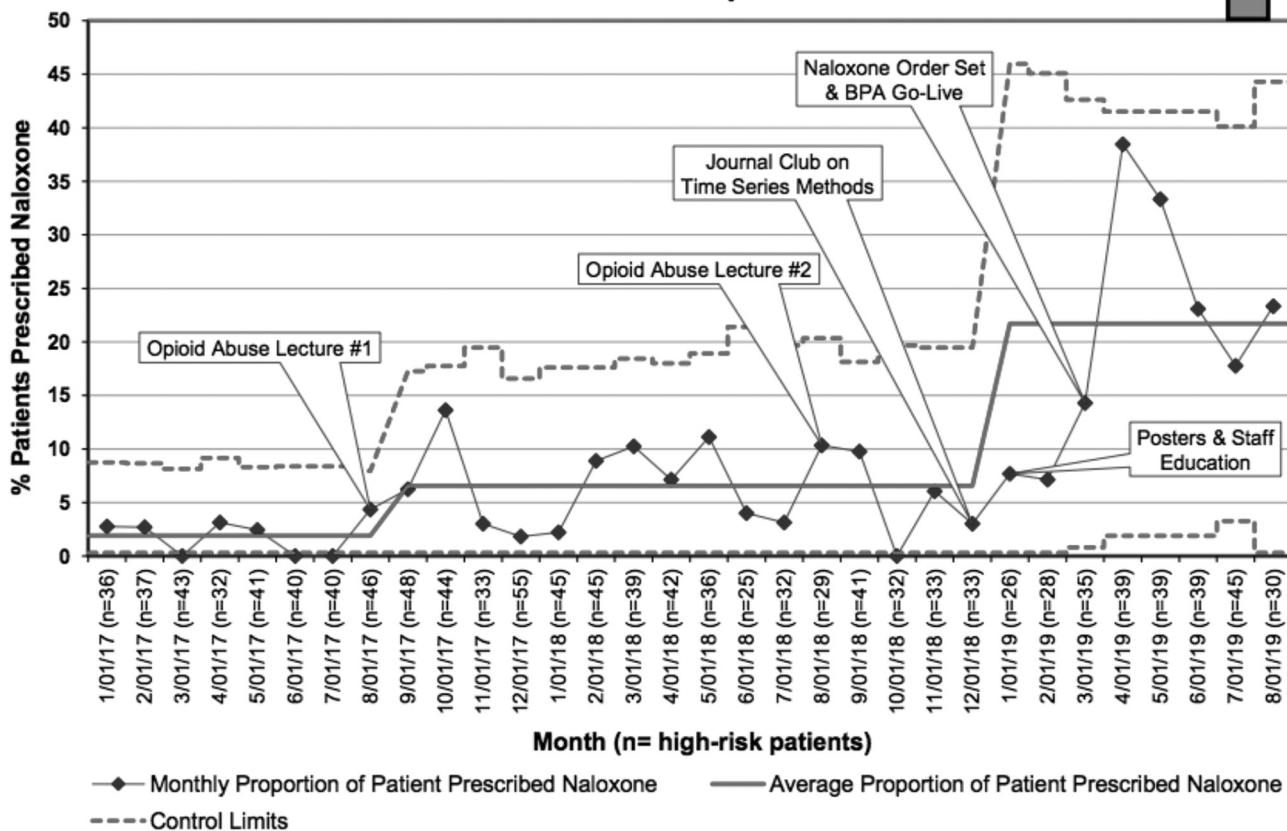


Proportion of High-Risk Opioid Users Discharged from ED with Naloxone Prescriptions



Abstract 11 Figure 2 Proportion of high-risk opioid users discharged from ED with naloxone prescriptions

12

REDUCING PERI-OPERATIVE OPIOIDS IN AMBULATORY SURGERY – A QUALITY IMPROVEMENT PROJECT USING REAL-WORLD DATA

¹Daniel Low, ¹Lynn Martin, ¹Michael Richards, ²Lloyd Provost. ¹Seattle Children’s Hospital, USA; ²IHI, USA

10.1136/bmjopen-2019-ihl.12

Background The risk for adolescents developing persistent opioid use following surgery is 5%. Despite using multimodal analgesia and extensive regional anesthesia, 85% of our patients received opioids during and after surgery.

Objectives 1. Reducing opioids during and after surgery. 2. Maintain pain scores and post-operative analgesia requirements. 3. Maintain other outcome measures. 4. Accelerate Plan-Do-Study-Act (PDSA) cycle times.

