

California Health Care Foundation

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Case Studies: Three California Health Plans Take Action Against Opioid Overuse

ealth plans have a critical role to play in curbing the opioid overdose epidemic — both through prevention (lowering the rates of addiction and complications from long-term opioid use) and treatment (ensuring affected members get the care they need). As primary payers for prescription drugs, health plans can profoundly influence the behavior of providers and patients. Also, clinicians can use health plan formularies to help guide their conversations with patients by informing them of more appropriate options for their pain management.

Three case studies are presented as examples of successful approaches, implemented by three very different California health plans:

- Partnership HealthPlan of California (Partnership), a Medi-Cal plan serving
 14 Northern California counties
- ➤ Blue Shield of California (Blue Shield), a commercial nonprofit health plan
- ➤ Kaiser Permanente Southern California (KPSC), an integrated plan and delivery system

These reports aim to make the case for more health plans to take up the charge: adopt effective strategies to curb the epidemic, improve the health of their members, and ensure providers and patients have the tools they need to make informed choices.

A companion paper, Changing Course: The Role of Health Plans in Curbing the Opioid Epidemic, reviews the overall case for change, the data and evidence supporting health plan interventions, and the summary of interviews and an online survey of health plans about their approaches to the opioid overuse and overdose epidemic. This paper describes how three organizations made opioid safety a top organizational priority by using aggressive goals and timelines, and several coordinated approaches at once.

"If you're going to attack this, don't just do one intervention. Complex problems require complex solutions."

> — Robert Moore, MD, MPH, chief medical officer Partnership HealthPlan

Partnership HealthPlan of California

Partnership HealthPlan of California (Partnership) started its Managing Pain Safely (MPS) program in 2014 in response to alarming statistics: The counties in which it operates had the highest opioid death rates in the state.

Partnership is a County Organized Health System Medi-Cal plan, which means that all Medi-Cal beneficiaries in its 14 counties belong to the plan, with some exceptions: foster children and people who are eligible for both Medicare and Medi-Cal (dual eligibles). Partnership launched MPS with the intention of leveraging health plan resources to improve the health of the region's entire population. The program's initial focus was on safer prescribing (decreasing the overall volume of opioids prescribed), and it later emphasized expanding access to medication-assisted treatment (MAT) and increasing the co-prescribing of naloxone.

Medical leadership started with a call to action — sharing comparative county statistics to bring executive leadership on board — then built community coalitions to create momentum among prescribers, hospitals, pharmacists, addiction treatment providers, and the broader community. The focus of the call to action was the value to patient safety and public health, rather than as a cost-saving intervention. Partnership focused on several interventions simultaneously to ensure synergy and a fast pace of change, and to prevent unintended consequences: shifting the problem from one health care sector to another, such as from primary care offices

to emergency departments (EDs). The program is described in a detailed white paper, Managing Pain Safely: Multiple Interventions to Dramatically Reduce Opioid Overuse, available on the Partnership website.¹

Program Approach

Prescriber Education

The MPS program recognizes that the root of the problem in rural Northern California is overprescribing. Lake County, in particular, had five times the prescribing rate compared to the state average in 2013, with enough opioids prescribed per resident to keep every man, woman, and child medicated around the clock an average of five months per year. Many prescribers in these rural counties, however, are accustomed to operating independently, and prescribing without managed care restrictions. Acknowledging these factors, Partnership leadership planned the campaign strategically, with incremental formulary changes buttressed by an intensive education campaign.

Partnership held four in-person regional MPS all-day convenings and five webinars, using live video feeds and remote facilitators to support attendance of large groups of primary care providers in Eureka, Redding, and Santa Rosa. Featured guest speakers and workshops focused on addressing misconceptions about opioids (e.g., that they are routinely effective for long-term pain treatment, that the risks of addiction are low, and that deaths are mainly seen in "doctor-shoppers"). The workshops were practical and focused on specific tools to help prescribers decrease the number of patients who start opioids

with acute pain and continue to long-term use (coaching on talking points and patient engagement strategies), as well as advice about how to safely lower high doses with the goal of improving function, lowering risk, and improving pain.

"Our most popular topics were Andrea Rubinstein's 'Rational and Irrational Opioid Prescribing' and 'The Art (and very little) Science of Tapering Opioids.' After sending her all around our region giving lectures, she continued to be in such high demand that we created professional videos of her lectures, made them available to the public. We hosted large meetings in remote areas where providers would watch the video together, and then have group discussions afterward. Attendance and satisfaction remain high each time we do it."

