California Health Care Foundation

July 2016

Meeting Summary

Remedy for the Rural Opioid Epidemic:

Leaders Discuss Medication-Assisted Addiction Treatment in Primary Care

Communities across the United States are experiencing unprecedented numbers of overdoses and deaths related to prescription opioids and heroin. California is no different: Although the state ranks 37th for prescription opioid deaths, 16 rural California counties have death rates high enough to put them in the top 10 for the whole nation. In 2013, there were 1,895 California deaths due to opioid overdoses, and 7% of these involved prescription opioids.[1] Neither the problem nor the treatment resources are distributed equally across the state.

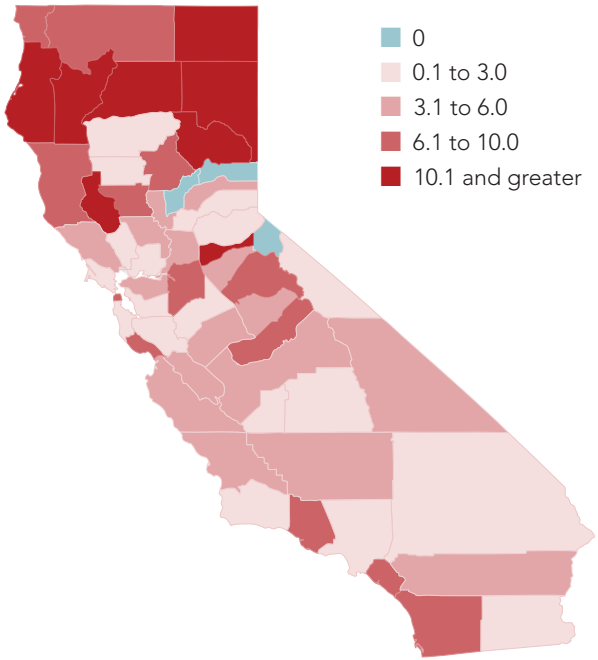
To understand the challenges in rural Northern California and to identify potential solutions, the California Health Care Foundation (CHCF) convened rural health leaders, addiction specialists, and policy experts on March 9, 2016. Framing the discussion at the start of the day, CHCF Director of High-Value Care Kelly Pfeifer, MD, displayed two California maps that together capture the size and seriousness of the problem, especially in Northern California counties. Figure 1 (see page 2) shows the variation in opioid death rates per 100,000 population in counties across the state from 2011 to 2013. While the statewide average was 10.96 deaths per 100,000 residents, the rates in many northern counties were much higher. Lake County experienced 26.8 deaths per 100,000 — nearly 2.5 times the state average.

Figure 2 (see page 2) shows the limited availability of licensed narcotic treatment programs (NTPs) in the counties where the need is greatest. Overall, the northern counties have the highest overdose death rates and the least access to addiction treatment.

The maps highlight the critical need for a focused effort to expand access to treatment in the rural north. Medication-assisted treatment (MAT) in primary care is an important option in these areas, as buprenorphine can be prescribed by any physician who goes through a training and waiver program, whereas NTPs (often called methadone clinics) have extensive regulatory requirements and are often difficult to build in areas without great population density. Likewise, naltrexone (indicated for alcohol and opioid use disorder) can be prescribed in primary care.

Overall, California's northern counties have the **highest overdose death rates...**

