Abstract

CSAP/CSAT State Targeted Response to the Opioid Crisis – TI-17-004

The purpose of the Michigan Opioid STR project is to increase access to treatment; reduce unmet treatment need; and reduce opioid overdose related deaths through the provision of prevention, treatment and recovery activities for OUDs. To achieve our purpose for the project, the Office of Recovery Systems of Care will: 1) improve the state infrastructure for individuals with an OUD; 2) train Prepaid Inpatient Health Plan and provider administration on infrastructure improvements, and training provider staff on evidence based interventions and fidelity measures; 3) implement evidence based prevention and treatment interventions with accompanying fidelity instruments to ensure that the quality of the intervention is consistent across the provider network; 4) improve access to psychiatric services and psychotropic medications to individuals with an OUD; 5) expand the availability and use of specially trained peers for MAT and drug free programming; 6) expand outreach and engagement activities to primary care and law enforcement sites; 7) increase supports to the prisoner re-entry population with an OUD; 8) expand the use of peers in emergency departments and primary care settings; 9) expand overdose education and naloxone distribution; and 10) disseminate a statewide media campaign for the purpose of public education.

The Michigan Opioid STR initiative will: improve awareness of the risks associated with using opioid based medications as well as illegal opioids; increase the availability of prevention focused evidence based practices for individuals considered to be part of the selected or indicated portion of the population; educate physicians on the CDC Prescriber Guidelines for responsible opioid prescribing; increase access to Medication Assisted Treatment, withdrawal management, and residential treatment services for individuals with Opioid Use Disorders (OUDs); increase availability of treatment and recovery support services to individuals with OUDs; improve the quality of services for individuals with OUDs; increase treatment and support services available to individuals re-entering the community from prison; and revise policy and contractual language to reflect standards of care as identified in Michigan’s Medication Assisted Treatment Guidelines for Opioid Use Disorders.

In 2015, 1,980 individuals died from a drug overdose in Michigan. Opioids, illicit and prescription, were involved in 64.1% of these deaths. Between 1999 and 2015, opioid involved overdose deaths increased more than 10 times, and have increased sharply since 2012. In 2015, the American Indian/Alaskan Native population had the highest rate of death due to opioid involved overdose. During the same year, adults aged 25 to 34 showed the highest overdose death rates, and males’ overdose death rates were higher than female.

Wayne State University, School of Social Work, will serve as the evaluator for the project.
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Section A: Population of Focus and Statement of Need

A.1. In 2015, 1,980 individuals died from a drug overdose in Michigan. Opioids, illicit and prescription, were involved in 64.1% (n=1,269) of these deaths. Between 1999 and 2015, opioid involved overdose deaths increased more than 10 times, and have increased sharply since 2012 (see chart 1 below). In 2015, the American Indian/Alaskan Native population had the highest rate of death due to opioid involved overdose (26.6 per 100,000). During the same year, adults aged 25 to 34 showed the highest overdose death rates (27.0 per 100,000), and males’ overdose death rates were higher than female (17.8 per 100,000).

From 2011 through 2015, the average death rate of heroin involved overdose was 4.4 per 100,000 individuals. American Indian or Alaska Natives (AI/AN) had the highest heroin involved overdose death rate at 9.2, males at 6.5, and adults aged 30 to 34 at 11.4 per 100,000. Fifteen out of 83 counties met the inclusion criteria for county-level rates, and the death rate ranged from 1.1 per 100,000 in Oakland County to 10.9 per 100,000 in Macomb County. Similarly, the average death rate involving prescription opioids was 5.6 per 100,000 during the same time. AI/AN had the highest prescription opioid involved overdose death rate at 10.8, males at 6.6, and aged 30 to 34 at 11.7 per 100,000. Twenty-four counties had reliable rates involving prescription opioids overdose, ranging from 1.5 per 100,000 in Oakland County to 15.1 per 100,000 in Muskegon County.

From 2011 through 2015, the Michigan counties with opioid involved death rates significantly higher than the state rate were Muskegon in the Lakeshore Region, Monroe, Livingston, and Washtenaw in the Southeast Michigan Region, Macomb located in southeast Michigan, Ingham in the Mid-State Region, Genesee in Region 10, Wayne in the Detroit Wayne Region, and Calhoun in the Southwest Region. These nine counties include Michigan’s most populous county (Wayne), urban, and rural counties.

Chart 1:

Drug overdose deaths by Opioids, Michigan, 1999-2015

Source: CDC, NCHS. Multiple Cause of Death, 1999-2015 on CDC Wonder Online
Initially, Michigan will focus efforts in the counties identified as having high death rates resulting from heroin and opioid use. Once the formal needs assessment is completed, additional Prepaid Inpatient Health Plan (PIHP) counties may be added.

A.2. During fiscal year 2016, a total of 72,386 substance abuse treatment admissions aged 12 and older were reported to Michigan’s Treatment Episode Data Set (TEDS). Of the 72,386 admissions, 32.2% (274 per 100,000) were for primary heroin use and 12.6% (107 per 100,000) were for primary opiate use other than heroin. For those receiving treatment services for primary heroin use and primary other opiate use, 54.1% were males, 62.2% were White, and 63.9% were adults aged 26 to 44. Half (50.9%) of primary heroin and primary opiate use admissions were also engaged in medication assisted treatment (MAT). Between 2006 and 2016, the total number of treatment admissions did not significantly increase, but the number of treatment admissions for primary heroin and opiate use increased significantly (134% and 85.6% respectively).

Table 1: Selected characteristics by primary drug of use, TEDS, FY16

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Heroin and Other opiates (n=32,473)</th>
<th>All other substances (n=39,913)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male (54.1%)</td>
<td>Male (64.8%)</td>
</tr>
<tr>
<td>Race</td>
<td>White (62.2%)</td>
<td>White (50.9%)</td>
</tr>
<tr>
<td></td>
<td>Two or More Races (24.5%)</td>
<td>Two or More Races (20.9%)</td>
</tr>
<tr>
<td></td>
<td>Black (6.8%)</td>
<td>Black (19.1%)</td>
</tr>
<tr>
<td>Age group</td>
<td>Aged 30-35 (25.4%)</td>
<td>Aged 45-54 (22.8%)</td>
</tr>
<tr>
<td></td>
<td>Aged 26-29 (21.6%)</td>
<td>Aged 36-44 (20.0%)</td>
</tr>
<tr>
<td></td>
<td>Aged 36-44 (16.9%)</td>
<td>Aged 30-35 (16.6%)</td>
</tr>
<tr>
<td>Mental Health Issues</td>
<td>Yes (40.2%)</td>
<td>Yes (44.6%)</td>
</tr>
<tr>
<td>Correction Status</td>
<td>None (79.3)</td>
<td>None (65.2%)</td>
</tr>
<tr>
<td></td>
<td>Probation (15.1%)</td>
<td>Probation (26.7%)</td>
</tr>
<tr>
<td>Pregnant at admission</td>
<td>Yes (2.6%)</td>
<td>Yes (1.0%)</td>
</tr>
</tbody>
</table>

The treatment admissions for pregnant women increased by 36.8% between 2006 and 2016. The percent of primary heroin and other opiate use admissions by pregnant women were significantly higher in 2016 (70.8%) than in 2006 (24.2%). In 2006, 11.4% of pregnant women received MAT as part of their treatment, while 45.4% of pregnant women received MAT in 2016.