Marshall Kubota, MD, regional medical director
 Partnership HealthPlan of California

To supplement the trainings, and to keep the focus on the community (not on "bad doctors" or "bad patients"), Partnership brought clinical leaders together to develop guidelines for safer prescribing in primary care practices, EDs, dental offices, and community pharmacies. Partnership sponsored several community clinics to join Project ECHO, a

weekly tele-mentoring and educational program from the University of California, Davis, on chronic pain and safer prescribing.

In 2007, Partnership launched an academic detailing project aimed at reducing overuse of interventions in chronic back pain, which resulted in statistically significant drops in the use of opioids and muscle relaxants, as well as in the use of MRIs and spinal injections.³ Based on this success, the plan's regional medical directors went on teaching rounds of the clinics and high-volume providers, sharing comparative prescribing data, and personally discussing the new formulary changes that were to be incrementally rolled out at Partnership. The plan's leaders believe the success of its formulary programs — which were met with provider support instead of disgruntled resistance — is due to advance notice to the providers and a slowly staged roll-out.

Technical Assistance and Prescriber Support

Partnership heard from its network that clinicians often struggled with tough opioid-related conversations with patients. Clinicians expressed that any authority (whether "clinic policy," "health plan rules," or "the opioid review committee") could help a provider share the responsibility for a change in a patient's opioid regimen. This shared responsibility could help explain why the provider is concerned about the safety of a regimen and why the patient would be safer, and feel better, on a lower dose. Since two-thirds of Partnership's members receive care in community clinics, the plan's regional medical directors worked with the larger clinics to help them set up local opioid review committees, to review cases of patients on high dose and those with signs of addiction or problematic opioid use,

and to provide recommendations to their peers. Partnership created a toolkit with clinical resources on its MPS website, including a specific guide for setting up a review committee, with the belief that providers would trust a local leader's recommendation more than they would trust a distant health plan authorization decision.⁴

Several primary care providers requested that Partnership arrange for telephone consultation with experts in opioid management and opioid tapering. To meet this need, Partnership set up a pilot program for remote phone consultation service with Synovation, a multispecialty pain and addiction treatment center in Southern California. An evaluation is pending.

Formulary Changes

Daily dose limits. Partnership evaluated baseline data and found that, in 2014, 20% of patients receiving daily morphine milligram equivalents (MMEs) above 120 were receiving dose increases over a sixmonth period. This surprising statistic led to the first formulary change: prior authorization requirement for any increases above 120 MME (stable doses were left alone). After nine months, Partnership announced to the network that they would implement new formulary controls, but providers were given three months to prepare. To avoid having to increase the number of staff on the pharmacist team that would have to review authorizations, Partnership announced that any patient to be continued on high doses (above 120 MME) would have to meet one of the following criteria:

➤ The case and treatment plan is brought to a local opioid review committee, a contracted pain

- specialist, or an attendee of Project ECHO, and the committee or individual recommends continuing the dose.
- ➤ The provider agrees to manage an opioid taper over a reasonable period of time.
- ➤ The member has a medical necessity exemption, where tapers would not be indicated or would put the patient at risk (e.g., psychiatric instability, frail medical status at risk of decompensation, or poor life expectancy).

If at least one of the criteria is not met, the provider would need to submit medical records documenting that the patient was receiving appropriate care. Plan leadership stated that they had overall positive feedback from the providers — it made it much easier for the patient to accept the prescription change when the provider was backed up by the plan and could say, "I'm sorry, but the plan will not cover this."

Limitation of new starts converting to long-term daily opioid therapy. As of June 2016, Partnership plans to limit the number of individual pills of any short-acting opioid for any patient not on daily opioids, with the goal of decreasing the number of patients starting down the path of long-term opioid dependence.

Other formulary limitations. The MPS program implemented a suite of formulary changes, all with the purpose of decreasing overuse and increasing patient safety. Examples include:

➤ Avoiding early refills. Refills are permitted only when 90% of the month's supply is expected to be exhausted.

- ➤ Avoiding high-dose formulations. Certain drugs that could cause accidental overdose death with a single dose were removed from the formulary, such as 80 mg OxyContin, 200 mg MS Contin, and 200 mcg Fentanyl.
- ➤ Avoiding high-risk medications. Methadone, found in 40% of opioid overdose deaths,⁵ is off the formulary for pain and requires authorization review. (Methadone used for addiction is carved out from Medi-Cal and is accessible to Partnership members through opioid treatment programs.)
- ➤ Avoiding high-risk combinations. Concurrent opioid and benzodiazepine use is identified and triggers a requirement for prior authorization.
- Avoiding drugs with high street value. OxyContin and other brand-name opioids are nonformulary.