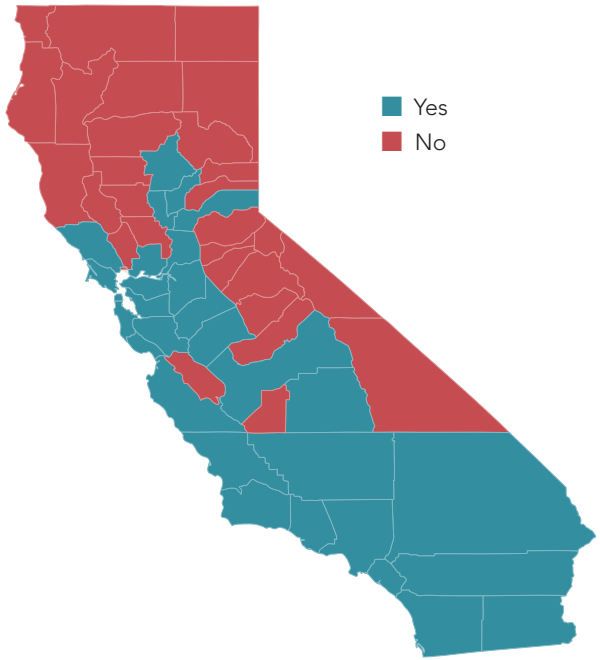
Figure 1. Rate of Rx Opioid-Related Deaths per 100k Residents, by County, California, 2011-2013



Source: California Department of Health Care Services.

but those counties also have the **least access to treatment.**

Figure 2. Presence of Narcotic Treatment Programs, by County, California, 2014



Source: California Department of Health Care Services.

"If Not Us, Who?"

The purpose of this meeting of experts, Pfeifer explained, was to ensure that these maps will look very different in three years, with lowered death rates and expanding access to MAT. A key first step, she said, is to change hearts and minds about the value and efficacy of MAT in primary care and also about the need to share responsibility for addiction treatment more broadly across medical care providers.

Historically, addiction treatment was considered "someone else's job," since few clinicians had any training, experience, or knowledge about managing substance use disorders, noted Pfeifer. But she emphasized that primary care providers must now take responsibility for treating addiction: "All of us in primary care unwittingly contributed to the epidemic by liberally prescribing opioids, believing that addiction was rare and high doses were safe," she said. "There are not enough addiction specialists to manage the problem. If not us, who?"

The epidemic has been falsely characterized as a problem of opioid misuse by patients, said Pfeifer: "Everyone is talking about doctor-shoppers, but most of the people who die from overdoses get the drugs from their own doctor." Primary care providers can be part of both sides of the solution, she said, by decreasing the quantity of opioids prescribed, thus exposing fewer patients to the risk of addiction, and by ensuring that those with addiction have access to treatment.

Pfeifer said she became an advocate of MAT after studying the direct impacts of opioids on the brain. "I learned Neurobiology 101. When you use opioids,

dopamine floods the brain; each use produces less of a response, until people need opioids just to feel normal."[2] Buprenorphine's value is that it stabilizes the dopamine system, allowing people to escape the cycle of withdrawal and craving that prevent them from making different choices. Buprenorphine has the potential to prevent deaths and to reduce the suffering of addiction — but very few people who need it can find it, she said.

"Early in my practice, with pharmaceutical misinformation accepted by the physician community as fact, I believed in the efficiency of opioids because I saw that my patients got better . . . for a day. And then they got worse over time, needing more and more opioids and still feeling 8/10 pain. Hyperalgesia was considered rare — we didn't realize the pain was actually caused by the medications, and the higher the dose, the worse patients felt."

— Kelly Pfeifer, MD
director of High-Value Care, CHCF

What Stands in the Way?

Restrictions and training requirements governing who can prescribe the two most effective opioid treatment drugs, buprenorphine and methadone, present challenges to expanding access to these agents. But even when the requirements are met — for example, when providers have gone through training on buprenorphine and have received DEA waivers, which are required for primary care providers to prescribe opioids for the treatment of addiction — many still do not prescribe. James Gasper, PharmD, a psychiatric and substance use disorder pharmacist with the California Department of Health Care Services (DHCS), noted Controlled Substances Utilization Review and Evaluation System (CURES) data[3] demonstrating that about 50% of physicians with waivers are not prescribing buprenorphine, and most who do prescribe do not treat the maximum number of patients permitted under the waiver (30 patients in the first year; 100 patient thereafter). "So it's not just about having more waivers," Gasper said. "It's about *using* the waivers."

