

DESCRIPTION

Opioid use has increased sharply in the US with overdoses tripling since the 1990s. In 2017, Utah was ranked seventh in the nation for opioid-related deaths with 7,000 opioid prescriptions filled every day. Clinical guidelines and benchmark opioid prescribing data among open heart surgery patients are lacking. Hence, characterizing prescribing patterns at Intermountain Healthcare's 4 surgical centers was important to both understanding current practices and to developing strategies to reduce opioid prescriptions.

AIM

To characterize current prescribing patterns and to evaluate the effectiveness of an intervention to reduce discharge opioid prescriptions following open heart surgeries.

ACTIONS TAKEN

Leadership set a system wide goal (40% reduction) in overall opioid prescribing. Intermountain Healthcare built a database to monitor and measure opioid prescribing in all patients across all 23 hospitals and across all outpatient clinics and pharmacies.

In the absence of clinical guidelines, we worked with surgeons and a pain management expert to set a goal of discharging at least 90% of patients with ≤ 30 opioid pills following CV surgery. Baseline data and the goal were presented to surgeons and advanced practice clinicians (APCs) in conjunction with provider education and patient educational materials.

RESULTS

The total number of prescriptions with ≤ 30 pills increased from 35.2% pre-intervention to 97.2% post-intervention ($p < 0.0001$). The average number of pills per prescription decreased from 42.6 pre-intervention to 27.6 post-intervention ($p < 0.0001$), which prevented approximately 5,985 pills going out into the community. All hospitals are meeting the system-wide goal. Despite the decrease in pills per prescription, outpatient visits in the month after discharge did not increase and HCAHPS scores for CV units and clinics remained consistent from the quarter before the intervention to the following quarters.

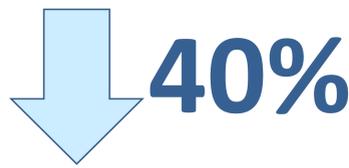
OPIOID PRESCRIPTION REDUCTION STRATEGIES

1 Identify the Problem

Creation of a system-wide Pain Management committee to address the issue of opioid prescribing

2 Key Stakeholders Engaged

Senior leadership set a system goal to reduce prescribing by 40% in 2018



3 Measure the Problem

Interdisciplinary team created an opioid prescription data mart to capture prescriptions across the continuum of care

4 Set a Goal

Using baseline data, a goal of at least 90% of all post-CV surgery prescriptions having ≤ 30 pills was set with surgeon and APC input

5 Work with Teams

Purpose of the project, project goal and baseline data presented to all CV surgeons and APCs in the system

6 Provide Resources

Educational resources regarding pain management for patients and providers distributed

7 Monitor Success

Reports reviewed monthly at CV Surgery Quality improvement meetings at all 4 cardiovascular surgery sites



		Pre-intervention	Post-Intervention	P-value
% of All Opioid Prescriptions Written for ≤ 30 Pills		486/1381 (35.2%)	388/399 (97.2%)	$<0.0001^*$
# of Opioid Pills Dispensed per Prescription	Mean \pm Std	42.6 \pm 16.3	27.6 \pm 22.3	$<0.0001^{**}$
# of Out-patient Visits after Discharge in 30 Days	Mean \pm Std	5.2 \pm 4.5	4.3 \pm 3.2	$<0.0001^{***}$

