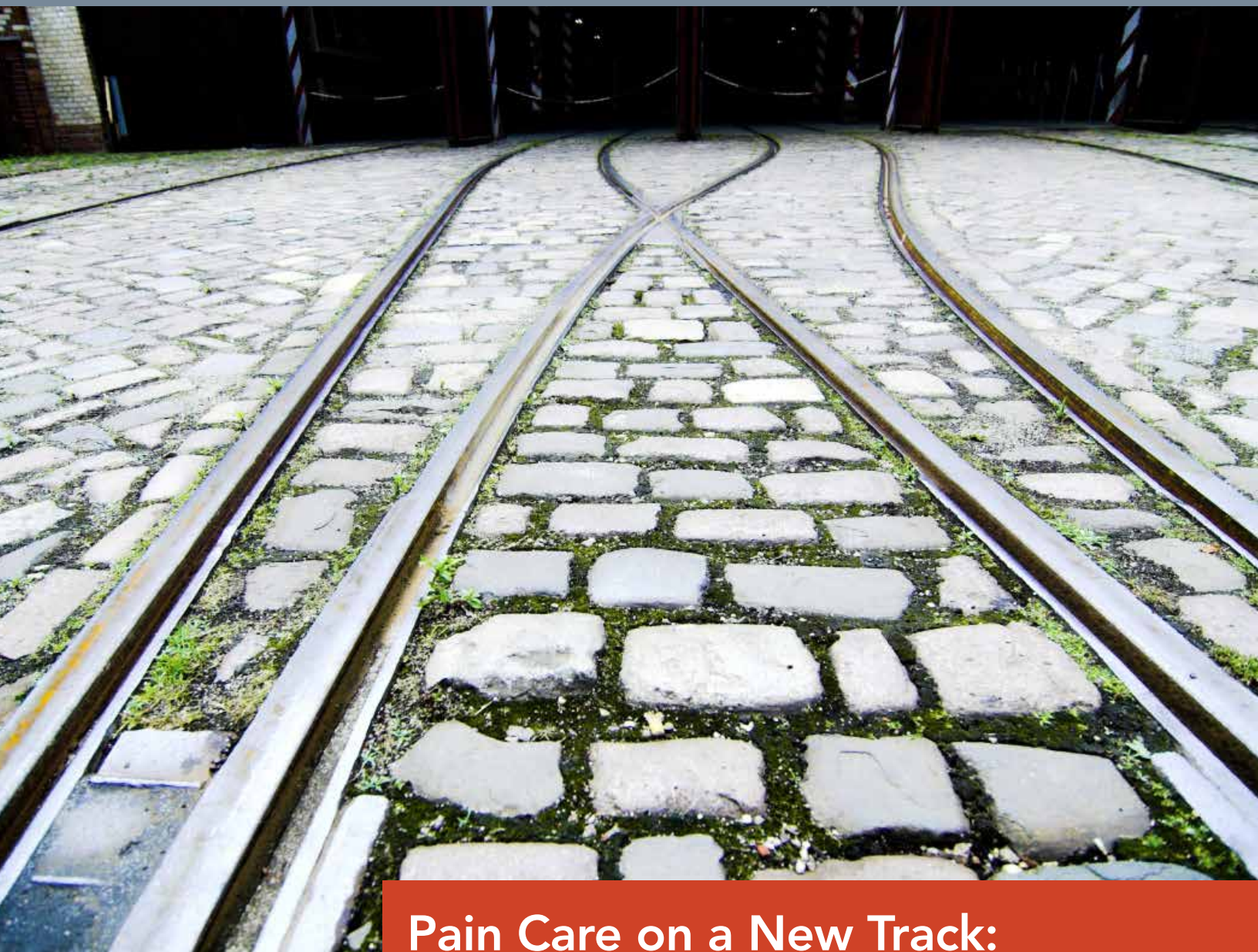




California Health Care Foundation



Pain Care on a New Track: Complementary Therapies in the Safety Net

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Introduction

Each year, more than 100 million Americans report experiencing chronic pain, which is associated with lower quality of life, loss of productivity, and billions of dollars in related societal costs in addition to the costs of medical treatment for pain.¹ In the US, primary care practitioners (PCPs), rather than specialists, manage the largest proportion of patients with chronic pain and prescribe the largest proportion of opioid medications.² Since the 1990s, the use of opioid analgesics for chronic pain has increased dramatically, as has opioid misuse and overdose. Among PCPs who treat patients with chronic pain, a disproportionate number practice in safety-net clinical settings, where low-income, vulnerable patient populations experience a high prevalence of chronic pain, substance use, and barriers to substance use treatment.³

Recognition of the risks of opioid analgesics used for chronic pain, coupled with studies demonstrating their lack of efficacy, has led to a movement to reduce their use for treating chronic pain.⁴ At the same time, limitations in the safety and efficacy of alternative pharmacologic treatments, such as nonsteroidal anti-inflammatory drugs (NSAIDs) and neuropathic agents, and a greater understanding of chronic pain as an illness characterized by abnormalities in brain hormones and mood, and impaired functioning, have encouraged multidisciplinary approaches to treatment.⁵ In particular, strong evidence that treatment of mental health conditions improves pain outcomes has led the American Pain Society to recommend multidisciplinary strategies with behavioral health components for the treatment of chronic noncancer pain (CNCPP).⁶

Multidisciplinary Pain Programs

Considered the gold standard for chronic pain treatment when standard medical therapy has failed,⁷ multidisciplinary pain programs are defined by the Agency for Healthcare Research and Quality (AHRQ) as treatment that includes medical therapy, behavioral therapy, physical reconditioning, and self-management education.⁸ Some also use the term “interdisciplinary pain models” to describe multidisciplinary teams that directly collaborate on a pain patient’s treatment plan, or teams working in the same geographic location.

Agnes’ Story: Alternatives to Opioid Pain Medications for Medi-Cal Enrollees?

Agnes, a 64-year-old African American woman, is insured through Medi-Cal and receives her primary care at a federally qualified health center near her home. She had a stroke last year, has chronic kidney disease, and suffers from severe chronic pain resulting from osteoarthritis of her knees and hips. At more than 200 pounds, she is considered obese.

She tried acetaminophen, gabapentin, and topical pain ointments, but these medications did not relieve her pain. She now takes hydrocodone with acetaminophen, but even this stronger medication is only minimally helpful, and she’s unhappy with its side effects. After her husband of 40 years passed away, Agnes’ symptoms worsened. She is now experiencing not only increased pain but also fatigue, poor sleep, and depressed mood, and she has gained weight.

A few months ago, Agnes’ primary care practitioner (PCP) referred her to physical therapy, which seemed to help. Agnes is talking with her PCP about other ways to treat her pain symptoms and to improve her health. Her PCP would like to refer her to acupuncture or another complementary therapy for her chronic pain but is not aware of the options available to Agnes because of her limited financial resources and public insurance.

What can Agnes’s PCP and clinic do to make multidisciplinary treatments available to patients like Agnes?

Multidisciplinary programs proliferated in the 1980s and 1990s, but the total number of clinics with such programs has decreased in recent years due to challenges in obtaining insurance reimbursement for intensive services, especially in Medicaid, and greater payer emphasis on pharmacologic treatments for chronic pain, which insurers perceive as costing less.⁹

This report focuses on the management of chronic pain in safety-net clinical settings, which the Institute of Medicine defines as “those settings that offer care to patients regardless of their ability to pay for services, and [for which] a substantial share of patients are uninsured, Medicaid, or other vulnerable patients.”¹⁰ Compared to patients in non-safety-net settings, those receiving care

Glossary

The following terms are relevant to pain treatment and multidisciplinary care, as used in this paper.

Behavioral health. Broadly, services that encompass the treatment of mental health conditions and substance use disorders.

Complementary and alternative medicine. Complementary and alternative medicine is the popular term for health and wellness therapies that have not been part of conventional western medicine. “Complementary” refers to treatment used with conventional medical care and “alternative” to treatments used instead of conventional medical care.

Functional restoration program. Any of a variety of pain rehabilitation programs that are characterized by intensive graded exercise and multidisciplinary pain management with integrated behavioral health and case management services.

Integrated behavioral health care. “The care a patient experiences as a result of a team of primary care and behavioral health clinicians, working together with patients and families, using a systematic and cost-effective approach to provide patient-centered care for a defined population. This care may address mental health and substance abuse conditions, health behaviors (including their contribution to chronic medical illnesses), life stressors and crises, stress-related physical symptoms, and ineffective patterns of health care utilization.”¹¹

Integrative medicine. A medical approach that combines complementary and alternative medicine with traditional Western medical treatments in the same location, and sometimes with the same provider.

Integrated services. Coordinated multidisciplinary services within a comprehensive treatment program, structured communication among team members and, frequently, colocation of providers and treatment.