What stands in the way? Gasper cited research by Walley et al., which found that all waivered physicians, whether they prescribed or not, cited the following barriers: insufficient office support, insufficient nursing support, and lack of institutional support; those not prescribing also cited insufficient staff knowledge and experience.[4]

But waivered physicians not prescribing, or prescribing to very few patients, does not fully account for the access challenge, Gasper said. He noted that in California, even if all waivered physicians prescribed up to their limit, 100,000 people would still be without access to this treatment. More prescribers are also needed, especially in counties with the highest death rates: Greater access means more saved lives.

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Pfeifer noted that many clinicians think buprenorphine induction is difficult, or will take up too much of their time, or they fear being overwhelmed by unmet need in their communities. (For details, read *Buprenorphine: Questions and Answers*.) Many physicians continue to work under the misunderstanding that buprenorphine is difficult to obtain on Medi-Cal, despite the fact that the TAR (treatment authorization request)[5] requirement for buprenorphine was removed in 2015. One meeting participant had heard a provider say, "I prescribe buprenorphine, but don't tell anybody," because of fear of becoming the de facto addiction treatment provider in the community and being overrun by challenging patients. Prescribers also hesitate to prescribe MAT if there are not enough counseling resources around, said Pfeifer. She added that conditions do not have to be perfect to get started with MAT. Although counseling in coordination with buprenorphine induction is the standard of care, she said, buprenorphine can be initiated even if the counseling component is not yet in place, and the meta-analyses looking at the impact of behavioral health added to buprenorphine

are mixed about the benefit.[6] "Buprenorphine works, with or without other resources," she said.

Another problem is reimbursement, Pfeifer said, noting that, outside of federally qualified health centers (FQHCs), Medi-Cal payment rates are insufficient to motivate providers to offer treatment. FQHCs have the advantage of team care models, where nurses or other staff do the bulk of the patient management, allow busy physicians to take on buprenorphine prescribing without impacting access for other patients.

Positive Developments

Despite the challenges, there are a number of positive policy and financing developments that could help to expand MAT in the rural north:

- **California's Drug Medi-Cal Organized Delivery System (DMC-ODS) waiver.** Counties that opt in to the DMC-ODS waiver will be required to provide a full continuum of substance use disorder treatment — from outpatient to residential — explained Gasper. The waiver expands requirements for a range of MAT options — including that all beneficiaries have access to methadone in the setting of an NTP, and that NTPs also provide onsite administration and dispensing of buprenorphine, naloxone, and disulfiram in addition to methadone. Gasper reported that some rural northern counties are discussing the development of a regional delivery system, potentially mediated through the local Medi-Cal plan (Partnership HealthPlan of California). Gasper emphasized that methadone can also be dispensed in primary care, through an Office-Based Opioid Treatment model, which requires compliance with different and more stringent regulations than buprenorphine.[7]
- **HRSA Substance Abuse Service Expansion grant.** In March 2016, the federal Health Resources and Services Administration (HRSA) announced recipients of their Substance Abuse Service Expansion grant, aimed at increasing MAT for opioid-use disorder in health centers across the country. Thirty-six California health centers are receiving over $12.5 million in funding under the grant, substantially increasing resources for clinical staff and for education and training.
- **Obama pledge of funding.** Although details were unclear at the time of the convening, the Obama administration proposed over 1 billion in new funding to increase access to buprenorphine and other MAT options.

Both Pfeifer and Gasper highlighted the mounting national concern about the opioid addiction epidemic and interest in MAT as a significant part of the solution.[8] "When CHCF first started this work a year ago, most people were just talking about safer prescribing — being more judicious about using opioids in acute and chronic pain," Pfeifer said. "Now we are seeing a broad conversation about the need for addiction treatment, free from stigma. So the opportunity is here."