Opioid use disorders (OUDs) greatly affect individuals within the U.S. criminal justice (CJ) system, and relapse and overdose occur at high rates upon release from prison. The Michigan Department of Correction’s (MDOC) reports an estimated 40% of parole violations result from the use of opioids or other criminal activity that supports opioid use. The baseline risk for arrest in this population is high, a recent study observed a two-year arrest rate of 38% in a sample of
individuals who had been treated with buprenorphine. One of the big gaps in care is the transition from prison to the community, particularly for those with a co-occurring opiate use and mental health disorder. Careful planning pre-release and deploying evidence based practices (EBPs) both pre and post release are critical to improve outcomes for incarcerated individuals. Michigan has a robust prisoner reentry program, and offers Residential Substance Abuse Treatment (RSAT) and Advanced Substance Abuse Treatment (ASAT) to incarcerated individuals with a substance use disorder (SUD). Currently, 112 individuals are enrolled and 70.5% indicated opiates as their primary drug of use and 41.1% had a co-occurring mental health disorder.

Currently, prison intake procedures include screening and assessment for SUD, and urinalysis drug testing during incarceration provides continual monitoring and surveillance. Those with an identified SUD have a requirement for education and treatment in the 18 months prior to leaving prison. In addition, a network of community providers contracted by MDOC assure outpatient or residential treatment are available upon the individual’s release, based on their need.

As a result, OROSC’s population of focus for this project will be individuals age 26 to 44, the AI/AN population, and the prisoner re-entry population. Our primary prevention focus will be a younger cohort.

A.3. As it has nationally, opioid-associated morbidity and mortality increased significantly and consistently over the past decade in Michigan. The drug overdose death rate increased from 6.2 to 20.9 per 100,000 individuals in Michigan between 1999 and 2015. Concurrently, the drug overdose death rate involving opioids (heroin and prescription opioids) increased from 1.2 to 13.4 per 100,000 during the period. In 2000, the heroin involved hospitalization rate was approximately 2.2 per 100,000, and had increased to 9.5 per 100,000 in 2015. In addition, the opioid-involved hospitalization rate increased from 6.3 in 2000, peaked at 22.8 in 2012 and decreased to 18.9 per 100,000 population in 2015. A recent study, *A Profile of Drug Overdose Deaths Using the Michigan Automated Prescription System (2014) (MAPS)*, found that there were 9.1 million prescriptions dispensed for opioid pain relievers, and over 20.9 million prescriptions for all controlled substances in 2012. From 2003 to 2012, the biggest increase noted was with buprenorphine, a partial-opioid agonist to treat opioid addiction. The number of prescriptions increased substantially from 327 in 2003 to 392,544 in 2012. Increases in Schedule II drug prescriptions from 2003 to 2012 include: oxycodone (129%), methadone (151%), and hydromorphone (391%). Hydrocodone remained the highest prescribed drug since MAPS’ inception in 2003, accounting for 32.2% of all controlled substance prescriptions in 2012. The dispensation rate for opioids was 114.6 per 100 people in 2015, which translates to more than 1 opioid prescription per person in Michigan.

Alternatively, nonmedical use of pain relievers in the past year decreased from 4.8 percent in 2013 to 4.0 percent 2014 for individuals aged 12 and older according to the National Survey on Drug Use and Health (NSDUH). The age group that experienced the most significant decrease from 2013 to 2014 were youth aged 12 to 17 and adults aged 26 and older. Despite the decrease
in that one year period, young adults age 18 to 25 continue to engage in the nonmedical use of pain relievers and TEDS indicates high treatment needs for this age group. The relatively young age of treatment admission clients with heroin and other opiates as their primary drug of use also suggests that more efforts are needed among teens and young adults to stem the tide of early onset use.

The data on prescribing trends, as well as opioid related deaths, suggests that there is a need to manage expectations surrounding patient pain management and to increase education to prescribers to reduce the availability of opioids. Currently, over 40% of opioids are prescribed during episodes of surgical and dental care. Clinical guidelines have been established for providers caring for patients suffering from chronic pain in order to curb opioid misuse and promote the use of alternative analgesics. However, far less is known regarding appropriate prescription opioid use following surgery. Recent studies suggest that opioid prescribing may not match patient consumption, and prescriptions are often written in excess following surgery. For example, roughly 80% of opioid pills prescribed postoperatively remain unused following outpatient procedures. In addition, nearly 20% of opioid naïve patients who undergo “successful” surgery remain opioid dependent following surgery, and new persistent opioid use is now one of the most common postoperative complications. In this context, optimizing postoperative pain management by creating best practices around opioid prescribing, highlighting opioid alternatives, and promoting safe opioid storage and disposal in the setting of surgical and dental procedural care has significant potential to reduce the incidence of opioid dependence and abuse.

Prior to surgery, nearly 25% of individuals are chronic or intermittent opioid users, and another 10% become opioid users following surgery. Given the increased risks associated with new and chronic opioid use, it is essential to create coordinated pathways between primary and surgical care. The lack of clinical guidelines has led to uncoordinated care, excess prescribing, and unsafe prescribing practices following both surgical and dental procedures, including high daily doses, overlapping prescriptions, concurrent prescribing alongside benzodiazepines, and the initiation of extended release opioid formulations for acute surgical pain. Moreover, excessive prescribing and improper disposal creates the potential for unintended opioid diversion into communities, including adolescents and young adults, exacerbating the morbidity and mortality attributable to the prescription opioid epidemic.

In the state of Michigan, the mortality rate related to prescription opioids is accelerating more rapidly than the national average, and is 20% higher. Recent data obtained from the Michigan Value Collaborative, a statewide collaborative quality improvement program focused on enhancing the value of surgical care, reveals that opioid prescribing following surgery varies dramatically across surgeons and hospitals, underscoring the need for streamlined prescribing practices. (Figure 1)
In addition to wide variation in opioid prescribing, over 20% of patients receive prescriptions from 2 or more prescribers following surgical care. The work of the University of Michigan OPEN project suggests that uncoordinated prescribing across multiple providers leads to poor outcomes, and patients who obtain opioids from an increasing number of providers are vulnerable to potentially unsafe prescribing. (Figure 2) Finally, this work demonstrates the ongoing burden of increasing opioid dependence on our healthcare system. They examined postoperative recovery among a large cohort of individuals undergoing elective abdominal surgery in Michigan, and identified that preoperative opioid use is an independent risk factor for poor postoperative outcomes, including longer length of stay, higher rates of postoperative complications, more frequent readmissions, and greater costs of care.22

Michigan continues its efforts to reduce the illicit opioid supply. According to Michigan State Police, the State Managed Multijurisdictional Narcotics Task Forces reported 22.5 kilograms of heroin seizures and 19,929 dosage units of opiates in 2016. Despite the deadly effect of heroin use, 0.4% of individuals aged 12 and older reported using heroin in the past year according to the 2014-2015 NSDUH. Young adults aged 18
to 25 had a higher prevalence of using heroin in the past year at 0.8%.

It is well documented that heroin use is a risk factor for Human Immunodeficiency Virus and Hepatitis C. According to the recent analyses by the Viral Hepatitis Unit within the Michigan Department of Health and Human Services (MDHHS), Michigan is experiencing a significant increase in viral hepatitis due to injection drug use. The number of cases of acute viral hepatitis increased by 200% between 2009 and 2015. In 2015, where data was available, 60 percent of cases reported a history of injecting drug use within the last two weeks to six months. In addition, the number of chronic viral hepatitis cases among individuals aged 18 to 29 increased by 2,300% between 2000 and 2015. In 2015, where data was available, approximately 90% of individuals aged 18 to 20 with chronic viral hepatitis reported a lifetime history of injecting drug use.