*Chi-Square test **t-test ***Wald Chi-Square test from GEMOD

GOAL SUPPORT FROM THE ENTIRE SYSTEM

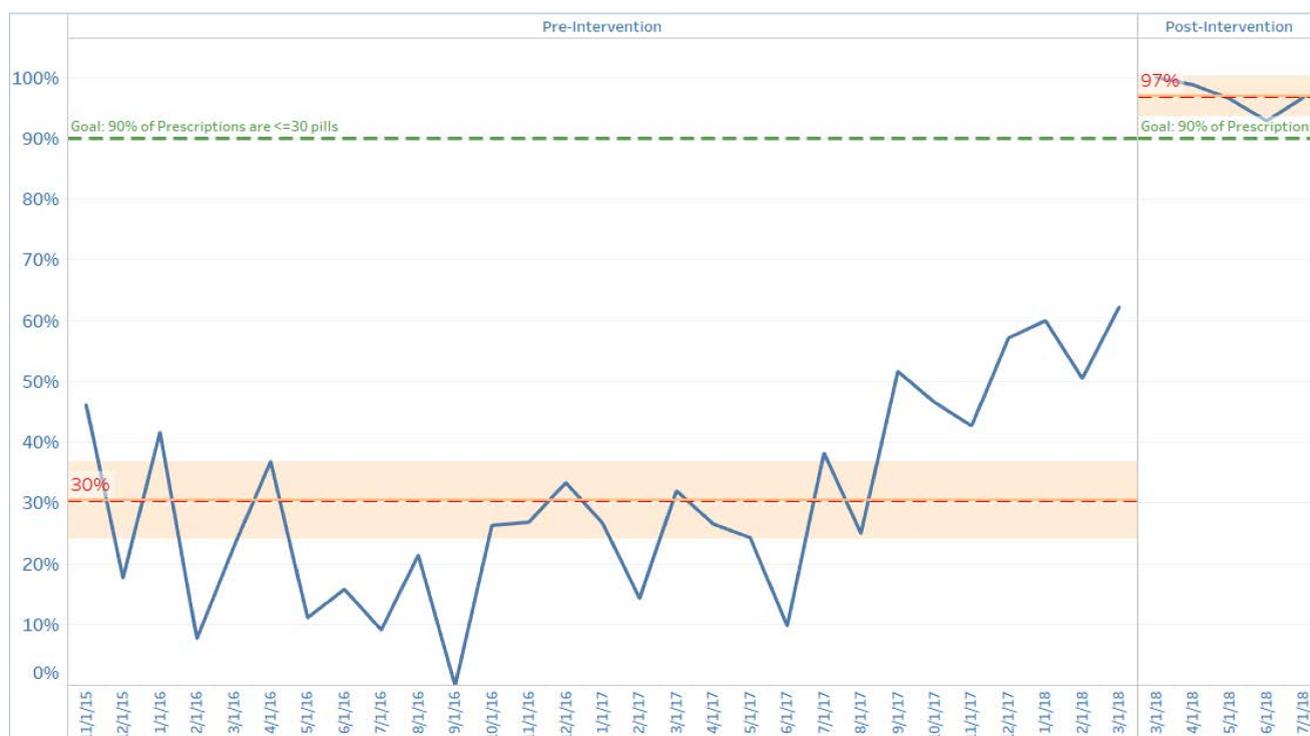
Our CV Surgery initiative was supported by work in many areas:

- Intermountain partnered with our community's Use Only As Directed campaign. The campaign included commercials, billboards, and a website. Campaign materials were posted in flyers, table covers, elevator door covers, and posters in hospital hallways.
- More than 2,500 employees attended trainings on preventing opioid misuse.
- Training videos and materials related to treating chronic pain, managing drug seeking patients, and opioid management materials and flashcards were posted on our internal web portal.
- Pain management education was provided to patients via pain management classes, videos, and brochures
- Opioid drop boxes were placed in all community pharmacies to encourage appropriate disposal of excess opioids.
- Multiple Care Process Models were created to guide opioid prescribing for both chronic and acute conditions.

RESULTS

- The total number of prescriptions with ≤ 30 pills increased from 35.2% pre-intervention to 97.2% post-intervention ($p < 0.0001$).
- The average number of pills per prescription decreased from 42.6 pre-intervention to 27.6 post-intervention ($p < 0.0001$). This prevented approximately 5,985 pills being prescribed.
- All hospitals are meeting the system-wide goal of having 90% of all opioid prescriptions written for 30 pills or fewer.
- Despite the decrease in pills per prescription, HCAHPS scores for CV units and clinics remained consistent from the quarter before the intervention to the following quarters, as did the number of outpatient office visits.

Percentage of Opioid Discharge Prescriptions Post-CV Surgery with ≤ 30 Pills Pre- and Post-Intervention



LESSONS LEARNED

- Identifying who is responsible for writing prescriptions is critical to making changes.
- Provision of accurate data is essential.
- Care providers are well aware of the risks and make changes once data are available.
- Opioid interventions benefit from the current spotlight on the opioid epidemic and from community initiatives.