



California Health Care Foundation



Changing Course: The Role of Health Plans in Curbing the Opioid Epidemic

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Executive Summary

Opioid prescribing quadrupled in the last 15 years, and the negative impact is well documented: Accidental deaths from drug overdose now exceed those caused by motor vehicles and firearms,¹ five times as many babies need treatment for opioid exposure,² hospital admissions for opioid addiction treatment (for both prescription painkillers and heroin) have increased fivefold, and the cost to health plans has been staggering.³

As a result of this epidemic, providers, health plans, and public health institutions are faced with a complex challenge: how to shift our medical culture back to more judicious opioid prescribing, address the needs of populations already harmed by opioids, and ensure prescribers and patients appropriately weigh the true risks of opioids, without overestimating the benefits, when starting down the path of long-term use.

A new understanding about long-term opioid use has emerged in the past few years: that the risks are much higher, and the benefits much less, than the medical community believed 10 to 20 years ago, when prescribing patterns changed so dramatically. Health plans now can play a crucial role in addressing the downstream impacts of the opioid epidemic. As primary payers for prescription drugs, plans are in a unique position to influence both provider and patient behavior. Plans have educational resources and tools to reduce the number of patients progressing to chronic, daily opioid use, to help providers taper patients on chronic opioids to lower and safer doses, and to identify and stop fraud. Plans can also identify risky opioid use and deploy case management, behavioral health, addiction treatment, and other resources, working with community and county organizations. Also, clinicians can use health plan formularies to navigate hard conversations: In addition to saying, “I think a dose increase is unsafe,” they can also say, “Your health plan will not approve a dose increase; let’s work on other ways to manage your pain.”

This paper explores each of four components that California health plans have used to decrease opioid overprescribing: engaging providers, working with high-risk members, addressing misuse, and supporting healthy communities. The paper reviews literature (where available, including from other states), and summarizes the results of an online survey of 30 California plans, and

interviews with 10 chief medical officers from among those plans. Finally, the paper highlights three California plans that adopted multipronged approaches to addressing the opioid epidemic, and as a result, dropped opioid prescribing rates by up to 50%: Partnership Health Plan of California, Blue Shield of California, and Kaiser Permanente Southern California); a companion paper, *Case Studies: Three California Health Plans Take Action Against Opioid Overuse*, reviews how each plan approached the epidemic in more detail.

All health plans surveyed are acting to decrease opioid overuse: some with a narrow focus, using formulary controls (authorization review for certain drugs or doses), and others through broad initiatives, aiming to change prescribing habits through education, training, data analysis and reporting, and incentive payments; expanding access to nonopioid treatments for patients with chronic pain; and ensuring availability of medication-assisted treatment for addiction. Most health plans are currently participating in or considering joining opioid safety coalitions in the communities they serve.

“The experience of several health plans across the country shows that concerted effort by a health plan, with its provider community, can dramatically reduce opioid overuse in a short period of time. How often do health plans have a chance to rapidly implement something that decreases utilization by over 50%, with huge direct and indirect cost savings, and large impacts on public health? This is an opportunity for health plans to demonstrate our service to the members and the greater community.”

— Robert Moore, MD, MPH, chief medical officer
Partnership HealthPlan of California

This report concludes with recommendations for health plan action. Health plans have a unique opportunity to make an impact on individual lives and the health of a broad population through prevention (lowering the rates of addiction and complications from long-term opioid use) and treatment (ensuring affected members get the care they need). Although some health plan actions are relatively easy to implement — such as restrictive formulary changes — this approach, if taken in isolation, risks harming members and alienating providers. Instead, this paper argues that health plans need to invest broadly in four areas to make a lasting difference in prescribing culture, and ultimately, in the health of the population:

1. Supporting judicious prescribing practices through formulary changes and provider education (engaging providers)
2. Focusing on improved member outcomes, especially for those at highest risk: members on high doses of opioids, those taking high-risk medication combinations, and members with addiction (working with high-risk members)
3. Identifying and acting upon overuse, misuse, and fraud
4. Supporting safe communities through participation in opioid safety coalitions, and promoting naloxone

Introduction

Background

The overuse of opioid medications was declared an epidemic by the US Centers for Disease Control and Prevention (CDC) in 2011. (For a glossary of terms as used in this report, see Appendix B.) The epidemic has led to dire consequences for patients and their families, the health care system, health plans and other insurers, and the workplace.

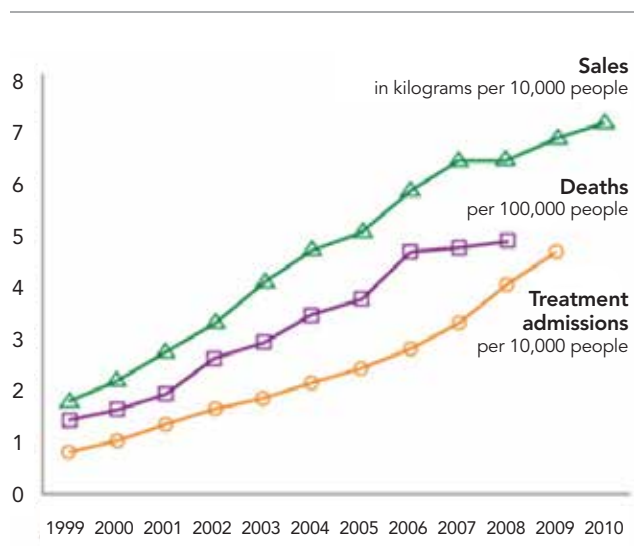
Overdose deaths from opioids increased steadily over the last two decades, nearly quadrupling between 1999 and 2013.⁴ Drug overdose-related deaths now exceed deaths from motor vehicles and firearms in the United States, and prescription opioid overdose deaths exceed those from cocaine and heroin combined.⁵ Hospital admissions for opioid addiction treatment have increased fivefold,⁶ as have related medical complications such as nonfatal overdoses, falls and fractures, drug-drug interactions, fatal heart rhythm disturbances, and neonatal abstinence

syndrome, which often require prolonged stays in intensive care.⁷

Total costs from the epidemic are estimated at more than \$70 billion annually, which includes loss of workplace productivity and law enforcement costs related to diversion of drugs, as well as health care expenditures.⁸ Some estimates put the cost to insurers just of opioid diversion — the illicit use of prescription opioids — at additional tens of billions of dollars.⁹ Ultimately, costs to insurers translate into costs to employers, consumers, and taxpayers.

The steady increase in the use of opioid medications over the last two decades has multiple causes. In the 1990s, pharmaceutical companies aggressively marketed new, stronger, longer-lasting opioids promising more effective treatment for pain without increased risk of addiction. The American Pain Society, heavily funded by Purdue, the maker of OxyContin,¹⁰ initiated a campaign in 1996 to encourage providers to assess pain at every patient visit. This “pain as a fifth vital sign” approach was soon adopted by the Department of Veterans Affairs¹¹ and by the Joint Commission, which accredits over 20,000 health care organizations. Although pain control did not improve,¹² the fifth vital sign campaign contributed to opioid prescribing practices reaching levels previously seen only in hospice care.¹³

Figure 1. Prescription Painkiller Sales, Deaths, and Substance Abuse Treatment Admissions, United States, 1999-2010



Source: www.cdc.gov.

While the opioid epidemic crosses all demographic and income lines, the impact is far worse on the poor: Medicaid beneficiaries are prescribed opioids twice as often as individuals with private health insurance,¹⁴ have a higher rate of hospitalization and emergency department (ED) use for drug poisoning,¹⁵ and six times the risk of overdose death.¹⁶ Opioid addiction is estimated to be 10 times as high in Medicaid compared to commercial populations.¹⁷

“DHCS wants to work with plans to get better data to define the problem, and drive effective improvements to reduce deaths and opioid overuse.”

— Neal Kohatsu, MD, MPH, medical director
California Department of Health Care Services

In response to growing media attention and public awareness, public officials and policymakers at the federal, state, and local levels are devoting funds and implementing programs to address the epidemic. In March 2016, President Obama announced the creation of a mental health and substance use disorder parity task

force to ensure that health plan coverage of addiction is comparable to physical health coverage.¹⁸

Role of Health Plans

Literature evaluating the impact of health plan interventions is sparse. This paper reviews the available literature, including published reports from other states. To help broaden the base of knowledge on this topic, the paper reviews practices and data obtained from the online survey and interviews with chief medical officers.

While there is little published literature on the role of health plans in the opioid epidemic, leaders from three California health plans shared the positive results their organizations achieved in a short period of time. Partnership HealthPlan of California (Partnership) dropped opioid prescribing by 50% in the first 18 months of its Managing Pain Safely program, and wrote a white paper describing their approach (available at www.partnershiphp.org). Kaiser Permanente Southern California (KPSC) decreased the number of patients on high-risk regimens (over 120 mg of morphine equivalents per day) by 29% in 21 months, and reduced total number of opioid tablets prescribed per member per month by 18%, maintained over five years, despite growth in membership by over 1 million. Blue Shield of California

Table 1. Top Four Health Plan Interventions to Address Opioid Overuse

BEST PRACTICES	
Supporting judicious prescribing practices	<ul style="list-style-type: none"> ▶ Aligned formularies and authorization policies ▶ Provider education and training ▶ Provider tools and resources, including comparative data ▶ Pay for performance
Focusing on improved member outcomes	<ul style="list-style-type: none"> ▶ Member education ▶ Case management and real-time information exchange ▶ Coverage of nonopioid pain treatments (e.g., nonopioid medications, acupuncture, chiropractic care, better access to physical therapy) and behavioral health (e.g., cognitive behavioral therapy and mindfulness training) ▶ Removal of barriers to buprenorphine for addiction and pain
Identifying overuse, misuse, and fraud	<ul style="list-style-type: none"> ▶ Patient review and coordination programs (assignment to one pharmacy and/or one prescriber for controlled medications) ▶ Identification of outlier prescribers, pharmacies, and members ▶ Promotion of prescription drug monitoring programs (CURES in California)
Supporting safe communities	<ul style="list-style-type: none"> ▶ Participation in opioid safety coalitions ▶ Naloxone promotion and distribution

(Blue Shield) made a commitment to reduce overall opioid prescribing by 50% by 2018, and saw a drop in the percentage of new users progressing to chronic use by 25% within a year of program inception. Details of these plans are available in a companion paper, [Case Studies: Three California Health Plans Take Action Against Opioid Overuse](#).

“Our physicians welcomed the specific guidance with the prescribing and formulary policies, including restrictions. They were developed by fellow medical group physicians and helped communicate a clear and consistent approach to care in dealing with sometimes difficult patients.”

— Joel Hyatt, MD
emeritus assistant regional medical director
Community Health Improvement
Kaiser Permanente Southern California

Methodology

To develop this paper, Health Management Associates conducted four analyses:

1. Literature search. The authors conducted a literature review to identify evidence and best practices, where available. The 2015 Johns Hopkins public health review *The Prescription Opioid Epidemic: An Evidence-Based Approach*,¹⁹ was a valuable reference.

2. Survey of California health plans. An online, multiple-choice survey was conducted to understand the spread of common opioid safety practices in California (See Appendix C for a list of health plan survey respondents.)