The service gap for opioid treatment among the corrections population is fairly large. Despite incarceration, prisoners receive little treatment and exit with co-occurring needs. Because of these trends, the plan to provide MISSION-Criminal Justice, an intensive evidence-based wrap around service and linkage model as part of re-entry planning, will provide a critical next step in state related reentry activity. Table 1 below, provides estimates of incarcerated individuals with OUD, due to be released from prison during the first quarter of 2017 in the target areas of Macomb, Oakland and Wayne Counties, sites where needs have been identified to pilot re-entry with MAT and tight linkages to community programs. Opioid use is self-reported on a continuum from the most severe (daily use) to the least severe (any other frequency of use). Using conservative estimates of OUD, the first column records only those who reported daily use of opiates prior to incarceration. Across the three counties, we find that 561 individuals will be paroled to the community during the first three months of 2017. Using the MDOC rate of mental health disorders among those with OUD (41%), we can determine that 230 individuals within those three counties will meet eligibility for MISSION-CJ and MAT over three months. Extrapolated to four quarters, we could conservatively estimate that 920 individuals will meet eligibility criteria in 2017 within these three counties.

Similarly, a more liberal estimate of need occurs if we examine all possible OUD among those with undetermined need within the three counties (n=823). Applying the prevalence rate of a co-occurring mental health disorder (41%), we find that an additional 337 individuals per quarter (1,348 per year) become eligible. Therefore, the upper most need for this intervention would be 567 individuals per quarter or 2,268 persons annually, across the three counties. (See Table 2)
<table>
<thead>
<tr>
<th>County</th>
<th>Highest Risk: Those who report DAILY use of opiates.</th>
<th>Undetermined Risk: Report Opiates Use – less than daily.</th>
<th>TOTAL POSSIBLE Per County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macomb</td>
<td>98</td>
<td>142</td>
<td>240</td>
</tr>
<tr>
<td>Oakland</td>
<td>105</td>
<td>149</td>
<td>254</td>
</tr>
<tr>
<td>Wayne</td>
<td>358</td>
<td>532</td>
<td>890</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>561</strong></td>
<td><strong>823</strong></td>
<td><strong>1384</strong></td>
</tr>
<tr>
<td>Total x the % estimated to have a MH Disorder</td>
<td>(561 x 41%)</td>
<td>(823 x 41%)</td>
<td></td>
</tr>
<tr>
<td>Target Population Quarterly Estimates</td>
<td>230</td>
<td>337</td>
<td>567</td>
</tr>
<tr>
<td>Annual Estimates</td>
<td>920</td>
<td>1348</td>
<td>2268</td>
</tr>
</tbody>
</table>

The MDOC began a Vivitrol based MAT pilot program in January 2017 for individuals paroling to three densely populated counties within Southeast MI: Wayne, Macomb, and Oakland. Prior to this MAT had not been an option for those in prison or on parole. In a recent study conducted with prisoners and those reentering society, MAT, using extended-release naltrexone was associated with a lower rate of opioid relapse than therapeutic intervention alone.\textsuperscript{23} It has no known abuse or diversion potential and can be administered without disrupting security or other prison routines.\textsuperscript{23,24}

Current eligibility inclusion criteria for the MDOC MAT pilot excludes those with a co-occurring mental health disorder. Given that MDOC estimates that 41% of males and 70% of females with a SUD also have a co-occurring mental health disorder, and that individuals with co-occurring mental health and SUD are more likely to recidivate, relapse, experience homelessness and traumatic events than those with a single disorder; the dearth of MAT services for this population is highly problematic.\textsuperscript{25-27}

In 2014, Michigan law expanded naloxone distribution and required Emergency Medical Services (EMS) to be trained for and carry naloxone by October 2015. The preliminary data showed that the number of patients with naloxone administered by EMS increased by 27% from 2014 to 2016. There is a need to expand naloxone distribution and training to additional first responders. At the end of 2016, Public Act 383 was signed into law in Michigan, making naloxone available at a pharmacy without a prescription from doctors. Greater awareness of access to naloxone for those close to someone who is misusing heroin and opioids is needed to increase the availability of naloxone to reduce accidental overdose deaths in Michigan.
Section B: Proposed Implementation Approach

B.1. The purpose of the proposed project is to: 1) increase access to treatment; 2) reduce unmet treatment need; and 3) reduce opioid overdose related deaths through the provision of prevention, treatment and recovery activities for OUD. The goals of the Michigan Opioid STR project related to the purpose are as follows:

- Improve awareness of the risks associated with using opioid based medications, as well as illegal opioids.
- Increase the availability of prevention focused evidence based practices for individuals considered to be part of the selected or indicated portion of the population.
- Educate physicians on the CDC Prescriber Guidelines for responsible opioid prescribing.
- Increase access to MAT, withdrawal management, and residential treatment services for individuals with OUDs.
- Increase availability of treatment and recovery support services to individuals with OUDs.
- Improve the quality of services for individuals with OUDs.
- Increase treatment and support services available to individuals re-entering the community from prison.
- Revise policy and contractual language to reflect standards of care as identified in Michigan’s Medication Assisted Treatment Guidelines for Opioid Use Disorders.

Michigan aims to accomplish these goals with the following objectives: 1) improving the state infrastructure for individuals with an OUD; 2) training PIHP and provider administration on infrastructure improvements, and training provider staff on evidence based interventions and fidelity measures; 3) implementing evidence based prevention and treatment interventions with accompanying fidelity instruments to ensure that the quality of the intervention is consistent across the provider network; 4) improving access to psychiatric services and psychotropic medications to individuals with an OUD; 5) expanding the availability and use of specially trained peers for MAT and drug free programming; 6) expanding outreach and engagement activities to primary care and law enforcement sites; 7) increasing supports to the prisoner re-entry population with an OUD; 8) expand the use of peers in emergency departments and primary care settings; 9) expand overdose education and naloxone distribution; and 10) disseminate a statewide media campaign for the purpose of public education.

These activities align with both the current MDHHS Strategic Plan and the 2015 Governor’s Prescription Drug and Opioid Task Force Recommendations. OROSC will use the activities, goals and objectives of the Opioid STR project to help fulfill the expectations of the Strategic Plan and Task Force Recommendations.
B.2. The Prescription Drug Overdose Data-Driven Prevention Initiative (PDO DPPI) team, within the MDHHS Injury and Violence Prevention Unit, will plan to assist Office of Recovery Oriented Systems of Care (OROSC) Behavioral Health and Training Coordinator in the new outreach and training efforts to the ten PIHPs. In this collaboration we would like to enhance education of the Michigan Automated Prescriptions System (MAPS) and also to help to broaden understanding of the CDC Guidelines for Prescribing Opioids for Chronic Pain. Additionally, we can provide access to tools and resources to help PIHP contracted providers implement the guidelines and utilize MAPS for better care management and coordination in their regional entities.