Multidisciplinary pain program. A program that includes four components: medical therapy, behavioral therapy, physical reconditioning, and education with a focus on self-management.

Multidisciplinary services. Involvement of several health care providers from different disciplines (medical, mental health, physical therapy, etc.) within a health care team.

Shared medical appointments (SMAs). Also called shared medical visits or group medical visits, SMAs deliver multidisciplinary treatments in a group setting to patients who share the same chronic medical condition.

Standard medical care for pain. Care that includes any or all of the following: a focused history and physical examination, diagnostic imaging for the underlying cause of pain (when indicated), education on pain, pharmacological management with analgesics and anti-inflammatory agents, referral to physical therapy, and the use of modalities such as heat/ice and behavioral modifications.

in safety-net clinical settings experience a higher burden of psychosocial stressors, including limited financial resources, racial and ethnic discrimination, and poor access to treatment for mental health conditions and substance use disorders.¹² These factors can exacerbate chronic pain symptoms. Although safety-net clinicians care for a large proportion of chronic pain patients in the US, they face particular barriers in their ability to provide multidisciplinary pain treatment.

The report summarizes interviews and site visits with leaders of California safety-net clinics and health care systems that are implementing creative multidisciplinary approaches in the treatment of chronic pain, as well as

selected out-of-state health centers. (See Appendix A for details on methodology and Appendix B for a list of interviewees.) To develop a set of best practices for safety-net clinics interested in implementing similar treatment models, the report addresses the following questions:

- ▶ Which chronic pain treatment models in safety-net clinics have been successful in enrolling and retaining patients in treatment?
- ▶ Have these models been evaluated and, if so, what are the results?
- ▶ How are safety-net providers structuring sustainable payment models for chronic pain services?

Limited Research on Multidisciplinary Pain Programs in the Safety Net

Research has shown the effectiveness of multidisciplinary pain programs, but only a few of these studies have been conducted in safety-net clinical settings. Researchers identified eight articles that describe multidisciplinary pain programs in clinical settings serving vulnerable or safety-net populations.¹³ All of these studies were observational or descriptive of pilot programs; none were randomized controlled studies. Studies that presented data on evaluation of their programs used pre- and post-survey design; none employed a control group. Studies included a mean number of 63 participants in evaluation. Half of the studies used validated pain and functional status scales; half provided qualitative or quantitative data on satisfaction alone. The studies that reported outcomes demonstrated improvements in pain, depression, and self-efficacy (an individual's confidence in his or her ability to self-manage various aspects of health associated with pain, such as pain symptoms, fatigue, distress, and disability), although these outcomes were generally measured over short follow-up periods.

To help increase the body of research on this topic, future studies should evaluate multidisciplinary pain models that can be delivered to safety-net patient populations with chronic pain. This report seeks to expand on available information on this subject.

Findings

Challenges

Safety-net providers reported facing a number of challenges in their efforts to care for patients with chronic pain, including fragmented systems of care, inadequate payment options for components of multidisciplinary care, and a lack of treatment options for individuals suffering from comorbid chronic pain and addiction.

Fragmented Systems of Care for Chronic Pain

Clinicians interviewed for this report said that most pain treatment plans are not integrated, and thus include diagnostic and management input from multiple providers at different locations. Some patients have difficulty navigating and following a complex treatment plan when many different clinicians are involved. In addition, even

when a multidisciplinary model is in use, it often involves referral-based clinics that are not located in the patient's safety-net primary care clinic. In this context, a PCP might struggle to communicate effectively with specialist pain care providers. Moreover, the PCP might not participate directly in pain treatment, confusing the patient and limiting the PCP's ability to reinforce self-management messages. Finally, some clinicians noted that patients' lack of confidence in non-opioid treatment limits their willingness or ability to receive other potentially beneficial interventions, including mental health treatment, physical therapy, and complementary and alternative treatments, particularly if non-opioid treatments require traveling to a new location or establishing a relationship with a new clinician.

Inadequate Payment Systems for Components of Multidisciplinary Pain Care

Safety-net clinical leadership repeatedly noted that inadequate insurance coverage is a barrier to delivering multidisciplinary pain care. In addition, there are limited or no reimbursement options for exercise- or movement-based therapies or for complementary and alternative therapies. There are also limits on coverage for more traditional therapies, such as physical and occupational therapy and mental health counseling. This lack of coverage is magnified for low-income patients receiving care in safety-net clinical settings because they often do not have financial resources to pay out-of-pocket medical costs they might incur seeking care not covered by Medicaid.

Lack of Treatment Options for Management of Comorbid Chronic Pain and Addiction

While PCPs are familiar with guidelines for avoiding the use of opioid analgesics for patients with co-occurring substance use disorders, many reported that alternative pharmacological treatments for patients with both a substance use disorder and pain are limited, either due to health plan formulary restrictions, or patient co-morbidities (such as liver, kidney, or heart disease — all common in patients with addiction histories). Many clinics have limited access to behavioral or complementary therapies that accommodate the needs of patients with both chronic pain and addiction. Although a growing body of literature is finding improved pain relief and function with buprenorphine after conversion from other long-acting opioids,¹⁴⁻¹⁶ many clinicians are unaware of buprenorphine's analgesic properties, since (until recently) no formulations were FDA-approved for pain. Many clinicians

are also unaware that buprenorphine can be prescribed for pain diagnoses without a waiver or special training.¹⁷ Finally, patients may not believe that their opioid misuse or loss of control over opioid use constitutes a substance use disorder, and may be less likely to accept treatment with buprenorphine, unless clinicians are able to make the case for its benefit in pain and improved function.

Clinicians also struggle to communicate openly with patients on issues of substance use, and patients hesitate to disclose substance use due to fear of judgment, stigma, or criminal repercussions (since confirmation of substance use can put jobs or custody at risk, or can result in criminal convictions). In this setting, PCPs often feel isolated and restricted in their options to treat comorbid pain and addiction.

Common Elements of Innovative Chronic Pain Programs

Several program concepts that address chronic pain treatment have been implemented in safety-net clinical settings.

Shared Medical Appointments (SMAs) for Chronic Noncancer Pain (CNCPP)

The majority of clinics interviewed for this report had implemented versions of SMAs for patients with chronic pain. For some clinics, SMAs were the only intervention for chronic pain other than traditional one-to-one visits with a PCP.

In an SMA, participants discuss behavioral adaptations that improve pain symptoms and learn physical movement skills. The group setting allows patients to share experiences with others who have similar symptoms and functional limitations. Proponents of SMAs believe that they deliver targeted and efficient patient education on chronic pain, encourage a focus on self-management skills that enhance patient empowerment in managing chronic disease, and create an environment of social support.

In the specific safety-net clinics studied for this paper, SMAs met on a weekly or biweekly basis for 60 to 90 minutes. The duration of the program also varied: Some clinics offered a rotating curriculum and closed group format, in which a set group of patients would commit to attending a specific number of meetings; others offered an open drop-in model where patients could

The Basics of Shared Medical Appointments

Shared medical appointments (SMAs) are a type of group visit where members of a health care team treat a group of 10 to 15 patients together. SMAs vary considerably from clinic to clinic in terms of the frequency and duration of group meetings and the duration of the group program itself. However, SMAs are typically longer than a one-to-one visit with a clinician and include a discussion of shared experiences and interactive group discussion. The majority of SMAs focus on education regarding a chronic disease topic and an emphasis on self-management techniques. In general, SMAs are designed to improve clinic efficiency, increase patient satisfaction, and improve patient self-management. Studies on SMAs for diabetic patients suggest positive effects on patient experience and lower health care utilization, but less is known about their efficacy for treating chronic pain.¹⁸ Billing specifications for SMAs depend on the insurance payer and require discussion with the payer to identify the appropriate billing codes. Medi-Cal does not cover shared medical visits, many clinics with high Medi-Cal populations pull patients out of the group for a brief individual visit. Although the group sessions are not covered, the clinic can bill for the medical face-to-face encounters.

join the group at any time. Though open drop-in models afforded the most flexibility for patients, they required creative adaptations to a rolling curriculum and did not allow for the group bonding that many leaders identified as an essential feature. On the other hand, drop-in groups allowed for more patients to participate. Drop-in groups also made greater demands on the moderator since integrating different group members on a weekly basis presented challenges for fostering group cohesion and developing a treatment plan for each patient. In general, the clinics interviewed offered SMAs with voluntary participation without incentives (occasionally clinics provided food or vouchers for transportation; some clinics tied attendance at groups with prescription refills).

For newly established groups, clinics emphasized the importance of patient “buy-in” to the group model. PCP support encouraged patient participation in SMAs. Some clinics asked past group participants to call newly referred patients to encourage them to attend. Clinics sometimes held an informational session where past participants

discussed their experience in the group. The clinics interviewed did not measure drop-out rates, but reported that they were generally low; patients who dropped out usually did so because of life events (death or illness in the family), changes in work obligations, or other issues not related to the pain diagnosis.

