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Maine Health Access Foundation Addiction Care Program: Interim Evaluation Report

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MeHAF
Maine Health Access Foundation

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University of Southern Maine
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MAINE HEALTH ACCESS FOUNDATION

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Executive Summary

The high rate of opioid misuse[i] and subsequent addiction is an ongoing national and local public health crisis. Despite numerous statewide efforts to reduce rates of opioid prescribing, prevent diversion, and increase access to treatment for opioid use disorder (OUD), the most recent data available for the state of Maine still shows the incidence of opioid-related overdoses and deaths increasing.

While there are numerous strategies to address this multi-faceted issue, one evidence-based strategy to address the opioid epidemic is the implementation of Medication-Assisted Treatment (MAT) within primary care settings. MAT combines the use of behavioral therapy with medication. For OUD the medication is buprenorphine (common brand names Suboxone or Subutex). Primary care, while often involved in the initial prescribing of opioids, is also a forward facing component of health care that has many opportunities to interface with individuals with OUD and provide an opportunity for them to enter treatment. However, implementing MAT within busy primary care settings can be challenging due to numerous barriers at the patient, provider, and practice levels.

Grantee Organizations
Planning Grants
LincolnHealth *Lincoln County*
Kennebec Behavioral Health *Somerset County*
Tri-County Mental Health Services *Androscoggin County*
York Hospital *York County*
Implementation Grants
Amistad *Cumberland & York Counties*
Health Access Network *Penobscot County*
Healthy Acadia *Hancock and Washington Counties*
Healthy Community Coalition *Franklin and Oxford Counties*
MaineGeneral *Kennebec, Somerset, and Sagadahoc Counties*
Penobscot Community Health Care *Penobscot, Somerset, and Waldo Counties*

Program Overview

The Maine Health Access Foundation (MeHAF) is currently providing funds to expand access to MAT within primary care practices for medically underserved individuals with OUD. In this initiative, the *Addiction Care Program*, funds have been distributed to ten grantee organizations – four are focusing on creating new capacity for MAT and six are focusing on expanding current capacity for MAT. The initiative is two years (April 2017 – March 2019) and the structure of the *Addiction Care Program* allows grantee organizations to learn from each other and share lessons learned. As part of the *Addiction Care Program*, MeHAF has contracted with Quality Counts (QC) to provide training, education, and technical assistance to support grantee organizations, both individually and as a cohort. In addition, QC has sub-contracted with Eric Haram, LADC of Haram Consulting, Maine Behavioral Healthcare, for the services of Mary Jean Mork, LCSW, and Maine Medical Association, principally Gordon Smith, Esq., to provide specialized assistance in the areas of integrated treatment models for OUD, billing/coding, and public policy, respectively. As grantee organizations move into the second year, they will begin to operationalize and refine workflows, processes, and protocols. Through ongoing technical assistance and lesson sharing, grantee organizations will ultimately move towards expanding and implementing MAT services for underserved individuals in the state.

[i] Throughout this document, the expression "opioid misuse" refers to the use of opioids in a manner, situation, amount or frequency that can cause harm to the substance user or to those around them. Prescription drug misuse refers to the use of a drug in any way a doctor did not direct an individual to use it. (Taken from Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health. (2016)). Glossary p.3-4. U.S. Department of Health and Human Services.)

Medication-Assisted Treatment (MAT) At a Glance

What is MAT?

MAT is an evidence-based path of recovery from substance use disorders facilitated by medically monitored pharmacological agents approved by the FDA. For opioid use disorder, these medications include methadone, naltrexone, and buprenorphine (common brand names: Suboxone and Subutex). MAT is the combination of behavioral therapy with medication that is effective for many, but not all individuals.

Who can provide MAT?

In Maine, Physicians (MD, DO), nurse practitioners (NP), and physician assistants (PA) can prescribe the medication(s) associated with MAT for opioid use disorder. To prescribe buprenorphine, providers must take additional training and receive a waiver from the federal government (X-waiver). The provider works with the patient and with behavioral health professionals to provide comprehensive care for the person receiving MAT.

What type of training is required to provide MAT?

Physicians are required to complete an eight-hour training to qualify for a waiver to prescribe and dispense buprenorphine. Nurse practitioners and physician assistants are required to complete 24 hours of training, including the initial eight-hour MAT training for physicians.

Who is a good candidate for MAT?

Per guidance from the U.S. Substance Abuse and Mental Health Services Agency (SAMHSA), a good candidate for MAT for opioid use disorder:

- Has an official diagnosis of an opioid use disorder.
- Is willing to fully comply with prescribing instructions.
- Lacks physical health issues that the medication could possibly exacerbate.
- Is fully educated on alternative options.

For more information on MAT: https://www.samhsa.gov/medication-assisted-treatment

The Muskie School of Public Service at the University of Southern Maine (Muskie) was contracted by MeHAF to conduct an independent evaluation of the implementation and effectiveness of the *Addiction Care Program*. The program evaluation is designed to inform current and future planning activities; guide the implementation and refinement of the intervention strategies; provide ongoing feedback to grantee organizations on improvements to access and delivery of MAT in their region; and offer a summative assessment of the implementation experience and success of the intervention strategies. The Interim Evaluation Report produced by Muskie discusses findings to date in more detail.

Muskie utilized a mixed-methods design, including the collection of both quantitative (administrative, clinical, and survey data) and qualitative data (provider interviews and patient focus groups), to document the implementation environment; examine factors impacting availability and access to MAT; and evaluate grantee strategies and whether and/or how these approaches reduce barriers to access to treatment and recovery supports for individuals with OUD. The evaluation was designed to look at implementation strategies through the lens of external and internal implementation environments.[ii]

Implementation Environments

External: Currently there is a growing awareness and readiness in Maine to develop strategies to overcome known barriers to implementing MAT programs, including limited infrastructure, public policies, insufficient reimbursement, and limited financial resources. The work being carried out by the Addiction Care Program grantee organizations aligns and expands upon existing state and local efforts to increase capacity in the state to prevent and treat OUD.

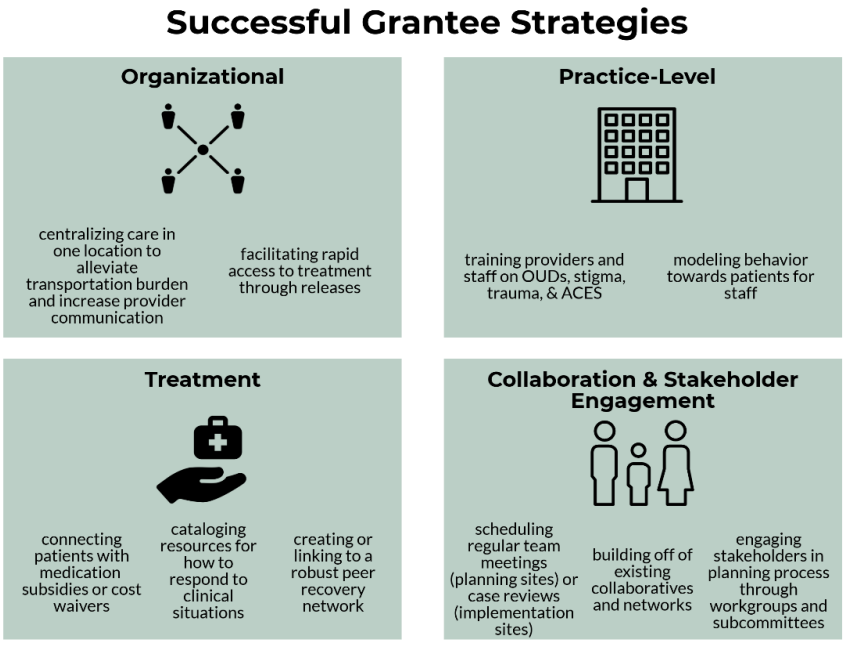
[ii] Examples of external implementation environmental factors include infrastructure, public policies, financial resources, and reimbursement issues. Examples of internal implementation environmental factors includes organizational cultures, organizational capacity, and provider motivation and readiness.

Internal: Data collected thus far indicates grantee organizations, as well as most providers, are motivated and ready to implement MAT within their organizations. Correspondingly, the overall organizational culture of the grantee organizations is a facilitator in the implementation of clinical interventions.

Grantee Milestones

During the first year of the grant, *Addiction Care Program* grantee organizations engaged in a substantial effort to provide training and education to a broad group of stakeholders that included executives, providers, administrative staff, and community partners. Sites reported holding 320 training/education sessions covering a broad range of relevant topics. On average, trainings lasted one to two hours and a total of 3,007 attendees were recorded across the education and training sessions held by grantee organizations. Sessions covered a wide variety of service delivery and implementation topics such as: screening and diagnosis for OUD, chronic pain management, implementing MAT workflows, and patient engagement strategies. A total of 56 individuals received training in MAT. Twenty-five of these individuals went on to complete the required federal training program necessary to prescribe or dispense buprenorphine, greatly increasing the capacity of *Addiction Care Program* grantee organizations to deliver MAT in their targeted geographic areas.

The number of providers delivering MAT across the six implementation grantee organizations nearly tripled from 27 to 73 providers, this represents a 170% increase in the number of prescribers. There was a corresponding increase in the number of patients receiving MAT services at program sites. Between October and March of 2017 there was a 75% increase in the number of patients receiving MAT. Of the 230 patients who were referred for induction, eighty percent were induced on buprenorphine. This high induction rate indicates that most referrals to MAT were appropriate, and that, patients did not face major barriers in starting treatment. For example, it is likely that scheduling the first therapy session and appointment with their PCP was amenable for the patient and increased their chances of starting MAT. In addition to increasing the number of patients seen and induced, grantee organizations also significantly increased the number of behavioral health referrals at their sites. Of the over 900 patients referred to behavioral health services, 94% attended their first behavioral health visit.



Successful Strategies

Administrative and provider interview data collected over the course of the first year of the *Addiction Care Program* provides key insights into the successful planning and implementation strategies used by grantee organizations. Grantee organizations indicated that collaboration and stakeholder engagement have been critical to informing systems of care and establishing the partnerships necessary to provide comprehensive MAT programs that include treatment, social services, and recovery supports. Both providers and patients agree that MAT services provided in environments that are co-located with physical and behavioral health care greatly reduces barriers to access and facilitates a holistic approach to addressing the complex physical and behavioral health care needs of individuals with OUD. A grantee organization without co-located services employed universal releases to increase low barrier access to treatment while at the same time providing for improved communication and care coordination across partner agencies.

Challenges and Opportunities for Change

The *Addiction Care Program* is being implemented at a time when there is considerable interest in developing strategies to expand the state's treatment infrastructure to address the opioid epidemic. However, despite support at both the governmental and health systems levels, substantial barriers to increasing access to MAT remain. Over the course of the first year of the *Addiction Care Program,* grantee organizations identified a number of challenges to expanding access to MAT in primary care settings. These challenges include the time and effort to manage and sustain collaborations across multiple sectors of care; reimbursement and payment for services; external rules and regulations that hinder process and capacity building; staff turnover that diminishes MAT capacity; inclusion of persons in recovery and patients within the collaborative process (including within peer recovery support networks); and lack of infrastructure to support real time data tracking and monitoring of MAT patient panels. *Addiction Care Program* grantee organizations are utilizing the technical assistance and resources provided by the *Addiction Care Program* to lay the foundation necessary to overcome identified barriers and expand access to evidence-based treatment programs within their service areas.

Key Findings

After the first year of the *Addiction Care Program*, the overarching key findings were summarized into the following themes:

Payment/Reimbursement for Services: Resources are one of the greatest barriers to implementing and sustaining MAT programs in a primary care setting. Some treatment programs and insurance companies have placed limits and regulations on who can be prescribed MAT and for what duration. These policies are intended to ensure that MAT is the best course of treatment for patients, yet they often make it harder for practices to offer patient-centered services.[1] Practices often lack the necessary financial resources as well as the human capital, time and organizational capacity to expand and/or sustain MAT programs without external support and funding. It is evident that there continues to be a need to advocate for policies that cover the cost of MAT services and ongoing supports as well as financial and technical resources to make implementing and sustaining MAT programs accessible to practices and providers.

Low Barrier Access to Treatment: Creating low barrier access to MAT is a critical component to ensuring treatment initiation and engagement for high-risk patients.[2] Effective systems must ensure that individuals with OUD needing treatment will be identified, assessed, and receive treatment, either directly or through appropriate referral, no matter where he or she enters the realm of services.[3] Establishing clinical-community linkages is essential for referral, assessment and treatment programs and policies that are consistent with a "no wrong door" policy. Programs that reduce barriers to accessing care and treatment, including low barrier access to detoxification services, are essential and help avoid interruptions in continuity of care.

Patient-Centered Approach: There is a continued need for grantee organizations to focus on creating treatment protocols and policies that include interventions specific to the tasks and challenges faced by patients at each stage of treatment, maintenance and recovery. Common challenges include: time commitments for appointments which lead to increased needs for childcare or time out of work, costs of treatment and medication, inflexible treatment program policies, lack of awareness of available resources, and inadequate insurance coverage. Regularly assessing patient feedback (e.g. having treatment options) and utilizing that information to refine program requirements to meet the unique needs of participants will promote treatment engagement and reinforce long-term participation in maintenance and recovery activities.

Information for Patients and Families: While creating the infrastructure to support MAT in primary care practices is paramount, awareness of OUD, available treatment options, and community supports for individuals and families affected by substance use disorder remains a challenge, particularly in rural communities. Future efforts could include working on communications plans and public awareness outreach within Maine communities.

Stigma: The stigma associated with opioid use is a major barrier for providers of MAT as well as patients in treatment and recovery. Health-related stigma is often described as a socio-cultural process in which social groups are devalued, rejected and excluded on the basis of a socially discredited health condition.[4] Stigma remains a major barrier to accessing treatment for OUD. Patients reported that stigma related to their OUD adversely impacted many domains of their life such as: treatment engagement, employment, housing, and social relationships. In addition, patients reported feeling stigma from family and friends, providers, pharmacists, and from members of their communities. Moreover, providers reported that stigma among medical providers and staff often compounds the challenges associated with the expansion of MAT services. There continues to be a need for training, education and outreach to address stigma associated with OUD and MAT; this training should be targeted at community members, health care professionals, individuals with OUD, and the recovery community.