3. Interviews. The chief medical officers of 35 California health plans were contacted and asked to participate; 30 responses were received (two plans responded twice, for different lines of business). HMA conducted 10 follow-up phone interviews with survey respondents, as well as with a representative from the California Department of Healthcare Services. In addition, three primary care physicians and one patient advocate were interviewed.

4. In-depth case studies. HMA interviewed leaders of Blue Shield, KPSC, and Partnership to obtain in-depth information on their current efforts aimed at addressing the opioid epidemic. (See [Case Studies: Three California Health Plans Take Action Against Opioid Overuse](#).)

Promising Health Plan Approaches

The best practices identified in this section are organized into four groups: (1) supporting judicious prescribing practices; (2) focusing on improved member outcomes; (3) identifying overuse, misuse, and fraud; and (4) supporting safe communities. Where possible, specific examples of health plan practices are provided.

Promoting Judicious Prescribing Practices

Since the majority of opioid overuse begins with health care providers' treatment of genuine pain, efforts to reduce opioid overuse and overdose must address providers' beliefs about the relative risks and benefits of opioids. Key drivers of overprescribing include insufficient provider training on nonopioid pain management strategies, lack of sufficient nonopioid resources to treat pain (such as easy access to behavioral therapies, physical and occupational therapy, or availability of alternative modality benefits such as chiropractic care or acupuncture), insufficient access to specialists, and lack of time in the short primary care visit to address behavioral or social issues contributing to pain and suffering. Survey responses indicated that getting provider buy-in through creating a case for change, and then providing interactive and intensive training and resources, were key components of success.

Blue Shield of California has set a goal to reduce inappropriate prescribing and overuse of opioid narcotic medications for its members by at least 50% by the end of 2018. “In the US, we prescribe opioids four times as much as we did 15 years ago, so a 50% reduction is a modest goal,” says Marcus Thygeson, MD, Blue Shield of California's chief health officer. “At Blue Shield, our focus is helping our members avoid new starts on opioids when alternatives are equally or more effective — so we catch people before they develop long-term dependence and addiction — and limiting dose escalations,

so our members don't get to high doses that put them at risk of accidental death. We are working closely with providers so they can also manage the pace of change."

"In the US, we prescribe opioids four times as much as we did 15 years ago, so a 50% reduction is a modest goal. Our focus is helping our members avoid new starts on opioids when alternatives are equally or more effective — so we catch people before they develop long-term dependence and addiction — and limiting dose escalations, so our members don't get to high doses that put them at risk of accidental death. We are working closely with providers so they can also manage the pace of change."

— Marcus Thygeson, chief health officer
Blue Shield of California

Aligning Formulary and Authorization Policies

A central health plan strategy for decreasing inappropriate opioid use is to use formularies and authorization review to support judicious prescribing, and to flag high-risk regimens for clinical review prior to a coverage decision. Typical formulary policies include:

- ▶ Removing certain extremely high-dose formulations from the formulary, such as oxycodone extended-release 80 mg tablets (OxyContin), equivalent to 120 mg of morphine, or 24 tablets of 5 mg hydrocodone (Norco), which could cause death if taken in error
- ▶ Removing medications from the formulary that have great potential for abuse, such as carisoprodol (Soma), or that have high street value (such as brand-name medications)
- ▶ Limiting the prescription quantity that a patient may obtain with each prescription fill
- ▶ Limiting early refills

- ▶ Limiting the total opioid daily dose, to avoid thresholds of morphine milligram equivalents (MME) that increase mortality risk

Formulary policies like these serve to change prescribing practices across a large network, and can support individual providers having difficult conversations with patients concerning opioid tapering or other changes in medication.

"Since we launched the Managing Pain Safely Program, we are saving more than \$1 million per month in decreased opioid prescription claims; these savings have allowed us to ramp up other services: increased benefits for members, training for providers, project ECHO, telemedicine and virtual consultation, and distribution of atomizers for naloxone."

— Robert Moore, MD, MPH, chief medical officer
Partnership HealthPlan of California

Three Medi-Cal plans approached the problem of high-dose prescribing in different ways:

1. Partnership: Intensive provider engagement and formulary management focused on high doses. Partnership covers areas of California with the highest rates of opioid prescribing and opioid-related deaths.²⁰ The plan launched its comprehensive Managing Pain Safely initiative in 2014, after an analysis of pharmacy claims data revealed that 20% of all plan members on high-dose opioids (>120 MME) increased their dose in a six-month period. Partnership initiated a campaign to educate providers about the risks of high-dose prescribing, and implemented authorization review requirements for dose escalations above 120 MME. The plan's regional medical directors worked with community health centers, which care for 67% of Partnership members, to create local multidisciplinary opioid review committees in which a team of behavioral and medical health providers review the treatment plan for patients on high-dose and/or high-risk regimens and provide feedback to prescribers. Concurrently in 2015, Partnership required authorization review of all high-dose regimens, with

approval contingent upon a reasonable tapering plan, or documentation of a contraindication to a taper. Members whose regimen had been reviewed by a clinic opioid oversight committee, pain specialist, or participant of Project ECHO (Extension for Community Healthcare Outcomes)²¹ were automatically approved, which significantly decreased the staff burden for the pharmacy and medical reviewers at the plan. Within 18 months, total opioid prescribing (both number and volume of prescriptions, as well as the relative number of members on high-dose opioids), dropped by 50%.

“The health plan policies helped our providers have difficult conversations with our patients. When faced with uncontrolled pain, we could say, ‘Increasing doses hasn’t helped you in the past. Besides, the health plan will not cover this dose level because it is unsafe.’ The educational events on tapering helped us with an even harder conversation: ‘I worry that your pain hasn’t gotten better after years of opioids, and these meds are contributing to your sleep apnea. We need to bring your level of medication down to a dose that won’t affect your breathing, and your health plan is requiring us to do this work.’”

— Nurit Licht, MD, chief medical officer
Petaluma and Rohnert Park Health Centers

2. Santa Clara Family Health Plan: Automated authorization letters referencing safe prescribing guidelines and the need for naloxone. In 2015, Santa Clara implemented a policy requiring authorization review for doses above 120 MME, but requests were automatically approved with a letter stating: “This quantity of narcotics exceeds safe prescribing guidelines. Please co-prescribe naloxone injection 1 vial for overdose rescue.” In 2016, recognizing that providers rarely read approval letters (and members never receive them), Santa Clara created a new protocol. All requests for >90 MME (excluding

hospice and palliative care) were automatically denied unless a claim for naloxone was on file for that member. Denials triggered a letter to the prescriber and member stating: “This quantity of narcotics greatly exceeds safe prescribing guidelines. Per CDC guidelines, opioid dosages greater than 90 morphine milligram equivalents per day are associated with increased risks. [The prescribed dosage and combination with morphine sulfate, oxycodone/APAP, and clonazepam are in lethal range.] Please resubmit with a prescription for naloxone injection 1 vial for overdose rescue.” (Language in brackets is added for members receiving high-risk combinations of medications.) Once the naloxone prescription is documented, the authorization is approved. With this approach, the health plan gives a clear message to the member and the prescriber about safety without the labor-intensive practice of reviewing each case. The program is too new to assess impact.

3. San Francisco Health Plan: Voluntary guidelines and incentives. San Francisco Health Plan (SFHP) coleads an opioid safety workgroup with community and county clinic leaders, and co-created opioid prescribing guidelines that were adopted by the large county clinic network in 2014. SFHP focused on online and in-person educational campaigns and pay for performance measures that provide incentives for clinic best practices (voluntary adoption of guidelines, registries, pain agreements, and opioid review committees), while limiting short-acting opioids (maximum of 120 in 30 days), and removing authorization requirements for nonopioid options (duloxetine, pregabalin, lidocaine gel and patch). Better pain management and judicious prescribing also became top priorities for the county and community clinics within the network. Within one year, the plan saw a 25% drop in the number of opioid prescriptions per member per month (pmpm), as well as in the total count of opioid tablets; the relative number of members on high-dose opioids has not changed.

Plan leaders shared that such formulary changes require investment in sufficient staff to identify and manage exceptions in real time — such as for hospice, palliative care, trauma, and surgeries — to avoid putting a patient at risk of suffering, hospitalization, or both. Moreover, all formulary and utilization management programs need to meet California regulations, which require plans to act on a request for a formulary exception within 72 hours for standard requests and within 24 hours for urgent requests, so that justifiable dose increases can be started quickly.

Finally, health plans need to be cautious about formulary policies that could have unintended consequences — such as only approving one opioid prescription per month, which could result in clinicians giving more pills than a patient needs. A March 2016 Politico working group report reflected on perverse incentives: “When we want to give five pills you get dinged, and you get a call back, and [the insurance company] will say, ‘This is all out-of-pocket. If you want it covered, it’s going to have to be a 30-day script.’”²²

Some plan leaders emphasized the need to focus on the highest-risk patients — those on high doses, high-risk combinations, or problematic use — and not push providers to taper all patients off of all opioids, regardless of dose. Yet the message to the frontline provider can be quite different, depending on the plan. “I can’t tell you how much time I spend fighting insurance companies to

maintain access to my patients’ pain meds — for patients on low doses doing fine,” said Alan Glaseroff, director of Workforce Transformation in Primary Care at Stanford. “We are going to see more kidney failure and gastrointestinal bleeds, as older patients are forced onto NSAIDs [nonsteroidal anti-inflammatory drugs] without regard to their clinical status. I don’t have a problem tapering patients at high risk. But requiring authorization for every opioid, no matter what the dose, increases the daily ‘hassle factor,’ which consumes physician time, destroys workflow — and ultimately hurts access for patients.” See Table 2 for some of the most common types of formulary approaches.

Medicare Part D plans have been mandated to implement dose limits and formulary controls since 2013, when the Centers for Medicare & Medicaid Services (CMS) launched its Overutilization Monitoring System. Within

Table 2. Formulary Approaches Supported by Research

RATIONALE (literature supporting recommendation)	
AUTHORIZATION REVIEW (by medical director or pharmacist for medical necessity)	
High-dose daily regimens (e.g., >100 MME)	More than 100 MME per day increases overdose deaths ninefold. ²³ “Use of opioids at a high dose” is a 2016 Medicaid Healthcare Effectiveness Data and Information Set (HEDIS) measure.
New starts on chronic daily opioid therapy (e.g., >7 days or 30 days)	Sixty-seven percent of patients using opioid medications for 90 days continue to use them long-term (more than two years). ²⁴
Methadone for pain	Methadone represented 5% to 19% of prescribed opioids (for pain) but 40% of single-drug opioid overdose deaths and 31% of opioid overdose deaths overall. ²⁵
Combinations of opioids and benzodiazepines	Thirty percent of opioid overdose deaths involve the use of benzodiazepines in combination with opioids. ²⁶
REMOVAL FROM FORMULARY	
High-dose formulations	Increased risk of overdose: One 80 mg tablet of OxyContin is equivalent to 24 tablets of 5 mg hydrocodone, and one tablet can cause death. Hospitalization rates for pediatric accidental ingestion have doubled in the last 15 years. ²⁷
Carisoprodol (Soma)	Indicated for short-term use only but often used long-term; with opioids and benzodiazepines, it is part of a commonly abused combination of drugs. ²⁸
Codeine cough syrup	Great potential for abuse and lack of evidence for efficacy. ²⁹
PROMOTING SAFER ALTERNATIVES	
Removal of authorization requirements, dose and treatment limits for buprenorphine used for addiction	Methadone or buprenorphine treatment of opioid addiction increases retention in treatment (67% instead of 25% at one year), reduces death rate, prevents relapse, and decreases risk of hepatitis and HIV. Relapse rates are high with discontinuation. ³⁰
Removal of barriers to buprenorphine used for pain	Given its partial agonist properties, converting patients on high-risk or high-dose opioids to buprenorphine for pain can reduce the risk of overdose death, stabilize drug levels, and prevent withdrawal symptoms, while providing pain relief. ³¹

this system, CMS identifies high-risk beneficiaries such as those on high doses of opioids (>120 MME per day), using three or more prescribers, or using multiple pharmacies within a three-month period. CMS provides the file of high-risk beneficiaries to the Part D plan to correct claim submission errors, confirm appropriate use, organize case management, and have beneficiary-specific pharmacy point-of-sale “edits” (restrictions) implemented. These edits require prior authorization before coverage of any further opioid prescriptions, to ensure that the prescriber has evaluated the ongoing need. CMS reports that this program has resulted in a 39% drop in the number of chronic opioid users who were in one of these high-risk categories.³²

Four health plans, discussed below, have demonstrated that formulary changes (usually in concert with other

interventions) can lead to lower opioid prescribing and decreased use of high-dose regimens. (See Table 3.)