New Benefits

While acupuncture and chiropractic care are not covered by Medi-Cal, and therefore any expenditures Partnership makes in these areas are not included in the state's calculation of Medi-Cal rates, Partnership decided to cover these services for certain patients for two reasons: (1) to address provider complaints about having nothing to offer when reducing opioid use ("I am taking something away from my patients and have nothing to give them in exchange,") and (2) while the evidence is unclear about impact on many chronic pain conditions, the costs of the benefits are relatively low, and the impact on provider and patient satisfaction is potentially high.

Outlier Review

Partnership conducted several rounds of analysis of prescription claims data to identify patients on high doses of opioids and prescribers with patterns of prescriptions suggesting risk for patient adverse outcomes. These interventions are progressively addressing challenges, such as ensuring that patients are assigned to the correct prescriber and primary care provider for analytic purposes, and accounting for all opioids prescribed.

Pharmacy Lock-In

The plan has been using a pharmacy and prescriber lock-in program on a case-by-case basis since 1994. Although this program may have helped individual members, Partnership did not see much change in the prescribing data until the full MPS program was launched in 2014.

Results

In the first 21 months of the MPS program, Partnership dropped its total opioid prescriptions per member and total number of pills prescribed by 50% across the population; the number of members per 1,000 on high-dose daily opioids (>120 MME) dropped by 50% as well. (See Figures 1 and 2.) These numbers range from 9% to 66%, depending on the county. Since Partnership is the only available Medi-Cal plan in the counties in which it operates, this change could not have resulted from patients migrating to a competing plan. Hydrocodone (Vicodin or Norco) was formerly the top prescribed drug within the plan and is now number four.

Figure 1. Opioid Prescriptions per 100 Members per Month, 2014 to March 2016

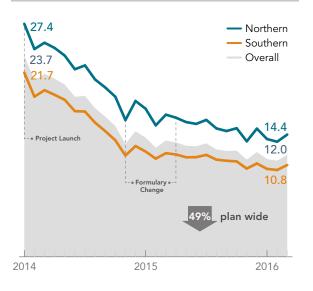
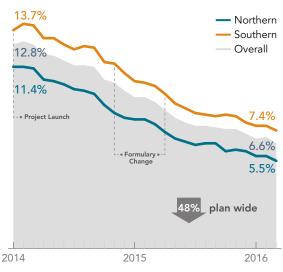


Figure 2. Percentage of Opioid Users on >120 MME
Daily Dose, 2014 to March 2016



Source (Figures 1 and 2): Partnership HealthPlan of California

While cost control was not the primary goal of its program, Partnership indicated that they have saved almost \$1 million per month in avoided opioid prescription costs, which has more than repaid the cost of all the MPS interventions — including the new chiropractic and acupuncture benefits — combined.

Partnership executive and board leadership continues to give tremendous support for the wide range of MPS interventions — not all of them inexpensive — because of the double bottom line improvement: huge cost savings and huge benefit to the community. While numbers are small and not yet statistically significant, some of the outlier counties have started to see downward trends in opioid overdose deaths, and that progress continues to motivate change.

Blue Shield of California

Blue Shield of California (Blue Shield) is a commercial, nonprofit health plan that recently entered the Medi-Cal market with the purchase of Care1st Health Plan in 2015. Blue Shield launched a three-year Narcotic Safety Initiative in 2015, working with network providers to reduce prescribing and overuse of opioids. Blue Shield's leadership set an aggressive goal to reduce the total amount of opioids dispensed to its members by 50% between 2015 and 2018.⁷

The focus of the California program is twofold: (1) to reduce unnecessary initial use of opioids for acute and chronic pain to decrease members' risk of chronic opioid dependence or addiction, and (2) to promote safer opioid doses for those already on chronic opioid therapy. While engaged in these efforts, the plan will ensure access to appropriate opioid therapy for acute self-limited pain, palliative care, and hospice

care. Blue Shield leverages its partnership with providers in its network, including in accountable care organizations (ACOs), to engage the providers directly. Obtaining alignment and partnership with medical group leaders is another important component to driving prescribing change. Future phases of the program will work with providers to taper patients on unsafe or high-dose regimens.

Program Approach

Formulary Controls

In 2015, Blue Shield implemented a maximum opioid dose limit of 120 MME per day for up to 90 days for members newly starting opioid therapy, since data suggest that 67% of patients who continue to use opioids beyond 90 days become long-term opioid users.⁸

Consistent with new CDC guidelines, the plan is reducing the dosage limit to 90 MME per day starting mid-2016, based on evidence showing a greater risk for overdose and death above this dose.

All extended-release opioid medications require authorization for members who are newly starting opioid therapy, because extended-release products are associated with higher risk of abuse and addiction and are reserved for people with intractable pain (constant and debilitating pain, potent enough to interfere with sleep, and not controlled on other treatments). Before authorizations for extended-release opioids or doses exceeding the limit are provided, the maximum dose limit is evaluated across all of the opioid-containing prescriptions that a member is currently taking, including products

that combine an opioid with another ingredient (e.g., guaifenesin with codeine, acetaminophen with hydrocodone). The plan is considering adding initial duration of treatment limits of 7 to 14 days.