As a member of the Behavioral Health State Epidemiological Outcomes Workgroup (SEOW), the Injury and Violence Prevention PDO Team will participate in monthly meetings and hold collaboration efforts at a premium; we hope that any efforts to help reduce prescription drug/opioid abuse and misuse (including data and resource sharing within programs) can be strengthened with this collaboration within our department. Additionally, we plan to share de-identified MAPS data we have access to on opioid misuse and prescriber and dispenser behaviors on any developed opioid related OROSC dashboard.

Funding for this initiative exists in two components: “Planning and Data” and “Prevention in Action.” Grant specific action plans for each component will be the focus over the course of the two years of funding. By meeting the deliverables outlined in the action plans, the initiative aims to play an important role in addressing this growing problem.

There are two areas of commonality and synchronization in the identified objectives of the PDO-DDPI grant and the Opioid STR project. They are as follows:

- Support MAPS enhancements, making MAPS easier to use and access.
- Offer education and outreach for increased understanding and access to the 2016 CDC prescribing guidelines.

However, Opioid STR funds will help support the addition of an SUD specific platform in MAPS, which will allow prescribers and pharmacists the opportunity to review additional information beyond the basics of MAPS and includes resources for intervention. OROSC will work closely with Population Health to ensure that efforts to increase understanding of the CDC prescribing guidelines are not duplicative of Opioid STR education initiatives. The Opioid STR project will move a step farther by offering training targeted to physicians regarding safe prescribing practices.

B.3. Project Timeline

<table>
<thead>
<tr>
<th>Key Activities</th>
<th>Responsible Staff</th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>Develop Needs Assessment</td>
<td>Project Director, evaluators</td>
<td></td>
<td></td>
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<tr>
<td>Develop a Comprehensive State Strategic Plan</td>
<td>Project Director, Project Coordinator,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key Activities</td>
<td>Responsible Staff</td>
<td>Year 1</td>
<td>Year 2</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
<td>-----------------------------------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>Design, Implement, Enhance and Evaluate Primary and Secondary Prevention using</td>
<td>Project Coordinator, evaluators</td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td>Evidence-based Methods</td>
<td></td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>Implement or Expand Access to Clinically Appropriate EBPs</td>
<td>Project Coordinator</td>
<td></td>
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<tr>
<td>Provide Assistance to patients with treatment costs and develop other strategies</td>
<td>Project Coordinator</td>
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<tr>
<td>to eliminate or reduce treatment cost for under-and uninsured patients.</td>
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<tr>
<td>Provide treatment to transition and coverage for patients reentering</td>
<td>Project Coordinator</td>
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<tr>
<td>communities from criminal justice settings or other rehabilitative settings</td>
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<tr>
<td>Enhance or support the provision of peer and other recovery support services</td>
<td>Project Coordinator, SOTA</td>
<td></td>
<td></td>
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<tr>
<td>designed to improved treatment access and retention and support long-term</td>
<td></td>
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<td></td>
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<tr>
<td>Train substance use and mental health care practitioners</td>
<td>Project Coordinator</td>
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<tr>
<td>Address barriers to receiving treatment by reducing the cost of treatment,</td>
<td>Project Coordinator</td>
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<tr>
<td>developing systems of care to expand access to treatment, engaging and retaining</td>
<td></td>
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<td></td>
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<tr>
<td>patients in treatment, and addressing discrimination associated with accessing</td>
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<tr>
<td>treatment, including discrimination that limits access to MAT.</td>
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<tr>
<td>Train OUD prevention and treatment providers, such as physicians, nurses, NPs,</td>
<td>Project Coordinator</td>
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<tr>
<td>Pas, counselors, social workers, care coordinators and case managers.</td>
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<td></td>
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<tr>
<td>Support innovative telehealth in rural and underserved areas to increase the</td>
<td>Project Coordinator</td>
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<tr>
<td>capacity of communities to support OUD prevention and treatment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase naloxone for distribution in high need</td>
<td>Project Coordinator, MSP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Key Activities

<table>
<thead>
<tr>
<th>Key Activities</th>
<th>Responsible Staff</th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
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<tbody>
<tr>
<td>communities, if necessary, and training first responders, substance use prevention and treatment providers, and other on the use of naloxone.</td>
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<td>Q3 Q4</td>
<td>Q1 Q2</td>
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<td>Enhance the State Prescription Drug Monitoring Program (PDMP), working with CDC grantees where applicable, to increase use of PDMP data (where appropriate).</td>
<td>Project Coordinator, LARA</td>
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<td>Establish and/or enhance statewide and community based recovery support systems, networks, and organizations to develop capacity at the state and local levels to design and implement peer and other recovery support services as vital components of recovery-oriented continuum of care.</td>
<td>Project Coordinator</td>
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**Key Activities**

**Needs Assessment:** The Office of Recovery Oriented Systems of Care (OROSC) has been following SAMHSA’s Strategic Prevention Framework (SPF) for guiding the selection, implementation, and evaluation of evidence-based, culturally appropriate, sustainable interventions addressing substance use disorders. The implementation of the Strategic Prevention Framework (SPF) model led to increased communication, collaboration and coordination between state and community stakeholders. As a result, several workgroups were formed, including a training cadre. The model continues to guide our work in both substance use disorder prevention and treatment.

The first step in the SPF model is a Needs Assessment to systematically gather and analyze local data related to the substance use disorder problem—in this case, opioid misuse. These data will help answer the questions what, who, where, when and why, and better understand the opioid misuse issues in the state. This step of the SPF is important for identifying appropriate strategies for addressing opioid misuse. A comprehensive assessment should: a) Identify the nature and extent of the opioid misuse problem in different groups, including those defined by age, gender, race/ethnicity, or other demographic characteristics, b) Identify the geographic areas where the problem is greatest, c) Define populations that are most affected by the problem (e.g., young adults, women, active users, people at high risk of overdose), d) Identify intervening variables that are linked to opioid misuse. In general, OORSC will identify the status of the problem, identify needs, potential solutions, political will, and the readiness to act.

Michigan maintains a State Epidemiological Outcomes Workgroup which will assist with the coordination of the needs assessment. The Recovery Oriented Systems of Care - Transformation
Steering Committee (ROSC-TSC) which has representation from providers, partners and consumers alike, will participate as needed. Wayne State University’s evaluation team will assist with data collection and analysis as well. From our previous work on the SPF the main action steps will include: a) reviewing data from a variety of sources, b) determining the extent of the problem, c) clarifying the populations’ needs, d) developing a guidance document for state goals, and e) assessing readiness to address the needs and gaps.

The needs assessment will utilize both qualitative and quantitative methodologies to provide a more complete picture of needs and gaps in the state. Data will be collected from a wide range of sources using both primary and secondary data collection. One important area of assessment is to document the number and location of all opioid treatment providers in the state, and their capacity to serve. In addition, we will create a database of all existing activities and their funding sources in the state that address OUD prevention, treatment, and recovery activities and remaining gaps in these activities. This will provide a clearer picture to allow for strategic planning, expansion and additional services where they are most needed.

Quantitative methods will be used to assess prevalence and consequences of opioid use through various data sources. The data sources include, but are not limited to, NSDUH, YRBS, Michigan Profile for Healthy Youth, Michigan Young Adult Survey, BFRSS, MAPS, Death Certificates, Michigan Inpatient Data Base, Michigan Department of Corrections- Prisoner Reentry, Michigan State Police-Opioids seized, and Treatment Episode Data Set.

