

# Improving Opioid Safety Using an Integrated Care Delivery Approach

## GENERAL OVERVIEW

The United States is facing a public health epidemic, with more than 40 people dying every day from prescription opioid overdoses. As a leading health care delivery system, Kaiser Permanente is taking steps to address this issue by implementing policy and clinical practice interventions. One such initiative, the Safe and Appropriate Opioid Prescribing Program – first implemented in Kaiser Permanente Southern California with the Southern California Permanente Medical Group – highlights one of the organization’s many successful efforts to address opioid addiction for its patients, members, and the communities it serves. The program is the focus of a *Journal of Evaluation in Clinical Practice (JECP)* study that shows how a comprehensive, system-level strategy can positively affect opioid prescribing.

## A FOUR-PRONGED APPROACH

The *JECP* article highlights the history of Kaiser Permanente’s intervention. In the past, each Permanente Medical Group (PMG) maintained its own method to address opioid safety. In 2010, the PMGs developed a comprehensive, four-pronged approach. Kaiser Permanente’s unique integrated care model, combined with its advanced electronic medical record (EMR), allowed PMG physicians to fight the epidemic on multiple fronts. (see *Figure 1.*)

## JECP STUDY: KEY FINDINGS

- 30 percent reduction in prescribing opioids in high doses
- 98 percent reduction in number of prescriptions with greater than 200 pills
- 95 percent reduction in prescribing of brand name opioid-acetaminophen products

## A Four-Pronged Approach to Opioid Safety



Figure 1.

## How Kaiser Permanente Addresses This Issue

Leading up to 2010, PMG physicians found that the most commonly prescribed drugs were opioid painkillers, not those that treat high blood pressure or diabetes. This phenomenon was not unique to Kaiser Permanente. Nationwide, people were receiving more prescriptions and higher doses of these drugs than in previous years.

At that time, literature was being published about the potential hazards and ineffectiveness of opioids for chronic pain management. PMG leaders identified an opportunity to improve care quality and the safety of their patients by developing a broad, system-wide approach to better manage opioid prescriptions.

The four-pronged approach includes:

- **Patient Education:** Kaiser Permanente uses online media and informational materials

to educate its patients about the dangers of opioids. The organization develops materials in multiple languages to explain the potential risks of opioids, as well as the nonpharmacologic alternatives for managing their pain.

- **Physician Education and Support:** Permanente physicians receive robust training to ensure consistency in treatment of pain and monthly reports on opioid safety metrics and prescribing patterns. EMR tools and decision-support technology flag high-risk scenarios and offer evidence-based guidance. Additional support

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includes collaboration with chronic pain experts such as pharmacists, physical therapists, and case managers.

- **Patient Safety:** Physicians encourage patients to taper to a lower dose (when clinically appropriate) and offer alternative pain management options such as yoga, tai chi, acupuncture, and cognitive behavioral therapy. Patients connect with a team of specialists in physical therapy, psychiatry, neurology, addiction medicine, and pharmacy to help treat their pain.



Internal data shows a nearly 40% reduction of patients on 90 morphine milliequivalents or more per month from 2014 - 2017

Region	Percent Reduction 2014 - 2017
CN	42%
CO	40%
CS	42%
GA	29%
HI	50%
MA	48%
NW	59%

- **Community Protection:** In addition to reduced prescribing, physicians may lower the risk of diversion onto the street by prescribing generic drugs with lower market value. Kaiser Permanente recognizes its role as part of a larger health ecosystem and carries its work forward into the community by educating and sharing information with local emergency departments. Additionally, the organization collaborates with government (e.g., CDC, legislators), academic (e.g., Harvard), and other nonprofit groups to promote best practices for opioid safety.

## On the Horizon

The eight PMGs serving Kaiser Permanente patients and members across the nation are rolling out the opioid safety initiative across departments, beginning with Internal and Family Medicine (the highest prescribers), Emergency, Orthopedics, and lower-prescribing service lines. For example, The Permanente Medical Group's Physician Education and Development program designed a curriculum incorporating tools like video vignettes of strategies physicians can use to communicate the new practice to patients.

The *Journal of Evaluation in Clinical Practice* study demonstrates promising results when there is leadership commitment, multi-stakeholder collaboration, and accurate data. The basic components of the intervention can be easily spread throughout an organization and are potentially applicable to other health care settings.

## Selected Publications

Sharp, Adam L., Ernest Shen, Y. Wu, Adeline Wong, Michael Menchine, Michael H. Kanter, and Michael K. Gould. "Satisfaction with Care After Reducing Opioids for Chronic Pain." *American Journal of Managed Care* (2018). <http://www.ajmc.com/journals/issue/2018/2018-vol24-n6/satisfaction-with-care-after-reducing-opioids-for-chronic-pain>

Losby, Jan L., Joel D. Hyatt, Michael H. Kanter, Grant Baldwin, and Denis Matsuoka. "Safer and More Appropriate Opioid Prescribing: A Large Healthcare System's Comprehensive Approach." *Journal of Evaluation in Clinical Practice* (2017). <http://onlinelibrary.wiley.com/doi/10.1111/jep.12756/full>



## About the Permanente Medical Groups

The Permanente Medical Groups are composed of more than 22,000 physicians dedicated to the mission of improving the health of our patients and the communities in which we provide care. We practice in eight self-governed, physician-led, prepaid, multispecialty medical groups. Together with the Kaiser Foundation Health Plans and Kaiser Foundation Hospitals, we are Kaiser Permanente – an award-winning health care system that delivers Permanente Medicine to more than 12.2 million Kaiser Permanente members. We work collaboratively, enabled by state-of-the-art facilities and technology, to provide preventive and world-class complex care in eight states – from Hawaii to Maryland – and the District of Columbia.

## About The Permanente Federation

The Permanente Federation LLC (the Federation) is the national leadership and consulting organization for the eight Permanente Medical Groups (PMGs), which, together with the Kaiser Foundation Health Plans and Kaiser Foundation Hospitals, comprise Kaiser Permanente. The PMGs employ more than 22,000 physicians, approximately 90,000 nurses, other clinicians and staff, and provide care to over 12.2 million Kaiser Permanente members. The Federation works on behalf of the PMGs to optimize care delivery and spread Permanente Medicine – medicine that is patient centered, evidence based, technology enabled, culturally responsive, team delivered, and physician led. The Federation, based in Oakland, California, fosters an open learning environment and accelerates research, innovation, and performance improvements across the PMGs to expand the reach of Kaiser Permanente's integrated care delivery model and to lead the nation in transforming care delivery.

Please visit [permanente.org](http://permanente.org).

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