More doctors need to be involved, Pfeifer stressed, but clinicians do not need to devote their entire practices to addiction. "If addiction were viewed like any other chronic disease, uncomplicated patients could be maintained in primary care on medications, and complicated patients would be referred to specialty narcotic treatment programs with more intensive behavioral health resources and monitoring."

Gasper also acknowledged the stigma typically attached to addiction, but believes this can be overcome as a barrier for providers. "Stigma gets shut down when you talk about patients dying," he said. "The evidence for buprenorphine over 'drug-free' treatment is clear." With an epidemic as dangerous and widespread as opioid addiction, Pfeifer added, "We need to see it as a community responsibility, not the task of one doctor."

Innovators and Promising Models

A number of provider organizations around the state are gaining experience with providing MAT in primary care; some of these models were profiled at the convening and are briefly described below. Common to many of these models is their reliance on creating care teams where each role has defined responsibilities: nurses, physicians, pharmacists, and others. (CHCF's report *Recovery Within Reach: Medication-Assisted Treatment of Opioid Addiction Comes to Primary Care* describes several models used by clinics to integrate buprenorphine in the primary care setting.)

The Massachusetts Model

Boston Medical Center has been an early innovator in integrating MAT into primary care. Their Nurse Care Management (NCM) model, also known as the Massachusetts model, was featured in *Recovery Within Reach*. A detailed description of the work and

the state-funded effort to disseminate training and implementation support for the model to community health centers is described in the medical literature.[9]

Colleen LaBelle, RN, a nurse at Boston Medical Center and the director of Massachusetts's OBOT-B (Office-Based Opioid Therapy — Buprenorphine) Program, spoke briefly by phone with meeting participants about the model. To increase access to buprenorphine across the state, the Boston Medical Center trained FQHCs in the NCM model, in which the nurse manages most of the care, with the physician confirming the diagnosis, seeing patients periodically, and writing prescriptions. In this way, physicians can incorporate more patients into their practice. The program has been implemented at 14 community health centers (CHCs), in which 114 physicians are currently trained and have waivers to prescribe buprenorphine. In fact, LaBelle, said, some clinics are requiring that every physician who joins the practice has to be willing to prescribe buprenorphine.

While some clinics were initially skeptical about implementing the model, LaBelle said that this problem was mitigated by a stigma-reduction campaign conducted by the state. In addition, the demonstrated success of the program at early-adopter health centers influenced the willingness of others to join in. Interest from clinics to participate continues to grow, she said. Within three years, the number of physicians prescribing buprenorphine increased by 375%, from 24 to 114.

Participants discussed a significant difference between Massachusetts and California regarding reimbursement: In Massachusetts, nurses are Medi-Cal providers and can bill for visits, while in California, nurse visits would need to be combined with a brief provider face-to-face encounter in order to be billed to Medi-Cal.[10] This means that California health centers seeking to replicate the Massachusetts model would need to have other funding sources or build a brief prescriber visit into the patient flow protocols. Participants noted that capitated payment models could enable more flexibility in staffing models and workflows.

Nurse-Led Models in California

Four California health care organizations described their own experiences with or plans to develop nurse-led models of care to support patients with opioid use disorder.

Chapa-De Indian Health. Katie Bell, RN, nurse case manager for substance abuse disorders at Chapa-De Indian Health, is developing a nurse case manager addiction treatment program affiliated with two primary care clinics in Northern California (Placer and Nevada Counties). It is based on the Massachusetts model, and on a program she and others developed for Department of Veterans Affairs (VA) facilities.

In that VA model, nurse case managers played the lead role, doing initial intake and assessment, managing the buprenorphine induction in collaboration with the physician, and leading a group visit for the prescribing physician and the patients inducted that week. A typical VA schedule would have intake on Monday, induction on Wednesday, and a group visit for 20 to 30 patients on Friday, with connections to behavioral health therapies. Changes in dosage were handled by the nurse; dates and dosages for each patient were logged into a database, and behaviors were also tracked. By the time Bell left the VA, the program had treated more than 300 veterans.