Although Blue Shield anticipated some challenges in implementing these requirements, it has found that providers have mostly been supportive, since the plan's limits make it easier for providers to avoid patient-initiated requests for dose escalation or starting extended-release opioid therapy. The plan has experienced only one overturn among the many patient appeals to the state regarding authorization decisions. The plan uses formulary controls and authorization review to ensure that best practices are being followed, such as setting functional goals, assessing progress against those goals, and inclusion of taper or discontinuation in treatment plans.

Utilization Reports

Blue Shield provides quarterly reports based on pharmacy claims data to individual opioid prescribers who have patients meeting any of the following criteria for high-risk use: total opioid dose is more than 100 MME per day, opioids prescriptions by four or more prescribers or filled at four or more pharmacies within four months, or members with prescription profiles indicative of a "holy trinity" regimen (regimens that contain an opioid plus a benzodiazepine plus a sedative hypnotic, muscle relaxant, or stimulant). The patient-specific data are intended to alert providers to patients at risk and to motivate providers to make changes in the patient's care plan.

To facilitate supportive discussions and identify outlier concerns in their group, Blue Shield also

provides summary reports to medical group and independent practice association (IPA) directors. These reports may be either blinded (without information that may identify individual providers) or unblinded (with identifying information) for individual prescribers. Providers have responded favorably. Prior to Controlled Substance Utilization Review and Evaluation System (CURES) access, providers routinely commented that these reports were very helpful, especially when they identified other providers giving controlled substances to their patients. In addition, these reports and other more customized reports have been used by ACO partners to feed into their medical group case review processes. The reports support referrals to case management or behavioral health, have led to group-level practice guidelines, and help medical group pharmacists alert prescribers to use of brand-name opioids that have high street value, and therefore, possible diversion risk.

Provider Outreach and Engagement

When quarterly utilization reports identify clinicians with high-volume opioid prescribing patterns, or when patients are identified with high-risk regimens, Blue Shield works with its IPA and ACO providers to create a plan to address the situation, such as supporting the provider with education and resources, talking with the provider about care plans for specific patients, and bringing in behavioral health and case management resources where needed. Generally, individual providers are more receptive to outreach coming from within their own group or IPA; however, Blue Shield ACO pharmacists and other clinicians have established trusted working relationships with their ACO providers and can often engage them directly.

The provider outreach or engagement takes different forms depending on the group and practice, and may include group educational sessions, report review, and individual contact in person or by phone. Blue Shield has been able to connect some ACO groups with behavioral health specialists through a round-the-clock help line for peer-to-peer consultation and for expediting member appointments with mental health providers for patients in crisis. The ACO enables closer relationships and more trust between the plan and providers, and direct conversations have been easier in this arrangement.

Prescriber Education

Blue Shield provides medical education about opioid safety in a variety of formats including webinars and guest speakers at IPA events. Information about behavioral health access and services is available online to providers who sign in at Blue Shield's provider site. An opioid safety toolkit will be available at this site in the future. Blue Shield's experience, however, is that most providers will not access a health plan website for this information; active participation with the group is preferred, as it provides practitioners the opportunity to engage interactively with the plan.

Alternative Benefits

Blue Shield's benefit offerings include coverage for acupuncture and chiropractic services. The plan is also both working with its behavioral health partner to strengthen its behavioral health service offerings related to substance use disorder treatment, and also building components of a comprehensive pain management program focused on restoring function, not just treating pain. This will include patient-directed programs to engage them in better understanding

their treatment goals and plan, and the risks of opioid treatment. For members in group-sponsored plans, availability of these programs will depend on the benefits selected by their employer.

Provider and Pharmacy Coordination ("Lock-In") Programs

Blue Shield is planning to implement patient review and coordination programs. Design of such programs is underway and will focus on members and providers who have engaged in a pain management agreement limiting members to one prescriber and pharmacy, have outlier opioid use/prescribing patterns but are not responding to inquiries to provide medical justification, or have outlier patterns under investigation for potential fraud.

Opioid Safety Coalitions

Blue Shield participates in opioid safety coalitions in several regions of the state where it has its highest membership, including San Diego County, Los Angeles County, and Orange County. It is currently exploring joining additional coalitions.

Blue Shield also participates in Integrated Healthcare Association's Statewide Workgroup to Reduce Overuse, which committed in 2015 to identify coordinated approaches to reducing opioid overuse, unnecessary back pain imaging, and c-sections.

