UNIVERSITY OF CALIFORNIA LOS ANGELES
INTEGRATED SUBSTANCE ABUSE PROGRAMS

CALIFORNIA HUB AND SPOKE MAT EXPANSION PROGRAM

2019 EVALUATION REPORT

Prepared for the California Department of Health Care Services

SEPTEMBER 2019

About This Report

This report was prepared by the UCLA Integrated Substance Abuse Programs (ISAP) for the California Department of Health Care Services (DHCS) in September 2019. All data reported cover the first and second years of implementation efforts of the Hub and Spoke program, a component of the California State Targeted Response (STR) to the Opioid Crisis.

Authors
Kendall Darfler, MS
Darren Urada, PhD
José Sandoval, BS
Aida Santos, BS
Liliana Gregorio, BS
Eva Vazquez, BS
Lauren Caton, MPH
Valerie Antonini, MPH
Elizabeth Hall, PhD
Vandana Joshi, PhD
Cheryl Teruya, PhD

Principal Investigator
Darren Urada, PhD

Acknowledgements

The authors thank Richard Rawson and Mark McGovern for their ongoing consultation on the evaluation of the Hub and Spoke model. Both Drs. Rawson and McGovern were involved in the Vermont Hub and Spoke project, and their input has been instrumental to the current project. We also thank the UCLA implementation team, including Gloria Miele, Thomas Freese, Beth Rutkowski, Kimberly Valencia and Christian Frable for their invaluable feedback. Thanks also to Robert Small, Becky Hoss, Frances Southwick, Ira Freeman and Nancy Lee for their input on pharmacy issues.

The authors would also like to acknowledge that the Hub and Spoke program and its evaluation have been carried out on the traditional lands of more than 154 indigenous nations.

Recommended citation: Darfler, K., Urada, D., Sandoval, J., Santos, A., Gregorio, L., Vazquez, E., Caton, L., Antonini, V., Hall, E., Joshi, V., Teruya, C. (2019). *California State Targeted Response to the Opioid Crisis: 2019 Evaluation Report*. Los Angeles, CA: UCLA Integrated Substance Abuse Programs

Contents

List of Acronyms

CDPH	California Department of Public Health
CHCF	California Health Care Foundation
CSAM	California Society of Addiction Medicine
DATA 2000	Drug Addiction Treatment Act of 2000
DHCS	Department of Health Care Services
FQHC	Federally Qualified Health Center
H&SS	Hub and Spoke System
ISAP	Integrated Substance Abuse Programs
MAT	Medications for Addiction Treatment[1]
OBOT	Office Based Opioid Treatment
OSI	OBOT Stability Index
OTP	Opioid Treatment Program
OUD	Opioid Use Disorder
SAMHSA	Substance Abuse and Mental Health Administration
SOR	State Opioid Response
STR	State Targeted Response
TNQ	Treatment Needs Questionnaire
UCLA	University of California Los Angeles
USC	University of Southern California
XR-NTX	Extended-release naltrexone

[1] MAT has also historically referred to Medication Assisted Treatment, which suggests the medication is secondary to other treatment. Wakeman (2017) argues this contributes to stigma and treats MAT differently from medications for other conditions. We therefore use the more neutral term Medications for Addiction Treatment in this report.

Goals of the Hub and Spoke Program

The goals of the California Hub and Spoke program, as outlined in the Strategic Plan, include:

Implement Hub and Spoke model throughout California

The primary aim of the MAT Expansion Project is to implement the Hub and Spoke model to increase access to opioid use disorder (OUD) treatment. This includes developing OTPs as regional subject matter experts and referral resources. Treatment expansion efforts focus on medications, but also include counseling and other supportive recovery resources through case management.

Increase availability of medications for addiction treatment (MAT)

MAT expansion efforts focus primarily on buprenorphine as these medications can be prescribed by any provider with a Drug Addiction Treatment Act of 2000 (DATA 2000) waiver. Waivered providers working in primary care settings, such as Federally Qualified Health Centers (FQHCs), are an important target of expansion efforts. Increasing the availability of buprenorphine in medically underserved areas, particularly among persons covered by Medi-Cal is an important sub-goal of the program.

Increase number of waivered providers who can prescribe MAT

In order to enhance the statewide infrastructure for MAT availability, it is critical to increase both the number of providers waivered to prescribe buprenorphine as well as the number of patients per provider. At the time the Strategic Plan was written, California waivered providers managed an average of five OUD patients at a time. Increasing the number of prescribers applies to all types of allowable providers.

Develop prevention and recovery activities

Prevention and recovery activities to support MAT expansion include providing naloxone, coordinating with local opioid coalitions, reducing stigma among the public as well as providers, developing physician MAT champions, promoting use of the California Substance Use Warmline, and providing education and technical assistance to all types of treatment providers (e.g., counselors, peer support workers, nurses) throughout the state.

Establish Learning Collaboratives and provide trainings

Learning Collaboratives are a key component of the Hub and Spoke model. They serve as a forum for didactic education about addiction medication and other evidence based practices, allow for regional relationship building among providers and administrators, and offer opportunities to discuss barriers and facilitators to program implementation.

Improve medication access for tribal communities

In 2017, the opioid overdose death rate for American Indian/Alaska Natives (AI/AN) was 17.8 per 100,000 persons, over three times the state average of 5.2 per 100,000 (CDPH 2018). Assessing both the OUD treatment and prevention needs as well as existing resources in tribal and urban indigenous communities is essential to developing culturally relevant treatment expansion efforts. A team of experts from a number of AI/AN organizations, led by Claradina Soto, PhD, at the University of Southern California (USC) conducted a needs assessment of MAT and other culturally relevant treatments, including traditional

healing practices, for OUD in indigenous communities in California. UCLA works closely with this team, but the two groups have determined that it is most appropriate for the research to be designed and carried out by those with the expertise and cultural knowledge needed to best serve the communities. A separate report was submitted to the Department of Health Care Services by USC detailing the outcomes of the needs assessment and recommended future directions for treatment expansion efforts.

Conduct a program evaluation

UCLA is conducting the evaluation of the Hub and Spoke MAT Expansion program. The evaluation includes regular reports on SAMHSA-required performance measures, creation of a data reporting structure for all Hub and Spoke Systems, surveys of providers, patient interviews, and qualitative site visits to a selection of programs. This report includes the outcomes of the second year of evaluation efforts.

Executive Summary

The California Hub and Spoke (H&S) program has rapidly responded to the state's growing opioid overdose crisis. The goal of the program is to increase access to medications for addiction treatment (MAT) throughout the state, with a particular emphasis on buprenorphine, which can be prescribed in low-barrier, office-based treatment settings like primary care. This evaluation report uses a systemic and patient-centered approach developed by Levesque et al. (2013) to determine the extent to which the program is increasing MAT access, where access to treatment is explored along a continuum from the patient perspective. Levesque et al. (2013) organize this continuum into five domains including: approachability (i.e., outreach and education efforts that allow patients to identify treatment services), acceptability (i.e., how acceptable care is to patients, especially those from marginalized backgrounds), availability and accommodation (i.e., whether services are available and reachable), affordability (i.e., how affordable services are to patients), and appropriateness (i.e., the quality and adequacy of care provided). Barriers to each of these domains of access are described, along with innovative and promising practices that hubs and spokes have employed to address them.

Over the span of the first two years of implementation, the program has built a statewide system of new linkages between opioid treatment programs (OTP; "hubs") and office-based practitioners ("spokes") that has more than tripled in size, to include 211 spoke locations among the 18 H&S networks. Over one-fifth (21.9%) of these spokes were located in rural areas, which have consistently had the highest overdose death rates in the state. These new linkages allow for increased knowledge and resource sharing among networks, and provide new avenues for treatment referrals.

As the network has grown, and more spokes have adopted the program, the numbers of patients starting MAT has also increased. By June 2019, 19,871 new patients started MAT (methadone, buprenorphine, or extended-release naltrexone) in hubs and spokes. Spokes saw a 94.6% increase in the number of patients starting buprenorphine each month over baseline (pre-H&S), with rural spokes experiencing the largest increase (116.7%). Interviews with patients also revealed promising preliminary treatment outcomes. In an initial review of interview data, 96.2% of participants who completed both treatment initiation and follow up interviews (n = 52), were still in treatment after 90 days. These patients also experienced significant decreases in days of prescription opioid misuse, days of illicit opioid use, and days of injection ($p < .001$), along with significant increases in satisfaction with life overall ($p < .001$). None of these patients had experienced an overdose since starting treatment. Although these initial outcomes appear positive, patients with more negative outcomes may have been less likely to participate in interviews, and barriers to expanding treatment access remain.

Although the number of providers in the H&S system with a waiver to prescribe buprenorphine has increased to 395, only 69.1% are actively prescribing. In a survey, waivered providers rated staffing resources, lack of time, lack of space, pharmacy availability, and reimbursement issues as

slight to moderate barriers to prescribing. However, above all of these, they rated patient compliance as the biggest barrier, indicating that stigma toward patients with OUD may be a major factor inhibiting MAT availability. This was reflected in patient interviews; nearly one-quarter (23.0%) of participants reported they were sometimes, frequently or always discriminated against by health care professionals because of their substance use disorder. Trainings addressing stigma and compassion fatigue for H&S providers were held throughout the second year of program implementation. Curricula emphasizing stigma and structural inequality will likely remain an important component of increasing access to MAT.

Due in part to this lack of active prescribers, numerous spokes were underperforming in terms of new patient numbers. Many spokes (41.1%) were low performers, and another 28.0% had no patients at all. This was particularly a problem in rural areas, where 50.0% had zero patients. As a result, availability of MAT was functionally lacking in many of the counties with the highest overdose death rates. Hubs should aim to help all of their spokes begin prescribing and providing treatment with as few barriers as possible. This may include engaging with telehealth programs to ensure convenient options for patients living in rural areas.

Outreach and education to new potential patients, other providers, and the community in general also proved challenging for hubs and spokes. The desire to increase the approachability of hubs and spokes was frequently cited in provider surveys and spoke site visits. Programs that had the most success in this area worked to normalize MAT in health care settings, by advertising buprenorphine alongside other health care services. They also used multifaceted approaches to advertising, with flyers, brochures, radio and television campaigns both throughout their clinics and in their communities. The spoke with greatest number of new patients in the entire system also used a near universal screening program to help find patients already within their care who could benefit from treatment. In addition, spokes described the benefits of working with peer support workers with community-level experience to recruit new patients and assist with retention. To connect with other providers and develop referral resources, one network started a listserv with other MAT providers, pharmacists, and the local emergency department.

The acceptability of treatment for patients from marginalized backgrounds also had room for improvement. Only 59.7% (n = 44) of MAT Team members and 60.9% (n = 129) of waivered providers indicated that they provided culturally competent care. Still fewer – 57.1% (n = 46) of MAT team members and 43.9% (n = 93) of waivered providers – provided trauma-informed care. This likely reduced treatment acceptability for patients experiencing homelessness, patients whose primary language was not English, people of color, patients living in rural areas and patients with co-occurring mental health diagnoses. Spokes that took a whole person care approach to their treatment programs demonstrated some of the most promising practices in addressing challenges for their most marginalized patients. One spoke offered on-site transitional housing, a food and clothing pantry, a community garden, financial services, and assistance for undocumented patients. Another spoke, in a rural area, provided referrals to housing resources, but also offered tents and sleeping bags to patients experiencing homelessness. They were also hoping to establish a mobile clinic.

Although the H&S program covers the cost of MAT for patients who are uninsured and ineligible for Medi-Cal, treatment affordability remained a concern for many patients and providers, particularly as it related to the sustainability of the program. While one patient who knew their medication costs were being covered by H&S expressed that the program had been lifesaving, nearly one-quarter (22.0%) of patients interviewed still found their treatment unaffordable. Spoke providers felt grateful that they did not have to delay care while waiting for Medi-Cal determinations, and found that being able to start patients on treatment immediately helped them recruit and retain more patients. They did, however, feel fearful about what would happen when grant funding ended, and worried that they would both lose patients whose treatment was currently being covered by the grant and that delayed care would cause potential new patients to never start MAT. Developing sustainable funding mechanisms for H&S services should be a priority for clinics as well as policymakers as the program enters its third year.

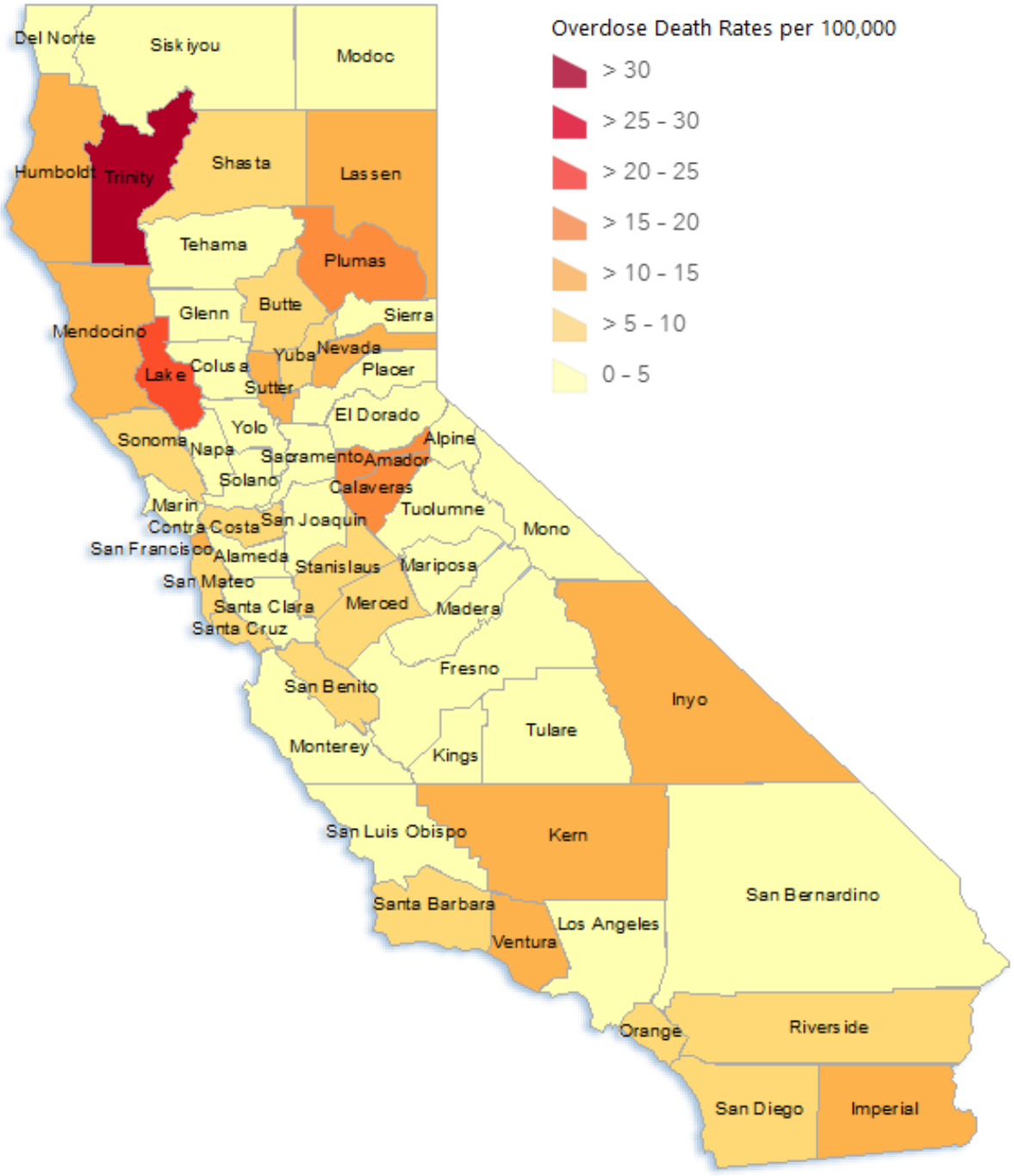
As Levesque et al. (2013) note, treatment affordability, physical and organizational availability alone do not constitute full access. The appropriateness of care – its quality and relevance to patient needs – impacts patient engagement. H&S patients who participated in interviews generally had positive treatment experiences, and felt that they were involved in treatment decision-making. However, a substantial proportion (19.2%) felt that they did not have a say in deciding about their treatment, and only 56.2% had talked with their doctors about medication options. This may indicate gaps in hub and spoke practices in determining which medications and other services may be most appropriate to patient needs. In addition, the quality of counseling services frequently arose as an issue in patient interviews. When asked which additional services would be most helpful to them, 23% of patients mentioned counseling in some form (e.g., better counseling, individual counseling, family counseling, counseling in their primary language, or any counseling at all). One promising practice in improving the appropriateness of care includes providers taking a harm reduction approach, or meeting patients "at their current stage of readiness for change," as one prescriber described in response to a survey. In addition, one spoke had space dedicated to counseling services that allowed patients to determine whether they wanted group or individual counseling. They also gave patients the option of not attending counseling, to impose as few barriers to accessing MAT as possible.

Despite the challenges that remain to expanding access to MAT, hubs and spokes throughout the state have developed promising practices to address barriers as defined within the five access domains and successfully start an increasing number of new patients on buprenorphine, methadone and extended-release naltrexone. This report documents these promising practices in hopes that those just beginning implementation, or those struggling to reach more new patients, can learn from others who have faced similar challenges. It also highlights the achievements of the program, which has helped nearly 20,000 new patients start MAT in under two years. As the program progresses into its third year, it is recommended for hubs and spokes to assess their progress based on the five access domains, identify areas for technical assistance needs addressing their unique barriers, and begin to develop plans for sustainability.

INTRODUCTION

Opioid Use Disorders and the California Treatment Landscape

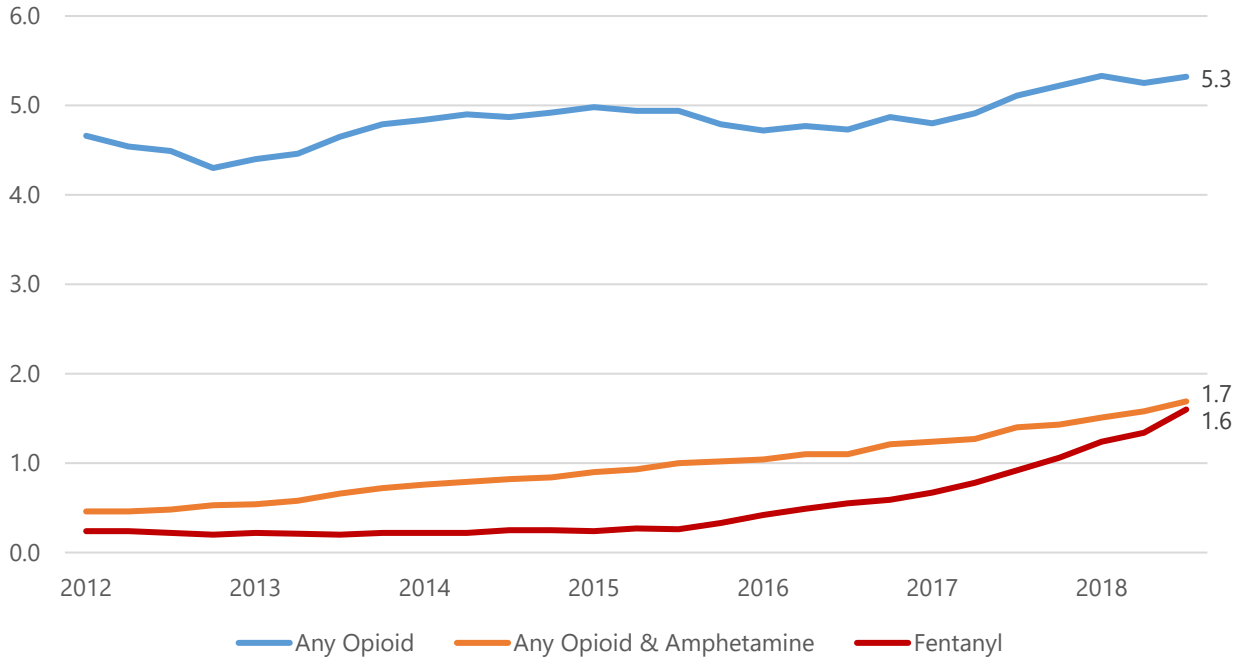
Figure 1. **Map of age-adjusted opioid overdose death rates by county (2018)**



Data source: California Department of Public Health (CDPH) Opioid Overdose Surveillance Dashboard

Opioid overdose death rates in California have continued to rise year after year (CDPH 2019). The overdose crisis has been primarily concentrated in the rural northern region, with Humboldt and Lake Counties consistently experiencing the highest death rates (see Figure 1). Rates in these counties regularly rival those in the states hardest hit by the crisis. These high rates, and the growth in overdoses statewide, have precipitated a rapid response by the state Department of Health Care Services (DHCS), recognizing that opioid use disorders (OUD) are emergencies.

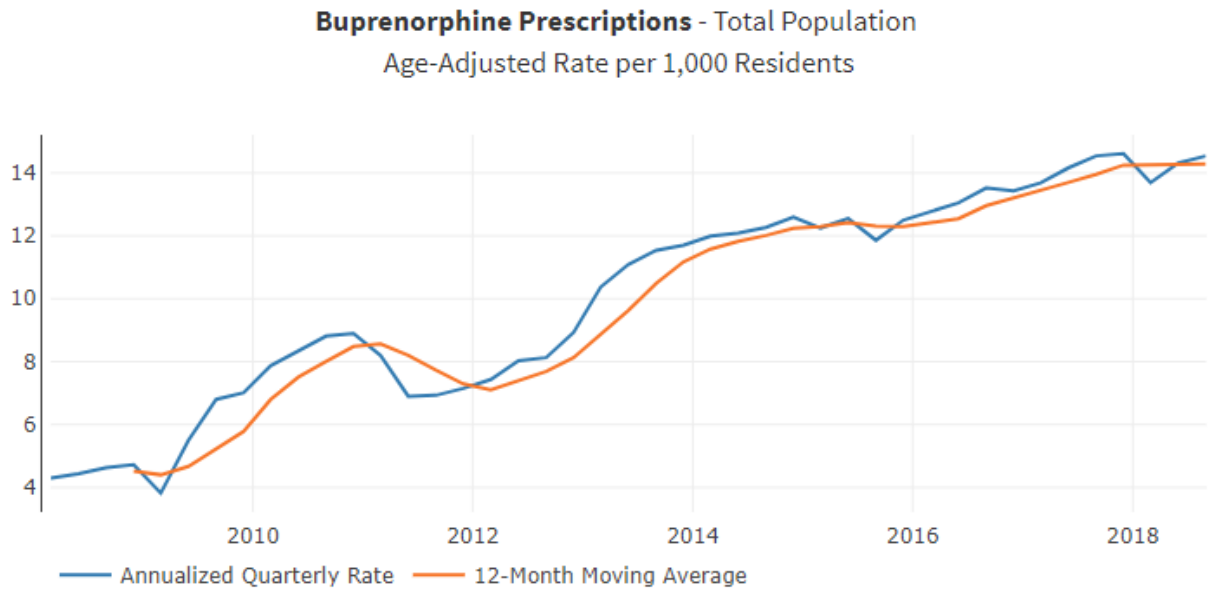
Figure 2. **12-Month Moving Average Overdose Death Rates (per 100,000)**



Data source: California Department of Public Health (CDPH) Opioid Overdose Surveillance Dashboard

As of the third quarter of 2018, statewide opioid-related overdose death rates had risen to 5.32 per 100,000 residents (see Figure 2), despite growth in buprenorphine prescribing (see Figure 3). This increase may be driven by the growing use of fentanyl in the state, including its presence in non-opioid drugs (see Figure 2). Historically, amphetamines have been the primary substance of use seen in California treatment settings (Treatment Episode Data Set – Admissions, 2017). But polysubstance use, including the use of amphetamines and opioids, has been increasingly implicated in overdose deaths.

Figure 3. **Statewide buprenorphine prescriptions**

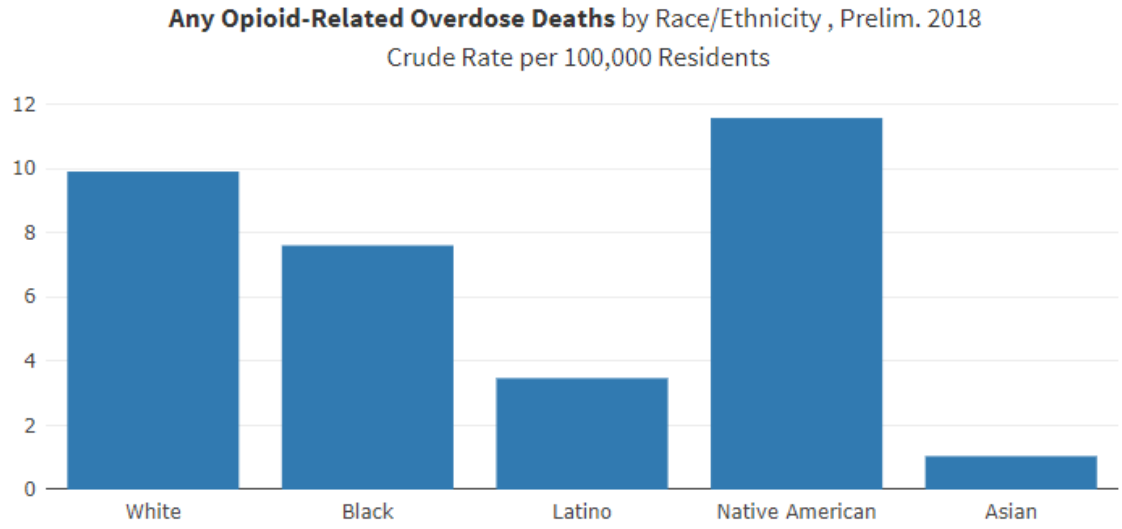


Data source: California Department of Public Health (CDPH) Opioid Overdose Surveillance Dashboard

Buprenorphine prescribing has increased statewide since 2010 (see Figure 3). However, there are still estimated gaps of 165,977 to 245,093 people with OUD in California without access to MAT (Clemans-Cope et al., 2018). This is particularly problematic for people of color, particularly American Indian/Alaska Natives, who have the highest overdose death rates in the state.

Overdose Rates by Race and Ethnicity

Figure 4. **Age-adjusted opioid overdose death rates per 100k residents by race/ethnicity (2018)**



Data source: California Department of Public Health (CDPH) Opioid Overdose Surveillance Dashboard

Although the national conversation about opioids typically points to the high overdose death rates among white Americans (Kaiser Family Foundation 2018), in California, death rates are highest among American Indians/Alaska Natives. The 2018 age-adjusted death rate per 100k was 11.6 for American Indian/Alaska Natives, while it was 9.9 for Whites, 7.6 for Black/African Americans, 3.5 for Latinx, and 1.0 for Asian/Pacific Islanders (California Department of Public Health 2019).

The high overdose death rates among American Indians/Alaska Natives (AI/AN) requires an urgent response. As part of the State Targeted Response (STR) to the opioid crisis grant, researchers at the University of Southern California, in collaboration with an array of AI/AN groups have conducted a needs assessment of gaps in prevention, treatment and recovery services for American Indians/Alaska Native communities across California (Soto et al. 2019). This report identified the need to incorporate traditional and cultural practices into MAT treatment and OUD prevention programs that serve American Indian/Alaska Native communities in California.

Figure 5. **Five Year Average overdose death rates (per 100,000) by race/ethnicity in California counties with the top 10 overall death rates**

	Overall	Native American	White	African American	Latinx	Asian American
Lake	**22.31**	46.64	25.17	28.24	8.63	20.98
Humboldt	**18.94**	34.68	19.96	0	8.20	2.69
Plumas	**17.00**	0	18.43	0	14.80	0
Mendocino	**15.86**	16.47	18.40	23.64	8.72	0
Lassen	**14.46**	21.53	18.40	0	0	38.01
Tuolumne	**14.14**	19.83	16.57	0	3.61	0
Siskiyou	**11.18**	9.72	12.47	0	8.11	0
Shasta	**11.09**	0	12.87	0	5.23	0
Santa Cruz	**10.92**	0	14.90	24.27	5.11	0
Trinity	**10.45**	0	12.08	0	0	0

Death rates by race/ethnicity also vary by county. As shown in Figure 5, among the top ten California counties with the highest five-year (2013-2017) average overdose death rates, six (Lake, Humboldt, Lassen, Tuolumne, Mendocino and Santa Cruz) have higher death rates among people of color:

- Lake, Humboldt, Lassen and Tuolumne Counties have higher death rates among American Indians/Alaska Natives
- Lake, Mendocino and Santa Cruz Counties have higher rates among African Americans
- Lake and Lassen Counties have higher rates among Asian Americans

Several additional California counties had five-year average overdose death rates per 100,000 for people of color far exceeding the national overall rate (21.7):

- American Indians/Alaska Natives: 74.7 in Amador County, 37.8 in Santa Barbara County, 36.76 in Merced County, 34.46 in Imperial County, 30.5 in Marin County, 26.8 in Nevada County, 26.7 in Del Norte County, and 23.7 in Yolo County
- African Americans: 35.2 in San Francisco County
- Latinxs: 23.9 in Modoc County

Treatment Availability

Figure 6. **Map of California counties with and without Opioid Treatment Programs (OTP) Data source: Department of Health Care Services (2019)**

Opioid Treatment Programs (OTPs) provide an important referral resource for patients who need a highly structured level of care, and only patients enrolled in an OTP can access methadone. While the presence of treatment locations has expanded since STR funds were released, counties with the highest overdose death rates, mostly those in the rural northern part of the state, still do not to have access to MAT through OTPs (see Figure 6). Since 2017, OTPs have been introduced in two new counties, Shasta and Nevada. But treatment options remain more limited in Humboldt, Modoc, Mendocino, Del Norte, Lake and Lassen Counties.

The Hub and Spoke Model is designed to reach people who may not have local access to an OTP or who would not otherwise enter specialty care by engaging them through non-specialty care sites (spokes). Any health care location with a provider who has a Drug Addiction Treatment Act of 2000 (DATA 2000) waiver to prescribe buprenorphine can serve as a spoke. Spokes often include primary care clinics (e.g. Federally Qualified Health Centers), private practices, behavioral health centers, and other SUD treatment centers. The Hub and Spoke model requires building relationships and coordination between OTPs and health care settings where, generally, none previously existed.

The purpose of this report is to examine the extent to which the California Hub and Spoke program has expanded access to MAT, and to document promising practices that hubs and spokes have implemented during the first two years. Access is defined as more than treatment availability. The report takes a patient-centered approach to understanding treatment access, based on Levesque et al.'s (2013) dimensions of approachability, acceptability, availability and accommodation, affordability, and appropriateness (see "Evaluation Report Framework" for further detail).

California Hub and Spoke Program

The California Hub and Spoke System (H&SS) is being implemented by the Department of Health Care Services (DHCS) as a way to improve, expand, and increase access to MAT services throughout the state, especially in counties with the highest overdose rates. The CA H&SS aims to increase the total number of physicians, physician assistants and nurse practitioners prescribing buprenorphine, thereby increasing access to MAT for patients with OUD. The project design is based on the Vermont Hub and Spoke model (Brooklyn et al., 2017), and has been adapted to fit the California context. DHCS contracted with UCLA to conduct the evaluation of the project as well as to provide the implementation support and training needed to adapt the Hub and Spoke model, facilitate the statewide strategy, and maximize the impact of the hub and spoke systems.

California Hub and Spoke Model

DHCS reviewed multiple applications and awarded grants to 19 agencies across the state to serve as "hubs" and partner with community health providers ("spokes") to build an OUD

treatment network that meets community needs. Hubs mostly consisted of existing licensed Opioid Treatment Programs (OTPs) that serve as regional consultants and subject matter experts to spokes on opioid dependence and treatment. They are tasked to work closely with their spokes to support prescribers, build treatment capacity, and promote treatment.

Spokes include clinics with one or more DATA 2000 waivered providers, who prescribe and/or administer buprenorphine. Spokes provide ongoing care for patients with more stable OUD, managing both induction and maintenance. They receive a variety of support services from the hubs, including the ability to refer complex patients for stabilization and access to a "MAT Team." MAT teams can include nurses, behavioral health specialists, peer support workers, and other care coordinators who support OUD patients and prescribers. MAT teams are essential to the success and effectiveness of spokes. Waivered providers, MAT team members, and administrators at both hubs and spokes were surveyed as part of this evaluation for their unique insights on the successes and challenges of implementation. For a more in-depth description of the model and its adaptations in the California context, see the Year 1 Evaluation Report (Darfler, et al. 2018).

Hub and Spoke Program Activities

The need for increased mentorship within the system identified within the first year of the program led to the development and 2018 implementation of the Hub and Spoke Expert Facilitator program, developed by Mark McGovern, PhD, at Stanford University, with input from the UCLA implementation team. Spokes faced significant challenges in expanding MAT prescribing among newly waivered physicians. The foundation for this program, the Implementation Facilitation model, stems from an identified need to assist and encourage providers to use a new practice. Through the development of interpersonal relationships, the model addresses challenges in adoption through interactive problem solving and support (Stetler et al., 2006). In the California Implementation Facilitation program model, hubs were matched with an expert local "facilitator," or known MAT champion, to provide mentorship to hub and spoke providers. The program also includes quarterly webinars that allow for check-ins, data sharing, and training opportunities for facilitators and staff involved in the system. Four of these sessions have taken place thus far. Additional activities, such as Learning Collaboratives and other training programs have continued on from the first year of the program, and are described in further detail in the Year 1 Evaluation Report (Darfler, et al. 2018).

The Hub and Spoke Networks

At the start of program implementation, in August 2017, the H&S system included 19 hub and spoke networks, located throughout the state. Among these networks, there were 18 active hub programs and 57 spoke clinic locations. By the end of the second year (June 30, 2019), the system had expanded to include 211 active spoke locations. The hub agencies, currently 18, are listed below (for a list of all hubs and spokes, see Appendix I):

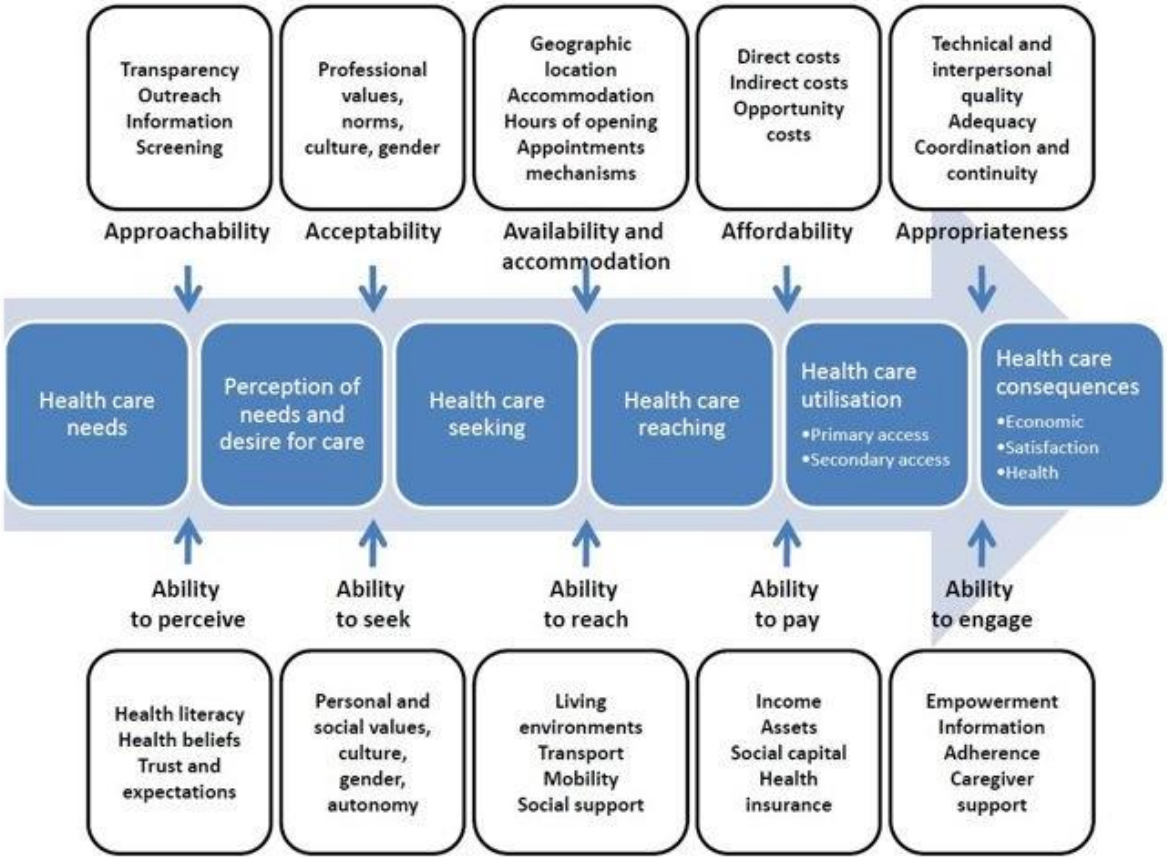
- Acadia Healthcare – Fashion Valley Comprehensive Treatment Center, San Diego
- Acadia Healthcare – Riverside Treatment Center, Riverside
- Aegis Treatment Centers - Chico
- Aegis Treatment Centers – Humboldt (OTP in progress)
- Aegis Treatment Centers - Manteca
- Aegis Treatment Centers - Marysville
- Aegis Treatment Centers - Redding
- Aegis Treatment Centers - Roseville
- BAART Behavioral Health Services – Contra Costa
- BAART Behavioral Health Services – San Francisco
- CLARE|MATRIX – Los Angeles
- CommuniCare Health Centers - Sacramento
- Janus of Santa Cruz - North – Santa Cruz
- Janus of Santa Cruz – South – Santa Cruz
- Marin Treatment Center - Marin
- MedMark Treatment Centers - Fresno
- MedMark Treatment Centers - Solano
- Tarzana Treatment Centers – Los Angeles

These hub and spoke networks cover 37 of 58 California counties, eight of which are in the top 10 counties with the highest five-year average opioid overdose death rates. The 18 networks are broken up into six regions, used to create smaller networks of more localized resources.

