

Implementation of Standardized Discharge Regimen and Education Reduces Narcotic Prescribing Following Adolescent Idiopathic Scoliosis (AIS) and Juvenile Idiopathic Scoliosis (JIS) Surgery

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BACKGROUND

Orthopedists are the 4th leading prescriber of opioids in the United States. There has been a steady increase in the abuse of prescription narcotic medications contributing to the “opioid crisis”. In response to national efforts to reduce opioid prescribing, our institution sought to systematically lower it for a specific, homogenous surgical population.

AIM STATEMENT

To standardize the number of opioid doses to 40 upon discharge from hospital after posterior spinal fusion (PSF) in 2019.

METHODS

- A multidisciplinary team was formed including physician champion, pharmacy, inpatient and ambulatory nursing, quality and electronic medical record team
- Baseline data was collected and reviewed
 - 99 patients undergoing PSF for AIS/JIS from May – November 2017
 - Established baseline prescribing practices
 - Administered patient surveys through Redcap to measure patient satisfaction with pain management upon discharge from the hospital
 - Response rate was 31% (86)
- Literature review was performed
- Sequential rapid cycle improvement strategies were initiated
 - Utilized Plan-Do-Study-Act (PDSA) cycles for improvement

CYCLES OF IMPROVEMENT

PDSA Cycle 1

- Implemented standardized reduced opioid discharge regimen with 45 doses
 - Created dosing taper tool
 - Created pharmacy led education program for patients and families
- Continued patient surveys to measure their satisfaction with new pain regimen
 - Response Rate: 73% (95)

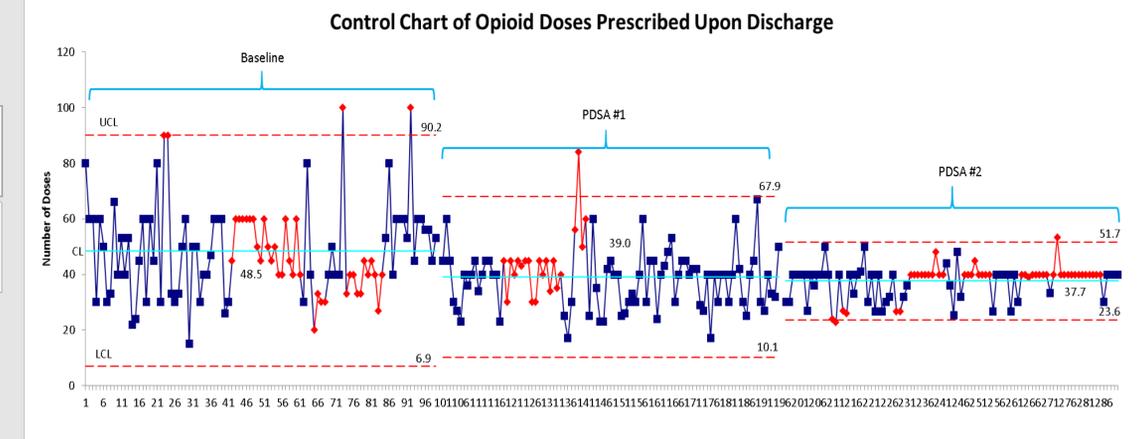
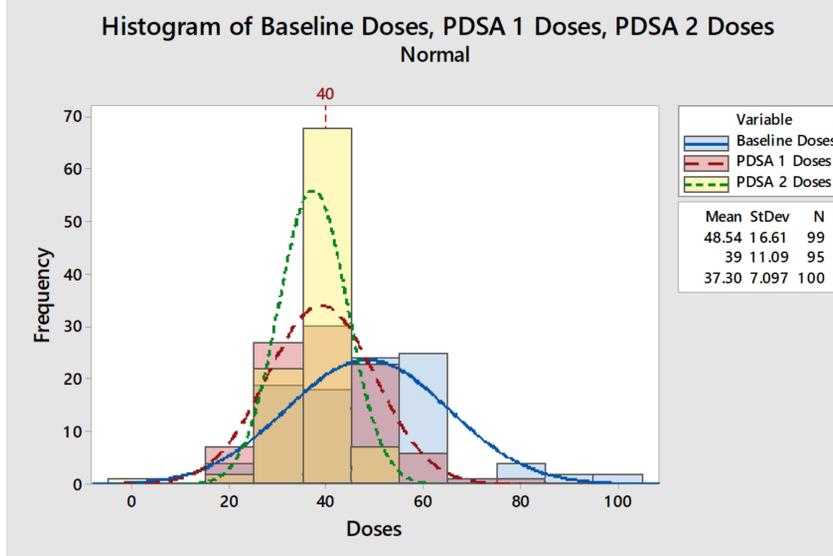
PDSA Cycle 2

- Implemented standardized reduced opioid discharge regimen with 40 doses
 - Updated dosing taper tool
 - Updated pharmacy led education sheet
- Continued patient survey to measure their satisfaction with new pain regimen
 - Response Rate: 51% (100)

RESULTS

- Significant variation was found with the amount of opioid medication prescribed with a mean of 48.54 and a range of 15-100 doses. 31.4% patients responded to the survey with 77% reporting that their pain was “very well” or “well” controlled. 81% reported adequate amounts of medication prescribed.
- After implementation of the new protocol, there was a mean of 38.92 doses prescribed, and 86% of respondents reported their pain was “very well” or “well” controlled. 74% of patients reported adequate amounts of pain medication, while 11% reported too much pain medication. 5 patients (9%) required a refill of the pain medication. Duration of narcotic use decreased as 66% of patients utilized narcotic pain medication for less than 10 days compared to 41% of patients prior to protocol implementation.

FIGURES AND CONCLUSION



A standardized approach to opioid prescribing after PSF reduces variation and number of doses ($p=0.022$), while maintaining adequate pain control.