**Results**

The most commonly identified low-dose medication was rectal Diazepam. Our baseline rate of low-dose prescriptions using data was 3.5%. Interventions targeting efforts to eliminate low-dose prescribing resulted in a centerline shift from a baseline of 3.5% to 2.8% in January 2016. There was a second centerline shift to 1.59% in September 2017.

**Conclusions**

Using quality improvement methodologies, the team substantially decreased low dose rescue medication orders by an average of 54%. We are currently developing a tool within our EMR to auto-calculate the correct rescue medication dose for each patient.

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**Abstract IHI ID 16 Figure 1**  Process flow chart and bedside handoff checklist

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**41 Days Since Last Event**

Incorrect site marking

Surgeon noted consent addition needed in OR

Process Go-Live 6/4/18

Pilot 4/23-4/26/18

Began discussing process

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**Abstract IHI ID 16 Figure 2**  Days-between preoperative task completion failures

Individuals (KMR) chart depicting the days between preoperative task-completion failures that resulted in incident reports. The chart is annotated for important time points in the study. Special cause is illustrated by points/connector in red and by points above the upper control limit. Dashed red line = upper control limit; Light blue line = Centerline depicting the mean for each value
Incident reports suggested that patients were reaching the operating room (OR) without completion of necessary preparatory tasks. Incidents included Near Misses with potential for harm. Parallel processing and inadequate communication among preoperative nurses, anesthesia providers, and OR nurses were determined to be root causes of many of these failures.

Objectives
Significantly increase the number of days-between preoperative task-completion (PTC) failures.

Methods
Incident reports were analyzed for root causes. Preoperative process flow was mapped. Process flow at other institutions was observed. Multidisciplinary bedside handoffs utilizing a task-completion checklist were tested, adapted, and adopted as a new preoperative process (figure 1). Days-between PTC failures were plotted on an XMR chart as the primary metric. First case procedure start times were plotted on XMR charts as a balancing measure. Qualitative data were collected about process issues identified by the handoff process.

Results
After introduction of bedside handoffs days-between PTC failures reaching the OR increased from every 5 days to >40 days (figure 2). The average procedure start time was delayed by 8 min (figure 3). A majority of PTC failures that were stopped from reaching the OR were surgeon-specific (figure 4A). Unavailability of nurses was a reported barrier to process success. (figure 4B).

Conclusions
Bedside handoffs inclusive of preoperative nurses, anesthesia providers, and OR nurses increased the days between PTC incidents reaching the OR. This safety intervention had the tradeoff of a slight decrease in efficiency as measured by procedure start times. Interventions targeting nurse availability and earlier surgeon task completion are still necessary to optimize efficiency.