Auxiliary Recovery Supports: Auxiliary recovery supports including safe housing, food security, and transportation are crucial elements of patient recovery. Although grantee organizations have made strides in facilitating care coordination and establishing relationships with recovery supports, many noted difficulties in establishing the infrastructure necessary to assist patients with the recovery supports. Future efforts could include building models of care with embedded patient navigators in the system who can guide individuals through the process of treatment initiation and ongoing engagement, while at the same time providing assistance with transportation and the hierarchy of recovery supports needed by a person living in recovery (peer supports, employment opportunities, safe and stable housing, access to transportation, etc.).

Peer Support for MAT Providers: Providers agree that current and future MAT prescribers could benefit from professional mentoring, particularly providers that have newly completed the federal X-waiver training required to deliver MAT. Most providers agree that a more formal MAT provider-to-provider network or clearinghouse would be beneficial for further training, consultation, and information sharing.

Overdose Prevention: Given the high rates of overdoses in the state, there appears to be a need for grantee organizations to leverage their current clinical-community linkages and cross-sector collaboration to expand access to Overdose Prevention Education and Naloxone Distribution (OPEND) programs. Of particular importance is developing and implementing screening protocols that identify patients at high risk for overdose[iii] and in need of overdose prevention education.

Systems to Monitor Patient Panels: Collecting valuable data on patient induction, stabilization and maintenance remains a struggle for many grantee organizations whose electronic medical records do not allow for easy tracking or extraction of this data for monitoring MAT patient panels. Finding strategies to help grantee organizations implement systems for ongoing monitoring of OUD patients will be critical to expanding practice and provider capacity for delivery of MAT.

Summary

Maine is among the states hardest hit by a national trend in non-medical uses of opioid prescription drugs, increasing usage of heroin, and opioid-related morbidity and mortality. Addressing the opioid epidemic in Maine is particularly challenging given the rural nature of the state. Despite ongoing state and local efforts to improve access to treatment services for individuals with OUD, promote awareness of the opioid epidemic and foster safe prescribing of opioid prescription drugs, rates of opioid related overdoses and deaths continue to rise. MeHAF's *Addiction Care Program* is addressing crucial access gaps in treatment infrastructure, provider training/education, and organizational capacity to deliver MAT in primary care settings. During the first year of the program, grantee organizations significantly expanded their capacity to deliver MAT in primary care settings as evidenced by the number of new prescribers and the increase in the number of patients served. As grantee organizations move into the second year of the program, they will continue to pilot innovative strategies that address barriers to expanding access to MAT in Maine communities.

[iii] Some examples of those at higher risk for opioid overdose include: 1) persons recently entered into detoxification, 2) persons recently released from incarceration, and/or 3) persons with a diagnosis of depression. For more information, see: https://www.who.int/substance_abuse/information-sheet/en/

I. Introduction

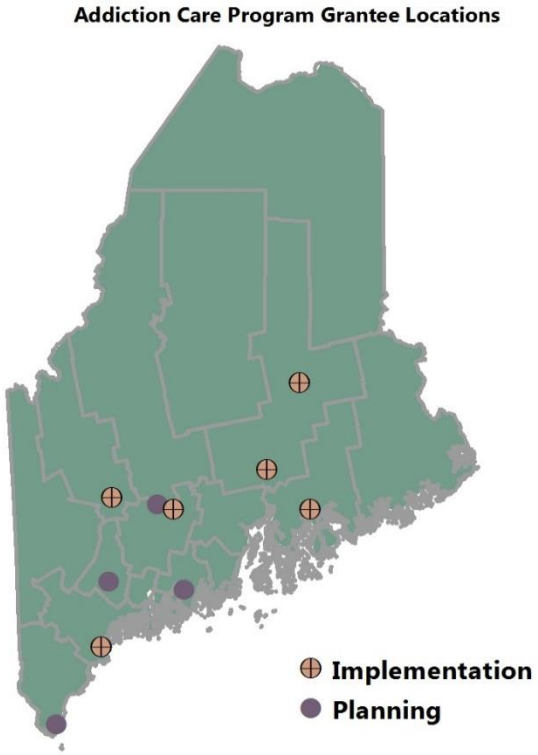
Background

The high rate of opioid misuse and subsequent addiction is a national and local public health crisis with significant impacts on morbidity and mortality, health care expenditures, crime, and health outcomes. This epidemic has stemmed from high prescribing rates in the late 1990s[5] and misinformation about the addictive nature of these medications — which eventually led to diversion, high rates of misuse, and opioid use disorder. In 2016 alone, 11.5 million people misused prescription opioids, 2.1 million people had an opioid use disorder, and an average 116 Americans died after overdosing on opioids each day.[6] Maine has been particularly hard hit by the opioid epidemic; overdose deaths have more than doubled since 2014. In 2016, Maine had the 8th highest rate of opioid-related overdose deaths in the nation (a statistically significant increase from 2015) and the 27th highest rate of opioid prescribing.[7,8] Despite successful statewide efforts to reduce opioid prescribing (between 2016 -2017 rates of opioid prescriptions in Maine declined by nearly 25%), as well as efforts to increase access to treatment in the state, rates of opioid related overdoses and deaths continue to rise.[9] In 2017, there were 418 overdoses in Maine involving pharmaceutical or non-pharmaceutical opioids, which is nearly double the rate from 2014 and accounts for 85% of all drug related deaths in the state.[10] Between 2016 and 2017, there was an 11% increase in the total number of drug-related deaths and a 27% increase in overdoses due to non-pharmaceutical fentanyl/fentanyl analogs.[11] Access to treatment is limited, particularly in rural areas, with an estimated 25,000 to 30,000 individuals seeking treatment annually who are unable to access care because of Maine's limited treatment resources and infrastructure.[12]

Opioid use is a complex problem that needs to be addressed using a multifaceted community-based public health approach. However, the development of appropriate interventions is complicated by the multiple interrelated pathways to opioid addiction and the relationship between prescription opioid and heroin use. Current research indicates prescription opioid use is a risk factor for heroin use and a subset of people who misuse prescription opioids may progress to heroin use.[13] Over the past two decades, substantial headway has been made in understanding the root causes of substance use disorders (SUDs); brain imaging and genetic studies suggest that addiction is a complex disease that impairs brain functioning and is characterized by changes in the brain that persist long after drug discontinuation.[14] Moreover, because there is now substantial evidence that long-term treatments can be effective in managing—but not curing— Substance Use Disorders (SUDs), it is reasonable to classify these conditions as chronic illnesses.[15,16] The shift from categorizing OUD as acute disorders to recognizing them as chronic conditions means that effective treatment models should not focus solely on acute management of withdrawal symptoms but also include long-term strategies for reducing reoccurrence and improving patients' treatment outcomes and quality of life. In addition, histories of trauma are considerably more common among individuals with SUDs. More specifically, it is estimated that individuals with a diagnosis of Post-Traumatic Stress Disorder (PTSD) engage in treatment for SUDs at a rate five times higher than the general population and some studies have found rates of co-occurring trauma among individuals with SUDs as high as 90%.[17,18] Individuals who present with histories of trauma and OUD tend to present with a more complicated clinical picture, experience more severe symptoms, have higher rates of additional psychiatric disorders, and poorer overall physical health.[19,20,21,22] In addition, histories of Adverse Childhood Events (ACEs) and trauma are considerably more common among individuals with SUDs. Considering the high association between trauma and

SUDs, comprehensive intervention strategies that incorporate trauma-informed strategies are critical to engaging and supporting long-term recovery among individuals with OUD.

Overview of Addiction Care Program



In the face of increasing rates of overdose deaths, escalating health care costs, and the tremendous social costs of opioid use disorder, stakeholders from across the state, including health care, public health, law enforcement, government entities, and communities, have been working to address the opioid epidemic. Within primary care, one evidence-based strategy to address opioid use disorder (OUD) is Medication-Assisted Treatment (MAT). MAT is the combination of behavioral therapy with medication. For OUD the medication is buprenorphine (common brand names Suboxone or Subutex).[23] The approach involves long-term use of medications and is akin to insulin use among people with diabetes. Evidence has demonstrated that MAT is more effective at treatment retention and reduction of heroin and prescription opiate misuse than using time-limited medication (i.e., opioid detoxification or tapering) or psychosocial interventions alone; the latter approach is associated with higher rates of recurrence.[24, 25] Primary care providers are uniquely situated to deliver MAT as they are at the front line of the health care system and provide chronic disease management; 50% of opioids dispensed come from primary care settings.[26] Although the evidence supports the effectiveness of MAT for addressing OUD, implementation in busy primary care practices remains challenging. National implementation efforts to expand MAT have faced patient, provider, and practice-level barriers as practices undertake their activities to either implement or expand MAT. These barriers may vary slightly by primary care practice, but for the most part include: inadequate organizational support; limited physician knowledge and training; poor access to supportive behavioral health services; as well as regulatory and bureaucratic obstacles.[27 ,28,29,30]

Understanding the existence of these barriers, the Maine Health Access Foundation (MeHAF) is providing funds to expand access to medication-assisted treatment (MAT) for people with OUD through their *Addiction Care Program*. The foundation is currently leading a two year initiative designed to expand access to MAT in primary care settings for medically underserved individuals with OUD. The *Addiction Care Program* builds upon MeHAF's prior work with Maine Quality Counts (QC) and the Maine Medical Education Trust (MMET) to assess the needs and capacities of providers and practices around the state with regard to offering MAT in primary care settings. As part of the *Addiction Care Program*, MeHAF has contracted with QC to provide training, education, and technical assistance to support grantee organizations, both individually and as a cohort. In addition, QC has sub-contracted with Eric Haram, LADC of Haram Consulting, Maine Behavioral Healthcare, for the services of Mary Jean Mork,

LCSW, and Maine Medical Association, principally Gordon Smith, Esq., to provide specialized assistance in the areas of integrated treatment models for OUD, billing/coding, and public policy, respectively. The technical assistance services are designed to support grantee organizations in making the practice transformations necessary to effectively implement, support, and maintain MAT services in primary care settings.

Started in April of 2017, this two-year program has provided a total of approximately $800,000 to four planning and six implementation grantee organizations across the state of Maine. The *Addiction Care Program* planning and implementation grantee organizations are working to expand access to MAT in primary care by building capacity at the practice and provider levels. As part of their efforts to increase the availability of MAT, grantee organizations are engaging a broad-based network of partners in their programs to ensure the necessary referral relationships and wrap-around services to enhance access to treatment and promote sustained, long-term recovery for people in treatment for OUD.

The four planning grantee organizations are building their practice and provider capacity to begin delivering MAT services on a pilot basis. Table 1 provides a brief overview of the planning grantee organizations with information from their initial grant applications; current work has evolved and been refined.

Table 1. Planning Grantee Organizations

Lead Organization	Project Description	Geographic Area of Focus
LINKING A COMMUNITY: BRINGING PEOPLE TOGETHER FOR COMPREHENSIVE MAT		
LincolnHealth	Assess provider capacity for MAT expansion and build on existing relationships with medical and social service providers, specialty addiction care services, and representatives from the recovery and treatment communities in order to improve access to patient-centered treatment through a county-wide MAT program.	Lincoln County
SOMERSET EXPANSION FOR ADDICTION CARE COLLABORATIVE		
Kennebec Behavioral Health	Convene provider and community stakeholders to develop an implementation plan that will meet the need for a more integrated system of care among primary care, specialty care, consumers, and critical stakeholders, with Kennebec Behavioral Health as the lead.	Somerset County
CommUNITY: A COLLABORATION TO EXPAND PATIENT-CENTERED ADDICTION CARE		
Tri-County Mental Health Services	Organize a coalition of local organizations through a Steering Committee and Subcommittees to design the structure of a "virtual organization" of multi-disciplinary providers to provide MAT services for uninsured and underinsured populations.	Androscoggin County
YORK HOSPITAL INTEGRATED MEDICATION ASSISTED TREATMENT (IMAT) INITIATIVE		
York Hospital	Establish a collaborative and multidisciplinary network of internal and external partners to develop a patient-centered system of addiction care through a hub-and-spoke model to provide capacity for triage, diagnosis and referral to MAT services.	York County

The six implementation grantee organizations are working on expanding their existing capacity to deliver MAT in primary care settings, enhance their capacity to provide low barrier access to MAT, and increase the number of patients receiving MAT services through their programs. Table 2 shares a brief overview of the implementation grantee organizations with information from their initial grant applications; current work has evolved and been refined.

Table 2. Implementation Grantee Organizations

Lead Organization	Project Description	Geographic Area of Focus
DEVELOPING AND IMPLEMENTING A GENDER-SPECIFIC OPIOID HEALTH HOME FOR WOMEN		
Amistad	Develop a gender-specific Opioid Health Home for women, with a focus on effective care coordination and safe housing options, and expand provider capacity for MAT in primary care medical homes through a hub-and-spoke model.	Cumberland and York Counties
HEALTH ACCESS NETWORK MAT EXPANSION		
Health Access Network	Increase care coordination and management support for MAT providers, and provide training and supervision for Advanced Practice Clinicians regarding MAT, as well as training in behavioral health, drug, and alcohol treatment.	Penobscot County
DOWNEAST OPIOID TREATMENT HUB AND SPOKES PROJECT		
Healthy Acadia	Expand the community-based Downeast Opioid Treatment Hub and Spokes Project, Peer Recovery Coach Services, and alternative pain management strategies.	Hancock and Washington Counties
RURAL ADDICTION CARE EXPANSION (RACE) TO RECOVERY		
Healthy Community Coalition	Lead a community-wide effort to increase provider capacity and access to MAT, with a focus on providing patient-centered addiction care to pregnant women, new mothers, and infants.	Franklin and Oxford Counties
EXPANDING ACCESS TO MAT IN THE CENTRAL MAINE REGION'S PRIMARY CARE PRACTICES		
MaineGeneral	Train and support currently prescribing physicians and newly prescribing physicians, physician assistants, and nurse practitioners to provide MAT by navigating system improvements to practice workflows and cross-organization tracking.	Kennebec, Somerset, and Sagadahoc Counties
A REGIONAL, RAPID-ACCESS APPROACH TO MAT		
Penobscot Community Health Care	Integrate a regional, rapid-access clinic in primary care that offers Suboxone (buprenorphine) induction, primary care, individual and group counseling sessions, and care management.	Penobscot, Somerset, and Waldo Counties

II. Evaluation Methodology

Overview

The Muskie School of Public Service at the University of Southern Maine was contracted by MeHAF to conduct an independent evaluation of the implementation and effectiveness of the *Addiction Care Program*. This program evaluation is designed to inform current and future planning activities; guide the implementation and refinement of the intervention strategies; provide ongoing feedback to grantee organizations on improvements to access and delivery of MAT in their region; and offer a summative

assessment of the implementation experience and success of the intervention strategies. The primary goals of the *Addiction Care Program* year one evaluation activities were to:

- examine the structural factors (external context) and organizational-level factors (internal context) that influence the planning or implementation of MAT in primary care settings;
- assess the barriers and facilitators to expanding access to MAT for medically underserved populations; and
- document successes and lessons learned from initial planning and implementation activities.

