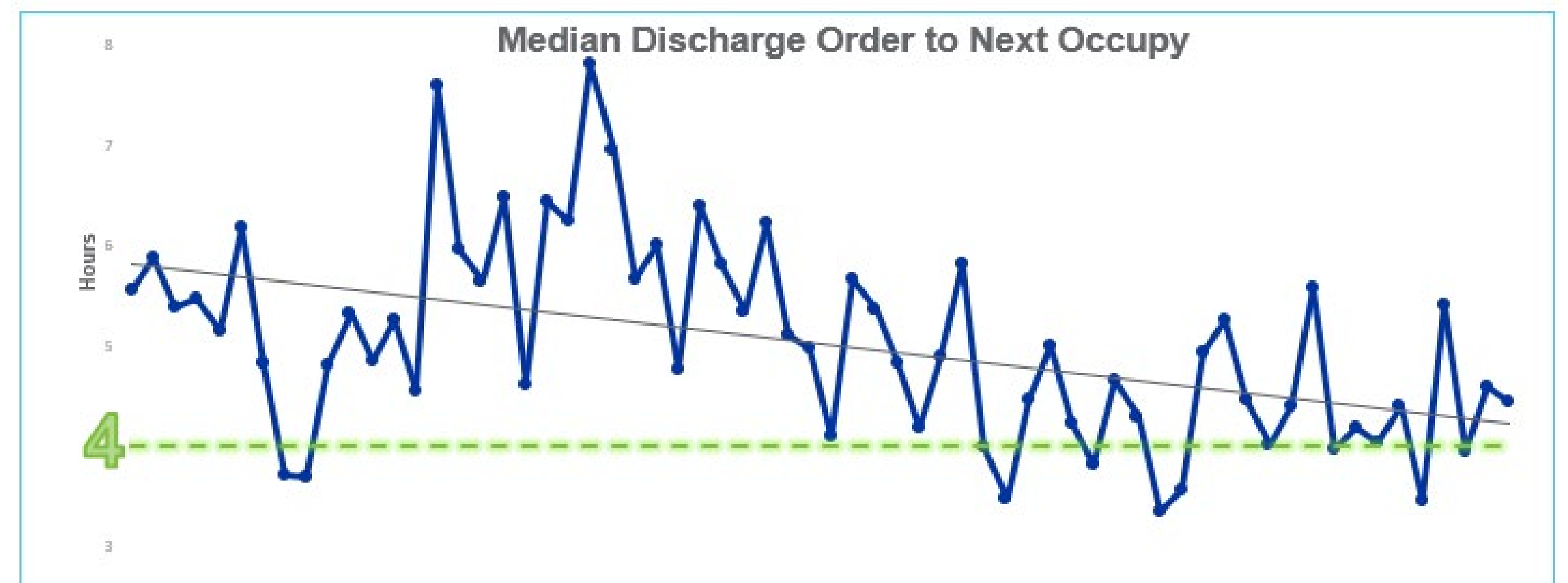
Transport Utilization

▲ 347%

Transport Response Time

▼ 13%

Engagement



System Impact

