

INTRODUCTION

With hundreds of miles of high desert sagebrush, pristine forests, and clear mountain lakes, Lake County, Oregon, seems like paradise to many. It can be a lonely place; at 8,358 square miles, Lake County is roughly the size of New Jersey, with less than one person for every square mile compared to New Jersey's 1,032 (American Community Survey 2017). Cattle outnumber people 10 to 1 here, and the largest town, Lakeview, is 90 miles from stoplights and Starbucks.

But Lake County is not without its struggles. One issue it faces is an abundance of opioid prescriptions in its residents' medicine cabinets. While they have worked hard to reduce the number, Lake County's primary care providers consistently prescribe opioids at a higher rate than the state average — and Oregon's opioid prescribing rate is higher than the national average (IMS Health 2016).

Adding to the problem is a growing senior population. As older adults and their accompanying chronic pain continue to age, fewer children and young adults are moving into the area. This has left Lake County disproportionately gray-haired and helped create high demand for pain treatment. The county's blue-collar industries, including ranching and farming, lead to pain and injury as well. Because of healthcare's past practice of first prescribing pills to treat pain, Lake County is developing an opioid problem it is reluctant to accept. As prescribers work harder to lower the number of narcotics prescribed, the county is slowly beginning to see more illegal opioids arrive to take their place.

This is a problem Lake County shares with neighboring Klamath County, Oregon, and Modoc County, California. Primary care providers and other agencies in the three counties have joined forces to form the High Desert Opioid Response Partnership to address issues created by opioid abuse, including overprescribing and opioid use disorder (OUD).

The partners are led by Lakeview-based Lake Health District, whose services include a critical access hospital, outpatient clinic services, and operation of the countywide mental health and public health departments. Outpatient clinics Warner Mountain Medical Clinic and Goose Lake Medical Services are part of the team, representing Lakeview and Alturas, California, respectively. Sky Lakes Medical Center is Klamath County's largest employer and an important regional partner in the fight against opioid abuse. Lakeview Disaster Unit brings to the table experience with naloxone, which saves lives by reversing opioid overdoses, and a passion to ensure law enforcement officers, who are often first responders in this frontier county, are equipped with the drug. Rounding out the consortium is the Lake County Senior Citizens Association, which will play a vital role in educating seniors about opioids and, as operator of the county transportation system, in helping people access treatment for OUD.

Together these partners plan to assess the region's existing resources regarding opioid abuse prevention, treatment, and recovery services. They'll survey residents to find out gaps in knowledge regarding opioids and treatments available for OUD and chronic pain. The partners will use the information they collect to create a tri-county strategic plan and workforce plan to better equip the region to fight the opioid epidemic. The partners also plan to create and offer education for first responders and the public.

NEED

Demographics of the target population(s) of the rural service area

Percent of population with health insurance coverage: As a rule, fewer people in the tri-county region served by this grant project have health insurance than their counterparts

statewide. Klamath County is close to meeting Oregon’s average, while Lake and Modoc counties lag behind their states.

Lake County’s population (7,863, American Community Survey 2017) is so small that county-level insurance rates are unavailable from state authorities. Oregon Health Authority’s Health Policy and Analytics Division included it in the “southeast region” of Lake, Harney, and Malheur counties during a 2017 survey of insurance rates.

Oregon insurance rates				
Region	Uninsured		Insured	
Statewide	6.2%	245,600	93.8%	3,747,500
Southeast region	10.5%	4,700	89.5%	40,100
Klamath County	6.8%	4,400	93.2%	60,500

Because of Modoc County’s small population (8,859, American Community Survey 2017), it, too, is often combined with other counties during statewide surveys. A 2016 study from the University of California Berkley Center for Labor Research and Education and the University of California Los Angeles Center for Health Policy Research estimated that nearly 3.1 million people in the state were uninsured. Modoc was counted among California’s 22 northern counties, where 73,000 people were uninsured.

The U.S. Census Bureau’s Small Area Health Insurance Estimates program says 11 percent of Modoc County residents lack health insurance, compared to California’s average 10 percent (2016). American Community Survey data from the same year, however, puts Modoc County’s uninsured rate at 14.4 percent and the state’s at 12.6 percent.

Insurance plays a crucial role in most people’s healthcare, not just behavioral health issues such as OUD. However, having health insurance seems to correlate with fewer opioid-related hospitalizations. In states that expanded Medicaid (including Oregon and California), the number of uninsured people hospitalized for reasons related to opioids dropped dramatically: from 13.4 percent in 2013 to 2.9 percent in 2015 (Agency for Healthcare Research and Quality). “This steep decline indicates that many uninsured people coping with OUDs have gained coverage through Medicaid expansion,” a February 28 report by the Center on Budget and Policy Priorities concludes.

Percent of population living below the federal poverty line (FPL): Poverty is wider spread in the project area than in the counties’ respective states.

Population living in poverty	
State/county	Below FPL
Oregon	15.7%
Lake	17.6%
Klamath	18.6%
California	15.8%
Modoc	16.9 %

Source: American Community Survey 2016

Poverty disproportionately affects some groups in Lake County. Nearly half — 45.26 percent — of children younger than 5 live below the federal poverty line. Nearly 27 percent of Hispanics live in poverty, compared to 17.6 percent of white residents (American Community Survey 2016).

In Modoc County, 30.4 percent of Hispanics live below the poverty line. The figure is 27.5 percent in Klamath County (American Community Survey 2016).

Not surprisingly, educational attainment plays a role in poverty. In Lake County, 26.3 percent of people who did not graduate high school live below the federal poverty line. Klamath County’s figure, 26.7 percent, is similar. In Modoc County, 34.9 percent of those who did not finish high school or earn a GED live in poverty (American Community Survey 2016).

Employment likewise affects finances. A little more than 26 percent of the Lake County residents who live below the poverty line are unemployed. The figure is 29 percent for all Modoc County residents, and 47.8 percent of Modoc County women without a job live in poverty, compared to 22.4 percent of men. In Klamath County, 44 percent of unemployed people live below the federal poverty line (American Community Survey 2016). These numbers indicate the area has a significant population of “working poor” — individuals who are employed but not making enough money to rise above poverty level.

Numerous sources have documented the relationship between poverty and drug misuse. A June 29 report from the U.S. Department of Health and Human Services’ Office of the Assistant Secretary for Planning and Evaluation (ASPE) shows that people who live below the poverty line are twice as likely to be classified as opioid dependent. The Centers for Disease Control and Prevention (CDC) said in 2012 that “Medicaid recipients and other low-income populations are at high risk for prescription drug overdose.”

Local data suggests the link between poverty and drug use holds true. Of the 52 clients enrolled in Lake District Wellness Center’s substance use disorder services, 75 percent are enrolled in Medicaid based on their financial, not disability, status. Three clients are not insured and are paying for services on a sliding fee scale.

It is critical, then, that the region identify gaps that exist in drug use prevention, treatment, and recovery services as they relate to people in poverty. With nearly one in five people in the region living below the federal poverty line, it is imperative that the providers, nonprofits, agencies, and services working to reduce drug abuse find effective ways to serve this population.

Percent of population who are unemployed: Historically, timber and agriculture formed the basis of the economies in south-central Oregon and the northeast corner of California. Environmental regulations severely restricted the timber industry; Lakeview went from five lumber mills in the 1950s and ’60s to one today. Now Lake, Klamath, and Modoc counties are searching for new economic opportunities.

Government is one of the largest employers in all three counties, but particularly in Lake and Modoc. The federal government manages 78 percent of the land in Lake County and about 90 percent of Modoc County. Agriculture plays a role in all three counties as well, but farming and ranching offer seasonal positions that can leave people looking for odd jobs when they aren’t working in the fields or herding cattle. Government work is often seasonal as well.

Unemployment in all three counties is higher than their state averages at any time of year. The chart below shows the jobless rates from May, when farm and ranch work is picking up, and January, when there is less work. To reflect the difference, the rates are not seasonally adjusted.

Unemployment rates		
State/county	May unemployment	January unemployment
Oregon	3.5%	4.3%
Lake	4.7%	7.3%
Klamath	5.0%	7.6%
California	3.7%	4.6%
Modoc	6.1%	10.2%

Source: Bureau of Labor Statistics 2018

Unemployment ties directly to opioid abuse. The June 29 ASPE research brief documents the relationship: "... an increase of 1 percentage point in a county's unemployment rate was associated with a 3.8 percent increase in per capita opioid sales, a 1.9 percent increase in per capita Medicare Part D opioid prescriptions, and a 4.6 percent increase in the overdose death rate, in the period from 2006 to 2016."

One 2016 study by Princeton University labor economist Alan Krueger found that nearly half of American men ages 25 to 54 aren't working because they're in pain and taking prescription painkillers. Other studies, including surveys conducted by the U.S. Department of Health and Human Services, indicate that people who are unemployed are more likely to abuse substances.

Research is less clear when it comes to the connection between underemployment or seasonal employment and opioid abuse. Opioid overdoses have, however, been categorized as "deaths of despair" by several researchers. Through this project, Lake Health District and its partners want to learn how big a role employment and financial struggles are playing in substance misuse in Lake County, as well as Klamath and Modoc counties.

Breakdown of race/ethnicity: Lake County's population has been described as "Wonder Bread": primarily white, with a ring of brown around the outside. This crude, if accurate, description applies to all three of the project's counties, which are overwhelmingly white, as shown in the chart below.