Evaluation Report Framework

Year 2 data, particularly patient interviews have revealed a need to restructure this report, to further examine patient perspectives on domains of access to treatment. As such, this report takes a systemic and patient-centered approach to evaluating access to treatment. Using a patient-centered definition of access developed by Levesque et al. (2013), access to treatment is explored along a continuum that starts with a patient's ability to perceive a health care need and identify that relevant treatment services are available, and ends with their ability to meaningfully engage with services that are appropriate to their needs. Levesque et al. organize this continuum into five domains including: approachability (i.e., outreach and education efforts that allow patients to identify treatment services), acceptability (i.e., how acceptable care is to patients, especially those from marginalized backgrounds), availability and accommodation (i.e., whether services are available and reachable), affordability (i.e., how affordable services are to patients), and appropriateness (i.e., the quality and adequacy of care provided). Figure 7, below, demonstrates how these domains relate to patients' abilities to access services.

Figure 7. **Dimensions of patient-centered access to health care (Levesque et al., 2013)**



In addition to updated data on network expansion, and patient and provider numbers, this report documents the barriers to increasing treatment access across each of these five domains, as well as the promising practices that hubs and spokes have employed to overcome them.

METHODS

The data presented in this report focus on the first and second years of program implementation activities. Although SAMHSA's State Targeted Response (STR) to the Opioid Crisis grant to the California Department of Health Care Services (DHCS) began in April 2017, Hub agencies received their program awards in August 2017. Because the main focus of the evaluation is on the implementation and outcomes of the Hub and Spoke program activities, data presented here focus on the period of August 2017 to June 2019. This program evaluation uses mixed methods, and a convergent parallel design (Creswell & Clark 2017). Quantitative and qualitative data were collected simultaneously throughout the evaluation, but were analyzed separately. Results of analyses are then interpreted in combination for the purposes of the report. This design was chosen for its pragmatism and ability to address the many complex factors affecting Hub and Spoke implementation and outcomes.

Patient and Provider Numbers

All data on patient medication initiations, cumulative patient censuses, number of waivered providers and number of patients per prescriber are collected through monthly reports completed by the hubs and spokes themselves (see Appendix II). UCLA ISAP developed and maintains a web reporting system, which serves as a portal for standardized data entry. Coordinators hired as part of the Hub and Spoke grants input monthly counts, drawn from their programs' health records. All coordinators received training in data collection methods and data entry at the start of the program. In addition, UCLA audits and delivers ongoing feedback to coordinators to ensure data quality. However, because data are reported by coordinators, rather than drawn directly from health records, it is possible that reports contain errors (see Limitations). The data presented in this report reflect Years 1 and 2 of implementation activities. As a result of the nature of the program, a goal of which was to expand the number of settings involved in the network, not all Spokes began implementation during the same month.

Patient Interviews

Interviews with Hub and Spoke patients were conducted beginning August 30, 2018. Patients were contacted for interviews at treatment initiation and were followed up approximately three months after beginning treatment. As of June 30, 2019, 112 patients had completed treatment initiation interviews and 52 had completed follow-up interviews (see Figure 8 below). Interviews will continue until the close of the project and, as such, all results presented here are preliminary. Selected spokes were fairly representative of the network at the time (see Figure 8). Rural spokes may be underrepresented in the current sample, as many were added as program sites by their hubs after the interview sample was drawn. As a result, rural spokes were oversampled in site visits (see "Spoke Site Visits" section below).

Figure 8. **Representativeness of spokes selected for patient interviews**

	Spokes Selected for Interviews (Aug 2018)	**Spokes Overall (Aug 2018)**
FQHC	44.4%	45.5%
Other Health Center	16.7%	15.2%
SUD Treatment Center	13.9%	18.2%
Rural	5.6%	21.9%
No new patients to date	27.8%	16.3%

Patients were recruited from all 17[2] hubs and a random sample of two spokes per each of the 18 H&SS networks. Spokes were sampled on August 24, 2018 and were selected from all spokes present in the network at the time. The probability of selection depended on the number of spokes in each network as of the sample date. Nine spokes (among six H&SS networks) had to be re-sampled because they were dropped or deactivated by their networks prior to the beginning of recruitment. All re-sampled spokes were drawn from the original August 2018 spoke list, with the exception of four of the spokes (covering two networks). These two networks dropped all of their spokes and contracted with new organizations in January 2019. Spokes for these networks were re-sampled January 29, 2019.

Figure 9. **Preliminary patient interview response rates as of June 30, 2019**

Referred from Hubs and Spokes	**Called**	**Refused to Participate[3]**	**Consented to Participate[2]**	**Unable to Contact[2,4]**	**Treatment Initiation Interview Complete**	**Follow Up Interview Complete[5]**
320	320	47	120	97	112	52
	100%	17.8%	45.4%	36.7%	42.4%	

All patient interviews were conducted via phone. New patients at hubs and selected spokes were presented with releases of information by spoke staff allowing UCLA to complete a recruitment phone call. All staff delivering releases were required to complete a training in which they were asked to select the first three patients starting MAT per month who fit the criteria (i.e., starting new MAT prescription, adult, Spanish- or English-speaking). However, not all hubs and spokes admit three new patients per month. In such instances, staff were asked to provide contact information for as many patients as were willing to release their contact information to UCLA each month until recruitment is completed. UCLA called all patients referred by hubs and spokes within one-day of receipt of their contact information to complete recruitment. During

[2] The Aegis Humboldt network does not have an OTP hub as of the date of this report.
[3] To date, 56 participants (17.5%) who have been referred from Hubs and Spokes are still being sought to complete treatment initiation interviews. As a result, rates have been calculated using the sum of patients refused, consented and unable to be contacted after 3 months (n = 264).
[4] Unable to be reached for >3 months after the date the release of information was signed
[5] To date, 65 participants (58.0%) who completed treatment initiation interviews are still being sought to complete follow up interviews. As a result, the follow up rate has not been calculated at this time.

recruitment calls, patients are fully-informed about the purposes of the evaluation and are asked to provide oral consent to participate if interested. Upon consent, treatment initiation interviews are completed immediately. The treatment initiation interview consists of brief demographics, treatment history, substance use history, health, life satisfaction, cravings and treatment experience items. Participants are given a $20 gift card for completion of the first interview. UCLA then attempts to contact all patients three months after the treatment initiation date for a follow-up interview. The follow-up interview includes all items from the treatment initiation interview as well as open-ended items about treatment experience (see Appendix III) for interview guides). Participants who complete the follow-up interview receive a $30 gift card. This program evaluation was approved by the California Office of Statewide Health Planning and Development (OSPHD) Committee for the Protection of Human Subjects. In addition, the research use of data obtained from this evaluation was approved by the UCLA Institutional Review Board.

Provider Surveys

In Year 2, UCLA conducted four online surveys of service providers working in Hub and Spoke locations. Each survey was tailored and administrated based on providers' roles in the Hub and Spoke Program as either: (1) DATA 2000 waivered providers, (2) supportive MAT Team staff (e.g., nurses, counselors, care navigators), (3) Hub administrators, or (4) Spoke administrators (see Appendix IV). Each survey addressed provider knowledge and attitudes about OUD and MAT, perceptions of the Hub and Spoke model, barriers and facilitators to successful implementation at the clinic and community level, and training/technical assistance needs.

UCLA developed the four surveys internally with feedback from DHCS, several Hub and Spoke providers, and consultants with expertise in the Vermont Hub and Spoke model, Mark McGovern, PhD and Richard Rawson, PhD. The content of the surveys was drawn from issues arising during Hub and Spoke Steering Committee meetings, Hub and Spoke Kick-Off meetings, and Learning Collaboratives, as well as from the themes of the AHRQ (2017) "Implementing Medication-Assisted Treatment for Opioid Use Disorder in Rural Primary Care: Environmental Scan Volume 1," and the Center for Advancing Health Policy and Practice (2017) "Integrating Buprenorphine Treatment for Opioid Use Disorder in Primary Care" manual. Items were developed based on several existing tools including the Criminal Justice Drug Abuse Treatment Studies (CJ-DATS) Baseline Survey of Organizational Characteristics (Welsh, et al. 2016), the Drug and Drug Problems Perceptions Questionnaire (DDPPQ; Watson, Maclaren & Kerr 2007), and the SAMHSA Opioid State Targeted Response (STR) Evaluation Community/Program Director Baseline Interview Protocol, and were modified for relevance to the Hub and Spoke project. Items were also added into the second annual survey series based on observations over the first year of the program. Item content, scales, wording and order was reviewed on an item-by-item basis by the UCLA evaluation team, with consultation from Mark McGovern. The surveys were approved by the California Office of Statewide Health Planning and Development (OSHPD) Committee for the Protection of Human Subjects. They were distributed online via Qualtrics. UCLA invited all known providers in the Hub and Spoke System as of June 2019 to participate,

by email. Respondents were offered a $30 electronic gift card incentive for completion of the survey.

From May 1, 2019 through June 30, 2019, UCLA received 330 completed responses, in total. Response rates per survey were as follows: waivered provider survey, 59.1% (n = 259); MAT team survey, 86.0% (n = 90); Hub administrators, 93.3% (n = 30); and Spoke administrators, 80.0% (n = 87). The four surveys were analyzed separately. Results for the waivered provider survey, MAT team survey and Hub administrator survey were compared to those of the first annual survey. Results were not matched by participant, due to extensive growth in the number of spokes and high rates of staff turnover. The Spoke administrator survey was newly added in the second year and, as a result, could not be compared to the previous year. Because each survey had a relatively low sample size, results should be interpreted with caution.

Spoke Site Visits

Site visits were conducted at seven spokes in Year 2. Six of these spokes were randomly sampled from a selection of sites chosen for patient interviews, and an additional spoke was added for TA purposes. Spokes included six FQHCs and one non-FQ health center. Two of the spokes were located in rural areas, including one in Humboldt County, which has among the highest overdose death rates in the state. Other spokes visited were located in Los Angeles, San Diego, Santa Cruz, Butte, and Yolo Counties. Two had started prescribing MAT for the first time during Hub and Spoke implementation. One spoke was a top performer among the state, two were moderate performers, and four were lower performers (three of which only had one patient induction in the past 7 months). An additional seven site visits with the remaining randomly sampled spokes will be completed during Year 3.

The purpose of these site visits was to gain a better understanding of barriers and facilitators to implementation of the Hub & Spoke system, with a focus on buprenorphine prescribing practices. Focus groups and individual interviews (when possible) were conducted with waivered providers, MAT team members, and spoke administrators. Staff organized clinic tours during which observational data were collected. Notes were taken on clinic materials related to buprenorphine/OUD, as well as staff interactions with patients. Spoke staff were asked about the major successes and challenges that they had encountered when implementing MAT in their program/clinic. They were also asked about their opinions of the Hub and Spoke model, their relationships with their hubs, strategies used to reach and retain patients seeking treatment, and how they would use additional funds or resources, if available (see Appendix V for focus group guides).

Administrative Data Review

Demographic data for hubs (OTPs) were estimated based on aggregate 2018 California Outcomes Measurement System, Treatment (CalOMS-Tx) data. CalOMS-Tx collects admission

and discharge data in compliance with SAMHSA's requirements for the Treatment Episode Data Set. OTPs and other providers are already required to submit this data, and report on the type of medication being used, which will enables the evaluators to quantify the number of people receiving MAT in the form of methadone. Demographic data for Spokes were estimated based on aggregate 2016 Medi-Cal managed care claims data.

Limitations

Patient and provider numbers were abstracted and provided in aggregate by coordinators in the Hub and Spoke clinics. These data were reported monthly via an online system hosted by the UCLA ISAP Data Management Center. Due to the scope of the project, it was not practical for UCLA to draw data directly from each participating program's electronic health record system. It is possible that data are inaccurate due to data entry errors and misreporting in this process, or limitations of health record systems on the coordinator's side. In order to standardize data reporting and minimize errors, UCLA conducted three data reporting training webinars during the first year of the project, and developed a handbook with written guidelines. The trainings were recorded and are available, along with the handbook on the internal UCLA H&SS website. To determine the accuracy of data reporting, UCLA will match reported data with CalOMS-Tx and Medi-Cal claims data. This will be completed in the third year of the evaluation, when data for the grant period become available.

Some of the patient and provider data presented in this report may represent underestimates, because 67 of 178 reporting spoke organizations were missing reports in several months. Data for months missing reports were adjusted using mean imputation (Engels & Diehr 2003). Fifteen spokes also had not submitted any data at the time of this report. These spokes have been excluded from analyses. Later submission of data reports may cause increases in numbers of patients starting MAT or numbers of waivered providers.

Patient and provider data collected through interviews and surveys are subject to response bias. That is, providers who actively prescribed buprenorphine may have been more likely to respond the survey, and patients who were still engaged in treatment may have been more likely to participate in the patient interviews.

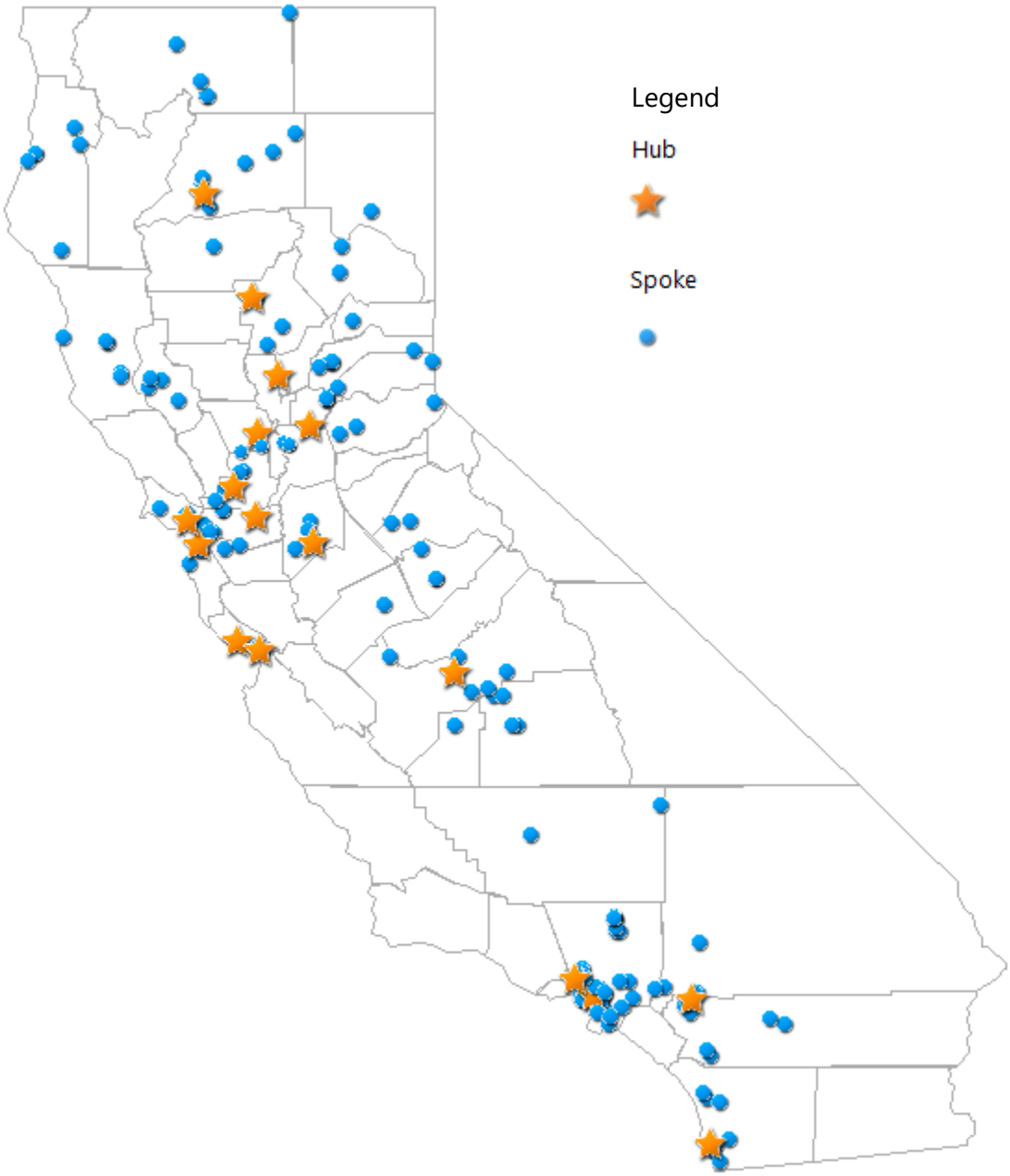
In addition, numerous additional efforts to address the OUD crisis in the state of California were taking place simultaneously with the Hub and Spoke program. In 2015, California received federal permission to improve and expand treatment and recovery services for substance use disorders (SUD) through its Medi-Cal Section 1115 waiver authority. The Drug Medi-Cal Organized Delivery System (DMC-ODS) waiver requires that counties offer a continuum of care modeled after the American Society of Addiction Medicine (ASAM) Criteria for SUD treatment services, and expands MAT capacity in OTP and other treatment settings. Thirty counties opted into and began implementation of the waiver as of this writing. Also in 2015, the California Department of Public Health (CDPH) was awarded a four-year grant from the Centers for

Disease Control and Prevention (CDC) to address opioid overdose in counties with the highest death rates. In addition to these programs, the California Health Care Foundation (CHCF), in partnership with the California Society of Addiction Medicine (CSAM) and DHCS, is supporting the integration of MAT into California community health centers, using a learning collaborative model. The Hub and Spoke program worked in conjunction with and was enhanced by these efforts. Any data presented on statewide or county-level outcomes should not be interpreted as being necessarily solely the result of the Hub and Spoke program.

HUB AND SPOKE IMPLEMENTATION

System Characteristics

Figure 10. **Hub and Spoke Locations – June 2019**



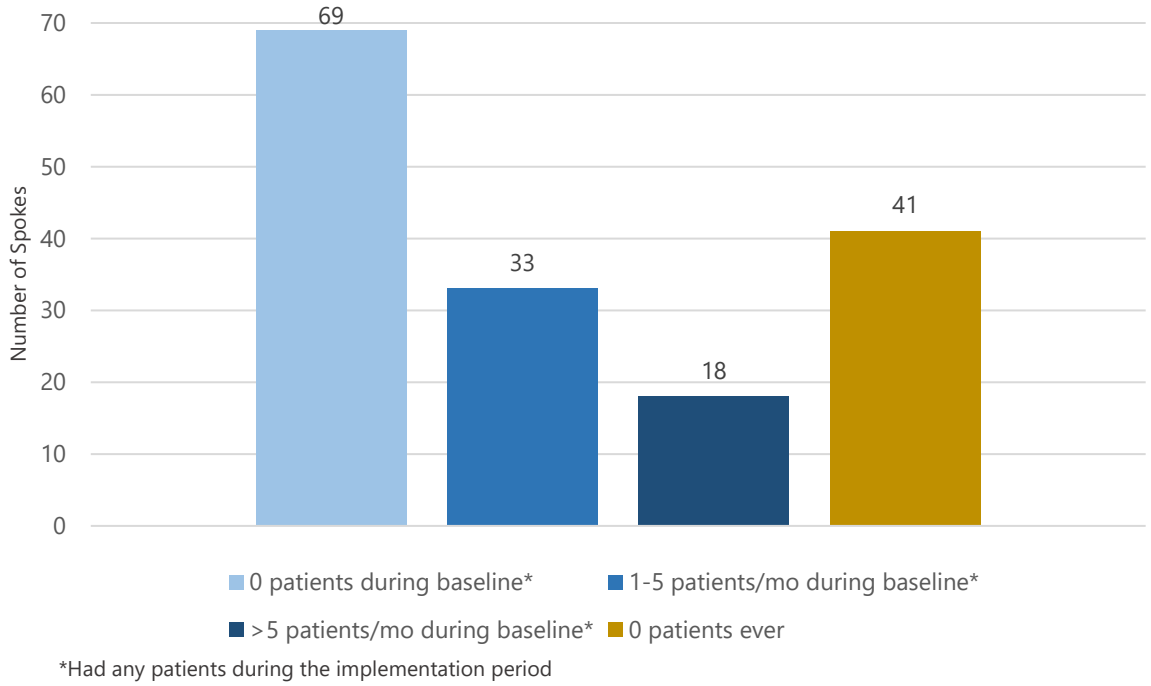
By the end of the second year of the Hub and Spoke program, the 18-network system had expanded from 17 hubs with 57 total spoke locations to include 211 spoke locations (see Figure 10). These locations were distributed throughout the state, and were most densely concentrated near the Los Angeles and Bay Area urban centers. There were also concentrations of spokes throughout the rural northern region, whose counties had the highest overdose death rates, and the northern part of the central valley.

Hub and Spoke Clinic Types

All 17 hubs except CommuniCare, an FQHC, were opioid treatment programs (OTPs). An eighteenth hub was still under development in Humboldt County, as part of the Aegis Humboldt system. The majority of reporting spokes (45.5%, n = 81) were federally qualified health centers (FQHCs), including 3.4% (n = 6) that were Indian Health Centers. An additional 14.6% (n = 26) were other, non-FQ health centers. In addition, 15.2% (n = 27) were SUD treatment programs, 6.2% (n = 11) were telehealth programs, 5.6% (n = 10) were hospitals, 5.6% (n = 10) were private practices, 5.1% (n = 9) were behavioral health centers, and 1.1% (n = 2) were pain clinics.

Buprenorphine Adoption Prior to H&S

Figure 11. **Spokes by Number of Patients per Month Prior to H&S (baseline)**



*Had any patients during the implementation period

In addition to growth in the total number of spokes in the network, there was growth in the number of spokes that had adopted MAT. Figure 11 shows the distribution of the number of patients {inducted on?} buprenorphine in the seven months prior to H&S implementation. Most (61.8%, n = 110) reporting spokes had zero buprenorphine patients during the 7-month baseline period (Jan – Jul 2017). Among these, 62.7% (n = 69) started prescribing during H&S implementation (Aug 2017 – Jun 2019). This represents an improvement over the first year of the program, during which there was nearly an equal number of spokes that had started prescribing to those that had not yet adopted buprenorphine (Darfler, et al. 2018). There were

also 51 spokes that started prescribing prior to implementation and continued throughout the program.

Rural vs. Urban Spokes

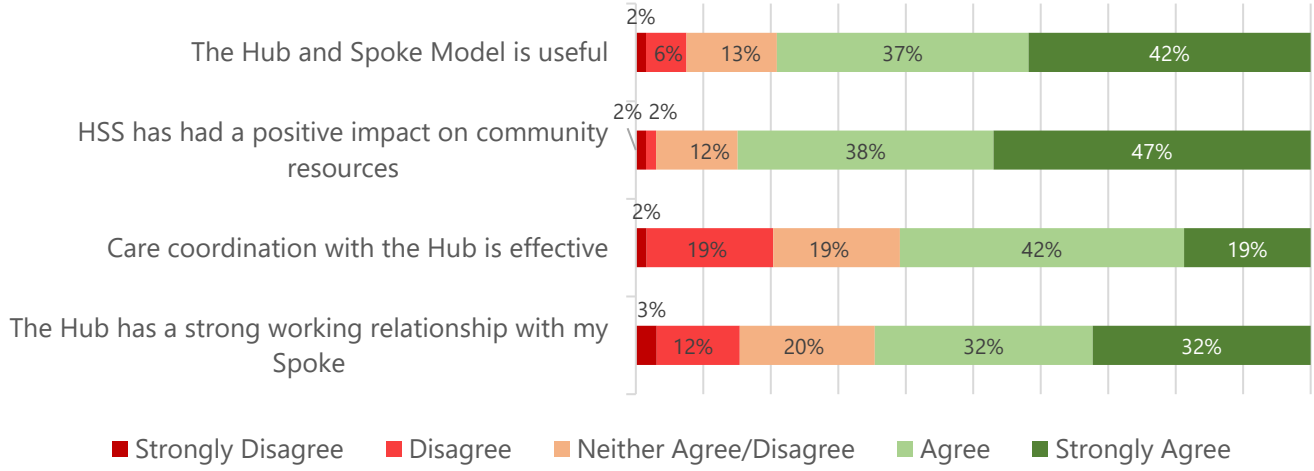
More than one-fifth (21.9%; n = 39) of spokes reporting data were located in rural areas, located outside of U.S. Census 2010 Urbanized Areas (50,000 or more people) and Urban Clusters (2,500 to 50,000 people). The remaining 69.7% (n = 124) of spokes were located in urban areas.

The majority of rural spokes (79.5%, n = 31) were not prescribing buprenorphine prior to H&S implementation. About half of these (48.4%, n = 15) started prescribing during the course of the program. As the third year of implementation progresses, it will be critical for inactive rural spokes to begin prescribing. Technical assistance efforts should focus on these locations.

While network connections within the H&S system have been helpful in working with new spokes to adopt MAT, connections between hubs and spokes have proven to be less critical than initially anticipated. As described in the Year 1 evaluation report, because the state of California has a unique geographic and demographic landscape from that of Vermont, adaptations to the model have led Hub and Spoke implementation in the state to require greater independence on the part of spokes (Darfler, et al. 2018). As the program progresses, implementation efforts have therefore become increasingly focused on increasing access to buprenorphine.

Communication and Coordination

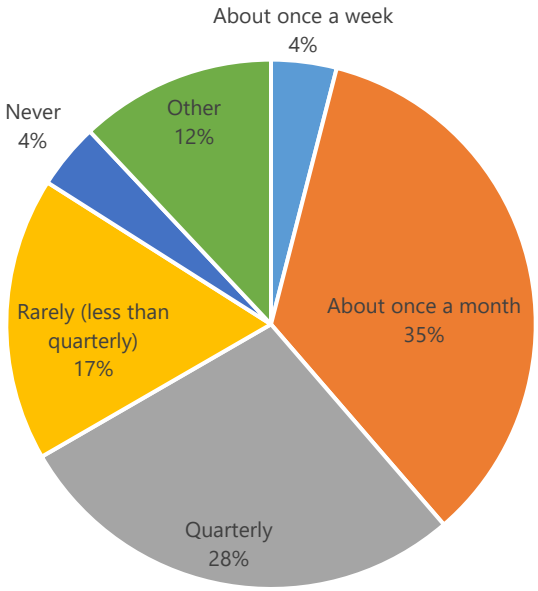
Figure 12. **Spoke administrator ratings of HSS Model and relationships**



In general, spoke administrators had positive views of the Hub and Spoke program at the end of Year 2. The majority of spoke administrators (79.1%, n = 53) found the Hub and Spoke model to be useful, and 84.9% (n = 56) felt the program had a positive impact on the availability of community resources to address OUD. Many (61%, n = 39) also found care coordination between the hub and the spoke to be effective. But a substantial proportion (21%, n = 13) did not find this to be true. In addition, 15% (n = 10) did not feel they had strong working relationships with their hubs.

There was a significant correlation between how often hubs and spokes met and how strong spoke administrators found their relationships to be ($p<.05$).

Figure 13. **Hub and spoke meeting frequency**



Although the majority of spoke administrators indicated that they regularly met with their hubs, 21.3% (n = 16) said that they met with their hubs less than quarterly (including three who had never met with their hubs).

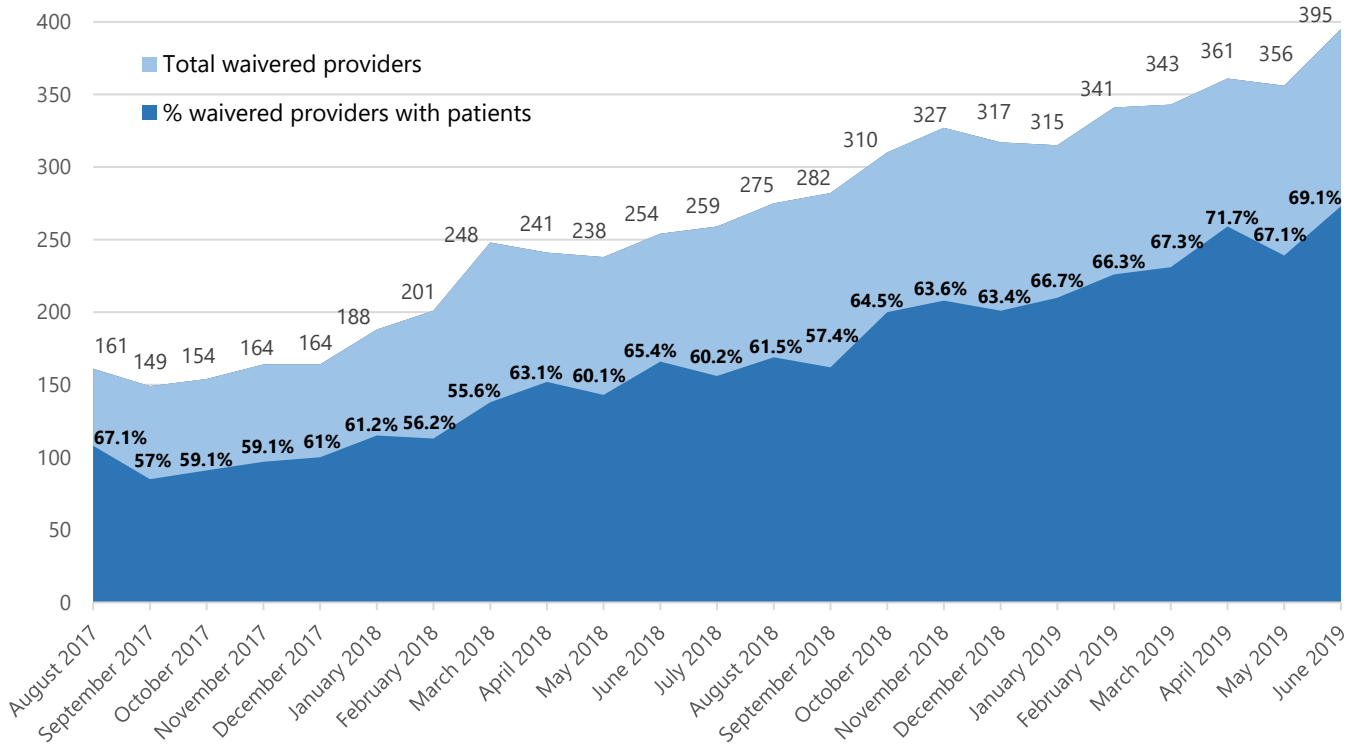
Meeting topics that those who had never met with their hubs would find most helpful to discuss included sustainability of the model after the grant ends, best practices for team-based care, telemedicine for OUD, how to address polysubstance use, buprenorphine and pregnancy, and services for youth. Many of these topics have been the subject of Hub and Spoke Clinical Skills Trainings and Learning Collaboratives. This may indicate that these spokes are less aware of the resources that the H&SS offers than those who meet with their hubs more frequently. Among those who had met with their hubs, the topics of discussion they mentioned most often (five or more times) as helpful included:

1. Billing and invoicing (including plans for when the grant ends);

2. Referrals and care coordination between the hub and spokes;
3. Patient care (including individual case studies);
4. Data and reporting requirements;
5. Information about upcoming provider trainings;
6. Other staff education;
7. Community resources (e.g., housing, transportation, family engagement);
8. Polysubstance use (especially stimulants); and
9. Counseling services.

Prescriber Activity

Figure 14. **Actively prescribing waivered spoke providers**



The number of DATA 2000 waivered providers able to prescribe buprenorphine in spokes has more than doubled since the start of program implementation (see Figure 14). The percentage of spoke providers actively prescribing has also increased somewhat over the course of the program, from 60.2% as of the end of Year 1 (May 2018) to 69.1% by the end of Year 2. In addition, almost all (97.8%, n = 138) active H&S prescribers surveyed (n = 146) indicated that they would continue prescribing buprenorphine after the program ended. However, as of June 2019, 30.9% (n = 122) of spoke providers remained inactive.

Among all H&S waivered providers surveyed (n = 174), most felt they had the resources (84.1%, n = 133) and mentorship (83.5%, n = 132) they needed to treat patients with OUD. Those who

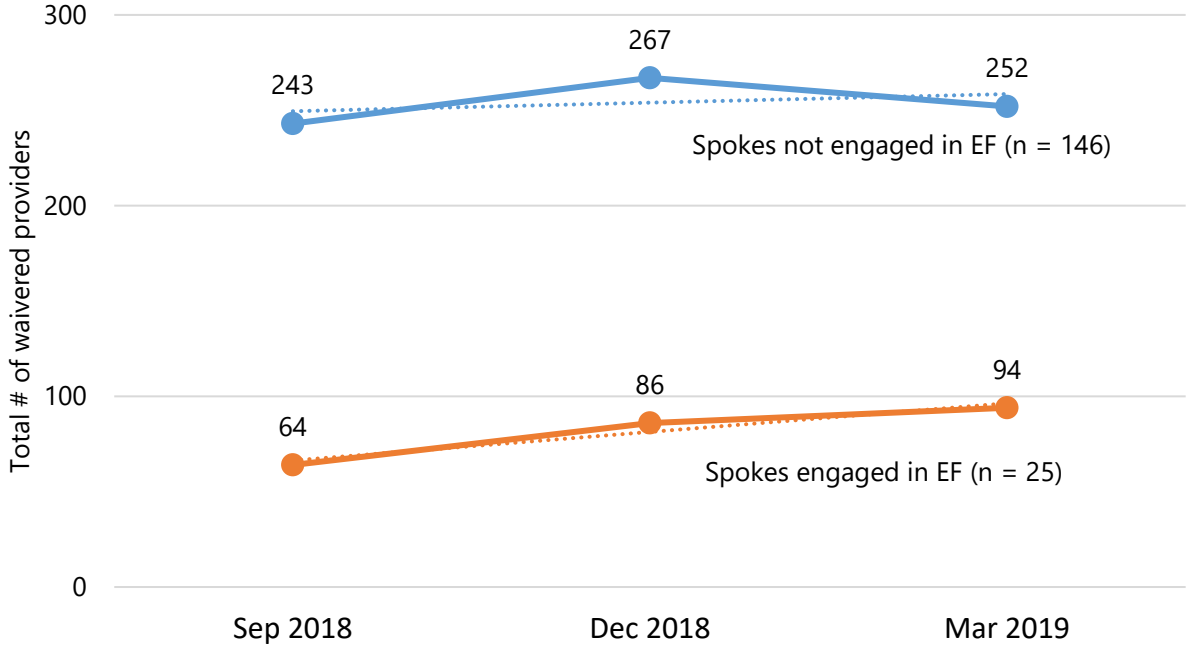
were not prescribing, though, were significantly less likely to feel they had sufficient mentorship ($p < .05$).[6] They were also less likely to feel equally as comfortable working with patients with OUD as they were with other patients ($p < .001$),[5] indicating that they may hold more stigmatizing attitudes than active prescribers. These trends have continued from the findings of the 2018 report (Darfler et al. 2018). However, the percentage of providers indicating that they have sufficient mentorship has increased slightly since the first year of the program (83.8% in Year 2 vs. 79.7% in Year 1). It is anticipated that these numbers will increase further as more new providers gain experience and connect with the Expert Facilitator program.