Qualitative methods will be used to assess perceptions of a variety of factors such as access, community norms, perceived risk of harm, strategies and needs. Care will be taken to ensure that within target communities, and across the state, there is inclusion of a wide range of voices to promote cultural and linguistic diversity. The data collection will include:

- Internet survey with providers to gather perceptions around treatment availability, readiness to address opioid issues, training needs and service gaps.
- Focus groups and/or key informant interviews with persons with lived experience, family members, providers, law enforcement to assess community norms, risks, consequences of opioid use in families and communities and more.
- Community readiness will be assessed across all target communities and the materials will be made available to our coalition and PIHP partners in all communities. Michigan has most often used the Tri-Ethnic Center Community Readiness Model. A large group of Michigan communities were trained in this model and Colorado State University has made the manual available for download at triethniccenter.colostate.edu/docs/CR_Handbook_8-3-15.pdf.
- Local data to provide a community context for opioid use in the state.

Data analysis will depend on the type of data collected. Quantitative data will be displayed using tables and graphs, showing trend lines where data is available. Information will be shared with the Governor’s Opioid Commission and state level leadership to ensure sustainability beyond the grant project.
Qualitative data will be coded by themes and aggregated into summaries; survey data will be summarized with means and other statistical tools of aggregation as appropriate. The prisoner re-entry initiative included in this project will complete a network analysis to identify connections to systems pre- and post- intervention.

Strategic Plan: OROSC will enlist the members of the currently existing ROSC-TSC, SEOW, the Medication Assisted Treatment Workgroup, and other stakeholders to form a subcommittee focused on developing a strategic plan for the Opioid STR project. The strategic plan will include the goals of the project, key activities of the grant, and strategies to remedy gaps in prevention, treatment and recovery efforts identified in the needs assessment. Michigan’s Medication Assisted Treatment Guidelines for Opioid Use Disorders will help guide strategies to improve the quality of treatment and recovery services for individuals with OUD, and remedy deficits in the current MAT continuum of care. Through this mechanism, Michigan will ensure that the state’s infrastructure can support the needed improvements to the system, as well as develop methods to ensure sustainability.

Supporting Costs: As Michigan is a Medicaid Expansion state, many of the individuals enrolled in MAT treatment are covered under traditional Medicaid or Medicaid Expansion, the Healthy Michigan Program (HMP). This has been a great benefit to individuals needing treatment for an OUD and participation in MAT programs has grown significantly since expansion began. However, there are individuals who are ineligible for Medicaid or HMP and they struggle to meet the costs of their treatment. Funding from this grant will be used to extend limited benefits for the uninsured, support the cost of co-pays for those who are insured and engaged in MAT treatment, to support the costs of MAT treatment for those without any health benefits, and to support the additional treatment needs of individuals who elect to participate in drug-free treatment options. Additional treatment needs could be extended stay in withdrawal management and residential levels of care, as well as connections to primary care and community resources.

Opioid Prescribing: Training will be developed and provided on multiple levels: 1) for substance use and co-occurring disorder clinical staff, based on the Medication Assisted Treatment Guidelines for Opioid Use Disorders, to support best practices for treatment of OUD; 2) best practices for pain management in individuals with OUD; 3) screening, identification and referral within the primary care setting; and 4) Opioid prescribing guidelines as identified by the CDC. OROSC uses an online platform for trainings that offer basic information, such as confidentiality, recipient rights and communicable disease. The platform is called Improving MI Practices, and training material that is appropriate for this type of delivery system will be placed on this platform for easy and consistent access as needed by practitioners.

Barriers to Treatment: Through the Opioid STR project, OROSC will provide support to individuals who cannot afford the cost of medications, therapeutic interventions, and transportation to services for those without any other resources. OROSC will also seek to streamline and simplify the Medicaid process for beneficiaries to reduce the stress on the
individual, as well as the provider, when seeking authorizations for MAT prescriptions and associated physician services. It is the intended outcome that by implementing many of the EBPs identified in this application, engagement and retention will be improved, as well as the quality of interventions individuals receive. OROSC continues to build partnerships with stakeholders to reduce stigma associated with MAT, and will expand these efforts through the Opioid STR project.

Veterans: MDHHS's Veteran's Liaison has been intricately involved in promoting the health and wellness of Michigan's veterans. As such, he has been working with the Michigan Veteran's Affairs Agency, the Michigan National Guard, and other stakeholders to assist in the development of a web portal or smartphone app that would enable a veteran or service member to access resources in their community in the areas of employment, education, housing, healthcare, transportation, and quality of life. The technology is still in development, and as work progresses OROSC will be submitting resource information for inclusion in the quality of life portion of the technology.

PDMP: Michigan will be the 42nd state utilizing the Appriss, Prescription Monitoring Program (PMP) Aware, solution for its PDMP called the Michigan Automated Prescription System (MAPS). As technology solutions evolve, Michigan will be poised, after fully transitioning to the Appriss solution on April 4, 2017, to enhance the new system with a more robust Substance Use Disorder (SUD) platform that Appriss offers, called NarxCare. This advanced platform can also be directly integrated with pharmacy electronic management systems and health electronic medical records to fit nicely within practitioner clinical workflows to encourage and incentivize use of the state’s PMP with direct accessibility and intuitive functionality.

NarxCare is the next generation SUD platform designed to provide a more comprehensive approach to addressing substance use disorder. NarxCare aids care teams in clinical decision-making, provides support to help prevent or manage substance use disorder, and empowers states with the comprehensive platform they need to take the next step in the battle against OUDs. NarxCare aggregates two years of historical prescription data from providers and pharmacies including quantities and active prescriptions and presents interactive, visual representations of the data, as well as complex risk scores based on the data. The platform then provides tools and resources to enable prescribers, dispensers and care teams to help patients and connect them to the regional Access Management System for prevention and treatment services, as appropriate.

This solution is presented in two main modules: The Narx Report and Resources. The Narx Report includes a patient’s NarxScores, Predictive Risk Scores, Red Flags, Rx Graph and access to Resources and Provider Communications. The NarxCare Resources module provides Medication Assistance Treatment (MAT) locators, patient information handouts, drug drop-off locations, and more. All features are accessible with a single click and automatically contextualized to an individual patient’s demographics. NarxCare also delivers peer-to-peer messaging among prescribers, including the transmission of documents, enabling easy communication among all authenticated users. Messaging enables collaboration of care, alerts
and information sharing, and other functions important to clinical decision-making and patient care.

The Michigan Department of Licensing and Regulatory Affairs (LARA) is partnering with the MDHHS through the Opioid STR project to enhance the state's PMP, MAPS, for the following:

1. Purchase, develop and upgrade current PMP Aware solution offered by Appriss to its next generation of software platform called NarxCare:

2. Conduct outcomes based study to obtain data on the success and effectiveness of Narx Care. Study 1 and Study 2 activities outlined below.

By making this level of investment in MAPS, and including the NarxCare technology solution, this will supplement current activities that LARA has implemented in the area of monitoring, regulation, notification to practitioners of duplicative prescriptions, and identification of practitioners who are over prescribing, over dispensing and/or involved or engaging patients in drug diversion. In addition, it will encourage increased use by practitioners of MAPS, and with LARA’s ongoing collaboration with MDHHS we can better address and prevent overdose deaths, in particular around the area of OUDs. Having this kind of advanced technology tool that can assist in connecting the dots of the various elements needed to comprehensively fight this epidemic that Michigan and the nation are combatting is essential if we are going to make a difference.