Population breakdown by race/ethnicity					
Race/ethnicity	Oregon	Lake	Klamath	California	Modoc
White	85.1%	90.1%	88.7%	61.3%	90.2%
American Indian	1.1%	1.4%	4.9%	0.7%	4.2%
Asian	4.0%	1.2%	1.1%	13.9%	1.4%
Black	1.9%	0.6%	0.9%	5.9%	0.9%
2 or more races	4.4%	4.2%	4.5%	4.6%	2.4%
Hispanic	12.4%	7.6%	12.5%	38.6%	14.8%

Source: American Community Survey 2016

Ethnically, the counties are likewise primarily Caucasian. In Lake County, many longtime residents claim Irish heritage — so many that Lakeview holds an annual Irish Days celebration each March. The largest ethnic group in all three counties is Hispanic, with most individuals hailing from Mexico (American Community Survey 2016). Modoc County is home to many members of the Pit River Tribe, and the Klamath Tribes live in Klamath County.

In Oregon, 88 percent of the people who died by opioid overdose in 2016 were white (National Vital Statistics System). California, which is more diverse than Oregon, still saw more white people killed by overdoses (69 percent) than any other group (National Vital Statistics System). Nationally, about 79 percent of all opioid overdose deaths in 2016 were white people.

Hispanics are among the least likely to die by overdose in Oregon, with 2.3 deaths per 100,000 (Oregon Health Authority).

Breakdown of age: The number of seniors 65 and older in the project area outpaces the number of older adults per capita in the two states. California is the youngest of the two, with a median age of 36 and just 12.9 percent of its population age 65 and older. Modoc County's median age is 11 years older than California's, and 23.1 percent of its residents are 65 and older (American Community Survey 2016).

Nineteen percent of Klamath County's population is older than 64, and 23 percent of Lake County residents are in that age group. Just 15.9 percent of Oregon's total population is 65 or

older. And while the state's median age is 39.1, the median ages in Lake and Klamath counties are 48.7 and 42.6, respectively.

Population breakdown by age					
Age	Oregon	Lake	Klamath	California	Modoc
Under 5	5.8%	4.9%	6.0%	6.5%	4.2%
5 to 14	12.1%	10.3%	12.0%	13.2%	12.2%
15 to 24	12.9%	10.0%	12.4%	14.3%	9.6%
25 to 34	13.7%	9.9%	11.6%	14.8%	10.5%
35 to 44	13.1%	10.8%	10.9%	13.4%	10.4%
45 to 54	12.9%	14.2%	12.8%	13.5%	13.3%
55 to 64	13.6%	17.0%	15%	11.7%	16.7%
65 to 74	9.4%	14.0%	11.5%	7.3%	13.8%
75 and older	6.5%	9.0%	7.8%	5.6%	9.3%
Median age	39.1	48.7	42.6	36.0	47.1

Source: American Community Survey 2016. Note: Due to rounding, columns may not total.

The area is steadily getting grayer, and with age comes aches and pains that require treatment. For many older adults, age is also bringing the painful reality of coping with opioid addiction, as prescribers taper them off the narcotics they were prescribed for years to treat their chronic pain. Lake Health Clinic [REDACTED] says providers have a difficult time explaining to these patients why they can no longer prescribe painkillers at the same level they had previously. While the change will create the best outcome for patients' health, the pain of withdrawal is not easy.

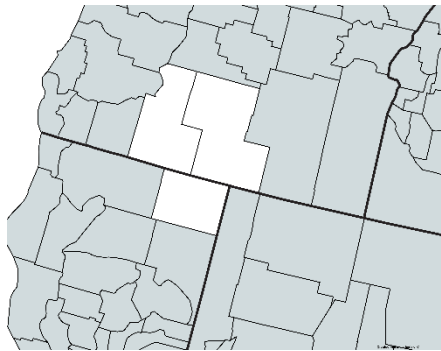
Compounding the issue is the challenge of helping elderly patients understand that they are addicted to opioids, which may not actually be treating their pain effectively. Providers are in a difficult position. They were trained to treat pain by prescribing painkillers, and opioid prescriptions for chronic pain unrelated to cancer were sanctioned by national and state medical authorities. This led to overprescribing, which was one contributing factor to today's opioid epidemic (Pain Physician, July 2012).

Most seniors trust their primary care providers' knowledge of prescription drugs, according to a 2009 study by doctors of philosophy Julie Donohue, Haiden Huskamp, Ira Wilson, and Joel Weissman. Seniors believed their doctors when they were told opioids were the best course of action, and they're having a hard time accepting the new information about opioids' dangers.

While no formal study has been conducted in Lake County, local providers report low health literacy makes it difficult to educate patients on issues including addiction. A 2015 study by the American Academy of Pain Medicine revealed common patient misconceptions about opioids, ranging from fearing pain medication so much that patients didn't manage their pain sufficiently to not knowing opioids are addictive. The Health Resources and Services Administration (HRSA) cites older adults as one population particularly susceptible to lower health literacy.

Lake, Klamath, and Modoc counties all need better education to reach seniors, both to alleviate addiction — and potential for addiction — and to alert them to alternative methods to treat their chronic pain. During this project, the consortium will assess residents' health literacy, especially as it pertains to opioids and chronic pain management, and create educational materials and programs to boost knowledge throughout the tri-county area.

Map of the target rural service area



Frontier Lake and Modoc counties and rural Klamath County comprise 18,697 square miles. That's more than twice the size of the Vermont. The largest community in the project area is Klamath Falls, population 21,359 (American Community Survey 2017). Lakeview, where Lake Health District is located and the largest town in Lake County, is 90 miles east of Klamath Falls. Alturas is Modoc County's largest city. It is 50 miles south of Lakeview.

A larger map of the project area and the communities included is in **Attachment 8**.

ODU among the target population(s) of the rural service area

Prevalence of OUD: When it comes to opioids, prescription drugs rather than illegal substances such as heroin and fentanyl are more likely to contribute to OUD in Lake, Klamath, and Modoc counties. It is difficult to get the actual number of patients with OUD in rural and frontier communities. Primary care providers can be reluctant to diagnose patients with OUD, in part because so few resources exist locally to treat these patients — although Lake County in particular has taken strides in this area over the last year. Lake Health District has added several treatment options to address chronic pain, as discussed in the overview of services described beginning on page 7 of this document. Providers are hopeful these expanded opportunities will continue to curtail requests for prescription pain medication.

Determining an accurate number of patients with OUD in Oregon is likewise challenging. [REDACTED], a residential treatment facility for people with substance use disorder in Klamath Falls, said the number isn't tracked well. Like Lake County's primary care providers, [REDACTED] attributes this to a lack of treatment options. Her facility only recently began offering medication-assisted treatment (MAT) for OUD and is now paying close attention to the number of OUD patients it treats.

On paper, the number of patients Lake District Wellness Center (the countywide mental health provider) is treating for OUD is six. However, Wellness Center counselors and Lake Health Clinic medical staff agree the actual number of patients struggling with opioid addiction is much higher. Anecdotal evidence suggests this is true in Klamath and Modoc counties as well. Determining an accurate OUD count will be part of the analysis conducted during the grant project.

Nationwide, an estimated 2.1 million people 12 and older had OUD in 2016, or 0.9 percent of the population (National Survey on Drug Use and Health). In California, 348,193 people, or 1.1 per 100 people, had OUD in 2016. Seventy-eight people in Modoc County, or 1.0 per 100 people, had OUD in 2016 (Lisa Clemans-Cope, Marni Epstein, and Doug Wissoker, "County-Level Estimates of Opioid Use Disorder and Treatment Needs in California," The Urban Institute, March 19, 2018).

Prevalence of opioid overdoses: Klamath County's opioid overdose-related hospitalization rate is higher than the state average, with 11.51 hospitalizations per 100,000 people compared with Oregon's 9.6 per 100,000 (Oregon Health Authority 2014). Lake County's rate is too small to be tracked by state authorities. Lake District Hospital had 44 opioid-related cases in fiscal year 2017, 20.45 percent of which were related to drug poisoning.

California Department of Public Health reports no opioid overdose hospitalizations in 2016, compared with 25.85 per 100,000 in California as a whole.

Opioid overdose mortality rate: While illicit drugs play a role in OUD throughout the country, including the project area, the bigger problem locally is risky prescribing practices. Lake County prescribers have cut the number of opioid prescriptions they write in half in the last three years (Oregon Health Authority), but they are still prescribing narcotics at a greater rate than the state average. Klamath and Modoc county prescribers likewise write more opioid prescriptions than the Oregon and California averages. Oregon, which has one of the highest opioid prescribing rates in the country, writes 78.1 prescriptions per 100 residents compared to 70 per 100 nationwide (IMS Health 2016).

Opioid availability can contribute to fatal overdoses. Klamath County’s Opioid Task Force reports 28 overdose deaths between 2012 and 2016. Twelve of those — 42.9 percent — were from opioids, and 11 of the 12 were prescription painkillers.

Lake County’s total overdose death rate in 2016 was 22.0 per 100,000, compared to a statewide nonmetro average of 15.7 (National Center for Health Statistics). Oregon Health Authority suppresses the county’s opioid overdose rate because of the low population. The agency reports the statewide average is 6.45 per 100,000.

Modoc County’s total overdose death rate was likewise significantly higher than the California nonmetro rate: 30.0 deaths per 100,000 compared to 23.8 statewide (National Center for Health Statistics). The national rate is 19.8 per 100,000. Both Lake and Modoc counties’ overdose rates have risen steadily for more than a decade. Lake County’s overdose death rate in 2000 was 4.0 per 100,000, compared to the Oregon nonmetro rate of 4.8. Modoc County’s was 10.0, higher than California’s rate of 9.0 per 100,000 (National Center for Health Statistics).