The majority of reporting clinics offered SMAs co-facilitated by two providers, at least one of whom was a licensed health care provider (medical or behavioral health). Many clinics had SMAs co-facilitated by a behavioral health clinician and a medical clinician, while others used one licensed health care provider with a co-facilitator trained in a related discipline, such as physical therapy, movement, mindfulness (the practice of bringing awareness or attention to experiences in the present moment), or nutrition. The facilitation of the group by at least one licensed billable provider (medical or behavioral) allows clinics to bill for group visits using individual patient billing codes, since no billing codes exist for SMAs. In the SMA models that billed for individual patient visits, licensed providers completed individual “break-out” sessions with patients to complete a physical exam, to discuss medication management or diagnostic procedures, or to provide more individualized counseling.

Interviewees generally agreed on the benefit of having a facilitator with behavioral health training; behavioral health clinicians often had the best skill set to enhance patient self-management skills for chronic pain. Providers with training in other forms of chronic pain care (physical movement, meditation, nutrition, etc.) were invited to provide instruction as part of the SMA curriculum. Many clinics offered a rotating curriculum of patient education on chronic pain topics: basic neurobiology of pain, medication management, sleep hygiene (simple behavioral skills that patients can use to help initiate and maintain sleep), identifying and avoiding triggers for pain, behavioral adaptations to pain, physical movement techniques, and group-based mindfulness strategies.

Curriculum Based on Mind-Body Medicine

Connie Basch, MD, a family medicine clinician who cares for Medi-Cal (the Medicaid program in California) patients in her private practice clinic in Humboldt County, California, designed a curriculum for chronic pain groups based on mind-body medicine. It involves abdominal breathing, other relaxation techniques, and physical movement. She co-facilitates groups with a therapist who has expertise in guided imagery and mindfulness.

Each session begins with a group relaxation process, followed by a patient check-in during which patients report their current symptoms and mood. Participants are encouraged to maintain a “gratitude journal” charting their symptoms, learning experiences, and strategies for improvement.

Dr. Basch initially made attendance mandatory for her chronic pain patients on long-term opioid therapy; patients were required to attend the group in order to obtain opioid refills. Though she has since eliminated mandatory attendance, she encourages all chronic pain patients to attend. She has found that patients who initially had misgivings about participating in a group often end up enjoying the experience and reporting improvements in their symptoms. She also uses a “buddy system” in which group participants are paired and are assigned weekly check-ins with their buddy to enforce self-management practices. Dr. Basch finds that offering a weekly SMA for her chronic pain patients has the added advantage of allowing her to spend more time with these patients who benefit from higher intensity clinical management.

“Just getting people in the room is 80% of [the job], no matter what curriculum you have planned. They talk to each other, in the group and on the breaks, and magic happens.”

— Connie Basch, MD, medical director
Full Circle Center for Integrative Medicine
Humboldt County

Integrative Pain Management Program

Barbara Wismer, MD, an internist at the Tom Waddell Urban Health Clinic in San Francisco, designed a pilot integrative medicine, group-based model for chronic pain patients called the Integrative Pain Management Program (IPMP). PCPs from other clinics can refer patients with chronic pain on opioid therapy to the program, but participation is optional. The model involves a weekly “home group,” during which patients share their current experiences living with pain with other group participants. Invited experts deliver a pain education curriculum to the home group, including topics related to the origins of pain, medication safety, mindfulness techniques, nutrition, and exercise as therapy. Participants feel that

sharing and learning from other individuals struggling with chronic pain provides them with support and realistic approaches to improve pain.

“I learned as much from the other people in the group as from the people who were invited to teach the different topics.”

— IPMP participant describing the benefits of the group setting

In Dr. Wismer’s IPMP model, public health coaches (who are trainees or volunteers) call patients weekly, checking on their progress and pain symptoms. Patients also can participate in nonpharmacologic treatments or education opportunities outside of their home group, including acupuncture, massage therapy, movement classes, nutrition and gardening groups, and one-to-one visits with a pharmacist employed by the Department of Public Health who attends and teaches at IPMP home groups and schedules individual patient visits. Patients are invited to sign up for these complementary services each week at the home group. The home group continues for 12 weeks, though the clinic has also created a graduate group to allow patients to continue to meet as a group after the home group phase ends, and to sign up for a selection of ongoing integrative medicine services, such as group acupuncture (where a single acupuncturist provides targeted treatment to multiple patients in the same physical space), physical movement classes, and nutrition classes.

Empowerment Model

Jeff Geller, MD, an integrative family medicine physician, leads SMAs at the Greater Lawrence Family Health (GLFH) Center in Lawrence, Massachusetts, where he has been director of integrative medicine and group programs since 2000. GLFH serves a predominantly low-income Latino population (70%) and is the largest group medical visit program in the country, delivering 38 weekly group visits on many topics, including chronic pain. Primary care patients are referred to SMAs by clinicians at GLFH and can participate in multiple groups simultaneously. Group visits are offered in a separate space attached to the clinic’s main building. The chronic pain group uses an open drop-in design facilitated by a medical provider.

GLFH groups use an empowerment model, focused on group support to foster reductions in loneliness and stress. “Empowerment refers to the ability of our patients to build new relationships and try new things,” Geller and colleagues wrote in a 2013 report about the model. “As this model was borne out of the observation that loneliness is an indicator of health status, social interactions are central to the empowerment model group medical visit.”¹⁹ Recently published results from a study of 42 female group participants with chronic pain reported significant improvements in pain scales, general health, social functioning, and mental health.²⁰

Pain Self-Efficacy

Paula Gardiner, MD, an integrative medicine family physician affiliated with Boston Medical Center, designed SMAs (called “integrated group medical visits”) for chronic pain in several urban community health centers. These SMAs offer a nine-week curriculum on chronic pain with a focus on self-management strategies, chair yoga, acupressure, and mindfulness-based stress-reduction techniques. A review of semi-structured qualitative interviews conducted with patient participants described their perspectives on benefits of the groups, including “not feeling alone” in their pain and gains in self-monitoring, self-regulation of symptoms, and the ability to use mindfulness skills to cope with pain.²¹ Dr. Gardiner described the curriculum as focused on pain self-efficacy, with the goal of empowering patients and receiving a patient response along these lines: “I have pain and it’s not going to go away, but the way I live my life allows me to cope. I can have control over that.”

Lessons Learned from Safety-Net SMAs

Clinical leaders who used SMAs emphasized the self-management skills and community-building that patients gain from the group setting. Clinicians also felt that education and skills were delivered more efficiently in a group setting than in a traditional one-to-one visit. Although groups were not an ideal fit for every patient, many patients benefited. In addition, many patients initially resistant to participating in a group found over time that they enjoyed and benefited from the experience. Clinicians emphasized the importance of fostering patient buy-in to the group model. Although clinics did not typically offer concrete incentives, they were able to encourage participation through PCP advocacy, testimonials from past participants, and support from health coaches or buddy systems.

Initiating Chronic Pain Shared Medical Appointments in Safety-Net Clinics

Leaders from safety-net clinics offered concrete tips for setting up shared medical appointments (SMAs) for chronic pain patients:

- ▶ Include a licensed billable provider (usually medical or behavioral) as a facilitator, which allows for individual patient visit code billing; some clinics pull patients out of the group for brief private face-to-face visits during the course of the group.
- ▶ During the initial visit, document social situation, mental health, pain symptoms, and any physical aid devices and provide a brief introduction to the group. Introduce the notion of self-efficacy: “What do you think you need to do to be healthier or to alleviate your pain? Can you do that? Will you do that?”
- ▶ During subsequent group visits, assess changes in pain symptoms, functional status, lifestyle, and mood; develop a plan with the patient for lifestyle changes.
- ▶ Involve a clinician with behavioral health training to (1) teach self-management skills to patients in the SMA, and/or (2) deliver evidence-based mental health treatments within the group setting or through referral to one-to-one services.
- ▶ Develop a curriculum on core educational topics relevant to chronic pain.
- ▶ Choose an open (drop-in) or closed (scheduled attendance) group model and evaluate patient participation and barriers to engagement in the chosen model.
- ▶ Develop a patient check-in system, involving health coaches, a buddy system, or clinical staff, to keep patients engaged in the group and to reinforce core concepts.