During Year 2, several training and technical assistance programs aimed at addressing provider inactivity were added to the H&SS implementation plan. These included the Expert Facilitator mentoring program, and webinars on "Stigma and MAT" and "Addressing Compassion Fatigue."

Expert Facilitator (EF) Program

In September of 2018, 18 facilitators were matched with each hub and spoke network. Currently, 14 of these networks still employ their facilitator as some clinics have experienced staff changes and turnover. The program also includes quarterly webinars that allow for check-ins, data sharing, and training opportunities for facilitators and staff involved in the system. Four of these sessions have taken place thus far.

Figure 15. **Growth in waivered provider numbers by spoke EF program engagement**

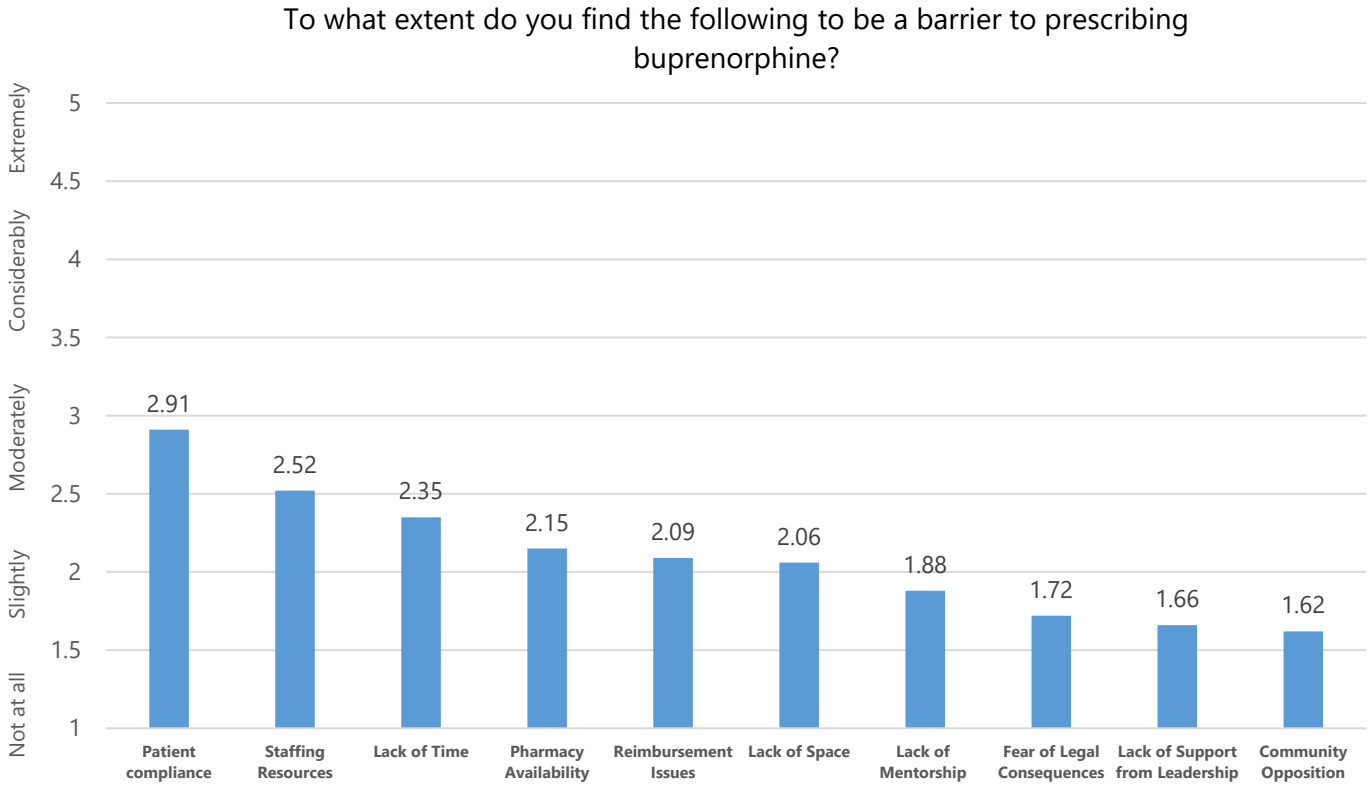


[6] Weighted to reflect a representative sample of providers with zero vs. any patients, based on monthly data reports (30.9% with zero patients, 69.1% with any patients). Only 8.8% of providers who responded to the survey indicated that they did not currently have patients.

As of May 2019, 25 spokes had opted to participate in the Expert Facilitator (EF) program. Several facilitators also engage with new "potential" spokes that are interested in learning about the benefits of the H&S program – 13 of these spokes have been engaged as well. Spokes participating in EF experienced 47% growth in number of waivered prescribers compared to 4% in non-EF spokes (see Figure 15). This trend remained when averaging by spoke, with 42% and 5% prescriber growth among EF and non-EF spokes, respectively.

Addressing Provider Stigma

Figure 16. **Provider perceived barriers to prescribing**

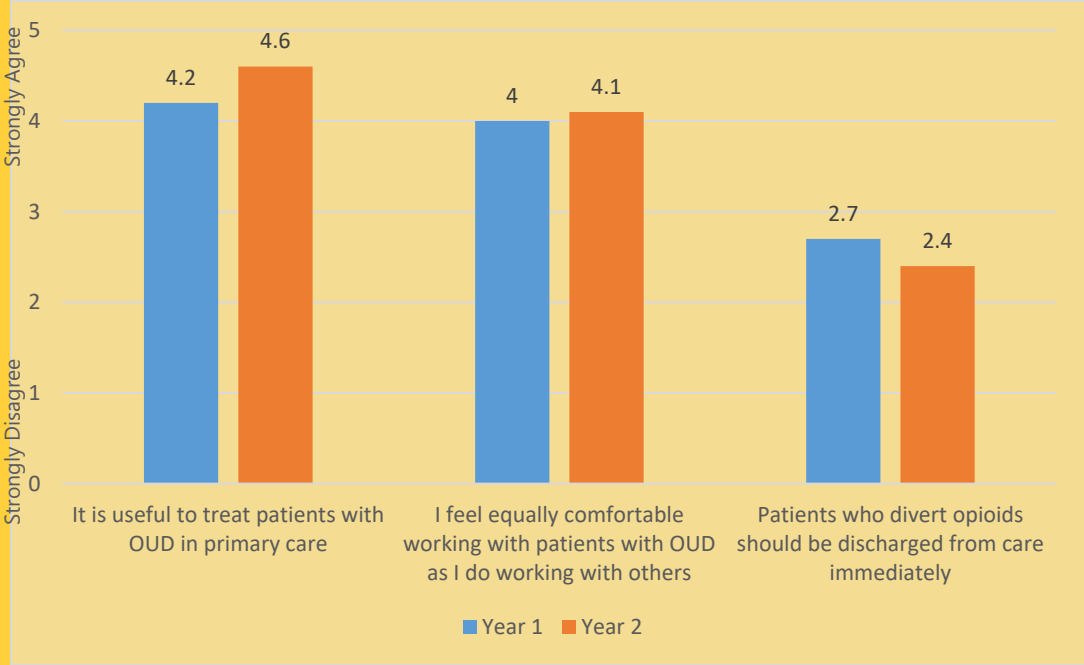


When surveyed about barriers to prescribing buprenorphine, waivered providers rated patient compliance as the biggest barrier (M = 2.91),[5] preceding lack of mentorship, as well as staffing resources, lack of time, pharmacy availability, reimbursement issues, and lack of space. This finding was surprising, as the other barriers listed were cited more frequently in site visits and other communications with providers. Moreover, it points to the continuing problem of provider stigma, which was described in the Year 1 evaluation report (Darfler, et al. 2018). Patient compliance should not prevent providers from prescribing medications. To address these gaps in knowledge and attitudes about MAT and patients with OUD, trainings were held on stigma and provider compassion.

There were 194 attendees online for the stigma webinars (48 attended the first webinar, 146 attended the second), and 164 attendees for the webinar on compassion fatigue. Continued trainings on these topics will likely be needed as the H&S program progresses. Future trainings could also incorporate topics such as structural competency, which helps providers understand the larger social structures behind health inequalities and clinical interactions (Metzl and Hansen, 2013).

Data in Focus: Provider Stigma

Provider knowledge and attitudes about MAT and patients with opioid use disorders improved slightly between the first and second years of Hub and Spoke implementation.



HOWEVER, STIGMA REMAINED A PROBLEM AND IS A CRITICAL ISSUE

Over one-quarter (28.8%) of prescribers indicated that they found patient compliance to be a considerable or extreme barrier to prescribing MAT.

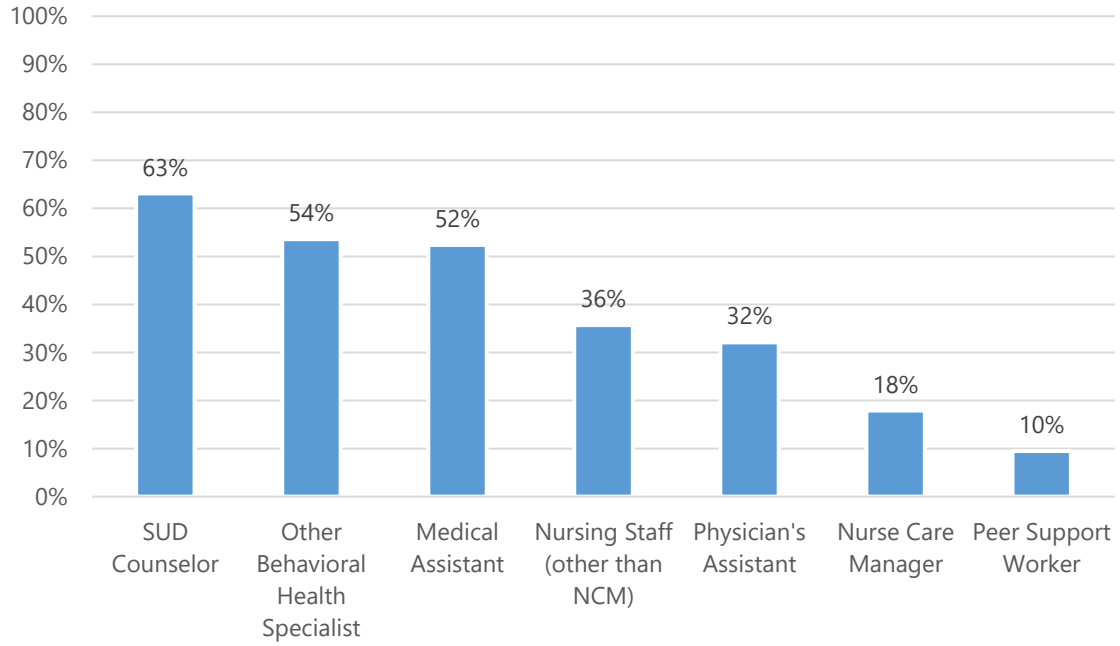
In addition, 11.6% of MAT team members still felt that methadone was just substituting one addiction for another, and 10.0% felt that patients demonstrating ongoing opioid use should be reprimanded or discharged from treatment.

Patient interviews revealed that nearly one-quarter (23.0%) of participants reported they were sometimes, frequently or always discriminated against by health care professionals because of their substance use disorder.

Trainings on compassion fatigue and structural competency, emphasizing the social structures behind health inequalities is of continued importance in expanding access to MAT.

MAT Teams

Figure 17. **MAT Team Composition**



As seen in Figure 17, Spoke Administrators reported that MAT Teams were primarily comprised of SUD counselors or other behavioral health specialists (82.1%, n = 69). In addition, 72.6% (n = 61) had at least one medical staff member as part of the team. Less than one-fifth (18%) indicated that their spoke used the Nurse Care Manager model (LaBelle et al. 2016), specifically. Peer support workers were least frequently part of the MAT Team. This may be due in part to Medi-Cal reimbursement restrictions on the types of services that peer support workers can provide. To foster sustainability of models incorporating peer support, it is recommended that additional services, such as early intervention, be made billable under Medi-Cal.

Most (68.1%, n = 49) MAT Team members work in only one H&S location (37.8% of whom work only in a Hub); 15.5% work in two locations; 7.0% worked in three locations; and 8.4% work in four or more. Only 64.2% work in at least one spoke location, which is not reflective of the Hub and Spoke model, in which all MAT Teams are supposed to support spokes. Most MAT Team members whose primary location was a spoke were nurses (35.3%) or SUD counselors (29.4%). The majority of MAT Team members working in hubs were SUD counselors (43.5%).

MAT Team members working in spokes were significantly more likely than those working in hubs to agree that buprenorphine reduces opioid misuse and that retaining patients in treatment is a top priority ($p < .05$). Spoke MAT Team members were also more likely to feel they were an integral part of the OUD treatment team and that they had a satisfactory level of communication with buprenorphine prescribers priority ($p < .05$). However, MAT teams in spokes were significantly less likely to find the Hub and Spoke model useful.

MAT Team member survey responses also demonstrated notable stigma toward patients with OUD: 11.6% of MAT team members felt that methadone was just substituting one addiction for another, and 10.0% felt that those demonstrating ongoing opioid use should be reprimanded or discharged from treatment. Ideally, none of the MAT Team members should agree with these statements. However, there has been a decrease in agreement with the statement that methadone is substituting one addiction for another from the first annual survey. In Year 1, 17.7% of MAT Team survey respondents agreed. There have been no changes in the item regarding reprimanding or discharging patients demonstrating continued use. Trainings on H&S provider stigma may be starting to make an impact. As one MAT Team member who had been involved in the H&S program for some time noted, "Throughout this program my opinions have changed. I am no longer as judgmental."

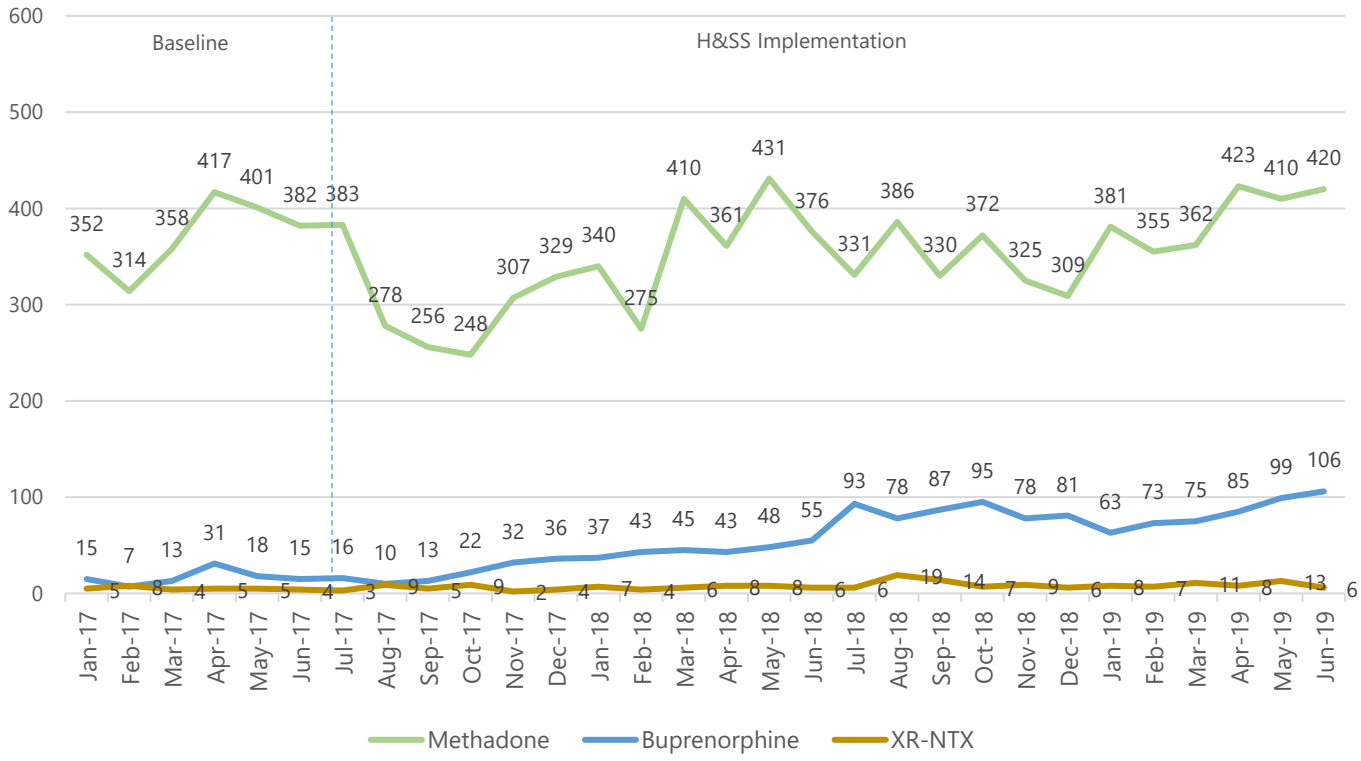
"Throughout this program my opinions have changed. I am no longer as judgmental."

PATIENT NUMBERS AND OUTCOMES

In the first two years of H&SS program implementation, 19,871 new patients started MAT (methadone, buprenorphine, or extended-release naltrexone) in hub and spoke settings. Although treatment outcomes are preliminary, patients experienced significant decreases in opioid use and cravings, and increases in life satisfaction in the first 90 days of treatment (see "Outcomes at 90 days" below).

Hub Patients

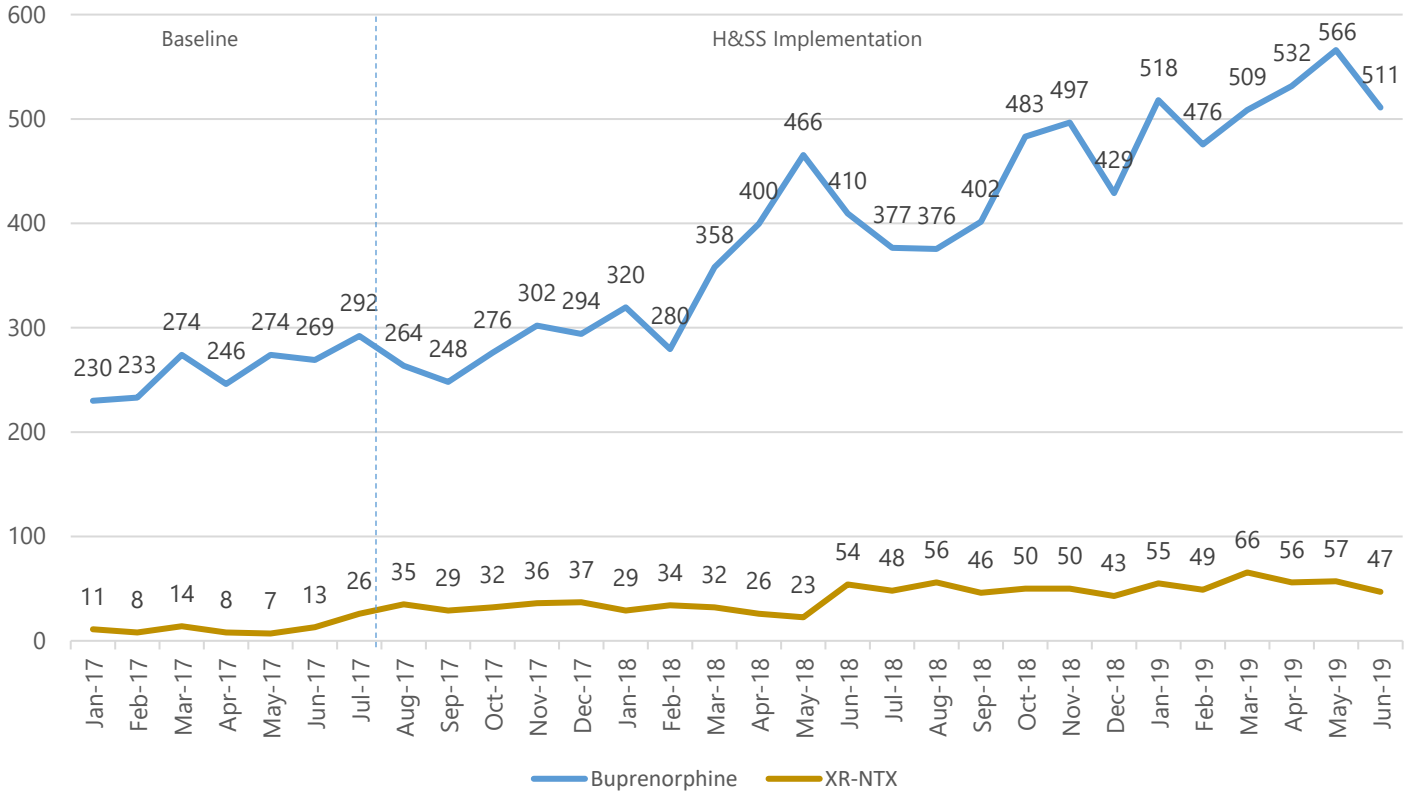
Figure 18. **New Patients Starting MAT in Hubs each Month**



In the first two years of H&SS program implementation, all Hubs (n = 17) started a total of 9,594 new patients on MAT (methadone, buprenorphine, or extended-release naltrexone; XR-NTX). The majority of these patients (83.5%, n = 8,015) started methadone. Over time, the number of patients starting buprenorphine each month has increased (406.1% over baseline). However, buprenorphine patients (n = 1,397) still represent only 14.6% of total hub patients (Figure 18). The availability of buprenorphine in OTP settings is an important element of expanding access to MAT, as patients have more treatment options from which to choose. The lower proportion of buprenorphine patients in hubs, combined with patient interview data on treatment experience (see "Acceptability" section below), indicate that patients may not be offered the full range of medication options when seeking treatment for OUDs in OTP settings. This growth is encouraging, but some hubs may need to ensure that their treatment initiation protocols include discussing all available treatments.

Spoke Patients

Figure 19. **New Patients Starting MAT in Spokes each Month**



A total of 10,277 patients started MAT (buprenorphine or extended-release naltrexone; XR-NTX) in the spokes over the first two years of program implementation. The majority of spoke patients (90.1%, n = 9,288) started buprenorphine. As Figure 19 shows, there was a 94.6% increase in the mean monthly number of patients starting buprenorphine in all spokes over the baseline period. On average, each spoke started 54.2 new patients on buprenorphine over the course of program implementation (*SD* = 82.7), with the highest performing spoke, Venice Family Clinic, completing 417 inductions. Nearly one-quarter (23.6%, n = 41) of reporting spokes had not started any patients on MAT by the end of Year 2, a slight improvement over Year 1, in which 28.8% of spokes had not seen any patients (Darfler et al., 2018). Although many spokes remained inactive, this decrease indicates greater productivity among spokes over time. A step toward actualizing MAT access in Year 3 should be to assist all spokes in beginning to prescribe buprenorphine; particularly those in high need areas (see "Availability and Accommodation" section for more detail).

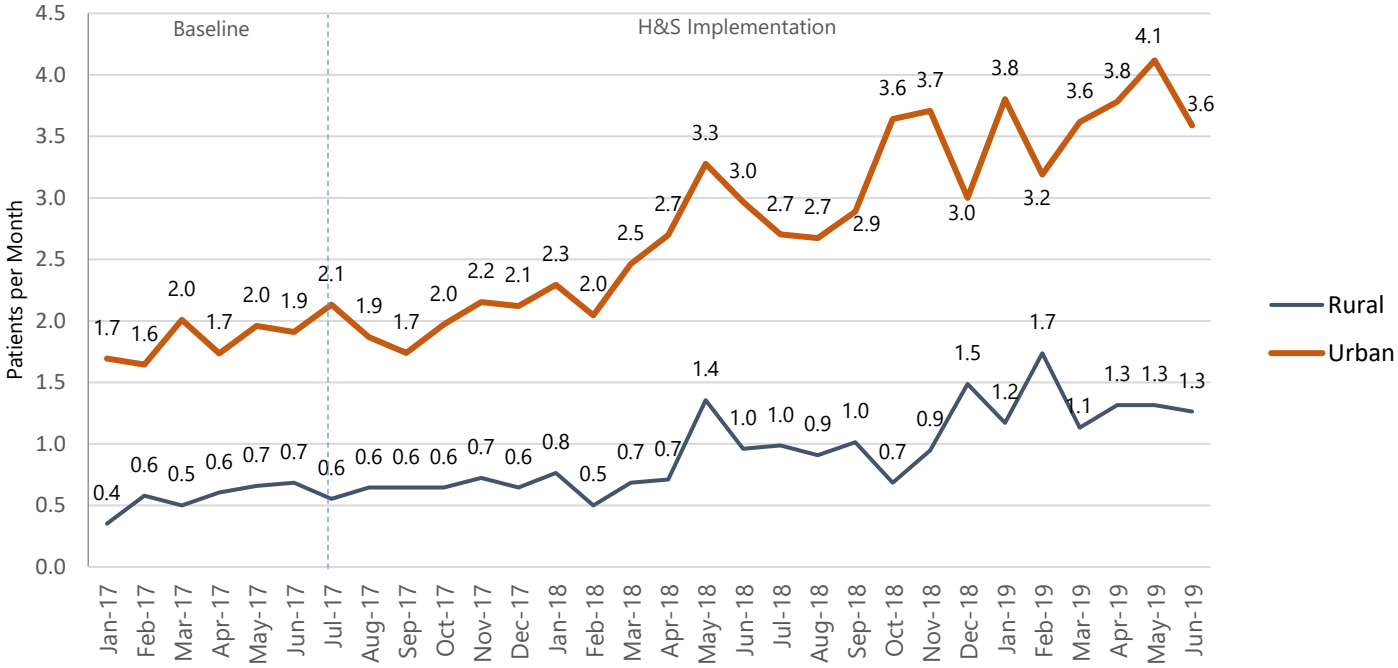
Figure 20. **Current buprenorphine patients per month by spoke type**

Spoke Type	Mean Patients per Month*	Std. Deviation
SUD Treatment Program	6.4	6.9
Hospital	3.4	5.5
Indian Health Center	3.3	2.3
Behavioral Health	2.7	4.4
FQHC	2.6	4.6
Pain Clinic	2.3	1.6
Telehealth	2.3	3.2
Private Practice	2.2	1.7
Health Center	1.6	2.4
Average (All Spoke Types)	3.0	4.7

*Past 7 month average (Dec 2018 – Jun 2019)

SUD treatment programs had the largest number of new buprenorphine patients per month over the past seven months (n = 6.4), followed by hospitals (n = 3.4), Indian Health Centers (n = 3.3), behavioral health centers (n = 2.7) and FQHCs (n = 2.6) (Figure 20). The average among all spokes was 3.0 patients per month. This was a slight increase over the first year of the program, during which the average number of new buprenorphine patients in spokes was 1.9 per month.

Figure 21. **Growth in buprenorphine patients per month in urban vs. rural spokes**



The average number of new buprenorphine patients per month was 3.6 in urban spokes and 1.3 in rural spokes (Figure 21). Although rural spokes had fewer new patients per month than urban spokes overall, rural spokes saw a greater increase in the number of new patients over baseline (116.7% vs. 89% increase between baseline and most recent 7 months).

Demographics

Figure 22. **Hub Patient Demographics (2018)**

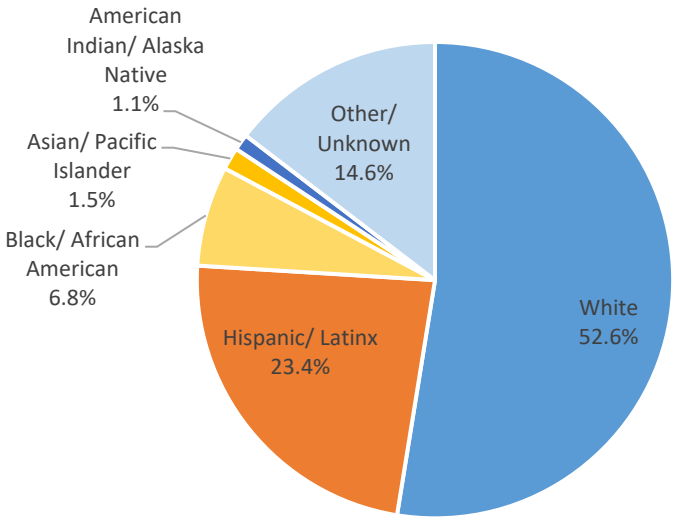
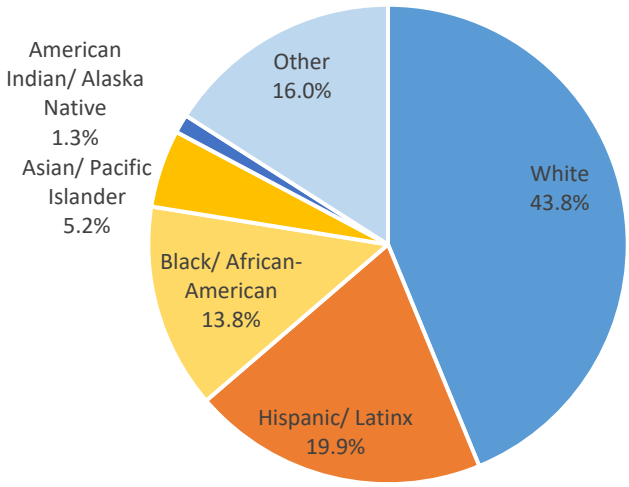


Figure 23. **Spoke Patient Demographics (2016)**



Based on CalOMS-Tx 2018 data, about half (52.6%) of hub patients were White, 23.4% were Hispanic or Latinx, 6.8% were Black or African American, 1.5% were Asian or Pacific Islander, 1.1% were American Indian or Alaska Native, and 14.6% were another race/ethnicity or their race was unknown (Figure 22). In addition, 58.9% were male and 41.1% were female. Data on other genders are not collected in the dataset. Most (93.2%) hub patients are between the ages of 18 and 64. Only 4.4% are over 65 and 2.3% are 12 to 17 years old.

Because Medi-Cal managed care data for 2017 have not yet become available, demographic estimates for spokes remain the same as the prior year. Overall, spoke patient populations appear to be somewhat more diverse than hub patient populations: 43.8% are White, 19.9% are Hispanic or Latinx, 13.8% are Black or African American, 5.2% are Asian or Pacific Islander, 1.3% are American Indian or Alaska Native, and 16.0% are another race/ethnicity (Figure 23).

Treatment Outcomes

Treatment outcomes are based on interviews of 52 participants who completed both the treatment initiation and 90-day follow up interviews. To date, 111 patients have completed treatment initiation interviews, all of whom are being sought to complete follow up interviews. The program evaluation team aims to interview over 400 patients, representing all H&S networks, by the close of the evaluation. Because interviews are not yet completed, results presented here are preliminary and should not be considered representative of the entire H&S system.

Participant Characteristics

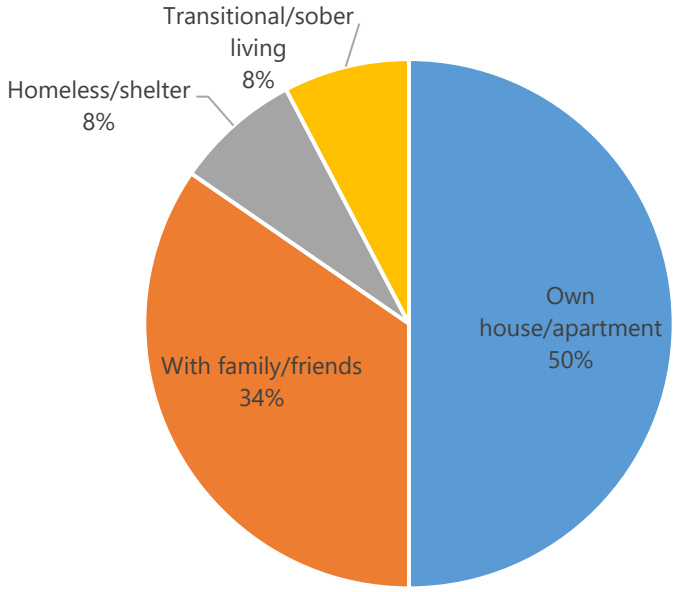
Among the 52 participants who completed 90-day follow up interviews as of the end of Year 2, 78.8% (n = 41) were Hub patients and 21.2% (n = 11) were Spoke patients. Patients came from 11 of the 18 H&SS networks.

Participant Demographics

Because data are preliminary, the sample is not currently representative of the populations at hubs and spokes (see Figures 22 and 23). The sample currently over represents white patients and men. If this trend continues as more interviews are conducted, the recruitment strategy will be revised to ensure a representative sample. Participants' mean age was 40.4 years (*SD* = 13.5). The youngest was 22 years old, and the oldest was 73. The majority (63.5%; n= 33) were men and 36.5% (n = 19) were women. No participants were non-binary and none chose to self-describe. Most participants (70.6%, n = 36) were white, 17.6% (n = 9) were Hispanic/Latinx, 2.0% (n = 1) were Black/African American, and 9.8% (n = 5) selected multiple race/ethnicities, including 5.8% (n = 3) who were American Indian/Alaska Native.

Living Situation

Figure 24. **Participant housing at follow up**



As shown in Figure 24, half (50.0%, n = 26) of participants lived in their own house or apartment, and an additional 34.6% (n = 18) lived with family or friends. Between treatment initiation and follow up, three patients became newly homeless (7.7%, n = 4 total). An equal number (n = 4) of patients lived in transitional housing or sober living. Hub patients were more likely to live in their own houses or apartments than spoke patients ($p < .05$).

The majority (69.2%; n = 36) of participants had children, 58.3% of whom lived with them.

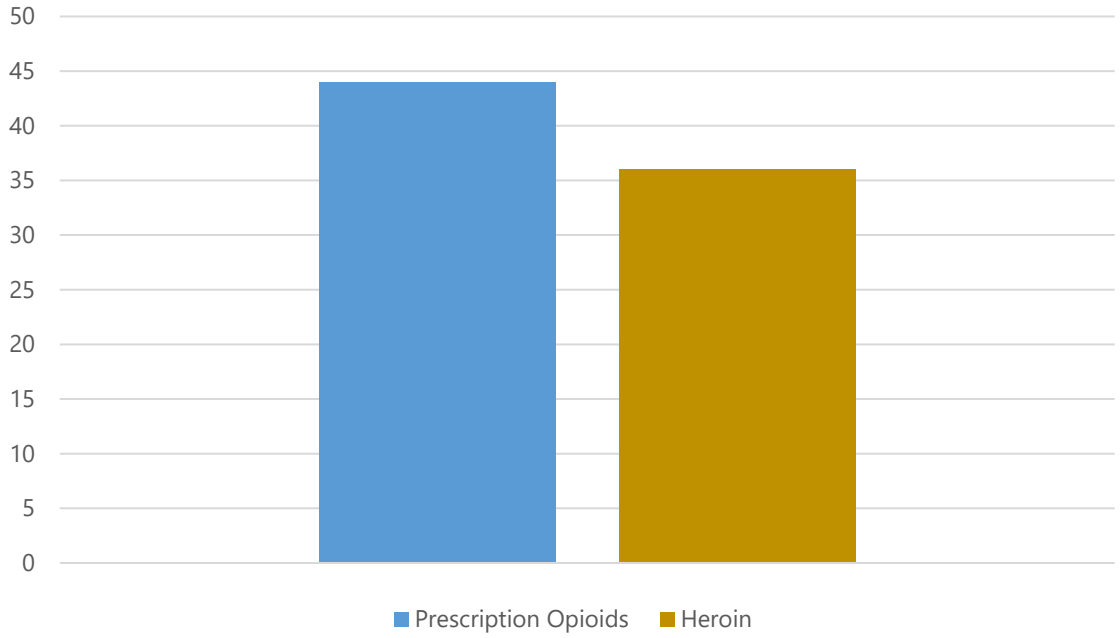
Only 7.7% (n = 4) participants lived in rural areas. On average, it took participants 24.6 minutes (*SD* = 24.8) to travel to their clinics or treatment centers and 14.8 (*SD* = 15.8) minutes to travel to their pharmacies. For urban patients, the average time to the clinic or treatment center was 22.5 minutes, and for rural patients, the average was 48.8 minutes.