Modoc County’s opioid overdose mortality rate is more than five times higher than California’s rate: 23.8 per 100,000, compared to the statewide rate of 4.49 per 100,000 (California Department of Public Health 2016).

Overdoses and other opioid statistics in the project area are detailed in the chart below.

Opioid stats at a glance					
	Oregon	Lake County	Klamath County	California	Modoc County
Opioid overdose hospitalizations (per 100,000 residents)	9.6 ¹	*	11.51 ¹	25.85 ²	0 ³
Opioid overdose mortality rate (per 100,000 residents)	6.45 ⁴	*	3.67 ⁴	4.49 ³	23.8 ³
Opioid prescriptions (per 1,000 residents)	212.99 ⁵	284.58 ⁵	230.43 ⁵	507.55 ³	747.6 ³

¹ Source: Oregon Health Authority 2014

² Source: California Department of Public Health 2014

³ Source: California Department of Public Health 2016

⁴ Source: Oregon Health Authority 2016

⁵ Source: Oregon Health Authority 2018

* Suppressed due to small counts (Oregon Health Authority 2016)

Overview of existing OUD programs and services, as well as gaps in services

As rural and frontier counties, Lake, Klamath, and Modoc counties have fewer resources to offer residents than more urban areas. The tri-county area is eager to make a full assessment of resources available to aid opioid abuse prevention, treatment, and recovery services through the course of this grant project.

Pain agreements: Lake Health Clinic and Warner Mountain Medical Clinic providers and staff worked together to create “a partnership agreement for the use of narcotics for persistent pain.” The pain contract is an agreement between a patient and his or her provider governing the use of prescription drugs to treat chronic pain. A sample contract is included in **Attachment 11**.

The contract outlines the provider’s responsibilities, including regularly assessing the patient’s function and quality of life with the narcotic; explaining the risks, benefits, side effects, and limits of any proposed treatments; and respecting the patient’s right to play a role in his or her own treatment decisions.

The patient’s role is likewise laid out, including being willing to try new ways to manage pain through behavior and lifestyle changes; never giving medication to anyone else; and not seeking pain medication or other controlled substances from other providers. Patients agree to use just one pharmacy and consent to random urinalysis testing and pill counts.

The pain agreements are loaded into Lake District Hospital’s electronic health record (EHR). Providers from both Lake Health and Warner Mountain Medical clinics staff the hospital emergency department, so having access to the pain contracts in the hospital adds a layer of accountability and protection against prescription opioid abuse. Lake District Hospital can make the contracts available to other emergency departments as well, giving providers in other counties a tool in addition to the state Prescription Drug Monitoring Program.

Naloxone: Naloxone is not new in the region, but it is gaining local attention in light of the nationwide opioid epidemic. Lake County providers have become more diligent in co-prescribing naloxone with narcotics.

Lakeview Disaster Unit, the local volunteer ambulance service, has carried naloxone to reverse overdoses ever since the ambulances began carrying morphine. But ambulance crews are often also first on the scene of drug-related tragedies. [REDACTED] the disaster unit [REDACTED] [REDACTED] has seen naloxone keep people alive until they could reach the hospital.

Because of [REDACTED] experience with the drug, and because of her close relationship with law enforcement agencies who also frequently act as first responders, [REDACTED] is passionate about ensuring that ambulances, sheriff’s offices, and police departments in the region are equipped with naloxone and trained to use it. Oregon State Police troopers carry naloxone. Sheriff’s deputies in north Lake County have the drug as well. Deputies in southern Lake County and Lakeview Police officers do not have naloxone.

This is dangerous in an area like Lake County, with fewer than one person per square mile and up to 100-mile trips to the emergency department. The same is true in Modoc and Klamath counties, which serve tiny communities far from hospital services. Naloxone is a necessity, not a luxury, in the region. Ensuring first responders and law enforcement officers have access to naloxone and are properly trained in its use is an important part of this grant project.

Pain Management Improvement Team: In February, Lake Health Clinic and Warner Mountain Medical Clinic joined Oregon Health Authority’s Pain Management Improvement Team (PMIT). PMIT offered healthcare organizations technical assistance for Oregon Health Authority’s Prescription Drug Overdose Project, a CDC-funded venture that seeks to change Oregon’s status as one of the nation’s top offenders in the number of people who use prescription pain medication for nonmedical purposes (Substance Abuse and Mental Health Services Administration 2013) and to reduce the number of overdoses statewide. PMIT’s goal is “supporting health systems to enhance internal capacity for a team-based approach to chronic pain and/or opioid management” (Oregon Health Authority).

PMIT has walked Lakeview providers through MAT trainings, improving clinic workflows, and having difficult conversations with patients. The latter has been invaluable, particularly with patients, often elderly, who don't understand why they are being tapered off painkillers. These tough conversations have the potential to have great impact, given older adults' propensity for trusting doctors (Donahue 2009). Primary care providers are uniquely poised to improve seniors' health literacy when it comes to opioid use and chronic pain management.

PMIT offers technology consultation, too, and has connected Lake County doctors to chronic pain experts across the state. The relationships Lakeview providers have built through PMIT will continue beyond the project, which is only slated to last six months. Laura Heesacker, a licensed clinical social worker and PMIT member, is an eager supporter of the High Desert Opioid Response Partnership. Her consulting organization, Synergy, provides technical assistance to healthcare organizations as part of the Prescription Drug Overdose project. Synergy provided a letter of support for the High Desert Opioid Response Partnership; the letter is included in **Attachment 9**.

Narcotics Anonymous: One Narcotics Anonymous (NA) group operates in Lakeview. Several people who are addicted to painkillers attend Alcoholics Anonymous (AA) meetings as well. Some people in AA welcome them; these individuals believe that addiction is the underlying factor they all have in common, regardless of what the addictive substance is. Others, however, would prefer that individuals who are addicted to narcotics stick to the NA group. These people say they would feel more comfortable sharing their triumphs and tough times with fellow alcoholics who can appreciate and empathize with their specific struggles. Lake Health District and its consortium partners will identify ways to address this friction during the grant period.

Klamath and Modoc counties likewise offer NA groups. Partners do not know whether people who are addicted to opioids but not alcohol are attending AA meetings in those counties.

Chronic Pain Self-Management Program: Two Lake Health District employees are trained facilitators in Chronic Pain Self-Management, a nationally recognized, evidence-based program created by Stanford University. [REDACTED]

[REDACTED] and [REDACTED] were trained in the program in 2017. They have led three six-week classes with an average attendance of 15 people.

The health district is able to offer the program through its participation in the Coalition for Living Well with Chronic Disease (aka the Living Well Coalition). This group of 15 partner agencies provides a wide range of support services in Klamath and Lake counties in the areas of healthcare, human services, and higher education. The coalition has been instrumental in bringing a variety of chronic disease self-management programs to rural and frontier Klamath and Lake counties. Through its participation in the Living Well Coalition, in addition to Chronic Pain, Lake Health District offers Living Well with Diabetes and Living Well with Chronic Conditions, which are also evidence-based programs from Stanford University.

Feedback from participants has been overwhelmingly positive in Lake County, particularly regarding the chronic pain class. Primary care providers are prescribing fewer narcotics, but patients still have pain. They appreciate a class that teaches them how to cope with chronic pain.

Despite the class's popularity, there is limited potential for expansion in Lake County without bringing on additional partners. Stanford standards require two facilitators to lead each session. [REDACTED] and [REDACTED] are the only two who have been trained to lead the Chronic Pain class, and both women also facilitate other self-management programs. Without training additional facilitators, Lake Health District will not be able to offer Chronic Pain Self-Management to many more people.

The health district and the Living Well Coalition are also limited in the number of classes they can provide. The license, which is held by Klamath and Lake Counties Council on Aging (another Living Well Coalition member), restricts how many Stanford self-management sessions the counties can offer each year. Having the ability to offer more classes — or perhaps finding or creating a program without a class number limitation — might benefit Lake and Klamath counties alike.

There is interest among Goose Lake Medical Services patients in offering Chronic Pain Self-Management and other chronic disease self-management programs in Alturas. To date, because the license held by Klamath and Lake Counties Council on Aging is specific to those two counties, Lake Health District has been unable to offer a California class.

These are gaps that will be assessed more thoroughly during the grant project.

Back to Health: [REDACTED] leads Back to Health, a yoga class designed to treat chronic lower back pain. Yoga classes created specifically for alleviating lower back pain are as effective as physical therapy for reducing pain, improving function, and decreasing patients' dependence on pain medication, according to a 2017 study by Boston Medical Center researchers.

[REDACTED] has offered nine 12-week Back to Health sessions and four eight-week refresher courses, with an average 14 people attending each class ranging in age from 14 to 82. She has relied on word of mouth and minimal advertising to promote the classes. Local primary care providers are not yet referring patients to the program, primarily because they are not familiar with it or the evidence supporting its effectiveness. This is a gap Lake Health District and consortium partners will address during the grant period.

[REDACTED] also has expressed a willingness to offer the class in Alturas. She is bound, however, by the state and county line, as she serves Lake County. However, exploring ways to offer the class in Alturas and gauging Modoc County residents' interest in Back to Health are tasks the coalition will examine during the grant period.