Interviewees identified common challenges in the implementation and operation of their SMAs:

- ▶ Lack of staff trained in group facilitation or mediation
- ▶ Lack of patient familiarity with and/or buy-in to group-based treatment
- ▶ Lack of moderator buy-in for open or drop-in group models (which are more difficult to manage because of their changing cast of patients)

- ▶ Excessive charting responsibilities for the clinician involved in billing individual visits associated with shared medical appointments
- ▶ Lack of staff time to make reminder calls, check in patients, and prepare educational materials

With administrative support, health care systems addressed these challenges by recruiting staff with expertise in group facilitation and providing protected time for staff members to prepare and facilitate groups. Some systems had patients check themselves in, record their own weight and blood pressures, and complete symptom review checklists, both to empower patients in their treatment and to reduce staffing demands for the visit. Once SMAs became established at a clinical site, the preparation time burden on staff decreased.

A systematic review of studies evaluating SMAs for all conditions found that most of this research focused on effectiveness in treating diabetes and the management of older adults who were frequent users of health care services.²² There are few studies on nonspecific pain conditions. A family practice clinical inquiry (article summarizing clinical evidence) found that group treatment sessions for low back pain and arthritis demonstrated possible improvements in symptoms.²³ SMAs may be an effective and efficient treatment strategy for chronic pain, but more research is needed to determine which patient populations are most likely to benefit and which SMA models are most effective.

Integrated Behavioral Health (IBH) Services

The Institute of Medicine recommends a chronic pain treatment approach that recognizes and incorporates the biopsychosocial model of pain, a broad view of disease that attributes disease cause and outcome to an interaction of biological, psychological, and social factors that cannot be separated into distinct components (see Figure 1 on page 10).²⁴

This view of disease is familiar to clinicians working in safety-net settings and caring for patients experiencing complex social issues that affect their ability to engage in care and to access and respond to treatments for chronic conditions. In particular, patients with chronic pain often have comorbid mental health conditions, feelings of guilt and shame, financial stressors, and relationship problems related to pain and functional limitations, all of which can benefit from behavioral health interventions.

Figure 1. Biopsychosocial Model of Pain



Notes: *Nociception* is the sensory nervous system's response to intense chemical, mechanical, or thermal stimulation. Nociception triggers physiological and behavioral responses and may result in a subjective experience of pain.

Source: National Association of Community Health Centers and SAMHSA-HRSA Center for Integrated Health Solutions, "Treatment of Chronic Pain: Our Approach," www.integration.samhsa.gov (PDF).

Many clinics interviewed for this report offered IBH services in primary care settings, including a behavioral health provider in their SMAs, believing this fostered education on self-management skills for chronic pain. These IBH services may include:

- ▶ **Cognitive behavioral therapy (CBT)**, a form of psychotherapy that seeks to reorient negative thought patterns about one's self or environment in order to change behavioral patterns
- ▶ **Mindfulness-based stress reduction (MBSR)**, a mind-body approach that teaches awareness and acceptance of physical and emotional discomfort related to pain

- ▶ **Acceptance and commitment therapy (ACT)**, a type of psychotherapy that uses acceptance of pain and mindfulness strategies to improve function, focusing on psychological flexibility, or the ability to change behavior through reflection on thoughts and feelings

IBH services offer advantages for many chronic medical conditions but may be particularly useful for chronic pain. Providers using IBH develop a shared care plan with the patient through which the behaviorist is able to address mental health issues, lifestyle modifications, substance use, and financial issues while also discussing evidenced-based treatment interventions, such as CBT, ACT, or MBSR. Licensed behavioral health providers can bill for

Evidence for Integrated Behavioral Health for Chronic Pain

A strong body of published research provides the evidence base for treating chronic pain with cognitive behavioral therapy, mindfulness-based stress reduction, and acceptance and commitment therapy.

Cognitive behavioral therapy (CBT):

- ▶ A 1993 Cochrane Systematic Review of CBT found small to moderate positive effects on chronic pain (excluding headache), functional disability, mood, and pain catastrophizing (a negative response to anticipated or actual pain), but at long-term follow-up only the effects on mood persisted.²⁵
- ▶ Recent studies show long-term improvements in pain and functioning for patients who receive CBT for chronic low back pain.²⁶
- ▶ CBT has been shown to be cost-effective in the treatment of chronic low back pain.²⁷

Mindfulness-based stress reduction (MBSR):

- ▶ A critical review of the literature on MBSR for chronic pain included evidence of decreases in pain intensity, with the improvements maintained over time.²⁸
- ▶ Two randomized controlled trials have examined MBSR (or a mind-body program adapted from MBSR) for low back pain, showing improvements in functioning and long-term pain.²⁹

Acceptance and commitment therapy (ACT):

- ▶ Reviews of the literature report that the quality of evidence is low, but ACT appears to have small positive effects on pain and quality of life and possibly a greater impact on mood symptoms than with MBSR for chronic pain.³⁰

visits and have similar clinical productivity and revenue generation as medical providers.

Examples of Integrated Behavioral Health in Safety-Net Clinics

Santa Cruz Community Health Centers created IBH services in primary care clinics several years ago and have recently emphasized chronic pain treatment in their approach to collaborative primary care. PCPs refer patients with chronic pain to the IBH team, and clinicians

then work together to develop a patient care plan. The shared care plan often addresses mental health issues and the patient's expectations about symptoms and functioning while living with chronic pain; the plan also provides logistical support for the patient, such as obtaining assistive devices, applying for disability, and getting approval for adaptations in the work place.

San Mateo Medical Center (a public hospital and clinic system) offers a new multidisciplinary pain clinic modeled on a functional restoration program (see Glossary) that combines medical therapy, graded exercise, and behavioral health treatments. Each San Mateo team includes two physiatrists (physicians specializing in physical medicine and rehabilitation), a psychiatrist with training in mindfulness and hypnosis, two psychologists, a nurse practitioner, and mental health clinical interns. Each patient receives a full psychiatric assessment that includes recommendations to the PCP for treatment of any comorbid mental health conditions. One of the psychologists focuses on the relationship between chronic pain and experiences of emotional trauma and how mind-body techniques can be used to control and diminish pain symptoms. Although the clinic has not yet been evaluated, clinic leaders say that patients report less pain and improved function after participation in this multidisciplinary program.

"We operate on a ratio concept where our goal is to have one behavioral health provider for every two PCPs. We have worked on culture change in our system so that we can offer true team-based care where medical providers and behavioral health providers collaborate to implement treatment goals."

— Holly Hughes, LCSW, behavioral health director
Santa Cruz Community Health Centers

Challenges in Implementing Integrated Behavioral Health Services

Clinic leaders interviewed for this report acknowledged challenges in implementing IBH services, including finding and funding an adequate number of behavioral staff members, and finding enough clinical space to provide primary care and behavioral health services at the same

location. Resolution of these challenges required support from clinical and administrative leadership to allocate space and fund staff positions. In addition, interviewees reported that clinical collaboration often required changing culture at the clinic, which in turn required time investment and modeling by clinic leaders. In particular, PCPs may not initially recognize all of the services and skills behavioral health providers can offer to chronic pain patients and may not perceive or accept behavioral health providers as equal members of a patient's chronic pain treatment team. For the most effective collaboration, interdisciplinary teams need to have adequate protected time to discuss the patient's care plan. Overall, interviewees emphasized that once the implementation challenges have been met, the benefits of IBH services can extend beyond chronic pain treatment, providing an infrastructure and workflow for treatment of many other chronic medical conditions.

Integrative Medicine Services

Many clinic staff members interviewed for this report described both patient and clinician interest in expanding access to integrative or complementary and alternative medicine treatments for chronic pain. These treatments may include: acupuncture, chiropractic services, mindfulness-based groups, yoga and other physical movement modalities, osteopathic manual medicine, and massage therapy. However, clinicians at the sites also reported limited patient access to such services due to cost, distance to location of integrative services, and lack of insurance coverage. Clinic models that delivered these services on-site were able to reduce both geographic and financial barriers for patients.

Examples of Clinics Offering Integrative Medical Services

Licensed acupuncturist Kate Lewis, supervisor at West Berkeley Lifelong Medical Care, described her clinic's implementation of acupuncture services. A former medical director had promoted integrative medicine services as a component of the clinic's response to the crisis in opioid misuse for chronic pain, which allowed the services to be established. Lifelong designed a clinical visit procedure that pairs an acupuncturist with a licensed medical provider to see a patient for a medical appointment. The medical clinician may adjust medications, administer preventive health interventions, and discuss the treatment plan, while the acupuncturist delivers targeted acupuncture treatment for the patient's complaint. The visit is billed under the licensed provider as a

traditional clinical visit. Because scheduling such paired visits is logistically challenging, Lifelong is only able to schedule acupuncture services coinciding with a licensed medical clinician visit 30% of the time that acupuncture is provided to patients; the clinic provides the remainder of acupuncture services to patients free of charge. With the addition of acupuncture as a Medi-Cal benefit in the 2016 California budget, pairing these visits will no longer be necessary. The success of the program depends on support from Lifelong's administrative leadership and on advocacy from clinical staff and the patient advisory council. Acupuncture services are popular and the clinic can't keep up with the demand; even with three acupuncture sessions per week, there is a three-month waiting list.