Medications

There was near equal representation between methadone and buprenorphine: 46.0% (n = 23) of participants who were still in treatment as of the 90-day follow up interview were taking methadone and 54.0% (n = 27) were taking buprenorphine. No participants were taking extended-release naltrexone.

Opioid Use History

Figure 25. **Lifetime use of heroin and prescription opioids**



At follow up, most participants (84.6%, n = 44) indicated that they had misused prescription opioids in their lifetimes and two-thirds (69.2%, n = 36) had used heroin (see Figure 25). Mean age at first use of prescription opioids was 22.9 years (SD = 10.2). The mean age of first use of heroin was 22.9 years (SD = 7.6). At follow up, 5.8% (n = 3) of respondents reported prescription opioid use in the past 30 days and 17.3% (n = 9) reported heroin use in the past 30 days. Three participants had used heroin but had never misused prescription opioids.

Nearly half of all participants (47.1%; n = 24) had ever used fentanyl. Among these, 62.5% (n = 15) planned to use it or used heroin knowing it was laced with fentanyl. Eight participants were not aware that their opioids were laced with fentanyl and found out after the fact. One of these participants experienced a non-fatal overdose as a result of being unaware.

Just under half (48.1%, n = 25) of participants had switched from using one type of opioid to another in their lifetime. When asked to describe this switch, most told a story of starting out with misusing prescription opioids and switching to heroin. One participant explained why they switched: "Pills got expensive, and heroin is cheaper and stronger."

Over half (57.7%, n = 30) had injected any opioid. The mean age of first injection was 23.5 (*SD* = 7.1). Injection remained the usual method of use for 65.5% (n = 19) of those who had ever injected. While the majority (73.7%; n = 14) of those who injected reported having access to a needle/syringe exchange program, 26.3% (n = 5) did not have access.

Benzodiazepine Use

Participants were asked specifically about their lifetime use of benzodiazepines due to the particularly risky interaction between benzodiazepines and opioids. Most (61.5%, n = 32) indicated that they had ever misused benzodiazepines, and 63.5% (n = 33) had used benzodiazepines in combination with opioids. This is an urgently imperative topic for ongoing patient education.

Treatment History

Participants had been in treatment an average of 3.8 times (*SD* = 4.5) prior to the current treatment episode, with a maximum of 20 times.

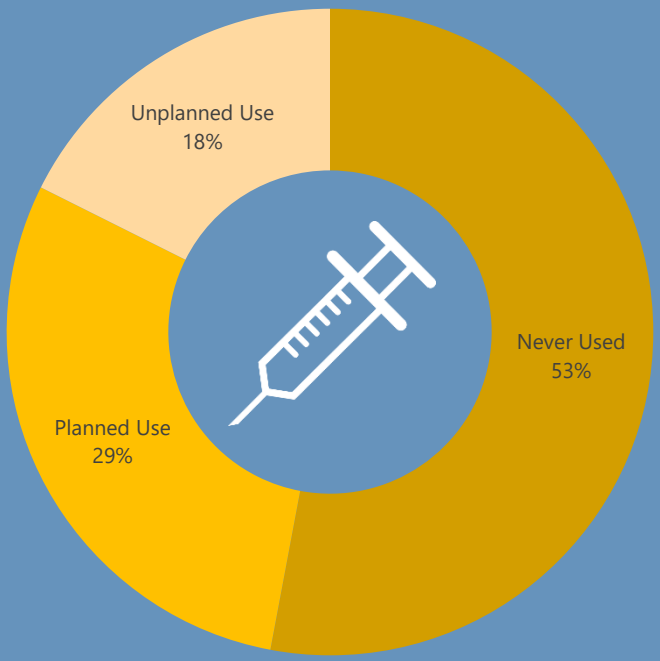
The majority of participants (61.5%; n = 32) had some prior experience with medications for opioid use disorders. 40.4% (n = 21) had received treatment with buprenorphine, 40.4% (n = 21) had received treatment with methadone, and 9.8% (n = 5) had received treatment with extended-release naltrexone prior to the current treatment episode.

Other Characteristics

A considerable proportion (21.2%, n =11) of participants were on probation or parole, in drug court, or had a case pending.

Almost half (46.2%, n = 24) had been diagnosed with a mental health condition. These included anxiety, depression, bipolar disorder, borderline personality disorder, and post-traumatic stress disorder.

Data in Focus: Fentanyl Use



Almost half of participants* (47.1%, n = 24) had used fentanyl, and nearly one-third (29.4%, n = 15) planned to use it or used heroin knowing it was laced with fentanyl.

Those who had used fentanyl were younger and significantly more likely to have a co-occurring mental health diagnosis than those who had not (p<.01).

They were also more likely to have overdosed on opioids (p<.05).

On average, participants who used fentanyl sought treatment 5.5 times before the current treatment episode.

These points of contact are important opportunities for engaging patients in conversations about safer fentanyl use and medication options.

PATIENTS WHO USED FENTANYL

35	67%	2.5	5.5
Average Age	With Mental Health Diagnoses	Average Times Overdosed	Average Times Previously in Treatment

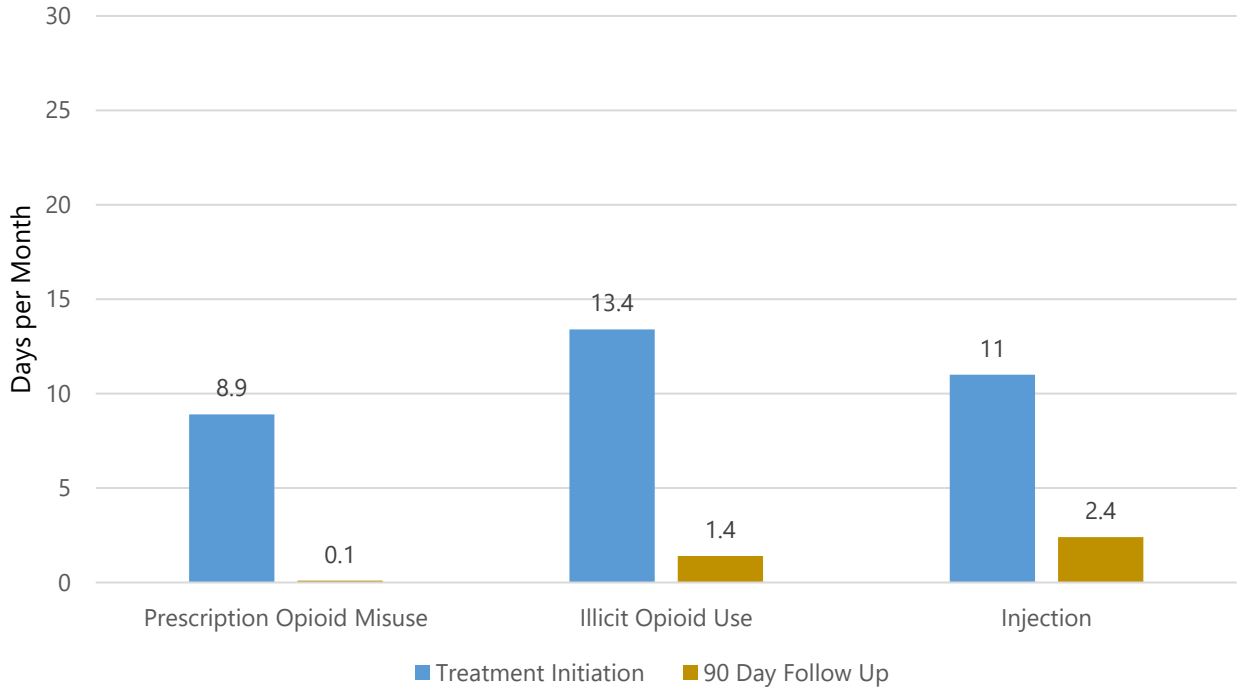
47	30%	0.6	2.2
Patients Who Never Used Fentanyl			

*Preliminary data based on 52 Hub and Spoke patients completing both treatment initiation and 90-day follow up interviews.

Outcomes at 90 Days

The majority (96.2%; n = 50) of participants who completed follow up interviews were still in treatment after 90 days.

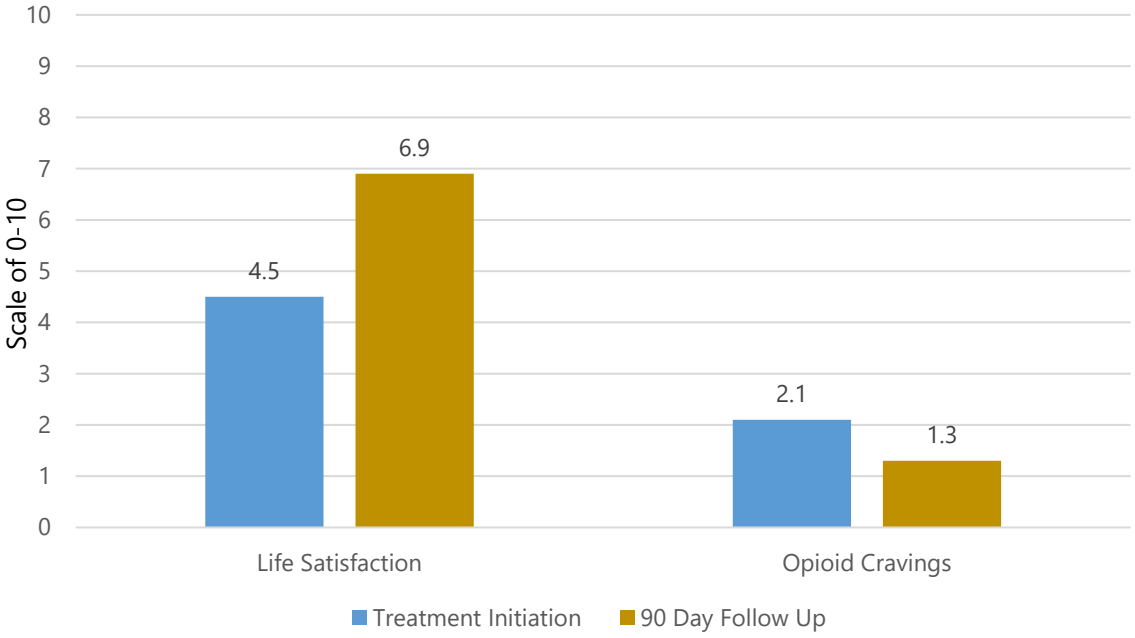
Figure 26. **Past 30 Day Opioid Use and Injection**



Participants reported statistically significant decreases in days of prescription opioid misuse, days of illicit opioid use, and days of injection ($p<.001$). Only 5.8% (n = 3) had misused prescription opioids in the past 30 days at follow up, with a mean of 0.1 days of use (SD = 0.8). At follow up, 17.3% (n = 9) had used in illicit opioids in the past 30 days, with a mean of 1.4 days of use (SD = 5.1). Two of these participants described experiencing relapses several weeks prior. One participant who had used opioids in the past 30 days had dropped out of treatment. The same number of participants who had used illicit opioids (17.3%, n = 9) had injected drugs in the past 30 days.

When asked about the impact of treatment on their substance use, most participants (84.3%, n = 43) agreed that they were less likely to use drugs or alcohol because of the treatment they had received in the hub and spoke sites.

Figure 27. **Life Satisfaction and Opioid Cravings**

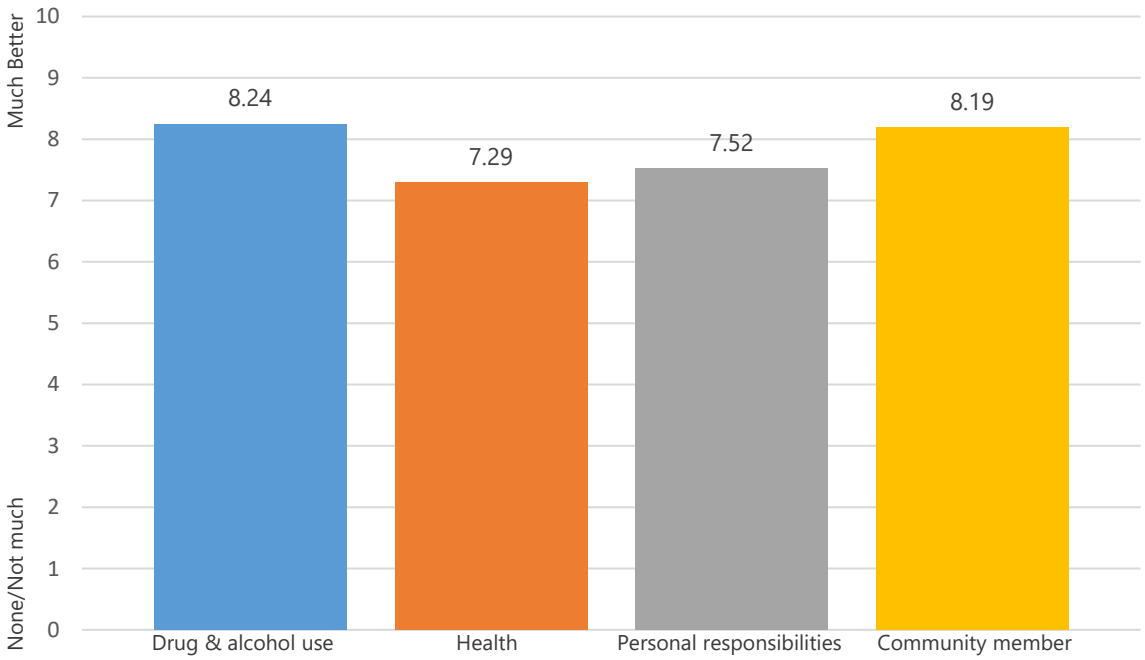


These same participants also experienced significant increases in satisfaction with life overall ($p<.001$), and significant decreases in opioid cravings on a scale of 0 to 10 ($p<.05$).

Although not significant, there were also decreases in number of times in the emergency room (2.6 times in the 30 days prior to treatment initiation vs. 0.1 times in the most recent 30 days at follow up), number of times overdosed (0.1 times vs. 0.0 times), days in serious relationship/family conflict (6.9 days vs. 3.7 days), days stopped or arrested by police (0.3 days vs. 0.1 days), and days incarcerated (0.2 days vs. 0.0 days). There were no significant changes in interest or pleasure in doing things or in depressed feelings.

There were no significant differences in satisfaction with treatment between treatment initiation and follow up. This may change as more interviews are completed over the course of the evaluation.

Figure 28. **Participant perceptions of improvements in life domains**



Participants were asked to rate their improvements in the following domains on a scale of 0 ("None/Not much") to 10 ("Much better") since starting treatment:

- How much better are you with drug and alcohol use?
- How much has your health improved?
- How much better are you in taking care of personal responsibilities?
- Are you a better member of the community?

Overall, participants felt they had experienced substantial improvements in each of these areas (Figure 28).

Other Drug Use

At treatment initiation, 46.9% (n = 30) patients indicated that they had used drugs other than opioids in the past 30 days, with an average of 9.6 days of use. This may be an underestimate, due to the wording of the item (i.e., "other drugs, such as benzodiazepines or cocaine") and participants' comfort levels disclosing substance use during the first interview. However, at follow up, 48.1% (n = 25) of participants endorsed using cannabis, amphetamines, benzodiazepines or other drugs[7] in the past 30-days.[8] Although a direct comparison between treatment initiation and 90-day follow up cannot be made, it appears that other drug use did not decrease with treatment for OUD.

[7] Participants named MDMA and zolpidem misuse when asked about "other drugs" in the 90-day follow up interview

[8] For the purposes of comparison between treatment initiation and 90-day follow up, tobacco and alcohol were excluded from this statistic, as participants may not have considered them "other drugs" at treatment initiation, given the wording of the item

Figure 29. **Past 30 day other drug use at follow up**

	Number of participants	Percent of all participants (N = 52)	Mean days of use
Tobacco	33	63.5%	17.4 days
Cannabis/Marijuana	20	38.5%	7.4 days
Alcohol	15	28.8%	1.3 days
Amphetamines	13	25.0%	3.2 days
Benzodiazepines	8	15.4%	2.0 days
Other drugs	4	7.7%	0.7 days

The most commonly used substance other than opioids was tobacco, which more than half (63.5%, n = 33) of participants had used in the past 30 days (Figure 29). One-quarter of participants (25.0%, n = 13) had used amphetamines in the past 30 days, with an average of 3.2 days of use. This should be cause for concern given the increasing incidence of overdose deaths involving a combination of amphetamines and opioids in the state. Polysubstance use should remain a priority for addressing the California overdose crisis, and access to treatments for amphetamine use, such as contingency management, should be expanded along with MAT.

Although treatment outcomes show promising improvement among the patients who completed follow up interviews, the sample remains small, and is not yet representative of all hubs and spokes, or all patient demographic groups. It is possible that these outcomes only represent patients who are the most engaged in treatment and are having the best treatment experiences. Moreover, it is possible that many more people with OUD who are in need of treatment are still unable to access hubs and spokes. Nearly half (43.1%, n = 28) of spoke administrators felt that individuals served by their spokes had difficulty accessing OUD services.

AVAILABILITY & ACCOMODATION

The "Availability and Accommodation" domain of access refer to the existence of productive health care settings that can be reached in a reasonable time, if at all. It is impacted by the physical location of clinics/programs, distribution and density of locations, presence of providers, transportation availability, and modes of service provision (Levesque et al. 2013).

Spoke Productivity

Figure 30. **Availability of Productive Spokes in Counties with High Overdose Death Rates**

Although spokes cover a majority of California counties, when mapping spokes based on their productivity, it becomes clear that access remains somewhat limited. Spoke productivity was broken into four categories, determined using average monthly number of buprenorphine inductions over the most recent seven months (Dec 2018 – Jun 2019). Categories included top performers (spokes with >8 patients per month), moderate performers (spokes with >2.8 – 8 patients per month), low performers (spokes with ≤2.8 patients per month), and spokes with 0 patients. Many spokes (41.1%) were low performers, and another 28.0% had no patients. Half of rural spokes (50.0%) had 0 patients, and none were high performers. The number of rural spokes without any patients at all is particularly concerning given the high need for treatment in these areas. Availability of productive spokes is still functionally lacking in many of the high overdose death rate counties including all of Lassen, and much of Siskiyou and Humboldt. Modoc, Del Norte and Yuba are missing spokes entirely. There are also large clusters of low/no productivity spokes in the Bay Area, Central Valley and the Inland Empire. If all spokes began prescribing buprenorphine, access to productive treatment settings would increase by 38.8% statewide.

Convenience

Most participants (71.1%, n = 37) felt that the location of their treatment center was convenient for them. However, 21.1% (n = 11) did not find that to be the case. Many participants went to great lengths to get to their treatment centers for timely dosing, waking up very early in the morning, bringing their children on long car rides, driving long distances, and compromising their work schedules.

"There's many times that I almost went out and used because, you know, I just couldn't take it anymore. Just to go dose was the hardest thing ever."

These difficulties were exacerbated for participants without reliable transportation. Although transportation tokens are an allowable expense under the H&S grants, more than one-third (37.5%, n = 24) of spoke administrators did not feel that their spokes offered adequate transportation resources to patients. One participant explained:

> For example, we have a baby, right... and we go in there at 5 in the morning because it makes it easier for us. So, as it is, we don't have transportation there. We have to get it through the insurance company, and a lot of times we have a lot of issues with them giving us transportation there. It's about a 40 minute drive. If we don't leave the house before let's say 6 AM, we're stuck on the road for like three hours.

He went on to describe the lack of accommodation that the treatment center provided for his early morning schedule, despite knowing that he had a child and transportation difficulties. Another patient with a child faced similar scheduling difficulties:

> If you came in the morning… at your scheduled appointment time, they would make you wait hours. And it was very hard on me because either I had work or I had my daughter, and I had things to do. And they wouldn't let you dose if you didn't see your counselor. Like, say I had to go to work and they made me wait… I would have to miss dosing... Which endangered me... Because then, if I'm not able to take methadone, then you get sick, and then you want to go and use drugs…
>
> There's many times that I almost went out and used because, you know, I just couldn't take it anymore. Just to go dose was the hardest thing ever.

Hubs and spokes should accommodate all patient schedules as often as possible, and work to ensure that their patients have a convenient and reliable way to get their doses. No patient should ever miss a medication dose because of a scheduling conflict.

Telehealth

Telehealth is an effective means to deliver buprenorphine and can benefit patients by reducing travel requirements and delays in receiving care (Weintraub et al., 2018). Telehealth can be particularly beneficial for patients living in rural areas. However, only 30.3% (n = 20) of spoke and 11.1% (n = 3) of hub administrators indicated that their locations frequently delivered telehealth services.

Partnering with telehealth organizations that already deliver MAT services through hub and spoke may be an easy way for programs to improve the convenience of their services for patients who live in rural areas, lack transportation, have mobility issues, or have scheduling conflicts.

Pharmacy Availability

Just over half (52.3%, n = 33) of spoke administrators felt that onsite or community pharmacies were effective in serving the needs of their patients with OUD.

Additional research is needed to clarify the reasons for this, but anecdotal evidence as well as informal individual discussions with a small convenience sample of five pharmacists (one of whom had informally interviewed her fellow pharmacists on the same topic) suggest several reasons for pharmacy resistance.

Stigma toward opioids, including buprenorphine, appears to present a challenge. Stigma came up in discussions with nearly all of the pharmacists we communicated with, and one of our own MAT Team survey respondents reported, "I have had multiple patients complain about [pharmacy name] here . . . The complaints have been the staff is rude and judgmental." While this suggests attitudes and beliefs about the value of MAT may need to be addressed, additional underlying challenges are hinted at by an interview by Feldman (2019), in which a pharmacist asserted it would be unethical to sell buprenorphine to a patient if he knew the patient was diverting (selling) the medication, and he cited safety issues due to drug dealers he felt were preying on his customers. This suggests that while education addressing beliefs about the medication itself may be helpful, such trainings are likely to be more effective if developed and/or delivered by pharmacists who have experience addressing these types of real-world challenges, and can speak in particular to their own positive experiences as a way of motivating pharmacists to take on these challenges. As one pharmacist explains:

> Many patients have hugged me post-induction, so pleased with their changed lives. They bring in loved ones to demonstrate their excitement. They often get jobs. They often get housed. The full time job of searching for opioids is resolved.

Wholesaler allocations were reported to be another barrier. Wholesalers can stop shipments of medications if they decide the order is suspicious according to their own varying criteria. One pharmacist reported a wholesaler cut off his pharmacy for too many "cash prescriptions," but these were largely cases in which patients had insurance that didn't cover the whole cost of the medication, so they paid part in cash. Wholesalers also were reported to hold shipments if controlled substances exceed a percentage threshold set by the wholesaler, causing pharmacies to scramble to avoid hitting that threshold on accident. Similarly, another pharmacist complained of ordering "paperwork and lag time." These challenges, along with the time and resources required to resolve them, can discourage pharmacies from carrying buprenorphine.

Costs are also a concern. Pharmacists reported Medi-Cal only pays for the brand name (Suboxone), not for the generic. This can reportedly cause a cash flow issue for community pharmacies. One pharmacist reported that a package of 30 Suboxone 8mg buprenorphine/2mg naloxone costs $300, which makes it more difficult for community pharmacies to keep these more expensive products on the shelves than it would be to stock generic products. Similarly, another pharmacist suggested pharmacies are carrying limited stock so that it doesn't expire.

The following policy and education recommendations are based on our discussions with pharmacists:

- Extend Medi-Cal coverage to generic formulations of buprenorphine/naloxone in addition to Suboxone
- Provide education to pharmacists on OUD and MAT, with particular emphases on overcoming buprenorphine-related challenges and the positive aspects of dispensing buprenorphine

- Work with the California Board of Pharmacy, which currently offers free trainings statewide, hosted typically on a quarterly basis, jointly with schools of Pharmacies at various venues throughout the state, and in partnership with local coalitions willing to host an event. (personal communication, Board of Pharmacy, 9/23/2019). UCLA requested a copy of the PowerPoint to identify the content of in the trainings, but was still awaiting a response when this report was submitted.
- Train pharmacists on how to look up DATA 2000 waivers specifically was said to be helpful.

These barriers and recommendations are based on a limited number of discussions. Further research is also recommended to further identify barriers and promising practices statewide.

Promising Practices: Availability & Accommodation

Promising practices for addressing availability and accommodation:

- Hubs should work with spokes to ensure that they all have the resources needed to start prescribing buprenorphine
- Offer low-barrier care that requires limited visits to the clinic (no mandatory counseling, lessen requirements for medication units)
- Offer transportation tokens and/or assist patients with insurance process for covering transportation costs
- Offer telehealth services to allow for more convenient treatment options, particularly for patients living in rural areas, patients who lack reliable transportation, or patients who have mobility issues
- Establish relationships with local pharmacies and keep them informed of training opportunities
- Encourage prescribers to write prescriptions with Dispense as Written (DAW) of 0. This allows pharmacists to use brand or generic, depending on what their insurance covers
- Encourage prescribers to clearly write either Opioid Dependence or Opioid Use Disorder as the indication on prescriptions. Insurance companies will not reimburse for sublingual tablets or films when the indication is pain

APPROACHABILITY

Approachability refers to the visibility of health care services. It includes both communities' abilities to perceive a need for care and potential patients' abilities to identify that relevant services exist. Information dissemination, outreach and education efforts all affect the approachability of treatment programs and clinics.

Patient Outreach and Education

While the state has developed a public awareness campaign about MAT and how to access providers (ChooseMAT.org), the evaluation revealed that local efforts are needed. MAT Team members and spoke administrators, who provide the most care coordination, were surveyed about their perceptions of how easy their clinics were for patients to find. Only 51.7% (n = 30) of MAT Team members and 43.5% (n = 27) of spoke administrators felt that individuals in their communities who were interested in buprenorphine could easily find their clinic(s) and providers in online directories. In an open-ended survey item, over one-third (34.8%, n = 23) of spoke administrators indicated that they would use additional funds or resources, if available, on outreach and education efforts. Insufficient outreach was also the most commonly written in response when MAT Team members were asked to identify barriers to H&S implementation they had faced. They identified needs for greater outreach among other providers, potential patients, and the community at large.

Outreach Activities

Site visits to several spokes revealed numerous challenges and best practices for reaching new potential patients.

A rural FQHC in a county with one of the highest overdose death rates used flyers and brochures throughout their clinic to educate patients about OUD and advertise their buprenorphine program. Signs on the front door read, "Don't mix opioids and benzodiazepines!" and "Sign up for Covered California here." There were also flyers for the buprenorphine program posted on the front desk next to the clinic sign-in sheet, and on the doors to exam rooms. The program was also advertised in their quarterly newsletter, alongside information about the arts in healthcare and the importance of cancer screenings. The ubiquity of the flyers helped to normalize the presence of MAT in the health care setting. However, the clinic still struggled with patient recruitment. They wanted to start advertising out in the local community, but had limited staff time to do so.

Another FQHC located in an urban area that served both urban and rural populations faced similar challenges. Although they had created radio ads in English and Spanish and community-facing flyers to post in parks, public restrooms and the local homeless navigation center, and had successfully worked with a peer support worker to disseminate information, they hit a roadblock due to staff turnover.

> **Provider 1**: We need an extra hand. We had a peer support worker who was amazing and was really starting to get some groundwork laid. And then she only worked with us for a couple months.
>
> **Provider 2**: And we still have the position open but it hasn't been filled since that time. I keep asking and we just don't have anybody yet. She would go out to the parks. And if somebody was not in good shape or didn't show up and didn't have a phone, she would go out to the park because she knew that's where they hung out. And if they weren't there she would ask their other friends… Yeah, she was amazing. And she would come into our meetings and say, "Hi, I'm your new best friend. And this is my phone number. You call me any time you need me. Day or night, I am available." And it was really amazing the support she gave.

There is growing evidence that peer recovery support is a beneficial component of treatment for substance use disorders (Bassuk et al., 2016). Peer support workers can help to empower patients and aid in non-clinical aspects of navigating the recovery process. They also have the lived experience needed to find potential patients in the local community and let them know where they can access treatment. Several spokes in one rural county worked with peer recovery workers to recruit new patients, through a harm reduction organization with a street outreach team.

Another spoke planned to bring a mobile syringe exchange unit directly to their clinic parking lot to both provide harm reduction services and to help advertise their MAT program. However, they had difficulty finding funding for the service and faced opposition toward the mobile unit being in the parking lot from the surrounding community. Although they were still seeking funding at the time of the site visit, they planned to manage community stigma by locating the syringe exchange in a clinic exam room.

Screening for OUD

The majority (80.0%, n = 52) of spoke administrators indicated that their providers screened most patients for OUD. However, the type of screening employed varied widely. At site visits, providers described screening protocols ranging from the use of tools such as the CAGE and AUDIT-C, to provider judgment based on long-term primary care relationships. The spoke with the largest number of new patients per month of the entire statewide system, an urban FQHC, employed a near universal SBIRT protocol, with a warm handoff to onsite behavioral health providers. This may be a useful tactic for other primary care spokes to consider to increase outreach within the clinic.

Provider Outreach and Education

H&S providers also identified a need to increase visibility among other health care and recovery support providers in the communities served by their networks. One MAT Team member explained in a survey response, "Many providers have never heard of buprenorphine, so they do not refer patients with OUD to prescribers. There needs to be more education about this type of MAT for [primary care providers] and ED doctors. Buprenorphine should be part of ED protocol for overdoses and drug-seeking." Although this sort of education is growing with initiatives like H&S and the California Bridge program, some spokes have yet to establish referral connections with local hospitals and other providers in their areas, or even in their own practices.

"There are several online resources… But I think it's nice having a local network to tap into."

Another MAT Team member expressed difficulty in disseminating information about buprenorphine availability to others involved in the treatment community.

> There are a lot of misconceptions about opioid treatment in the 12-step communities that are a real barrier to care. There needs to be more education and public awareness about the problem and how our community is addressing it. I think this is a community challenge and so far I think there remains a lot of silos. [Treatment information] and options need to be more available and community based. I think we need more boots on the ground outreach and education and collaboration with local government.

One spoke found success in this collaborative community-based approach. During their site visit, they explained how they had joined a local advisory group and set up a listserv to share resources and advice with other local providers.

> **Provider 1**: People here in this community want to collaborate and go out of their way to learn and work together. So we have our MAT advisory group in the county that we meet regularly with… It's kind of a way that we come together and really talk about current issues. The coroner comes even to report trends, and we have pharmacy representation, [behavioral health] representation, psychiatry. We have inpatient doctors, ER doctors. And I think that really has helped disseminate this in a way that [addresses] the culture shift.

A second provider continued, after describing the advisory group's listserv:

> **Provider 2**: I know there are a lot of resources. There's the warm line. There are several online resources, [Providers Clinical Support System]. But I think it's nice having a local network to tap into.

Communicating and collaborating with local practitioners allowed the spoke to build a network of knowledge sharing and referral resources similar to those developed on the larger scale for the H&S program.

Promising Practices: Approachability

H&S providers face challenges to outreach and education at many levels, including stigma toward MAT in their communities, insufficient referral resources, and trouble reaching potential new patients. The best practices providers used to address these challenges included:

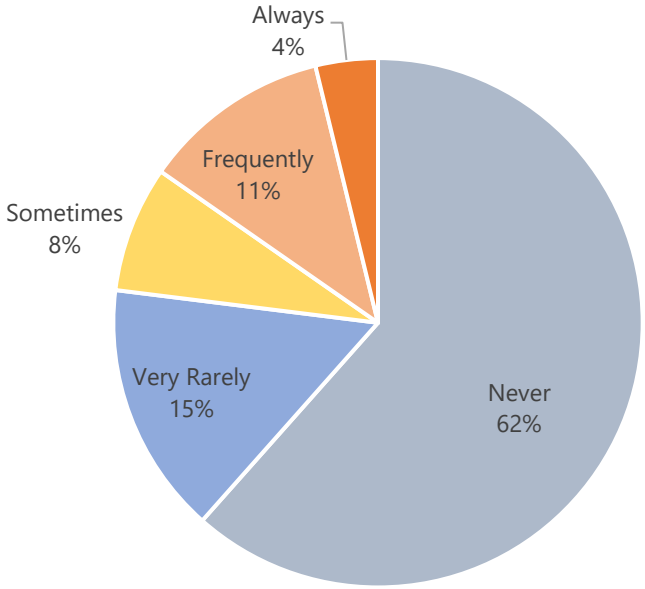
- A multifaceted approach to advertising with flyers, brochures and radio/television campaigns in the clinic and the community at large
    - Hubs should offer resources to spokes to help develop and disseminate these materials
- Normalizing MAT in health care settings by advertising buprenorphine alongside other health care services
- Employing peer support workers to build community relationships and recruit potential patients
    - If possible, hire peer support workers directly through the spoke, as part of the MAT Team, to allow them to aid with care navigation and patient retention
    - Given reimbursement challenges due to current Medi-Cal policy on peer recovery services, partnering with harm reduction organizations with street outreach teams may help clinics reach new patients
- Developing a listserv with other local practitioners, such as behavioral health providers, emergency medicine providers, pharmacists, and harm reduction organizers to share knowledge and develop referral resources
- Increase screening for substance use disorders to identify current patients who may be in need of treatment

ACCEPTABILITY

Acceptability relates to ensuring that health care services meet the needs of those from various sociocultural backgrounds, particularly those who are most marginalized. Because patients with substance use disorders are already vulnerable to discrimination, those from marginalized groups can face extreme barriers to accessing treatment services. Below includes discussions on patients experiencing homelessness, patients speaking languages other than English, people of color, patients living in rural areas, and patients with co-occurring mental health diagnoses.

Hub and spoke participants encountered stigma and discrimination in the community at large, as well as in treatment settings. Many (61.6%, n = 32) had worried to some extent that others would view them unfavorably because they were in treatment, and 13.5% (n = 7) had avoided treatment because they were concerned about how others would react. Stigma toward MAT was also a problem among the recovery community, and 25.0% (n = 12) felt that others had not been accepting of their use of medications.

Figure 31. **Frequency participants felt discriminated against by health professionals**



Although most participants (61.5%, n = 32) felt that they had never been discriminated against by health professionals because of their substance use disorder, nearly one-quarter (23.0%, n = 12) sometimes, frequently or always faced discrimination (see Figure 31). Most patients (86.5%, n = 45) also felt that staff in their treatment centers were sensitive to their backgrounds. However, it is important to note that the sample of patients may not currently be representative of women and people of color (see "Participant Characteristics").

Almost all (95.6%, n = 65) spoke administrators felt that their spokes provided culturally competent care, and 77.3% (n = 51) felt that their staff had experience providing trauma-informed care. However, far fewer MAT team members and waivered providers indicated that they actually provided such services. Only 59.7% (n = 44) of MAT Team members and 60.9% (n =

129) of waivered providers indicated that they provided culturally competent care. Still fewer – 57.1% (n = 46) of MAT team members and 43.9% (n = 93) of waivered providers – provided trauma-informed care. Given the proportion of patients experiencing discrimination, hub and spoke leadership may need to institute further training and education. This is particularly important for patients from marginalized backgrounds facing health disparities, such as patients experiencing homelessness, patients speaking languages other than English, people of color, patients living in rural areas, and patients with co-occurring mental health conditions.