Prescription Drug Monitoring Program: Lake Health District is part of the Oregon Prescription Drug Monitoring Program. This statewide registry allows hospitals and health clinics to access what drugs patients have been prescribed at other healthcare facilities. The program has been an important weapon in the fight against prescription opioid abuse by helping prevent drug seekers from getting narcotics from a variety of sources.

The Prescription Drug Monitoring Program Center of Excellence at Brandeis University released a briefing in 2012, updated in September 2014, that details in what ways these monitoring programs are effective:

“Research and accumulated experience strongly suggest that PDMPs [prescription drug monitoring programs] serve essential functions in combating the prescription drug abuse epidemic. They can help identify major sources of prescription drug diversion such as prescription fraud, forgeries, doctor shopping and improper prescribing and dispensing. PDMPs are also important resources for practitioners and third party payers, giving them information on patients' use of controlled substances that is crucial for providing good medical care and ensuring patient safety.”

One downside of the programs is that they are state-based. This puts Lake Health District, which is just 15 miles from the California border and treats many Modoc County patients, at a disadvantage. Lake Health District and Sky Lakes Medical Center, who are part of separate health systems, can more easily track out-of-system patients' opioid use than Lake Health District can with its sister clinic in Alturas, Goose Lake Medical Services. Lake Health Clinic

is, however, in the process of updating its EHR, eClinical Works. With the upgrade, the EHR should be able to track patients' prescriptions across state lines.

Drug Take Back Day: Lake District Wellness Center-Prevention worked with Lakeview Police Department to revive Lakeview's participation in the Drug Enforcement Administration's National Prescription Drug Take Back Day. The first event, in April 2017, netted 53 pounds of prescription drugs in Lakeview alone. The October 2017 event collected 20 pounds.

Prevention teamed up with the Lake County Sheriff's Office to add Christmas Valley, an unincorporated community located 100 miles north of Lakeview, to the Drug Take Back Day event last spring. North Lake County residents turned in 55 pounds of prescription drugs in April. Lakeview Police collected 23 pounds of drugs that same day. Not all those drugs were opioids, but because painkillers are so widely prescribed in Lake County, at least some of the 151 pounds of prescription drugs collected at Drug Take Back Day events were narcotics.

Klamath County consistently participates in National Prescription Drug Take Back Day. Expanding Drug Take Back Day events to more communities in the region, and ensuring prescription drug disposal is available in Modoc County, are gaps that will be addressed during the project period.

AmeriCorps VISTA: In July 2018, Lake Health District was approved to host an AmeriCorps VISTA through a partnership between the national service organization and Oregon Health Authority. Oregon Health Authority sought sites with opioid projects in place or in the works and chose Lake Health District to host a service member for a year starting in September.

The VISTA will help track the number of opioid prescriptions written at Lake Health Clinic and Goose Lake Medical Services, collect data from patient charts to ensure pain agreements are up to date, and track that information throughout the year. The VISTA also will assist in education and analysis efforts related to opioid use in the project area. While [REDACTED] will lead the team's assessment efforts, the VISTA will play a key role in helping collect information about existing opioid prevention, treatment, and recovery services in Lake, Klamath, and Modoc counties.

Transportation: Lake County Senior Citizens Association manages the Lake County transportation system. There is no formal bus system such as one might associate with larger cities. The Senior Citizens Association does, however, have small buses and vans to transport people within Lake County and to Bend or the Medford area for doctor appointments.

This system is funded through the Oregon Department of Transportation and the U.S. Department of Veteran Affairs. Because of the county's size, however, and because of the Senior Citizens Association's determination to help Lake County residents get to medical appointments at facilities in larger cities, funding is inadequate for current needs.

Senior Citizens Association data shows ridership has grown 400 percent in the last two years. Lake County needs these buses and vans. The transportation system is critical to treating individuals with opioid use and other substance use disorders. Lake District Wellness Center reports clients frequently struggle to reach counseling appointments because they don't have transportation. Transportation impacts individuals' ability to reach work, the grocery store, NA meetings, church, and other places important to making up a well-rounded life. If a person can't easily get around, this can have negative ramifications on drug use and other health problems.

The Senior Citizens Association's ability to drive residents to out-of-town appointments is important to the High Desert Opioid Response Partnership's desire to help patients access pain clinics. The nearest clinics to Lakeview are in Medford, Oregon, and Bend, Oregon, both of which are 175 miles away.

Overview of existing OUD workforce, as well as gaps in workforce

Behavioral health services: In August 2016, Lake Health District took over operation of Lake County Mental Health, renaming it Lake District Wellness Center. In the nearly two years the health district has operated the countywide mental health department, it has greatly expanded operations, adding more qualified mental health professionals and counselors.

This includes adding certified alcohol and drug counselors (CADCs). In January 2017, Lake Health District collaborated with Lake County on a federal grant proposal to support the Lake County Drug Treatment Court program. At that time, the Wellness Center had one CADC who, in addition to working with 15 intensive Treatment Court clients, had a caseload of about 45 clients. The Wellness Center hired two new CADCs in 2017 and trained one licensed clinical social worker (LCSW) as a CADC. The LCSW spends about half her time on drug and alcohol counseling, giving Lake County 3.5 CADCs.

This spring, Lake District Wellness Center also hired a psychiatric mental health nurse practitioner (PMHNP). [REDACTED] is going through the certification process to prescribe Suboxone. Unlike some Wellness Center staff members, [REDACTED] is certified in Oregon and California, so he will be able to treat individuals at Goose Lake Medical Services. There is also one private LCSW serving clients in Lakeview and Paisley.

Lake County behavioral health professionals					
Location	QMHP ¹	CADC	LCSW	LPC ²	PMHNP
Lakeview	5	3	1	1	1
Christmas Valley	0	0.5	1	1	0

¹ Qualified mental health professional

² Licensed professional counselor

Other behavioral health services are available in Alturas and other northeast California communities through Modoc County Behavioral Health. The county mental health department offers prevention and outreach treatment programs, some of which are culturally specific, and dual diagnosis treatment for substance use disorder clients.

Klamath County has more extensive services available to clients with substance use disorder. In addition to Klamath Basin Behavioral Health, Klamath County’s community mental health provider, there are residential and outpatient services in Klamath Falls. Transformations Wellness Center is one residential treatment home open to patients with OUD and other substance use disorders. Of the 24 patients in treatment there at this time, four have a primary diagnosis of OUD. Other patients have OUD as well, but the disorder is co-occurring with other drug or alcohol addictions.

All three counties need additional behavioral health providers to keep up with the need. Even after Lake District Wellness Center more than tripled its CADC staff, it wasn’t enough to fully meet the need for certified drug counselors. As providers continue to curb the number of opioid prescriptions they write, and as heroin and fentanyl continue to fill the gap left by prescription medications, the need for counselors will only go up. All three counties are in Health Professional Shortage Areas when it comes to mental health (HRSA Data Warehouse 2017).

Primary care services: Suboxone, a brand name for a drug combination of buprenorphine and naloxone, has become an increasingly popular treatment for opioid addiction in the wake of reports of methadone addiction. Methadone was the favored treatment for addiction for years, and is still in use, but one-third of all prescription drug-related deaths in 2012 were related to methadone overdose (CDC).

Several Klamath County primary care providers offer Suboxone as a treatment for opioid addiction. Transformations Wellness Center, the residential treatment facility in Klamath Falls, recently added Suboxone to its offerings as well.

The drug has only recently been available in Lake County. Lakeview’s primary care providers, each of whom has a massive caseload, were reluctant to go through the training that prescribing MAT requires. In August 2017, Oregon Medical Board directed two Lake Health Clinic doctors and Warner Mountain Medical Clinic’s doctor to change their approach to chronic pain patients. This included prescribing fewer opioids for chronic pain, tapering some patients off narcotics, and adding alternative treatments, including MAT, to their repertoire.

Since August, all three providers have completed or are going through training so they can prescribe Suboxone. A new doctor at Lake Health Clinic was hired with the agreement that he be able to prescribe Suboxone; he is in the process of being trained. Two Lake Health Clinic physician assistants and one family nurse practitioner (FNP) are being trained to prescribe Suboxone, as is an FNP at Goose Lake Medical Services. Warner Mountain Medical Clinic’s nurse practitioner can prescribe Suboxone as well.

In Klamath County, a total of eight providers — six physicians, one physician assistant, and one FNP — have received their buprenorphine waiver from the Drug Enforcement Administration (DEA). Increasing access to this treatment, including exploring the possibility of creating policies requiring providers be certified to offer Suboxone as a treatment option, will be considered during this project.

The total number of providers with DEA waivers is shown in the chart below.

Providers who can prescribe buprenorphine			
Location	Doctors	Physician assistants	Nurse practitioners
Lake County	3	0	1
Klamath County	6	1	1
Modoc County	0	0	0

Source: *Buprenorphine Treatment Practitioner Locator, SAMHSA*

METHODOLOGY

Methods for fulfilling core activities

Developing/strengthening the consortium: The High Desert Opioid Response Partnership has six committed partners already: Lake Health District, which includes Lake Health Clinic, Lake District Hospital, Lake District Wellness Center, and Lake County Public Health; Warner Mountain Medical Clinic; Goose Lake Medical Services; Lakeview Disaster Unit; Lake County Senior Center; and Sky Lakes Medical Center. These six are simply the beginning of what partners envision as a multisector partnership dedicated to addressing and reducing opioid abuse in Lake, Klamath, and Modoc counties.

Each member has committed to using its local, regional, and statewide affiliations and relationships to build the consortium. Many of the current partners already work together on grant projects and in other professional contexts. The same is true of other partners throughout the region and state who have not yet been brought on board but who have a vested interest in ensuring the opioid crisis does not reach the same tragic level it has in other parts of the country. The partners include governments, law enforcement agencies, school districts, business associations, and more.