The evaluation team utilized a mixed-methods design, including the collection of both quantitative and qualitative data, to document the implementation environment; examine factors impacting availability and access to MAT; and evaluate grantee strategies and whether and/or how these approaches reduce barriers to access to treatment and recovery supports for individuals with OUD.

Data Collection

Administrative and Clinical Data: During the first six months of the grant, the evaluation team worked with grantee organizations to develop cross-site and site-specific metrics to track strategies, goals and outcomes. Grantee strategies and goals were guided by Site Self Assessments which were completed by all grantee organizations. Data dashboards were developed using Excel spreadsheets to assist grantee organizations' tracking of cross-site and site-specific metrics and provide rapid cycle feedback on program strategies through continuous quality improvement (CQI) metrics. These dashboards were developed collaboratively with each grantee organization, based on their goals and data collection needs, in consultation with Muskie and Eric Haram. In health care systems, data dashboards are frequently used to manage and track health care information, CQI metrics and other essential measures to monitor programmatic performance and patient outcomes. During year one of the *Addiction Care Program*, planning grantee organizations collected administrative data on: education and training, stakeholder engagement, and capacity building (e.g. new policies, workflows, waivered providers). Implementation grantee organizations tracked clinical CQI metrics related to screening and assessment, treatment initiation, stabilization, and maintenance including: number of patients screened for OUD, total patients diagnosed with OUD, total patients induced on buprenorphine, number of behavioral health referrals, number of urine drug screens and number of patients with universal agreements. Aggregate administrative and clinical data from the dashboards provides valuable feedback about grantee milestones and challenges faced during the first year of the initiative.

Surveys: Gathering data on organizational climate (including provider attitudes), practices, and patterns of care is crucial to enhancing efficiency in health care delivery while continuing to improve patient outcomes. Baseline surveys were used to gather data on organizational climate, readiness for change and provider attitudes and behaviors. A total of 302 surveys were distributed to executives, Change Team members and providers between September and October of 2017 using Snap Survey Software, a

web-based survey tool. A total of 150 surveys were completed for a response rate of 50%, which is consistent with electronic survey response rates among health care providers.[31] Thirteen percent of survey respondents were executives, 35% were Change Team members and 52% were providers. The majority of survey respondents were female (65%) and between the ages of 45 and 64 (56%). The bulk of provider respondents were from planning sites (78%), most likely due to the fact that sites defined potential participants for recruitment and planning sites included nearly three times as many providers in their recruitment pool. At the time of the survey, only 16% of provider respondents had completed the Drug Treatment Act of 2000[iv] required training and certification to obtain the required X-waiver to prescribe buprenorphine.

Targeted Survey Respondents

Executive: Individuals who are part of health system or organizational executive leadership.

Change Team: Individuals who are involved in the day to day collaborative and operational aspects of project implementation.

Providers: Prescribers and anyone with direct interactions with participants/patients. This staff includes but is not limited to: MD/DOs, PAs, RNs, LPNs, CMA/MAs, managers, LCSWs, and other behavioral health staff.

Interviews: A total of 36 providers from participating sites were interviewed during year one of the program. Staff who agreed to participate were asked about the challenges associated with implementing MAT; the health system, practice or provider-level factors that facilitated the implementation process; organizational factors that impact the planning and implementation process; and individual, provider-level issues that influence the adoption and delivery of MAT. All providers (including prescribers and anyone with direct interactions with patients; parallel to provider survey respondents) engaging in MAT activities were eligible to participate in the semi-structured group interviews.

Focus Groups: In an effort to understand barriers and facilitators to accessing care for OUD, as well as current service gaps and unmet needs, eight focus groups were conducted throughout the state with persons in recovery from the grantee organizations (n=37). Persons in recovery, including those currently in treatment, planning on engaging in treatment, and/or engaged in the planning and collaboration of the *Addiction Care Program* efforts were interviewed. Domains of interest included: experiences initiating and engaging in treatment; barriers and facilitators to accessing care for OUD; patient experiences receiving MAT; the impact of MAT on patient commitment to treatment and recovery; current unmet treatment and recovery needs; and patient recommendations for enhanced patient-centered care.

[iv] The Drug Addiction Treatment Act of 2000 (DATA 2000) expands the clinical context of medication-assisted opioid dependency treatment. Qualified physicians are permitted to dispense or prescribe specifically approved Schedule III, IV, and V narcotic medications (medications that have a lower risk for abuse, like buprenorphine) in settings other than an opioid treatment program (OTP). OTPs provide medication-assisted treatment (MAT) for people diagnosed with an opioid use disorder.

Data Analysis

Muskie utilized both quantitative and qualitative data analysis techniques to analyze and triangulate data collected from organizations, providers, and patients. In order to maintain the confidentiality of respondents, all data presented in this report has been de-identified and presented in the aggregate. Quantitative administrative, clinical, and survey data were analyzed using appropriate descriptive statistics such as means and frequencies; analysis was conducted in Microsoft Excel and SAS 9.4. Qualitative data (e.g., semi-structured interviews, focus groups, key documents) were systematically coded to explore how the implementation of MAT in primary care practices unfolds using the qualitative software program NVivo.[32] Qualitative data analysis was done iteratively to build a coding scheme for all textual data using the grounded theory technique, in which codes are drawn from the text and coding involves frequent comparative analysis of the data. We compiled a code book of emerging themes and constructs with attention to those elements suggested to be important for successful implementation of MAT in primary care settings. Qualitative data was compared with quantitative data to further explicate and validate findings and to identify areas needing exploration.

The evaluation team and MeHAF recognize the importance of language in perpetuating the stigma associated with OUD. Therefore, throughout this report, data is presented using recommended terminology from the Substance Abuse and Mental Health Services Administration guide to language.[33] For a more detailed description of key terminology used throughout this report please refer to Appendix A, *Glossary of Key Terms*.

Data is presented using traditional graphs and tables as well as infographics and exemplar quotes taken from interviews and focus groups. It is important to note that some of the quotes from patients include terminology that reinforces stereotypes about individuals with OUD. These verbatim quotes represent the views of individuals with OUD and it is important for us to allow individuals with substance use disorders the autonomy to define how they identify themselves.[34] Moreover, the inclusion of patient perspectives is essential to understanding how to effectively address stigma as well as other key barriers and facilitators to expanding access to patient-centered care for OUD.

III. Evaluation Results

Implementation Context

External Implementation Environment: Improving the quality of treatment for OUD through the implementation of evidence-based treatment practices (EBPs) has increasingly been the focus of federal and state agencies. However, research indicates that initiatives aimed at promoting the widespread implementation of MAT programs are often undercut by limited infrastructure, public policies, insufficient reimbursement, and limited financial resources.[35] There is a growing awareness and a readiness in Maine to develop strategies to overcome these barriers and enhance the state's ability to effectively address opioid misuse and OUD. The work being carried out by the *Addiction Care Program* grantee organizations aligns and expands upon existing state and local efforts to increase capacity in the state to prevent and treat OUD. For example, the Maine Opiate Collaborative (MOC), which was led

by the U.S. Attorney's office, was established in September 2015 to facilitate the creation of a broad, multi-dimensional approach to addressing OUD in the state including education, prevention, treatment, recovery, and law enforcement. The Collaborative created three multi-stakeholder task forces which made recommendations for clinical, policy, and funding changes needed to address the opioid crisis across the state (released in May 2016). A legislative taskforce was formed in the spring of 2017 and charged with examining the MOC recommendations, as well as current laws, and initiatives undertaken by other states, to develop a set of recommendations to address Maine's opioid crisis. (Note: the Opioid Taskforce released its final report in December of 2017 and is no longer meeting.) Many of these recommendations are being addressed by *Addiction Care Program* grantee organizations. As part of its policy strategy to lessen the opioid crisis, the Maine Legislature passed a strict new opioid prescribing law that went into effect in July 2016 and is the current environment under which providers are prescribing opioids. The 2016 law made five major changes to opioid prescribing. It:

- mandates use of the State's Prescription Monitoring Program (PMP) and expands its users;
- enacts strict limits on opioid prescribing for acute and chronic pain (ALL opioids, not just Schedule II);
- mandates education for opioid prescribers;
- mandates electronic prescribing of opioids;
- provides for a "Partial Fill" at a pharmacy, at the direction of the patient.

Additionally, the prescriber licensing board's Chapter 21 rules require additional actions in connection with opioid prescribing, such as universal precautions for opioid prescribing; opioid continuing education requirements for all licensees of the Board of Licensure in Medicine (the MD Board); and mandated urine drug screens for patients. Implementing the new opioid prescribing law has been a considerable effort and both QC and MMA continue to offer technical assistance and provider education to bring providers into compliance with the new regulations. The challenges health systems and providers have faced translating the new policy into practice highlight the need for supports like the *Addiction Care Program,* that provide the resources necessary to facilitate both practice transformation and build organizational and provider capacity to effectively address OUD in primary care settings.

In addition to other state-level policy changes, the Maine Department of Health & Human Services, Office of Substance Abuse and Mental Health Services established an Opioid Health Homes program (OHH) that provides funding to providers who deliver MAT to patients with OUD to cover costs of intensive, intermediate and long-term treatment, including, but not limited to, the cost of medication, screening, behavioral health treatment and office visits for 1,000 uninsured patients. However, programmatic requirements have made it difficult for the majority of practices and providers in the state to participate in the OHH program; several of the grantee organizations are leveraging the MeHAF funds to help implement the infrastructure necessary to qualify for the program. In addition to the efforts led by the State of Maine, QC and MMA have led a collaborative effort, Caring for ME, since 2016 that aims to bring together a wide set of partners to promote shared messages, educational resources, and practical tools to enhance provider capacity to deliver MAT and provide ongoing training and support to providers delivering MAT.

Although the state has begun to implement the OHH program to provide MAT and care coordination for low-income individuals living in Maine, the state has been unable to expand access to treatment

through Medicaid expansion. Medicaid programs have historically filled critical gaps in responding to public health crises and research indicates that of nonelderly adults with OUD, those with Medicaid are twice as likely as those with private insurance or no insurance to receive treatment.[36] Medicaid facilitates access to treatment by covering numerous inpatient and outpatient treatment services, as well as the medications prescribed as part of MAT. Maine voters approved Medicaid expansion through a referendum in November of 2018. The decision to expand Medicaid coverage in Maine has the potential to transform substance use disorder treatment in the state however, implementation of expansion has been delayed by disagreements between the executive and legislative bodies on how to fund the program. The costs associated with MAT are major barriers to accessing care for OUD in Maine. Medicaid expansion would make at least 70,000 additional Maine residents eligible for Medicaid and, as evidenced by expansion states who saw treatment for substance use disorders increase under expansion, could play a vital role in increasing access to treatment for OUD and decrease opioid related morbidity and mortality.[37]

While the *Addiction Care Program* is being implemented at a time when there is considerable interest in developing strategies to expand the state's treatment infrastructure, there are still substantial barriers to expanding access to MAT in Maine. Despite support at both the governmental and health systems levels, there remain substantial policy level barriers to increasing access to MAT. Legislative efforts to address the need for expanding the state's prevention and treatment infrastructure have not yet provided the resources necessary to fully implement the recommendations put forth by the Taskforce. As a result, health systems are seeking alternative solutions to address the needs of their patient populations. There are currently several efforts being led by health systems, community-based collaborations, and social service agencies across the state to expand access to treatment and recovery supports for individuals with OUD.

Internal Implementation Environment: Although the broader statewide implementation climate is critical to supporting efforts to expand the use of MAT to address OUD, organizational culture and readiness are increasingly recognized as factors that play a key role in determining the success of quality improvement efforts aimed at addressing substance use disorders. Research indicates that under the right circumstances, primary care practices that are ready to implement evidence-based care can do so if they are provided with effective facilitation and training.[38] Health care organizations that emphasize teamwork, coordination, and communication among staff have been associated with higher rates of successful implementation of quality improvement activities including operationalizing new policies, programs, and practices. Moreover, research indicates that efforts to improve the delivery of evidence-based care that focus only on provider knowledge and decision support have been largely unsuccessful. Interventions that target providers and promote practice transformation, are critical to improving the quality of care.[39]

Organizational Readiness**:** Baseline survey and interview data from *Addiction Care Program* grantee organizations indicates that participating sites are motivated and ready to implement MAT programs. The primary reason individual grantee organizations pursued participation in the *Addiction Care Program* was a clear need to address OUD at the community level.

The 2015 *Maine Shared Community Health Needs Assessment*, a coordinated effort led by several of the state's largest health systems and the Maine Center for Disease Control and Prevention (Maine CDC), identified drug and alcohol use disorders as the top-ranked health issue in the state. Executive leadership at the grantee organizations reported actively seeking out opportunities to address this clearly identified issue within their service areas.[40]

Survey Participants and Response Rates		
Survey Type	**Participants**	**Response Rate**
Executive	Individuals who are on health system or organizational executive leadership.	N=19/36 (53%)
Change Team	Individuals who are involved in the day to day collaborative and operational aspects of project implementation.	N=39/64 (61%)
Provider	Individuals include prescribers and anyone with direct interactions with participants/patients. This staff includes but is not limited to: MD/DOs, PAs, LPNs, RNs, CMA/MAs, LCSWs, managers, and behavioral health staff.	N=92/193 (48%)
Overall Response Rate: (150/302) = 50%		

Moreover, the majority of executives, Change Team members and providers (86%) associated with grantee organizations strongly agreed/agreed that expanding access to MAT through the *Addiction Care Program* would lead to improved patient outcomes for individuals with OUD. Implementation grantee organizations (98% implementation vs. 81% planning) and Change Team members (97% Change Team vs. 79% non-Change Team) were significantly more likely to feel that expanding access to MAT in primary care settings is fundamental to improving patient outcomes ($p < 0.01$). Many respondents reported that expanding access to MAT is important because it is an evidence-based treatment that is proven to be effective in saving lives and helping many patients recover from OUD. In addition, three out of four survey respondents indicated that they strongly agreed/agreed that expanding access to MAT in primary care settings is supported by evidence and takes into consideration the needs and treatment preferences of patients. These findings are supported by the data we collected through conversations with patients. The majority of focus group participants indicated that they had engaged in a variety of different treatment programs, but office-based outpatient MAT was clearly articulated as their preferred treatment mode. This was largely due to the fact that outpatient MAT programs, particularly for those in long-term recovery, were viewed as the most expedited low-barrier way to access buprenorphine with care management, linkage to wrap-around treatment and primary care, as needed.