Provider Education and Training

Medical leaders in plans with major opioid initiatives agreed that provider education and training were critical components of changing prescribing culture. Yet these education programs are not in widespread use.

Kaiser Permanente Southern California (KPSC) invested heavily in “re-education” to counter the teachings from the prior 10 to 20 years that led to liberal prescribing habits. Clinical pharmacists provided high-volume prescribers with academic detailing — brief, in-person educational sessions focused on evidence and the need for changing practice, modeled after pharmaceutical detailing, which has been shown to have an impact on

Table 3. Examples of Health Plan Formulary Policies

	FORMULARY CONTROL	RESULTS
Blue Cross Blue Shield of Massachusetts	Authorization review for more than 30 days of short-acting opioids. Authorization review for all long-acting opioids.	Reductions of 20% in prescriptions for common opioids (e.g., Percocet) and 50% in prescriptions for long-acting opioids (e.g., OxyContin). Reduction of 6.6 million pills over an 18-month period. ³³
Blue Shield of California	Enhancement of coverage requirements with evidence-based treatment guidelines for opioids. Authorization for extended-release opioids, including oxycodone, brand-name and generics. Quantity limits based on a threshold of 120 MME per day.	Within six months of active interventions (comparing 2015 to 2014 data): <ul style="list-style-type: none"> ▶ 25% decrease in new opioid users progressing to chronic use ▶ 33% reduction in oxycodone extended-release products ▶ 9% reduction in total MME for all opioids, with a 10% reduction in the highest doses of opioids (>500 MME per day)
Kaiser Permanente Southern California	Treatment guidelines and formulary policies, including restricted prescribing of certain opioids to pain management, oncology, and palliative care clinicians; the 30/30 program (opioids prescribed only for a maximum of 30 days and no refill in less than 30 days); nonformulary status for OxyContin (and other brand-name opioids); quantity limits for the default prescription in the electronic medical record.	Since start of program in 2010: <ul style="list-style-type: none"> ▶ 85% decrease in OxyContin use ▶ 98% decrease in opioid/acetaminophen combo medications of greater than 200 tablets ▶ 95% decrease in brand-name opioids ▶ 84% decrease in “holy trinity” (opioid + benzo + Soma) Between 2012 and 2015: <ul style="list-style-type: none"> ▶ 26% decrease of members on >120 MME daily
Partnership HealthPlan of California	In 2014, required authorization review for dose escalations >120 MME; in 2015, required authorization for continued use of >120 MME. Approval requires a taper plan and review by a local opioid safety committee or the plan. In 2014, high-dose opioid formulations were made nonformulary (morphine 100 and 200 mg, fentanyl patch 200 mcg, and methadone 40 mg).	Decreased total opioid prescriptions and number of patients on high-dose opioids by 50% in 18 months. ³⁴

physician practice.³⁵ Clinical champions held educational sessions at medical centers and department meetings, and KPSC required all clinicians to attend an educational program from the University of California, San Diego (the Physician Assessment and Clinical Education program). Currently, all new physicians and residents must complete a three-hour online continuing medical education (CME) session within their first year with KPSC, and frequent corporate communications to clinicians continue to reinforce messages about appropriate opioid use.

Partnership’s Managing Pain Safely (MPS) initiative emphasizes provider education as a necessary component of culture change, using multiple tactics:³⁶

- ▶ Promotion of evidence-based practice guidelines for primary care, emergency, dental, and pharmacy
- ▶ CME sessions, pain management toolkits, and practice redesign tools, provided through in-person and remote live video sessions with facilitated discussion
- ▶ Academic detailing, focused on prescribers with high volumes of patients on chronic or high-dose opioids
- ▶ Information on formulary changes and guidelines in provider newsletters
- ▶ Project ECHO: peer-to-peer video tele-mentoring on pain management and safe prescribing in weekly lunch sessions over one year³⁷
- ▶ Education on buprenorphine combined with a \$500 incentive to complete training and accept new patients for treatment

“Providers are asking for help: How do I convince patients in pain that starting long-term opioids will cause more harm than good? How do I get patients on board with tapering when they are so afraid to live without these medications? We supported several trainings focused on practical skills and talking points — including role plays — to help providers with tough conversations.”

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

“Five years ago we built a prescribing toolkit, brought it to the top 10 highest prescribers, but it didn’t help. They had no time to read the toolkit, and they said they didn’t know what to do — the patients were too challenging. The highest priority was treating pain rather than evaluating whether the treatment was appropriate or safe. In most circumstances, prescribers and regulators did not want the health plan to be in this conversation. Now things are shifting — and there is an understanding that everyone needs to work on this issue.”

— Chris Chan, pharmacy director
Inland Empire Health Plan

Another health plan, **L.A. Care**, offers annual provider training in substance use disorders, and supports buprenorphine trainings (allowing physicians to obtain waivers to allow prescribing in primary care). Similarly, in 2015, **San Francisco Health Plan** commissioned Quality Health Care Concepts to develop a free, one-hour, online CME course covering safer prescribing practices and acute pain management. The tailored training provides information on local pain management resources as well as the latest CDC guidelines. Launched in March 2016, the program is available to all network providers and is promoted through newsletters and provider meetings.

The impact of provider education programs is difficult to isolate in a broad health plan approach. Nonetheless, plan leaders interviewed for this paper emphasized that provider education is a key strategy in creating a call to action (“Why should we change?”) and in counteracting misinformation. The opportunity to learn from experts, network with other providers in similar practice settings, and share approaches for change at all levels — individual, practice, and community — were considered key to behavior change. In addition, the plan leaders thought the good will generated from these plan-sponsored educational programs led to broader acceptance of formulary changes and new authorization requirements.

Partnership highlighted the value of interactive, case-based learning compared to passive learning (lectures, webinars), since the latter approach is less likely to change behavior. Partnership has seen significant differences in prescribing patterns for clinicians who go through the Project ECHO program (a weekly lunchtime tele-mentoring program, where an expert team provides didactic lectures and case reviews with discussion). A formal evaluation of the University of California, Davis, ECHO program shows promising trends and is pending publication. Partnership credits provider education, training, and engagement as critical components of the MPS initiative's impact: Both total opioid prescribing across the 14 Partnership counties and the percentage of members on high-dose opioids dropped 50% over 18 months.³⁸

Provider Tools and Resources, Including Comparative Data

Health plans invest in tools, resources, and guidelines for their providers to equip them to better manage acute pain (to prevent progression to chronic opioid dependence) and to focus on patients at the highest risk of death (rather than sending the message that all patients on opioids need to be taken off, no matter what their risk). See Appendix A for literature support and examples of common health plan guidelines.

Preventing conversion from acute opioid use to chronic use. For example, **Kaiser Permanente Southern California (KPSC)** created electronic health record (EHR) alerts focused on the risk of the “90-day cliff,” since the Trends and Risks of Opioid Use for Pain (TROUP) study of over 3 million enrollees showed that 67% of opioid-naïve patients (those with no history of opioid use) using opioids for 90 days were still taking them two years later.³⁹ When a patient approaches the 90-day mark, the EHR alert urges the provider to make another treatment choice, if possible. Provider scorecards allow doctors to recognize when their prescribing practices for acute pain fall outside the norm. KPSC changed the default setting on the electronic health record to support lower amounts of prescriptions for acute pain. These efforts brought hydrocodone (Vicodin and Norco) down from the most frequently prescribed drug to the fourth most frequent.

Support for tapering patients on high-dose opioids. Busy providers often do not have the time or expertise to implement a slow and measured taper without help. It can be time-consuming and difficult to convince patients that they will feel better and live longer if they lower

their dose of opioids. Plans can provide direct support to prescribers: Plan pharmacists and medical directors can work with a provider on an individualized taper plan that the member will accept and tolerate, ensuring that authorizations are in place when doses are changed to prevent delays in treatment. Plans also can facilitate access to specialist advice, through phone, secure email, or live video.

KPSC, Partnership, and Blue Shield emphasized the importance of providing talking points for providers and strategies to make the case for change. The talking points focus on understanding opioid-induced hyperalgesia⁴⁰ (pain that is created or worsened by opioids), withdrawal-related pain (physical withdrawal symptoms occurring between doses of pain medications), and the long-term complications of opioids (such as sleep apnea and hypogonadism) to help convince providers and members that lower doses can actually improve pain control and function.

“I can almost always convince a patient to work with me to taper their opioids,” said Andrea Rubinstein, chief of the Department of Chronic Pain, Kaiser Santa Rosa Medical Center, whose training materials are part of Partnership’s tapering training program, “not because the health plan wants it, or the provider wants it — but because the patient wants to get better. And when I taper them down, their pain gets better — and sometimes completely goes away.” This paradoxical effect — of improving pain with lower opioid doses — has been reported in several small studies.^{41,42}

“KPSC prioritizes patient experience and satisfaction as a central value; therefore, we did not want this initiative to be seen as an ‘anti-opioid’ crusade. Opioids are important medications and serve a purpose. We focused our efforts where the evidence shows the biggest impact: new starts, and high-dose, high-risk regimens.”

— Joel Hyatt, MD, emeritus assistant regional medical director, Community Health Improvement
Kaiser Permanente Southern California

“A big part of our strategy is engaging providers as partners. Through our relationships with providers in our ACOs [accountable care organizations], our team of pharmacists and medical directors works with medical groups, providing data (since prescription history is not always accessible to them) and best practices (since some providers don’t have all the tools they need to work with patients to get to lower doses). To be more thoughtful in our intervention approach, we started with preventing dose escalations — since it is easier to not raise a dose than it is to lower the dose. Our next stage will be working with doctors to lower doses for their patients on chronic opioids.”

— Salina Wong, PharmD
director of clinical pharmacy programs
Blue Shield of California

Providers are concerned about a growing anti-opioid sentiment, which makes it more difficult to use opioids properly when needed. Intense health plan scrutiny and control makes providers more likely to discharge patients from their practice (or not accept new ones) — resulting in “opioid refugees,” or patients who are physically dependent on the drugs and who have no medical home. Alternatively, health plan pressure may result in providers requiring patients to taper opioids at an intolerable or unsafe pace. “Fast tapers put patients at real risk,” states Rubinstein. “They make people feel like they are going to die, and bad things happen — psychiatric decompensation, use of street drugs, leaving your practice and hopping around doctors until they find someone who will treat them (and many times they can’t).”