As many as 30 members are anticipated by the end of the project year, simply through personal invitations and one-on-one discussions with potential consortium members. As an

added enticement to join the partnership, Lake Health District is requesting a stipend for members for the first year of the project. By the end of the project period, the partners will have drafted and signed a memorandum of understanding (MOU) committing the partners to working on projects, programs, and policies created during the project year. The MOU will replace the monetary incentives to sustain involvement in the consortium moving forward.

Conducting a detailed analysis to identify opportunities and gaps in OUD prevention, treatment, and recovery services: Each consortium member has committed to assisting this analysis, and each new member will commit to the same thing as he or she is brought on board. Lake Health District's AmeriCorps VISTA, under supervision by [REDACTED], Lake Health Clinic and Goose Lake Medical Services clinics director, and [REDACTED], the clinics manager, will lead the assessment efforts. The VISTA will comb statewide data available through Oregon Health Authority, California Department of Public Health, and other sources. Because Lake and Modoc counties' populations are so small that data typically is suppressed at the state level, the VISTA also will conduct her own investigation into resources available with those two counties. Other consortium members will play a crucial role in supplying this information. The VISTA will coordinate with [REDACTED], community health programs program manager at Sky Lakes Medical Center, to ensure the same assessment is conducted in Klamath County.

The analysis will include the following information, as well as other questions determined by the consortium. Some questions have been asked and answered in this grant proposal but will be updated when the assessment is conducted this fall:

- Number of individuals with OUD
- Number of individuals with other substance use disorders
- Number of certified alcohol and drug counselors
- Number of other behavioral health professionals
- Counselors' caseloads and optimum caseload levels
- Providers prescribing MAT
- Other treatments available for chronic pain management
- Availability of naloxone among law enforcement and first responder agencies
- Recovery services available
- Recovery services needed
- Number of uninsured individuals
- Number of individuals with Medicaid

One piece of information the partners want to quantify is health literacy regarding opioids and OUD in the tri-county region. To ascertain this information, the partners will contract with a survey company to send questionnaires to residents of Lake and Modoc counties and to the residents of Klamath Falls. The city of Klamath will be used as a representative for the county as a whole; funding will not allow for surveying the entire county. When that data is collected, the partners will use the information to tailor educational programs and public awareness campaigns to improve the region's understanding of narcotics, how they work, their dangers, and the services that are available locally to manage chronic pain.

Once the survey results are compiled and resource assessments are completed for Lake, Klamath, and Modoc counties, the VISTA will report the information to the consortium.

Developing a comprehensive strategic plan: The VISTA's report will form the basis of the strategic plan. The partners will discuss and expand on the gaps and opportunities named in the report, and then use that information to draft a plan for Lake, Klamath, and Modoc counties.

To avoid the chaos of having a large group of people creating a plan, [REDACTED] will direct the group to break up into smaller teams to tackle pieces of the plan. This may be done according to industry; primary care providers could work together, for example, to craft a vision specific to their niche in the tri-county area. Rather than having large consortium meetings, the smaller committees will work together for a few months before everyone comes together in the large group to put together one broad plan.

To help draft the plan, each consortium member is tasked with researching existing promising practices, best practices, and evidence-based practices already in place in other parts of the two states and across the country. While one-size-fits-all approaches rarely work, other organizations or groups in other places may have identified strategies that will work in Lake, Klamath, and/or Modoc counties. Every consortium member has agreed to use its connections with the state- and national-level organizations with which it is affiliated to research such strategies. They will present this information to the consortium to develop the regional plan.

Developing a comprehensive workforce plan: The process of developing a comprehensive workforce plan will happen concurrently with drafting the strategic plan. The smaller teams will address workforce issues as they discuss strategies.

One of the major issues the partners will cover is recruitment. All three counties struggle to attract and retain qualified employees, and all three are in Health Professional Shortage Areas (HRSA Data Warehouse 2017). The teams will discuss the possibility of working together to recruit qualified primary care and behavioral health providers. This teamwork has limits, of course. Each organization naturally wants to build its own employee base, and the communities involved are separated by great distances, 100 miles or more. But by working together, the consortium may be more effective in recruiting people to this frontier and rural area.

The partners also will address how to strengthen existing and/or create new partnerships with community colleges and universities. Lake Health District partners with Klamath Community College and Oregon Health Sciences University for nursing education, but there may be additional opportunity to expand those partnerships. Sky Lakes Medical Center likewise works with Klamath Community College and Oregon Health Sciences University, as well as with Oregon State University and Oregon Institute of Technology.

Lake Health Clinic, Lake District Wellness Center, and Lake District Hospital are members of HRSA's National Health Service Corps (NHSC), which helps attract health professionals through scholarship support and loan repayment. La Pine Community Health Center-Christmas Valley, which is not yet a consortium member but will be approached about joining the team, is also an NHSC site. In Modoc County, Goose Lake Medical Services is an NHSC site. Several other organizations in Klamath and Modoc counties, many of whom are potential partners in the consortium, are NHSC sites as well. The partners will discuss how to leverage this association to boost the region's hiring capacity.

Completing a sustainability plan: This project year is intended to be a launching pad to create programs, projects, and policies that reflect the strategic and workforce plans the consortium develops. Signing an MOU is the first step toward building sustainability. Bringing together so many partners and encouraging information sharing and open communication will open doors for future fundraising and collaboration opportunities. All partners must have a voice in the discussion and be part of creating the vision. Only with that level of buy-in will sustainability be possible.

Lake Health District is in the process of contracting with members of PMIT for consultations. PMIT has provided valuable insight and direction as Lakeview's two clinics work

to reduce opioid prescriptions. Building relationships and contracting with consultants across the region will help the High Desert Opioid Response Partnership access knowledge and ideas from other providers. This will help sustain interest in the partnership's efforts.

While the partners will meet monthly at a minimum during the project, they will continue to meet quarterly after the project ends. They will join work groups as specific issues arise or as needed to fulfill program needs spelled out in the strategic and/or workforce plans. The partnership will continue to seek funding for projects and to help with mileage and other costs associated with participating in the partnership.

Methods for fulfilling additional activities

Training and/or developing training curricula: [REDACTED]

[REDACTED] will lead the consortium in its efforts to obtain naloxone for Lake County law enforcement officers who don't currently carry it. Oregon State Police troopers and Lake County Sheriff's deputies in the north Lake County area have Narcan, but deputies in south Lake County and Lakeview Police do not.

[REDACTED] will coordinate with Oregon State Police and other law enforcement agencies as necessary to train Lake County officers how and when to use naloxone. [REDACTED] is also able to lead trainings herself, if necessary. Lakeview Disaster Unit has carried naloxone since its ambulances began carrying morphine, to reverse accidental overdoses. EMS crews have used naloxone to save individuals in other overdose situations, including one in July.

The assessment the consortium conducts will include finding out what other law enforcement and first responder agencies in the tri-county area lack Narcan. Finding funding to purchase naloxone and coordinating training will be part of the partnership's strategic plan.

Building workforce capacity: The partners will continue to build existing relationships with colleges and universities, including Klamath Community College, Oregon State University, Oregon Institute of Technology, and Oregon Health Sciences University. However, they will also go to other institutions in the region that are training healthcare professionals, including the University of California, Davis. Making more contacts with more universities that train physicians, physician assistants, nurses, and behavioral health professionals will help Lake, Modoc, and Klamath counties attract future healthcare professionals.

As the consortium expands, members already designated as NHSC sites will encourage other members to obtain the designation. The promise of loan repayment assistance can go a long way toward recruiting healthcare professionals to rural and frontier communities.

Identifying evidence-based, promising, and innovative models or policy avenues: Each consortium member is tasked with researching promising, best, and evidence-based practices as they relate to OUD prevention, treatment, and recovery services. Partners will confer with colleagues across the region and state, and they will research innovative work being done through state and national organizations with which they are affiliated.

Research is also part of the AmeriCorps VISTA's work plan. She will seek out promising, best, and evidence-based practices being used to address OUD throughout the nation. She also will investigate how organizations are helping individuals diagnosed with OUD who do not have health insurance or whose insurance is inadequate to cover treatment.

Enhancing individual, caregiver, and community education and engagement: Lake Health and Warner Mountain Medical clinics will share their pain agreements with other providers in the consortium. These contracts outline many risks of opioids and stress their addictive nature. Because so many individuals, particularly older adults, implicitly trust their doctors, this is an

effective way of conducting patient education. It is a model other clinics and providers in the consortium may want to adopt.

The AmeriCorps VISTA will work with [REDACTED], director of the Lake County Senior Citizens Association, to develop educational materials and programs that will resonate with older adults. Opioid use among seniors is a growing problem (National Survey on Drug Use and Health), and it is imperative that older adults learn about painkillers' risks and appropriate use, as well as other treatments available locally to manage chronic pain. The materials and programs developed will be available to the entire region.

Developing plans to invest in capital infrastructure: Lake Health District is in the process of expanding its telehealth services. Telemedicine can help patients access behavioral health professionals not available locally. This is particularly useful in parts of Lake County located miles from Lake District Wellness Center's offices in Lakeview and Christmas Valley, as well as for outlying communities in Modoc and Klamath counties. Purchasing telemedicine carts for some of these outlying locations may be part of the partnership's strategic plan.

