

Patient Flow

Utilizing Remote Video Auditing to Improve Hospital Flow

Long Island Jewish Medical Center, Northwell Health

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Background

- Long Island Jewish Medical Center has seen tremendous growth in Emergency Department and Inpatient volume, leading to ED Boarding
- Traditional methods of discharge and bed placement processes are dependent on individuals entering data into an IT system to trigger an event (i.e Patient Discharged, Bed Cleaning in Process, Bed Cleaning Complete, Transport patient, etc).
- Remote Video Auditing has been used to monitor Patient Safety and Efficiency in the operating room with great success. What we have encountered through those initiatives is that electronic systems do not accurately reflect what is happening.

Zone	Zone Name	Expected Discharges	Open Beds	Expected Variance
Zone 1	Medicine	8	2	-9
Zone 2	Trauma	2	0	-28
Zone 3	Surgery	8	0	-32
Zone 4	Critical Care	8	5	-2
Zone 5	Med/Surg	23	8	25
Zone 6	LIJ PACU		7	
Zone 7	Rate PACU		3	
Zone 8	Rate Labor & Delivery		1	
Zone 9	ED		15	

Discharges		Index		Discharge Process	
Total	Actual	Classified	Pending	Discharge	Process
EM	11	8	3	7	11
Rate	22	0	15	9	20
Total	33	8	18	16	31

Admits w/o bed	
Wait Time	33

Project Aim

- Utilize Remote Video Auditing to capture milestones of the Inpatient Admission and Discharge process to accomplish the following:
- Reduce the time from Patient Discharge to Room Cleaned.
 - Reduce the time admitted patients are waiting for a bed in the ED.
 - Demonstrate that typical electronic systems in hospitals do not accurately reflect patient flow leading to delays in care.

Remote Video Auditing Overview

Equipment & Install:

- Cameras are installed in strategic locations from an outside company to monitor remotely desired operations.



Measurement:

- Video is recorded and an auditor reviews and connect remotely.
- Various indicators from safety, compliance, and efficiency are monitored and scored from the auditors.

Feedback:

- Data, reports, dashboards, and analytics are provided.
- Through this information, the hospital can get better clarity and improve compliance and efficiency.

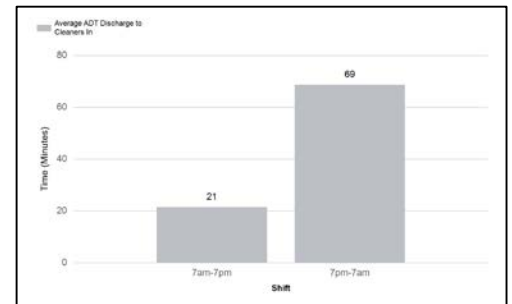
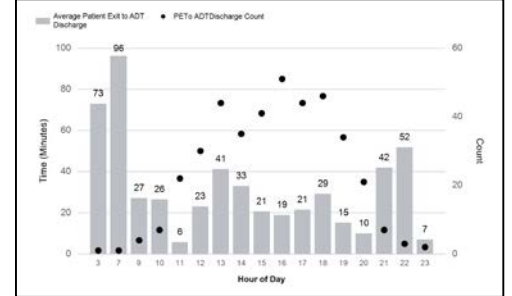
Project Design / Strategy



Changes Made

Weekly Department & Hospital Reports

- RVA captures Key Milestones in Patient Discharge Process
 - Patient Exits Room
 - Discharge Entered Into ADT
 - Cleaners In
 - Cleaners Out
 - Patient Enters Room for Next Admit
 - Patient Admitted into ADT
- Reports Analyzed and Trend Data
 - By Department
 - By Day
 - By Shift
 - By Hour of Day



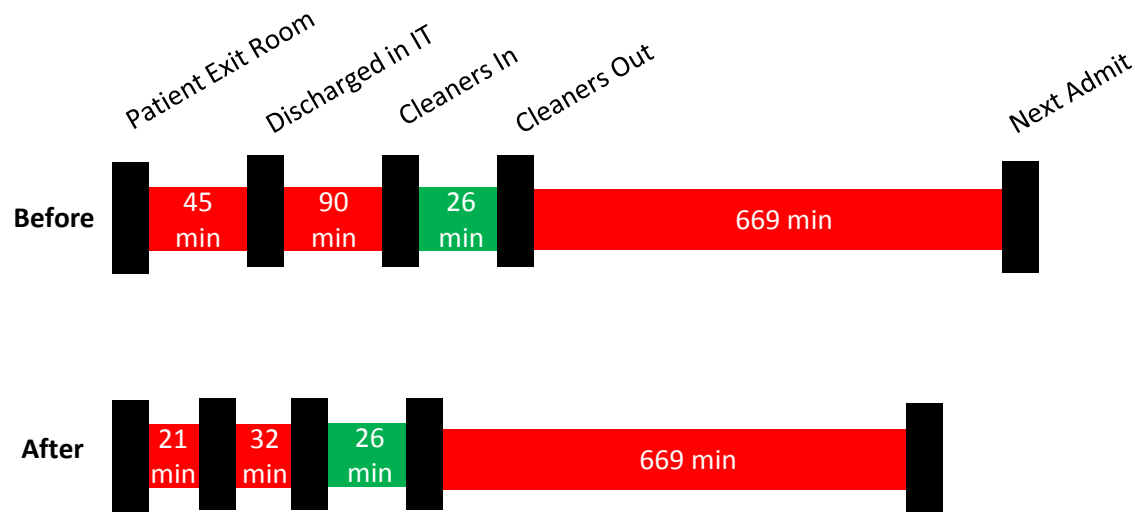
Weekly Department High Flier Report

- Displays gap from when Patient Exited Room for Discharge until it was entered into ADT

Day of Week	Room	Bed	Discharge Type	PE to ADT Discharge (Minutes)	Patient Exit Date/Time	ADT Discharge Date/Time
Sunday	548	B	EMT	190.83	9/9/2018 3:33:10 PM	9/9/2018 6:44:00 PM
Monday	565	B	None	148.62	9/10/2018 4:14:23 PM	9/10/2018 6:43:00 PM

Results & Key Findings

- Patient Exits Room for discharge **45 minutes before our IT systems know**



- Providing feedback in terms of Weekly Reports and high fliers **reduced Patient Exit to Cleaners Out by 50%**

- 200 minutes, which accounts for 50%** of the time patients are holding in the ED the bed they ultimately went to was already available. We are calling this **Idle Bed Time**

