Improving Patient Flow: ED to Inpatient Bed Assignment Process

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Reason for Action

- The Emergency Department was consistently boarding 8 -20 admitted patients daily

- Excess time in the emergency department increases the opportunity for patient harm, frustrates staff, and negatively impacts the patient experience

Scope: Admitted Medicine Patients

True North: Flow

What Did We Do?

- Patient Flow Committee, led by CMO, tasked a small multidisciplinary Kaizen team to design a process to reduce the time from when a bed is requested by an Emergency Department physician until a bed is ready

- Challenges identified
    - Limited visual management
    - Multiple handoffs
    - Variability in process
    - Work performed in silos
    - Batching

Lean Principles

Visual Management for One Piece Flow

Use bent door tag as a visual cue to trigger standard work

Unit Secretary: Discharge patient from system in real time without batching

NA: Strip linen from the bed

EVS: Clean the room. If linen is on the bed, enter Linen Delay and inform Unit Secretary or Charge Nurse.

Voice of the Customer

- Admitting is a customer of the ED
- Admitting cannot assign a bed without Attending name

Remove Waste

- Charge RN is removed from the process

Communication Plan and Culture Change

- New workflow socialized to staff via huddles, staff meetings, and workshops

- Combined ED and Inpatient "Charge Nurse Day" held to improve communication and break down silos

- Deputy CNO held multiple sessions to review the difference between batching discharges and one-piece flow. These workshops were attended by every Unit Secretary and Nurse Manager

Create an elevator speech to communicate <u>what</u> and <u>why</u>

How does the change benefit the patient and the end user?

Outcomes and Sustainment (11 months post kaizen)

Time from Bed Request to Bed Ready

	Pre-Kaizen	Target	30 Days	60 Days	90 Days	Total Post Through 3/10/18	Reduction
Average	7h 1m	5h 10m	3h 57m	3h 29m	3h 22m	3h 53m	3h 8m (45%)
Median	3h 45m	2h 40m	2h 30m	2h 12m	1h 58m	2h 11m	1h 34m (42%)

I Chart of Median_Bed Request to Ready (Outliers Removed)
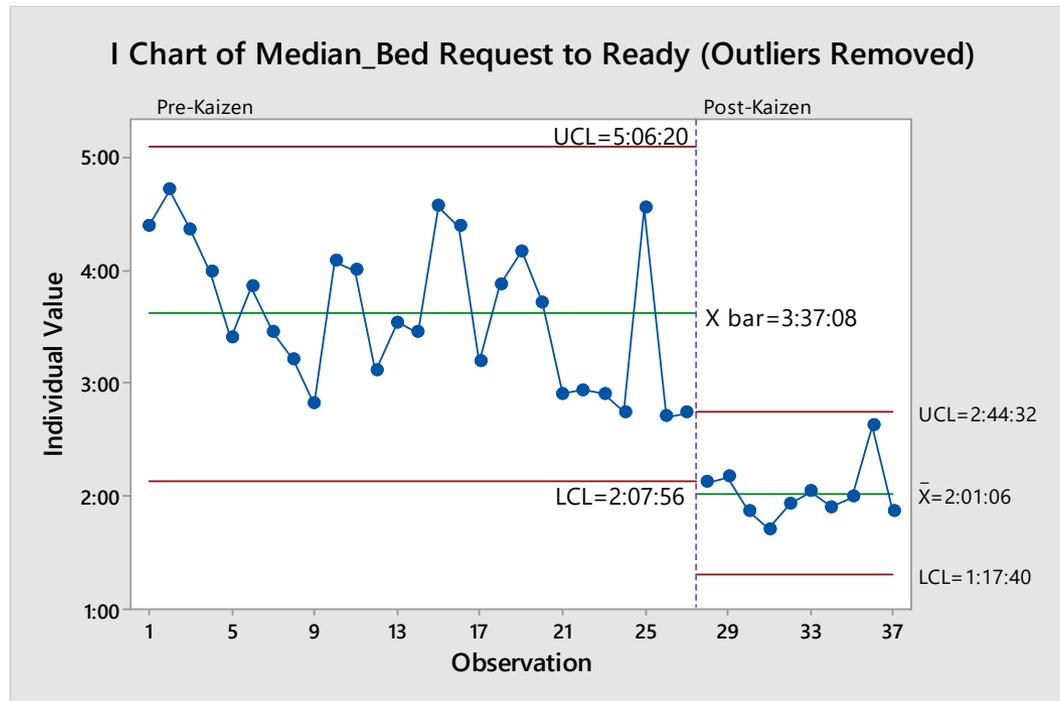
- Statistically significant difference in mean before and after Kaizen
- Outliers removed for January 017 and 2018 because of influx during flu season