The team will investigate whether Lake County Senior Citizens Association's public transportation fleet is adequate. At current ridership levels, the association has the vehicles to drive people to locations around the county and accommodate weekly out-of-county trips to Klamath Falls, as well as regular trips to Bend and Medford. This may not be the case if ridership grows, however. Lake Health District is interested in assessing whether it needs a vehicle dedicated solely to patient transportation to ensure patients make counseling and primary care appointments and can reach out-of-town pain clinic appointments.

The team also will explore whether more residential treatment facilities are needed. Klamath County has residential programs, but they are small and consistently full. Residential behavioral health treatment does not exist in Lake and Modoc counties.

Tracking and monitoring data: The AmeriCorps VISTA will take the lead in this effort for Lake Health Clinic and Goose Lake Medical Services. A major component of her job involves tracking morphine equivalent dose for each provider and reporting that information to clinic administrators and state authorities. She will monitor the information over the course of the grant period, and she will coordinate with consortium members in Klamath and Modoc counties to ensure accurate regional numbers.

Leveraging existing OUD efforts at the federal, state, and local levels: The High Desert Opioid Response Partnership will share its information with HRSA, with its partners throughout the region, with local governments, and with the state and national organizations with which its members are affiliated. The partnership will use local and regional print, radio, and online media to tell its story in a relatable way to the public. This will be an important step toward increasing public awareness about opioid abuse and treatments available for OUD and chronic pain management.

The partners will look for ways to better work together to refer patients to programs other consortium members offer, as appropriate. The VISTA will create a registry of pain clinics in Oregon and northern California that will be made available to members.

Methods for disseminating program information

The partners will communicate information with HRSA throughout the grant period. They will create reports for consortium members to use with board members, administrators, and clients. They will work with local and regional newspapers, radio stations, and online media outlets to share their information and, once they develop trainings and programs, to share that information with the public as well.

As they network with the organizations they are affiliated with at the state and national levels, the partners will share information about what they're doing in Lake, Klamath, and Modoc counties. The partners will discuss the project with local, state, and federal elected officials. They will share information with local and regional advisory councils. Partners will use their organizations' websites, as appropriate, to share information.

Methods for engaging with the target rural population

The partners plan to survey the residents of Lake and Modoc counties, as well as the city of Klamath Falls. The questionnaires will address basic health literacy questions as well as some questions specific to opioids and OUD. The High Desert Opioid Response Partnership will contract with a company to conduct the survey.

As part of its efforts to create educational materials and programming specifically for older adults, the partnership will engage active members of the Lake County Senior Center. Seniors are more apt to listen to a peer than a younger educator. [REDACTED] the Senior Citizens Association director, and the AmeriCorps VISTA will recruit respected and trusted seniors as ambassadors.

Methods for maintaining consortium commitment

Consortium members will sign an MOU before the end of the project period. This is step one toward building a sustainable group.

To encourage participation during the initial project year, consortium members will receive a monthly stipend. Offering each member a financial incentive per month encourages organizations to commit to the consortium early and remain involved in the project.

Having monthly meetings and assignments to complete will ensure consortium members are actively engaged. This will support commitment; people are more likely to continue in a group they contribute to than one where they merely sit through meetings.

Even though the region is large, the consortium will encourage in-person meetings. Partners who must travel to Lakeview from out of town will receive mileage reimbursements. Lunch will be provided. If members cannot make a meeting in person, Lake Health District will encourage members to participate by calling in. This is more likely to happen during the winter months; out-of-town partners must cross mountain passes to reach Lakeview.

WORK PLAN

The High Desert Opioid Response Partnership has three goals for this project:

1. Create a regional group dedicated to preventing and treating opioid use disorder in Lake, Klamath, and Modoc counties.
2. Determine the existing climate as it relates to opioid use disorder in Lake, Klamath, and Modoc counties.
3. Reduce injury, morbidity, and mortality related to opioid use disorder in Lake, Klamath, and Modoc counties.

To accomplish the first goal, the existing consortium will establish a monthly meeting schedule. In the project's first month, [REDACTED] will use a Doodle poll to determine the date that will work for consortium members and will send calendar invitations to remind members of meetings. She will schedule meeting locations and will send invitations each month to members as the consortium grows.

Growing the consortium is an important part of the plan. Each member is responsible for reaching out to local, regional, and statewide partners with interest in improving opioid abuse

prevention, treatment, and recovery services. New members will be asked to provide letters of commitment and, eventually, to sign an MOU. This will happen throughout the project period. To encourage members to join, out-of-town attendees will be reimbursed for their mileage to meetings in Lakeview, and organizations will receive a stipend each month they participate in the consortium. This will continue until the MOU, which consortium members will draft throughout the project period, is signed in month 12.

Accomplishing the second goal begins with assessing each county's existing opioid use prevention, treatment, and recovery services. The AmeriCorps VISTA, under direction from [REDACTED] and [REDACTED] will lead this effort in Lake and Modoc counties. Because the VISTA is based in Lakeview, she will coordinate with other Modoc County agencies and with [REDACTED], the Klamath County liaison, to ensure an accurate assessment of those counties.

The VISTA will draft the assessment questions, with input from the consortium, to ensure consistent information is collected across all three counties. This work will begin in earnest in month two of the project, with results presented to the consortium in month five.

[REDACTED] and [REDACTED] also will work with the VISTA to create a health literacy assessment that includes questions related to opioid use knowledge and awareness of chronic pain management options. Lake Health District will contract with a survey company to send the questionnaire and incentive (a \$2 bill) to each resident of Lake and Modoc counties and the city of Klamath Falls. This work will be done in months two through six of the project period.

The information collected in the survey will be used to shape educational materials and programs for the public. The partnership is particularly focused on outreach to older adults, among whom OUD diagnoses are on the rise. The VISTA will work with [REDACTED], the senior center director, to develop educational materials and programming appropriate for a senior audience. The campaign will be developed and ready for implementation by the end of the project period.

Because most of the tri-county region's opioid problem stems from prescription drugs, the VISTA will spearhead efforts to track provider-, clinic-, and county-level prescribing numbers. She will lead this effort at Lake Health Clinic and Goose Lake Medical Services and will coordinate with clinics throughout the tri-county area to ensure these numbers are being collected for reporting to the consortium as well as to the appropriate state agencies that require regular reporting. This information will be shared with the consortium monthly throughout the project.

Addressing the third goal requires a great deal of teamwork by the consortium. The partnership will use the information collected during the assessment to develop strategic and workforce plans that address the gaps identified during the analysis. They will break up into smaller work groups, each tasked with drafting a plan specific to a particular industry or area. These groups will report to the consortium monthly. Work on the plans will begin in month five with a rough strategic plan and workforce plan completed by month eight and final plans adopted in month 10. Each work group will have a leader responsible for ensuring work is completed, and each leader will report to [REDACTED], who is responsible for assembling the final plans.

Once the strategic and workforce plans are complete, the team will work on a sustainability plan. While discussions about sustainability will be happening throughout the project, a final plan, including details regarding capacity and fundraising, will be drafted beginning in month 10. It will be approved in the project period's final month under [REDACTED] leadership.

While planning is important in reducing OUD-related injury, morbidity, and mortality, so is ensuring first responders have access to lifesaving drugs. [REDACTED] will research naloxone vendors, as well as shelf life and need throughout the region, from months two to four

of the project. She will coordinate with law enforcement agencies and ambulance crews to develop naloxone trainings, and she will schedule trainings in Lake County. Trainings, which are intended for replication throughout the project area and beyond, will be completed in Lake County by the project's ninth month.

To ensure residents have access to treatment, the AmeriCorps VISTA will compile an up-to-date registry of pain clinics in Oregon and northern California. No such registry currently exists, forcing medical staff to scour the internet for information each time someone needs a pain clinic referral. The VISTA will make the registry available by the project's fourth month.

Lake Health District will work with the Lake County Senior Citizens Association to draft a contract or MOU regarding transportation for individuals who need to reach those out-of-town pain clinics. This work will begin in month two under [REDACTED] and [REDACTED] leadership. A final signed contract is expected in month four.

Additional information is available in the work plan in **Attachment 1**.

RESOLUTION OF CHALLENGES

Recruitment: Finding team members to join the High Desert Opioid Response Partnership won't be an easy task. It helps to have six members already on board, and that each of those six is well positioned within their respective counties to connect with other organizations. Each member knows other people with a vested interest in OUD prevention, treatment, and/or recovery services and can use those relationships to grow the consortium. Each member also has statewide affiliates who can give the consortium broader perspective and reach.

Commitment: Even more challenging than finding organizations to join the partnership will be finding ways to get them to stay. To help this, the consortium will ask new members to submit a letter of commitment and then, once the MOU is drafted, to sign the document.

Each member will be responsible for researching promising practices, best practices, and evidence-based practices used by other organizations with which they are affiliated to address OUD and its related problems. Each member will serve on a smaller work group while the consortium drafts its strategic and workforce plans. This will hold members accountable and encourage active participation.

Consortium members also will receive stipends to encourage participation. Receiving a financial allowance each month will incentivize members to get involved early and stay involved throughout the duration of the project.

Out-of-town members will be reimbursed for their mileage and lunch will be provided to encourage them to drive to Lakeview for monthly meetings. Conference calls will be set up if driving isn't possible.

Teamwork: The High Desert Opioid Response Partnership seeks to bring together organizations that historically haven't always worked well together. Lake Health District has a good relationship with each current consortium member, but not all members have worked with one another. As the consortium grows, it will add members who are unfamiliar or who perhaps have had a negative experience with another partner organization.