Steven Chen, MD, family medicine physician and medical director of the Hayward Wellness Center in Alameda County, California, described the services his clinic offers for chronic pain, including acupuncture, mindfulness-based groups, yoga, osteopathic manual medicine, and SMAs. When acupuncture is done by medical clinicians certified in medical acupuncture, visits can be billed in much the same way as any other medical visit. Although having medical clinicians provide acupuncture simplifies billing, it also means a corresponding loss of provider productivity (combined medical and acupuncture visits take longer). Clinic rooms are often not appropriately designed for acupuncture services. After designing its new multipurpose clinical site, however, the center is better able to offer acupuncture visits, group visits, and nutrition and cooking education classes on-site. Dr. Chen reported that his earlier work experience in technology and business benefited him when he made the case for integrative services at the Hayward center. In his business plan, he used Lean methodology, which seeks to eliminate waste and improve efficiency, and specified staffing needs, patient visits, equipment, and provider education.³¹ His strategy is supported by administrators and staff, and currently the clinic receives high patient satisfaction ratings for its services.

Myles Spar, MD, MPH, director of integrative medicine at Venice Family Clinic in Los Angeles County, collaborates with local acupuncture and massage therapy schools to offer services to patients who are uninsured or who are insured through Medi-Cal. Dr. Spar, an internist with fellowship training in integrative medicine, sees patients for integrative medicine consultation, often in collaboration with providers from other disciplines (acupuncture, massage, chiropractic). He described his motivation to gain

additional training in integrative medicine: “When I left medical training, I felt equipped to treat roughly half of patient issues, but the other half, having to do with behavior change, stress, exercise, and nutrition, I had little or no training in.” He completed a fellowship in integrative medicine at the University of Arizona and then worked to incorporate integrative services at the Venice Family Clinic. The clinic is able to bill for one-to-one integrative medicine services provided by Dr. Spar, but it does not bill for any visits for acupuncture, chiropractic services, or massage. Instead, these services are provided through volunteers from local training programs.

The Integrative Pain Management Program at the Tom Waddell Urban Health Center in San Francisco (described in detail on page 7) includes group sessions for acupuncture, mindfulness, and massage, and individual acupuncture and massage therapy visits provided outside of the group. One participant described how he had previously considered massage therapy and acupuncture “quackery,” but “now I am a disciple of both, three times a week, the more the better!” The program is currently supported by the San Francisco Department of Public Health and will be evaluated to determine efficacy and potential for expansion. The clinic is not currently billing for these services.

Chiropractor Michel Tetrault, DC, currently based in the Philippines, leads a management service organization (MSO) that consults with FQHCs to install and maintain chiropractic departments. Chiropractors are considered qualified physicians under Medicaid and Medicare. Medicare considers fees for acute and chronic spinal manipulation services reimbursable. Although chiropractic services are currently not a Medicaid benefit in California (other than special categories such as pregnant women), FQHCs operate under federal rather than state rules, and so they may offer and bill for chiropractic visits, up to two per calendar month, and bill for these visits through the prospective payment system. In FQHCs where chiropractic services have been implemented, patients may self-refer or be referred by their PCP. The FQHC contracts with an MSO to provide chiropractic services on-site in the primary care clinic. The FQHC bills for the chiropractic services and then reimburses individual chiropractors through the MSO. Only a minority of clinics sampled for this report had implemented integrated chiropractic services, but many expressed interest in expanding this service as another strategy for integrated chronic pain treatment.

Evidence for Integrative Medicine Modalities for Treating Chronic Pain

A number of published studies provide the evidence base for treating chronic pain with integrated medicine modalities.

Acupuncture:

- ▶ A systematic review of randomized clinical trials evaluating acupuncture for chronic low back pain demonstrated that acupuncture was more effective than usual care (or no intervention) in relieving pain and improving functional status.³²
- ▶ Another systematic review found moderate-quality evidence that acupuncture is more effective than sham acupuncture (acupuncture at nonacupoint positions or noninsertive simulative acupuncture, used as a control in scientific studies) in reducing short-term pain for both chronic neck and low back pain.³³
- ▶ In a large meta-analysis, acupuncture was superior to both sham and no-acupuncture controls for multiple pain conditions (neck and back pain, osteoarthritis, shoulder pain, headache) with similar effects for different etiologies of pain.³⁴
- ▶ Evidence exists for a dose-response with acupuncture: a greater number of needles applied and visits correlates with improved treatment response.³⁵

Massage Therapy:

- ▶ Massage therapy may be beneficial for chronic back pain based on several systematic reviews, but the strength of the evidence is weak.³⁶

Chiropractic:

- ▶ A systematic review of the effectiveness of chiropractic services for low back pain began in 2015, but results are not yet available in the peer-reviewed literature.³⁷
- ▶ There is moderate-quality evidence for the efficacy of spinal manipulation, defined broadly, for chronic back pain.³⁸

Challenges in Implementing Integrative Medical Services

Clinics identified a number of challenges in providing integrative medicine services, including:

- ▶ The inability to bill for visits unless services are provided by licensed billable clinician (MD, nurse practitioner, physician assistant, or doctor of chiropractic)
- ▶ A shortage of health care providers trained in both allopathic medicine and complementary and alternative techniques
- ▶ Primary care clinic spaces that are not conducive to delivering such services

Most interviewees, however, felt that these challenges could be overcome and shared that patients and clinicians reported high levels of satisfaction with these services and anecdotal success in improving pain and functional status and in reducing reliance on opioid medications.

Physical Movement Services

The majority of clinics and systems reviewed for this report refer patients to physical and occupational therapists as part of their traditional workflow for patients with chronic musculoskeletal pain. Physical movement therapies for chronic pain include yoga, Qi Gong, Tai Chi, and the Alexander Technique. Tai Chi and Qi Gong are movement practices intended to improve balance and core strength, reduce stress and pain, and promote mindfulness. The Alexander Technique, a method taught to patients to improve self-care and self-efficacy, focuses on alignment of the spine and enhancement of the patient's ability to correct errors in posture and movement.

Some clinics offer enhanced physical movement therapies for chronic pain through SMAs or as drop-in classes available to all primary care patients. For example, Vista Family Health Center in Santa Rosa offers a mindful movement SMA for patients with chronic pain with a rotating 12-week curriculum. The group is co-facilitated by a physician and a yoga instructor with experience in adapting yoga for chronic pain. Participants range in age from 20 to 70 years, many with good functional status, but others with significant mobility impairment. Jessica Les, MD, described her experience leading the physical movement group as “the only effective modality I’ve experienced as a physician that has the potential

to not only reduce patient’s pain but also has the power to transform a person’s relationship to stress, their body, and the experience of pain.” Petaluma Health Center is another clinic offering SMAs that integrate physical movement options, such as gentle yoga, Qi Gong, Tai Chi, and simple stretching. The center also offers community fitness classes in the clinic movement room; some of these classes are free to patients, while others require a small fee (\$3 to \$5).

“Mindful movement has given me the tools I need to cope (or even stop) the chronic pain I’ve experienced for eight years. Not only has my pain decreased, but my awareness of how to closely monitor my body, to pay attention to my posture, and how to breathe through not only the pain, but through other trying situations in my life. I’m finally feeling centered for the first time in many years! I finally like being ‘in’ my body and enjoying doing things I have not been able to in years”

— Participant in the Vista Family Health Center mindful movement group

Many clinical settings offer classes through collaboration with local training programs. The Venice Family Clinic’s chronic pain program, for example, offers yoga classes through collaboration with a local university master’s program. Similarly, the Sierra Medical Clinic, a full-service medical, behavioral health, and dental facility in Nevada City, offers yoga and other physical movement classes to patients through collaboration with local training programs.

Finally, San Mateo Medical Center’s functional restoration program involves a combination of two physiatrists working directly with patients and physical movement treatments, which include both individual physical therapy and group-based physical movement modalities, such as yoga, Tai Chi, and aquatic therapy.