> *"MAT saves lives and works to bring people into recovery."*
> -**MAT provider**

Organizational Culture**:** Organizational culture and climate plays a key role in ensuring the successful implementation of clinical interventions.[41] Survey responses indicate that the organizational culture at grantee organizations facilitates the use of innovative strategies to improve patient experience and promotes population health. Survey respondents indicated that staff members at their organization have a sense of personal responsibility for improving patient care and regularly work to improve the efficacy of the care they provide (Figure 1). The majority (82%) of respondents strongly agreed/agreed that executive management in their organization believes that current practice patterns can be improved. Yet, providers were significantly less likely than non-providers (i.e. Executive and Change Team members who were not providers) to strongly agree/agree that clinical innovation and creativity designed to improve patient care is rewarded; 42% versus 75% respectively. In addition, providers were significantly less likely than non-providers to feel that senior and/or clinical leadership at their organization provide clearly defined responsibilities, promote a team-based approach to addressing issues related to clinical care, and facilitate communication between clinical services departments; all important components to effectively implementing integrated models of care for complex conditions such as OUD (Table 3).

Figure 1. Staff Members In My Organization…

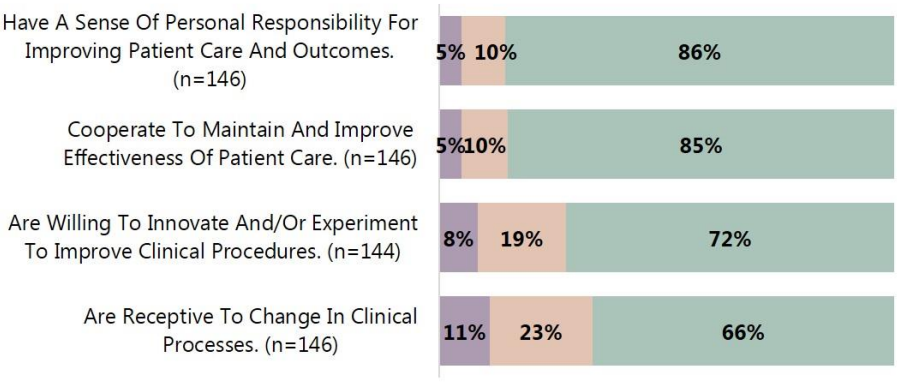
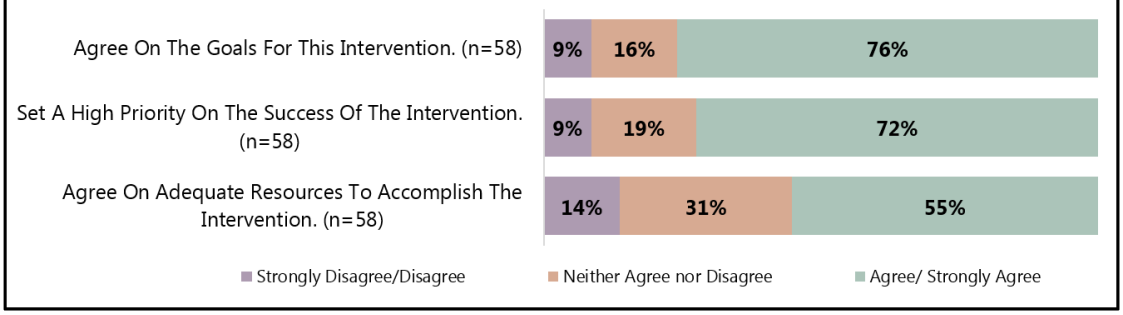


Table 3. Strongly Agree/ Agree that Senior Leadership / Clinical Management in My Organization…		
	Provider (n=54)	**Non-Provider (n=89)**
Clearly define areas of responsibility and authority for clinical managers and staff	53% (n=47)	76% (n=41)*
Promote team building to solve clinical care problems	55% (n=49)	80% (n=43)*
Promote communication among clinical services and units	60% (n=53)	80% (n=43)*
* Statistically significant difference between Providers and Non-Providers (p<.01)		

Organizational leadership plays a pivotal role in facilitating the implementation and sustainability of change within clinical practices. In order to effectively integrate MAT into primary care settings, senior administrative and clinical leadership must perceive the value of investing in proactive, chronic care treatment models as well as provide the resources necessary to support integrated care, including investing in information systems and outcomes measurement. Although providers express mixed views about organizational leadership regarding MAT implementation or expansion, members of the Change Team who are primarily responsible for implementing the project strategies at each site, did feel that

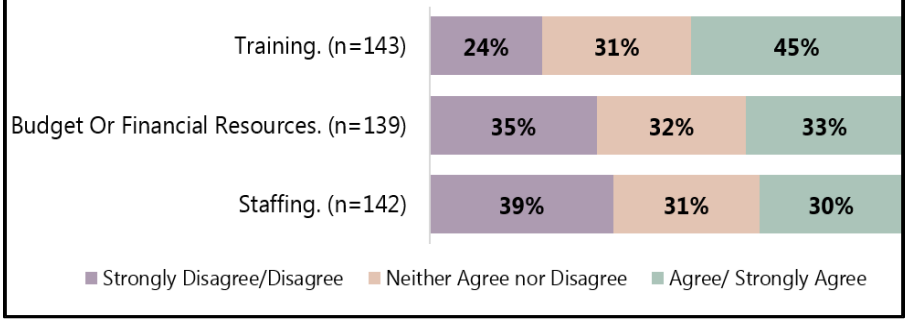
executive and/or clinical leadership within their organization agreed upon the goals of their *Addiction Care Program* project and that leadership has prioritized the success of the program (Figure 2). Yet, it is important to note that Change Team members strongly disagreed/disagreed or reported neutral responses when asked if leadership agrees upon the resources necessary to achieve programmatic goals. This indicates that organizational leadership may not have a full understanding of the resources necessary to effectively implement their programmatic strategies (Figure 2). These results signify that there is a need for more formal feedback structures required between Change Teams and Executive Leadership.

Figure 2. Senior Leadership/Clinical Management In My Organization...



Research indicates that even within organizations that are highly motivated to implement MAT to address OUD, insufficient organizational investment of resources as well as external funding policies that fail to sufficiently reimburse for provider time and other MAT-related expenses can create major barriers to implementation.[42] When asked about the challenges organizations face when trying to implement or expand MAT services, the broader group of respondents reiterated the concerns expressed by Change Team members about the resources devoted to the initiative. In addition to concerns about lack of funding and budgetary restraints, respondents also indicated that there is often a lack of support in terms of staffing as well as appropriate training and education to help facilitate the implementation of new policies and protocols (Figure 3).

Figure 3. In my organization, when there is agreement that change needs to happen, we have the necessary support in terms of...



In order to successfully implement change within health care settings, organizations need to have a clear vision, well-defined plans and expectations of providers as well as staff supports for implementation. As part of the *Addiction Care Program*, over the past year, grantee organizations have engaged in comprehensive planning and implementation processes which have allowed them to effectively address some of the organizational culture and climate issues described above.

Grantee organizations report using multi-pronged strategies that are focused on creating organizational cultures that help facilitate the implementation process (e.g. updating workflows, policies, procedures) while simultaneously utilizing targeted training and education strategies to enhance providers' abilities and willingness to deliver MAT. As a result, grantee organizations have been able to overcome organizational barriers and create implementation environments that are much better equipped to offer providers the supports they need to integrate MAT into their clinical practice.

Provider Motivation and Readiness: Despite overall high motivation to help individuals with OUD, survey respondents from implementation projects (vs. those on planning projects) or on a Change Team (vs. those not on a change team) were significantly more likely to want to work with individuals with OUD. Twenty percent of respondents were ambivalent towards working with individuals with OUD and 18% did not want to work with these individuals. Concerns over lack of provider willingness was a noted challenge to MAT expansion, including hesitation to participate and providers' perceptions of "too many hoops/barriers to patients entering care" for them to consider becoming involved. These findings mirror national research that indicates a reluctance to use MAT among providers; frequently cited factors include: negative attitudes about MAT; insufficient or inaccurate knowledge about MAT in the general medical community; inadequate reimbursement for MAT services; and a lack of resources needed to effectively provide and support MAT programs.[43] It is important to note that project managers of grantee organizations determined to whom the surveys were deployed, and therefore the surveys may have reached a wider breadth and more diverse pool of providers compared to those interviewed. Providers reached through surveys may not have been aware of their respective site's MAT project or may have been less supportive of the work of the project.

Barriers to Expanding Access to Treatment for OUD

Organizational-Level Barriers:

Resources: The most commonly identified challenge to expanding access to MAT among executives, Change Team members, and providers was a lack of funding and the budgetary constraints faced by their organizations. Providers indicated that reimbursement for services was the number one barrier to expanding access to MAT. In addition, providers indicated that there are a number of administrative, infrastructure, and compliance issues that make implementing and delivering MAT difficult in primary care settings. Many participants expressed concerns about administrative and regulatory burdens; increases in workload; expanded responsibilities related to coordinating the care of complex patients; and the challenges associated with navigating reimbursement policies. For example, many providers indicated that they and their organizations lack understanding about obtaining reimbursement for office-based medication management, which presents additional challenges for expanding access to MAT in primary care practices.

> *"If we could get the cost or reimbursement barriers out of the way, the things we're talking about on the ground about changing hearts and minds—we can do that if we just keep working at it."*
>
> -**MAT Provider**

Provider and Program Shortages**:** Patients frequently cited the lack of available MAT providers in their community as a barrier to access care. Workforce shortages and staff turnover continue to constrain the ability of organizations to expand access to MAT. In our discussions with providers they continually mentioned not having enough providers and counselors to effectively address the demand for services in their communities. In addition, providers are faced with limited staff to help with scheduling and managing care coordination for MAT patients. A lack of staff to oversee these activities has forced prescribers to limit the size of their MAT patient panels. As one prescribing provider noted, ***"the irony of that stigma (perceived work burden) is if we could spread this out over more people, it wouldn't be so onerous."*** In addition, particularly in rural areas, patients are faced with limited access to detoxification and MAT treatment programs because of the states limited treatment infrastructure.

> *"This epidemic … probably wouldn't be half as bad if everybody had access to help when they wanted it. I wanted help a long time before I got it."*
>
> -**Person in recovery**

Provider-Level Barriers:

Provider Training: Research indicates that primary care providers recognize the importance of addressing OUD and increasingly view it as part of their clinical responsibilities.[44] However, despite ambitious efforts nationwide to implement comprehensive screening and MAT for OUD in primary care, the number of primary care providers delivering MAT remains low, particularly in rural states such as Maine. Providers expressed a wide range of comfort levels related to working with individuals with opioid use disorder and the delivery of MAT; many lack confidence in their ability to manage patients with opioid use disorder. Lack of proper training, expertise, and tools for providers and staff were regularly mentioned as barriers to expanding access to MAT. The workforce challenges associated with implementing MAT into primary care settings are significant and providers expressed apprehensions about the time-constraints associated with working with patients with complex medical needs. Based on the feedback we received from providers, in order to effectively expand access to MAT, it appears there is a need for trainings for a variety of providers (prescribers, nurses, social workers, therapists, counselors, peer recovery coaches, etc.) as well as a sustained investment in developing the appropriate infrastructure and supports for staff all at levels. In order to address these issues, grantee organizations made significant investments in training and education throughout the first year of the project.

> *"I think it is a little daunting that you have to go through an extra step to get this X waiver, and there's a lot of things you have to keep track of in order to do it properly. I'm sure the majority of us prescribing are going to be audited at some point, so I think there's some fear there. It's not just prescribing someone's blood pressure medicine."*
>
> -**MAT Provider**

Stigma: Providers reported that stigma among medical providers and staff often underlies or compounds the challenges associated with many of the barriers to MAT expansion that were noted above. In general, many providers are uncomfortable with treating individuals with OUD due to the