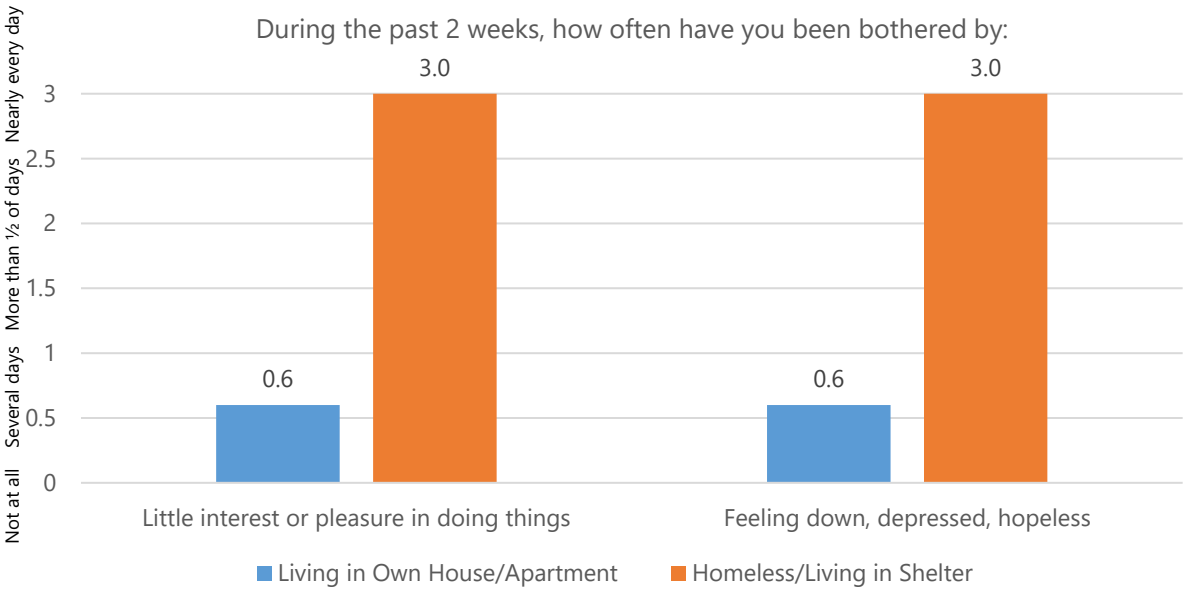
Patients Experiencing Homelessness

Less than half (43.9%, n = 29) of spoke administrators felt that their spokes had adequate referral resources for housing supports to provide to patients experiencing homelessness. Lacking such resources is a barrier to treatment for these patients. As one participant who hoped her treatment center would institute a homeless outreach program explained:

> I will say it is very hard to stay clean being homeless, because most people in the homeless community are active users. So a lot of the people, you know, when you're homeless that you come into contact with are homeless. And it's very hard to stay clean that way because- Like where they have the camps, where people set up tents and stuff all together… you kind of have to do it in a community so your tent doesn't get stolen or what not. But we're the only people clean, you know. Everybody else there, they're using drugs around you right out in the open. You know, that could be a trigger. It just makes it hard.

In addition to lacking stable housing and a safe location to store medications, which prevented her from getting take-home doses, she felt triggered among the community she lived in. Patients experiencing homelessness also struggled more with mental health.

Figure 32. **PHQ-2 scores by housing situation**



Those who were homeless or lived in shelters received significantly higher scores on the PHQ-2 than those living in their own homes ($p<.001$), indicating greater depressive symptoms. They were also significantly less satisfied with their lives overall ($p<.001$).

The same participant who struggled with triggers in the homeless encampments also described feeling judged by staff due to her housing circumstances:

> It just feels like there are a couple people that look down on you because, you know, of the situation that we're in. Like we're homeless because, you know, that's directly related to our drug addiction. But now they don't understand why we're still homeless even though we are clean. But if they're not going to take the time to listen then- Yeah. It was easy to dig the hole. It just takes a lot more time to get out of it, especially when you're doing everything legally now.

Despite the great efforts this participant took to attend treatment regularly, she still felt that staff looked down upon and, at times, punished her for her living situation. It was difficult to find stable housing, and she hoped staff would listen more and understand these challenges.

One FQHC spoke in an urban area made addressing the needs of homeless and other underserved patients a priority. They offered a full "Circle of Care," which included transitional housing on site, transportation vans, a food pantry, job search assistance and a community garden. This whole person care approach was realized by staff who aimed to connect with patients without being judgmental. One provider interviewed during a visit to this spoke explained:

> Each individual that works here does a really good job of connecting with the patients. So I think that's a really big part as to why our patients come back. They don't feel judged, they feel comfortable here. And so despite these challenges with some of their diagnoses, they start feeling connected to staff members here. And sometimes they start feeling like this is their home, their safe place kind of, which is what we're trying to foster.

This approach, combined with the wide array of services and referral resources available may help hubs and spokes better serve the needs of patients experiencing homelessness, ultimately making treatment more accessible.

Patients Speaking Languages Other than English

According to the Census Bureau 2016 American Community Survey, nearly half (44.6%) of Californians speak a language other than English at home ("Percent of People 5 Years" 2016). Yet full access to treatment services for those with opioid use disorders who do not speak English or prefer to use a language other than English may be lacking. Provider surveys revealed that 14.8% (n = 4) of hub and 16.7% (n = 11) spoke administrators said their locations don't have the staff and other resources needed to treat patients with OUD who speak a language other than English. A considerable proportion of hub (26.9%, n = 7) and spoke (28.6%, n =18) administrators also indicated that their locations did not offer outreach and education materials in languages other than English. Many of those with opioid use disorders whose primary language is not English may therefore be unaware that these services exist.

Almost all (94.2%, n = 49) participants strongly agreed that they were able to access services in their preferred language at their hub or spoke treatment center. However, this is likely the result of the very small number of interviews completed with Spanish-speaking patients to date. One participant who did speak Spanish explained how this affected her treatment. She liked that the program offered individual therapy, but, she said, "it's a problem because I understand English but I can't speak." Her counseling was less effective because she had difficulty responding to the counselor. The evaluation team has requested that hubs and spokes refer an increased number of patients who speak Spanish, to further detect issues like this. As the interview sample grows, though, the recruitment strategy may need to be revised.

People of Color

Overall, people of color (POC; n = 14) completing follow up interviews faced more barriers to treatment than white participants did. POC participants were less likely to have prior treatment experiences than white participants (1.9 times vs. 4.9, $p<.05$). On a scale of 1-5, POC were also significantly less likely to feel that their treatment was affordable (2.5 vs. 4.3; $p<.001$). The

reasons behind these differences are important areas for further exploration. Hubs and spokes should ensure equitable access to the services they provide, particularly financial resources.

In addition, among participants who reported ever using fentanyl (n = 23), POC were more likely to have planned to use it than white participants were (p=.54). All POC respondents (n = 5) indicated that they had planned to use it or used heroin knowing it was laced with fentanyl. Only 47.1% (n = 8) of white respondents indicated the same. Although the number of participants is small and these data are preliminary, this trend is important to highlight in a moment when fentanyl overdoses are rapidly increasing death rates. Communities of color should receive increased funding to assist with covering treatment costs and other resources, such as harm reduction services for fentanyl users.

Patients Living in Rural Areas

Patients in rural areas face unique barriers to accessing treatment such as distance to treatment centers, lack of transportation options, and impacted clinics with long wait times. Only a small number of patients living in rural areas[9] (n = 4) had been interviewed as of the time of this

[9] Patients living outside of urbanized areas or urban clusters per Census 2010

report. However, given the urgency of the opioid crisis in California's rural areas, we found it important to report preliminary descriptive data on this patient population.

The average travel time to the clinic or treatment center for patients living in rural areas was 48.8 minutes. Although travel times met DHCS network adequacy standards ("Medicaid Managed Care" 2017), only 50.0% (n = 2) of participants felt that the treatment center location was convenient for them. Pharmacy travel time was much lower, with an average of 8.0 minutes, indicating that pharmacies could play a crucial role in ensuring access to medications in these areas.

One participant living in a rural area who dosed at a local medication unit and named distance to the main clinic location for weekly medical and counseling visits as the biggest obstacle to treatment detailed how inconvenient seeking treatment under these conditions could be:

> I have to drive an hour away once a week. And with my work schedule, I have to be at the clinic by 5:00 am, which means I have to leave- I have to be up at 2:30 or 3:00. And then I leave my house no later than 3:45 to get there on time. And then I have to go straight from the clinic to work, and work a full day half awake.

These long distances also affected the affordability of seeking treatment. The same participant noted that driving to the clinic took "over an hour both ways, so two hours' drive time. Plus gas is over $4 a gallon."

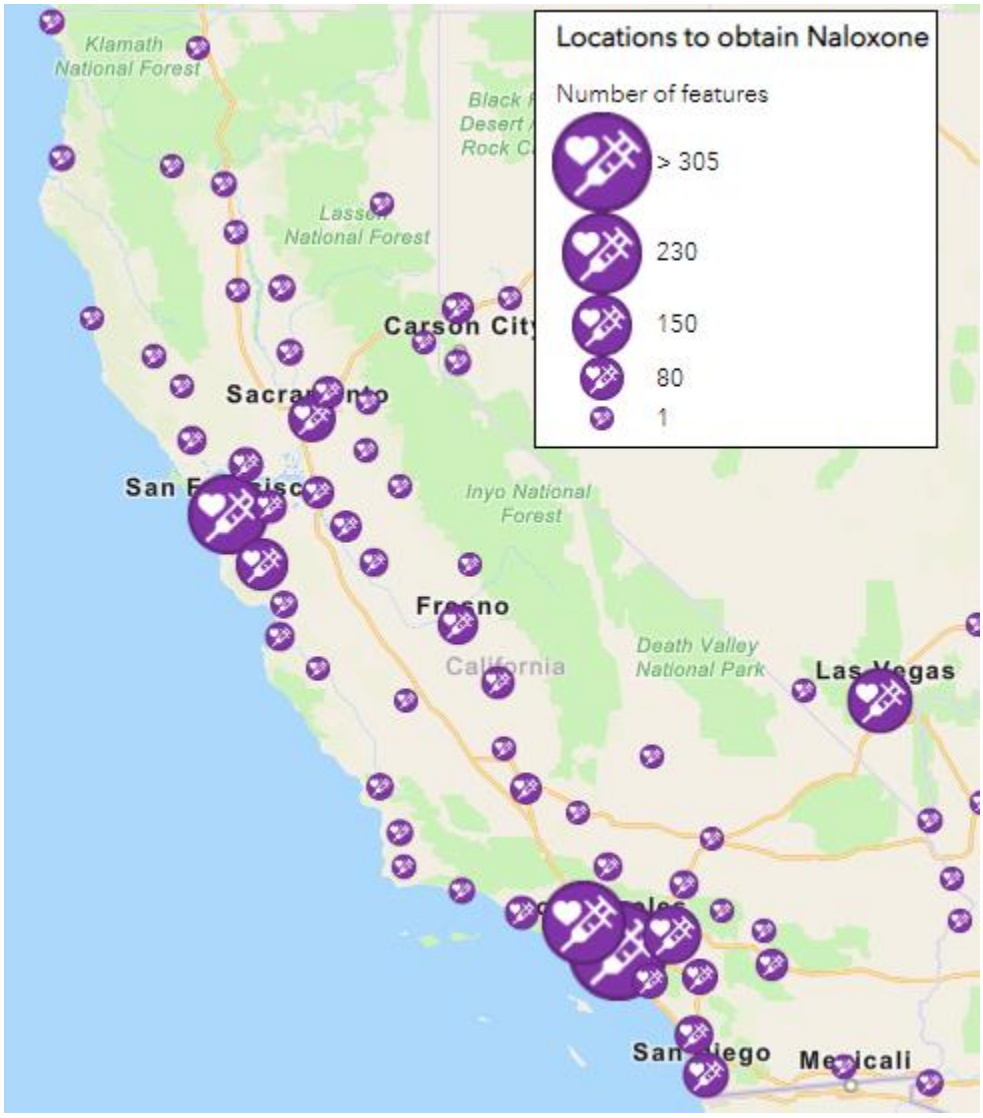
These barriers likely prevented many additional potential patients from seeking treatment altogether. A team in one spoke serving rural areas observed:

> **Provider 1**: There's a part of [the county]… It's up in [the mountains]. And if you look at where opioid use is, that's one high use area. And there aren't any community clinics there... So I would love to branch there and have a van or an RV or something where we could do the same thing up there - we could do MAT and primary care and behavioral health all in one.
>
> **Provider 2**: Yeah and I could tell you exactly where to park that van, because I live up there.
>
> **Interviewer**: How far is that, in driving distance?
>
> **Provider 2**: Between 30 and 40 minutes. It's not super far but it's pretty isolated. There's like one bus that goes there and down. And so, yeah, transportation is a big issue. We do have patients who come here from there. But we're definitely missing some, I'm sure.

For this clinic, although drive times for rural patients were relatively reasonable, patients relying on public transportation had extremely limited access to treatment.

In addition to challenges to reaching treatment, those with OUD in rural areas also faced greater risks. All patients in rural areas had used heroin, and the majority (75.0%) had used fentanyl. The majority had also switched from misusing prescription opioids to using heroin. All patients had injected opioids at some point in their lifetime. Fortunately, those who still used this method of administration reported that they had access to a needle/syringe exchange program.

Figure 33. **Locations to Obtain Naloxone**



Data source: ESRI National Naloxone Map

Access to naloxone was more limited. The majority (75.0%) of patients living in rural areas reported that they had overdosed on opioids in the past. Only one had been revived using naloxone, and half said they did not have access to naloxone. Although the sample size for rural patients is very low at this point in the evaluation, these data correspond with ESRI Opioid

Mapping Initiative data (see Figure 33), demonstrating a lack of locations to obtain naloxone in rural areas throughout the state. There is a continued need to increase naloxone access, particularly in areas with high overdose death rates.

Patients with Co-Occurring Mental Health Diagnoses

Mental health conditions may be under-addressed in hub and spoke settings. Almost half (46.1%, n = 24) of participants indicated that they had been diagnosed with a co-occurring mental health condition. Yet 20.7% (n = 13) of spoke administrators felt that they did not have the resources they needed to treat or make referrals for these patients.

These patients also faced greater stigma. Patients who reported having a co-occurring mental health diagnosis (n = 24) were also significantly more likely to feel they had been discriminated against by a health professional than those who did not ($p<.05$). They were also more likely to be worried that others would view them unfavorably because they were in treatment ($p<.001$).

Moreover, those with mental health diagnoses were more likely to have used fentanyl ($p<.05$), leading to greater risk of overdose.

Promising Practices: Acceptability

- Consider building on-site transitional housing or develop strong connections with referral resources for patients experiencing homelessness
- Use mobile clinics or offer transportation services, such as vans, to patients living in rural areas
- Develop strong connections with referral resources for patients with co-occurring mental health conditions
- Ensure equitable access to treatment for people of color. In particular, offer financial resources to make sure treatment is affordable
- Offer all materials in languages other than English, especially outreach and education materials.
- Hire staff who are bilingual
- Provide stigma training to all staff (prescribers, MAT teams, front office staff), and training on cultural competence and trauma-informed care to all practitioners
- Connect with naloxone distribution programs and pharmacies to ensure that all patients have access to naloxone in case of an overdose, especially those living in rural areas

AFFORDABILITY

The Hub and Spoke program covers the cost of MAT for patients who are uninsured and ineligible for Medi-Cal. The majority (66.2%, n = 45) of spoke administrators felt that their spokes had the resources needed to provide OUD services to patients who were uninsured or underinsured. One spoke administrator described the impact this made for patients who might otherwise be unable to afford treatment:

"I appreciate this program. They're very helpful. And if it wasn't for that program, God knows where I'd be right now – if I'd still be alive."

> A lot of our patients are extremely underserved and low-income. And I think that the grant is just a huge blessing in a lot of ways, because without the opportunity [the patients] probably wouldn't pursue [treatment].

Although many hubs and spokes, particularly FQHCs, were already able to help patients cover treatment costs and help them to sign up for Medi-Cal or other insurance, the ability to provide treatment without a delay while waiting on insurance approvals was seen as a critical benefit of the grant. In response to the survey, one provider explained:

> Being on the grant, we don't have to turn anyone away because they can't afford to pay for [treatment]. So they can initiate services, get coordinated with case management, eventually get insurance going. But it doesn't delay their ability to access treatment.

Despite the generally positive experiences with the grant, not all administrators felt that the hub and spoke program had made a meaningful impact in this capacity. One survey respondent explained:

> The hub and spoke model provided very little support for our area. Our patient population is largely comprised of Medi-Cal patients therefore their services are covered. Further, we have been providing MAT care for many years prior, about 20 of our 218 patients received assistance in covering the cost of medication for either uninsured or under insured patients. A prescription assistance program that aids documented and undocumented individuals with OUD would have [been] equally or more effective to meet our needs.

This recommendation may indicate that the support provided to spokes through H&S grants may be more useful if tailored to the needs and existing capacity of each spoke.

One patient whose treatment was funded by the grant described his experience with the program:

> This program is funded by the state. They let people in for free, and they're really compassionate and helpful. If you're homeless, if you're on drugs, it doesn't matter. They just want you to come in and get help. So awesome.

Later, he continued, "I appreciate this program. They're very helpful. And if it wasn't for that program, God knows where I'd be right now – if I'd still be alive." Still, nearly one-quarter (22.0%, n = 11) of participants did not feel they could afford the treatment they wanted to receive, even with the benefits H&S provided.

In addition, providers were concerned about the sustainability of the program once funding ended. At a site visit to a rural spoke, discussions about this topic elicited concerns over what would happen to patients whose costs were currently being covered by the grant.

> **Interviewer**: What are your thoughts on when the grant funding goes away?
>
> **Provider**: Fear. Because the program covers any of the co-pays, here and at the pharmacy. And because we're so rural that that extra money the patients are saving maybe is going towards other means to help them with their progress.

The spoke providers were worried that those whose medication costs were being covered might no longer be able to afford treatment without the hub and spoke program, potentially leading to relapse and overdose.

Promising Practices: Affordability

Although addressing affordability is a challenge that extends beyond the scope of what is funded by H&S, and should incorporate universal health care, as hubs and spokes look to the future, promising practices to ensure that treatment is as affordable as possible should include:

- Tailor support to the needs and existing treatment capacity of each spoke
- Develop sustainable funding mechanisms for current grant services

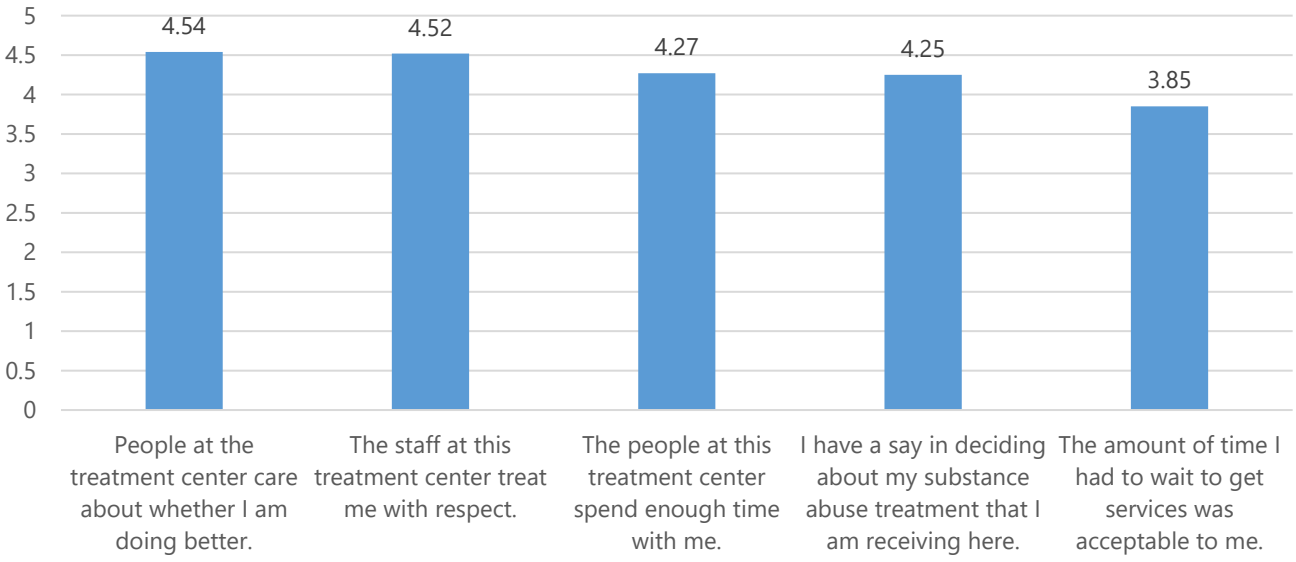
APPROPRIATENESS

Levesque et al. (2013) include appropriateness in their definition of access. Appropriateness refers to the adequacy and quality of services provided. The authors emphasize that "one should not have access to health care based on geographical and organizational availability and affordability alone, but that access encompasses the possibility to choose acceptable and effective services" (p. 6). Appropriateness encompasses the technical quality of services (e.g. prescribing practices), as well as patient satisfaction with care and patient engagement (e.g., involvement in decision-making).

"The patient who presents for treatment deserves to be met and assisted at their current stage of readiness for change… the patient's ability to take the significant risk of choosing sobriety requires patience and acceptance on the part of the treatment provider. Miracles do happen more frequently than one might normally expect."

Patient Treatment Satisfaction

Figure 34. **Participant treatment experiences (mean scores)**



Patients generally had positive treatment experiences. Most patients (88.5%, n = 46) felt that staff at the hubs and spokes cared about whether they were doing better, treated them with respect (86.5%, n = 45), and spent enough time with them (78.9%, n = 41). Although the majority (78.9%, n = 41) also agreed that they had a say in deciding about their treatment,

19.2% (n = 10) felt this was not the case. Further, only 56.2% (n = 41) of patients interviewed at baseline (n = 111) said that they talked with their doctors about medication options.

> I feel like no, they don't have respect for treatment decisions. Like I said before, if I felt like I wanted to go up in dose or go down in dose, just to see a counselor it would take about a month. And then when I did see my counselor and I wanted to change something they'd tell me that, you know, they didn't feel the same way as me or, you know, they didn't care what I was saying or, you know, it's just almost like they… didn't care at all. Like they didn't see me as being a person. They just didn't even care about helping people.

In addition, 25.0% (n = 13) of participants did not feel that the amount of time they had to wait for services was acceptable. Providing treatment in a more timely manner may be challenging due to long waitlists at treatment centers. Increasing prescriber activity, and working with all waivered providers to start prescribing would build more capacity. In addition, spokes might consider offering at-home inductions, to avoid a delay related to clinic space. Two spokes at which site visits were conducted noted that they completed all at-home inductions, and that they had done so since their programs were founded. Both had addiction psychiatrists on staff who helped them to establish their protocols.

When asked which additional services would be most helpful to add into the hub and spoke clinics, 23.0% of patients mentioned counseling of some sort (e.g., better counseling, individual counseling, family counseling, counseling in their primary language, or any counseling at all). One patient explained her disappointment with the level of counseling that she received:

> I thought what I was going to get was a place where I could delve into why I felt the need to use drugs to begin with. You know, there's got to be a reason. Because not everybody in the world uses drugs… I would think that counselor would talk more about that kind of stuff than what she does… I'm not getting anywhere to find out. So I don't feel- You know, I'm just kind of spinning my wheels.

In addition, when asked what she did not like about her clinic, another participant described how she wished the staff would show more empathy and acceptance:

> I think that some of the staff there that you interact with could be more compassionate, you know, show more compassion. That's what I don't like. I think that, you know, maybe they should have people there that maybe have experienced in this kind of issue and that are more compassionate.

One very experienced provider addressed these concerns, describing the harm reduction approach that they took to interacting with patients:

I have worked in this field in this agency for 28 years and believe that the patient who presents for treatment deserves to be met and assisted at their current stage of readiness for change, and that the patient's ability to take the significant risk of choosing sobriety requires patience and acceptance on the part of the treatment provider. Miracles do happen more frequently than one might normally expect.

Promising Practices: Appropriateness

- Patients should be presented with all medication options and be fully informed in planning their treatment alongside the prescriber
- Offer at-home inductions. Have an expert (e.g., addiction psychiatrist) provide training to staff about take-home procedures
- Offer individual and family therapy, but do not make therapy a requirement for accessing medications
- Take a harm reduction approach to providing treatment and meet the patient "where they are at."

RECOMMENDATIONS AND NEXT STEPS

Future of the Evaluation

The third year of evaluation efforts will continue to include the data sources used in this report, as well as statewide administrative data aimed at assessing the impact of the Hub and Spoke program on state OUD and overdose death rates. Data will be analyzed as they become available. Seven additional site visits will be conducted at participating spokes. Patient interviews will continue to ensure representation from each H&S network.

Summary of Promising Practices

Availability and Accommodation

- Hubs should work with spokes to ensure that they all have the resources needed to start prescribing buprenorphine
- Offer low-barrier care that requires limited visits to the clinic (no mandatory counseling, lessen requirements for medication units)
- Offer transportation tokens and/or assist patients with insurance process for covering transportation costs
- Offer telehealth services to allow for more convenient treatment options, particularly for patients living in rural areas, patients who lack reliable transportation, or patients who have mobility issues
- Establish relationships with local pharmacies and keep them informed of training opportunities
- Encourage prescribers to write prescriptions with Dispense as Written (DAW) of 0. This allows pharmacists to use brand or generic, depending on what their insurance covers
- Encourage prescribers to clearly write either Opioid Dependence or Opioid Use Disorder as the indication on prescriptions. Insurance companies will not reimburse for sublingual tablets or films when the indication is pain

Approachability

- A multifaceted approach to advertising with flyers, brochures and radio/television campaigns in the clinic and the community at large
    - Hubs should offer resources to spokes to help develop and disseminate these materials
- Normalizing MAT in health care settings by advertising buprenorphine alongside other health care services
- Employing peer support workers to build community relationships and recruit potential patients
    - If possible, hire peer support workers directly through the spoke, as part of the MAT Team, to allow them to aid with care navigation and patient retention
    - Given reimbursement challenges due to current Medi-Cal policy on peer recovery services, partnering with harm reduction organizations with street outreach teams may help clinics reach new patients

- Developing a listserv with other local practitioners, such as behavioral health providers, emergency medicine providers, pharmacists, and harm reduction organizers to share knowledge and develop referral resources
- Increase screening for substance use disorders to identify current patients who may be in need of treatment

Acceptability

- Consider building on-site transitional housing or develop strong connections with referral resources for patients experiencing homelessness
- Use mobile clinics or offer transportation services, such as vans, to patients living in rural areas
- Develop strong connections with referral resources for patients with co-occurring mental health conditions
- Ensure equitable access to treatment for people of color. In particular, offer financial resources to make sure treatment is affordable
- Offer all materials in languages other than English, especially outreach and education materials.
- Hire staff who are bilingual
- Provide stigma training to all staff (prescribers, MAT teams, front office staff), and training on cultural competence and trauma-informed care to all practitioners
- Connect with naloxone distribution programs and pharmacies to ensure that all patients have access to naloxone in case of an overdose, especially those living in rural areas

Affordability

- Tailor support to the needs and existing treatment capacity of each spoke
- Develop sustainable funding mechanisms for current grant services

Appropriateness

- Patients should be presented with all medication options and be fully informed in planning their treatment alongside the prescriber
- Offer at-home inductions. Have an expert (e.g., addiction psychiatrist) provide training to staff about take-home procedures
- Offer individual and family therapy, but do not make therapy a requirement for accessing medications
- Take a harm reduction approach to providing treatment and meet the patient "where they are at."

References

Bassuk, E. L., Hanson, J., Greene, R. N., Richard, M., & Laudet, A. (2016). Peer-delivered recovery support services for addictions in the United States: a systematic review. *Journal of substance abuse treatment*, *63*, 1-9.

Brooklyn, J. R., & Sigmon, S. C. (2017). Vermont hub-and-spoke model of care for opioid use disorder: development, implementation, and impact. *Journal of addiction medicine*, *11*(4), 286.

California Department of Public Health (CDPH), Safe and Active Communities Branch. (2018). *California Opioid Overdose Surveillance Dashboard*. Available at: https://discovery.cdph.ca.gov/CDIC/ODdash/

Clemans-Cope, L., Epstein, M., and Wissoker, D. (2018). *County-Level Estimates of Opioid Use Disorder and Treatment Needs in California*. The Urban Institute.

Engels, J. M., & Diehr, P. (2003). Imputation of missing longitudinal data: a comparison of methods. *Journal of clinical epidemiology*, *56*(10), 968-976.

Feldman, N. (2109). It's The Go-To Drug To Treat Opioid Addiction. Why Won't More Pharmacies Stock It? Available at: https://www.npr.org/sections/health-shots/2019/08/13/741113454/its-the-go-to-drug-for-opioid-addiction-so-why-won-t-more-pharmacists-stock-it?utm_source=npr_newsletter&utm_medium=email&utm_content=20190814&utm_campaign=npr_email_a_friend&utm_term=storyshare

Kaiser Family Foundation (2018). Data Source: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics. Multiple Cause of Death 1999-2016 on CDC WONDER Online Database, released 2017. Retrieved from: https://www.kff.org/state-category/health-status/opioids/

LaBelle, C. T., Han, S. C., Bergeron, A., & Samet, J. H. (2016). 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*, 6-13.

Levesque, J. F., Harris, M. F., & Russell, G. (2013). Patient-centred access to health care: conceptualising access at the interface of health systems and populations. *International journal for equity in health*, *12*(1), 18.

Medicaid Managed Care Final Rule: Network Adequacy Standards. (0AD). Retrieved September 27, 2019, from https://www.dhcs.ca.gov/formsandpubs/Documents/FinalRuleNAFinalProposal.pdf.

Metzl, J. M., & Hansen, H. (2014). Structural competency: Theorizing a new medical engagement with stigma and inequality. *Social science & medicine*, *103*, 126-133.

Percent of People 5 Years and Over Who Speak a Language Other Than English At Home - United States -- States; and Puerto Rico Universe: Population 5 years and over 2016 American Community Survey 1-Year Estimates. (0AD). Retrieved October 24, 2017, from https://cdn.cnsnews.com/attachments/census-other_than_english.pdf.

Stetler, C. B., Legro, M. W., Rycroft-Malone, J., Bowman, C., Curran, G., Guihan, M., Wallace, C. M. (2006). Role of "external facilitation" in implementation of research findings: A qualitative evaluation of facilitation experiences in the Veterans Health Administration. Implementation Science, 1(1), https://doi.org/10.1186/1748-5908- 1-23

Wakeman, S.E. (2017). Medications For Addiction Treatment: Changing Language to Improve Care. Journal of Addiction Medicine, 11(1), 1-2. doi: 10.1097/ADM.0000000000000275.

Weintraub, E., Greenblatt, A. D., Chang, J., Himelhoch, S., & Welsh, C. (2018). Expanding access to buprenorphine treatment in rural areas with the use of telemedicine. *The American journal on addictions*, *27*(8), 612-617.