Bell noted that it was important to change the mindsets of both patients and providers who believe that the goal should always be to taper off the buprenorphine completely. "Some patients need to stay on long-term, since whenever tapers are attempted, the cravings come back and the patient faces risk of relapse. We had people who were stable on buprenorphine for seven years," she said. "We periodically would taper doses, and those who tolerated it could be tapered off completely. But the decision has to be made based on the needs of the individual patient."

"There is a desperate need in rural California. I will work with any clinic that will let me in the room to talk about this. I understand that providers have fear, but I'm getting desperate calls every day from people who are addicted to heroin and from mothers who just lost a child."

— Katie Bell, RN, nurse care manager
Chapa-De Indian Health

Open Door Community Health Centers. Open Door is an FQHC with 13 clinics and three mobile clinics in Humboldt and Del Norte Counties. Medical Director Bill Hunter, MD, began the MAT program

eight years ago with a nurse and two patients. Today, Open Door starts three to four patients on buprenorphine per week, and has approximately 400 patients receiving buprenorphine, with a six-week waiting list for the program. The care team now also includes a full-time drug counselor who conducts weekly group visits with groups of 10 to 12 patients. The reimbursement they receive as an FQHC has been more than sufficient to support the program, Hunter said.

The care process includes an initial visit with the physician, induction, and follow-up led by the nurse, and weekly two-hour group visits with the drug counselor (each visit also includes a urine toxicology screen and a brief visit with the physician) for the first six weeks. For some patients, a fentanyl "bridge" is used to avoid withdrawal symptoms during induction onto buprenorphine.

After the first six weeks of treatment, patients whose urine samples are clean begin meeting every other week, then less frequently. "The first six weeks are hard because it requires changing a way of life," Hunter said. In the past, the program tried to have most patients wean off buprenorphine on a specific timeline, but "we found that patients relapsed quickly when we insisted on limiting the program to three months," Hunter said. Now, they are open to longer-term use and allow for weaning at the patient's own pace.

To date, they have not found a significant decrease in ED use and deaths, though Hunter said those numbers could have been even worse without the program, given trends for continually increasing opioid overuse and overdose deaths across the rural Northern California counties. Regardless, said Hunter, "Every single one of my patients who has been in the program for a while says 'You saved my life.' And we have."

Primary Care Doctors' Warmline

The Substance Use Warmline (855) 300-3595. provides clinician-to-clinician consultation on managing substance use disorders every weekday (7 AM to 3 PM). Run by the Clinician Consultation Center at the University of California, San Francisco, the Warmline is staffed by experts in pharmacotherapy options for opioid use. See nccc.ucsf.edu.

El Dorado Community Health Center. John Bachman, PhD, is the behavioral health lead for this FQHC with four sites in the Sierra Nevada foothills. The center is currently expanding its comprehensive opioid-specific MAT program, building on its initial experience with one physician who became waivered in 2007. Currently, the clinic has three waivered physicians managing between 75 and 100 patients, with a waiting list of about 30 people. In developing an interdisciplinary complex care team, Bachman noted the challenges of expanding behavioral health services due to the difficulty of recruiting providers with addiction training, and of receiving appropriate reimbursement for the ancillary services needed by these patients. Bachman also described local gaps in the availability of short-term and long-term outpatient treatment options for patients. He cited the challenge of multiple competing demands on busy primary care providers and how to build a sustainable MAT program that supports them in managing complex patients. The El Dorado Community Health Center received one of the Health Resources and Services Administration grants to support its expanded MAT program.

San Francisco Department of Public Health. Nurse practitioner Matt Tierney, MS, RN, described San Francisco's Office-Based Buprenorphine Induction Clinic (OBIC), a collaborative model funded by the City and County of San Francisco and led by two full-time nurse practitioners and a 0.5 FTE physician. The clinic acts as a central hub, managing induction and stabilization, and then connects patients to primary care providers for buprenorphine maintenance. Referrals to OBIC typically come from primary care providers, homeless services, needle exchange programs, and patients and families themselves. Patients who experience relapses while in primary care are referred back to OBIC.