Partnership provides training for primary care providers on tapering through multiple in-person conferences and by promoting universal viewing of two video trainings by Kaiser Permanente pain specialist Rubinstein: *Rational and Irrational Opioid Prescribing*, and *The Art and (Very Little)*

Science of Opioid Tapering,⁴³ both of which are available to the public on the Managing Pain Safely website.

Virtual comanagement and collaborative care with specialists. Consultation with a pain specialist may help primary care physicians develop a safe tapering plan for a patient on a high-dose or complex regimen. For example, a 2010 Washington State law requires pain consultation for opioid doses above 120 mg; this, and other statewide efforts, resulted in a 29% decrease in opioid overdose deaths between 2011 and 2013, and a decline in overdose-related hospitalizations by 29% in the same period.⁴⁴

This type of mandate may be difficult in California, due to an insufficient supply of pain specialists, especially in rural areas. California health plans have had to resort to creative solutions. In response to provider requests, **Partnership** contracted with a Southern California pain and addiction specialty group and reimbursed them for phone consultations with primary care providers, to help develop individualized treatment and tapering plans. Similarly, in 2016, **Anthem Blue Cross** started a pilot program where a pain medicine specialty group provides virtual video visits with the primary care provider. Also, several Medi-Cal plans support the cost of clinic participation in the University of California, Davis, Project ECHO tele-mentoring program, which supports weekly live video sessions between a pain specialist team and several primary care clinics across the state, using a combination of didactic sessions and case reviews.

KPSC developed an interdepartmental working agreement between primary care and specialty care (pain management, addiction medicine, psychiatry, and physical therapy) to foster collaboration and mutual support. In addition, KPSC offers email consultation to foster timely access to specialty advice and support. Every KPSC medical center in Southern California has a multidisciplinary review team, which is available to providers for advice on difficult cases.

It should be noted, however, that consultation with pain specialists is not a panacea. Some health plan leaders expressed concern about a mismatch between what primary care providers need (help creating a management plan that involves nonopioid options and lower overall opioid doses) and what some pain specialists may supply (continued high-dose regimens, and interventional procedures, such as spinal injections, which are better reimbursed but not always effective long-term).

“Pain specialists are sometimes part of the problem,” said Marcus Thygeson, chief health officer at **Blue Shield**. “Many continue to be true believers in the safety of high-dose opioids and escalate doses beyond what would be supported by evidence, or what the primary care doctor is willing to prescribe. Primary care providers are caught having to continue the high-dose regimen or openly disagree with a specialist.”

Support for opioid oversight committees. Another option is to support the formation of a local opioid oversight committee, where a practice or community of providers refers complex patients to a multidisciplinary team for comprehensive review and advice. Typically, these teams are based in a community clinic or medical group and include medical and behavioral health providers. Pain medicine and addiction specialists are included, where available. **San Francisco Health Plan** supported community clinics to form such committees through their pay for performance program, and **Partnership** encouraged the use of these committees by exempting committee-approved medication regimens from authorization requirements.

Comparative prescriber data. Each health plan interviewed uses different measures and processes to share comparative data with their provider network. Some focus on high doses (members on more than 100 MME a day or over 40 mg methadone a day), while others consider combined benzodiazepines and opioids, multiple prescribers or pharmacies, or recurrent early refills.

Blue Shield shares prescribing reports with their contracted independent practice associations (IPAs) and medical groups that, in turn, work with their own physicians through educational events and individual coaching. “Information is better received when it comes from the clinical leader in the IPA or medical group,” stated Salina Wong of Blue Shield, “and we can tailor reports based on the needs of the group. Some groups prefer blinded reports; however, those that use unblinded reports have a greater impact on prescribing change.”

Pay for Performance (P4P) Incentives

San Francisco Health Plan used P4P incentives to promote formation of opioid review committees in community clinics, and to promote use of registries to track chronic pain patients and report on compliance with best practices. **Partnership**, noting insufficient access to opioid addiction treatment, offered a \$500 incentive for

San Francisco Health Plan: Engaging Providers Through Workgroups, Education, and Targeted Incentives

San Francisco Health Plan (SFHP) coleads the San Francisco Safety Net Pain Management Workgroup with the local county health network. The group developed guidelines that were adopted across the 14 county clinics, which included recommendations for dose limits, avoiding co-prescribing benzodiazepines and opioids, and identifying and treating addiction. SFHP holds an annual “Pain Day” educational event for providers, staff, and the public, with input from the workgroup, focusing on best practices and local resources for the management of patients with chronic pain.

In 2015, SFHP supported development of an online medical education program with Quality Health Care Concepts that it offers free to San Francisco providers. In addition, SFHP offers bonuses as part of its P4P program, rewarding clinics for starting interdisciplinary opioid review committees (to support prescribers and ensure adherence to practice guidelines), adopting clinic-wide pain management guidelines, and tracking patients in a registry to ensure that all have documented informed consent and pain agreements in the chart, and that patients are routinely screened for addiction. SFHP’s provider website includes guidelines, informed consent and pain management agreement documents translated into multiple languages, educational resources for members and providers, and toolkits for setting up opioid review committees.

physicians to attend a training, obtain a Drug Enforcement Agency (DEA) waiver, and accept referrals. Partnership also created incentives for provider sites to host peer-led pain and opioid-dependence support groups.

Although only 3 plans responding to the survey use P4P incentives related to opioid use, 10 plans indicated that they are considering it, and a metric for high-dose opioid use was recently added to the core Medicaid quality measure set.⁴⁵

Medical directors implementing P4P emphasized that plans need to make sure they are not creating unintended consequences. As an example, rewarding physicians for low opioid prescribing rates could encourage providers to release high-dose patients from their practice.

Focusing on Improved Member Outcomes

Some health plans are adding pain management and addiction to their portfolio of member-facing educational materials for the general population, as well as providing targeted educational information to patients identified as higher risk (e.g., those taking long-term opioids) or even those newly starting opioid prescriptions, to prevent unnecessary progression to long-term use. Some health plans specifically identify members at high risk of overdose or other negative outcomes for case management referral, and train case managers to help guide patients with addiction into treatment. Expanded benefits — behavioral health services, acupuncture, chiropractic care, mindfulness training — are being added by some plans, both to increase opportunities for members to choose nonopioid pain management options, and to encourage judicious prescribing by offering providers other choices.

Plans must continue to ensure that opioids are available to patients when needed, such as in acute injury, post-surgery, hospice, and palliative care. Moreover, plans must ensure patient access to pharmacies that stock opioids for indicated uses (which is increasingly a problem in rural and high-crime urban areas). Finally, plans have an opportunity to decrease barriers to medication-assisted addiction treatment, such as buprenorphine, as only 1 in 10 people with opioid addiction currently have access to treatment.

Member Education

Health plans have implemented various approaches to educate their members about the risks of opioid medications, safe use of these medications, safe disposal, and how to intervene in the event of an overdose, including materials and videos on health plan websites, member portals, and newsletters.

Kaiser Permanente Southern California has a well-developed portfolio of options for its members, including health education classes, which combine therapy with education focused on back pain, headaches, or other chronic pain diagnoses.⁴⁶ Additionally, several health plans interviewed for this report indicated they send individualized letters to identified high-risk members who have been prescribed a high-dose opioid, educating about risk and providing resources for more information.

Case Management and Care Coordination

Health plans commonly analyze data from various sources — prescription data, medical or behavioral health utilization, and substance use diagnoses from medical claims — to refer high-risk members to case management or addiction treatment programs. These programs are staffed by nurses, social workers, and behavioral health specialists, and connect members to needed housing, addiction or mental health treatment, specialists, or other community resources. For example, an **Aetna-run Behavioral Health Medication Assistance Program** uses nurses and psychologists working with physicians to counsel and manage the care of members with addiction or opioid misuse. According to Aetna, this program has shown a 30% improvement in opioid abstinence rates, a 35% reduction of inpatient hospital admissions, and a 40% decrease in total paid medical costs.⁴⁷

One plan leader identified challenges in training care managers to work with members with chronic pain or addiction because care managers rarely have this specialized training. “We asked our providers what they needed, and most wanted help from our case management department,” said Dale Bishop, MD, chief medical officer at **Central California Alliance for Health**. “But then soon we burned out our case managers with

“We are always learning strategies from other Medi-Cal plans. Based on what we learned from Santa Clara Family Health Plan, we started sending automated notifications to prescribers every time we had a pharmacy fill for over 120 mg morphine equivalents per day, saying, ‘This prescription exceeds recommended dosage for safe prescribing, and please co-prescribe naloxone.’ It is too soon to know the outcome, but we have heard from appreciative prescribers that the patients are bringing the letters in, asking good questions.”

— Dale Bishop, chief medical officer
Central California Alliance for Health

all these hard patients, without enough training and resources to manage them. Since then, we developed multidisciplinary teams to work with the members.”

Because such gaps in care management training are so widespread, California State University launched an online and in-person health plan care management curriculum called Care Excellence, which includes training in chronic pain and addiction, as well as palliative care, designed for Medi-Cal and Medicare populations but applicable to a broad population.⁴⁸

A **New York commercial health plan** demonstrated reductions in the number of prescribers, pharmacies, and controlled substances through a randomized, controlled trial focused on members using three or more prescribers or three or more pharmacies within three months. The plan sent letters to prescribers and included a detailed report of the patient’s medications, doses, amounts, prescribers, and prescriber phone numbers. The letter urged the provider to coordinate care with other prescribers for that patient, and welcomed the provider to call the health plan pharmacy to work out a treatment plan, as well as to contact the health plan behavioral health department to arrange for mental health or substance use treatment. The letter also included contact information for the health plan’s certified addiction counselor, in case addiction was suspected. If the same member continued to use multiple prescribers, the addiction counselor took the initiative to call each prescriber to discuss the case and offer resources and care coordination. The addiction counselor also called members to screen them for addiction and discuss treatment options. The study showed that members randomly assigned to the

intervention group demonstrated greater reductions in the number of prescribers (24%), dispensing pharmacies (16%), and filled opioid prescriptions (15%) over the trial’s one-year period.⁴⁹ Of particular note is that the workload for this project — including producing letters, mailings, and contacting providers and members — required only a 0.5 FTE addiction counselor for a health plan of close to 1 million members.

Real-Time Information Exchange

Health plans can identify members who have had a non-fatal overdose event, either in the ED or hospital, and alert the prescriber in real time.⁵⁰ “When we learned that 91% of patients who have a nonfatal overdose continue to receive opioids — and 17% of those on high dose have another overdose event⁵¹ — we had to act,” said Dr. Marshall Kubota, regional medical director at Partnership. “Opioids may be justified in some of those patients, but if the provider doesn’t know about the overdose, they don’t have the opportunity to taper the member to a safer dose — or get them onto buprenorphine if they truly have addiction or problematic use. We are setting up a program to alert prescribers so they can act on this information. With inaccuracies of admission diagnoses, this may require a manual process by our utilization management nurses.”