To be successful, the partners will have to build trust. This, quite simply, takes time. As consortium members show up for meetings, they demonstrate they are invested in the team. Assigning members research homework and requiring them to report what they find during consortium and work group meetings not only builds the group's knowledge but shows the team that individual members can be trusted to fulfill assignments.

Open and frequent communication also will build trust. [REDACTED], the project leader, will take ultimate responsibility for this, scheduling meetings and serving as the team's point of contact. However, all members will be encouraged to share findings and questions with one another.

Transportation: This is a current gap in OUD treatment in Lake County. To support the county transportation system on which so many patients rely to reach counseling appointments and NA meetings, and to encourage its ability to transport people to out-of-town appointments, the partnership will financially support Lake County's transportation system throughout this project. The partners will look for ways to improve the system's financial stability and look for additional funding sources as part of its strategic plan.

EVALUATION AND TECHNICAL SUPPORT CAPACITY

In addition to the measures outlined below, the High Desert Opioid Response Partnership, under the leadership of Lake Health District, will work with HRSA's technical assistance provider throughout the project period. The health district will keep the agency apprised of developments, successes, and challenges the partnership encounters throughout the grant period. This relationship will provide valuable outside expertise to assist the local and regional efforts.

Establish monthly meetings.

- **Process indicators:** Emails, phone calls, and Doodle poll between [REDACTED] and consortium members to establish the best date for the initial meeting.
- **Outcome indicators:** Consortium meetings take place on a consistent date each month.
- **Plan for tracking process and outcome indicators:** Doodle polls, group emails.
- **Plan for disseminating evaluation results:** Emails, phone calls, and calendar invitations to consortium members. Emails, phone calls, and calendar invitations to new members as they join the consortium.

Use networks and connections locally, statewide, and throughout the region to build and expand the consortium.

- **Process indicators:** Outreach via phone calls and emails to potential consortium members. New members attend meetings.
- **Outcome indicators:** Letters of commitment from, and eventually signed MOU between, consortium members.
- **Plan for tracking process and outcome indicators:** Attendance at monthly consortium meetings. Letters of commitment kept on file.
- **Plan for disseminating evaluation results:** Updates and attendance at consortium meetings.

Draft MOU with all consortium members.

- **Process indicators:** Letters of commitment from consortium members. Draft MOU sent to legal counsel for approval.
- **Outcome indicators:** Signed MOU.
- **Plan for tracking process and outcome indicators:** Drafts kept on file. Letters of commitment noted in consortium meeting minutes and kept on file.
- **Plan for disseminating evaluation results:** MOU sent to all consortium members.

Conduct analysis of Lake, Klamath, and Modoc counties' prevention, treatment, and recovery services as they relate to opioid use and other substance use disorders.

- **Process indicators:** Create assessment document to ensure consistent questions across all three counties. Collect data from federal and statewide sources. Collect data by interviewing local sources.

- **Outcome indicators:** Final reports for each county and the tri-county region outlining existing services, workforce, and opportunities as well as gaps.

- **Plan for tracking process and outcome indicators:** Updates at monthly consortium meetings. Emails weekly, at a minimum, from AmeriCorps VISTA and [REDACTED], the Klamath County liaison, to [REDACTED], the project leader.

- **Plan for disseminating evaluation results:** Final report(s) will be made available to consortium members, as well as other interested local, state, and national organizations.

Survey residents of Lake and Modoc counties and the city of Klamath Falls regarding health literacy, opioid awareness, and knowledge of pain management options.

- **Process indicators:** Contract signed with survey company. Survey drafted and approved by consortium. Incentives sent with surveys to all residents.

- **Outcome indicators:** Surveys returned and data compiled into usable information. The goal rate of return is a minimum 15 percent.

- **Plan for tracking process and outcome indicators:** Contract kept on file. Survey kept on file. Returned surveys scanned and kept on file. Final report kept on file.

- **Plan for disseminating evaluation results:** Final report shared with consortium members and other local, state, and national organizations as appropriate. Results will be used to shape education materials and programs for public audiences, including older adults.

Track county- and provider-level opioid prescribing numbers, by morphine equivalent dose, in all three counties.

- **Process indicators:** Weekly numbers established: per provider numbers, per clinic numbers, and per county numbers.

- **Outcome indicators:** Monthly numbers reported to clinics, state, and consortium.

- **Plan for tracking process and outcome indicators:** Numbers reported to clinic administrators. Numbers logged as appropriate for each clinic. Numbers reported to state authorities.

- **Plan for disseminating evaluation results:** Monthly reports to consortium. Monthly reports to medical staff. Monthly reports to state authorities.

Create comprehensive regional strategic plan addressing gaps and opportunities identified during county-level assessments.

- **Process indicators:** Create work groups to address specific needs. Monthly reports from work groups.

- **Outcome indicators:** Regional strategic plan.

- **Plan for tracking process and outcome indicators:** Monthly reports to consortium from work groups.

- **Plan for disseminating evaluation results:** Final plan distributed to consortium members and kept on file. Plan shared with local, state, and federal authorities and organizations as appropriate. Local media informed.

Develop comprehensive workforce plan that addresses gaps and opportunities identified during county-level assessments.

- **Process indicators:** Create work groups to address specific needs. Monthly reports from work groups.

- **Outcome indicators:** Regional workforce plan.

- **Plan for tracking process and outcome indicators:** Monthly reports to consortium from work groups.

- **Plan for disseminating evaluation results:** Final plan distributed to consortium members and kept on file. Plan shared with local, state, and federal authorities and organizations as appropriate. Local media informed.

Complete sustainability plan outlining specific goals for consortium to pursue as a group and individually to ensure strategic and workforce plans' sustainability.

- **Process indicators:** Create list of potential funders. Create goals for consortium to pursue. Create goals for individual agencies to pursue. Agree to future (quarterly) meeting schedule.
- **Outcome indicators:** Sustainability plan.
- **Plan for tracking process and outcome indicators:** Funding and goal lists kept on file. Calendar invitations issued for future meetings. Plan kept on file.
- **Plan for disseminating evaluation results:** Calendar invitations for future meetings. Sustainability plan kept on file and distributed to all consortium members.

Research naloxone prices, shelf life, and need throughout the tri-county project area.

- **Process indicators:** Updates at monthly meetings, and more often as necessary, from EMS coordinator [REDACTED] regarding her research.
- **Outcome indicators:** List of vendors, quotes, and shelf life. Survey of naloxone's availability among law enforcement agencies and ambulance crews in Lake, Klamath, and Modoc counties.
- **Plan for tracking process and outcome indicators:** Minutes from monthly consortium meetings. Emails from [REDACTED] to [REDACTED] to report progress.
- **Plan for disseminating evaluation results:** Sharing information and updates at monthly meetings.

Coordinate with law enforcement agencies and ambulance crews to develop naloxone trainings for regional law enforcement officers and EMS crews.

- **Process indicators:** Receive commitments from Oregon State Police, Lake County Sheriff's Office, and Lakeview Police to join High Desert Opioid Response Partnership. Updates from [REDACTED] regarding progress contacting agencies.
- **Outcome indicators:** Create new training or adapt Oregon State Police training for other agencies' needs. Schedule training dates.
- **Plan for tracking process and outcome indicators:** Minutes from monthly consortium meetings. Copy of training agenda or outline on file.
- **Plan for disseminating evaluation results:** Personal invitations to attend trainings.

Train Lake County law enforcement officers in naloxone use.

- **Process indicators:** Receive commitments from Oregon State Police, Lake County Sheriff's Office, and Lakeview Police to join High Desert Opioid Response Partnership. Obtain written commitment from agencies with officers without naloxone to attend training.
- **Outcome indicators:** All Lake County Sheriff's deputies and Lakeview Police officers are equipped with naloxone and trained to use it.
- **Plan for tracking process and outcome indicators:** Letters of commitment to join consortium, then eventually a signed MOU. Sign-in sheet to document training attendance. Make receiving naloxone contingent on completing training.
- **Plan for disseminating evaluation results:** Create working group of law enforcement officers to debrief following trainings and fine-tune training for use throughout the tri-county project area and beyond.

Compile registry of pain clinics in Oregon and northern California.

- **Process indicators:** Establish existing pain clinic information. Phone calls to confirm clinics' information.
- **Outcome indicators:** List of addresses, emails, phone numbers, points of contact, and other relevant information compiled into pain clinic registry.
- **Plan for tracking process and outcome indicators:** Updates from AmeriCorps VISTA to [REDACTED] and [REDACTED].
- **Plan for disseminating evaluation results:** Reports each month to consortium. Final document or site made available to consortium members.

Draft MOU or contract with Lake County Senior Citizens Association outlining expectations and agreements for opioid and substance-use related transportation.

- **Process indicators:** Meetings scheduled to outline contract agreements. Contract sent to legal counsel for approval.
- **Outcome indicators:** Signed contract between Lake Health District and Lake County Senior Citizens Association outlining transportation agreement.
- **Plan for tracking process and outcome indicators:** Copies of contract in progress kept on file. Final agreement kept on file.
- **Plan for disseminating evaluation results:** Updates at consortium meetings.

ORGANIZATIONAL INFORMATION

Lake Health District operates a 25-bed acute care critical access hospital, a home health and hospice agency, three outpatient clinics in two states, countywide mental health services, a county public health department, an affiliated 24-bed long-term care and 12-bed assisted living facility, and a durable medical equipment outlet in remote Lake County, Oregon. Lake Health District's mission is "to care for our community with respect and compassion through excellence and teamwork."