Tierney said that OBIC's intense engagement with patients, as well as the clarity and stability of the clinical process, are the keys to its success. Because the clinic location is in the same building as the county mental health clinic, "we not only can do a warm handoff, but a direct handoff because it's all in the same place." The colocation of addiction specialists and an on-site pharmacy facilitate the process. Such coordination means that "if a person presents with alcohol on the breath, we send them upstairs for a breathalyzer test and to talk about possible treatment. The nurse can diagnose the intensity of addiction and do everything but actually write the buprenorphine prescription."

Moving Toward Implementation

Participants gathered into small groups to delve deeper into some specific implementation challenges and strategies. Themes from these discussions are summarized below.

Engaging Providers

To address some providers' reluctance to incorporate addiction treatment into their practice, opportunities include:

- Sharing patient stories and case studies illustrating success stories — and the experience of providers when patients transform from "difficult and chaotic" (demanding opioids) to stable and grateful.[11]
- Developing a program to shadow other primary care practices engaged in this work so that it is demystified.

> *"We prescribe much more dangerous medications — like insulin — all the time. I'm here to help spread the message that buprenorphine treatment works. People get better. Suffering lessens."*
>
> — Matt Tierney, NP, director
> San Francisco Office-Based Induction Clinic (OBIC)
> Promoting Community Education and Involvement

- Inviting clinicians (including medical residents) to visit established alcohol and drug services to learn more about the needs and opportunities for this population.
- Designing programs to maximize the use of nurses and to streamline processes so that the physician's time is minimized.

Given the complexity of the issues, the solution will not rest solely with medical providers in one care setting. The discussion participants agreed that a community model is needed, including:

- Promoting broad-based education about addiction and recovery — for example, for middle and high school students, local boards of supervisors or city councils, state congressional representatives and staff, and community-based service organizations.
- Creating partnerships and communication channels with local hospitals — whose providers need to understand the role of buprenorphine in recovery and the importance of maintaining treatment during a hospitalization.
- Making connections with local substance abuse providers. "It could be as easy as hosting a community lunch," said one participant, noting that sometimes primary care providers are reluctant to screen for substance use because they believe there is no one around to treat it — when in fact "there is a local treatment center that they don't know about." The important thing, participants said, is to get into the same room and build relationships, focusing on shared goals. Without relationships, the different sectors are apt to project their frustration on the other parts of the system.
- Connecting with the county's substance use system. Most counties are opting in to the new Drug Medi-Cal program (the Organized Delivery System or ODS), meaning that the county will be responsible for providing the entire range of addiction treatment resources. Addiction treatment in primary care can be an important part of the continuum of care, and clinic leaders should get involved in planning the implementation of the new ODS.

Addressing Pain

Participants discussed the concept of a continuum of chronic pain and addiction, since most of their patients experience some degree of both issues. While some chronic pain patients may not meet criteria for opioid use disorder and may not see themselves at risk, patients using high-dose regimens are at high risk of accidental overdose (>100 mg morphine equivalents increases risk of overdose death ninefold,[12] and 3.8% of men taking over 200 mg morphine equivalents die of opioid-related causes[13]). Most people who die from overdose are taking opioids for pain from only one doctor.[14]

Participants discussed opportunities for broader use of buprenorphine for pain, especially for patients at highest risk (i.e., those taking a high dose, combining with benzodiazepines, and/or using methadone for pain). Buprenorphine has several advantages over other opioids: It is long-acting (resulting in less craving and withdrawal), provides effective pain control, stabilizes the part of the brain that manages

motivation and reward (the dopamine axis), does not impact testosterone levels or create sexual dysfunction,[15] lowers risk of sleep apnea, and dramatically lowers risk of overdose death. Participants agreed it would be helpful to have very clear guidance on when, by whom, and in what formulations buprenorphine can be prescribed for treatment of pain. In response, CHCF scheduled two webinars on the use of buprenorphine (see Resources).