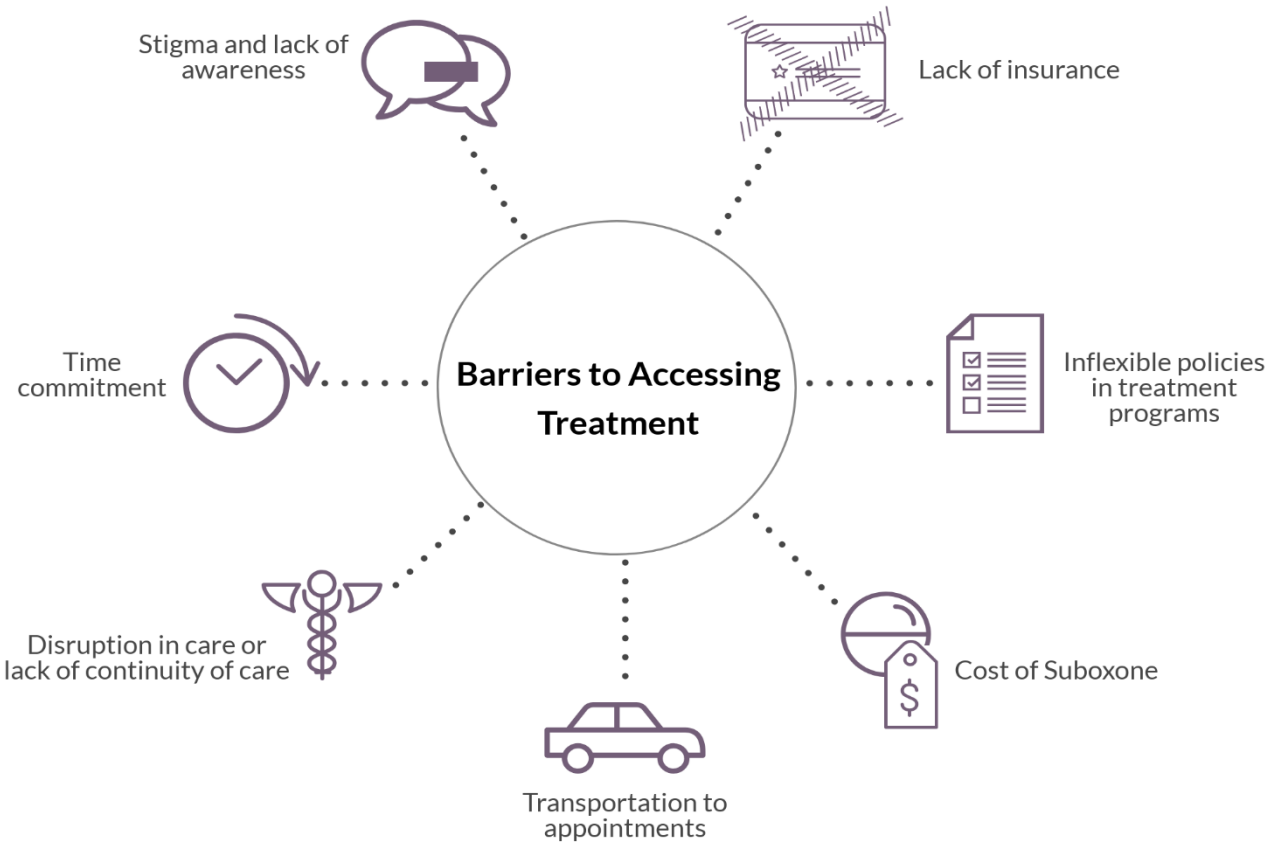
nature of the disease. As one doctor noted, ***"Negative factors of why other potential prescribers don't do it would be they're uncomfortable with the medication, with the patients, with the disease process."*** In addition, many providers continue to be resistant to addressing OUD in primary care. ***"That's the biggest hurdle. If we could convince providers that this is part of treating your patient just like anything else, then you might get more buy-in."*** Concern over liability if patients experience a recurrence while on MAT prevents many therapists and medical and behavioral health providers from delivering MAT. As such, misconceptions about processes and workloads held by providers produce a fear of treating OUD, which contributes to the lack of providers willing to prescribe medications for OUD treatment. Providers reported that if there were more resources and infrastructure in place to support MAT providers, more attention could be placed on addressing stigma.

Barriers to Initiating and Engaging in Treatment for OUD

Barriers to initiating and engaging in treatment for OUD such as health care workforce shortages, transportation limitations, and stigma have been well documented in the literature.[45] Furthermore, individuals in rural communities are often disproportionately impacted by these barriers and individuals with OUD living in rural areas are often faced with additional challenges to accessing treatment and recovery services. In our discussions with providers and patients, seven primary themes emerged as obstacles to accessing treatment for OUD including: lack of insurance, inflexible treatment program policies (i.e., getting "kicked out" of treatment for missing a meeting), cost of Suboxone, transportation, disruptions in care, time commitment, stigma and lack of awareness (see *Patient and Provider Perspectives: Barriers to Accessing Treatment* infographic, next page).

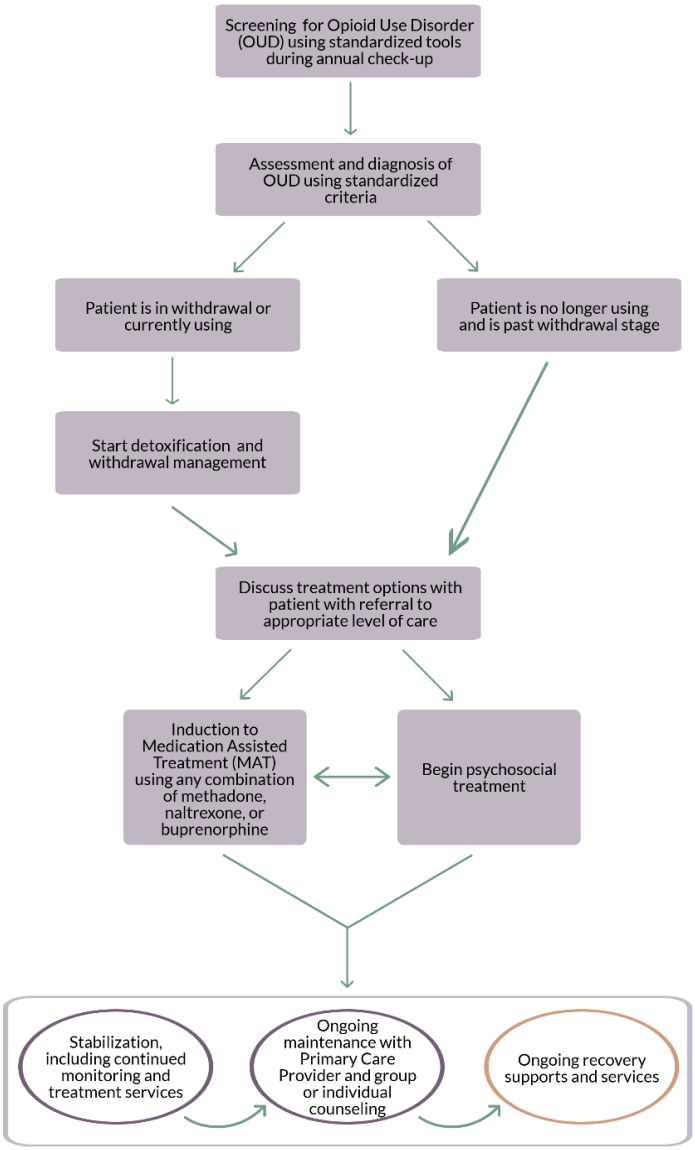
> *"I think there's still a lot of stigma across medical providers, and that is a service barrier. There's also really unrealistic views that this is going to add a ton of time to people's practices."*
>
> **-MAT Provider**

Patient and Provider Perspectives: Barriers to Accessing Treatment



Identifying Pathways to Treatment: Overall, patients cite a number of reasons why initiating and engaging in treatment can be difficult even when they are ready to seek help. The majority of patients indicated that there are often no clear paths for individuals seeking treatment for OUD (for one example of how a person might enter MAT in a primary care setting, see *Example Clinical Pathways for MAT* infographic, next page). Inadequate detoxification and treatment options, coupled with the lack of MAT providers in the state, makes identifying and accessing treatment difficult for patients. The majority of individuals reported using informal social networks to identify sources of treatment and gain an understanding of how to access care. Patients reported a variety of mechanisms for identifying and entering into treatment; while some people initiated treatment via court order or through the criminal justice system, others reported seeking help through a health care provider or using online resources or the phonebook to identify treatment options. These patients describe spending hours on the phone or online trying to identify a MAT provider; when they did identify potential prescribers they were often told the provider was no long offering MAT services, or was at full capacity.

Example Clinical Pathways for MAT in the Outpatient Setting

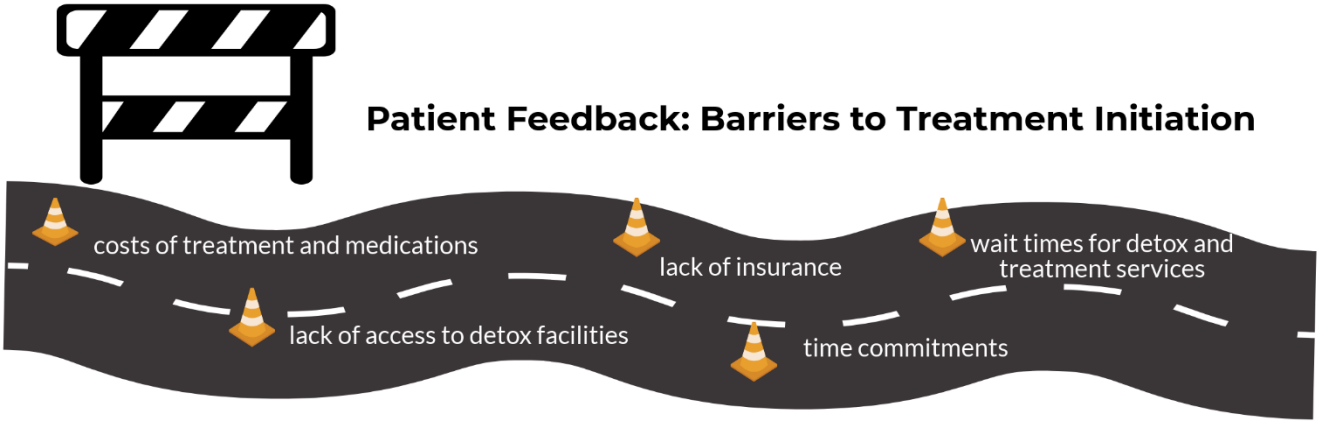


Moreover, both providers and patients indicated that once an individual identified a potential source of treatment they often faced additional barriers to initiating care including long wait times to see prescribers, lack of access to detoxification facilities, lack of insurance and/or the financial resources to pay for treatment and medications, and the inability to meet the intensive requirements, including time commitments, often required as part of OUD treatment program. (See *Patient Feedback: Barriers to Treatment Initiation* infographic, next page.)

Patients overwhelmingly indicated a need for education and outreach to family and friends about treatment options and the use of MAT to address OUD so that peers and loved ones will be more likely to assist patients with getting access to treatment. Patients frequently mentioned the need for in-depth, consistent, evidence-based education to individuals, friends and family members regarding treatment options and the use of MAT to address OUD. Many individuals also mentioned the need for outreach about available services in their communities so family and friends can help individuals get access to treatment when needed. Many respondents indicated that they were unaware of treatment services in their area with one individual noting: ***"For such a small town we have an amazing system, but still people know nothing about it."***

> "*More knowledge is needed about Suboxone ... my family can't understand you can't get high off it.*"
>
> -**Person in recovery**

In general, patients saw education and outreach as essential tools in raising awareness about available treatment options, while at the same time helping to reduce the stigma associated with OUD and MAT.



Costs: Among persons interviewed, the cost of treatment services and prescription medications was by far the most prohibitive barrier to accessing and engaging in treatment for OUD. Both patients and providers frequently discussed the fact that the majority of patients seeking treatment for OUD in Maine are underinsured or uninsured. In fact, Mainers who are out of work or living below the poverty line are at the highest risk for OUD. Even individuals with insurance discussed the high out-of-pocket costs of MAT, including the expense of paying for buprenorphine. Participants frequently cited the high costs of medication and the varying costs of prescriptions by region and pharmacy: ***"I pay $60 a week for prescriptions, and $65 for the (weekly) treatment group, so it comes out to $500 a month for Suboxone."***

> *"I watched people that I knew … in and out, in and out (of treatment), and it is mostly because of money. There is not enough funding out there to get clean."*
>
> **-Person in recovery**

Treatment Policies: In addition to the challenges associated with the affordability of MAT, both patients and providers reported that inflexible treatment program policies as well as external policies such as MaineCare's cumbersome prior authorization process, make it difficult to have continuity of care in treatment and recovery. As with other chronic relapsing conditions, the clinical course of OUD includes periods of exacerbation and remission, but the patient is never disease-free.[46] Patients report past recurrences, missing appointments or group therapies, and changes in insurance that often put them back at "square one" in an intensive outpatient program. Patients clearly articulated the need for a spectrum of treatment and recovery services that allow for multiple points of entry and accommodate the chronic relapsing nature of OUD. This suggests the need for a broader application of team-oriented Chronic Care Models (CCM). The implementation of a CCM reorients care from acute, procedure-oriented care to sustained patient-oriented practices which can facilitate a treatment options that recognize the chronic nature of OUD. The CCM offers a framework for achieving evidence-based care by providing flexibility for individuals with OUD and promoting an integrated model of care to

> *"If you mess up one time or two times they don't want to take you back. You know addicts are going to relapse. It seems like they just don't want to keep giving you chances."*
>
> **-Person in recovery**

address the complex needs of patients. Consistent with CCMs used to manage other chronic diseases such as diabetes, treatment plans for OUD need to be patient-specific and created with input from the patient, the prescriber, and other members of the health care team. This dual approach to OUD treatment is supported by medical and behavioral health groups, including the American Society of Addiction Medicine and the National Council for Behavioral Health, patient advocate groups, and federal entities including the White House Office of National Drug Control Policy and the U.S. Surgeon General.[47]

Transportation: Nationwide only 1.3% of waivered providers practice in rural communities, which means individuals seeking MAT must often travel long distances to access care.[48] Therefore, transportation is a particularly salient barrier for individuals seeking treatment for OUD in Maine. Both patients and providers mentioned that the lack of safe and affordable transportation presents major challenges for individuals trying to access and engage in treatment. Rural communities in Maine often lack detoxification services, MAT providers, and specialty mental health and substance use treatment programs. Geographic proximity to services, and lack of transportation or resources to obtain transportation to reach these limited services, were frequently discussed as barriers to accessing treatment. In addition, patients discussed the fact that unreliable transportation was the primary cause of treatment non-compliance (e.g. missing appointments, pill counts, urine screens) which could result in termination from the program.

> *"Transportation is another big deal. I was getting my Suboxone out of Portland and that is quite a hike when you have to chase your pills."*
>
> **–Person in recovery living 55 miles from Portland**

Stigma: Increasingly, governments and professional organizations are mobilizing resources towards preventing and managing health-related stigma.[49] However, the stigma associated with opioid use continues to be a major barrier for providers of MAT as well as patients in treatment and recovery. Health-related stigma is often described as a socio-cultural process in which social groups are devalued, rejected and excluded on the basis of a socially discredited health condition.[50] Stigma can manifest itself at the individual, social and societal levels. Research indicates that stigma is a significant barrier to accessing treatment for substance use disorders and has negative impacts on treatment completion rates.[51] Both providers and patients acknowledged that stigma remains a major barrier to accessing treatment for OUD. Patients reported that stigma related to their OUD adversely impacted many domains of life such as treatment engagement, employment, housing, and social relationships. In addition, patients reported feeling stigma from family and friends, providers, pharmacists, and from members of their communities. Several patients noted that they felt stigmatized for their use of medication in their recovery by other individuals using the abstinence-based treatment model of recovery. Providers also conceded that stigma around treating persons with opioid use disorder remains a problem in the provider community: ***"A lot of providers don't see it as part of primary care, which is unfortunate - because it is."*** Both providers and patients reiterated the need to address stigma surrounding opioids and to educate the community about OUD and MAT.