Advocacy Efforts

Blue Shield is also supporting broader access to drug disposal programs that allow for disposal of controlled substances, particularly at sites not associated with law enforcement (such as at retail pharmacies), since law enforcement sites may be a deterrent for some people.

As a member of the Blue Cross Blue Shield Association (BCBSA), Blue Shield of California has participated in the BCBSA's national campaign against opioid overuse. In April 2016, Blue Shield presented at a US Senate Health, Education, Labor, and Pensions (HELP) Committee briefing of BCBSA national initiatives on fighting the opioid epidemic and advocated for national efforts to support the cause. The HELP committee was most interested in provider-level efforts to stem the epidemic as well as potential policy changes to limit the current state of broad access to prescription opioids.

Blue Shield is also actively monitoring state and national legislation related to fighting the opioid epidemic and providing frontline perspective and insight to advocate for the most productive path forward.

Results

Results have been promising. (See Figures 3 and 4.) Within six months of implementation, Blue Shield noted the following changes:

- ➤ 25% reduction in new opioid users progressing to chronic use of daily opioids
- ➤ 33% reduction in oxycodone extendedrelease products, half of which came from reducing prescriptions for the higheststrength tablets (80 mg)
- ➤ 10% reduction of the number of patients on the highest opioid doses (>500 MME per day)
- ➤ 19% reduction in total prescription volume per 10,000 members per month for all opioids

Figure 3. Opioid Prescriptions per 10,000 Members per Month, December 2014 to November 2015

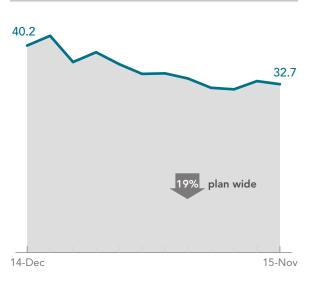
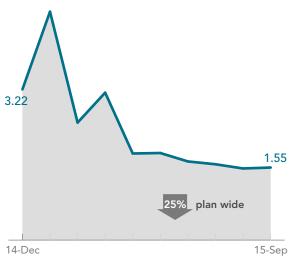


Figure 4. Members per 10,000 Newly Starting
Opioids and Progressing to Chronic Use,
December 2014 to September 2015



Source (Figures 3 and 4): Blue Shield of California.

Blue Shield plans to continue to lower the opioid dose ceiling over time to either 90 or 100 MME, evaluate expanded access to rescue medications, and will make available training and expert consultants to help prescribers manage safe dose tapers with their patients.

They also plan to expand non-pharmacologic support and services to members with chronic pain to improve function, and will evaluate the impact of opioid reduction efforts on medical service utilization (e.g., emergency department and hospital admissions for overdoses). With ACO partners, Blue Shield will develop additional guidelines for prescribing opioids in hospitals (particularly upon discharge), emergency departments, and urgent care. Blue Shield remains committed to the effort at all levels of the organization.

Kaiser Permanente Southern California

The Safe and Appropriate Opioid Prescribing Program (SAOP) of Kaiser Permanente Southern California (KPSC) launched in 2010 after KPSC discovered that its most prescribed nonformulary medication was long-acting OxyContin (oxycodone), and its most prescribed formulary medications were hydrocodone products. The program was led by the Southern California Permanente Medical Group in partnership with Kaiser's Pharmacy Operations. KPSC's program started within an existing drug utilization management program and then transitioned over two years to an independent safe opioid prescribing initiative. The program involves all lines of business, as well as multiple, coordinated, and systematic interventions.

Program Approach

The SAOP approach has 12 interconnected components.

1. Use of Data to Acknowledge the Problem

In 2010, when KPSC looked at its oxycodone and hydrocodone product prescribing practices, the findings raised concerns with the group's drug utilization and pain management leaders, in view of the latest published evidence and reports from the CDC about a nationwide epidemic of prescription opioid overdoses and deaths. Kaiser Permanente Southern California's clinical leaders recognized an opportunity to improve quality and safety for their members and were determined to be part of the solution to the problem of opioid overprescribing. Data about opioid prescribing practices were organized and reported to KPSC physicians and to pharmacy leadership as a call to action.

2. Leadership Commitment

The organization's leadership supported initial investigation into the data and then the creation of the SAOP, declaring it an important safety and quality improvement initiative. To establish its importance and facilitate its work, leaders organized a regional steering committee with resources from the medical group, pharmacy, and IT, tasking it to develop strategic plans and interventions. Leaders also committed themselves to remaining engaged with the program, in part by requiring at least quarterly reports on progress.

