

n=148 All Unique M RNS	Pre	Post	Δ	Cost Avoidance (Loaded Costs)
ED (Visits)	827	404	423	\$216,153.00
UC (Visits)	278	191	87	\$10,440.00
IP (days)	992	371	621	\$2,079,729.00
Observations	472	204	268	\$897,532.00

\$3,203,854.00

**Abstract 8 Figure 1**

the control group yielding in approximately \$2,145,099 in cost avoidance. In addition, 1:1 pharmacist time showed a projected cost savings of \$385,000.

**Conclusions** Connecting patients and families with appropriate resources and supporting them will increase the quality of care and patient adherence to the care plans which in turn decreases utilization.

**Background** Wide variability exists in opioid doses prescribed after pediatric orthopaedic surgery. Increasing opioid prescriptions by a single day increases the risk of aberrant opioid behavior by almost 10% in the pediatric population.

**Objectives** The goal of this study is to increase the percentage of patients prescribed opioids based on a standard dosing protocol after pediatric orthopaedic surgery from 0 to 90%.

**Methods** A multidisciplinary team developed a key driver diagram (figure 1). A prescribing protocol was developed based on the surgery severity. Baseline data began in October 2017 with initial protocol testing starting in November 2017. The primary measure was the weekly percent of patients correctly dosed by the protocol. The secondary measure was the average number of opioids prescribed at discharge each week for all children undergoing orthopaedic surgery between October 2017 and September 2018. Statistical process control charts were used for data analysis with Nelson rules used to determine special cause.

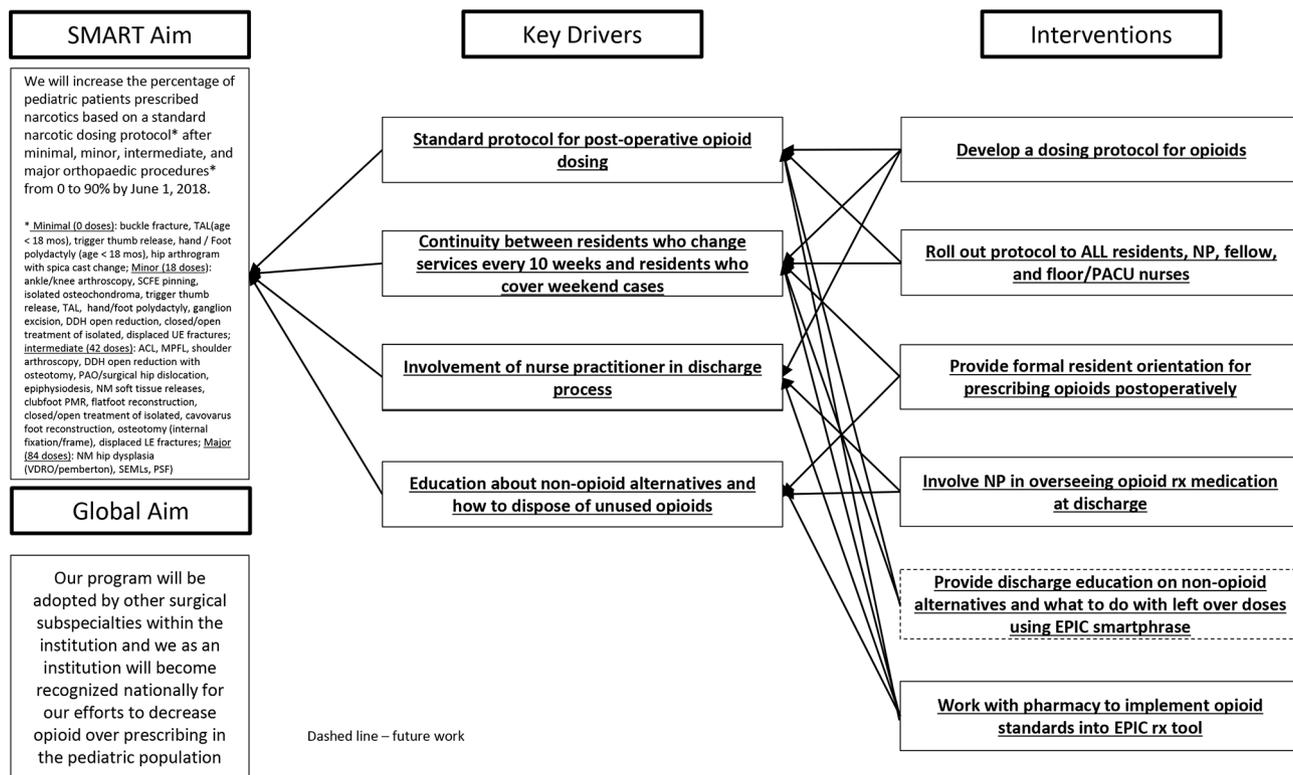
**Results** 1645 patient records were prospectively reviewed during the study time period. Adherence to the dosing protocol increased from 0% at baseline to 97% for all categories of surgery (figure 2). Mean prescribed opioid doses following surgical procedures were reduced from 21.9 to 17.8 doses (figure 3), achieving special cause variation.