Facilitating Access to Treatment for OUD

Low barrier access to treatment, insurance coverage (private or public), provider supports, and having treatment options were frequently cited as key factors in being able to access and initiate treatment.

Low Barrier Access to MAT: Patients and providers overwhelmingly agreed that programs that reduce barriers to accessing care, including low barrier access to detoxification services, are essential to increasing access to treatment for individuals with OUD. A large 2016 study showed that MAT – including a specific prescribed medication such as buprenorphine that reduces or eliminates drug cravings – cuts the death rate by 50% for people with OUD, when compared to routine substance use disorder treatment that does not include a pharmaceutical medication.[52] Therefore, for individuals with OUD, easy access to affordable life-saving medications is critical. Access to medication supports was so important that some participants reported resorting to using diverted medication when they are unable to gain access to buprenorphine through a prescriber or treatment program. In addition, long wait times promote the use of cash providers who often do not provide comprehensive MAT services. Patients see these providers as the quickest way to get access to buprenorphine to stabilize themselves. Unfortunately, many patients reported that the high costs associated with utilizing cash providers often led them to divert a portion of their prescription to afford the services. These findings provide further evidence of the importance of expanding provider capacity and low barrier access programs that can promptly engage patients who are seeking care in evidence-based treatment programs.

> *"You want to get into a place and it takes seven days. They want to admit you to a program and all of this (waiting) makes people give up. It is real easy to give up you know."*
>
> **-Person in recovery**

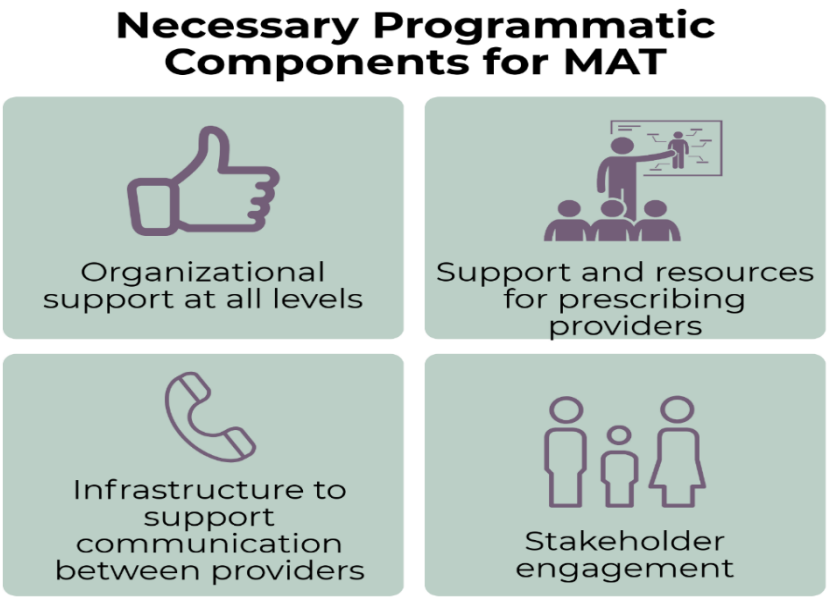
Insurance Coverage: Insurance coverage (private or public) was identified as a key factor in being able to access and initiate treatment. Even individuals with insurance face cost barriers as many insurance companies do not pay for the costs of patients' buprenorphine prescriptions. The majority of individuals with OUD we talked to did not have insurance or were underinsured, which created additional obstacles to accessing care. Although progress has been made in increasing access to medications approved for the treatment of OUD, significant barriers still exist with regard to benefits and coverage of medications that can be used as part of comprehensive treatments to address OUD. Medicaid expansion has the potential to greatly reduce the cost barriers associated with MAT. The recent vote in Maine to expand Medicaid has the potential to reduce the financial barriers associated with MAT and can improve access to treatment for thousands of individuals with OUD in the state. Nationally, states that have expanded Medicaid have seen the largest increases in treatment for substance use disorders including a large increase in the provision of MAT.[53]

> *"Insurance companies will say they approve (MAT) in the beginning … and those people go to treatment and they get out and they have a (huge) bill because their insurance only picked up part of their treatment."*
>
> **-Person in recovery**

Treatment Options: Treatment needs vary by individual and population characteristics. Traditional treatment modalities may act as a deterrent for some individuals with OUD. Patients repeatedly mentioned the need for a continuum of treatment services that address the unique needs of the individuals seeking care. For example, one factor repeatedly mentioned by women is the need for treatment programs that provide on-site child care or have policies that allow women to have regular interactions with their children while they are in care. In addition, numerous individuals discussed the need for treatment models that provide services at a centralized location where individuals can access comprehensive MAT, primary care and psychosocial services. Patients indicated that "one-stop-shops" help reduce transportation burdens, help with care coordination, and ease some of the time constraints associated with addressing their complex medical needs. Numerous patients also indicated that there is a need to implement models of care that offer a continuum of services with varying requirements and levels of intensity, *i.e.* programmatic options with services that correspond with individual treatment needs at different stages of treatment, maintenance, and recovery.

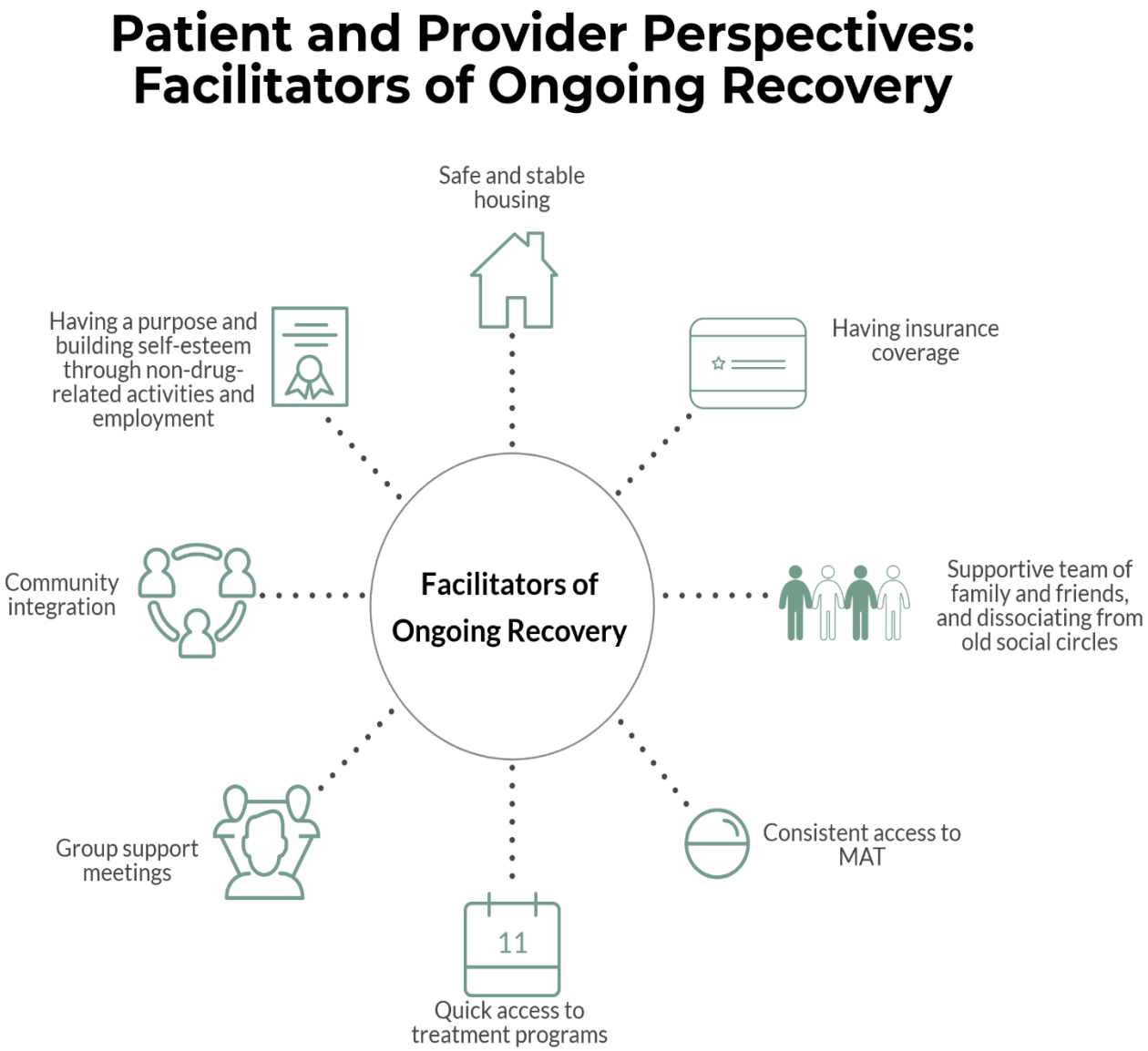
> *"It's not reasonable to expect someone with a full time job to be able to access a treatment program that requires a multiple hours per week commitment. Nor can many of my patients afford to pay inordinate sums of money for their treatment AND their prescription medication."*
>
> **-MAT Provider**

Provider Supports: Research indicates that greater integration of MAT for individuals with OUD in primary care settings across Maine would expand access to treatment for hundreds of individuals living in rural communities throughout the state.[54] Although models for integrating MAT in primary care vary in how they are structured, it is clear that in order to effectively recruit and engage providers in the delivery of MAT, organizations need to provide the necessary resources and supports to facilitate integration. Providers consistently noted four key components that are paramount to implementing MAT models in primary care: (1) organizational buy-in and supports; (2) education/training and other resources for prescribing providers; (3) mechanisms for coordination/integration of OUD treatment with other medical/psychological needs; and (4) engagement of a broad group of stakeholders (see *Necessary programmatic components for MAT* infographic above). Providers indicated that they were reluctant to deliver MAT if they did not feel they had the necessary infrastructure to support implementation.



Supporting Ongoing Recovery for Individuals with OUD

Quick access to treatment programs, consistent access to MAT, insurance coverage, auxiliary recovery supports (e.g. transportation, safe and stable housing), peer and family support (e.g. group support meetings, supportive families/friends, a peer recovery coach), as well as opportunities for community integration (e.g. social activities and employment), were the most frequently mentioned factors necessary to support ongoing maintenance and recovery (see *Patient and Provider Perspectives: Facilitators of Ongoing Recovery* infographic below). One of the greatest challenges associated with long-term maintenance for patients is the cost associated with MAT services, particularly for individuals without insurance. As discussed earlier, even individuals with insurance face cost barriers as many public and private insurance companies do not fully cover or pay for buprenorphine prescriptions.



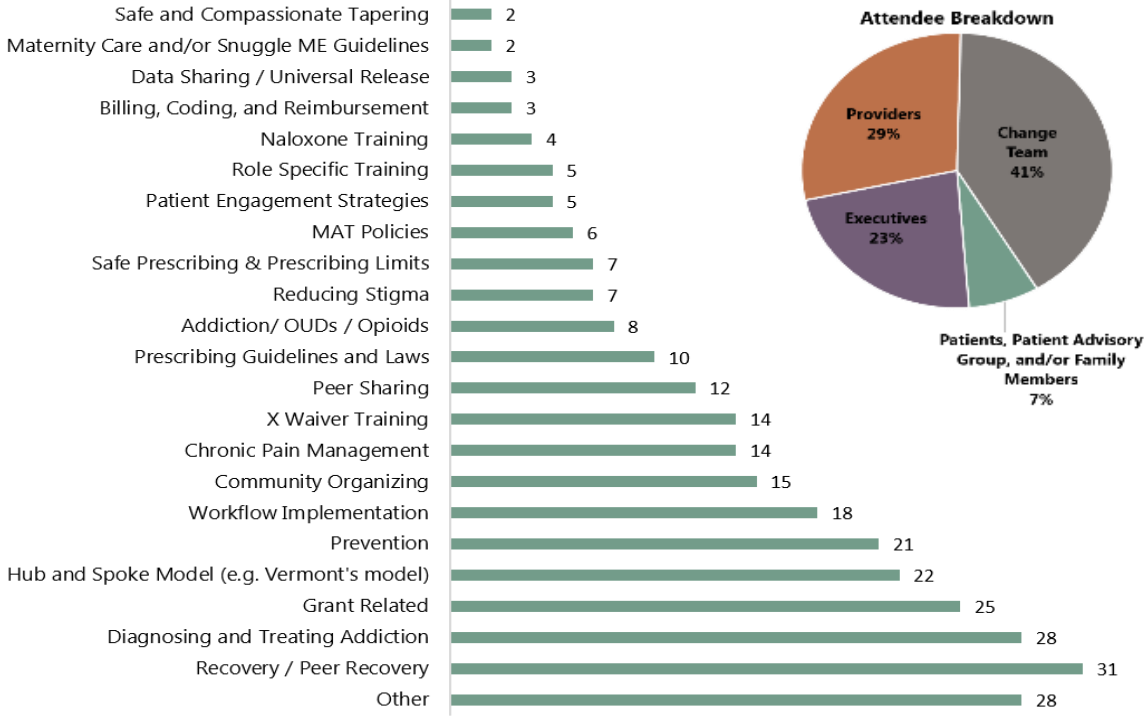
IV. Addiction Care Program Milestones

Year One Milestones

Although MeHAF's *Addiction Care Program* is still in the early stages of implementation, grantee activities have already increased statewide capacity for addressing the opioid epidemic by providing training/education to providers, engaging a broad range of stakeholders in planning and implementation activities, and expanding access to MAT services in primary care settings.