Health information exchanges with real-time alert capabilities, coupled with collaborative care plans spanning multiple coordinating health systems, allow providers and case managers to decrease ineffective and potentially harmful care (e.g., large numbers of opioid prescriptions) and guide patients to more beneficial care (primary care, social resources, and/or an opioid treatment program).

“Automated hospital discharge summaries are awesome. I received a discharge summary from a local hospital for one of my primary care patients who recently overdosed and required naloxone, intubation, and an ICU stay. I am fairly confident she would not have shared this event with me, and I may never have known, meaning she would have been at very high risk for a repeat event. Having this additional information completely changes my management of her chronic pain, as we have had a frank discussion around the risks and benefits of opioids for pain management, and I will encourage varied modalities to manage her pain while minimizing risk in the future.”

— Kelly Eagen, MD, primary care provider
San Francisco Department of Public Health

Washington State implemented a system of real-time alerts, allowing emergency physicians to quickly access information about previous emergency department visits, studies, diagnoses, and medications, resulting in a 24% drop in the rate of visits resulting in a scheduled drug prescription, while total Medicaid ED visits dropped by nearly 10% in the first year (2012-13).⁵² The same system (PreManage ED) is increasingly being used by hospitals across California, and can be used by health plans for real-time notification of designated populations, such as frequent services users needing complex care management.

Coverage of Nonopioid Pain Treatments and Behavioral Health

Some plans offer optional benefits for nonopioid pain treatment, such as specialized behavioral health services, acupuncture, and chiropractic care. Acupuncture is a Medi-Cal benefit as of July 1, 2016. In addition, savings from lower opioid prescribing rates may compensate for the costs (see Partnership HealthPlan case study as an example). Employers may opt to include these treatments as part of the benefit offering for their employees and dependents. Some plans or employers offer these services only to certain qualifying members, while others make them available to all. Although the evidence for the efficacy of acupuncture and chiropractic care in chronic pain varies, some health plans' preliminary data showed lower opioid use for patients who accessed complementary therapy. Literature is accumulating on the benefit of cognitive behavioral therapy and mindfulness training.

Kaiser Permanente Southern California has invested heavily in behavioral health and educational strategies for its members, as well as chiropractic care and acupuncture. Members with chronic back pain are offered a structured back program, with a focus on movement and improving function.

Many Medi-Cal health plans work with the behavioral health services organization Beacon Health Options to manage mental health benefits for mild-to-moderate mental illness. Gold Coast Health Plan, among others, worked with Beacon to identify local behavioral health providers to serve members with chronic pain as part of the mental health benefit. In these plans, a "chronic pain" diagnosis qualified the member to schedule an appointment with a behavioral health therapist trained in pain management.

In January 2016, **Central California Alliance for Health (CCAH)** expanded its complementary and alternative medicine benefit in acupuncture and chiropractic care to offer providers and members additional non-pharmacologic resources to treat pain. Providers can request up to 20 visits per authorization; no limit is placed on the total number of authorizations. Evaluation of the pilot program (June 2014 through December 2015) showed that members receiving acupuncture reduced their MME dose an average of 30 mg/day (24%), subjective pain scores decreased from 8.5 out of 10 prior to the program to 5 out of 10 after the program, and overall, the cost of visits was offset by the pharmacy savings. CCAH also expanded its chiropractic benefit to include all covered adults.

Partnership now authorizes chiropractic care and acupuncture for select diagnoses and reports that the cost of the services is more than compensated by savings in opioid prescriptions. The plan also worked with Beacon Health Options to ensure that members with chronic pain are offered specialized behavioral services. Partnership reports that providers are more willing to work with the health plan to taper members on high-dose regimens if they have something else to offer.

Removing Barriers to Use of Buprenorphine for Addiction

Although buprenorphine has been established as first-line treatment for opioid use disorder, along with methadone, authorization requirements and limits on doses or lengths of treatment can result in barriers for patients. Although this is not an issue in Medi-Cal, since addiction treatment is carved out of managed care Medi-Cal and is covered directly by the state, it can be a significant problem in commercial plans. "I've spoken with hundreds of parents across the US who have lost children to the epidemic," said April Rovero, founder and executive director of the National Coalition Against Prescription Drug Abuse, "and too many tell a version of the same story: long, frustrating hours fighting with an insurance company to get treatment."

Although buprenorphine can be used in short-term detoxification programs, experts increasingly discourage this approach and encourage continuing buprenorphine over the long term.⁶¹ Patients who stop buprenorphine during the first few months of their treatment experience high rates of relapse,⁶² even with intensive behavioral support. In a 2015 long-term treatment trial, only 9% of patients remained abstinent after buprenorphine taper,

Buprenorphine Basics

Buprenorphine is an opioid with Food and Drug Administration (FDA) indications for opioid dependence and pain. It is a partial opioid agonist, meaning that it acts on certain opioid receptors in the brain, providing potent pain relief, but it has a ceiling effect on respiration, meaning increasingly higher doses will not affect breathing. Overdose deaths on buprenorphine are rare, and usually involve multiple medications (e.g., benzodiazepines and other opioids). Some formulations are FDA-approved for opioid dependence (sublingual and tablet), while others are FDA-approved for pain (injectable, patch, and buccal). Only a physician with a Drug Addiction Treatment Act of 2000 (DATA 2000) waiver can prescribe buprenorphine for addiction; these waivers are obtained after an eight-hour live or online course. Currently, physicians are capped at 30 patients (first year) and 100 patients (thereafter), but a limit of 200 was under consideration at the time of publication.⁵³ Any DEA-licensed provider (e.g., nurse practitioner, physician assistant) can prescribe buprenorphine for pain. As a schedule III drug, buprenorphine can be ordered by phone or fax. In contrast, schedule II drugs, such as hydrocodone, require tamperproof prescriptions.

Buprenorphine is proven effective in opioid addiction, significantly increasing retention in treatment (67% at one year) compared to drug-free treatment (7% to 25% at one year), while lowering the death rate and lowering the risk of acquiring hepatitis C and HIV.⁵⁴

Buprenorphine is a potent pain reliever, so patients on chronic buprenorphine do not need to discontinue their

buprenorphine when admitted to the hospital — for example, for surgery.⁵⁵⁻⁵⁷ Studies of patients on high-dose opioids transitioned to buprenorphine have shown improved pain control, improved control of psychiatric symptoms, and much lower risk of overdose death.⁵⁸

Patients commonly start buprenorphine in a provider office after 12 to 48 hours of withdrawal symptoms, known as an “induction,” since sublingual buprenorphine causes severe withdrawal symptoms if started while other opioid medications are on board. However, these symptoms can be avoided in patients with a pain diagnosis by the use of a fentanyl or buprenorphine patch, which creates an induction process with no or only mild withdrawal symptoms.⁵⁹ The patches are FDA-approved for pain, not addiction, and a letter from the DEA clarified that there is no restriction on the use of buprenorphine for pain.⁶⁰ Home inductions are also increasingly used, where the patient is given instructions on how to monitor withdrawal symptoms and when to take the first dose, to increase convenience for the patient and decrease the burden on the office practice.

Only 20% of those needing opioid addiction treatment are able to access it. Buprenorphine remains inaccessible to most patients with addiction or chronic pain due to many barriers: not enough waived physicians, lack of understanding about its use, the paperwork burden from health plan authorization requirements, and from tracking patients to stay under the cap limit. To decrease these barriers, in 2015 Medi-Cal removed authorization requirements from buprenorphine when used for addiction.

while 80% of patients reported abstinence at 18 months and 42 months if they continued daily buprenorphine treatment.⁶³ Without long-term treatment, people often return to the drug to which they were addicted, and the dose their bodies tolerated prior to treatment can, at that point, cause overdose death.

The California Society of Addiction Medicine (CSAM) recommends removing authorization requirements for buprenorphine, for initial treatment and for ongoing therapy, since insurance paperwork is cited as a major cause of treatment delay for patients, and a barrier for physicians thinking about integrating addiction treatment into their practice.⁶⁴

All 11 of the commercial plans surveyed for this paper have buprenorphine on their formulary for addiction, although many require authorization review. Barriers to buprenorphine have been removed for Medi-Cal; any prescription from a waived provider will be covered without prior authorization, without quantity limits, and without limits on length of treatment. Likewise, the Centers for Medicare & Medicaid Services (CMS) announced in April 2016 that it will require Medicare Part D formularies to include such medication-assisted treatment (MAT) medications as buprenorphine, naloxone, and naltrexone.

“People are on a continuum — pain with no addiction on one end, and addiction with no pain on the other. But most people who have been on opioids for a long time have a blend of these conditions. They still have a lot of pain, and even though they don’t ‘break’ the pain agreements, it is clear that they are not doing well on these meds. A lot of our chronic pain patients end up doing a lot better on buprenorphine — less pain and better function. The before and after experience is like night and day.”

— Willard Hunter, MD, medical director
Open Door Community Health Centers

In addition to removing barriers, some health plans put interventions in place to increase the number of providers who prescribe buprenorphine and accept referrals, even in Medi-Cal plans where the buprenorphine itself is carved out of managed care.

To address the lack of sufficient buprenorphine prescribers, some Medi-Cal plans are piloting approaches to increase access, including developing additional fee-for-service payments on top of primary care capitation, providing telemedicine (direct patient-to-doctor) or e-consult (doctor to doctor) access to addiction and pain specialists, hosting waiver trainings, starting local Project

ECHOs focused on buprenorphine, hosting webinars for the “curious but not sure,” or putting incentives into the pay for performance program for physicians to obtain the buprenorphine waiver.

Removing Barriers to Use of Buprenorphine for Pain

Although still an uncommon practice, there is a compelling case for converting patients on high-dose opioids for chronic pain to buprenorphine, to lower death rates and improve function. Patients on long-term, high-dose opioids, even with no addiction history or behavior, remain at high risk of accidental overdose death: Death rates for those taking more than 100 mg of morphine equivalents daily are almost nine times as high as those taking lower doses (1 to 20 mg).⁶⁵ Because long-term opioid use changes the brain’s reward and motivation centers, sometimes permanently,⁶⁶ patients forced to taper to zero are at high risk of conversion to street drugs.⁶⁷ Buprenorphine carries lower risks of medical complications from long-term opioid use: less sleep apnea, less impact on testosterone levels, sexual dysfunction,⁶⁸ and bone density, and less impact on functional status.⁶⁹

Buprenorphine offers the opportunity to treat pain, treat addiction when present, lower morbidities, and lower death rates for patients dependent on high-dose opioids. Health plans that make it easier to prescribe high-dose, long-acting opioids than to prescribe buprenorphine, due to differing authorization requirements, may be losing an opportunity to decrease opioid-related morbidity and lower its associated costs.

Buprenorphine for pain does require authorization from Medi-Cal, and only 55% (6 out of 11) commercial plans surveyed have buprenorphine for pain on the formulary.

“Fail First criteria [health plan step therapy requirements for medication-assisted addiction treatment] . . . violate precepts of ‘first do no harm.’ Many opioid relapses, particularly to street drugs such as heroin, contain risks of infection with HIV or hepatitis C, overdoses, and overdose deaths. Eligibility for maintenance medications is best established by relapsing clinical histories, not by regulations that demand a high-risk event as a precondition for coverage.”