Appendices

Appendix I: List of all active hubs and spokes
Appendix II: Monthly Hub and Spoke Reporting Forms
Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides
Appendix IV: Provider Surveys
Appendix V: Site Visit Focus Group Guide

Appendix I. List of all active Hubs and Spokes

ACADIA RIVERSIDE

Colton Clinical Services	2275 E. Cooley, Colton, CA 92324
Desert Clinic Pain Institute - Rancho Mirage	36101 Bob Hope Dr., Suite B2, Rancho Mirage, CA 92270
Desert Treatment Clinic - Palm Springs	1330 N. Indian Canyon Dr., Palm Springs, CA 92262
First Step Recovery Center	12402 Industrial Blvd., Suite B-6, Victoriville, CA 92395
Inland Valley Recovery Services	1260 E. Arrow Hwy, Bldg E, Upland, CA 91786
MFI Recovery - Arlington	5870 Arlington Ave., Riverside, CA 92504
MFI Recovery - Riverside	5870 Arlington Ave, #103, Riverside, CA 92504
MFI Recovery - University	4440 University Ave, Riverside, CA 92501
MFI Recovery - Van Buren	17130 Van Buren Blvd., Riverside, CA 92504
Neighborhood Healthcare - Temecula	41840 Enterprise Circle North, Temecula, CA 92590
Pacific Grove Hospital	5900 Brockton Avenue, Riverside, CA 92506
Riverside-San Bernardino County Indian Health	11980 Mount Vernon Ave., Grand Terrace, CA 92313
Temecula Valley Treatment Services	40700 California Oaks Road, Murrieta, CA 92562

ACADIA SAN DIEGO

Capalina Comprehensive Treatment Center	1560 Capalina Road, San Marcos, CA 92069
El Cajon Comprehensive Treatment Center	234 Magnolia Avenue, El Cajon, CA 92020
Family Health Centers of San Diego	140 Elm St., San Diego, CA 92103
La Maestra Community Health Center	4060 Fairmount Avenue, San Diego, CA 92105
Neighborhood Healthcare - Escondido	425 No. Date Street, #203, Escondido, CA 92025
St. Vincent de Paul - Village Family Health Center	1501 Imperial Avenue, San Diego, CA 92101
Third Ave Comprehensive Treatment Center	1161 Third Avenue, Chula Vista, CA 91911
Vista Community Clinic	1000 Vale Terrace Drive, Vista, CA 92084

AEGIS CHICO

Banner Health Susanville	1680 Paul Bunyan Rd Susanville, CA 96130
Butte County Behavioral Health-Chico	560 Cohasset Rd Suite 175, Chico, CA 95926
Butte County Behavioral Health-Gridley	995 Spruce St, Gridley, CA 95948
Butte County Behavioral Health-Oroville	2430 Bird St, Oroville, CA 95965
Groups Recover Together- Chico	1550 Humboldt Rd Ste 3 Chico CA 95926
Mangrove Medical Group - Chico	1040 Manrgove Ave, Chico, CA 95926
Plumas District Hospital - Quincy	1065 Bucks Lake Rd, Quincy, CA 95971
Plumas District Hospital- Greenville	176 Hot Springs Road Greenville, CA 95971
Tehama County Health Services Agency - Red Bluff	1445 Vista Way, Red Bluff, CA 96080

Appendix I. List of all active Hubs and Spokes

AEGIS HUMBOLDT

K'ima:w Medical Center-Hoopa	535 Airport Rd, Hoopa, CA 95546
Open Door Community Health Centers-Arcata 10th	770 10th Street Arcata, CA 95521
Open Door Community Health Centers-Arcata 18th	785 18th Street Arcata, CA 95521
Open Door Community Health Centers-Willow Creek	38883 Hwy 299 Willow Creek, Ca 95573
Redwoods Rural Health Center	101 West Coast Road, Redway, CA, 95560
Waterfront Recovery Services	2413 2nd St, Eureka, CA 95501

AEGIS MANTECA

Community Medical Centers- Manteca	200 Cottage Ave, Manteca Ca 95336
Community Medical Centers- Stockton	1031 Waterloo Road Stockon, CA 95205
Community Medical Centers- Tracy	730 N Central Ave, Tracy, Ca 95376
Golden Valley Health Centers-Merced	847 West Childs Ave. Merced, CA 95341
Mathiesen Memorial Health Center	18144 Seco St, Jamestown, CA 95327
Me-Wuk Tribal Health Center	18880 Cherry Valley Blvd N, Tuolumne, CA 95379
San Joaquin General Hospital	500 W. Hospital Road French Camp, CA 95231

AEGIS MARYSVILLE

Adventist Health - Clearlake	15630 18th Avenue, Clearlake 95422
Adventist Health - Ukiah	275 Hospital Drive, Ukiah 95482
Adventist Health - Willits	3 Marcela Drive, Willits, CA 95490
Chapa-De Indian Health – Grass Valley	1350 E Main St, Grass Valley, CA 95945
Community Recovery Resources (CoRR) - Grass Valley	180 Sierra College Drive, Grass Valley, CA 95945
Lake County Tribal Health Consortium	925 Bevins Ct, Lakeport, CA 95453
Lucerne Community Clinic	6300 State Hwy 20, Lucerne, CA 95458
Mendocino Coast Clinics	205 South St, Fort Bragg, CA 95437
Mendocino Community Health Center - Hillside Health Center	333 Laws Ave, Ukiah, CA 95482
Mendocino Community Health Center - Lake View Center	5335 Lakeshore Blvd, Lakeport, CA, 95453
Mendocino Community Health Center - Little Lake Center	45 Hazel Street, Willits, CA, 95490
Western Sierra Medical Clinic - Downieville	209 Nevada St, Downieville, CA 95936
Western Sierra Medical Clinic - Grass Valley	844 Old Tunnel Road, Grass Valley, CA 95945
Western Sierra Medical Clinic - Penn Valley	10544 Spenceville Road, Penn Valley, CA 95946

Appendix I. List of all active Hubs and Spokes

AEGIS REDDING

Dignity Health-Mt. Shasta	912 Pine Street, Mount Shasta, CA, 96067
Fairchild Medical Center	444 Bruce St, Yreka, CA 96097
Groups Recover Together - Redding	376 Hartnell Ave, Redding, CA 96002
Hill Country Health and Wellness Center- Gold St	1401 Gold St. Suite A Redding, CA 96001
Hill Country Health and Wellness Center- Redding	317 Lake Boulevard, Redding, CA, 96003
Hill Country Health and Wellness Center- Round Mountain	29632 Highway 299 East, Round Mountain, CA, 96008
Mike Staszel	822 Pine St, Mt Shasta, CA 96067
Mountain Valleys Health Center- Weed	50 Alamo Drive Weed, CA 96094
Mountain Valleys Health Center-Burney	37497 Enterprise Dr, Burney, CA 96013
Mountain Valleys Health Center-Fall River Mills	43563 Highway 299, Fall River Mills, CA, 96028
Mountain Valleys Health Center-Tulelake	498 Main Street, Tulelake, CA, 96134
Shasta Community Health Center-Anderson	2801 Silver Street, Anderson, CA, 96007
Shasta Community Health Center-Redding	1035 Placer Street Redding, CA, 96001
Shasta Community Health Center-Shasta Lake	4215 Front Street, Shasta Lake City, CA, 96019

AEGIS ROSEVILLE

Barton Health Hospital - South Lake Tahoe	2170 South Ave, South Lake Tahoe, CA 96150
Chapa De Indian Health - Auburn	11670 Atwood Rd, Auburn, CA 95603
Community Recovery Resources (CoRR) - Auburn	12125 Shale Ridge Rd, Auburn, CA 95602
El Dorado Community Health Center - Cameron Park	3104 Ponte Morino Dr, Cameron Park, CA 95682
Marshall Medical Center	1100 Marshall Way, Placerville, CA 95667
Stallant Health	20601 W Paoli Ln, Weimar, CA 95736
Tahoe Forest Hospital	10121 Pine Ave, Truckee, CA 96161
Western Sierra Medical Center - Auburn Locksley	12183 Locksley Ln #106, Auburn, CA 95602
Western Sierra Medical Center - Auburn Professional	3111 Professional Dr, Auburn, CA 95603
Western Sierra Medical Center - Kings Beach	8665 Salmon Ave, Kings Beach, CA 96143

Appendix I. List of all active Hubs and Spokes

BAART CONTRA COSTA

BAART Community Healthcare	433 Turk St, San Francisco, CA 94102
Bright Heart Health	Telehealth
Carolyn Schuman	2380 Ellsworth St, Berkeley, CA 94704
Clifford Hoffman	831 E 2nd St #103, Benicia, CA 94510
Diablo Valley Drug and Alcohol Services	100 Park Pl, Unit 120 San Ramon, CA 94583
Lifelong- Ashby	Suite 280, 3075 Adeline St, Berkeley, CA 94703
Lifelong- Brookside San Pablo Health Center	2023 Vale Rd., San Pablo, CA 94806
Lifelong- DOC	616 – 16th St., Oakland, CA 94612
Lifelong Medical Care	TBD
Lifelong- Over Sixty	3260 Sacramento St, Berkeley, CA 94702
Lifelong- Richmond	1030 Nevin Ave., Richmond, CA 94804
Lifelong- TRUST	386 14th St, Oakland, CA 94612
Lifelong- West Berkeley	837 Addison St., Berkeley, CA 94710
Lifelong-East Oakland	Foothill Square, 10700 MacArthur Blvd, Oakland, CA 94605
Smart Medicine San Francisco	468 Tehama St A, San Francisco, CA 94103
Steve Balt	705 Fourth St., Suite 4, San Rafael, CA 94901
Workit Health	Telehealth

BAART SAN FRANCISCO

API Wellness	730 Polk St, San Francisco, CA 94109
Bicycle Health	Telehealth
HealthRight 360	101 Grove Street. San Francisco, CA 94102
Max Burns	403 Dondee St, Suite 5, Pacifica, California 94044
Smart Medicine San Francisco	468 Tehama St A, San Francisco, CA 94103
Steve Balt	705 Fourth St., Suite 4, San Rafael, CA 94901

Appendix I. List of all active Hubs and Spokes

CLARE | MATRIX

CLARE | MATRIX - Healing House	1865 9th Street, Santa Monica, CA 90404
CLARE | MATRIX - Men's Treatment Center	905 & 907 Pico Blvd., Santa Monica, CA 90405
CLARE | MATRIX - Outpatient Services	1334 Lincoln Blvd., Santa Monica, CA 90401
CLARE | MATRIX - Women's Treatment Center	844 Pico Blvd., Santa Monica, CA 90405
JWCH Institute, Inc. - San Pedro	522 South San Pedro St., Los Angeles, CA 90013
JWCH Institute, Inc. - Vermont	954 N. Vermont Ave., Los Angeles, CA 90029
JWCH Institute, Inc. - Wesley Health Center	15898 E Gale Ave 91745 Hacienda Heights, CA 91745
St. John's Well Child and Family Center-Compton Health Center	2115 N. Wilmington Ave., Compton, CA 90222
St. John's Well Child and Family Center-Traynham Health Center	326 West 23rd Street, Los Angeles, CA 90007
St. John's Well Child and Family Center-Williams Health Center	808 W. 58th St, Los Angeles, CA 90037
UMMA Community Clinic	711 W. Florence Ave., Los Angeles, CA 90044
Venice Family Clinic	604 Rose Ave, Venice, CA. 90291
Venice Family Clinic - Common Ground Clinic	622 Rose Ave., Venice, CA 90291

COMMUNICARE

CommuniCare - Davis Community Clinic	2051 John Jones Road, Davis, CA 95616
CommuniCare - Salud Clinic	500 Jefferson Boulevard, West Sacramento, CA 95605
CORE Medical Clinics	2100 Capitol Avenue, Sacramento, CA 95816
One Community Health	1500 21st Street, Sacramento, 95811
Winters Healthcare	23 Main Street, Winters, CA 95694

JANUS NORTH

County of Santa Cruz Health Service Agency - Emeline	1020 Emeline Avenue, Santa Cruz, CA 95060
County of Santa Cruz Health Service Agency - Homeless Persons Health	115-A Coral Street, Santa Cruz, CA 95060
County of Santa Cruz Health Service Agency - Watsonville	1430 Freedom Boulevard, Watsonville, CA 95076
Encompass Community Services	716 Ocean Street, Santa Cruz, CA 95060
Santa Cruz Community Health Centers - Women's Health	250 Locust Street, Santa Cruz, CA 95060
Santa Cruz Community Health Centers - East Cliff Family Health Center	21507 East Cliff Drive, Santa Cruz, CA 95062

JANUS SOUTH

Clinica Del Valle Del Pajaro (Salud Para La Gente)	45 Nielson Street, Watsonville, CA 95076
Plazita Medical Clinic	1150 Main Street, Watsonville, CA 95076
Salud Para La Gente	204 East Beach Street, Watsonville, CA 95076

Appendix I. List of all active Hubs and Spokes

MARIN TREATMENT CENTER

Bright Heart Health	Telehealth
Coastal Health Alliance	3 Sixth Street, Point Reyes Station, CA 94956
Helen Vine Detox Center	301 Smith Ranch Rd, San Rafael, CA 94903
Marin City Health and Wellness Center - Bayview Hunters Point Clinic	6301 Third Street, San Francisco, CA 94124
Marin Community Clinic	3110 Kerner Boulevard, San Rafael, CA 94901
Marin County Behavioral Health and Recovery Services (BHRS)	3230 Kerner Boulevard, San Rafael, CA 94901
Prima Medical	4000 Civic Center Dr, Suite 200B, San Rafael, CA. 94903

MEDMARK FRESNO

Aria Community Health Center	140 C Street, Lemoore, CA 93245
BAART E Street	1235 E St, Fresno, CA 93706
Bicycle Health	Telehealth
Dinuba Rural Health Center	420 E El Monte Way, Dinuba, CA 93618
Firebaugh and Mendota Health Clinics, Inc.	944 O St B, Firebaugh, CA 93622
Fremont Family Physicians	5189 Hospital Road, Mariposa, CA 95338
Fremont Specialty Clinics	5186 Hospital Road, Mariposa, CA 95338
Groups Recover Together - Bakersfield	3550 Q Street Suite 101, Bakersfield, CA 93301
LaLaine Tiu	3069 E Tulare St, Fresno, CA 93721
Latif Ziyar MD Inc	1702 E Utah Ave, Fresno, CA 93720
Northside Clinic	6386 Greeley Hill Rd., Coulterville, CA 95311
Orosi Rural Health Clinic	12572 Ave 416 B, Orosi, CA 93647
San Joaquin Prime Care - Exeter	330 E. Pine St., Exeter CA 93221
San Joaquin Prime Care - Farmersville	682 E. Visalia Rd., Farmersville CA 93223
San Joaquin Prime Care - Reedley	826 E. Manning Ave., Reedley CA 93654
San Joaquin Prime Care - Squaw Valley	30924 E. Kings Canyon Rd., Squaw Valley CA 93675
Selma Rural Health Clinic	2057 High St, Selma, CA 93662
Workit Health	Telehealth

MEDMARK SOLANO

Advanced Pain Management Institute	200 Butcher Rd Vacaville CA 95687
Bicycle Health	Telehealth
Bright Heart Health	Telehealth
Caminar/Healthy Partnerships - Fairfield	1735 Enterprize Dr. #105A Fairfield CA 94533
Clifford Hoffman	831 E 2nd St #103, Benicia, CA 94510
Community Medical Centers	600 Nut Tree Rd Ste 260, Vacaville,CA 95687
Comprehensive Psychiatric Services	5030 Business Center Drive Suite 220 Fairfield CA 94533
La Clinica	220 Hospital Dr, Vallejo, CA 94589
Solano Care Inc. / First Choice Medical & Surgical Associates	171 Butcher Rd, Vacaville, CA 95687
WorkIt Health	Telehealth

Appendix I. List of all active Hubs and Spokes

TARZANA TREATMENT CENTERS

Bartz-Altadonna Community Health Center	43322 Gingham Avenue, Lancaster, CA 93535
Behavioral Health Services, Inc.	15519 Crenshaw Blvd. Gardena, CA 90249
Blue Shield Promise Health Plan Primary & Urgent Care	38440 5th St West, Palmdale, CA 93551
JWCH Institute, Inc. (Antelope Valley Community Clinic - Palmdale)	2151 East Palmdale Boulevard, Palmdale, CA 93550
JWCH Institute, Inc. (Antelope Valley Community Clinic - West Lancaster)	45104 10th Street, West Lancaster, CA 93534
Los Angeles Centers for Alcohol and Drug Abuse	11015 Bloomfield Avenue, Santa Fe Springs, CA 90670
Los Angeles LGBT Center	1625 Schrader Boulevard, Los Angeles, CA 90028
Mission City Community Network - Mission Hills	10200 Sepulveda Boulevard, Mission Hills, CA 91345
Mission City Community Network - Monrovia	513 E. Lime Ave. Monrovia, CA 91016
Mission City Community Network - North Hills	8527 Sepulveda Boulevard, North Hills, CA 91343
Northeast Valley Health Corporation	6551 Van Nuys Boulevard, Van Nuys, CA 91401
Prototypes (HealthRight 360) - Los Angeles	1000 North Alameda Street, Los Angeles, CA 90012
Prototypes (HealthRight 360) - Pasadena	2555 East Colorado Boulevard, Pasadena, CA 91107
Prototypes (HealthRight 360) - Pomona	845 East Arrow Highway, Pomona, CA 91767
Ridgecrest Regional Hospital/Rural Health Clinic	1081 N. China Lake Blvd., Ridgecrest, CA 93555
Tarzana Treatment Centers, Inc. - location 1	2101 Magnolia Avenue, Long Beach, CA 90806
Tarzana Treatment Centers, Inc. - location 2	5190 Atlantic Avenue, Long Beach, CA 90805
Tarzana Treatment Centers, Inc. - location 3	422 West Avenue P, Palmdale, CA 93551
Tarzana Treatment Centers, Inc. - location 4	907 West Lancaster Boulevard, Lancaster, CA 93534
Tarzana Treatment Centers, Inc. - location 5	44447 North 10th Street, West Lancaster, CA 93534
Tarzana Treatment Centers, Inc. - location 6	44443 North 10th Street, West Lancaster, CA 93534
Tarzana Treatment Centers, Inc. - location 7	8330 Reseda Boulevard, Northridge, CA 91324
Tarzana Treatment Centers, Inc. - location 8	7101 Baird Ave, Reseda, CA 91335

Date of report

9/6/2019

Monthly Reporting Form—Hub

Name of individual completing report

Report status

New Report | Revised Report

A. Data below is for the month of:

B. Data below is for the year of:

C. Hub Name

Aegis Redding (STR-15)

Aegis Eureka/Humboldt (STR-51)

Aegis Marysville (STR-12)

Aegis Chico (STR-50)

Aegis Roseville (STR-14)

Aegis Manteca (STR-52)

Bright Heart Health (STR-33)

Marin Treatment Center (STR-55)

MedMark Solano (STR-10)

MedMark Fresno (STR-05)

BAART San Francisco (STR-08)

BAART Contra Costa (STR-04)

CommuniCare (STR-58)

Janus North (STR-56)

Janus South (STR-57)

Acadia San Diego (Fashion Valley Clinic) (STR-01)

Acadia Riverside (Riverside Treatment Center) (STR-02)

Matrix (STR-61)

Tarzana Treatment Centers (STR-53)

1. Patients INITIATING methadone for OUD during the month at the hub. (total N)**

2. Patients INITIATING buprenorphine (including Suboxone, Subutex, Probuphine) for OUD during the month at the hub. (total N)**

3. Patients INITIATING XR-naltrexone ("Vivitrol") for OUD during the month at the hub. (total N)**

4. Of patients initiating any of the above medications at the hub (1 + 3 + 2 above), number who also received counseling or other OUD recovery services* from either the spoke or the hub. (total N)**

5. Active** OUD patients (census) as of the last day of the month at the hub. (total N)**

6. MAT patients who initiated treatment in remaining in treatment uninterrupted as of the last day of , at the hub.

Below, name each spoke. After entering the name of a spoke, enter the number of patients REFERRED TO the hub from that spoke who initiated MAT (methadone, buprenorphine, or XR-naltrexone). Subsequent fields will appear for additional spokes upon entry. Please enter this data for each spoke. If a spoke has not referred any patients who initiated MAT at the hub, enter "0." Do not leave the field blank.

7. Spoke Name

A. Patients referred to hub from the spoke named above who initiated MAT (total N)

8. Spoke Name

A. Patients referred to hub from the spoke named above who initiated MAT (total N)

Additional comments or clarifications:

If your organization has more than one grant, please submit a separate data reporting form packet for each CA H&SS.

*** Choose a descriptive name (e.g. organization, location). Please use the same hub and spoke names consistently over the duration project. Patients served at Medication Units (if any) should be included in Hub counts.**

**** Please count ALL patients who initiated medication assisted treatment (MAT) during the reporting month. Please only exclude courtesy dosing.**

***** Recovery support services help people enter into and navigate systems of care, remove barriers to recovery, stay engaged in the recovery process, and live full lives in communities of their choice. Some examples include: supported employment, education, and housing; assertive community treatment; illness management; and peer-operated services. For more see: https://www.samhsa.gov/recovery**

****** Patients in the opioid treatment program (OTP; most hubs) setting are considered active if they have gone no more than 14 days without medication (i.e., they have not been discharged). Patients in the office based treatment (OBOT; most spokes) setting are considered active if they have a new MAT prescription or refill of a MAT prescription within the past 90 days.**

Continue

For questions or concerns, please contact Hub and Spoke Evaluation Coordinator, Kendall Darfler at kdarfler@mednet.ucla.edu or (310) 267-5417.

Date of report

9/6/2019

Monthly Reporting Form—Spoke

Name of individual completing report

Report status

New Report | Revised Report

Spoke Name

Spoke Address

Hub Name

- Aegis Redding (STR-15)
- Aegis Eureka/Humboldt (STR-51)
- Aegis Marysville (STR-12)
- Aegis Chico (STR-50)
- Aegis Roseville (STR-14)
- Aegis Manteca (STR-52)
- Bright Heart Health (STR-33)
- Marin Treatment Center (STR-55)
- MedMark Solano (STR-10)
- MedMark Fresno (STR-05)
- BAART San Francisco (STR-08)
- BAART Contra Costa (STR-04)
- CommuniCare (STR-58)
- Janus North (STR-56)
- Janus South (STR-57)
- Acadia San Diego (Fashion Valley Clinic) (STR-01)

Appendix II. Monthly Hub and Spoke Reporting Forms

Acadia Riverside (Riverside Treatment Center) (STR-02)

Matrix (STR-61)

Tarzana Treatment Centers (STR-53)

A. Data below is for the month of:

B. Data below is for the year of:

1. Patients INITIATING methadone for OUD during the month at the spoke**

2. Patients INITIATING buprenorphine (including Suboxone, Subutex, Probuphine) for OUD during the month at the spoke.**

3. Patients INITIATING XR-naltrexone ("Vivitrol") for OUD during the month at the spoke.**

4. Total patients REFERRED TO the hub.

5. Total patients REFERRED FROM the hub.

6. Patients REFERRED FROM the hub who initiated buprenorphine or XR-naltrexone at the spoke.

7. Of patients initiating buprenorphine or XR-naltrexone at the spoke (1 + 2 above), number who also received counseling or other OUD recovery services* from either the spoke or the hub.**

8. Active** OUD patients (census) as of the last day of the month at the spoke.**

9. MAT patients who initiated treatment in remaining in treatment uninterrupted as of the last day of , at the spoke.

10. Total providers with DATA 2000 waiver at the spoke.

For the below items, enter the full name (first and last) of the first prescriber. Please use prescriber names consistently over the duration of the project. Then, for the prescriber named above, enter the number of active MAT patients served by the provider you named in the corresponding "Prescriber name" field. After you enter this number, subsequent fields will appear for additional prescribers. Please complete this item for each prescriber, even if the answer is "0." Do not leave the field blank.

11. Prescriber Name

A. For the prescriber named above, list the number of active OUD patients

Additional comments or clarifications:

PLEASE SUBMIT ONE RECORD PER SPOKE.

*** Choose a descriptive name (e.g. organization, location). Please use the same hub and spoke names consistently over the duration project. Patients served at Medication Units (if any) should be included in Hub counts.**

**** Please count ALL patients who initiated medication assisted treatment (MAT) during the reporting month. Please only exclude courtesy dosing.**

***** Recovery support services help people enter into and navigate systems of care, remove barriers to recovery, stay engaged in the recovery process, and live full lives in communities of their choice. Some examples include: supported employment, education, and housing; assertive community treatment; illness management; and peer-operated services. For more see: https://www.samhsa.gov/recovery**

****** Patients in the opioid treatment program (OTP; most hubs) setting are considered active if they have gone no more than 14 days without medication (i.e., they have not been discharged). Patients in the office based treatment (OBOT; most spokes) setting are considered active if they have a new MAT prescription or refill of a MAT prescription within the past 90 days.**

Continue

For questions or concerns, please contact Hub and Spoke Evaluation Coordinator, Kendall Darfler at kdarfler@mednet.ucla.edu or (310) 267-

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

Baseline - (English)

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

CA HUB AND SPOKE EVALUATION

Q1. **Participant ID #:** __ __ __ __

Q2. **Please re-enter Participant ID #:** __ __ __ __

If Q1 is not equal to Q2 then READ: "Sorry IDs don't match, please re-enter" and skip to Q2.

DATE1TXT = LongDate(DATE1)

Q2d. Is this interview being conducted on today, [DATE1TXT]?

1	Yes
0	No
7	Don't Know
8	Refuse to Answer
9	Not Applicable

If Q2d is equal to 1, then skip to Q3.

Q2e. Please write the date on which the data was collected:

__ __ / __ __ / __ __ __ __ mm / dd / yyyy

Q3. **Interviewer ID #:** __ __ __ __

Q4. **Site: (select one)** (Choose one)

0	Hub
1	Spoke
7	Don't Know

Q5. **Site name:**

__ __

Q6. **Date of service:**
(date ROI was signed) __ __ / __ __ / __ __ __ __ mm / dd / yyyy

***************** Please start recording now *****************

READ: BASELINE INTERVIEW GUIDE

Thank you, again, for agreeing to help improve treatment services by sharing your experiences. There are no right or wrong answers to any questions I will ask you. You are free to skip any questions that you feel uncomfortable answering at any time.

Today, we want to learn some basic background information about you, to help us describe participants in this study. The contact information that we collect will help us reach you when its time for your follow-up interview in three months. This information will be stored separately from your responses to the interview. We won't use your name in any reports and this interview is confidential.
First, I'd like to ask some basic demographic questions.

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

Demographics

BL1. **Age:** __ __

97 Don't Know
98 Refuse to Answer

BL2. **Gender:** *(choose one)* (Choose one)

1 Man
2 Woman
3 Non-binary
4 Prefer to self-describe
5 Prefer not to say
7 Don't Know
8 Refuse to Answer

If BL2 is not equal to 4, then skip to BL3.

BL2A. **Please specify**

__ __

BL3. **Race/Ethnicity:** *(mark all that apply)*
(Check all that apply)

__ American Indian or Alaska Native
__ Asian
__ Pacific Islander
__ Black or African American
__ Hispanic or Latinx
__ Middle Eastern or Arab American
__ White
__ Prefer to self-describe
__ Prefer not to say
__ Don't Know
__ Refuse to Answer

If BL3H is equal to 0, then skip to BL5.

BL4. **Specify Race/Ethnicity:**

__ __

BL5. **Are you currently living in**: (*mark one*) (Choose one)

0 Your own house or apartment
1 With family or friends
2 In a shelter or homeless
3 Transitional/sober living
7 Don't Know
8 Refuse to Answer

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

BL6. **What town/city do you live in?**

__ __

BL7. **How long does it take you to travel to your clinic or treatment center?**

__ __ __	HOURS
__ __ __	MINUTES
997	Don't Know (Minutes)
998	Refuse to Answer (Minutes)

BL8. **How long does it take you to travel to your pharmacy?**

__ __ __	HOURS
__ __ __	MINUTES
997	Don't Know (Minutes)
998	Refuse to Answer (Minutes)

BL9. **Are you taking medications for your opioid use disorder?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

If BL9 is equal to 0, then skip to BL14.

BL10. **If YES, which medication are you taking?** (Choose one)

1	Methadone
2	Buprenorphine (Suboxone, Subutex, Probuphine)
3	Extended-release naltrexone (Vivitrol)
7	Don't Know
8	Refuse to Answer

BL11. **What is your current medication dose?**

__ __

BL12. **When you started treatment with this medication, did you talk with your doctor about different medication choices, like buprenorphine/Suboxone, Vivitrol/naltrexone or methadone?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

If BL12 is equal to 0, then skip to BL14.

BL13. **How did you decide which medication to take?**

__ __

BL14. **Before seeking treatment for opioid use at [*name of participants clinic program*] on [*date of initial visit*],** Prompt: **How many times in your life were you in treatment for opioid use? If you are unsure, please estimate.**

__ __	
97	Don't Know
98	Refuse to Answer

READ: For the next several questions, I will ask you to think about the 30 days (or one month) before you started treatment.

BL15. **In the 30 days before starting treatment, on a scale of 0-10, where 0 is very dissatisfied, 10 is very satisfied, how satisfied have you been with your life, overall?**

00	Very Dissatisfied
01	
02	
03	
04	
05	
06	
07	
08	
09	
10	Very Satisfied
97	Don't Know
98	Refuse to Answer

BL16. **IN THE 30 DAYS BEFORE STARTING TREATMENT:**

How many days have you used prescription opioids, to relax or have fun, or in larger doses than recommended? Prescription opioids include drugs like codeine, Vicodin, OxyContin, Norco, Percocet.

__ __	
97	Don't Know
98	Refuse to Answer

BL17. **IN THE 30 DAYS BEFORE STARTING TREATMENT:**

How many days have you used illegal opioids (heroin, fentanyl)? __ __

97	Don't Know
98	Refuse to Answer

BL18. **IN THE 30 DAYS BEFORE STARTING TREATMENT:**

How many days have you used other drugs (e.g., benzodiazepines, cocaine, amphetamines)?

__ __

97 Don't Know

98 Refuse to Answer

BL18a. **Comments:**

__ __

BL19. **IN THE 30 DAYS BEFORE STARTING TREATMENT:**

How many days have you injected any drug? __ __

97 Don't Know

98 Refuse to Answer

BL20. **IN THE 30 DAYS BEFORE STARTING TREATMENT:**

How many times have you been in the ER? __ __

97 Don't Know

98 Refuse to Answer

BL21. **IN THE 30 DAYS BEFORE STARTING TREATMENT:**

How many times have you overdosed? __ __

97 Don't Know

98 Refuse to Answer

BL22. **IN THE 30 DAYS BEFORE STARTING TREATMENT:**

How many days have you been in a serious family/relationship conflict?

__ __

97 Don't Know

98 Refuse to Answer

BL23. **IN THE 30 DAYS BEFORE STARTING TREATMENT:**

How many days have you been stopped by the police or arrested by the police?

__ __

97 Don't Know

98 Refuse to Answer

BL24. **IN THE 30 DAYS BEFORE STARTING TREATMENT:**

How many days have you been incarcerated? __ __

97	Don't Know
98	Refuse to Answer

BL25. **IN THE 30 DAYS BEFORE STARTING TREATMENT:**

How many days have you been involved in illegal activities (eg. shoplifting, bad checks, drug SALES , etc. (NOT DRUG USE))?

__ __

97	Don't Know
98	Refuse to Answer

BL26. **In the 30 days before starting treatment, I worried that others would view me unfavorably because I was in treatment for my substance use disorder.** (Choose one)

0	Never
1	Very rarely
2	Sometimes
3	Frequently
4	Always
7	Don't Know
8	Refuse to Answer

BL27. **On a scale of 0 to 10, where 0 is "not at all" and 10 is "extremely", how much do you <u>currently</u> crave opioids?**

PROMPT: If participant needs clarification on which types of opioids are being referred to: By opioids, we mean illegal opioids OR prescription opioids used to relax or have fun, or in larger doses than recommended.

00	Not at all
01	
02	
03	
04	
05	
06	
07	
08	
09	
10	Extremely
97	Don't Know
98	Refuse to Answer

READ: This next question is about your feelings in the past two weeks.

BL28. **Over the past 2 weeks, how often have you been bothered by any of the following problems**?

Little interest or pleasure in doing things (Choose one)

0	Not at all
1	Several days
2	More than half the days
3	Nearly every day
7	Don't Know
8	Refuse to Answer

BL29. **Over the past 2 weeks, how often have you been bothered by any of the following problems**?

Feeling down, depressed or hopeless (Choose one)

0	Not at all
1	Several days
2	More than half the days
3	Nearly every day
7	Don't Know
8	Refuse to Answer

READ: Now we are going to ask you two questions about your treatment experience. Please focus on your experience at [clinic name] since [treatment date].

BL30. **I would recommend this treatment center to a friend or family member** (Choose one)

1	Strongly Disagree
2	Somewhat Disagree
3	Neither agree or disagree
4	Somewhat agree
5	Strongly Agree
7	Don't Know
8	Refuse to Answer

BL31. **Overall, I am satisfied with the services I received. (Choose one)** (Choose one)

1	Strongly Disagree
2	Somewhat Disagree
3	Neither agree or disagree
4	Somewhat agree
5	Strongly Agree
7	Don't Know
8	Refuse to Answer

READ: Thank you very much for your time. This questionnaire is now complete. We will send you your $20 gift card in the mail. As a reminder, we will call you again in about three months to complete a follow-up interview. If you complete the second interview, you will receive a $30 gift card.

If you have any questions about this evaluation study in the future, or if you need to contact me about your participation, you can call our UCLA team at (310) 267-5207. Thank you, again.

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

Follow up - (English)

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

CA HUB AND SPOKE EVALUATION

Q1. **Participant ID #:** __ __ __ __

Q2. **Please re-enter Participant ID #:** __ __ __ __

If Q1 is not equal to Q2 then READ: "IDs don't match, please re-enter:" and skip to Q2.

DATE1TXT = LongDate(DATE1)

Q2d. Is this interview being conducted today, [DATE1TXT]?

1	Yes
0	No
7	Don't Know
8	Refuse to Answer
9	Not Applicable

If Q2d is equal to 1, then skip to Q3.

Q2e. Please enter the date data was collected on:

__ __ / __ __ / __ __ __ __ mm / dd / yyyy

Q3. **Interviewer ID:** __ __ __ __

Q4. **Site: (select one)** (Choose one)

0	Hub
1	Spoke
7	Don't Know

Q5. **Site name:**

__ __
__ __
__ __
__ __

Q6. **Date of service:** (date ROI was signed)

__ __ / __ __ / __ __ __ __ mm / dd / yyyy

Important:

·**NEVER MENTION DRUGS OR DRUG TREATMENT UNTIL YOU HAVE VALIDATED THE IDENTITY OF THE PARTICIPANT**

·**NEVER LEAVE MESSAGES THAT MAY IDENTIFY YOU OR YOUR AGENCY AS PART OF DRUG TREATMENT RESEARCH**

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

READ: Introduction script:

Hello, may I please speak with [name of participant]?

****If the participant is not available, ask if there is a better time and/or number to call. Record the information in the contact log. Do not leave a message****

****If they are speaking/come to the phone, continue with the conversation****

My name is [your name], and Im calling from UCLA. We spoke about 3 months ago. As you may remember, UCLA is conducting an evaluation of health care services you recently received, and you agreed to participate. Im calling today to complete your follow-up interview. As a reminder you will receive a $30 gift card for completing this interview, which will take about one hour. Is now a good time to talk?

****If no, ask if there is a better time to call back. Record the time in the contact log****

****If yes, proceed****

Are you in a good place to privately talk about the study, or is there somewhere else that you would like to go?

****If no, wait for participant to relocate, or offer to call back at another time****

****If yes, proceed****

Before we continue, in order to protect your confidentiality, I need to confirm that I'm speaking to [participant name]. What is your date of birth? And what are the last four digits of your social security number?

IF THE CLIENT IS UNABLE TO PROVIDE ADEQUATE VALIDATION OF THEIR IDENTITY, STOP THE CONVERSATION AT THIS POINT. EXPLAIN THAT YOU ARE ONLY ALLOWED TO DISCUSS THE STUDY WITH THE PERSON WHO YOU CALLED FOR.

********** **Please start recording now** **********

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

READ: FOLLOW UP INTERVIEW GUIDE

Thank you for confirming your identity. To remind you about the study, UCLA is conducting an evaluation of services provided at [name of clinic/program]. The purpose of this evaluation is to learn more about the opioid treatment services you received and how you felt about them. Your participation in this evaluation is completely voluntary, and if you choose not to participate, your care at [name of clinic/program] will not change in any way. As a reminder, this interview will be audio recorded. You can skip any questions you are uncomfortable answering, and can withdraw your participation in the evaluation at any time. Your responses to these interview questions will not be stored with your name or identifying information, and will remain confidential.

Do you have any questions?

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

Demographics

READ: To start I'm going to ask you some demographic information about who you are, your living situation, and your background, including your substance use treatment background.

A1. **Age:** __ __

97	Don't Know
98	Refuse to Answer

A2. **Gender:** *(choose one)* (Choose one)

1	Man
2	Woman
3	Non-binary
4	Prefer to self-describe
5	Prefer not to say
7	Don't Know
8	Refuse to Answer

If A2 is not equal to 4, then skip to A3.

A2A. **Please specify**

__ __
__ __
__ __
__ __

A3. **Race/Ethnicity:** *(mark all that apply)* (Check all that apply)

__	American Indian or Alaska Native
__	Asian
__	Pacific Islander
__	Black or African American
__	Hispanic or Latinx
__	Middle Eastern or Arab American
__	White
__	Prefer to self-describe
__	Prefer not to say
__	Don't Know
__	Refuse to Answer

If A3H is equal to 0, then skip to B1.

A4. **Specify Race/Ethnicity:**

__ __
__ __
__ __
__ __

Living Situation

B1. **Are you currently living in**: (*mark one*) (Choose one)

0	Your own house or apartment
1	With family or friends
2	In a shelter or homeless
3	Transitional/sober living
7	Don't Know
8	Refuse to Answer

B2. **What town/city do you live in?**

__ __
__ __
__ __
__ __

B3. **Has your housing situation changed since you entered treatment?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

If B3 is not equal to 1, then skip to B5.

B4. **Specify housing situation**

__ __
__ __
__ __
__ __

B5. **Have you started treatment at a new clinic or program in the past 3 months?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

If B5 is not equal to 1, then skip to B7.

B6. If yes,
What is the name of your new clinic?

__ __
__ __

B7. **How long does it take you to travel to your clinic or treatment center?**

__ __ __	HOURS
__ __ __	MINUTES
997	Don't Know (Minutes)
998	Refuse to Answer (Minutes)

B8. **How long does it take you to travel to your pharmacy?**

__ __ __	HOURS
__ __ __	MINUTES
997	Don't Know (Minutes)
998	Refuse to Answer (Minutes)

B9. **Do you have children:**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

If B9 is not equal to 1, then skip to instruction before B11.

B10. **How many?** __ __

97	Don't Know
98	Refuse to Answer

If B9 is not equal to 1, then skip to C1.

B11. **Do your children live with you?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

Other Background Questions

C1. **Are you currently in treatment for opioid use?**

1 Yes
0 No
7 Don't Know
8 Refuse to Answer
9 Not Applicable

If C1 is equal to 1, then skip to C5.

If C1 is equal to 0, then skip to C2.

If 1 is equal to 1, then skip to C7.

C2. **Reason: (Not in treatment for opioid use)**

____
____
____
____
____

C3. **How are you managing your opioid use during this treatment gap?** (Choose one)

1 Stopped using opioids without medication
2 Continuing to use opioids
3 I rely on doses that I have saved
4 I purchased my medications on the street
5 I received my medications from a friend or family
6 Other
7 Don't Know
8 Refuse to Answer

If C3 is not equal to 6, then skip to C7.

C4. **Please describe other:**

____
____
____
____
____

If 1 is equal to 1, then skip to C7.

C5. **If YES, are you in treatment with: (*check response*)** (Choose one)

1 Methadone
2 Buprenorphine (Suboxone, Subutex, Probuphine)
3 Extended-release naltrexone (Vivitrol)
7 Don't Know
8 Refuse to Answer

C6. If 1-3, **What is your current medication dose?**

— —
— —
— —
— —
— —

C7. **Are you on probation or parole, in drug court, or do you have a case pending: (*mark one*)**

1 Yes
0 No
7 Don't Know
8 Refuse to Answer

C8. **Have you ever been diagnosed with a mental health condition?**

1 Yes
0 No
7 Don't Know
8 Refuse to Answer

If C8 is not equal to 1, then skip to instruction before D1.

C9. **Specify: Diagnoses**

— —
— —
— —
— —

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

Substance Use History

READ: Now Im going to ask you some questions about your experiences with using several substances.