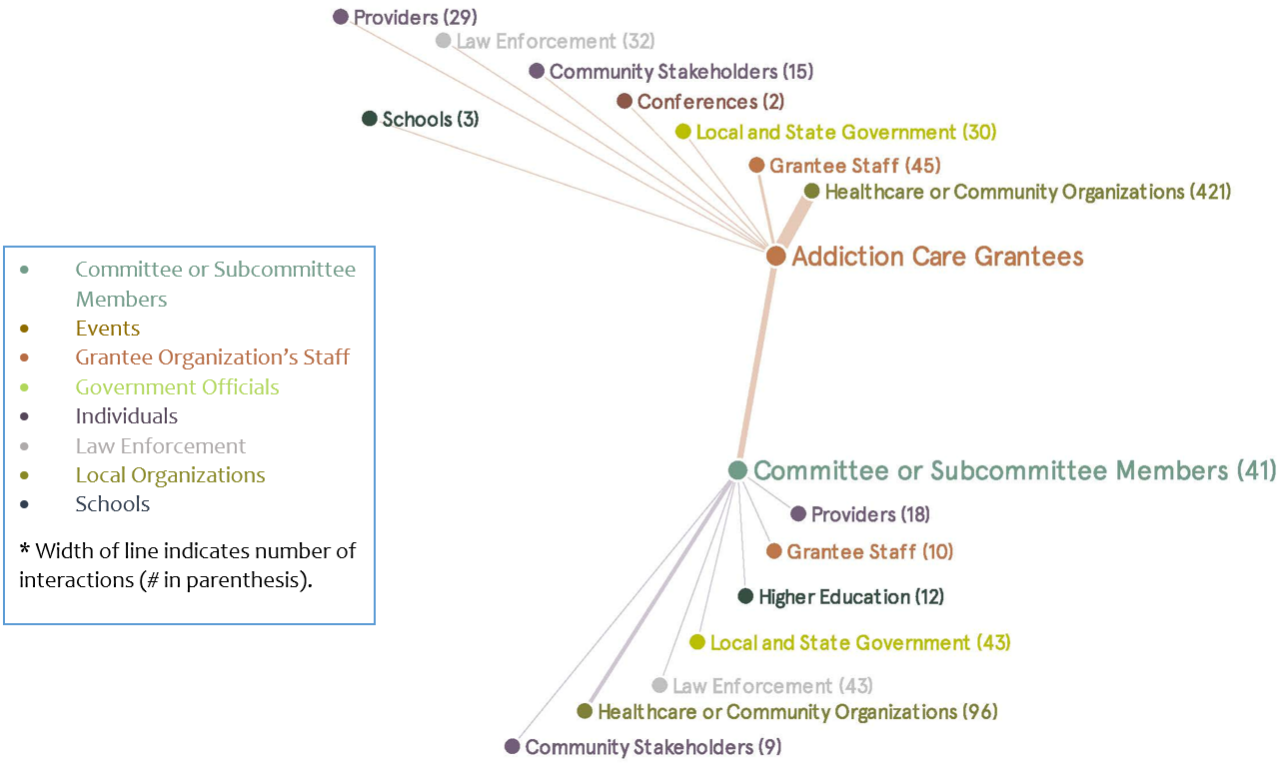
Training and Education: During the first year of the grant, *Addiction Care Program* grantee organizations reported holding 320 training/education sessions covering a broad range of relevant topics (Figure 4). Grantee organizations engaged in a large effort to provide training and education to a broad group of stakeholders including executives, providers, administrative staff, and community partners. On average, trainings lasted one to two hours and a total of 3,007 attendees were recorded across the education and training sessions held by grantee organizations. Sessions covered a wide variety of service delivery and implementation topics such as OUD screening and diagnosis, chronic pain management, implementing MAT workflows, and patient engagement strategies. A total of 56 individuals received training in MAT. Twenty-five of these individuals went on to complete the required federal training program necessary to prescribe or dispense buprenorphine, greatly increasing the capacity of *Addiction Care Program* grantee organizations to deliver MAT in their targeted geographic areas.

Figure 4. Primary Training Topics



Stakeholder Engagement: Creating sustainable, effective linkages between clinical and community settings can improve patients' access to prevention, treatment and chronic care services by fostering partnerships between clinical providers, community organizations, and public health agencies.[55] Therefore, engaging a broad network of partners has been fundamental to the work of the *Addiction Care* grantee organizations. Over the past year, program participants have formed partnerships and collaborated with a broad range of stakeholders from a variety of sectors. The *Stakeholder Engagement Map* shows that grantees most frequently interact with health care or community organizations and that grantees have a diverse set of stakeholders on their committees and subcommittees.

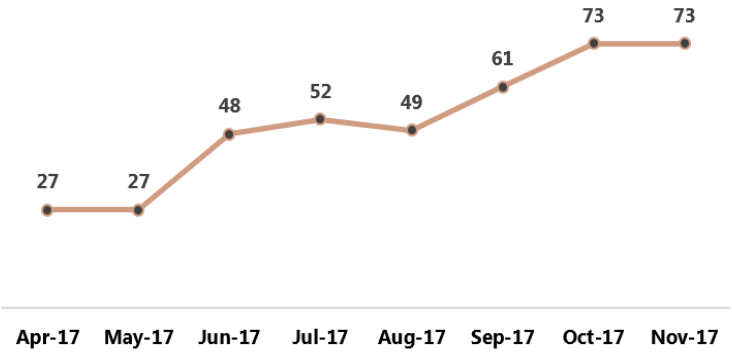
Stakeholder Engagement Map



Comprehensive cross-sector partnerships between health care, first responders, law enforcement, business, peer recovery and social service agencies, are essential to increasing clinical-community linkages, expanding low barrier access to treatment, reducing stigma, and creating recovery ready communities. The clinical-community linkages grantee organizations have fostered over the past year have played a critical role in helping programs establish the partnerships and infrastructure necessary to create sustainable community systems of care for individuals in treatment and recovery.

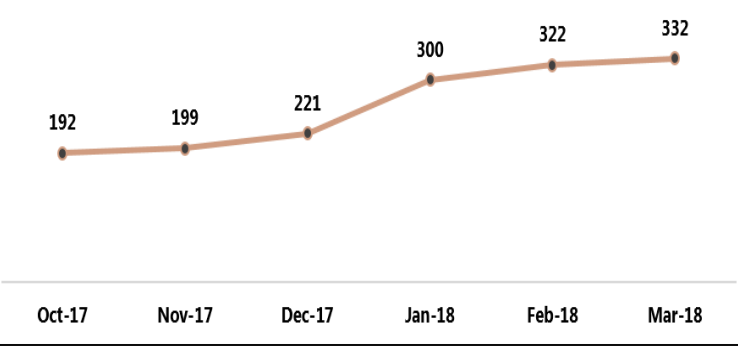
Capacity Building: The comprehensive planning and implementation activities of grantee organizations have increased their organizational capacity and ability to effectively deliver MAT in primary care settings. Between April and November of 2017, the number of providers delivering MAT across the six implementation grantee organizations nearly tripled from 27 providers to 73. This represents a 170% increase in the number of prescribers (Figure 5).

Figure 5. Total Number of Providers Delivering MAT by Month



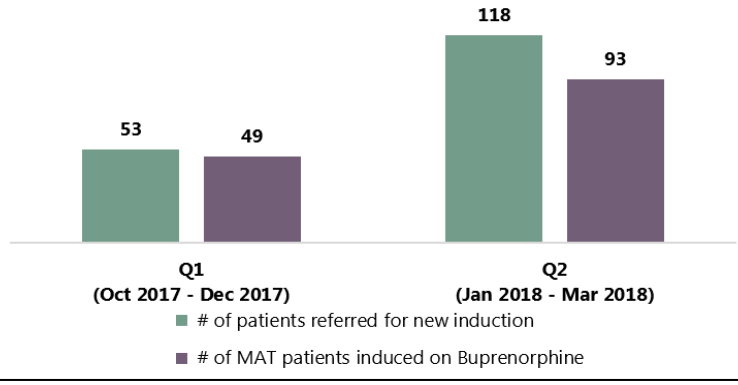
There was a corresponding increase in the number of patients receiving MAT services at program sites. Between October and March there was a 75% increase in the number of patients receiving MAT (Figure 6) and a 20% increase in the number of patients with a documented diagnosis of OUD at grantee organizations. Correspondingly, the number of MAT patients increased by 15 percentage points on average across grantee organizations.

Figure 6. Number of Patients on MAT by Month (n=6)



Eighty percent of the individuals referred for MAT services were assessed and induced on buprenorphine (Figure 7), indicating that grantee organizations were successfully communicating with and retaining patients as they enrolled in treatment. Between October and March of 2017, 230 patients were referred for induction at 5 out of the 6 implementation sites. Research indicates that retention rates for MAT can range from 56-90% and long-term abstinence rates range from 61-70%.[56] The high rate of initial induction indicates that *Addiction Care Program* grantee organizations have established processes to efficiently screen, refer and engage the majority of patients appropriate for MAT into their programs.

Figure 7. MAT Induction (n=5)



Research indicates that individuals who are induced and maintained in MAT programs have significantly higher rates of treatment adherence when compared to non-drug approaches.

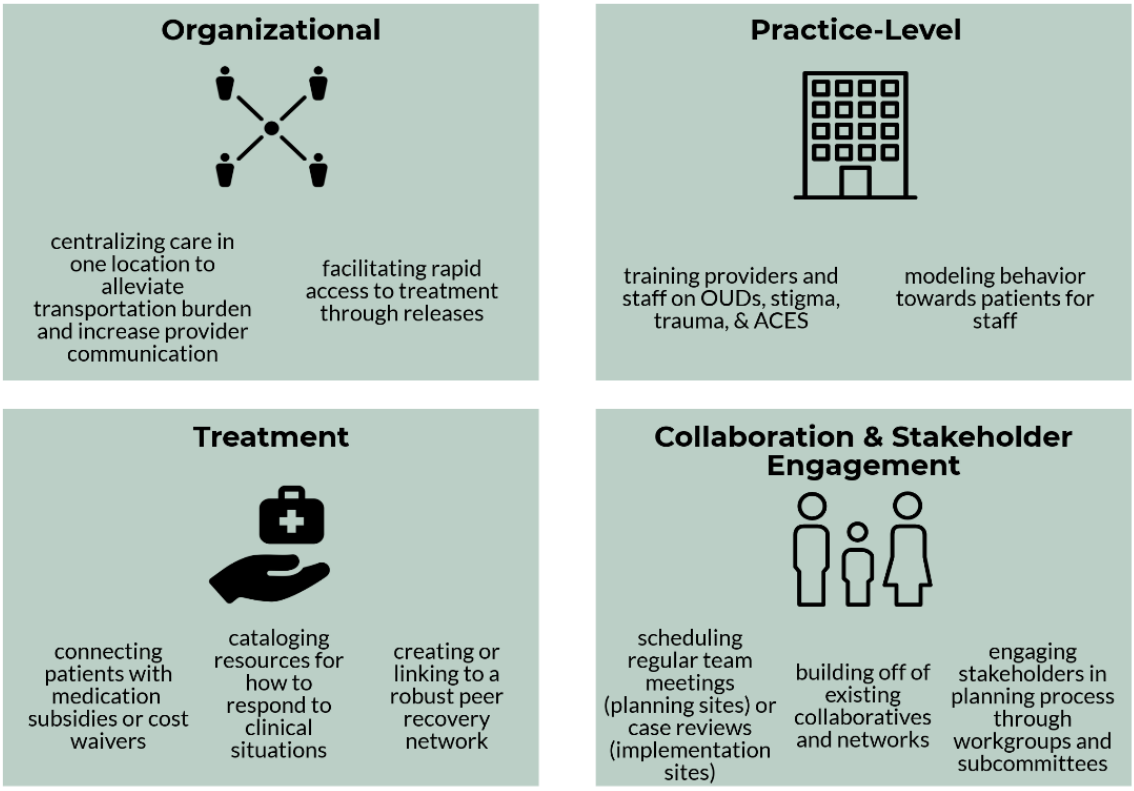
This increases the chances a person will remain in treatment to learn the skills and build the networks necessary to achieve long-term recovery and the associated positive social outcomes (i.e. stable housing, employment, decreased interaction with criminal justice system).[57] In addition to increasing the number of patients seen and induced, sites also significantly increased the number of behavioral health referrals at their sites. Between October and March, rates of patients referred to behavioral health services continued to increase. Of the 937 patients who were referred to behavioral health services, 94% attended their first behavioral health visit.

As evidenced by the data presented above, despite the numerous challenges associated with implementing MAT in primary care settings, grantee organizations have made great strides in establishing and/or expanding their organizational capacity to deliver MAT. Over the past year grantee organizations have significantly enhanced provider capacity throughout the state to deliver MAT through training and infrastructure development; increased access to MAT by expanding services in rural and under-resourced communities; reduced wait-times between referral and induction; and increased the number of patients receiving MAT (Figure 7). In addition, grantee organizations have established clinical-community linkages between collaborating organizations which has led to increased care coordination and patient engagement in both MAT and behavioral health services.

V. Lessons Learned

Successful Strategies: Administrative and provider interview data collected over the course of the first year of the *Addiction Care Program* provides key insights into the successful planning and implementation strategies used by grantee organizations. The *Successful Grantee Strategies* graphic captures the most commonly reported strategies that have successfully increased the capacity of both planning and implementation grantee organizations to provide MAT services in primary care settings. Grantee organizations indicated that collaboration and stakeholder engagement have been critical to informing systems of care and establishing the partnerships necessary to provide comprehensive MAT programs that include treatment, social services, and recovery supports. Both providers and patients indicated that the provision of MAT services in environments that are co-located with physical and behavioral health care greatly reduces barriers to access and facilitates a holistic approach to addressing the complex physical and behavioral health care needs of individuals with OUD. Grantee organizations who do not have a centralized treatment location have employed universal releases to increase low barrier access to treatment while at the same time providing for improved communication and care coordination across partner agencies. Additionally, the training and education activities undertaken by grantee organizations have increased provider confidence and reduced stigma related to the delivery of MAT. As a result, the number of providers delivering MAT at grantee organizations has significantly increased in the past year. Finally, grantee organizations have worked to establish robust peer recovery networks that are being leveraged to assist patients with a variety of auxiliary recovery supports.

Successful Grantee Strategies



Challenges and Opportunities for Change: Over the course of the first year of the *Addiction Care Program,* grantee organizations identified a number of challenges to expanding access to MAT in primary care settings. Below is a brief summary of the primary obstacles identified by sites.