— David Kan, MD, and Tauheed Zaman, MD
Minimum Insurance Benefits for Patients with Opioid Use Disorder

Identifying Overuse, Misuse, and Fraud

Patient Review and Coordination Programs (PRCs, or “Lock-In” Programs)

One study found that a very small number (the top 0.7%) of the most extreme users of multiple prescribers account for 2% of opioid prescriptions⁷⁰ and are seven times more likely to die of an overdose.⁷¹ Pharmacy and prescriber coordination programs (often called “lock-in” programs) are one way to address this problem. Selected members — frequent services users — are identified through referrals, grievances, or pharmacy claims with varying thresholds (e.g., four prescribers or four pharmacies in four months). These programs have been shown to decrease opioid misuse, opioid prescription volume, emergency visits, and costs.^{72,73} About 44% of the health plans responding to the survey currently have either a prescriber or pharmacy coordination program, or both.

Federal regulations give state Medicaid programs and managed care plans broad authority to implement these programs, as long as certain member rights are protected, including sufficient notification time, the right to change prescribers or pharmacies, and the right to appeal.⁷⁴ To ensure that patient access is not unduly burdened, exceptions need to be built into the program — for example, exempting patients in hospice, migrant workers and others traveling wide distances for work, allowing assignment to two pharmacies if the principal pharmacy is a community clinic (which may not stock all needed medications), or allowing multiple prescribers if the practice is a teaching center (where multiple prescribers cover for each other).

Several studies of PRC programs demonstrate decreases in total opioid prescriptions, multiple prescriber use, and emergency department visits. Some health plan interviewees expressed concern that members could perceive these programs as impeding their access to necessary medications. Contrary to this perception, however, a study of Oklahoma’s Medicaid lock-in program found that the program did not decrease the use of other medications, meaning that members continued to get the same volume of chronic medications as prior to implementation of the lock-in program (implying that access to other services has not changed).⁷⁵

Horizon NJ Health wrote about and published their experience with a pharmacy lock-in program that includes outreach and support for members, pharmacies, and prescribers. Prescribers are notified if participants fill two or more prescriptions within the same class. Case managers contact members as needed. The program also tracks the number of controlled substances per member, the amount spent for controlled substances per member, and the number of pharmacies used per member. Early results for the program have been positive on three fronts:⁷⁶ The average number of controlled substances per member decreased 44%, the average amount spent for controlled substances per member decreased 50%, and the average number of pharmacies used per member decreased 28%.

A literature review and guidelines published by Pew Charitable Trusts in 2015 provide a starting point for plans launching PRC programs. Read the full paper at www.pewtrusts.org.

Identification of Outlier Prescribers, Pharmacies, and Members

The identification of outlier prescribers, pharmacies, and members is a critical component of formal fraud, waste, and abuse programs, both to identify fraud and to address inappropriate and risky opioid prescribing. Health plans, pharmacy benefit management companies, pharmacy auditing companies, and state and federal entities use pharmacy claims data to identify patterns and trends, such as number of controlled substances per member, per prescriber, or per pharmacy; the average age of members receiving controlled substances, the frequency and timing of opioid prescription claims, and the number of members receiving high-dose opioids.⁷⁷ Some plans cross-reference these data with quality metrics to identify providers or pharmacies that merit further investigation and perhaps action, including additional training and support, removal from a provider network, reporting to state licensing boards, DEA or law enforcement, and/or financial recoveries.

When an outlier prescriber is identified, steps can be taken to determine whether the pattern is consistent with the medical service (e.g., hospice or oncology), if a knowledge or data gap exists, or if the pattern is

consistent with that of a “pill mill” (a high-volume cash practice that typically caters to younger patients traveling far distances or to online buyers, and provides little to no clinical services outside of prescribing opioids).

An analysis of California data by the Brandeis Center of Excellence for Prescription Drug Monitoring Programs showed that the average distance traveled by patients from their home to the prescriber office is 400 miles for the top first percentile of high-prescribing doctors in California. “These pill mills are surprisingly common,” stated Salina Wong of Blue Shield, “but it takes work to identify them and track them down. We found one on a satellite photo that was just a shack in the desert. It obviously was not a legitimate medical practice, and we may not have found it if we didn’t have a retrospective data review process in place.” One medical director noted during an interview, “When we identify these doctors, if they don’t respond to our feedback and coaching, we often see their license suspended due to DEA charges within a year or two.”

As in all interventions, health plans should use this tool cautiously and investigate before acting. Dr. Alan Glaseroff, Stanford’s director of workforce transformation, shared this story: “One physician I know was prescribing according to recommendations from an academic pain center. A local pharmacist reported him to the medical board for ‘overprescribing’ based on a single patient. Two years later (with an annual \$5,000 deductible lost to legal defense) the physician was exonerated. Health plans should use medical record review, quality data, and other information to paint the entire picture of a practice and not just rely on one data point.” A 2013 white paper from the California Medical Association reinforces this message: “Although the public is clearly not served by physicians who prescribe inappropriately or illegally, justice and due process are not served by an overly rapid system of investigation that assumes guilt before evidence proves otherwise. Ensuring due process is critical. . . . Even if a complaint is found to be without merit, defending against these allegations can disrupt patient care.”⁷⁸

Aetna’s Pharmacy Misuse, Waste, and Abuse Program uses medical claims review and prior authorization to identify opioid overuse patterns. Health plan clinicians also work proactively with providers to identify patients who may be at risk of addiction. Results from the program have been significant. Opioid prescriptions were

reduced by 14% across 4.3 million members between January 2010 and January 2012.⁷⁹

Health plans should use this outlier tool judiciously, however, as a threatening approach with the provider network can lead to unintended consequences. “I have been a practicing pain management physician for 30 years,” said Lee Snook Jr., MD, medical director of Metropolitan Pain Management Consultants. “My specialty of pain medicine has a higher-than-average opioid prescribing volume, and the tone and intent of the letters I receive from a variety of plans is increasingly uncompromising, alarming, and sometimes threatening. I see workers’ comp patients who were stable and doing well, and after a threatening letter from Utilization Review, a pharmacy benefits manager, or from the insurance company, they are cut off from medications completely, leaving them to pay out-of-pocket for medications they cannot afford. Worse yet, they feel stigmatized for taking medications for their chronic pain condition.”

Promotion of Prescription Drug Monitoring Databases (CURES in California)

Prescription drug monitoring programs (PDMPs) are databases of all controlled substance prescriptions dispensed in a particular state. All states but one have active PDMPs. The California PDMP, known as CURES (Controlled Substance Utilization Review and Evaluation System), was designed to serve public health, regulatory oversight agencies, and law enforcement.

While several states allow third parties — such as Medicare, Medicaid, and commercial insurance — to access the database, California law allows only licensed prescribers and pharmacists to access the data, and specifically excludes insurers from accessing data for their members or from profiling prescribers. Due to this restriction, California health plans are limited to their own data when analyzing prescribing patterns, dispensing patterns, or members at risk; they are unable to access prescriptions paid with cash, a manufacturer coupon, or covered by other health insurance. This makes it more difficult to identify pill mills (which are frequently cash practices), fraud and diversion (where members may fill some medications with their insurance and others with cash), and fraud and diversion by someone in a medical office or pharmacy. An additional limitation is the lack of interoperability between states, meaning that providers are unable to determine if a member is using prescribers across state lines.

States that require providers to check with the PDMP prior to prescribing controlled substances saw drops in the number of patients using multiple prescribers by 75% (New York), 50% (Kentucky), and 36% (Florida).⁸⁰ While legislation mandates that all California prescribers and pharmacists register on CURES by July 2016, accessing CURES to view Patient Activity Reports is voluntary and underused. Health plan guidelines and educational programs frequently encourage voluntary use of CURES by California providers to identify patients using multiple prescribers due to addiction, or who are engaging in fraud.

CURES 2.0, the improved California system launched in early 2016, hopes to increase provider use of the system by adding value. It streamlines registration and allows providers to see at a glance a list of patients who have hit certain risk thresholds: >100 mg morphine a day, six or more prescribers or pharmacies within six months, >40 mg methadone a day, >90 days of continuous use, and combined benzodiazepine and opioid use. Prescribers, pharmacists, health departments, and the general public will have access to reports on the CURES public website comparing prescription data by county and zip code, trended over time.

Supporting Safe Communities

Health plans are part of a wider community, and their efforts to address opioid overuse and misuse should be viewed within a community-wide context. When one health plan acts alone, its actions (such as placing strict formulary limits without a process to bring providers on board) can cause a migration of patients to other plans or providers. This is less likely to occur when providers, plans, medical societies, public health officials, and others work together to create shared community standards around safer prescribing, access to addiction treatment, and access to naloxone.

Opioid Safety Coalitions

Community coalitions bring together medical societies, health plans, public health departments, physicians, hospital leaders, pharmacies, clinics, addiction treatment programs, law enforcement, community advocates, patients, and others to create a call to action, unite around common goals, and form a plan to make a measurable difference in opioid overdose rates. Coalitions in many states have shown to have significant impact: For example, Wilkes County, North Carolina, started as the sixth worst county in the nation in overdose deaths. Project

Lazarus created a community coalition and implemented a series of interventions that reduced the county's overdose rate by 69% between 2009 and 2011. In 2011, not a single Wilkes County resident died from a prescription opioid from a prescriber within the county.⁸¹

The California Health Care Foundation is currently supporting 16 opioid safety coalitions operating in 24 California counties, most of which have at least one health plan participant. These coalitions are focusing on the federal priorities defined by the Obama administration in 2015: promoting provider education to support more judicious prescribing, expanding access to medication-assisted addiction treatment, and increasing use of naloxone, an overdose antidote. Health plans engaging in coalitions have an opportunity to improve good will and provider buy-in regarding new health plan programs, and also create opportunities to learn about unintended consequences and adjust when needed.

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Encouraging Use of Naloxone

The medication naloxone reverses the effect of opioids on breathing and consciousness. In the past, use of naloxone was limited to emergency departments. However, this drug can now be legally dispensed in California by a pharmacist without a prescription and can be distributed in community settings such as needle exchange sites. Naloxone can be administered by a layperson by injection or by nasal spray; it should have no other effect on an otherwise healthy person who is unconscious for another reason.

The CDC and the American Medical Association recommend routine prescribing of naloxone to all patients at risk of an overdose (such as patients who take more than 50 MME daily, use both opioids and benzodiazepines, have a history of substance use disorder, or who have other risk factors).⁸² Since overdose deaths can occur in patients taking any amount of opioids, including intermittent use, many experts recommend co-prescription of naloxone to all patients using long-term opioids, since prescribers are not able to predict which patients will need it.⁸³

In a Massachusetts study of community naloxone implementation, death rates dropped in communities with naloxone distribution programs — the more naloxone distributed, the lower the death rate.⁸⁴ In a Pittsburgh study of a needle exchange site, of 141 trained individuals who returned to the study site for a naloxone refill, 89 (63%) reported being involved in one or more situations in which they used naloxone to respond to an overdose. These people reported administering naloxone in 249 separate overdose situations, and in 96% of cases, they reported that the overdose victims survived.⁸⁵ Overdose deaths have been shown to decrease when naloxone is prescribed but not used, perhaps because it creates an opportunity to discuss opioid risks, resulting in increased caution with use.⁸⁶

Despite growing evidence of its benefit, naloxone is poorly understood by providers and underused.