3. Collaboration: Teams of Multiple Stakeholders, Organized and Tasked to Address the Problem

Building from its existing drug utilization management program and experience with its chronic and preventive care initiative, Complete Care, ¹⁰ KPSC formed a multi-entity, multidisciplinary steering committee to address the opioid problem. This committee developed a strategic work plan (focused primarily on provider education, decision support, IT leveraging, pharmacy operations leveraging, and data management).

The team included representatives from pharmacy operations, primary care, pain management, addiction medicine, psychiatry, physical medicine, IT, legal, member services, clinical and pharmacy analytic services, health education, and continuing medical education. After a year, each of KPSC's 13 medical centers had local safe opioid prescribing teams or committees to support local efforts, including case review.

4. Clinician Education

SCPMG invested heavily in re-educating its clinicians to counter the accepted truths about opioids from the prior 10 to 20 years. Strategies included academic detailing — in-person educational visits by clinical pharmacists to prescribers — and many educational presentations at medical centers and department meetings by clinical champions and the University of California, San Diego's Physician Assessment and Clinical Education program on safe opioid prescribing. In 2012-13, this program was presented, in person, for all clinicians at all of KPSC's 13 medical centers.

After 2013, all new physicians have been required to complete a three-hour online pain education program within their first year at KPSC. This training is reinforced by frequent publications and communications to all clinicians about safe and appropriate opioid use, as well as additional educational materials that accompany decision support alerts and warnings built into the electronic health record. KPSC's pharmacy department also developed its own parallel education and training for all pharmacists.

5. Leveraging Data: Provider Reports and Identification of Patients at High Risk

SCPMG started providing reports to individual physicians (and their chiefs of service) comparing their individual prescribing practices (e.g., high-dose oxycodone >120 MME/day) with those of their peers. The reports alert physicians to the risks of the prescribed medications, allow them to see if they are outliers in opioid prescribing, and provide them with recommendations, such as alternatives to opioids, how to safely taper opioids to lower doses, and how to seek assistance and support from pain management or addiction medicine colleagues.

Mining pharmacy data has been critical to identifying high-risk patients and high-prescribing clinicians. Based on such data, KPSC regularly sends lists of high-risk patients (e.g., ≥120 MME/day) to physicians with requests and recommendations to assist in working with these patients. Some of these patients are reviewed by local multidisciplinary teams that develop action plans and recommendations. High-prescribing physicians are brought to the attention of the departmental chief of service.

6. Formulary Management

KPSC established internal policies and restrictions through its Pharmacy & Therapeutics Committee that control the prescribing of opioids. Before implementation, SCPMG obtained agreement for this approach from primary care and specialty physicians. These controls include:

- Only those physicians specializing in pain management, oncology, or palliative care may provide new prescriptions of OxyContin, Opana, doses over 100 mg, or co-prescriptions of opioids and benzodiazepines.
- OxyContin (and other long-acting opioids) are placed on nonformulary status that requires a formulary exception to prescribe.
- ➤ The "30/30 program" requires that most opioids can be prescribed only for a maximum of 30 days and cannot be refilled in less than 30 days.
- Default settings in EHR for opioid prescriptions were changed to support smaller prescriptions for acute and post-surgical pain.
- The pharmacy is empowered to contact and question prescribers regarding high-quantity prescriptions (e.g., >200 tablets, ≥120 MME/ day).

7. Leveraging Electronic Health Records (EHRs) to Incorporate Decision Support

KPSC physicians use their EHR system to reinforce prescribing controls through selective pop-up warnings and alerts. For example, a physician attempting to write a new prescription of OxyContin, Opana, or a high-dose opioid will see a large yellow pop-up

warning in the EHR system explaining that only physicians in pain management, oncology, or palliative care can write new prescriptions for these drugs. If the prescribing physician is not in one of these specialties but wants to proceed with the prescription, that physician is prompted to indicate what physician in pain management, oncology, or palliative care is supporting the prescription. If the prescribing physician cannot identify such a physician, the prescribing physician would not be permitted to continue with the prescription.

Additional decision support tools that are made available for providers include:

- DR.ADVICE: an online tool that allows any physician to send a message to a specialist

 such as in pain management, addiction medicine, or physical medicine about a patient, asking for immediate advice for management of a particular problem, without a formal referral
- Opioid morphine equivalent dose calculators, which can be accessed in the EHR
- ➤ An online clinical library, accessible through the EHR, linking to guidelines and scientific evidence
- Specialty support by phone, EHR message, or eConsult (a mechanism for email comanagement and sharing criteria for referral)
- Multidisciplinary pain management teams to review and offer advice on complex patients

8. Peer Support and Pressure

Physicians learn from, support, and provide positive peer pressure for each other in these efforts. Colleagues in the same medical group help each other in education, consultation, and shared patient care, and through multidisciplinary case review teams to address complex cases. Best practices are frequently highlighted and discussed at departmental and medical staff meetings. Chiefs of service meet with, review, and counsel outlier physicians or respond to calls from KPSC pharmacies about questionable prescribing. Finally, publications by peer physicians set the culture for safe and appropriate opioid prescribing.