Evidence for Yoga, Tai Chi, Qi Gong for Treating Chronic Pain

- ▶ Conflicting evidence exists for the efficacy of meditative movement therapies.
- ▶ A systematic review in *Pain Medicine* included a weak recommendation for Tai Chi and yoga for general chronic pain symptoms but concluded there was inadequate evidence to recommend Qi Gong for chronic pain.³⁹
- ▶ One review described a possible benefit of Tai Chi and yoga for chronic back pain, but the strength of evidence is low.⁴⁰ Another review found evidence that yoga, Tai Chi and Qi Gong all improved health-related quality of life in patients with low back pain.⁴¹
- ▶ A systematic review and meta-analysis of randomized controlled trials showed positive evidence for Tai Chi for pain caused by osteoarthritis of large joints, but weaker evidence for low back pain.⁴²
- ▶ A recent randomized clinical trial found that the Alexander Technique led to reductions in pain at 12 months for patients with chronic neck pain.⁴³
- ▶ A systematic review of studies of the Alexander Technique found that Alexander Technique lessons led to long-term improvements in chronic back pain.⁴⁴

Substance Use Treatment Services

The increasing incidence of opioid use disorder has led many clinics to start integrating substance use treatment into primary care, using both pharmacologic and behavioral approaches, fueled by new federal funding opportunities.⁴⁵

Central City Concern in Portland, Oregon, an agency devoted to preventing and ending homelessness, runs supportive housing services, health services, and specialized services in mental health and addiction. Over the last few years it has increased its services for chronic pain, beginning with a controlled substances review committee and later combining an addiction and chronic pain program within its largest primary care clinic. (For more details, see Examples of Innovative Pain Programs below.)

Highland Hospital's Functional Restoration Clinic in Oakland offers consultation services to PCPs caring for

high-risk patients on long-term opioid therapy. PCPs within the Alameda County Health System refer patients to this clinic, where the vast majority are transitioned from full agonist opioid therapy to sublingual buprenorphine for the treatment of chronic pain. Patients receive care from a multidisciplinary team including a physical therapist, a licensed clinical social worker with expertise in chronic pain and substance use, a nurse practitioner with expertise in buprenorphine and chronic pain, and a physician who is board-certified in emergency medicine, addiction, and pain management. The clinic has been successful in reducing patient use of full agonist opioids, reducing concurrent substance use, and improving functional status and pain. Clinicians at this clinic report challenges in facilitating continuity of care after initial stabilization, related to patient resistance in returning to their primary care provider after the intensive experience in the clinic, and because some PCPs lack experience in prescribing buprenorphine. Alameda County is responding to this issue by mandating that all 42 safety-net clinics in the county develop buprenorphine-prescribing capacity as a condition of ongoing funding.

The A. F. Williams Family Medicine Center, an academic clinic serving Medicaid patients in a low-income area of Denver, Colorado, developed a program embedded within a primary care clinic to manage comorbid substance use and chronic pain. Patricia Pade, MD, an internist and addiction medicine specialist recruited by the University of Colorado to start an addiction medicine fellowship, started the pain and substance use program. Primary care providers can refer patients to the program's services, which include review of a patient's pain and substance use history, consideration of buprenorphine/naloxone for pain and opioid dependence, and refinement of full agonist opioid therapy with monitoring and use of adjunctive treatments (e.g., physical therapy, alternative medications, group-based therapies).

Roxanne Cook, nurse coordinator of the Williams Center program, described the benefits of having extra time to devote to this issue outside of the traditional 20-minute primary care visit: "There is a huge difference if a physician enters an exam room and announces a plan to decrease opioids or to move a patient towards suboxone (buprenorphine) in a 15- to 20-minute time frame, instead of having the benefit of 40 minutes to really engage the patient (and family too) in the treatment plan." Removing the burden of pain management from the PCP and allowing the pain program to spend a longer time with the

patient focused on chronic pain increased both patient and clinician satisfaction. Preliminary outcomes for 148 patients with comorbid substance use and chronic pain showed that more than 25% were transitioned to sublingual buprenorphine, 25% were transitioned off all opioid medications, and those patients remaining on opioids decreased their opioid dose by an average of more than 100 morphine equivalents a day.⁴⁶ Pain scores also improved for both buprenorphine and nonbuprenorphine participants. While initially supported by funds from the university, Dr. Pade and her staff now bill for visits using standard primary care billing codes.

Interviewees from a number of clinics described access to substance use services, particularly office-based buprenorphine (see below), as an essential component of a comprehensive chronic pain program. However, they identified a number of challenges in providing integrated substance use treatment: logistical issues in providing primary care-based buprenorphine induction, lack of staff familiarity with opioid tapering and conversions, and the need for frequent and longer visits with patients. (CHCF's report, *Recovery Within Reach: Medication-Assisted Treatment of Opioid Addiction Comes to Primary Care*, discusses how primary care clinics overcame these challenges.)

Buprenorphine: A Safer Alternative for Pain?

Buprenorphine, a partial agonist at the mu opioid receptor and an antagonist at the kappa receptor, is effective for

the treatment of pain and opioid dependence. The partial mu activity accounts for pain relief and lack of respiratory suppression, compared to other opioids, and the antagonism at the kappa receptor explains its anti-depressant qualities. Certain formulations of buprenorphine (patch, mucosal film, and IV) are FDA-approved for treating acute and chronic moderate-to-severe pain. Sublingual (SL) buprenorphine is approved for the treatment of opioid dependence. (See Table 1.) Unlike most other opioids, buprenorphine is a schedule III controlled substance, so it does not require a tamper-proof prescription and can be called in or faxed. Any clinician with a Drug Enforcement Agency (DEA) license can prescribe buprenorphine for pain,⁴⁷ but only physicians with a DEA waiver (also known as an X-license) can prescribe buprenorphine for addiction. Buprenorphine for addiction is covered under Medi-Cal without need for prior authorization; authorization is required when it is used for pain.

Buprenorphine has an improved risk-benefit profile compared to full agonist opioids for the treatment of pain because of a lower risk of overdose (due to a ceiling effect on respiration), less impact on the endocrine system, fewer adverse mental health effects (and possible benefits), less potential to cause opioid-induced hyperalgesia, and a lower risk of abuse and diversion.⁴⁸ Buprenorphine also has attractive pharmacologic properties for pain management: quality evidence for management of CNCP, cancer-related pain, and neuropathic pain syndromes. (See Table 1.)

Table 1. Buprenorphine Formulations

	DOSES AVAILABLE	INDICATION
Transdermal patch (<i>Butrans</i>)	buprenorphine: 5, 7.5, 10, 15, and 20 mcg/hour, every 7 days	Pain
Low dose buccal film (<i>Belbucca</i>)	buprenorphine: 75, 150, 300, 450, 600, 750, and 900 mcg, twice daily	Pain
High dose buccal film (<i>Bunavil</i>)	buprenorphine/naloxone: 2.1/0.3 mg, 4.2/0.7 mg, and 6.3/1 mg	Addiction
Sublingual tablets (<i>Subutex</i> , <i>Suboxone</i> , <i>Zubsolv</i>)	buprenorphine: 2 and 8 mg buprenorphine/naloxone: 1.4/0.36 mg, 2/0.5 mg, 2.9/0.71 mg, 5.7/1.4 mg, 8/2 mg, 8.6/2.1 mg, and 11.4/2.9 mg	Addiction Pain, off-label
Sublingual film (<i>Suboxone</i>)	buprenorphine/naloxone: 2/0.5 mg, 4/1 mg, 8/2 mg, and 12/3 mg	Addiction Pain, off-label
Compounded	Many options	Pain

Source: Howard Kornfeld, MD, presentation to California Health Care Foundation, 2016.

Howard Kornfeld, MD, founding medical director at the Highland Hospital Functional Restoration Clinic, has published extensively on the use of buprenorphine for pain, and advocates for its use with patients at risk of overdose death or addiction (such as those using high-dose opioids for pain). His research and that of others shows the effectiveness of buprenorphine for pain when compared to other opioids during inpatient surgeries and for patients transitioned off of high-dose daily opioids due to inadequate pain relief, overdose risk, medical complications, or difficulty managing side effects.⁴⁹ Off-label use of sublingual buprenorphine for pain is *not* prohibited by the DEA and does *not* require a prescriber to have an X license (waiver). In fact, the DEA has acknowledged the legality of off-label use of buprenorphine to treat chronic pain.⁵⁰ (To address this issue, Dr. Kornfeld suggests writing “pain patient, off-label use” on the prescription if using the sublingual form; other forms are FDA-approved for pain.)

Examples of Innovative Chronic Pain Programs

This section presents more detailed information on several innovative programs for managing chronic pain. Each of these multidisciplinary pain programs involves components of pain treatment described in the sections above.

Petaluma Health Center: Integrative Medicine and SMAs

Petaluma Health Center is an FQHC with five clinic locations. It serves approximately 24,000 residents of Petaluma, Rohnert Park, Cotati, Penngrove, and surrounding areas in Sonoma County. Since 2009, its Wellness Department has developed several chronic pain programs, including a chronic pain medication review committee, chronic pain SMAs, medical acupuncture visits, and group mindfulness-based stress reduction.

Shared Medical Appointments (SMAs)

The Petaluma center offers patients three types of SMAs for chronic pain, each with its own unique curriculum. One of the groups is more medically focused while the other two are more focused on mindfulness, education, and behavioral approaches to pain management. The groups are open (drop-in model) and voluntary. (The alumni or graduate group, a process support group, meets every other week and is only open to graduates

of earlier groups.) A physician trained in integrative medicine and a mental health specialist co-facilitate each group. The curriculum includes education on opioid safety, sleep hygiene, self-management techniques for pain and stress, mindfulness-based techniques for stress, sleep and pain, discussion of how mood impacts pain, and physical movement (Qi Gong, Tai Chi, yoga, stretching).