Health plans have several opportunities to increase the use of naloxone:

- ▶ Promoting co-prescribing in provider or member educational trainings or materials
- ▶ Working within coalitions to increase naloxone dispensing in community settings (such as needle exchanges or addiction support groups)
- ▶ For commercial plans, ensuring naloxone is available on the formulary with no authorization requirements and no refill limitations (Medi-Cal covers naloxone)

Current Spread of Opioid Safety Interventions in California Health Plans

Researchers for this paper conducted an online survey to learn the extent to which health plans in California are adopting the most common opioid safety interventions. Thirty-five Medi-Cal, commercial, and Medicare health plans were sent the survey, and 30 responses were received from 28 plans (2 plans reported for multiple lines of business): 64% (18 of 28) reported for a Medi-Cal line of business, 29% (8 of 28) reported on commercial products, and 18% (5 of 28) reported on Medicare Advantage products.

The results of the survey indicate that health plans across California are actively working on the opioid epidemic, some taking it on as a major initiative, and others starting with smaller efforts, most often in formulary changes. The discussion and figures below outline highlights of the survey findings.

Formulary and Authorization Policies

All health plans in the survey reported using some type of formulary controls for certain opioids, such as removing a medication from formulary (typically, brand-name or extremely high dose), requiring authorization review (requiring a phone call or form submission, and review by a pharmacist or medical director), or step therapy (which requires patients to have tried an alternative medication that didn't work for them). Some plans also limit quantities for specific medications, either in number of pills up to a maximum dose (e.g., limiting quantities to 120 tablets in a month) or in total doses (adding up all medications to equal morphine milligram equivalents).

See Table 4 (page 24) for the formulary controls used by the responding health plans for specific opioid medications (some plans reported multiple controls for the same medication).

Table 4. Formulary Policies for Selected Opioids (N=30)

	Off Formulary	Prior Authorization	Quantity Limits or Step Therapy
Methadone (for pain)	7%	17%	50%
OxyContin (80 mg)	17%	67%	23%
MS Contin (200 mg)	10%	20%	23%
Fentanyl (100 mcg patch)	13%	63%	27%
Opana (40 mg)	47%	50%	13%
SOMA	27%	33%	13%
Codeine Cough Syrup	13%	13%	43%
Zohydro (ER)	53%	50%	10%

The 30 health plans were also asked whether they:

- ▶ **Restrict the co-prescribing of opioids and benzodiazepines.** Only 10% responded that they did, with another 33% replying that they were considering such restrictions.
- ▶ **Limit new starts of opioid prescriptions (for members with no history of opioid use).** Only 23% of respondents reported that they limit new starts, with three other plans stating that they were considering this path.
- ▶ **Dose limits.** 60% of respondents reported that they have implemented dose limits for certain opioids, and another 30% reported that they are considering dose limits.

Provider Education and Training

Almost all the health plans surveyed have education efforts in place. Guidelines, toolkits, and websites are the most common. For example, the **Central California Alliance for Health** developed a packet of materials including treatment guidelines, tools to assess appropriateness of opioid therapy, information about tapering from high-dose opioids (including the use of buprenorphine), availability of contracted behavioral health counselors with expertise in pain management,

prescribing and administering naloxone, and other resources. These materials have been distributed through targeted written communication to individual providers on a quarterly basis and through large in-person biannual medical education events. CCAH also offers financial support for provider participation in Project ECHO video tele-mentoring.

Some plans have launched more intensive efforts, such as large, in-person medical education events, development of comparative data reports to allow prescribers to compare themselves to peers, and support for clinics to join Project ECHO video tele-mentoring. Of the plans responding to the survey, only three indicated that they are using their provider portal to offer opioid training and educational resources for providers.

Of the 28 plans responding that they have at least one of the following provider education programs in place, the prevalence of these programs is:

- ▶ **Practice guidelines:** 64%
- ▶ **Education/CME events:** 43%
- ▶ **Promote use of CURES:** 71%
- ▶ **Academic detailing:** 29%
- ▶ **Share prescriber-level comparative data:** 36%
- ▶ **Support Project ECHO participation:** 25%
- ▶ **Digital or portal apps or tools:** 14%

Pay for Performance

Pay for performance (P4P) incentives focused on opioid safe prescribing are not common, although one-third of the 28 plans indicated they are considering using P4P to focus on opioid safety:

- ▶ **P4P measure in place:** 11%
- ▶ **Considering P4P measures:** 36%

One plan commented that a pay for performance measure for opioid safety would need to be carefully designed to support the right outcome, as a measure incentivizing lower prescribing rates could incentivize providers to dismiss patients, taper them too quickly, or refuse to accept new pain patients into their practice.

Case Management

Of all respondents, 77% indicated that they run member reports to identify the need for case management referral. Indicators include high cost, ED visits from an overdose, high-dose regimens, evidence of high-risk drug combinations (e.g., opioid use with benzodiazepines, sedative-hypnotics, stimulants, and muscle relaxants), and use of multiple prescribers or multiple pharmacies.

Real-Time Information Exchange for Care Coordination

As discussed in the previous section, real-time care coordination allows providers to make better decisions in emergency departments and allows health plans to connect with high-risk patients who are frequent ED visitors to provide access to needed services. Only three of the plan respondents have access to a system that allows real-time communication between health plans and emergency departments, while six are considering implementation.

Plans (28 total) with a system for real-time care coordination:

- ▶ **In place:** 11%
- ▶ **Considering:** 21%

Nonopioid Pain Treatments

For those respondents reporting that they have implemented expanded benefits, examples include those shown in Tables 5 and 6.

Table 5. Coverage of Acupuncture and Chiropractic Services, Medi-Cal vs. Commercial Plans

	MEDI-CAL* (n=17)	COMMERCIAL (n=8)
Chiropractic Services	52%	88%
Acupuncture	41%	88%

*Chiropractic services are covered benefits only for certain categories of Medi-Cal beneficiaries: examples include pregnant women, nursing home residents, and children in special programs such as the Early and Periodic Diagnostic, Screening, and Treatment benefit or California Children's Services.

Table 6. Plan Coverage of Expanded Benefits for Pain Treatments, Included vs. Considering Inclusion (N=27)

	INCLUDED	CONSIDERING
Expanded Physical Therapy Benefits	56%	26%
Self-Management Resources (e.g., mindfulness-based stress reduction)	48%	11%
Health Education	75%	7%

In interviews, some medical leaders indicated that offering treatment alternatives is an important aspect of supporting providers as they taper patients down from high-risk, high-dose use, since providers feel they cannot take something away — something the patients perceive they need — without having something to offer the patient in its place to manage their pain. However, while some benefits are offered to all members, other benefits — particularly acupuncture and chiropractic — are sometimes available only to members with certain diagnoses, or are available to certain insured groups or benefit levels within a plan. Some medical directors expressed concern about insufficient numbers of behavioral health clinicians with interest or experience in working with patients with chronic pain, addiction, or both.

Integrated Mental Health, Addiction Treatment, and Primary Care

Of the 28 plans responding to a question about integrated services for mental health, primary care, and addiction treatment:

- ▶ **In place (in at least some settings):** 71%
- ▶ **Considering:** 11%

Plans commented that integrated services were available for some members through some community health centers with embedded behavioral health specialists, county mental health clinics, or behavioral health plans. One plan has an in-house behavioral health program. Other plans commented that there are not enough resources in the network to offer integrated services — partly because the funding sources for each of these are different. Some plans are participating in a California Health Care Foundation-funded planning effort to develop new integrated services for members with frequent ED use.

Inland Empire Health Plan's Centers of Excellence

Recognizing that its prescribers may need more than toolkits and guidelines to manage complex pain patients on high-dose opioids, **Inland Empire Health Plan** is piloting a number of centers of excellence, where patients with complex pain syndromes or high-risk opioid use can receive multidisciplinary care. Each pilot center has a different focus: One is just orthopedics, one is an integrated team model, and one integrates psychiatry with primary care.

Increasing Access to Buprenorphine

Of the health plans responding to a survey question about their use of buprenorphine for pain and/or addiction:

- ▶ **On formulary for addiction:** 100% (8 of 8) of commercial plan respondents have buprenorphine on the formulary for addiction.
- ▶ **On formulary for pain:** 50% (4 of 8) of commercial plan respondents have buprenorphine on the formulary for pain.
- ▶ **Encouraging use for high-risk chronic pain members:** 21% (4 of 19) of plan respondents encourage the use of buprenorphine for high-risk members, usually during the course of tapering.
- ▶ **Encouraging buprenorphine waiver:** 16% (3 of 19) of plan respondents encourage the use of buprenorphine by providing incentives to providers to obtain a buprenorphine waiver, also called an x-license, which allows a doctor to prescribe buprenorphine for addiction.
- ▶ **Provider education:** 53% (10 of 19) of plan respondents encourage the use of buprenorphine through provider education.

Patient Review and Coordination (Lock-In) Programs

Patient review and coordination (PRC) programs, also referred to as lock-in programs, entail limiting patient access to a single prescriber, a single pharmacy, or both. Based on the survey, the use of such lock-in programs in California is not widespread:

- ▶ **Pharmacy lock-in:** 40% of respondents (12 of 30) are running pharmacy lock-in programs, with another 30% considering a pharmacy program.
- ▶ **Prescriber lock-in:** 24% of respondents (7 of 29) are running prescriber lock-in programs, with another 38% considering a prescriber program.

Some health plans identified the need for state approval of lock-in programs for their members as a potential barrier. Others identified a concern about member responses — resistance and frustration — as barriers to implementing these programs, with fears that some members may switch health plans to avoid these restrictions.

The health plans surveyed use varying methods for identifying participants for these programs, including identifying members who have filled a certain number of prescriptions in general or opioid prescriptions in particular; those who have received prescriptions from multiple prescribers or multiple pharmacies, or both, over a set period of time; and those with frequent ED visits and prescription fills. Providers may also refer members to these programs. One plan indicated that it identifies patients through formal grievances received due to a patient being discharged from a provider's practice for using multiple prescribers.

Identification of Outlier Prescribers

Almost all (87% — 26 of 30) of the survey respondents indicated that they systematically track outlier prescribers, and three of the four plans who do not currently track outliers indicated that they were considering implementing such a system. The 26 plans use the tracking information in a variety of ways, the most common of which are:

- ▶ **Outreach:** 77% of the plans that conduct regular tracking of outliers reported that they send outreach letters, make phone calls, or make in-person visits to network prescribers who meet certain thresholds in the tracking system.

- ▶ **Identify and report fraud:** 88% of the plans that do tracking use the information to identify and report suspected fraud.
- ▶ **Removal of prescribers:** 23% of the plans that track outliers use tracking results to determine whether to remove a prescriber from the plan's network.

Some health plans use claims data from pharmacy benefits management companies, while others make use of multiple data sources to identify high-risk patients and providers. At least one plan also runs an annual report of all providers' prescribing habits regarding opioids and conducts in-person office visits with some identified outlier prescribers. At another plan, outlier member, pharmacy, and prescriber cases are reviewed by the narcotic safety committee, which includes medical directors, pharmacists, provider credentialing representatives, case managers, and investigators, to determine appropriate action.