**Conclusions** Implementation of a standardized opioid dosing protocol for pediatric patients undergoing orthopaedic surgery improved protocol-based adherence to over 90% and was associated with reduced opioid doses prescribed at discharge. Future work will investigate whether this may lead to a decrease in aberrant opioid behaviors in pediatric patients.

**9 A POSTOPERATIVE PROTOCOL REDUCES OPIOIDS PRESCRIBED AFTER PEDIATRIC ORTHOPAEDIC SURGERY**

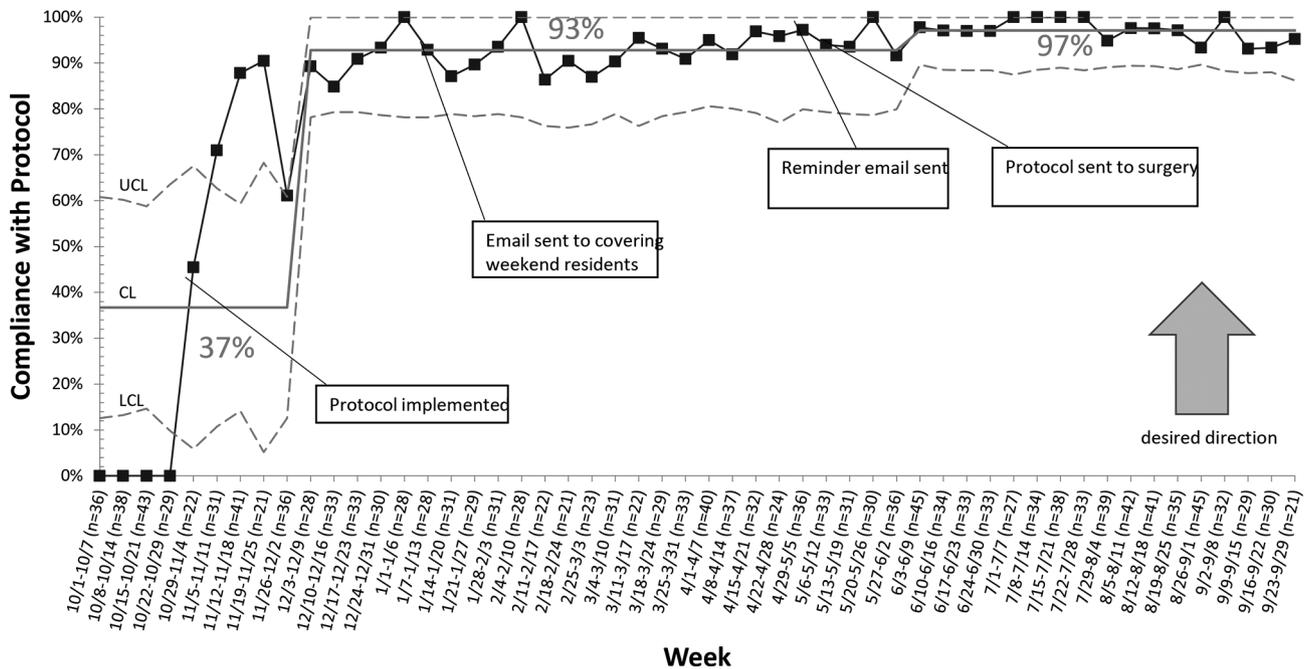
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10.1136/bmjoc-2019-ih1.9