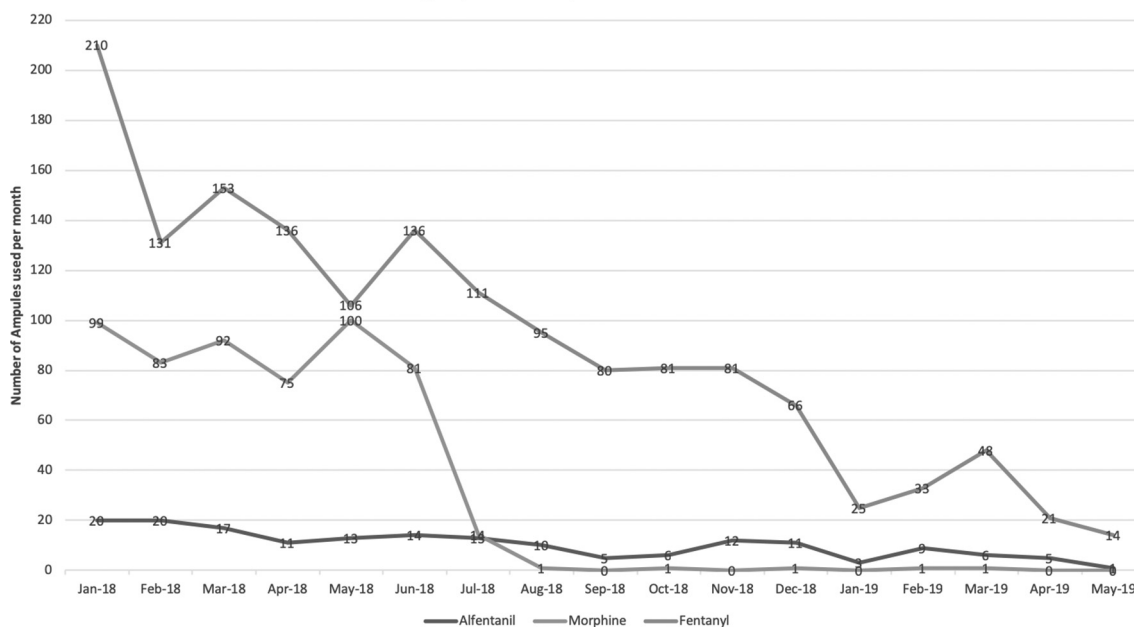
Methods Teams completed multiple PDSA cycles, driven by real-world outcomes data, to reduce perioperative opioid administration. Clinical and operational measures, visualized as

Statistical Process Control (SPC) charts, assessed the impact of different tests of change. Key interventions were derived from evidenced based medicine. SPC charts were used to determine real-world effectiveness.

Results From Jan 2018 to June 2019 our team achieved a 96% absolute reduction in perioperative opioid use for surgical patients (see figure 1). Post-operative opioid administration went from 14% to 2% (see figure 2A). Post-operative nausea and vomiting (PONV) rate is now <0.001% (see figure 2B). Recovery pain scores and length of stay were unchanged (see 2c and 2d). Improvement cycle times were reduced from 2 years to 2 months.

Conclusions 50 million Americans have surgery each year, 2 million of which develop persistent opioid use. The risk of persistent opioid use increases if patients are still taking opioids on day 5 postoperatively. Leveraging real-world data and SPC charts, PDSA cycles were significantly reduced. This reduction in opioid use creates a safer surgical journey and could help curb the opioid epidemic.

Surgery Center Opioid Use 2018-19



Abstract 12 Figure 1 Monthly vials of opioids used at surgery center



Abstract 12 Figure 2 Balancing measures to track effectiveness of opioid reduction at surgery center.

13

A NOVEL EVIDENCE-BASED APPROACH TO DIGITAL OUTREACH IMPROVES PATIENT ENGAGEMENT AND HEALTH OUTCOMES IN TWO DISTINCT COHORTS OF MEDICAID PATIENTS

Yolande Pengetnze, Donna Persaud, Albert Karam, Xiao Wang. *PCCI, USA*

10.1136/bmjoc-2019-ih1.13

Background Patient education and motivation are crucial to behavior change, care engagement, and successful outcomes for chronic conditions such as asthma or term-limited conditions such as pregnancy. Educational programs, if not

personalized, might lead to no or short-lived behavior change and suboptimal outcomes.

Objectives Using the framework of education as a continuous, repetitive, and interactive process, and leveraging ubiquitous access to mobile technology, we designed a novel digital outreach program that uses short, focused, motivational text messages targeted and tailored to patients' risk profiles to produce sustained healthy behavior change. Messaging content and frequency are personalized for optimal and sustained effectiveness, while mitigating 'Digital Fatigue' risk. Advanced analytics for accurate predictive patient risk profiling drive patient engagement personalization.