Through this project, Study 1 will: Quantify the effectiveness in workflow PMP clinical decision support. Appriss Health will work with MAPS to study the effectiveness of in-workflow PDMP clinical decision support. This will be accomplished by comparing baseline PDMP use and outcome metrics with those obtained after the implementation of NarxCare. The pre- and post-implementation metrics planned for study include:

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<th>Table 3: Study 1 Pre- and Post- Implementation Metrics</th>
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<td><strong>Provider Activity</strong></td>
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<tr>
<td>Total daily report reviews</td>
</tr>
<tr>
<td>% compliance with checking prior to prescribing</td>
</tr>
<tr>
<td>% overlapping prescriptions</td>
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Study 2 will conduct a survey of perceived effectiveness of PMP risk indicators. Appriess Health provides in-workflow PDMP clinical decision support that includes the use of data-derived risk indicators predictive of certain outcomes. These outcomes include overdose death, and non-fatal overdose. Appriess Health will work with MAPS to conduct an inline survey to providers engaged in clinical care to assess their overall perception of accuracy and usability of the risk indicators as they relate to decision to prescribe or decision to intervene.

B.4. OROSC will employ a full-time Project Coordinator to manage the activities and deliverables of the Opioid STR project. The ability to provide technical assistance to those implementing the EBPs, providing training, and monitoring progress will contribute to OROSC’s ability implement the key activities, make changes as indicated by data, and effectively report on progress. In addition to the Project Coordinator, OROSC will hire a part time Project Assistant to help with daily project needs, and to maintain required reports and data. The project staff will oversee training to practitioners in EBPs, work with fidelity teams and tools to ensure correct implementation, and work with existing OROSC staff to update policy and contract for sustainability of quality improvements.

Wayne State University (WSU) will be the contracted evaluator for the Opioid STR project. To support their activities, a Principal Investigator, Co-Principal Investigator, consultants and project staff will be utilized. WSU will monitor the key activities of the grant, evaluate data and outcomes associated with the EBPs, provide feedback on success and fidelity of implementation of the EBPs, and report on necessary GPRA requirements.

B.5. Prevention efforts are an important part of the plan to reduce opioid use in Michigan. More broadly, prevention occurs at individual and environmental levels and across domains of individual, family, school and community. As a primary prevention strategy, we are expanding use of a family-based model. A large research base exists to support that families play a critical role in substance abuse prevention. 28

Michigan Drug and Opioid Abuse Campaign: The objectives of the campaign include: 1) Increasing awareness of the dangers of opioids and educate the public about proper storage and disposal of prescription drugs; 2) Increasing awareness among prescribers of the dangers of prescription drugs; and 3) Encouraging prescribers to register for the MAPS.

The primary target population includes 26-44 year olds in Michigan, although messaging will be created to also resonate with a younger cohort, as well as parents. The secondary target population includes prescribers of opioids, most commonly, family doctors and internists who treat patients for chronic pain. The campaign will be a statewide initiative, including the Upper Peninsula and northern Lower Peninsula, with focus on counties with high rates of opioid-
involved deaths, specifically: Calhoun, Monroe, Wayne, Muskegon, Ingham, Livingston, Washtenaw, Ottawa, Macomb, Kent, Genesee and Oakland.

The Media Campaign will run from August 2017 to September 2018. To help develop the media plan for Prescription Drug and Opioid Abuse Campaign MDHHS used Nielsen Reports and Nielsen @plan research using the profile – A25-44 in Michigan with a filled prescription within the last 90 days. The campaign will utilize a diverse media mix including: radio, television; cable television; digital; audio streaming; social media; Google AdWords; prescriber targeting; email prescriber targeting; and Google AdWords prescriber targeting.

Below are the findings from the research that helped determine the media mix.

- 64% of the target audience listened to traditional radio in the past week
- 96% of the target audience accesses the internet 5+ times per week
- 90% of the target audience uses a cellular device to go online
- The target audience is 42% more likely to listen to Pandora's free streaming service than the average 18+ on-line user
- 89% of the target audience has 1+ social networking profile
- 78% of the target audience uses a desktop to go online
- The target audience is 89% more likely to search through a browser for how-to advice than the average 18+ on-line user
- Michigan State Medical Society Newsletter is delivered weekly to over 6,800 subscribers

The media campaign will be developed by Brogan and Partners, an accomplished communications agency that has provided media services over several years to MDHHS. The campaign content and messaging will be created in a culturally and linguistically appropriate manner, based on feedback from an existing opioid media campaign workgroup established to respond to the Governor’s Prescription Drug and Opioid Task Force’s recommendations of 2015 to develop an awareness campaign to increase public knowledge regarding opioid misuse. The workgroup consists of service providers, prescribers, pharmacists, administrators from MDHHS, PDMP personnel; and coalitions addressing opioid misuse and overdose deaths and injuries. Focus groups with the target populations of the campaign will also be conducted to create the proper and effective messaging and media used in the campaign.

**Strengthening Families (Iowa Model):** The Strengthening Families Program: For Parents and Youth 10-14 (SFP 10-14) is a family skills training intervention designed to enhance school success and reduce youth substance use and aggression among 10- to 14-year-olds (www.extension.iastate.edu/sfp10-14/). It is theoretically based on several etiological and intervention models including the biopsychosocial vulnerability, resiliency, and family process models. This intervention model has been shown to produce a wide range of positive outcomes.
(e.g., enhanced youth life skills and academic performance, improved parenting and family functioning, reduced youth health-risking sexual behaviors, substance misuse, and conduct problems) as many as 10 years past baseline. In relation to the opioid crisis, SFP 10-14 has proven to be significantly effective in both improving risk perception of harm within youth and decreasing the use of opioids in the long term. In addition, it is recognized as a Model Program by the Center for Substance Abuse Prevention (CSAP) and the Substance Abuse and Mental Health Services Administration/National Registry of Evidence-based and Promising Practices.

The program includes seven two-hour sessions and four optional booster sessions in which parents and youth meet separately for instruction during the first hour and together for family activities during the second hour. The sessions provide instruction for parents on understanding the risk factors for substance use, enhancing parent-child bonding, monitoring compliance with parental guidelines and imposing appropriate consequences, managing anger and family conflict, and fostering positive child involvement in family tasks. Children-focused sessions deliver instruction on resisting peer influences to use substances, and developing a healthy future orientation, a protective factor shown to reduce future use.

SFP 10-14 is a modified version of the full scale Strengthening Families Program currently being implemented within six PIHP regions in eight counties through the PFS 2015/2020 grant. OROSC intends to expand the reach of this program to all ten of the Regional PIHPs in Michigan. Due to the statewide implications of the opioid crisis in Michigan, program expansion will increase availability of substance abuse prevention services while targeting regions with current service gaps. PIHP regions with counties currently implementing the original program under the PFS 2015/2020 grant were identified as high needs, increased risked communities based on epidemiology data collected. PFS 2015/2020 grant funding will continue to support those previously identified areas while STR grant funds will provide support to unfunded areas and additional funding to PFS regions so that they may increase programming to counties in their region without the program. The epidemiological significance of these regions support the need for additional funding to address the increased prevalence of opioid use disorders.