D1. The next two questions are about use of prescription opioids, like OxyContin, Vicodin, Percocet, codeine, methadone, or buprenorphine.

Have you ever used prescription opioids to relax or have fun, or used larger doses than are recommended by your doctor?

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

If D1 is not equal to 1, then skip to D3.

D2. **If YES, how old were you when you first used prescription opioids to relax or have fun, or used larger doses than are recommended?**

__ __	
97	Don't Know
98	Refuse to Answer

D3. **Have you ever used heroin?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

If D3 is not equal to 1, then skip to D5.

D4. **If YES, how old were you when you first used heroin?** __ __

97	Don't Know
98	Refuse to Answer

D5. **Have you ever used fentanyl?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

If D5 is not equal to 1, then skip to instruction before D7.

D6. **If YES, did you plan to use fentanyl, or did you use heroin knowing it was laced with fentanyl?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

If D6 is not equal to 0, then skip to instruction before D8.

D7. **No, Explain:**

__ __
__ __
__ __
__ __
__ __

If D6 is not equal to 1, then skip to D9.

D8. **Yes, Explain:**

__ __
__ __
__ __
__ __
__ __

D9. **What is the longest period of time that you have used any opioid (including heroin, fentanyl or prescription opioids) on a regular basis?**

From what age:

__ __	
97	Don't Know
98	Refuse to Answer

D10. (Cont. Previous question)

To what age:

__ __	
97	Don't Know
98	Refuse to Answer

D11. **Have you ever switched from using one type of opioid to another (for example, from using prescription opioids to heroin)?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

If D11 is not equal to 1, then skip to D13.

D12. **Yes, Explain:**

__ __
__ __
__ __
__ __
__ __

D13. **Have you ever injected any opioid?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

If D13 is not equal to 1, then skip to instruction before D16.

D14. **If YES, how old were you when you first injected?** __ __

97	Don't Know
98	Refuse to Answer

If D13 is not equal to 1, then skip to instruction before D16.

D15. **If YES, is this currently your usual method of use?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

If D13 is not equal to 1, then skip to D16.

If D15 is not equal to 1, then skip to D17.

D16. **If YES, do you have access to a needle exchange to get clean needles/syringes?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

D17. The next question is about use of benzodiazepines, like Valium, Xanax, Klonopin, or another sedative.

Have you ever used benzodiazepines to relax or have fun, or used larger doses than are recommended?

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

D18. **Have you ever used benzodiazepines together with opioids (including heroin, fentanyl or prescription opioids)?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

D19. **Before seeking treatment for opioid use at [*name of participants clinic program*] on [*date of initial visit*], how many times had you been in treatment for substance use before?**

— —	
97	Don't Know
98	Refuse to Answer

D20. **Have you received treatment with Suboxone or another form of buprenorphine prior to starting treatment at [*name of participants clinic/program*] on [*date*]?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

D21. **Have you received treatment with methadone prior to starting treatment at [*name of participants clinic/program*] on [*date*]?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

D22. **Have you received treatment with extended-release naltrexone (Vivitrol) prior to starting treatment at [*name of participants clinic/program*] on [*date*]?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

Past 30 Day Substance Use

READ: For the next several questions, I will ask you to think about the past 30 days (or one month). The questions are about your experience with using several substances during this time period. I will list each substance, and ask, during the past 30 days, how many days you have used each substance. If youre not sure, please provide your best guess.

E1. **During the past 30 days, how many days have you used:**

Tobacco products (like cigarettes, chewing tobacco) __ __

97 Don't Know

98 Refuse to Answer

E2. **Comments - <u>Tobacco:</u>**

__ __
__ __
__ __
__ __
__ __

E3. **During the past 30 days, how many days have you used:**

Alcoholic beverages (like beer, wine, liquor) __ __

97 Don't Know

98 Refuse to Answer

E4. **Comments - <u>Alcoholic beverages (like beer, wine, liquor)</u>**

__ __
__ __
__ __
__ __
__ __

E5. **During the past 30 days, how many days have you used:**

Cannabis (including marijuana, hash, THC oil) __ __

97 Don't Know

98 Refuse to Answer

E6. **Comments - <u>Cannabis (including marijuana, hash, THC oil)</u>**

__ __
__ __
__ __
__ __
__ __

E7. **During the past 30 days, how many days have you used:**

Amphetamines (methamphetamine, crystal, Adderall/Ritalin/other ADHD medications without a prescription)

__ __

97 Don't Know

98 Refuse to Answer

E8. **Comments - <u>Amphetamines</u> (methamphetamine, crystal, Adderall/Ritalin/other ADHD medications without a prescription)**

__ __
__ __
__ __
__ __
__ __

E9. **During the past 30 days, how many days have you used:**

Benzodiazepines (Valium, Klonopin, Xanax, other sedatives) __ __

97 Don't Know

98 Refuse to Answer

E10. **Comments - <u>Benzodiazepines</u> (Valium, Klonopin, Xanax, other sedatives)**

__ __
__ __
__ __
__ __
__ __

E11. **During the past 30 days, how many days have you used:**

Illegal opioids (heroin, fentanyl) __ __

97 Don't Know

98 Refuse to Answer

E12. **Comments - Illegal opioids (heroin, fentanyl)**

__ __
__ __
__ __
__ __
__ __

E13. **During the past 30 days, how many days have you used:**

Prescription opioids, to relax or have fun, or in larger doses than recommended (morphine, codeine, Vicodin, OxyContin, Norco, Percocet, methadone or buprenorphine)

__ __

97 Don't Know

98 Refuse to Answer

E14. **Comments - <u>Prescription opioids,</u> to relax or have fun, or in larger doses than recommended**

__ __
__ __
__ __
__ __
__ __

E15. **During the past 30 days, how many days have you used:**

Drug Injection (injection of any drug) __ __

97 Don't Know

98 Refuse to Answer

E16. **Comments - <u>Drug Injection</u> (injection of any drug)**

__ __
__ __
__ __
__ __
__ __

E17. **During the past 30 days, how many days have you used:**

Other drugs, for example Cocaine (Coke, Crack), MDMA (ecstasy, X, molly), Hallucinogens (LSD, mushrooms, PCP, Special K)

__ __

97 Don't Know

98 Refuse to Answer

E18. **Comments - <u>Other drugs, for example Cocaine</u> (Coke, Crack), MDMA (ecstasy, X, molly), Hallucinogens (LSD, mushrooms, PCP, Special K)**

__ __
__ __
__ __
__ __
__ __

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

Past 30 Days: Other Domains

READ: For the next several questions, I will also ask you to think back to the past 30 days. These questions will be about other parts of your life.

F1. Past 30 Days:

How many days were you in school or training? __ __

97 Don't Know

98 Refuse to Answer

F2. **Comments - for school or training**

__ __
__ __
__ __
__ __
__ __

F3. Past 30 Days:

How many days did you work? __ __

97 Don't Know

98 Refuse to Answer

F4. **Comments - for work**

__ __
__ __
__ __
__ __
__ __

F5. Past 30 Days:

How many days have you been in the hospital overnight? __ __

97 Don't Know

98 Refuse to Answer

F6. **Comments - for hospital overnight**

__ __
__ __
__ __
__ __
__ __

F7. Past 30 Days:

How many days have you been in a serious family/relationship conflict?

__ __

97 Don't Know

98 Refuse to Answer

F8. **Comments - for serious family/relationship conflict**

__ __
__ __
__ __
__ __
__ __

F9. Past 30 Days:

How many days have you been incarcerated? __ __

97 Don't Know
98 Refuse to Answer

F10. **Comments - for incarcerated**

__ __
__ __
__ __
__ __
__ __

F11. Past 30 Days:

How many days have you been involved in illegal activities (eg. shoplifting, drug SALES bad checks, etc. NOT DRUG USE)?

__ __

97 Don't Know
98 Refuse to Answer

F12. **Comments - for been involved in illegal activities**

__ __
__ __
__ __
__ __
__ __

F13. Past 30 Days:

How many days have you been stopped by the police or arrested by the police?

__ __

97 Don't Know
98 Refuse to Answer

F14. **Comments - been stopped by the police or arrested by the police**

__ __
__ __
__ __
__ __
__ __

F15. Past 30 Days:

How many times have you been in the ER? __ __

97 Don't Know
98 Refuse to Answer

F16. **Comments - for been in the ER**

__ __
__ __
__ __
__ __
__ __

F17. Past 30 Days:

How many times have you gone to an outpatient clinic or doctors office?

__ __

97 Don't Know

98 Refuse to Answer

F18. **Comments - for gone to an outpatient clinic or doctors office**

__ __
__ __
__ __
__ __
__ __

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

Past 30 Days: Satisfaction

G1. **In the past 30 days, on a scale of 0-10, where 0 is "very dissatisfied", 10 is "very satisfied", how satisfied have you been with your life, overall:**

00	Very Dissatisfied
01	
02	
03	
04	
05	
06	
07	
08	
09	
10	Very Satisfied
97	Don't Know
98	Refuse to Answer

Overdose Questionnaire

READ: Next, I will ask you some questions about your experience and knowledge about overdosing on opioids.

H1. **On a scale of 0 to 10, where 0 is "not at all concerned" and 10 is "very concerned", how concerned are you about overdosing on opioids?**

00	Not at all concerned
01	
02	
03	
04	
05	
06	
07	
08	
09	
10	Very concerned
97	Don't Know
98	Refuse to Answer

H2. **How many times have you ever overdosed on opioids?**

— —	
97	Don't Know
98	Refuse to Answer

H3. **How many times have you overdosed on opioids in the past 90 days (in other words, in the 3 months since you started treatment)?**

— —	
97	Don't Know
98	Refuse to Answer

H4. **Do you know what naloxone (Narcan) is?**

If the response is NO, **Prompt:** explain that naloxone is an injection or nasal spray that can reverse an overdose. If respondent realizes they do know, change response to yes.

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

If H4 is not equal to 1, then skip to H6.

H5. **If YES, If you or someone you know overdosed, would you have immediate access to naloxone?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

H6. **Has naloxone ever been used to revive you?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

If H6 is not equal to 1, then skip to I1.

H7. **If Yes, Number of times revived** __ __

97	Don't Know
98	Refuse to Answer

Opioid Craving Scale

I1. *This question refers to your current feelings, right now.*

How much do you currently crave opioids?

PROMPT: If participant needs clarification on which types of opioids are being referred to:
By opioids, we mean illegal opioids OR prescription opioids used to relax or have fun, or in larger doses than recommended.

00	Not at all
01	
02	
03	
04	
05	
06	
07	
08	
09	
10	Extremely
97	Don't Know
98	Refuse to Answer

Mental Health/ Mood State: PHQ-2

READ: This next question is about your feelings over the past 2 weeks.

J1. **Over <u>the past 2 weeks</u>, how often have you been bothered by any of the following problems**?

Little interest or pleasure in doing things (Choose one)

0	Not at all
1	Several days
2	More than half the days
3	Nearly every day
7	Don't Know
8	Refuse to Answer

J2. *This next question is about your feelings over the past 2 weeks.*
Over <u>the past 2 weeks</u>, how often have you been bothered by any of the following problems?

Feeling down, depressed or hopeless (Choose one)

0	Not at all
1	Several days
2	More than half the days
3	Nearly every day
7	Don't Know
8	Refuse to Answer

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

Stigma Questionnaire:

READ: Now, I am going to ask you a few questions regarding your feelings about and experiences with stigma related to substance use disorders and treatment over the past 90 days (in other words, during the 3 months you have been in treatment).

K1. **Over the past 90 days:**

I have worried that others will view me unfavorably because I am in treatment for my substance use disorder. (Choose one)

0	Never
1	Very rarely
2	Sometimes
3	Frequently
4	Always
7	Don't Know
8	Refuse to Answer

K2. **Over the past 90 days:**

I have been discriminated against by health professionals because of my substance use disorder. (Choose one)

0	Never
1	Very rarely
2	Sometimes
3	Frequently
4	Always
7	Don't Know
8	Refuse to Answer

K3. **Over the past 90 days:**

I have been judged by other patients in the waiting room of my treatment center when it was clear that I was in treatment for a substance use disorder. (Choose one)

0	Never
1	Very rarely
2	Sometimes
3	Frequently
4	Always
7	Don't Know
8	Refuse to Answer

K4. **Over the past 90 days:**

I have avoided treatment for my substance use disorder because I am concerned of how other people will react. (Choose one)

0	Never
1	Very rarely
2	Sometimes
3	Frequently
4	Always
7	Don't Know
8	Refuse to Answer

K5. **Over the past 90 days:**

Other people in the recovery community have been accepting of my use of medications for my substance use disorder. (Choose one)

0	Never
1	Very rarely
2	Sometimes
3	Frequently
4	Always
7	Don't Know
8	Refuse to Answer

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

Treatment Assessment:

READ: The next several questions will be about your treatment experience. Please think about your experience at the clinic/program where you mostly recently received treatment for opioid use. The goal of these questions is to get your honest feedback on the clinic/program.

READ: For each of the following statements, indicate the extent to which you agree about your treatment experience:

1-Strongly Disagree 2- Somewhat Disagree 3-Neither agree or disagree 4- Somewhat agree 5- Strongly Agree

L1. **The amount of time I had to wait to get services was acceptable to me.** (Choose one)

1	Strongly Disagree
2	Somewhat Disagree
3	Neither agree or disagree
4	Somewhat agree
5	Strongly Agree
7	Don't Know
8	Refuse to Answer

L2. **I can afford the treatment I want to receive.** (Choose one)

1	Strongly Disagree
2	Somewhat Disagree
3	Neither agree or disagree
4	Somewhat agree
5	Strongly Agree
7	Don't Know
8	Refuse to Answer

L3. **The location of this treatment center is convenient for me.** (Choose one)

1	Strongly Disagree
2	Somewhat Disagree
3	Neither agree or disagree
4	Somewhat agree
5	Strongly Agree
7	Don't Know
8	Refuse to Answer

L4. **The staff at this treatment center treat me with respect.** (Choose one)

1 Strongly Disagree
2 Somewhat Disagree
3 Neither agree or disagree
4 Somewhat agree
5 Strongly Agree
7 Don't Know
8 Refuse to Answer

L5. **The people at this treatment center spend enough time with me.** (Choose one)

1 Strongly Disagree
2 Somewhat Disagree
3 Neither agree or disagree
4 Somewhat agree
5 Strongly Agree
7 Don't Know
8 Refuse to Answer

L6. **I have a say in deciding about my substance abuse treatment that I am receiving here.** (Choose one)

1 Strongly Disagree
2 Somewhat Disagree
3 Neither agree or disagree
4 Somewhat agree
5 Strongly Agree
7 Don't Know
8 Refuse to Answer

L7. **I am able to access services in my preferred language at this treatment center.** (Choose one)

1 Strongly Disagree
2 Somewhat Disagree
3 Neither agree or disagree
4 Somewhat agree
5 Strongly Agree
7 Don't Know
8 Refuse to Answer

L8. **The staff at this treatment center are sensitive to my background.** (Choose one)

1 Strongly Disagree
2 Somewhat Disagree
3 Neither agree or disagree
4 Somewhat agree
5 Strongly Agree
7 Don't Know
8 Refuse to Answer
9 Not Applicable

L9. **I am less likely to use alcohol or other drugs because of this treatment.** (Choose one)

1 Strongly Disagree
2 Somewhat Disagree
3 Neither agree or disagree
4 Somewhat agree
5 Strongly Agree
7 Don't Know
8 Refuse to Answer
9 Not Applicable

L10. **People at the treatment center care about whether I am doing better.** (Choose one)

1 Strongly Disagree
2 Somewhat Disagree
3 Neither agree or disagree
4 Somewhat agree
5 Strongly Agree
7 Don't Know
8 Refuse to Answer
9 Not Applicable

L11. **I would recommend this treatment center to a friend or family member** (Choose one)

1 Strongly Disagree
2 Somewhat Disagree
3 Neither agree or disagree
4 Somewhat agree
5 Strongly Agree
7 Don't Know
8 Refuse to Answer
9 Not Applicable

L12. **Overall, I am satisfied with the services I received. (Choose one)** (Choose one)

1	Strongly Disagree
2	Somewhat Disagree
3	Neither agree or disagree
4	Somewhat agree
5	Strongly Agree
7	Don't Know
8	Refuse to Answer
9	Not Applicable

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

Treatment Effectiveness Assessment (TEA)

READ: Please answer the following questions regarding the extent of changes for the better that have occurred <u>since you have been in treatment</u> on a scale of 0-10 where 0 is None or not much, 5 is Better and 10 is Much better. Answer each question thinking about how you have improved (higher number).

None or not much Better Much better
0 1 2 3 4 5 6 7 8 9 10

M1. **<u>Substance use</u>: How much better are you with drug and alcohol use? Consider the frequency and amount of use, money spent on drugs, amount of drug craving, time spent being loaded, being sick, in trouble and in other drug-using activities, etc.**

None or not much Better Much better
0 1 2 3 4 5 6 7 8 9 10

00	None or not much
01	
02	
03	
04	
05	
06	
07	
08	
09	
10	Much better
97	Don't Know
98	Refuse to Answer

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

M2. **<u>Health</u>: Has your health improved? In what way and how much? Think about your physical and mental health: Are you eating and sleeping properly, exercising, taking care of health problems or dental problems, feeling better about yourself, etc?**

None or not much Better Much better
0 1 2 3 4 5 6 7 8 9 10

00	None or not much
01	
02	
03	
04	
05	
06	
07	
08	
09	
10	Much better
97	Don't Know
98	Refuse to Answer

M3. **<u>Lifestyle</u>: How much better are you in taking care of personal responsibilities? Think about your living conditions, family situation, employment, relationships: Are you paying your bills? Following through with your personal or professional commitments?**

None or not much Better Much better
0 1 2 3 4 5 6 7 8 9 10

00	None or not much
01	
02	
03	
04	
05	
06	
07	
08	
09	
10	Much better
97	Don't Know
98	Refuse to Answer

M4. **<u>Community</u>: Are you a better member of the community? Think about things like obeying laws and meeting your responsibilities to society: Do your actions have positive or negative impacts on other people?**

None or not much Better Much better

0 1 2 3 4 5 6 7 8 9 10

00	None or not much
01	
02	
03	
04	
05	
06	
07	
08	
09	
10	Much better
97	Don't Know
98	Refuse to Answer

READ:
As a reminder, all of your responses to these questions will be kept anonymous.

Open-Ended Questions

N1. **Over the last 90 days, <u>have your treatment providers transferred you from one clinic to another</u> to address your opioid use?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

If N1 is not equal to 1, then skip to N3.

N2. **If YES, what was your experience of this transfer like? (If prompting is needed: Was the transfer delayed, or smooth? Did it feel like you were continuing care or starting over? Was it a positive or negative experience? Why?)**

N3. **Have *you* chosen to transfer from one clinic to another to address your opioid use?**

1	Yes
0	No
7	Don't Know
8	Refuse to Answer

If N3 is not equal to 1, then skip to N6.

N4. If yes,
What is the name of your new clinic?

N5. **How would you describe your experience at [name of program/clinic] compared to your new clinic now?**

N6.**What are the things that you most like and value about your current opioid treatment clinic/Drs. Office?**

N7. **What are the things that you don't like about this treatment clinic/Drs office?**

N8. **Do you feel your opioid treatment provider is compassionate? Why/why not?**

N9. **Do you feel that your opioid treatment provider has respect for your treatment preferences, and includes you in making decisions about your care? Why/why not?**

N10. **Does your opioid treatment provider adequately address your pain? How so?**

Appendix III: Treatment Initiation and 90-Day Follow Up Patient Interview Guides

N11. **What services do you receive in this clinic/Drs office that help you the most (for example, medication, medical care, help for your family, individual counseling, group counseling, referrals, AA/NA, etc.)?**

N12. **Do you feel like you are receiving support for more than just your substance use disorder? (For example: job skills, mental health, education)**

N13.**What additional services could be added to this clinic/Drs office that would be helpful to you?**

N14. **What are the biggest obstacles or challenges to your involvement in substance use disorder treatment?**

N15. **Other notable information or comments: (PROBE: Or any other differences between your current and last treatment locations?)**

****END THE INTERVIEW AND THANK THE PARTICIPANT FOR THEIR TIME****

Thank you very much for your time. This questionnaire is now complete. We will send you your $30 gift card in the mail. Is the address we sent your gift card to last time still the best address to receive the new gift card. As a reminder, we sent it to [READ PARTICIPANTS ADDRESS FROM LOCATOR].

If you have any questions about this evaluation study in the future, or if you need to contact me about your participation, you can call our UCLA team at (310) 267-5207. Thank you, again.

Hub Leadership Survey

Default Question Block

The California Department of Health Care Services (DHCS) is partnering with UCLA to conduct a survey with all providers in the **California statewide Hub and Spoke System** to increase access to medications for opioid use disorders (MOUD).

This survey will provide important feedback on the barriers and facilitators to the success of the Hub and Spoke System, and will help to improve care for patients with opioid use disorders throughout the state. As a **Hub administrator**, we ask that you please take a moment to complete the survey.

The survey will take 10-12 minutes to complete, and you will receive a $30 gift card for your participation.

If you have any questions, or feel that this survey does not apply to you, please contact the UCLA Evaluation team at ISAP@mednet.ucla.edu.

Thank you for your participation in this important program evaluation!

Hub location Name

How long have you worked at the Hub location? (in years)

Position Title

Professional license/certification title

Professional specialization (if applicable)

Which category best describes the communities that this location serves? (choose all that apply)

- ☐ Large urban area (population of more than 50,000)
- ☐ Smaller urban area (population of 2,500-50,000)
- ☐ Rural (population less than 2,500)

For the following questions, mark the answer that comes closest to how you feel. Don't spend too long on any single item. If you don't know, select the "DK" option.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
The Hub and Spoke model is useful.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
My Hub and Spoke System has had a positive impact on the availability of community resources to address opioid use disorders.	○	○	○	○	○	○
The Hub service has had a positive impact on the primary care practice of the Spokes.	○	○	○	○	○	○
Care coordination between the Hub and Spokes is effective.	○	○	○	○	○	○
Participating in the Learning Collaborative(s) has been helpful.	○	○	○	○	○	○
The MAT team(s) in this Hub and Spoke system are effective.	○	○	○	○	○	○
Communication between medical and behavioral health staff in my Hub and Spoke system is good.	○	○	○	○	○	○
The Hub and Spokes in my network have a strong working relationship.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
Staff in this location have adequate training to implement the Hub and Spoke model.	○	○	○	○	○	○
Staff in this location are confident about implementing the Hub and Spoke model.	○	○	○	○	○	○
Senior management in this location support the implementation of the Hub and Spoke model.	○	○	○	○	○	○

Have you attended any Hub and Spoke Learning Collaborative sessions?

- ○ Yes
- ○ No
- ○ Don't know

How often does your hub meet with your spokes?

- ○ Every day

- ○ About once a week
- ○ About once a month
- ○ Quarterly
- ○ Rarely (less than quarterly)
- ○ Never
- ○ [ ] Other (please describe)

Please list the top 3 topics that would be the most helpful to discuss in Hub and Spoke meetings.

Please list the top 3 topics that you most often discuss in Hub and Spoke meetings.

Please describe your plans for maintaining connections with spokes after the Hub and Spoke grant ends.

If you had additional funds and/or resources to get more members of your community onto medications for opioid use disorders, what would you use them for?

If you have any additional thoughts about the impact of the Hub and Spoke model, please elaborate here. (Optional)

For the following questions, please mark the answer that comes closest to how you feel. If you work in multiple locations, please note any significant differences between locations in the comments section. If you don't know, select the "DK" option.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
There is an adequate number of behavioral health care providers in the community served by this Hub and Spoke system to provide opioid use disorder services.	○	○	○	○	○	○
Behavioral health care providers in this community are unwilling or reluctant to provide therapy to patients receiving medication assisted treatment.	○	○	○	○	○	○
Onsite or community pharmacies are effective in serving the needs of our patients with opioid use disorder.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
There is an adequate supply of naloxone (Narcan) in the community served by this Hub and Spoke system.	○	○	○	○	○	○
We often deliver telehealth services.	○	○	○	○	○	○
Individuals in the community served by this Hub and Spoke system have difficulty accessing opioid use disorder services.	○	○	○	○	○	○
Individuals in this community who are interested in buprenorphine can easily find our Spokes and their providers in online directories.	○	○	○	○	○	○
Staff members in Spokes seem confused about the goals of the Hub and Spoke model.	○	○	○	○	○	○
Staff in my Hub and Spoke system have the peer mentorship they need to address opioid use disorders.	○	○	○	○	○	○

Please describe any additional barriers or facilitators to the success of the Hub and Spoke model not named above, or describe any significant differences between Hub and Spoke sites. (Optional)

For the following questions, mark the answer that comes closest to how you feel about the resources of your Hub and Spoke system. Don't spend too long on any single item. If you don't know, select the "DK" option.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
My Hub and Spoke system has the resources it needs to provide opioid use disorder services to uninsured/underinsured patients.	○	○	○	○	○	○
Staff in my Hub and Spoke system consider health disparities when providing opioid use disorder services.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
My Hub and Spoke system provides patients with culturally competent care.	○	○	○	○	○	○
Staff in my Hub and Spoke system have experience providing trauma-informed care.	○	○	○	○	○	○
Staff in my Hub and Spoke system have the appropriate level of experience to deliver opioid use disorder services to patients with chronic pain.	○	○	○	○	○	○
My Hub and Spoke system provides universal prenatal screening for drug and alcohol use.	○	○	○	○	○	○
My Hub and Spoke system collaborates with a local delivery facility capable of treating infants with neonatal abstinence syndrome.	○	○	○	○	○	○
Staff in my Hub and Spoke system have the resources they need to make referrals for or provide opioid use disorder services to patients with co-occurring psychiatric disorders.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
This Hub and Spoke system offers adequate transportation resources for patients.	○	○	○	○	○	○
This Hub and Spoke system offers adequate housing supports and other resources to patients who are homeless or experiencing domestic violence.	○	○	○	○	○	○
This Hub and Spoke system offers adequate reentry services for patients leaving correctional facilities.	○	○	○	○	○	○
This Hub and Spoke system offers adequate family support services to patients with children or other dependents.	○	○	○	○	○	○

Please describe any other services you find critical to addressing the needs of the populations your Hub and Spoke System serves. (Optional)

Does your Hub and Spoke location offer outreach and education materials related to opioid use disorders in the languages (other than English) spoken by the community you serve?

- ○ Yes
- ○ No
- ○ Don't know

Does your Hub and Spoke location have the staff and other resources it needs to treat patients with opioid use disorders who speak a language other than English?

- ○ Yes
- ○ No
- ○ Don't know

If you provide materials, staff and resources in some, but not all, languages spoken by the community you serve, please specify which additional languages it would be most helpful to have materials available in.

Have staff in your Hub and Spoke system ever attended a training covering culturally informed practice or competencies?

- ○ Yes
- ○ No
- ○ Don't Know

If yes, did it cover American Indians/Alaska Natives?

- ○ Yes
- ○ No
- ○ Don't Know

Your age in years

Gender

- ○ Man

- ○ Woman
- ○ Non-binary
- ○ Prefer not to say
- ○ _____ Prefer to self-describe

Race/Ethnicity (choose all that apply)

- ☐ American Indian or Alaska Native
- ☐ Asian or Pacific Islander
- ☐ Black or African American
- ☐ Hispanic or Latinx
- ☐ Middle Eastern or Arab American
- ☐ White or Caucasian
- ☐ Prefer not to say
- ☐ _____ Prefer to self-describe

Spoke Leadership Survey

Default Question Block

The California Department of Health Care Services (DHCS) is partnering with UCLA to conduct a survey with all providers in the **California statewide Hub and Spoke System** to increase access to medications for opioid use disorders (MOUD).

This survey will provide important feedback on the barriers and facilitators to the success of the Hub and Spoke System, and will help to improve care for patients with opioid use disorders throughout the state. As a **Spoke administrator**, we ask that you please take a moment to complete the survey.

The survey will take 10-12 minutes to complete, and you will receive a $30 gift card for your participation.

If you have any questions, or feel that this survey does not apply to you, please contact the UCLA Evaluation team at ISAP@mednet.ucla.edu.

Thank you for your participation in this important program evaluation!

Spoke location name

How long have you worked at the Spoke location? (in years)

Position Title

Professional license/certification title

Professional specialization (if applicable)

Which category best describes the communities that this location serves? (choose all that apply)

- ☐ Large urban area (population of more than 50,000)
- ☐ Smaller urban area (population of 2,500-50,000)
- ☐ Rural (population less than 2,500)

Which of the following types of staff members provide clinical support to buprenorphine prescribers in your spoke, as part of the MAT Team?

- ☐ Nurse Care Manager
- ☐ Nursing staff (other than NCM)
- ☐ Physician's assistant
- ☐ Medical assistant
- ☐ SUD counselor
- ☐ Behavioral health specialist (other than SUD counselor)
- ☐ Peer support worker

☐ Other (please specify):

How many patients with opioid use disorders does your MAT team provide support to? (If you are unsure, please estimate in numbers)

Have you attended any Hub and Spoke Learning Collaborative sessions?

- ○ Yes
- ○ No
- ○ Don't know

How often does your hub meet with your spoke?

- ○ Every day
- ○ About once a week
- ○ About once a month
- ○ Quarterly
- ○ Rarely (less than quarterly)
- ○ Never

○ Other (please describe)

Please list the top 3 topics that would be the most helpful to discuss in Hub and Spoke meetings.

Please list the top 3 topics that you most often discuss in Hub and Spoke meetings.

For the following questions, mark the answer that comes closest to how you feel. Don't spend too long on any single item. If you don't know, select the "DK" option.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
The Hub and Spoke model is useful.	○	○	○	○	○	○
The Hub and Spoke System has had a positive impact on the availability of community resources to address opioid use disorders.	○	○	○	○	○	○
Participating in the Learning Collaborative(s) has been helpful.	○	○	○	○	○	○
The Hub service has had a positive impact on the primary care practice of this Spoke.	○	○	○	○	○	○
Care coordination between the Hub and this Spoke is effective.	○	○	○	○	○	○
The MAT team in this Spoke is effective.	○	○	○	○	○	○
Communication between medical and behavioral health staff in my Spoke is good.	○	○	○	○	○	○
The Hub in my network has a strong working relationship with this Spoke.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
Staff in this spoke have adequate training to implement the Hub and Spoke model.	○	○	○	○	○	○
Staff members seem confused about the goals of the Hub and Spoke model.	○	○	○	○	○	○
Staff in this spkoe are confident about implementing the Hub and Spoke model.	○	○	○	○	○	○
Staff in this spoke have the peer mentorship they need to address opioid use disorders.	○	○	○	○	○	○
Senior management in this spoke support the implementation of the Hub and Spoke model.	○	○	○	○	○	○

If you had additional funds and/or resources to get more members of your community onto medications for opioid use disorders, what would you use them for?

If you have any additional thoughts about the impact of the Hub and Spoke model, please elaborate here. (Optional)

For the following questions, please mark the answer that comes closest to how you feel. If you work in multiple locations, please note any significant differences between locations in the comments section. If you don't know, select the "DK" option.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
There is an adequate number of behavioral health care providers in the community served by this Spoke to provide opioid use disorder services.	○	○	○	○	○	○
Behavioral health care providers in this community are unwilling or reluctant to provide therapy to patients receiving medication assisted treatment.	○	○	○	○	○	○
Onsite or community pharmacies are effective in serving the needs of our patients with opioid use disorder.	○	○	○	○	○	○
There is an adequate supply of naloxone (Narcan) in the community served by this Spoke.	○	○	○	○	○	○
We often deliver telehealth services.	○	○	○	○	○	○
We screen most patients for opioid use disorders.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
Individuals in the community served by this Spoke have difficulty accessing opioid use disorder services.	○	○	○	○	○	○
Individuals in this community who are interested in buprenorphine can easily find our Spoke and its providers in online directories.	○	○	○	○	○	○
Staff members seem confused about the goals of the Hub and Spoke model.	○	○	○	○	○	○

Please list any additional barriers or facilitators to the success of the Hub and Spoke model not named above. (Optional)

For the following questions, mark the answer that comes closest to how you feel about the resources of your Hub and Spoke system. Don't spend too long on any single item. If you don't know, select the "DK" option.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
My Spoke has the resources it needs to provide opioid use disorder services to uninsured/underinsured patients.	○	○	○	○	○	○
Staff in my Spoke consider health disparities when providing opioid use disorder services.	○	○	○	○	○	○
My Spoke provides patients with culturally competent care.	○	○	○	○	○	○
Staff in my Spoke have experience providing trauma-informed care.	○	○	○	○	○	○
Staff in my Spoke have the appropriate level of experience to deliver opioid use disorder services to patients with chronic pain.	○	○	○	○	○	○
My Spoke provides universal prenatal screening for drug and alcohol use.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
My Spoke collaborates with a local delivery facility capable of treating infants with neonatal abstinence syndrome	○	○	○	○	○	○
Staff in my Spoke have the resources they need to make referrals for or provide opioid use disorder services to patients with co-occurring psychiatric disorders.	○	○	○	○	○	○
This Spoke offers adequate transportation resources for patients.	○	○	○	○	○	○
This Spoke has adequate referral resources for housing supports and other resources for patients who are homeless or experiencing domestic violence.	○	○	○	○	○	○
This Spoke has adequate referral resources for reentry services for patients leaving correctional facilities.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
This Spoke has adequate referral resources for family support services to patients with children or other dependents.	○	○	○	○	○	○

Please describe any other services your Spoke offers that you find critical to addressing the needs of the populations it serves. (Optional)

Does your Spoke location offer outreach and education materials related to opioid use disorders in the languages (other than English) spoken by the community you serve?

- ○ Yes
- ○ No
- ○ Don't know

Does your Spoke location have the staff and other resources it needs to treat patients with opioid use disorders who speak a language other than English?

- ○ Yes
- ○ No
- ○ Don't know

If you provide materials, staff and resources in some, but not all, languages spoken by the community you serve, please specify which additional languages it would be most helpful to have materials available in.

Have staff in your Spoke ever attended a training covering culturally informed practice or competencies?

- ○ Yes
- ○ No
- ○ Don't Know

If yes, did it cover American Indians/Alaska Natives?

- ○ Yes
- ○ No
- ○ Don't Know

Your age in years

Gender

- ○ Man
- ○ Woman
- ○ Non-binary
- ○ Prefer not to say
- ○ Prefer to self-describe

Race/Ethnicity (choose all that apply)

- ☐ American Indian or Alaska Native
- ☐ Asian or Pacific Islander
- ☐ Black or African American

- [ ] Hispanic or Latinx
- [ ] Middle Eastern or Arab American
- [ ] White or Caucasian
- [ ] Prefer not to say
- [ ] Prefer to self-describe

Powered by Qualtrics

MAT Team Survey

Default Question Block

The California Department of Health Care Services (DHCS) is partnering with UCLA to conduct a survey with all providers in the **California statewide Hub and Spoke System** to increase access to medications for opioid use disorders (MOUD).

This survey will provide important feedback on the barriers and facilitators to the success of the Hub and Spoke System, and will help to improve care for patients with opioid use disorders throughout the state. As a Hub and Spoke **MAT team provider** (e.g. nurse, counselor, peer support, care navigator), we ask that you please take a moment to complete the survey. *Note: if your role on the project is administrative (e.g. project director/coordinator, finance administrator), please contact the UCLA Evaluation team to receive the Hub and Spoke Leadership survey.*

The survey will take 10-20 minutes to complete, and you will receive a $30 gift card for your participation.

If you have any questions, or feel that this survey does not apply to you, please contact the UCLA Evaluation team at ISAP@mednet.ucla.edu.

Thank you for your participation in this important program evaluation!

Job Role

Note: if your role on the Hub and Spoke project is administrative (e.g. project director/coordinator, finance administrator), please contact the UCLA Evaluation team to receive the Hub and Spoke Leadership survey.

- ☐ Nurse (RN, NP, LVN)
- ☐ Behavioral health specialist (psychologist, therapist)
- ☐ SUD counselor
- ☐ Social worker
- ☐ Peer support
- ☐ Patient care coordinator/navigator
- ☐ Other (please specify): _____

Professional license/certification title

How many locations (total) do you work for as part of the Hub and Spoke project?