9. Emergency Department and Urgent Care Guidelines

In the ED and in urgent care, KPSC is following the American Academy of Emergency Medicine safe opioid prescribing guidelines, which limit opioid prescriptions from ED doctors to no more than a three-day supply and discourage providing opioid refills or IV opioids in chronic opioid patients in the ED.¹¹ The changes originated with the ED chiefs, who approached SAOP leaders asking for support to address the issue of opioid misuse and overdose in the ED. Use of the American Academy of Emergency Medicine guidelines was strongly endorsed by the ED chiefs and departments when proposed in early 2013. KPSC then developed policies and procedures for ED staff and developed patient handouts on the guidelines to distribute to all ED patients. Physicians in charge of urgent care (UC) asked for the same help and support, as they were concerned that ED patients unable to get opioids would next turn to their department, so KPSC developed the same program for UC. Both were implemented on

Opioid Restrictions in the ED Do Not Reduce Patient Satisfaction

Some physicians express concern that following the American Academy of Emergency Medicine safe opioid prescribing guidelines may result in patient dissatisfaction. Kaiser Permanente Southern California has had the opposite experience.

"The Southern California Kaiser Permanente Emergency Departments, consisting of 14 sites caring for close to 1,000,000 patients in 2015, adopted the Safe Opioid Prescribing Guidelines January 1, 2014. While there was concern among KPSC physicians that these recommendations might lower customer satisfaction scores, this has not been borne out by the data. Internal randomized satisfaction surveys show that in 2014 the regional average for patient emergency physician satisfaction actually increased slightly, while in 2015 it stayed largely flat. So far, 2016 data shows another slight increase in our patient satisfaction scores. In summary, these safe opioid prescribing guidelines are not only safer for our patients, but concerns about a detrimental effect on patient satisfaction have proven to be unfounded."

— Todd Newton, MD, KPSC regional chief, Emergency Medicine

January 1, 2014. In addition, at the request of the ED and UC departments, KPSC developed data reports of frequent ED/UC opioid users and the use of injectable opioids in both settings. These reports have confirmed the progress by both departments in reducing opioid overuse.

10. Pharmacist Corresponding Responsibility

KPSC's pharmacy operations are an important part of the opioid control program. The California Board of Pharmacy defines a "corresponding responsibility" for pharmacists to assure safe opioid prescribing, and in accordance with this responsibility, the KPSC Pharmacy and Therapeutics committee developed opioid prescribing policies, and education and training programs to implement them.

The policies guide and empower pharmacists to recognize high-risk prescriptions (e.g., >200 tablets,

≥120 MME/day), combinations of opioids with benzodiazepines and/or carisoprodol, prescriptions by unauthorized physicians (e.g., not pain management or oncology), and premature refill requests (<30 days). Pharmacists are empowered to call the physician and request reconsideration of a prescription that seems to breach the guidelines. If the physician does not provide a satisfactory response, the pharmacist is empowered to escalate the issue to the chief of service and area medical director. In addition, the Pharmacy Fraud and Abuse unit has supported the initiative with regular reports identifying patients with a high probability of diversion.

11. Inter-Specialty Support Agreements

Prior to implementation of the program, there was frequent disagreement among specialties about referrals. For example, Jane's primary care physician refers Jane to pain management, who refuses to see

Jane, saying she should go to addiction treatment. The addiction team says that Jane does not meet the program criteria.

Cooperation among specialties does not automatically happen simply because they are all part of the same organization. This level of cooperation and collaboration takes time and the development of relationships, and ultimately can be facilitated by agreed-upon policies. KPSC physician leaders facilitated relationships between primary care and other specialties: pain management, addiction medicine, physical medicine, psychiatry, neurology. Each specialty shared its points of view and challenges, and together the specialties coauthored referral guidelines and policies.

12. Patient/Consumer Education, Support of Member Services

Information about opioid overprescribing and the risks of drug combinations are made available to patients on various websites and in online and hard copy articles and other publications. In addition, letters are sent to patients on high-risk opioid regimens informing them of the risks and asking them to check in with their doctors. Patients on long-term opioids who have not been seen by their doctor in six months are also notified to follow up with the doctor, or future refills will be denied. KPSC also provides training to member services representatives to help them understand the issues and the new clinical practices and guidelines, so that they can better interact with members who have questions, concerns, or complaints.