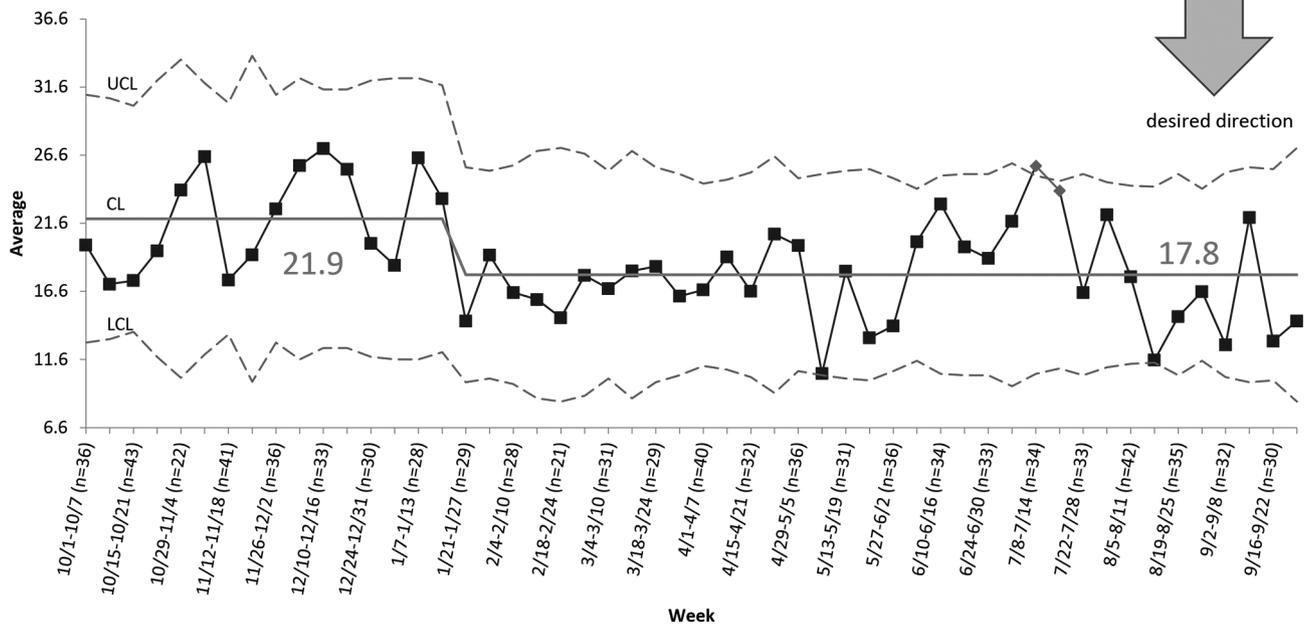
**Abstract 9 Figure 1** Key driver diagram developed by multidisciplinary team

### Compliance with Opioid Prescribing Protocol in Pediatric Orthopaedic Patients



**Abstract 9 Figure 2** P-chart showing compliance with the opioid prescribing protocol for the one month prior to protocol being implemented and 11 months following protocol implementation. Compliance with the protocol at end of the study period was 97%

### Average Opioid Dose Prescribed After Pediatric Orthopaedic Surgery - All Categories



**Abstract 9 Figure 3** X-bar chart showing the average number of opioid doses prescribed for the one month prior to protocol being implemented and 11 months following protocol implementation. The average number of doses decreased from 21.9 to 17.8 (4.1 doses) over the study period

**10** **DECREASING PAIN EXPERIENCED BY HOSPITALIZED PEDIATRIC PATIENTS BY INCREASING THE USE OF TOPICAL ANESTHETICS FOR PERIPHERAL INTRAVENOUS (PIV) LINE PLACEMENT**

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10.1136/bmjopen-2019-ih1.10

**Background** Venous access is a common source of pain for hospitalized patients. Topical anesthetics are effective at decreasing needle pain, can improve success rate, and decrease procedure time. At our institution, there is inconsistent use of topical anesthetics for PIV placement.

**Objectives** The global aim was to reduce pain experienced by hospitalized pediatric patients. The SMART aim was to