Opioid Safety Coalitions

Opioid safety coalitions are forming across California to tackle the opioid epidemic in local communities. Coalitions are led by a variety of organizations (medical societies, public health departments, health plans, independent practice associations, county agencies) and often include provider groups, hospitals, law enforcement, addiction treatment, community advocates, and others. CHCF is supporting 16 coalitions in 24 California counties, all focused on promoting judicious prescribing practices, expanding access to medication-assisted addiction treatment, and increasing use of naloxone. Of the 29 respondents to the question:

- ▶ **Part of an opioid safety coalition:** 52%
- ▶ **Considering joining a coalition:** 38%

San Francisco Health Plan, for example, launched a workgroup in 2012 that it coleads with county health clinic leaders. The workgroup brings together medical directors from county clinics, nonprofit community clinics, jail health, Veterans Affairs, the local academic center (University of California, San Francisco), and behavioral health and substance use experts. The group collaborated on practice guidelines that were adopted across large clinic systems, and promoted local opioid review committees. The group continues to share best practices and give input to SFHP on educational needs and appropriate measures for its P4P program.

Naloxone Promotion

Health plans promote the use of naloxone in different ways. Of the plans responding to a question on naloxone:

- ▶ **Promote naloxone through guidelines or education:** 55% (12 of 22)
- ▶ **Promote naloxone through member materials:** 14% (3 of 22)
- ▶ **Naloxone on formulary (commercial plans only):** 100% (11 of 11)

Naloxone is a carve-out on Medi-Cal and is available without authorization. One plan recommends that providers prescribe naloxone to opioid-using patients upon discharge from inpatient care, while two others promote naloxone prescriptions for patients whose opioid use exceeds a certain dose threshold or number of doses per month.

Unintended Impact on Health Care Costs

In interviews, health plan leaders expressed concern about the unintended consequences of some of the new opioid safety efforts. For example, naloxone originally was available only by injection, and historically was given in emergency settings. With increasing promotion for use by the lay public, newer and more convenient formulations are now available. One of these formulations was Evzio, approved by the FDA in April 2014. Between January and February 2016, its wholesale price increased 400%, and it now costs almost \$5,000 per prescription.

Another example is the promotion of abuse-deterrent opioid formulations. The FDA proposed in February 2016 to approve new opioid products only if they have abuse-deterrent properties. While these formulations make it more difficult for users to crush opioid tablets for purposes of injecting the drug, they do not prevent overuse by oral ingestion or the deaths of children by accidental ingestion. In Indiana, the largest outbreak of HIV in the state's history occurred in early 2015; it was associated with manipulation of the abuse-deterrent formulation of an opioid.⁸⁷

One effect of the FDA proposal could be increased reformulation of opioids that have been on the market for decades, with the unintended consequence of price inflation — as seen with the reformulation of naloxone.

Health plan leaders cautioned that efforts to improve opioid safety should be considered carefully, to ensure the intervention will actually achieve its objective and not drive up health care costs for plans (and ultimately, consumers and taxpayers) without measurable benefit.

Pushback Against False “Solutions”

“At the policy level, we need to push back on special interest efforts to promote abuse-deterrent formulations as a solution to this problem,” cautioned Marcus Thygeson, chief health officer of **Blue Shield**. “So-called abuse-deterrent formulations do not even fully prevent abuse, and do nothing to prevent opioid-induced tolerance, physical dependence, and worsening of chronic pain. Such efforts are a distraction and a Trojan horse to displace perfectly good, low-cost, generic opioids under the guise of addressing the opioid epidemic.”

Conclusion

Health plans across California are tackling the opioid overdose epidemic through a variety of programs and interventions, ranging from comprehensive — focused on provider culture, patient needs, and the community — to narrow (e.g., formulary changes). All of the health plans interviewed are working on the issue in some way, and many plans contacted for this report indicated that they are actively planning to expand their efforts.

The most successful efforts had the following elements in common:

Multifaceted approach. The health plans that have succeeded in reducing opioid use significantly used an orchestrated set of interventions:

- ▶ Supporting cautious opioid prescribing practices through formulary changes and provider education, such as avoiding new starts of opioid prescriptions for patients with long life expectancies, tapering high-dose regimens, and avoiding the combination of opioids and sedatives.

- ▶ Focusing on highest-risk situations: high-dose opioids, high-risk medication combinations, and addiction
- ▶ Identifying and addressing overuse, misuse, and fraud
- ▶ Supporting safe communities through coalitions

Support from senior leaders. Senior health plan leadership support is important to prioritize opioid safety initiatives, and close collaboration between the plan and its providers contributes to success.

Interactive education approaches. Provider education approaches that encourage discussion and case review, such as academic detailing and Project ECHO, are more impactful on prescribing behavior than passive modalities, such as guidelines and webinars.

Use of data. Reliable data drive change, whether the data are used to create a call to action, to motivate outlier prescribers to change, or to demonstrate return on investment and program effectiveness to plan leadership.

Focus on the evidence. “Universal precautions” is a common theme in pain management medical education (e.g., urine drug screens, pain agreements, and risk-screening tools), but there is little evidence to support their use. The health plans showing measurable impact on opioid prescribing focused their interventions on the strategies with the most evidence behind them: Avoid new starts of opioid prescriptions for patients with long life expectancies; taper patients on high-dose or combination therapy to safer regimens; increase access to medication-assisted addiction treatment (e.g., buprenorphine), and promote the use of naloxone, an opioid antidote. (See Appendix A.)

It should be emphasized that interventions in this arena can be ineffective and even harmful if carried out in isolation. For example, tight formulary controls without prescriber resources and support can lead to disgruntled providers and patients, and encourage patients to change health plans rather than supporting the hard work of changing prescribing practices. Similarly, not all education on pain management will result in more judicious prescribing — for example, FDA-supported Risk Evaluation Mitigation Strategy programs have been criticized for overestimating benefits and underestimating risks while promoting use of long-acting opioids.⁸⁸

All organizations in the case studies — each of which has experienced significant drops in opioid prescribing rates — put significant effort into prescriber education campaigns focused on judicious and cautious opioid prescribing.

The medical leaders interviewed shared words of caution. The epidemic will not be solved if the problem is simply moved from one sector (health care) into other sectors (street drug use, correctional systems, social services), or if lives saved from prescription overdoses are offset by lives lost from heroin. Leaders emphasized the importance of interventions based on science and not on peremptory, unreachable goals — for example, patients on long-term high doses of opioids are often unable to taper to zero, and health plans insisting that their members be “off opioids at all costs” will likely cause more harm than good. Likewise, health plans targeting outlier prescribers in ways that providers feel are unjust (for example, without adequate investigation) or that are punitive, will risk doctors releasing patients from their practice rather than enduring the hassle of plan review, which puts patients at risk for bad outcomes. Finally, health plan policies need to adapt to the needs of individual patients and circumstances, with better health for the individual as the ultimate goal.

A key theme from this research was the important role health plans can play in a coordinated community approach to the opioid epidemic. The epidemic is a public health crisis, not specific to any geographic area or population, and any medical group or plan acting in isolation may just be “squeezing the balloon,” causing patients to move from one network to another, or one plan to another. Community coalitions bring together competing plans and medical groups to identify community standards that all agree to follow, and to commit to expanding resources (such as access to naloxone or addiction treatment) so all may benefit. Coalitions can work together to ensure that opioids themselves are not turned into the enemy, becoming unavailable for patients who need them — such as for cancer treatments, surgery, trauma, kidney stones, and palliative care. Opioids have tremendous capacity both to relieve suffering and to cause suffering. Health plans have a unique opportunity to safeguard the health of the community — preventing opioid overuse and overdose deaths — while ensuring individual members get effective and appropriate treatment.

Appendix A. Common Components of Health Plan Clinical Guidelines

RECOMMENDATION	LITERATURE SUPPORT	EXAMPLES OF HEALTH PLAN APPROACHES
<p>Avoid new starts for patients with long life expectancies “avoid the 90-day cliff”</p>	<p>A large health plan study showed that 67% of patients taking opioids for 90 days continued daily use two years later.⁸⁹</p>	<ul style="list-style-type: none"> ▶ Easy access to nonopioid therapies in acute pain (behavioral health, physical therapy, complementary therapy) ▶ Prescriber education ▶ Member education ▶ Formulary controls (limited number of tablets per fill, authorization review for ongoing use after the first prescription) ▶ Pay for performance incentives
<p>Taper patients onto safer regimens</p>	<p>Doses >100 MME a day increase the death rate almost ninefold⁹⁰ compared to 1 to 20 mg daily; 30% of opioid overdose deaths include concurrent benzodiazepine use.⁹¹</p>	<ul style="list-style-type: none"> ▶ Formulary dose limits (with prompt authorization review to manage exceptions) ▶ Work with providers on individual tapering plans ▶ Case management and care coordination ▶ Access to nonopioid treatments ▶ Data analysis and work with outliers ▶ Specialist support through phone, email, or live video consultation ▶ Increased access to buprenorphine for pain management ▶ Identification and investigation of fraud
<p>Offer medication-assisted addiction treatment (MAT)</p>	<p>Buprenorphine and methadone decrease rates of death, HIV, and hepatitis rates and increase retention in treatment compared to social model treatments.⁹²</p>	<ul style="list-style-type: none"> ▶ Removal of authorization barriers for buprenorphine ▶ Buprenorphine waiver trainings ▶ Incentive payments or grants for new programs ▶ Alternative payment models ▶ Outreach to waived but non-prescribing clinicians ▶ Collaboration with local coalitions and counties (e.g., whole person care and health home programs)
<p>Promote use of naloxone</p>	<p>Communities with increased naloxone availability have lower death rates.⁹³</p>	<ul style="list-style-type: none"> ▶ Removal of authorization barriers for naloxone ▶ Prescriber education ▶ Member education ▶ Incentive programs ▶ Promotion of uptake in pharmacies (dispense without prescription) ▶ Collaboration with local coalitions: distribution at community events and needle exchanges, and with first responders

Appendix B. Glossary

The literature about the opioid crisis uses a wide array 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. Medications used 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.⁹⁴

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). It is not equivalent to 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 nonmedical purposes), and addiction (loss of control over use).

Appendix C. Health Plan Survey Respondents and California Market Participation

HEALTH PLAN SURVEY RESPONDENT	MEDI-CAL	MEDICARE*	COMMERCIAL
Aetna		X	X
Alameda Alliance for Health	X		X [‡]
Anthem Blue Cross	X	X	X
Blue Shield of California	X	X	X
California Health & Wellness (Centene; now called California Health Net)	X	X	X
CalOptima	X	X	
Care1st Health Plan [†]	X	X	
CareMore Health Plan		X	
CenCal Health	X		
Central California Alliance for Health	X		X [‡]
Chinese Community Health Plan		X	X
Contra Costa Health Plan	X	X	X
Gold Coast Health Plan	X		
Health Net	X	X	X
Health Plan of San Joaquin	X		
Health Plan of San Mateo	X	X	X [‡]
Inland Empire Health Plan	X	X	
Kaiser Permanente Southern California	X	X	X
Kern Family Health Care	X		
L.A. Care	X	X	X
Molina Healthcare of California	X	X	X
Partnership HealthPlan of California	X		
San Francisco Health Plan	X		X [‡]
Santa Clara Family Health Plan	X	X	
Sharp Health Plan		X	X
Stanford Health Care Advantage		X	
Sutter Health Plus			X
Valley Health Plan			X

LEGEND

- X Market participation
- X Survey response for this line of business

*Includes Cal MediConnect duals demonstration plans.

†Care1st is an independent licensee of the Blue Shield Association.

‡Healthy Workers is the only commercial line of business.

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