The SMA program is available to all referred primary care patients with chronic pain. A medical assistant takes vital signs and documents the patient’s history (pain symptoms, injuries, etc.) Patients are evaluated individually by a clinician and may receive individualized services, including vaccinations and other preventive health interventions, medication adjustments, and recommendations for ancillary therapies, such as physical movement, physical therapy, and acupuncture. There is no limit on the number of sessions that a patient can attend, but there is a rotating 16-week curriculum. The program does not offer incentives, and participation is not linked to opioid prescriptions. Communication with the primary care team is through charting in the shared electronic medical record. SMAs are billed as traditional office visits.

Clinical Acupuncture Services

Petaluma Health Center offers medical acupuncture by physicians with certification in acupuncture. Acupuncture services are delivered in a community model, where multiple patients are treated in a single open room. Evaluation and medical treatment of each patient occurs in a separate exam room prior to the insertion of needles. Providers administer acupuncture in a shared space where patients can rest and keep the acupuncture needles in place for therapeutic benefit. The clinic is able to bill for individual visits since each treatment involves individualized assessment.

Mindfulness-Based Stress Reduction (MBSR) Services

Petaluma Health Center offers an MBSR-based group course to referred patients with stress, anxiety or depression or both, chronic pain, or all of the above. This course operates on an eight-week rotating curriculum. A licensed mental health provider facilitates the group and is able to bill for a single patient visit for each group (often attended by as many as 10 patients). The clinic plans to evaluate measures of patient participation and satisfaction to decide if it will continue to offer the program.

Central City Concern (CCC), Portland: Integrated Substance Use and Chronic Pain Services

CCC, a multi-service organization devoted to preventing and ending homelessness, offers specialized services in mental health and addiction. Over 50% of Central City's patients are over the age of 45, and about 71% are white. The vast majority of its patients have incomes below the federal poverty level, and almost 90% are homeless or marginally housed.

CCC developed a comprehensive approach to treatment of addiction and pain simultaneously; the approach includes the following components.

Uniform Guidelines and Prescribing Oversight

CCC's controlled substances review committee reviews all episodes of serious opioid misuse or other substance-related misconduct, and all cases where patients are being started on long-term opioid therapy. It also provides guidance to PCPs for complex pain management cases. CCC also developed standardized opioid prescribing guidelines for clinicians that eliminated some

practice variability in prescribing, and educated clinicians on opioid risks.

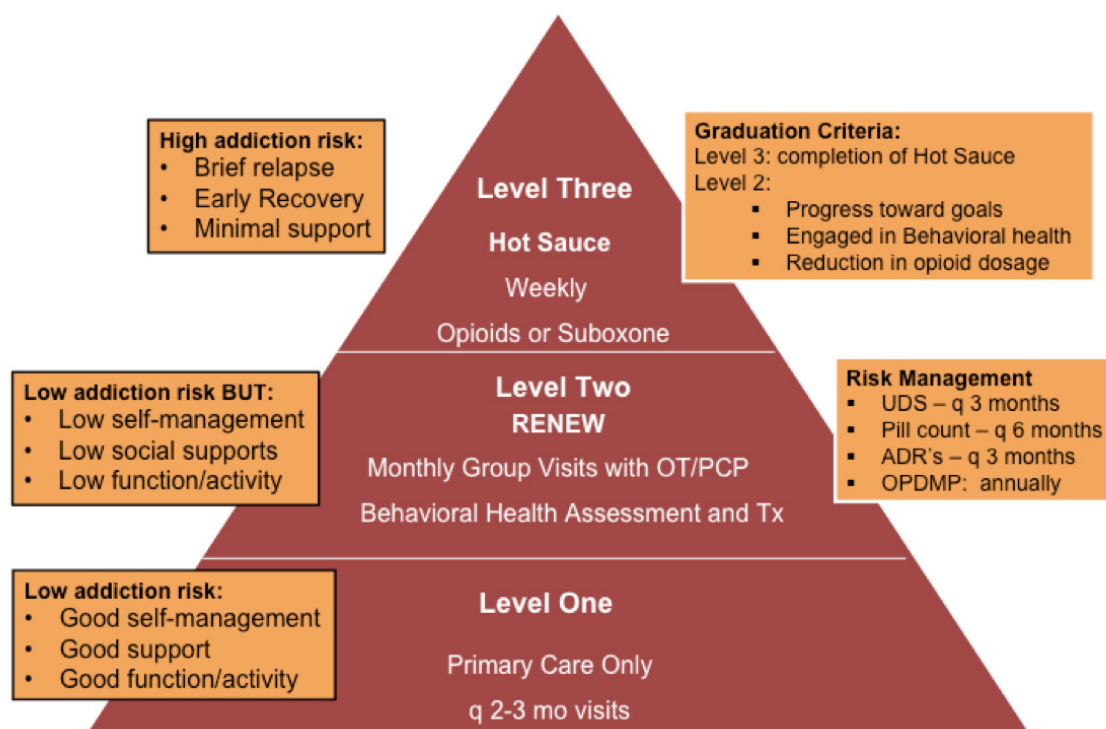
Integration of Evidenced-Based Treatment for Pain and Addiction

CCC developed integrated services for patients with chronic pain and substance use, emphasizing a focus on function rather than pain level. These services include: occupational therapy, physical therapy, acupuncture (drop-in services or appointments), and integrated behavioral health care offering cognitive behavioral therapy (CBT) and acceptance commitment therapy (ACT) to participating patients. Several Oregon insurance providers now reimburse for acupuncture; otherwise, CCC provides it for free.

Risk Stratification

CCC also developed specific programs for patients with chronic pain and substance use. CCC stratifies patients by risk, to identify appropriate program referral. CCC's program for high-risk patients, called "Hot Sauce" (see Figure 2),⁵¹ involves a 12-week curriculum led by a certified addiction counselor with training in pain

Figure 2. Central City Concern Risk Stratification



Notes: UDS = urine drug screen; ADR = adverse drug reaction; OPDMP = Oregon Prescription Drug Monitoring Program; OT = occupational therapist.
Source: Central City Concern 2015.

management. The curriculum focuses on self-management skills and alternatives to opioids to treat pain. Hot Sauce enrolls many patients prescribed buprenorphine by their PCP. CCC's program for moderate-risk patients, called Project Renew, involves a monthly group led by an occupational therapist. This group focuses on physical adaptations to pain and self-management skills. The curriculum includes: education on sleep hygiene, behavioral health, mindfulness techniques, and pharmacologic management of pain. Individuals who are receiving monthly opioid analgesic refills must attend the group to obtain their refill. Patients have a brief clinical visit with their PCP either before or after each group session. Lowest-risk patients are monitored by their PCP.

"The separation of addiction and chronic pain services made no sense to clinicians or patients."

— Rachel Solotaroff, MD, medical director
Central City Concern

CCC is currently collecting data to evaluate the success of its integrated substance use and chronic pain services, but anecdotally reports both reduced clinician burn-out and improved patient satisfaction since inception of its multi-tiered treatment plan for pain and addiction.

Boston Community Health Centers: Multidisciplinary Pain Models and Integrative Medical Group Visits

The Program for Integrative Medicine and Health Care Disparities at Boston Medical Center was created in 2004 to provide clinical services, conduct research, and offer education. Later, the team piloted Integrative Medical Group Visits (IMGVs), which are SMAs featuring integrative medicine components at local community health centers. Patients enroll in an intensive nine-week series facilitated by a clinician and a behavioral health specialist with training in MBSR. The curriculum involves principles of self-care management, MBSR techniques, self-massage instruction, acupuncture, and cooking classes. Patients record their own vital signs and pain scales for entry into the medical record. The program also uses an electronic innovation, the Our Whole Lives (OWL) web-based resource, through which patients can track their vitals and health goals, and participate in a monitored discussion group with peers.⁵² Other resources include

educational videos on stress reactivity, understanding pain, insomnia, obesity, depression, nutrition, and goal-setting.

Pilot data available from early experience with IMGVs demonstrated statistically significant improvements in pain, depression, stress, and sleep quality after participation.⁵³ Paula Gardiner, MD, and the program team received a Patient-Centered Outcomes Research Institute grant to compare IMGVs to standard medical care for chronic pain in a randomized clinical trial. Patients included in this trial have experienced chronic musculoskeletal pain for more than three months and registered a high score on the PHQ9 depression scale. As primary outcomes, the research group will look at pain severity and interference in daily life, and depression. Secondary outcomes will include functional status, social support, pain medication use, pain self-efficacy, and sleep quality. The research team will collect final data in September 2016 and hopes to disseminate its results in the spring of 2017.