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Outcomes and Sustainment

Percentage of Red Days* per Month
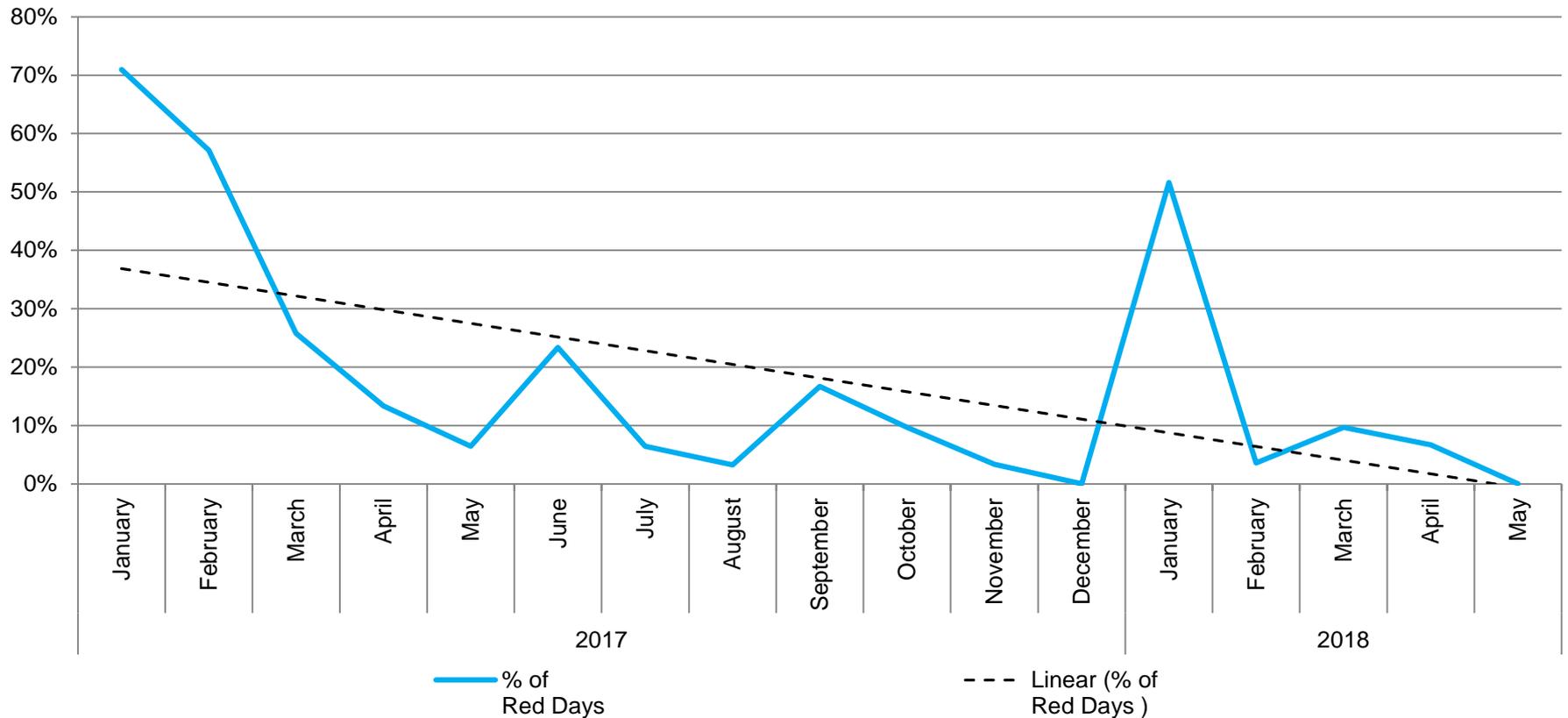
- *A "Red Day" at MSSL is defined as 8 or more ED admitted patients waiting 90 minutes or more for a bed assignment