How many patients with opioid use disorders do you typically have in your caseload? If you are unsure, please estimate in numbers.

Which category best describes the communities that your primary Hub and Spoke location serves? (choose all that apply)

- ☐ Large urban area (population of more than 50,000)
- ☐ Smaller urban area (population of 2,500-50,000)
- ☐ Rural (population less than 2,500)

For the following questions, mark the answer that comes closest to how you feel. Don't spend too long on any single item. If you don't know, select the "DK" option.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly agree	DK
Some patients with opioid use disorders need medication assisted treatment for years, or even for life.	○	○	○	○	○	○
Methadone is just substituting one addiction for another.	○	○	○	○	○	○
Patients who continually abuse opioids are not committed to treatment.	○	○	○	○	○	○
Patients who divert buprenorphine or other opioids should be discharged from care immediately.	○	○	○	○	○	○
Buprenorphine reduces opioid misuse.	○	○	○	○	○	○
Checking the CURES database is an important part of working with patients taking opioids.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly agree	DK
Patients demonstrating ongoing opioid use should be reprimanded or discharged from treatment.	○	○	○	○	○	○
Patients demonstrating cannabis/marijuana use should be reprimanded or discharged from treatment.	○	○	○	○	○	○
Patients demonstrating stimulant use should be reprimanded or discharged from treatment.	○	○	○	○	○	○
Most patients should be tapered off of buprenorphine as soon as possible.	○	○	○	○	○	○
I feel equally comfortable working with patients with opioid use disorders as I do working with other patient groups.	○	○	○	○	○	○
Retaining patients in treatment is a top priority for me.	○	○	○	○	○	○

Please elaborate on your responses to any of the questions above. (Optional)

For the following questions, mark the answer that comes closest to how you feel about your experience with the Hub and Spoke project. Don't spend too long on any single item. If you don't know, select the "DK" option.

	Strongly Disgree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
The Hub and Spoke model is useful.	○	○	○	○	○	○
The Hub and Spoke project has had a positive impact on the availability of resources to treat opioid use disorders in my community.	○	○	○	○	○	○
Care coordination between the Hub and Spoke(s) is effective.	○	○	○	○	○	○
Participating in the Hub and Spoke Learning Collaborative(s) has been helpful.	○	○	○	○	○	○

	Strongly Disgree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
Hub services are useful to practitioners in the Spoke(s).	○	○	○	○	○	○
I feel the criteria for transferring patients between Spokes and the Hub are clear.	○	○	○	○	○	○
I have a satisfactory level of communication with buprenorphine prescribers in my Hub and Spoke system.	○	○	○	○	○	○
I feel that I am an integral part of the team for treating opioid use disorders in this Hub and Spoke system.	○	○	○	○	○	○
The Hub and Spokes in my network have a strong working relationship.	○	○	○	○	○	○

Have you attended any Hub and Spoke Learning Collaborative sessions?

- ○ Yes
- ○ No
- ○ Don't know

How often does your Hub meet with your Spokes?

- ○ Every day
- ○ About once a week
- ○ About once a month
- ○ Quarterly
- ○ Rarely (less than quarterly)
- ○ Never
- ○ _____ Other (please describe)

Please list the top 3 topics that would be most helpful to discuss in Hub and Spoke meetings.

Please list the top 3 topics that you discuss most often during these Hub and Spoke meetings.

How often do you meet with buprenorphine prescribers about patients with opioid use disorders in your Hub and Spoke location?

- ○ Every day
- ○ About once a week
- ○ About once a month
- ○ Quarterly
- ○ Rarely (less than quarterly)
- ○ Never
- ○ _____ Other (please describe):

If you have any additional thoughts about the impact of the Hub and Spoke model, please elaborate here. (Optional)

For the following questions, please mark the answer that comes closest to how you feel. If you work in multiple locations, please note any significant differences between

locations in the comments section. If you don't know, select the "DK" option.

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
Behavioral health care providers and mutual support groups (e.g, AA, NA) in my community are reluctant to provide services to patients receiving medication assisted treatment.	○	○	○	○	○	○
Onsite or community pharmacies are effective in serving the needs of our patients with opioid use disorders.	○	○	○	○	○	○
There is an adequate supply of naloxone (Narcan) in my community.	○	○	○	○	○	○
Individuals in my community have difficulty accessing opioid use disorder services.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
Individuals in my community who are interested in buprenorphine can easily find Hub and Spoke clinics and their providers in online directories.	○	○	○	○	○	○

Please describe any additional barriers or facilitators to treating/preventing opioid use disorders in your community not named above. (Optional)

I provide the following types of services to patients with opioid use disorders:

- ☐ Screening for opioid use disorders
- ☐ Care navigation/coordination
- ☐ Referrals to community resources (e.g. child care, housing supports, residential treatment)
- ☐ Behavioral interventions (e.g., motivational interviewing, cognitive behavioral therapy)

- [ ] Patient education
- [ ] Group visits
- [ ] Culturally competent care
- [ ] Trauma-informed care
- [ ] Peer support
- [ ] Insurance assistance
- [ ] Documentation of treatment attendance
- [ ] Drug testing
- [ ] Pharmacy interface
- [ ] Other (please specify) _____

I feel that I need more training and technical assistance in serving the needs of patients with opioid use disorders who:

- [ ] Are uninsured/underinsured
- [ ] Are homeless
- [ ] Have chronic pain
- [ ] Are pregnant/nursing
- [ ] Have co-occurring psychiatric disorders
- [ ] Use multiple substances
- [ ] Have HIV/AIDS and/or HCV
- [ ] Other (please describe): _____
- [ ] None

Have you ever attended a training covering culturally informed practice or competencies specific to American Indians/Alaska Natives?

- ○ Yes
- ○ No
- ○ Don't know

Would you be interested in attending such a training if it were offered?

- ○ Yes
- ○ No

Is there any additional training that would help you in serving the needs of the patients you see with opioid use disorders? (please describe)

Do you offer outreach and education materials related to opioid use disorders in the languages (other than English) spoken by the community you serve?

- ○ Yes
- ○ No
- ○ Don't Know

Does your Hub and Spoke location have the staff and other resources it needs to treat patients with opioid use disorders who speak a language other than English?

- ○ Yes
- ○ No
- ○ Don't Know

If you provide materials, staff or resources in some, but not all, languages spoken by the community you serve, please specify which additional languages it would be most helpful to have materials available in.

Name of the Hub and Spoke location where you work most often

About what percentage of your time on the Hub and Spoke project do you spend working in this location? (If you aren't sure how much of your time is dedicated to the Hub and Spoke project, please estimate based on your total hours worked).

- ○ 5-10%
- ○ 11-25%
- ○ 26-50%
- ○ 51-75%
- ○ 76-100%

How long have you worked at this location? (# years, # months)

Which category best describes the primary setting or service of this location? (choose all that apply)

- ☐ Hospital/Emergency Department
- ☐ Primary care clinic (e.g. FQHC, other community health clinic)
- ☐ Mental/behavioral health center
- ☐ Alcohol/drug treatment program
- ☐ Private practice
- ☐ Telehealth program
- ☐ Other (please specify) _____

For the following questions, please mark the answer that comes closest to how you feel. If you don't know, select the "DK" option. If you work in multiple locations, please think about the location where you work most often. You will be prompted to answer these questions for additional locations at the end of the question set.

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
Clinical staff in this location regularly screen patients for opioid use disorders.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
Clinical staff in this location have the referral resources they need for patients with opioid use disorders.	○	○	○	○	○	○
Staff in this location have adequate training to implement the Hub and Spoke model.	○	○	○	○	○	○
Staff in this location are confident about implementing the Hub and Spoke model.	○	○	○	○	○	○
Senior management in this location support the implementation of the Hub and Spoke model.	○	○	○	○	○	○
Communication between medical and behavioral health staff in this location is good.	○	○	○	○	○	○
Clinical staff in this location often deliver telehealth services.	○	○	○	○	○	○
This location offers adequate transportation resources for patients.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
This location offers adequate referral resources for housing supports to patients who are homeless or experiencing domestic violence.	○	○	○	○	○	○
This location offers adequate referral resources for reentry services for patients leaving correctional facilities.	○	○	○	○	○	○
This location offers adequate referral resources for family support services to patients with children or other dependents.	○	○	○	○	○	○

Please elaborate on your responses to any of the questions above, or describe any other services you find critical to the success of the Hub and Spoke model at this location. (Optional)

Do you work in another location as part of the Hub and Spoke project?

- ○ Yes
- ○ No

Name of second Hub and Spoke location

About what percentage of your time on the Hub and Spoke project do you spend working in this location? (If you aren't sure how much of your time is dedicated to the Hub and Spoke project, please estimate based on your total hours worked).

- ○ 5-10%
- ○ 11-25%
- ○ 26-50%
- ○ 51-75%
- ○ 76-100%

How long have you worked at this location? (# years, # months)

Which category best describes the primary setting or service of this location? (choose all that apply)

- ☐ Hospital/Emergency Department
- ☐ Primary care clinic (e.g. FQHC, other community health clinic)
- ☐ Mental/behavioral health center
- ☐ Alcohol/drug treatment program
- ☐ Private practice
- ☐ Telehealth program
- ☐ Other (please specify)

For the following questions, please mark the answer that comes closest to how you feel. If you don't know, select the "DK" option. If you work in multiple locations, please think about the location where you work most often. You will be prompted to answer these questions for additional locations at the end of the question set.

Appendix IV: Provider Surveys

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
Clinical staff in this location regularly screen patients for opioid use disorders.	○	○	○	○	○	○
Clinical staff in this location have the referral resources they need for patients with opioid use disorders.	○	○	○	○	○	○
Staff in this location have adequate training to implement the Hub and Spoke model.	○	○	○	○	○	○
Staff in this location are confident about implementing the Hub and Spoke model.	○	○	○	○	○	○
Senior management in this location support the implementation of the Hub and Spoke model.	○	○	○	○	○	○
Communication between medical and behavioral health staff in this location is good.	○	○	○	○	○	○
Clinical staff in this location often deliver telehealth services.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
This location offers adequate transportation resources for patients.	○	○	○	○	○	○
This location offers adequate referral resources for housing supports to patients who are homeless or experiencing domestic violence.	○	○	○	○	○	○
This location offers adequate referral resources for reentry services for patients leaving correctional facilities.	○	○	○	○	○	○
This location offers adequate referral resources for family support services to patients with children or other dependents.	○	○	○	○	○	○

Please elaborate on your responses to any of the questions above, or describe any other services you find critical to the success of the Hub and Spoke model at this location. (Optional)

Do you work in another location as part of the Hub and Spoke project?

- Yes
- No

Name of third Hub and Spoke location

About what percentage of your time on the Hub and Spoke project do you spend working in this location? (If you aren't sure how much of your time is dedicated to the Hub and Spoke project, please estimate based on your total hours worked).

- 5-10%
- 11-25%
- 26-50%
- 51-75%

○ 76-100%

How long have you worked at this location? (# years, # months)

Which category best describes the primary setting or service of this location? (choose all that apply)

- ☐ Hospital/Emergency Department
- ☐ Primary care clinic (e.g. FQHC, other community health clinic)
- ☐ Mental/behavioral health center
- ☐ Alcohol/drug treatment program
- ☐ Private practice
- ☐ Telehealth program
- ☐ Other (please specify)

For the following questions, please mark the answer that comes closest to how you feel. If you don't know, select the "DK" option. If you work in multiple locations, please think about the location where you work most often. You will be

prompted to answer these questions for additional locations at the end of the question set.

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
Clinical staff in this location regularly screen patients for opioid use disorders.	○	○	○	○	○	○
Clinical staff in this location have the referral resources they need for patients with opioid use disorders.	○	○	○	○	○	○
Staff in this location have adequate training to implement the Hub and Spoke model.	○	○	○	○	○	○
Staff in this location are confident about implementing the Hub and Spoke model.	○	○	○	○	○	○
Senior management in this location support the implementation of the Hub and Spoke model.	○	○	○	○	○	○
Communication between medical and behavioral health staff in this location is good.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
Clinical staff in this location often deliver telehealth services.	○	○	○	○	○	○
This location offers adequate transportation resources for patients.	○	○	○	○	○	○
This location offers adequate referral resources housing supports to patients who are homeless or experiencing domestic violence.	○	○	○	○	○	○
This location offers adequate referral resources for reentry services for patients leaving correctional facilities.	○	○	○	○	○	○
This location offers adequate referral resources for family support services to patients with children or other dependents.	○	○	○	○	○	○

Please elaborate on your responses to any of the questions above, or describe any other services you find critical to

the success of the Hub and Spoke model at this location. (Optional)

Do you work in another location as part of the Hub and Spoke project?

- ○ Yes
- ○ No

Name of fourth Hub and Spoke location

About what percentage of your time on the Hub and Spoke project do you spend working in this location? (If you aren't sure how much of your time is dedicated to the Hub and Spoke project, please estimate based on your total hours worked).

- ○ 5-10%

- ○ 11-25%
- ○ 26-50%
- ○ 51-75%
- ○ 76-100%

How long have you worked at this location? (# years, # months)

Which category best describes the primary setting or service of this location? (choose all that apply)

- ☐ Hospital/Emergency Department
- ☐ Primary care clinic (e.g. FQHC, other community health clinic)
- ☐ Mental/behavioral health center
- ☐ Alcohol/drug treatment program
- ☐ Private practice
- ☐ Telehealth program
- ☐ Other (please specify)

For the following questions, please mark the answer that comes closest to how you feel. If you don't know, select the "DK" option. If you work in multiple locations, please think about the location where you work most often. You will be prompted to answer these questions for additional locations at the end of the question set.

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
Clinical staff in this location regularly screen patients for opioid use disorders.	○	○	○	○	○	○
Clinical staff in this location have the referral resources they need for patients with opioid use disorders.	○	○	○	○	○	○
Staff in this location have adequate training to implement the Hub and Spoke model.	○	○	○	○	○	○
Staff in this location are confident about implementing the Hub and Spoke model.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
Senior management in this location support the implementation of the Hub and Spoke model.	○	○	○	○	○	○
Communication between medical and behavioral health staff in this location is good.	○	○	○	○	○	○
Clinical staff in this location often deliver telehealth services.	○	○	○	○	○	○
This location offers adequate transportation resources for patients.	○	○	○	○	○	○
This location offers adequate referral resources for housing supports to patients who are homeless or experiencing domestic violence.	○	○	○	○	○	○
This location offers adequate referral resources for reentry services for patients leaving correctional facilities.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
This location offers adequate referral resources for family support services to patients with children or other dependents.	○	○	○	○	○	○

Please elaborate on your responses to any of the questions above, or describe any other services you find critical to the success of the Hub and Spoke model at this location. (Optional)

Do you work in another location as part of the Hub and Spoke project?

- ○ Yes
- ○ No

Name of fifth Hub and Spoke location

About what percentage of your time on the Hub and Spoke project do you spend working in this location? (If you aren't sure how much of your time is dedicated to the Hub and Spoke project, please estimate based on your total hours worked).

- 5-10%
- 11-25%
- 26-50%
- 51-75%
- 76-100%

How long have you worked at this location? (# years, # months)

Which category best describes the primary setting or service of this location? (choose all that apply)

- ☐ Hospital/Emergency Department
- ☐ Primary care clinic (e.g. FQHC, other community health clinic)
- ☐ Mental/behavioral health center
- ☐ Alcohol/drug treatment program
- ☐ Private practice
- ☐ Telehealth program
- ☐ Other (please specify) _____

For the following questions, please mark the answer that comes closest to how you feel. If you don't know, select the "DK" option. If you work in multiple locations, please think about the location where you work most often. You will be prompted to answer these questions for additional locations at the end of the question set.

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
Clinical staff in this location regularly screen patients for opioid use disorders.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
Clinical staff in this location have the referral resources they need for patients with opioid use disorders.	○	○	○	○	○	○
Staff in this location have adequate training to implement the Hub and Spoke model.	○	○	○	○	○	○
Staff in this location are confident about implementing the Hub and Spoke model.	○	○	○	○	○	○
Senior management in this location support the implementation of the Hub and Spoke model.	○	○	○	○	○	○
Communication between medical and behavioral health staff in this location is good.	○	○	○	○	○	○
Clinical staff in this location often deliver telehealth services.	○	○	○	○	○	○
This location offers adequate transportation resources for patients.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
This location offers adequate referral resources for housing supports to patients who are homeless or experiencing domestic violence.	○	○	○	○	○	○
This location offers adequate referral resources for reentry services for patients leaving correctional facilities.	○	○	○	○	○	○
This location offers adequate referral resources for family support services to patients with children or other dependents.	○	○	○	○	○	○

Please elaborate on your responses to any of the questions above, or describe any other services you find critical to the success of the Hub and Spoke model at this location. (Optional)

Do you work in another location as part of the Hub and Spoke project?

- ○ Yes
- ○ No

Name of sixth Hub and Spoke location

About what percentage of your time on the Hub and Spoke project do you spend working in this location? (If you aren't sure how much of your time is dedicated to the Hub and Spoke project, please estimate based on your total hours worked).

- ○ 5-10%
- ○ 11-25%
- ○ 26-50%
- ○ 51-75%
- ○ 76-100%

How long have you worked at this location? (# years, # months)

Which category best describes the primary setting or service of this location? (choose all that apply)

- ☐ Hospital/Emergency Department
- ☐ Primary care clinic (e.g. FQHC, other community health clinic)
- ☐ Mental/behavioral health center
- ☐ Alcohol/drug treatment program
- ☐ Private practice
- ☐ Telehealth program
- ☐ Other (please specify)

For the following questions, please mark the answer that comes closest to how you feel. If you don't know, select the "DK" option. If you work in multiple locations, please think about the location where you work most often. You will be prompted to answer these questions for additional locations at the end of the question set.

Appendix IV: Provider Surveys

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
Clinical staff in this location regularly screen patients for opioid use disorders.	○	○	○	○	○	○
Clinical staff in this location have the referral resources they need for patients with opioid use disorders.	○	○	○	○	○	○
Staff in this location have adequate training to implement the Hub and Spoke model.	○	○	○	○	○	○
Staff in this location are confident about implementing the Hub and Spoke model.	○	○	○	○	○	○
Senior management in this location support the implementation of the Hub and Spoke model.	○	○	○	○	○	○
Communication between medical and behavioral health staff in this location is good.	○	○	○	○	○	○
Clinical staff in this location often deliver telehealth services.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither agree Nor disagree	Agree	Strongly agree	DK
This location offers adequate transportation resources for patients.	○	○	○	○	○	○
This location offers adequate referral resources for housing supports to patients who are homeless or experiencing domestic violence.	○	○	○	○	○	○
This location offers adequate referral resources for reentry services for patients leaving correctional facilities.	○	○	○	○	○	○
This location offers adequate referral resources for family support services to patients with children or other dependents.	○	○	○	○	○	○

Please elaborate on your responses to any of the questions above, or describe any other services you find critical to the success of the Hub and Spoke model at this location. (Optional)

Your age in years

Gender

- Man
- Woman
- Non-binary
- Prefer not to say
- Prefer to self-describe

Race/Ethnicity (choose all that apply)

- American Indian or Alaska Native
- Asian or Pacific Islander
- Black or African American
- Hispanic or Latinx
- Middle Eastern or Arab American

- [ ] White or Caucasian
- [ ] Prefer not to say
- [ ] Prefer to self-describe

Powered by Qualtrics

Waivered Provider Survey

Default Question Block

The California Department of Health Care Services (DHCS) is partnering with UCLA to conduct a survey with all providers in the **California statewide Hub and Spoke System** to increase access to medications for opioid use disorders (MOUD).

This survey will provide important feedback on the barriers and facilitators to the success of the Hub and Spoke System, and will help to improve care for patients with opioid use disorders throughout the state. As a Hub and Spoke **waivered provider**, we ask that you please take a moment to complete the survey.

The survey will take 10-12 minutes to complete, and you will receive a $30 gift card for your participation.

If you have any questions, or feel that this survey does not apply to you, please contact the UCLA Evaluation team at ISAP@mednet.ucla.edu.

Thank you for your participation in this important program evaluation!

Hub and Spoke Location Name

How long have you worked at this location? (In years)

Position Title

Professional license/certification title

Professional specialization (if applicable)

Which category best describes the primary setting or service of this location? (choose all that apply)

- ☐ Hospital/Emergency Department
- ☐ Primary care clinic (e.g. FQHC, county-operated clinic, other community health clinic)
- ☐ Mental/behavioral health center
- ☐ Alcohol/drug treatment program
- ☐ Private practice
- ☐ Telehealth program
- ☐ Other (please specify)

Which category best describes the communities that this location serves? (choose all that apply)

- ☐ Large urban area (population of more than 50,000)
- ☐ Smaller urban area (population of 2,500-50,000)
- ☐ Rural (population less than 2,500)

When did you obtain your DATA 2000 waiver to prescribe buprenorphine? (MM/YYYY)

What is the patient limit of your current waiver?

- ○ 30 patients
- ○ 100 patients
- ○ 275 patients
- ○ Not currently waivered
- ○ Don't know

After a year of prescribing at the 30-patient limit, waivered providers are eligible to increase their limit to 100 patients. For which of the reasons below have you not yet increased your prescribing limit?

- ○ I'm not currently prescribing.
- ○ I'm still within my first year of prescribing (i.e., not yet eligible to increase).
- ○ There isn't a big enough patient population at my program/clinic to increase my prescribing limit.
- ○ I don't want to prescribe to any more patients.
- ○ I didn't know I could apply to increase my prescribing limit.

○ Other (please describe):

How many patients are you currently prescribing buprenorphine to? (If you are unsure, please estimate in numbers)

About how many patients have you ever prescribed buprenorphine to? (If you are unsure, please estimate in numbers)

For the following questions, mark the answer that comes closest to how you feel. Don't spend too long on any single item. If you don't know, select the "DK" option.

Appendix IV: Provider Surveys

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
I have the resources I need to effectively treat patients with opioid use disorders.	○	○	○	○	○	○
I have the mentorship I need to effectively treat patients with opioid use disorders.	○	○	○	○	○	○
I feel confident prescribing buprenorphine.	○	○	○	○	○	○
I am fearful of potential legal consequences when it comes to prescribing buprenorphine.	○	○	○	○	○	○
Checking the CURES database is an important part of working with patients taking opioids.	○	○	○	○	○	○
I feel confident addressing opioid use disorders among patients with chronic pain.	○	○	○	○	○	○
Patients who continually abuse opioids are not committed to treatment.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
Patients who divert buprenorphine or other opioids should be discharged from care immediately.	○	○	○	○	○	○
I feel confident in my ability to detect diversion behaviors in patients.	○	○	○	○	○	○
I feel comfortable prescribing naloxone (Narcan) to patients taking opioids.	○	○	○	○	○	○
I feel equally comfortable working with patients with opioid use disorders as I do working with other patient groups.	○	○	○	○	○	○
I always create a treatment agreement with patients with opioid use disorders describing the goals, risks and benefits of treatment.	○	○	○	○	○	○
Patients demonstrating ongoing opioid use should be reprimanded or discharged from treatment.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
Patients demonstrating cannabis/marijuana use should be reprimanded or discharged from treatment.	○	○	○	○	○	○
Patients demonstrating stimulant use should be reprimanded or discharged from treatment.	○	○	○	○	○	○
Most patients should be tapered off of buprenorphine as soon as possible.	○	○	○	○	○	○
Retaining patients in treatment is a top priority for me.	○	○	○	○	○	○

Please elaborate on your responses to any of the questions above. (Optional)

For the following questions, mark the answer that comes closest to how you feel. Don't spend too long on any single item. If you don't know, select the "DK" option.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
It is useful to treat patients with opioid use disorders in primary care settings.	○	○	○	○	○	○
Treating patients with opioid use disorders in primary care settings can negatively impact the workload of clinic staff.	○	○	○	○	○	○
Treating patients with opioid use disorders in primary care settings can be detrimental to the safety of other patients and clinic staff.	○	○	○	○	○	○
Treating patients with opioid use disorders in primary care settings might drive away other primary care patients.	○	○	○	○	○	○

Please elaborate on your responses to any of the questions above. (Optional)

For the following questions, mark the answer that comes closest to how you feel. Don't spend too long on any single item. If you don't know, select the "DK" option.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
The Hub and Spoke model is useful.	○	○	○	○	○	○
I am familiar with my clinic/location's involvement in the Hub and Spoke project.	○	○	○	○	○	○
Onsite or community pharmacies are effective in serving the needs of our patients with opioid use disorders.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
I will continue prescribing buprenorphine after the Hub and Spoke grant ends.	○	○	○	○	○	○
Care coordination between the Hub and Spoke(s) is effective.	○	○	○	○	○	○
Communication between medical and behavioral health staff at my location is good.	○	○	○	○	○	○
The Hub service has a positive impact on the primary care practice of this location.	○	○	○	○	○	○
If I felt the need, I could easily find someone to help me formulate the best approach to addressing a patient's opioid use disorder.	○	○	○	○	○	○
Participating in the Hub and Spoke Learning Collaborative(s) has been helpful.	○	○	○	○	○	○
The MAT team in my location is effective.	○	○	○	○	○	○

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	DK
I have a satisfactory level of communication with the MAT team in my location.	○	○	○	○	○	○
I feel the criteria for transferring patients between Spoke(s) and the Hub are clear.	○	○	○	○	○	○
The Hub and Spokes in my network have a strong working relationship.	○	○	○	○	○	○

Have you attended any Hub and Spoke Learning Collaborative sessions?

- ○ Yes
- ○ No
- ○ Don't know

How often does your Hub and Spoke team meet?

- ○ Every day
- ○ About once a week

- ○ About once a month
- ○ Quarterly
- ○ Rarely (less than quarterly)
- ○ Never
- ○ [ ] Other (please describe)

Please list the top 3 topics that would be most helpful to discuss in Hub and Spoke meetings:

Please list the top 3 topics that you discuss most often in these Hub and Spoke meetings:

If you have any additional thoughts about the impact of the Hub and Spoke model, please elaborate here. (Optional)

To what extent do you find each of the following to be a barrier to prescribing buprenorphine?

	Not at all	Slighty	Moderately	Considerably	Extremely	DK
Staffing resources	○	○	○	○	○	○
Reimbursement issues	○	○	○	○	○	○
Lack of mentorship from other providers	○	○	○	○	○	○
Fear of potential legal consequences	○	○	○	○	○	○
Patient compliance	○	○	○	○	○	○
Pharmacy availability	○	○	○	○	○	○
Community opposition	○	○	○	○	○	○
Lack of space	○	○	○	○	○	○
Lack of time	○	○	○	○	○	○
Lack of support from leadership in my organization	○	○	○	○	○	○

Please describe any additional barriers to prescribing buprenorphine not listed above. (Optional)

In your experience, what is the ideal length of time that a patient should be retained in treatment with buprenorphine?

I provide the following types of services to patients with opioid use disorders:

- ☐ Buprenorphine office-based induction
- ☐ Buprenorphine home induction
- ☐ Buprenorphine maintenance
- ☐ Buprenorphine standing orders
- ☐ Opioid detox with a buprenorphine taper
- ☐ Extended-release naltrexone (Vivitrol)

- [ ] Behavioral interventions (e.g., motivational interviewing, cognitive behavioral therapy)
- [ ] Trauma-informed care
- [ ] Culturally competent care
- [ ] Other (please specify) _____

Have you ever attended a training covering culturally informed practice or competencies specific to American Indians/Alaska Natives?

- ○ Yes
- ○ No

Would you be interested in attending such a training if it were offered?

- ○ Yes
- ○ No

I feel that I need more training and technical assistance in serving the needs of patients with opioid use disorders who (choose all that apply):

- [ ] Are uninsured/underinsured
- [ ] Are homeless
- [ ] Have chronic pain
- [ ] Are pregnant/nursing
- [ ] Have co-occurring psychiatric disorders
- [ ] Use multiple substances
- [ ] Have HIV/AIDS and/or HCV
- [ ] Other (please describe):

- [ ] None

Is there any additional training that would help you in serving the needs of the patients you see with opioid use disorders? (If yes, please describe)

Does your Hub and Spoke location offer outreach and education materials related to opioid use disorders in the languages (other than English) spoken by the community you serve?

- ○ Yes

- ○ No
- ○ Don't know

Does your Hub and Spoke location have the staff and other resources it needs to treat patients with opioid use disorders who speak a language other than English?

- ○ Yes
- ○ No
- ○ Don't know

Would you be interested in providing peer support to other waivered providers?

- ○ Yes
- ○ No

Did you participate in the 2018 California Society for Addiction Medicine (CSAM) Medication and Education Research Foundation MAT Expansion Scholars (MERF-MATES) Program?

- ○ Yes
- ○ No

- ○ Don't know

What experiences have been most useful to you in becoming more confident and prepared to prescribe medications for opioid use disorders?

Your age in years

Gender

- ○ Man
- ○ Woman
- ○ Non-binary
- ○ Prefer to self-describe
- ○ Prefer not to say

Race/Ethnicity (choose all that apply)

- ☐ American Indian or Alaska Native
- ☐ Asian or Pacific Islander
- ☐ Black or African American
- ☐ Hispanic or Latinx
- ☐ Middle Eastern or Arab American
- ☐ White or Caucasian
- ☐ _____ Prefer to self-describe
- ☐ Prefer not to say

Appendix V: Site Visit Focus Group Guide and Interview

FOCUS GROUP GUIDE

The first few questions will be about the MAT program here, in general.

1. Is there anything particularly innovative that this Spoke is doing to treat patients with opioid use disorders? Please tell me about this.

2. What have been the major factors that made implementing MAT successful in your program/clinic?

3. What types of training or technical assistance has been most helpful for your program/clinic staff to implement MAT?

    a. What other training or technical assistance is needed?

These next several questions are about the Hub and Spoke program, specifically.

1. What practices, if any, have you adjusted since joining the Hub and Spoke program?

2. How well do you think your Hub serves your needs?

    a. In what additional ways do you wish your Hub would help your program/clinic?

3. What advice would you offer to new programs/clinics just coming on board to the Hub and Spoke program?

4. If the Hub and Spoke program could offer you additional funds or resources to get more people in the community onto MAT, what would those look like?

5. Based on your experience, is there anything that we didn't ask you about that you think would be important for us to know about implementing MAT as part of a H&S system?

Thank you for your time!

SPOKE INTERVIEW QUESTIONS

CLINIC DIRECTOR

MAT Program

1. **As a way to get started, it would be helpful if you could give us a brief overview of the medication assisted treatment (MAT) program at this clinic (e.g., structure, flow).**

2. How many waivered prescribers do you currently have at this program/clinic? Do you have plans to increase the number of waivered prescribers? If yes, how?

3. From your perspective, what challenges do waivered prescribers face in terms of increasing the number of MAT patients in their care? Increasing their limits?

4. How do you encourage waivered providers to increase their patient numbers/waiver limits?

5. **If you had additional funds or resources to get more people in the community onto MAT, how would you use them?**

Patient Outreach

6. How do patients typically find out about the MAT services that your program/clinic provides?

7. How long does it typically take for a patient seeking MAT services to get an appointment?

8. What types of patient outreach activities does your program/clinic use to help find new patients who could benefit from MAT?

BH Services

9. Beyond the MAT Team, does this program/clinic provide behavioral health services (mental health and/or substance use counseling, referrals, peer support)?

Hub

10. **How well do you think your Hub serves your needs?**

    - What are the primary services they provide to you (e.g., MAT subject matter expertise, referral resources)?

    - What has been most helpful?

- **In what additional ways do you wish your Hub would help your program/clinic?**

H&S MAT Team

11. Who makes up your MAT team?

12. Was your MAT team hired by the Hub, or are they your clinic/program's staff?

13. What are the responsibilities of the MAT team? What services/support do they provide?

14. Please tell us about your program's/clinic's working relationship with the MAT team.

- How often are they on site at your clinic/program?
- Please describe the communication between the MAT Team and other clinic staff.

15. What role, if any, has the Hub and Spoke MAT team played to successfully implement MAT at this program/clinic?

Implementation of MAT

16. What type of <u>training or technical assistance</u> has been most helpful for your program/clinic staff to implement MAT?

- What other training or technical assistance is needed?

17. Have you heard about the Hub and Spoke practice facilitator program?

18. What have been the major factors that made implementing medication assisted treatment (MAT) <u>successful</u> in your program/clinic?

19. What have been the major <u>challenges or barriers</u> that you have encountered when implementing MAT in your program/clinic?

- What did you do/are you doing to overcome those barriers?
- What information, training, or technical assistance would be helpful?

20. Is there anything particularly innovative that this Spoke is doing to treat patients with OUD? Please tell me about this.

21. What <u>impact</u> (positive or negative) has offering MAT had on your program/clinic?

- On staff?

- On patients?

22. What advice would you offer to new programs/clinics just coming on board to the Hub and Spoke program?

23. What are the major factors that will likely contribute to the long-term sustainability of MAT in your clinic/program?

Appendix V: Site Visit Focus Group Guide and Interview

WAIVERED PROVIDER/CLINICAL STAFF

1. How long have you been prescribing buprenorphine?

2. What made you decide to get waivered to prescribe buprenorphine?

Identification and Assessment of Patients with OUD

3. **How do you know someone might be struggling with opioids and may be in need of medication assisted treatment?**

4. Walk me though how patients are identified as having an *opioid use disorder* (e.g., screening tools, who screens, who gets screened, who scores the screener).

    - How often do you screen patients for OUD?

    - What next steps do you take if a patient screens positive, or there is indication of an OUD?

5. What tools do you use to assess the treatment needs of patients with OUD?

Starting Patients on and Prescribing Buprenorphine

6. How would you describe your experiences starting patients on buprenorphine?

    - If no inductions: Why not?

7. **What would help you to prescribe to more patients?**

8. **If you had additional funds or resources to get more people in the community onto MAT, how would you use them?**

Successes and Challenges

9. **From your perspective, what seems to be working especially well in terms of providing MAT services in this clinic?**

10. **What have been the major challenges or barriers that you have encountered to treating patients with OUD? What do you do to address these?**

11. Based on your experience, is there anything that we didn't ask you about that you think would be important for us to know about implementing MAT as part of a H&S system?

Appendix V: Site Visit Focus Group Guide and Interview

MAT TEAM/CARE NAVIGATOR

Role on MAT team

1. Tell us a little bit about your professional background and your role and responsibilities on the MAT team.

2. How would you describe your relationship with the staff at your program/clinic's Hub?

Patient Flow for MAT services

3. **Please walk me through what would typically happen if a new patient calls or comes into your clinic/program seeking buprenorphine. What are your first steps in offering them treatment or resources?**

    - Are they offered an appointment at your clinic/program? Or are they referred elsewhere?

    - How soon are new patients able to get an appointment?

4. **What strategies do you use to help retain patients in treatment with MAT once they get started?**

5. **If you had additional funds or resources to get more people in the community onto MAT, how would you use them?**

Patient Transfers

6. **Please describe the process of transferring a patient between this clinic/program and your system's Hub.**

    - In what instances would a patient be transferred to the Hub?

    - In what instances would a patient be transferred from the Hub?

    - How effective do you find the transfer process?

Pharmacy

7. Does this clinic have an on-site pharmacy?

    - If not, how far is the nearest pharmacy is that provides buprenorphine?

    - How effective do you feel on-site or community pharmacies are in serving the needs of patients with OUD? Please explain.

    - What recommendations do you have for improvement?

Appendix V: Site Visit Focus Group Guide and Interview

MAT Related Services

8. Do you distribute Narcan (naloxone) to patients with OUD?
    - Their families?
    - How is that working?
9. What sorts of counseling do you do with patients?
    - Is it standard? Is it optional?
    - How well do you think it is being utilized?
    - Do you find it helpful?
10. Please describe the transportation resources this clinic/program offers for patients who live far away.
    - Are there other transportation resources that would be helpful?
11. What sorts of resources in the community do you provide or refer patients with OUD to (e.g. peer support groups, housing, employment, family supports)? Please tell me about the referral process.
12. Based on your experience with being on the MAT team, is there anything that we didn't ask you about?