Michigan's PIHP regions are a mix of urban and rural with varying levels of readiness, infrastructure and resources. As such, flexibility will be provided to best meet the region's need to incorporate screening into primary care settings and community health care centers. Recruitment of participants can come from multiple methods. First, participant identification can be conducted through Screening, Brief Intervention, and Referral to Treatment (SBIRT). Dependent upon the level of SBIRT implementation per region, a mixed methodology will be deployed on the administration of screening for program participation. In some regions, it may be best for a primary care provider to actually administer the screening tool. In other regions, it may be best for prevention professional to administer or review the results of the screening tool and determine next steps. Families may also be recruited by traditional methods of program recruitment, including referrals from schools and school health staff, partner agencies such as Youth Assistance Programs, human service agencies and other groups. This allows for a wide
range of families to be recruited into Strengthening Families programs, beyond those specifically identified as at-risk. Through this expanded inclusion criteria, youth and families’ recruitment issues will be minimized, while primary prevention capacity will be maximized.

As part of the SBIRT process, the specific screening tools to be utilized will be either the CRAFFT (Car, Relax, Alone, Forget, Friends, Trouble) or National Institute on Alcohol Abuse and Alcoholism (NIAAA) Screening. Other evidenced based tools may be used with prior approval from ORCSC. Individuals identified in either indicated or selective populations as a result of this screening will be referred to SFP 10-14.

Training on SFP 10-14 will be provided by SFP-certified trainers to prevention leaders within all ten of Michigan’s Prepaid Inpatient Health Plan (PIHP) regions. Technical assistance on program implementation, quality/fidelity, and evaluation will be key components of the required training. Each provided training session will consist of two days with two SFP-certified trainers, with approximately 35 prevention leaders per training. In addition to the hands-on learning, a CD with the SFP 10-14 course work will be included with a permanent site-limited license to copy course materials for agency use. Several sessions will be held around the state for the proximal convenience of each PIHP. To increase the capacity of trained prevention specialists and ensure sustainability, train-the-trainer sessions will take place interspersed across the state.

**Michigan OPEN:** In 2016, the University of Michigan (UM) established the Michigan Opioid Prescribing Engagement Network (Michigan OPEN), as a collaborative, statewide program designed to identify best practices in opioid prescribing for common surgical procedures, optimize patient care for vulnerable patients, highlight opioid alternatives, and ensure accessible options for safe opioid disposal and storage. This innovative platform, funded as a Medicaid Match program through MDHHS, executes its work plan through the collaborative quality initiative (CQI) programs funded by Blue Cross Blue Shield of Michigan (BCBSM) that reach over 73 hospitals in our state.

UM actively partners with the both BCBSM, the MDHHS, and over eight Collaborative Quality Improvement Programs focused on surgical and emergency care in Michigan to engage providers, patients, and communities. Going forward, in this two year proposal, UM will expand partnerships to include the BCBSM -funded Physician Group Incentive Program (PGIP), LARA, and the Michigan Dental Association to optimize opioid prescribing and develop best practices during transitions of care and include oro-maxillofacial and dental procedural care. These established programs offer an unmatched platform to disseminate data to specialist care, surgeons, and primary care physicians, and develop and implement population-based quality improvement strategies directed around opioid prescribing.
In this two-year proposal, UM will partner with PGIP to identify gaps in care and opportunities for improvement between primary care providers and surgeons during the preoperative and postoperative period, specifically as it relates to opioid prescribing. Strategies will be developed to facilitate referral patterns between primary care and surgical providers to bridge gaps in care for chronic or newly dependent opioid users in order to facilitate opioid weaning, and prevent opioid misuse and abuse. In addition, UM will expand communication tools within the medical record and MAPS through LARA to ensure coordinated opioid prescribing across providers in all specialties. It is anticipated that this partnership will lead to improved quality of care for patients undergoing surgery by identifying patients vulnerable to postoperative opioid dependence prior to surgery and building appropriate referral and care pathways, as well as optimizing care for patients chronically dependent on opioids who are facing surgical procedures in order to prevent opioid escalation, and morbidity and mortality related to uncoordinated care.

Collaborative Quality Improvement (CQI) programs provide a cooperative approach to population-based quality improvement in which large payers provide financial support and infrastructure to establish collaborations among hospitals and healthcare centers that are directed at improving the quality of care for patients with a specific condition or undergoing a specific type of surgical procedure. Within programs, each hospital or site collects longitudinal, prospective clinical data regarding patient characteristics, clinical outcomes, and relevant processes of care, which are then submitted to a coordinating center. Data is obtained at regular intervals from the medical record by trained chart abstractors with the use of standardized definitions, and maintained in a large clinical registry. Registries include detailed patient clinical and sociodemographic information including risk factors, processes of care and outcomes. Hospitals and surgeons receive regular feedback regarding their performance at timed intervals from the coordinating center. Participants convene at scheduled intervals, such as biannually or quarterly, to review the data and interpret areas of improvement, concern, or variation. Changes in practices and resultant outcomes can be tracked, and the most successful strategies, or best practices, can be implemented in a standard fashion. Participation in the collaborative is voluntary, but compensation is provided for those centers that maintain data and participation standards. Hospitals and physician groups are compensated for their participation and data collection efforts, regardless of their individual performance or how they rank compared with other hospitals.

Although each CQI program has unique characteristics, quality collaboratives all share four critical elements: rigorous data, timely feedback, transparent reporting, and collaborative improvement. Timely feedback of data is provided to participants at regular intervals at scheduled meetings between providers, surgeons, and program coordinators where performance data is reviewed. Performance data is provided in a transparent fashion that is easy to interpret,
confidential to individual surgeons, or in a de-identified format when presented in aggregate. Reports can then be used by hospitals to compare their own performance against other systems, or against aggregate means. Payers require regular reporting from participants to ensure data quality, and have access to data in order to follow variation in care.

Established goals of the CQI program include the following:

- To empower providers to self-assess and optimize their care by identifying opportunities to bring care into closer alignment with best practices leading to improved quality and lower costs for selected, high cost, high frequency, and highly complex procedures.

- Examine the link between care processes and outcomes in complex, highly technical areas of care to continually generate new knowledge contributing to understanding of which care processes lead to optimal outcomes.

- Measure the quality of care within and across systems of care

- Create a feedback loop to participating institutions to facilitate continuous quality improvement at their own facility

- Identify “clinical champions” at each participating hospital

- Implement fast-track quality improvement initiatives targeted at specific, high-leverage procedures

- Continue to demonstrate to consumers and purchasers of care that CQIs positively impact systems of care and help optimize the quality and outcomes of care

For the Opioid STR project, UM will build upon existing infrastructure established within Michigan OPEN to expand data collection on opioid prescribing and patient-reported pain outcomes and opioid consumption following both surgical and dental care, and extend our work-plan into emergency care and primary care. In order to engage our clinical partners in primary care to facilitate smooth transitions of care during surgical episodes, we will partner with PGIP through BCBSM. We also aim to work with the LARA to ensure prescription drug monitoring programs, such as Michigan Automated Prescription Service (MAPS), are leveraged more effectively during episodes of surgical care. Audit and feedback interventions ideally provide
timely, relevant information regarding clinical care and are designed to encourage behavioral change and improve quality of care. Such tools have been shown to be highly motivational in a variety of settings, and are particularly incentivizing for clinicians seeking to improve care.