Conclusions

This paper identifies common themes and components of multidisciplinary pain programs implemented in safety-net clinical settings that have been successful in enrolling and retaining patients in treatment. These components include SMAs, integrated behavioral health services, integrative or complementary and alternative medicine pain services, physical movement services, and integrated substance use treatment. These strategies attempt to address the challenges identified by clinicians treating chronic pain in safety-net settings, including care fragmentation, inadequate payment systems, and insufficient mechanisms to address comorbid substance use and chronic pain.

Payment for nontraditional modalities of medical care for pain is an issue confronting all the clinics studied for this report. Researchers did not interview Medi-Cal plans or other insurance payers for this report, but clinicians often expressed frustration that insurance coverage for pharmacologic treatment for pain (including high-risk medications) was automatic, while obtaining coverage for multidisciplinary options was much more challenging. These clinics address the problem of making such chronic pain services sustainable through different payment models, including the involvement of providers for

whom insurance will allow billing for SMAs, the use of medical clinicians who are also trained in allopathic and complementary and alternative medicine, and using volunteer services from training programs.

Many clinics studied were still in the early stages of implementation and had not yet collected evaluation data on their models but reported anecdotal success in improving patient and staff satisfaction in the management of chronic pain. The programs that have performed evaluations report positive improvements in pain, functional status, and mood, though the evaluations are limited by small samples and short follow-up periods.

Clinicians and clinic leaders discussed many issues critical to implementation of this broad range of services, including clinical staffing, training, and infrastructure requirements for successful programming, and the need for creative solutions to billing for financial sustainability. Although there is limited evidence in the peer-reviewed literature on multidisciplinary models implemented in safety-net settings, there is a growing interest in effective, multidisciplinary pain treatment options for vulnerable patient groups. The majority of patients with chronic pain are managed in primary care settings. Given the limitations of pharmacologic options for chronic pain and high rates of opioid overdose, addiction, and other negative outcomes related to opioids, PCPs and patients are looking for new ways to treat pain without causing harm. Primary care clinics in many parts of the US are experimenting with new pain treatment models that not only show great promise in improving clinician satisfaction in pain management, but more importantly in improving outcomes for patients struggling with chronic pain.

Appendix A. Methodology

This report is based on a review of the current literature related to multidisciplinary pain treatment programs in safety-net clinics, as well as interviews and site visits conducted with clinical leaders implementing multidisciplinary models.

For the literature review, researchers conducted a search of PubMed, PsychInfo, and Web of Science, using a systematic review methodology outlined in the 2011 AHRO report on multidisciplinary pain programs for CNCP, adding additional search terms to narrow the focus to multidisciplinary pain programs implemented in safety-net clinical settings. Researchers included sources that are not peer-reviewed (“gray literature”) — materials produced by organizations, government agencies, and industries outside of traditional commercial or academic publishing — to identify additional multidisciplinary pain programs implemented in safety-net settings.

The research team collaborated with leadership at the California Health Care Foundation (CHCF) and engaged in discussions with key informants to identify 23 clinics or systems that implemented novel models of pain management care in safety-net settings, including five notable models outside of California. The research team conducted interviews with key informants and individuals in leadership roles in multidisciplinary pain programs to gather information on design, implementation, funding, challenges, and evaluation (see Appendix B). These informants identified common challenges that safety-net clinics encounter in their management of chronic pain and common strategies to improve pain treatment. Researchers also conducted three site visits to directly observe integrated systems. Based on these methods, the research team identified programmatic strategies to address chronic pain in safety-net settings that can serve as models for practices interested in expanding treatment options for chronic pain.

Appendix B. Clinic Sites and Key Informants Interviewed

HEALTH SYSTEM LEADERS AND EXPERTS IN CHRONIC PAIN TREATMENT

Maria Chao, PhD, assistant professor and researcher	Osher Center for Integrative Medicine, UCSF, San Francisco
Alice Chen, MD, MPH, chief medical officer	San Francisco Health Network, San Francisco
Ann Dallman, MD, MPH, family medicine physician	Tom Waddell Urban Health Center, John Muir Medical Center, Zuckerberg San Francisco General Hospital and Trauma Center, San Francisco
Hattie Grundland, NP	Healthy Spine Clinic, Zuckerberg San Francisco General Hospital, San Francisco
Joel Hyatt, MD, assistant regional medical director	Quality and Clinical Analysis, Kaiser Permanente, Los Angeles County
Jennifer Kanenaga, NP	Healthy Spine Clinic, Zuckerberg San Francisco General Hospital, San Francisco
Sharad Kohli, MD, director of clinical affairs	Texas Association of Community Health Centers; former medical director at West Berkeley Lifelong Clinic
Michel Tetrault, DC, chiropractic consultant	

REPRESENTATIVES FROM CALIFORNIA CLINICS OR SYSTEMS DEVELOPING MULTIDISCIPLINARY PAIN PROGRAMS

Connie Basch, MD, medical director	Full Circle Center for Integrative Medicine, Arcata
Steven Chen, MD, medical director	Alameda County Wellness Center, Hayward
Diana Coffa, MD, clinician and residency director	Family Medicine Clinic, Zuckerberg San Francisco General Hospital, San Francisco
Connie Earl, DO, medical director	Forestville Wellness Center, Forestville
Sarah Gavin, LMFT, director of behavioral health services	Communicare Health Center System, Sacramento Area
Melissa Fledderjohan, PhD, director	Pain Management Clinic, San Mateo Medical Center, San Mateo
Fasih Hameed, MD, director of integrative services	Petaluma Health Center, Petaluma
Claire Horton, MD, medical director	General Medicine Clinic, Zuckerberg San Francisco General Hospital, San Francisco
Holly Hughes, LCSW, director of behavioral health	Santa Cruz Community Health Centers, Santa Cruz
Howard Kornfeld, MD, medical director	Pain Management and Functional Restoration Clinic, Alameda County Medical Center, Oakland
Jessica Les, MD, lead clinician	Pain Services, Vista Family Health Center, Santa Rosa
Kate Lewis, L.Ac, center supervisor and acupuncturist	West Berkeley Lifelong Primary Care Clinic, Berkeley
Melissa Marshall, MD, chief medical officer	Communicare Health Center System, Sacramento Area
Perlita Perez-Marcia, MD, clinician	Martin Luther King Jr. Outpatient Center, Los Angeles
Myles Spar, MD, MPH, director of integrative medicine	Venice Family Clinic, Venice
Peter Van Houten, MD, medical director	Sierra Family Medical Clinic, Nevada City
Barbara Wismer, MD, MPH, medical director	Integrative Pain Management Program, Tom Waddell Urban Health Center, San Francisco
Michelle Wong, MD, integrative health medical director	Integrative Health Services, Contra Costa Health System, Contra Costa County
Arthur Wood, MD, medical director	Pain Consultation Clinic, Zuckerberg San Francisco General Hospital, San Francisco
Jimmy Wu, MD, MPH, lead clinician	Pain Services, Vista Family Health Center, Santa Rosa

SELECTED CLINICS DEVELOPING MULTIDISCIPLINARY PAIN PROGRAMS OUTSIDE OF CALIFORNIA

Roxanne Cook, RN, nurse coordinator	A.F. Williams Family Medical Center, Denver, CO
Paula Gardiner, MD, MPH, assistant director	Program for Integrative Medicine and Health Care Disparities, Boston Medical Center, Boston, MA
Jeff Geller, MD, MPH, director of integrative medicine and group programs	Greater Lawrence Family Health Center, Lawrence, MA
Anna Lestoquoy, research study coordinator	Boston Medical Center, Boston, MA
Patricia Pade, MD, addiction medicine specialist	A.F. Williams Family Medical Center, Denver, CO
Rachel Solotaroff, MD, MPH, medical director	Central City Concern, Portland, OR
Corey Waller, MD, MPH, medical director	Center for Integrative Medicine, Spectrum Health, Grand Rapids, MI

Appendix C. Resources for Buprenorphine

California Society for Addiction Medicine (CSAM)

- ▶ Clinical tools
- ▶ Consent forms
- ▶ Intake history sample forms

www.csam-asam.org

SAMHSA

- ▶ Buprenorphine Training for Physicians
www.samhsa.gov
- ▶ Buprenorphine Treatment Physician Locator
www.samhsa.gov

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51. The program's name, "Hot Sauce" came about during a Central City Concern brainstorming session about working with high-risk patients and how people in recovery who are also dealing with pain may be on opioid agonist treatment. An addiction counselor and acupuncturist said, "It's like harm reduction, but with hot sauce on it." And the term was born.
52. OWL is copyrighted by the Program for Integrative Medicine and Health Disparities at the Boston Medical Center.
53. Gardiner P, "Medical Group Visits," 20-26.