- **Collaboration:** Although *Addiction Care Program* grantee organizations have made significant strides in establishing and maintaining the collaborative partnerships necessary to create comprehensive systems of care for individuals with OUD, there remain challenges with managing and sustaining cross-site, multi-sector collaboration among participating partners including: competing priorities, maintaining meaningful engagement, and ensuring regular, open communication. As most grantee organizations are using grant funding for this partnership work, future sustainability of these collaborative efforts (once grant funding ends) is precarious; in most cases there is no natural owner for this endeavor. Partnership work is critical to establishing and sustaining the infrastructure necessary to expand access to MAT for OUD and must continue to be supported to ensure the long-term viability of primary care- based MAT programs.
- **Regulations:** Several sites continue to face external regulatory hurdles that have impacted their ability to expand or offer MAT and behavioral health services. For example, sites reported staff members that were willing and able to join the MAT program were unable to obtain permanent

licensure from the State of Maine. MaineCare's prior authorization process was also identified as a major hurdle and time burden by providers.

- **Staffing:** Staff turnover and provider shortages continue to hinder MAT implementation and expansion opportunities for grantee organizations. Staff turnover directly affected provider capacity and impeded scheduling and/or meeting behavioral health counseling needs for 40% of the grantee organizations in Year 1. All grantee organizations reported expanding provider capacity as a priority in Year 2.
- **Stakeholder Engagement**: One of MeHAF's core values is that their efforts are guided by the voices of the people they are dedicated to serve. The *Addiction Care Program* is dedicated to creating and/or improving services that are patient-centered. To that end, all of the grantee organizations continue to seek meaningful engagement of a diverse group of patients in planning and implementation activities. Some grantee organizations struggled with identifying and engaging patients throughout the first half of Year 1, but made strides in fostering meaningful patient engagement as their programs developed. Grantee organization staff reported the need to build trust with patients, which takes time, and the fact that patients are often working or busy during the times when meetings are held or when they are seeking in-person feedback. Grantee organizations that were able to get patients and persons living in recovery "to the table" for stakeholder meetings, reported the need to continue to sustain meaningful engagement with their patients to continue to be responsive to their needs, not just throughout the duration of the grant but as a model for the program's future.
- **Referral Processes:** A majority of grantee organizations would like to improve their collaborations and referrals across patient entry points – Hub sites, Emergency Departments, Behavioral Health, Psychiatry, PCPs, etc. Grantee organizations cite a "no wrong door" approach as the goal and are working collaboratively with their partners to provide low barrier access to MAT for patients.
- **Recovery Supports:** Grantee organizations reported challenges in building a recovery network with robust peer supports, something that is seen by providers and patients as a necessary component for long-term maintenance and recovery from OUD. Many grantee organizations have established relationships with recovery coaches and organizations, and are committed to working with their key stakeholders to devise strategies that effectively develop, implement and/or expand dynamic peer supports within their recovery networks.
- **Data Tracking and Monitoring:** Ongoing data tracking and monitoring is essential for monitoring clinical outcomes and tracking the progress of quality improvement activities within a health care organization. Grantee organizations have experienced challenges in collecting and reporting dashboard data in Year 1.[v] Initial challenges included narrowing down metrics and ensuring all stakeholders were in agreement with which metrics were the most salient to their respective project's work. Because success looks different not only to each grantee, but to each stakeholder within a grantee's project, choosing metrics that capture and inform accomplishments and challenges within a project are an ongoing refinement process for grantee organizations and stakeholders. Current challenges include time (collecting, compiling,

[v] In health care systems, data dashboards are frequently used to manage and track healthcare information, CQI metrics and other essential measures to monitor programmatic performance and patient outcomes.

and recording data; gathering and compiling data from multiple partners), technology (pulling data from disparate electronic medical records (EMRs); reporting not set up in EMR; using a mix of data collection methods), and staffing (allocating staff time for monitoring data; training). Despite the noted challenges, many grantee organizations are actively working to streamline data collection through new workflows and EMR updates.

Implications and Future Sustainability:

Data from Year 1 grantee activities provide implications for future activities and program sustainability. There are a number of opportunities for future efforts focused on sustaining the new capacity and expansion of MAT in Maine. A summary of future directions is provided below.

- **Payment/Reimbursement for Services**: It is evident that one of the greatest barriers to implementing and sustaining MAT programs in primary care is resources. Practices often lack the necessary financial resources as well as the human capital and organizational capacity to expand and/or sustain MAT programs without external support and funding. In Maine, practices still face great challenges meeting the eligibility requirements for the States' Opioid Health Home programs, which are specifically designed to provide financial resources to support MAT and care coordination for complex uninsured and under-insured patients. (See Page 14. for Opioid Health Home program descriptions.) Moreover, there remain challenges with adequate reimbursement for MAT services and care coordination from federal and state resources. It is evident that there continues to be a need to advocate for financial and technical resources to make these programs accessible to practices and providers.
- **Low Barrier Access to Treatment**: Research indicates that 80% of individuals with OUD do not receive treatment; therefore, creating low barrier access to MAT is a critical component to ensuring treatment initiation and engagement.[58] Effective systems must ensure that individuals with OUD needing treatment will be identified, assessed, and receive treatment, either directly or through appropriate referral, no matter where he or she enters the realm of services.[59] The focus on creating "no wrong door" policies is imperative to developing delivery systems that ensure access to treatment can be obtained through multiple pathways and from a variety of sectors including: health care facilities, homeless shelters, social service agencies, emergency departments, or criminal justice settings. Establishing clinical-community linkages is essential for referral, assessment and treatment programs and policies that are consistent with a "no wrong door" policy. Grantee organizations need to continue to work towards developing the inter-agency partnerships that promote low barrier access to MAT and provide the coordination necessary to establish overall systems of care in their communities that are seamless and provide continuity of care across service systems.
- **Patient-Centered Approach**: There is a continued need for grantee organizations to focus on creating treatment protocols and policies that include interventions specific to the tasks and challenges faced by patients at each stage of treatment, maintenance and recovery. Our findings indicate a need for MAT programmatic policies that facilitate engagement and the achievement of treatment goals. Both providers and patients indicated that long-standing rigid treatment program requirements (established separately from the *Addiction Care Program*) often make long-term engagement difficult and can even create barriers to patients achieving desired

treatment outcomes. It will be important for grantee organizations to regularly assess patient feedback and utilize that information to refine program requirements to meet the unique needs of participants and reinforce long-term participation in maintenance and recovery activities.

- **Information for Patients and Families**: While creating the infrastructure to support MAT in primary care practices is paramount, awareness of OUD, available treatment options, and community supports for individuals and families affected by substance use disorder remains a challenge, particularly in rural communities. Many patients and providers discussed the need for more comprehensive communication strategies to effectively share information about available recovery and MAT-specific services in their communities. In addition, patients repeatedly discussed a need for more awareness, messaging aimed at reducing stigma, and education for the community about OUD and the effectiveness of using MAT to address OUD. Future MeHAF efforts could include working with grantee organizations on their communications plans and public awareness outreach within the communities they serve.
- **Auxiliary Recovery Supports**: Patients and providers agreed that auxiliary recovery supports including safe housing, food security, and transportation are crucial elements of patient recovery. Although grantee organizations have made strides in facilitating care coordination and establishing relationships with recovery supports, many noted difficulties in establishing the infrastructure necessary to assist patients with the recovery supports necessary to facilitate effective treatment engagement and long-term recovery. Future efforts could include building models of care with embedded patient navigators in the system who can guide individuals through the process of treatment initiation and ongoing engagement, while at the same time providing assistance with transportation and the hierarchy of recovery supports needed by a person living in recovery (employment, housing, etc.).
- **Peer Support for MAT Providers**: Providers agree that MAT prescribers could benefit from professional mentoring, particularly providers that have recently completed X-waiver training. Some *Addiction Care Program* grantees report having ad-hoc, informal mentoring within their staff structure and workflows. Whether or not this peer support for providers is happening within an organization, most providers agree that a more formal MAT provider-to-provider network or clearinghouse would be beneficial for further training and information sharing. Future opportunities could harness the natural connection across these grantee organizations to create such a network.
- **Overdose Prevention**: Given the high rates of overdoses in the state, there appears to be a need for grantee organizations to leverage their current clinical-community linkages and cross-sector collaboration to expand access to Overdose Prevention Education and Naloxone Distribution (OPEND) programs. Of high importance is developing and implementing screening protocols that identify patients at high risk for overdose and in need of overdose prevention education. In addition, expanded access to naloxone for high risk patients and linking them to harm reduction and MAT services are key elements to addressing opioid related morbidity and mortality.
- **Systems to Monitor Patient Panels**: While data dashboards were developed to assist sites with data tracking and provide rapid cycle feedback on program strategies through continuous quality improvement measures (CQI), collecting valuable data on patient induction, stabilization

and maintenance remains a struggle for many grantee organizations whose electronic medical records do not allow for easy tracking or extraction of this data. Finding strategies to help grantee organizations implement systems for ongoing monitoring of OUD patient panels will be critical to expanding practice and provider capacity for delivery of MAT.

VI. Limitations

There are several limitations to the data collected in this report. The first limitation of this evaluation is that grantee organizations selected who would be surveyed, interviewed, and/or participate in a focus group. As a result, some sites opted to electronically distribute surveys to a larger audience than others and therefore their results may not be parallel to sites that only surveyed those who were planning to be directly involved in the program. Providers who filled out surveys may not have been offered the opportunity to participate in interviews and providers who participated in interviews may have been more motivated to participate due to their existing engagement with MAT. An additional limitation of the data is the reliance on site-reported data (i.e. dashboard data) which is limited by the fact that despite built in quality checks, the data cannot be completely and independently verified. Therefore, dashboard data is subject to self-report biases, including over or under reporting. Lastly, we were unable to interview providers from all ten sites or engage patients in focus groups from all ten sites due to logistics (e.g. weather, busy practices) and patient barriers (e.g. transportation, time commitment, interest). Data collected and analyzed for this evaluation may not be generalizable to other programs with similar goals in Maine and elsewhere; however the results do provide valuable information on implementation processes and outcomes that can be used to help inform effective strategies for overcoming barriers to delivering MAT in primary care practices.

VII. Next Steps

Moving into the second year of the grant, *Addiction Care Program* grantee organizations will build on their efforts in the first year of the program by continuing to refine referral and intake processes as they work with both internal resources and external partners. They will work towards implementing or finalizing standard treatment protocols and care plans for MAT patients and continuing ongoing collaborations with existing or new community partners. Education and training of providers remains a priority for grantee organizations and they will continue to sponsor or engage in relevant professional development and outreach activities. In addition, grantee organizations remain dedicated to the participation and contribution of persons living in recovery. Finding meaningful opportunities to engage stakeholders in recovery remains a top priority for grantee organizations.

Planning Grantee Organizations: The planning grantee organizations, in particular, have indicated that operationalizing their referral process, practice protocols and increasing staff capacity are tantamount to achieving their goals in Year 2. As planning grantee organizations move into the implementation phase of their projects, they will focus on implementing the infrastructure necessary to support new processes and workflows within their programs. Planning grantee organizations' timelines for piloting MAT services vary, but will all take place before the completion of the grant program in April 2019, as a requirement of the grant.

- **York Hospital** began accepting patients in April 2018 with the goal to have capacity for up to 160 new MAT patients by March 31, 2019.
- **Tri-County Mental Health Services** plans to begin their pilot in August 2018.
- **Kennebec Behavioral Health** plans to begin their pilot in December 2018.
- **LincolnHealth** is expanding their existing MAT network with plans for up to ten new patients in their Damariscotta location between January – March 2019.

Implementation Grantee Organizations: The implementation grantee organizations will continue refining their workflows and referrals processes in Year 2 as they expand their MAT services. Several grantee organizations' "hub and spoke" models will be facilitating collaboration between the "hub" and the primary care offices "spokes" that will be expanding or implementing MAT services.

- **MaineGeneral** will be training new providers to deliver MAT in six targeted MaineGeneral primary care practices or within their current onsite stabilization program — Outpatient Plus (OPP), tracking provider capacity by primary care location, increasing capacity of behavioral health integrated care specialists, and expanding OPP into Waterville by January-March 2019.
- **Healthy Acadia** is currently launching its treatment hub (Down East Treatment Center) which will include intake of new patients. Over the summer of 2018 they will be educating and training the current spoke sites as they begin preparing new PCP sites for comprehensive MAT delivery during the next year, and will continue to coordinate, assess, and modify their robust Peer Recovery Support System.
- **Healthy Community Coalition** will be focused on increasing MAT provider capacity with trainings and establishing an MAT provider peer community, expanding MAT in both primary care as well as clinical (i.e., OB/GYN) settings, and mapping capacity in greater Franklin and Oxford counties to create a treatment approach algorithm that will link all treatment services in greater Franklin County.
- **Health Access Network** will continue provider trainings for clinical staff as well as training all front line staff (reception, MAs) on protocols for MAT in tandem with education for recovery coaches within the community. Their minimum patient panel goal is to have capacity for 40-45 patients at all times and to increase capacity to 90 patients within the first three years of an established program.
- **Amistad** will continue working within the Greater Portland Addiction Collaborative (GPAC) to build primary care capacity for comprehensive MAT, as they optimize referral processes and create a compassionate tapering protocol across their partner organizations. Specific to their recovery residence, a major aspect of expanding their patient-centered care is to have the women in the house take on leadership roles within the project, receive training so they can facilitate groups and provide peer supports and navigation for others enrolling into MAT.
- **Penobscot Community Health Care** intends to increase the number of PCHC providers delivering MAT from 25 to 31, increasing capacity for the number of patients from all sources from 400 to 650. They will continue to train providers, through peer-to-peer mentorship among clinical staff, as they implement broader coordination of social services necessary for patients to achieve and sustain recovery.

VIII. Summary

Maine is among the states hardest hit by a national trend of non-medical uses of opioid prescription drugs and increasing use of heroin, with subsequent increases in opioid-related morbidity and mortality. Addressing the opioid epidemic in Maine is particularly challenging given the rural nature of the state. Despite ongoing state and local efforts to improve access to treatment services for individuals with OUD, promote awareness of the opioid epidemic and foster safe prescribing of opioid prescription drugs, rates of opioid related overdoses and deaths continue to rise. MeHAF's *Addiction Care Program* is addressing crucial access gaps in treatment infrastructure, provider training/education, and organizational capacity to deliver MAT in primary care settings. During the first year of the program, grantee organizations significantly expanded their capacity to deliver MAT in primary care settings as evidenced by the number of new prescribers and the increase in the number of patients served. As grantee organizations move into the second year of the program, they will continue to pilot innovative strategies that address barriers to expanding access to MAT in Maine communities.

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