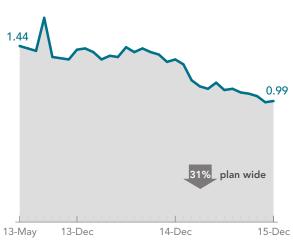
Results

Since starting its program in 2010, KPSC has seen a more than 85% reduction in the prescribing of OxyContin, and a reduction in the prescribing of opioid/acetaminophen combinations of greater than 200 tablets by 98%. Brand-name opioid prescribing (prioritized due to high street value and likelihood to be diverted, as well as cost to the plan) has been reduced by over 95%. Prescribing of the "holy trinity" (opioid + benzodiazepine + carisoprodol [Soma]) has decreased by 84%. Also, between 2013 and 2015, KPSC has decreased the number of patients on high opioid doses (≥120 MME per day) by 31% (see Figure 5). KPSC plans to emphasize the new CDC guidelines, and has moved this threshold to ≥100 MME per day.

Kaiser Permanente Southern California's program results are a product of a comprehensive, systemic, multi-stakeholder approach to opioid overprescribing. However, building such a program that changes and sustains a new culture and practice of safe and effective opioid use was not easy, and is an ongoing process.

KPSC's framework for this change has now been spread across the national Kaiser Permanente enterprise in all regions, supported by a team at each program office. Recognizing that it is part of a larger health ecosystem, KPSC is also helping to carry this work forward into community collaborations. For example, KPSC spread its ED initiative to all 75 EDs in Los Angeles County as part of the SafeMedLA Coalition. Though KPSC is an integrated health system, the framework and interventions it has adopted and found successful appear to be equally well suited to any sizable health plan.

Figure 5. Number of Opioid Users on >120 MME Daily Dose (per 1,000 members per month), May 2013 to December 2015



Source: Kaiser Permanente Southern California.

About the Foundation

The California Health Care Foundation is dedicated to advancing meaningful, measurable improvements in the way the health care delivery system provides care to the people of California, particularly those with low incomes and those whose needs are not well served by the status quo. We work to ensure that people have access to the care they need, when they need it, at a price they can afford.

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Appendix A. Glossary

The literature about the opioid crisis uses a wide away of terms somewhat inconsistently. This glossary seeks to clarify the meaning of relevant terms as used in this paper.

Benzodiazepine. A highly addictive sedative medication (e.g., Valium, Xanax) used to treat anxiety and panic disorder; combination with opioids greatly increases the risk of overdose death. Of opioid overdoses, 30% involve use of a benzodiazepine.

MAT, or medication-assisted treatment. Use of medications for the treatment of substance use disorders, often in combination with behavioral health interventions. Primarily targeting opioid and alcohol use disorders, these medications include buprenorphine, methadone maintenance, naltrexone, disulfiram, and acamprosate.

Methadone. A long-acting opioid. When used for addiction, as part of an opioid treatment program, methadone has been shown to increase retention in treatment and decrease overdose deaths, largely because these programs have close monitoring (only giving a day's or week's dose at a time), with intensive counseling services. Methadone's long half-life makes it a complex medication to prescribe for pain relief, and as its use for pain increased, so has the role of methadone in overdose deaths. The CDC estimates that 30% of prescription opioid-related overdose deaths in 2009 involved methadone prescriptions for pain.¹²

Morphine milligram equivalent (MME). A conversion factor used for different opioid medications to determine an equivalent amount (in milligrams) of morphine to produce an equivalent analgesic effect, to assist with safe conversion from one opioid medication to another, and to allow for comparison among opioids with different potencies.

Naloxone. A medication that works as an antidote (antagonist) to opioids, rapidly reversing the effect of opioids to restart breathing and return the recipient to consciousness. Naloxone can be dispensed in California without a prescription and can be administered by a layperson, either nasally or by injection.

Opioid. Medications either produced from opium or synthesized to mimic its effects, including prescription painkillers (hydrocodone, oxycodone, morphine, fentanyl), illicit drugs (heroin), and medications used to treat both pain and addiction (methadone and buprenorphine).

Opioid dependence. A physical state created by daily opioid use that creates withdrawal symptoms and craving when opioids are stopped, as well as tolerance (higher doses are needed to achieve the same effect). Dependence is not the same as addiction.

Opioid Use Disorder (or opioid addiction). A DSM-recognized diagnosis involving loss of control of use; use resulting in failure to fulfill work, school, or home obligations; and/or persistent use despite social or interpersonal problems caused by use, among other diagnostic criteria at pcssmat.org.

Overdose. Respiratory depression (cessation of breathing) from opioids, leading to injury, hospitalization, or death.

Overuse. Overuse in this paper refers broadly to overprescribing (using opioids in situations where the risk outweighs the benefit, where opioids are not indicated, or in doses that put the patient at risk), misuse (use of opioids for recreational or other non-medical purposes), and addiction (loss of control over use).

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