Starting Where Impact Could Be Greatest: Pregnant Women

Participants discussed the importance of getting MAT to pregnant women with opioid use disorder, citing opportunities to improve the health of the mother and fetus, to improve health outcomes for the baby after birth, and to increase the likelihood of the mother stabilizing and being able to care for her child appropriately. Necessary early steps to creating such a program include:

- Building relationships with outpatient and hospital-based obstetrics and gynecology (ob/gyn) services, as well as residential programs for pregnant women.
- Educating partners in ob/gyn about addiction and recovery to encourage more specialists to obtain buprenorphine waivers and to offer treatment.
- Building out workflows and protocols for managing pregnant patients with opioid addiction.

Using Existing Assets and Leveraging Available Resources

Integration of MAT into primary care requires careful and efficient use of clinical and financial resources. Ideas for building out a service in a cost-efficient manner included:

- Replicating the Massachusetts Nurse Care Manager model, to allow patients to receive more intensive and frequent follow-up while minimizing the impact on primary care providers. Nurses taking on this role would need to have dedicated time for the program, and would need intensive training, with opportunities for shadowing and mentoring from experienced nurses.
- Using innovative visit models such as shared medical visits (groups of patients meeting for education and peer support, preceded by or followed by one-on-one brief visits with the physician) or flipped visits (where a nurse does the comprehensive assessment and care plan, and physician or mid-level provider sees the patient at the end of the visit).
- Using health coaches or peer counselors to follow up with patients and keep them engaged. Medical assistants, nurses, and peer health coaches can all be trained to do this. Such coaching is already a well-established model of care for other chronic diseases.
- Building standardized clinical processes and a training model to spread that process.
- Optimizing available funding. Clinics could become certified by Drug Medi-Cal, to enable billing for addiction counselors (who are not Medi-Cal providers).[16] Federal funding sources will be increasingly available (such as the large addiction integration grants announced by HRSA in March 2016).[17] New alternative payment models will allow more opportunities for use of teams and ancillary staff.[18]
- Leveraging telehealth resources. Virtual visits and consultations can bring specialty help to remote areas of the state.

In concluding the day's discussions, Pfeifer reflected on the shared optimism of the experts who participated in the convening. The barriers are significant, she said, but so is the growing commitment to making a change. What used to be marginalized and stigmatized — care of addiction — is now taking center stage. Addiction treatment is a priority for the Obama Administration, for the presidential candidates, for state agencies, and for local coalitions, she said.

"The maps of California's opioid deaths and treatment access can look significantly different three years from now."

— Kelly Pfeifer, MD
director of High-Value Care, CHCF

About the Author

Susan Anthony is a health care editor and writer.

About the Foundation

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

CHCF informs policymakers and industry leaders, invests in ideas and innovations, and connects with changemakers to create a more responsive, patient-centered health care system.

For more information, visit www.chcf.org.

Resources

Buprenorphine: Questions and Answers
www.chcf.org (PDF)

California Department of Health Care Services: Drug Medi-Cal Organized Delivery System
www.dhcs.ca.gov

Changing Course: The Role of Health Plans in Curbing the Opioid Epidemic
www.chcf.org

Complex Care
www.complex.care

Opioid Safety Coalitions Network
www.chcf.org/oscn

Recovery Within Reach: Medication-Assisted Treatment of Opioid Addiction Comes to Primary Care
www.chcf.org

Webinars:

Expanding Access to Buprenorphine in Primary Care Practices
www.chcf.org

Opioid Safety Coalitions: Is Buprenorphine for Pain a Safer Alternative to High-Dose or Long Term Opioid Use?
www.chcf.org