The health district, which was incorporated by popular vote in 1967, spans approximately 5,600 square miles in Lake County. Lake Health Clinic and its affiliate, Lake Health Specialty Clinic, and Lake District Hospital also serve patients from Klamath and Modoc counties.

For decades, Lake Health District followed conventional wisdom when it came to medicine: If it ain't broke, don't fix it. That mentality fit well with rugged Lake County's ethos of stoic endurance. People only saw a doctor if it was absolutely necessary.

That attitude is still prevalent today, but Lake Health District is at the forefront of a campaign to change the county's definition of strength to include prevention and wellness activities. As part of this effort, the health district is taking a proactive approach to healthcare, addressing social determinants of health such as housing and nutrition that contribute to people's overall well-being. Lake Health District is also actively working to address the opioid crisis by reducing the number of painkillers prescribed and offering evidence-based alternatives to manage chronic pain.

The health district already is working closely with consortium members in this endeavor. Confirmed consortium members include Goose Lake Medical Services, Warner Mountain Medical Clinic, Lakeview Disaster Unit, Lake County Senior Citizens Association, and Sky Lakes Medical Center.

Lake Health and Warner Mountain Medical clinics worked together to develop the pain agreements all providers use with chronic pain patients who are prescribed opioids. A copy of the pain agreement is included in **Attachment 11**. Although Goose Lake Medical Services is a separate entity, it shares administration — and sometimes staff — with Lake Health Clinic. This

allowed the pain contracts to be implemented at Goose Lake, too. The agreements are uploaded to each clinic's EHR and shared with Lake District Hospital's emergency department.

Having all contracts available through the hospital means all doctors have access to all chronic pain patients' agreements. Lake District Hospital's emergency department is staffed by Lake Health Clinic's three doctors, the doctor and family nurse practitioner from Warner Mountain Medical Clinic, and locum tenens providers as scheduling and funding allow. Ready, yet confidential, access to pain agreements adds a layer of accountability for healthcare providers and patients alike, preventing overprescribing and drug abuse.

In addition to working closely together at the hospital, Lake Health and Warner Mountain Medical clinic staff collaborate on several grant projects aimed at increasing access to healthcare and improving population health management. The two clinics are partners in the statewide PMIT project, and Warner Mountain has referred patients to Lake Health District's Chronic Pain Self-Management Program. The High Desert Opioid Response Partnership is one more opportunity to work in tandem.

Lake Health District offers Chronic Pain Self-Management and other chronic disease self-management programs through a partnership with Sky Lakes Medical Center. The relationship, which began in 2017, has grown over the last year as the two entities have collaborated on grant proposals and teamed up as part of the regional Coalition for Living Well with Chronic Disease.

Because of this relationship, Sky Lakes approached Lake Health District this spring to seek guidance on its approach to the opioid epidemic. Klamath Falls has developed an opioid task force to address the issue of OUD. The task force includes agencies including Klamath County Public Health, Klamath County Commissioners, Klamath County Sheriff's Department, Klamath Falls Police Department, Sky Lakes, and more.

Beyond forming the task force, little has been done to move the project forward. Barriers include a lack of truly dedicated staff to address the issue on a regional level, lack of a long-term strategic plan to help guide future work, lack of awareness within the community regarding the objectives and work plan for the newly formed task force, and funding to support initiatives to be implemented. There is, however, the desire to move forward, which makes the opportunity to collaborate with Lake Health District and other regional partners invaluable.

One of those partners is the Lake County Senior Citizens Association. The association works closely with Klamath and Lake Counties Council on Aging, which is also a member of the Coalition for Living Well with Chronic Disease. Thanks to that partnership, Lake Health District has been able to offer chronic disease self-management classes at the Lake County Senior Center.

Lakeview Gardens, the long-term care and assisted living facility associated with Lake Health District, contracts with the Senior Citizens Association to provide transportation for its residents to ensure they can get to doctor appointments and, when necessary, go to the emergency department without calling an ambulance. The health district works closely with the association in other capacities as well, including creating education and outreach opportunities to create better health literacy and stimulate healthier living among Lake County's older adults. For the last year, the two organizations have partnered on the Lake County Gatekeeper project, which is training community members how to recognize signs of potential abuse and neglect among seniors.

██████████, the association's director, is eager to bring more education opportunities to the seniors. She recognizes the challenge of changing older adults' mindset about prescription painkillers and is willing to work with the consortium to develop opioid and other medication safety materials and programs that will resonate with seniors.

Lake District Hospital does not have its own ambulance unit and depends on Lakeview Disaster Unit’s volunteer emergency responders to transport patients to the emergency department. Since the disaster unit formed in the 1950s, the two agencies have worked closely together — so closely that in October 2017, they agreed to create and jointly fund an EMS manager position, currently held by [REDACTED]. The two organizations collaborate on grant projects and training. Both entities have a vested interest in decreasing the number of drug-related deaths and injuries in Lake County and are eager to work together in the High Desert Opioid Response Partnership.

For detailed information about each consortium member’s location, see the list of consortium members in **Attachment 6**. An organizational chart is provided in **Attachment 7**.

Each confirmed member of the team has committed to leveraging his or her connections with local, regional, and statewide organizations to build and expand the consortium. Opioid abuse is an issue that affects all sectors, and partners are eager to bring more organizations, each with its own unique expertise, to the table.

Potential consortium members include the following:

Sector	Organization(s)	
Healthcare	Lake County	• La Pine Community Health Center-Christmas Valley
	Klamath County	• Klamath County Public Health • Klamath Basin Behavioral Health
	Modoc County	• Modoc Medical Center, Alturas • Modoc County Mental Health Services • Canby Family Practice Clinic, Canby, California
Government	Lake County	• Lakeview Town Council • Lake County Commission
	Klamath County	• Klamath City Council • Klamath County Commission • Klamath Tribal Council
	Modoc County	• Alturas City Council • Modoc County Board of Supervisors • Pit River Tribal Council
Education	Lake County	• Lake County School District 7 • North Lake School District, Silver Lake • Paisley School District, Paisley • Klamath Family Head Start
	Klamath County	• Klamath County School District • Klamath Community College • Oregon Institute of Technology
	Modoc County	• Modoc Joint Unified School District
Business	Lake County	• Lake County Chamber of Commerce • North Lake Chamber of Commerce
	Klamath County	• Klamath County Chamber of Commerce
	Modoc County	• Alturas Chamber of Commerce
Law enforcement/ corrections	Lake County	• Lakeview Police Department • Lake County Sheriff’s Office • Lake County Community Corrections • Oregon State Police (also covers Klamath County) • Warner Creek Correctional Facility
	Klamath County	• Klamath Falls Police Department • Klamath County Sheriff’s Office
	Modoc County	• Alturas Police Department • Modoc County Sheriff’s Office

Other	Lake County	<ul style="list-style-type: none"> • Eastern Oregon Coordinated Care Organization • Eastern Oregon Healthy Living Alliance • Oregon Office of Rural Health (also covers Klamath County) • Oregon Health Authority (also covers Klamath County)
	Klamath County	<ul style="list-style-type: none"> • Cascade Health Alliance
	Modoc County	<ul style="list-style-type: none"> • Partnership HealthPlan of California • California State Office of Rural Health

As the applicant for this grant, Lake Health District will take the lead in the High Desert Opioid Response Partnership. [REDACTED], the project leader, will schedule meetings as needed, no less often than monthly throughout the project’s duration. Each consortium member will be responsible for fully engaging in the project, including attending meetings. Each member’s anticipated duties are included in the signed Letters of Commitment in **Attachment 4**.

[REDACTED] will lead the partnership by organizing meetings and holding consortium members accountable to their responsibilities, including building relationships with the entities listed above and researching promising practices, best practices, and evidence-based practices from the local, statewide, regional, and national organizations with which they are affiliated. [REDACTED] also will oversee the AmeriCorps VISTA who will be responsible for leading the assessment of existing OUD prevention, treatment, and recovery services available in Lake and Modoc counties. She will work closely with [REDACTED] in Klamath County to ensure the same analysis is conducted there.

[REDACTED] also will work with Lake Health District’s grant writing and budget departments to ensure the financial and reporting requirements for this grant are met. She will work closely with [REDACTED], the health district’s clinics manager, who has served as interim director since September 2017. [REDACTED] has walked Lake Health Clinic providers through their new painkiller prescribing protocol and has written policies that have reduced the number of opioid prescriptions written. She has been an active member of PMIT and has worked closely with chronic pain authorities from around the state. [REDACTED] will use this experience and expertise to help guide the High Desert Opioid Response Partnership.

[REDACTED] and [REDACTED] will oversee the AmeriCorps VISTA who will help with this project’s assessment, data collection, and education efforts. They also will collaborate with [REDACTED], a certified alcohol and drug counselor who heads up Lake District Wellness Center’s substance use disorder services. As a counselor, [REDACTED] will be a strong advocate for the clients this project aims to help. His expertise in the field of substance use disorders and knowledge of evidence-based treatments in rural settings will help shape the project’s assessments and plans for addressing gaps in OUD prevention, treatment, and recovery services.

[REDACTED], the EMS manager, will lead efforts to obtain naloxone and train local law enforcement officers in using the lifesaving drug. [REDACTED], the Senior Citizens Association director, will lend her expertise in outreach to older adults and operation of the countywide transportation program to the High Desert Opioid Response Partnership.

A complete staffing plan for the partnership is included in **Attachment 5**. Resumes for the partnership’s key staff members are included in **Attachment 3**.