Endnotes

1. "Prescription Opioid Misuse and Overdose," California Department of Public Health, last modified September 9, 2015, www.cdph.ca.gov.
2. Barbara Masters and Mary Rainwater, "Recovery Within Reach: Medication-Assisted Treatment of Opioid Addiction Comes to Primary Care," California Health Care Foundation, March 2016, www.chcf.org.
3. CURES (Controlled substance Utilization Review and Evaluation System) is a database of all controlled medications dispensed in California.
4. Alexander Y. Walley et al., "Office-Based Management of Opioid Dependence with Buprenorphine: Clinical Practices and Barriers," *Journal of General Internal Medicine* 23, no. 9 (September 2008): 1393-8, doi:10.1007/s11606-008-0686-x.
5. Medi-Cal does not require prior authorization (Treatment Authorization Requests or TARs) when using buprenorphine for addiction, but does require it for pain. For details, see "Webinar Questions and Answers – Expanding Access to Buprenorphine in Primary Care," www.chcf.org.
6. Karen Dugosh et al., "A Systematic Review on the Use of Psychosocial Interventions in Conjunction with Medications for the Treatment of Opioid Addiction," *Journal of Addiction Medicine* 10, no. 2 (March/April 2016): 91-101, doi:10.1097.ADM0000000000000193.
7. Methadone treatment for addiction is highly regulated. It is possible for a primary care office to become certified to deliver methadone treatment for addiction as part of primary care, although many more regulations are involved than with buprenorphine.
8. "Lawmakers Are Finally Sobering Up to the Reality of Opioid Addiction," *Washington Post*, March 17, 2016, www.washingtonpost.com.
9. Colleen T. LaBelle et al., "Office-Based Opioid Treatment with Buprenorphine (OBOT-B): Statewide Implementation of the Massachusetts Collaborative Care Model in Community Health Centers," *Journal of Substance Abuse Treatment* 60 (January 2016): 6-13, doi:10.1016/j.jsat.2015.06.010.
10. At the time of publication, California permits certain categories of clinicians to bill Medi-Cal for visits — such as physicians, physician assistants, nurse practitioners, nurse midwives, licensed clinical social workers, and psychologists, and excludes others, such as nurses. Current legislation proposes to add marriage and family therapists as Medi-Cal providers.
11. A recommended film is *The Hungry Heart*, which provides an intimate look at opioid addiction through the world of Vermont pediatrician Fred Holmes. Holmes, who has known many of his patients since they were young children, uses suboxone in his practice. For more information about the film, visit thehungryheartmovie.org.
12. Kate M. Dunn et al., "Opioid Prescriptions for Chronic Pain and Overdose: A Cohort Study," *Annals of Internal Medicine* 152, no. 2 (January 19, 2010): 85-92, doi:10.7326/0003-4819-152-2-201001190-00006.
13. "The Opioid Crisis: Facts That News Coverage Is Missing," Health News Review, January 27, 2016, www.healthnewsreview.org.
14. Erin Johnson et al., "Unintentional Prescription Opioid-Related Overdose Deaths: Description of Decedents by Next of Kin or Best Contact, Utah, 2008-2009," *Journal of General Internal Medicine* 28, no. 4 (April 1, 2013): 522-9, doi:10.1007/s11606-012-2225-z.
15. Richard Hallinan et al., "Erectile Dysfunction in Men Receiving Methadone and Buprenorphine Maintenance Treatment," *Journal of Sexual Medicine* 5, no. 3 (March 2008): 684-92, doi:10.1111/j.1743-6109.2007.00702.x, onlinelibrary.wiley.com.
16. "Drug Medi-Cal (DMC) Treatment Program," California Department of Health Care Services, last modified February 26, 2015, www.dhcs.ca.gov.
17. "California FY2016 Substance Abuse Service Expansion Awards," Health Resources and Services Administration, bphc.hrsa.gov.
18. "Payment Reform: Overview," California Primary Care Association, www.cpca.org.