UM will use the data gathered from each CQI program, PGIP, and dental organization regarding the risk factors for opioid use, and provider factors that influence opioid prescribing, to create clinical tools that display provider-level opioid prescribing alongside patient opioid utilization. We believe that an inappropriate match between patient requirements and opioid prescribing leads to poor outcomes. For example, uncontrolled pain following surgery, despite postoperative opioid regimens, may lead to poor patient satisfaction, prolonged length of stay, and chronic postoperative pain. Alternatively, excessive opioid prescribing may also lead to unfavorable outcomes, including opioid diversion and misuse. Therefore, creating a tool that integrates patient opioid use, opioid prescribing, and options for storage and disposal could allow clinicians to tailor prescribing to pain requirements. As such, providers will be motivated to match opioid prescribing with patient needs and that this will result in a decline in overall opioid prescribing as well as the number of un consume d opioids available to diversion. Specifically, the existing work plan will be modified to:

1. Collect and disseminate data regarding patient trends in healthcare access and utilization alongside opioid prescribing, which will now include emergency care and primary care prior to, during, and after surgical and dental procedures.

2. Provide feedback to providers, including primary care providers, emergency care providers, dentists, and oral surgeons, regarding procedural opioid prescribing, pain outcomes, and patient-reported opioid consumption through informational tools administered in a clinical setting.

3. Partner with statewide dental organizations to engage oral surgeons and dentists and raise awareness regarding gaps in prescribing and opioid consumption, provide feedback over time, and determine new strategies to improve practice.

4. Expand provider and patient educational modules regarding opioid prescribing, risks, prescription drug monitoring programs, and appropriate disposal and storage across all CQIs, including those directed toward emergency and trauma care, PGIP, and through statewide dental organizations.

5. Integrate the PGIP work-plan with existing surgical CQIs and PGIP to develop initiatives focused on improving referral patterns and communication between surgical and primary care procedures around episodes of procedural care, particularly for patients who are at high risk of developing, or who currently experience opioid dependence.

Overdose Education and Naloxone Distribution: OROSC will partner with the Grand Rapids Red Project, a pioneer in Michigan’s opioid overdose prevention efforts, and one of the first programs to offer overdose education and naloxone distribution (OEND) to non-medically trained community members as well as law enforcement in the state. The Grand Rapids Red Project has
been providing community-based opioid overdose prevention since 2008, which predates the release of SAMHSA’s Opioid Overdose Prevention Toolkit. However, the Red Project’s overdose prevention work has consistently aligned with each version that has been released, including the most recent version released in 2016.

The Red Project’s technical assistance team includes staff and consultants. Staff at Red Project have supported community based overdose prevention expansion into 21 counties and have been asked to present their work and model at conferences in the state and nationally, in addition to training and equipping over 1,000 law enforcement officers from 50 different departments with naloxone rescue kits in the past year. Community based overdose prevention efforts in West Michigan have resulted in over 400 reported overdose reversals since 2008. For larger technical assistance projects, Red Project collaborates with a cadre of local and national experts.

In the past 9 years, an approach has been developed to implement and expand overdose prevention and naloxone access. A comprehensive opioid safety initiative involves some important “non-traditional partners” - parents and loved ones of people who use drugs and people who have been lost to overdose, people who use drugs, and people in recovery. Traditional and primary prevention initiatives may not be familiar with identifying, engaging, and supporting the continued involvement of these groups that have little or no professional experience of education about prevention. Nonetheless, involvement and input from these groups are essential for community-based overdose prevention.

In a broad sense, firmly establishing a community based opioid overdose prevention initiative involves four main steps:

1. Provide overdose education and naloxone distribution (OEND) to a wide audience, including but not limited to people who use opioids, their friends and family, individuals in recovery, SUD service providers, and law enforcement

2. During general OEND training, interested champions spontaneously emerge

3. Provide train-the-trainer to the identified champions and offer ongoing technical assistance and troubleshooting support. This process establishes local expertise. Examples of technical assistance include:
   a. Help with policies and procedures
   b. Develop responses to common hurdles
   c. Support recruiting a medical support team
   d. Explore various options for naloxone purchasing
   e. Liaise with local government, including health departments, district attorneys, and law enforcement
   f. Explore media and information dissemination strategies

4. Connect local experts to counterpart experts in different regions for ongoing support, information dissemination, minimizing overlap in resource/material development, etc.
   Examples of activities include:
   a. Development and engagement of a list serve
b. Quarterly phone calls for discussing targeted approaches

c. Biannual meetings for knowledge transfer and to cement a learning community relationship. Providing continuing education opportunities at these events improves the capacity for licensed professionals such as physicians, nurses, NPs, PAs, counselors, social workers, care coordinators and case managers to join.

While the Red Project does not provide MAT for OUD, the program is a Recovery Community Organization. A majority of the services are delivered by peer support specialists, trained to provide support to people at risk for opioid overdose at whatever point in the recovery process that person may be. For example, activities with a person who is actively using and not engaged in treatment might be OEND and Motivational Interviewing; the Red Project might provide logistical or relapse prevention support to someone engaged in MAT. Strong relationships between risk reduction and overdose prevention programming and MAT providers is essential to reducing opioid overdose deaths. One approach to enhancing relationships and communication between OEND and MAT is to incorporate OEND into SUD treatment.

Some Prepaid Inpatient Health Plan (PIHP) regions have established community-based overdose prevention initiatives and some are in earlier stages of development. PIHP regions that have more established initiatives already have systems in place to purchase naloxone and additional overdose prevention materials. In this case, the Opioid STR funds would simply go directly to those purchases. For PIHP regions with less formal naloxone procurement systems in place, the Red Project’s “implementation package” includes all the implementation technical assistance listed above as well as sufficient starter materials to bridge the organization until they have the necessary components in place to acquire FDA approved prescription naloxone products. The most cost effective and most widely distributed naloxone is a generic injectable naloxone, though nasal naloxone will also be purchased for groups that are concerned about injury and liability (such as law enforcement) as well as a modification for cultural competence where injection is more strongly stigmatized even though overdose risk is high.

Specifically, technical assistance for the community based OEND component of the Opioid STR will include, at minimum:

1. Technical assistance needs assessment and service planning for each PIHP region and will target identified 24 counties from Section A, at minimum. This will be expanded as necessary based on the results of the formal needs assessment

2. OEND Train the Trainer and Law Enforcement Training (provided via in-person training and webinar as needed)

   a. Overdose epidemiology, best practices, variation, and state of the evidence
   b. Local, state, and national policy- what policy and legislation does and does not indicate and liability issues
   c. Understanding different naloxone products
   d. Overdose prevention and newly emerging synthetic opioids (fentanyl analogs, U-47700, etc)
e. Secondary prevention, public health, and harm reduction
f. Others based on needs assessment

3. Minimum of one on-site training per PIHP region per year (unless PIHP regions are close and decide to combine training),

4. Individual phone calls and emails, as needed

5. Establish a learning community by:
   a. Developing a list serve
   b. Hosting quarterly phone calls
   c. Organizing regional bi-annual meetings

6. Implementation package including naloxone procurement support

7. Support to ensure that initiatives involve people who use drugs, people in recovery from SUD and friends and family of people at risk for or lost to overdose

8. Ongoing technical assistance to the MI SSA related to monitoring, reporting and evaluation

The Inter-Tribal Council (ITC) Tribal OUD Prevention Initiative will work with the tribes in Michigan to facilitate a needs assessment and strategic planning initiative during the first 6 months of the project, from 4/1/17 thru 9/30/17. The focus of these efforts will be to:

- Identify areas where opioid misuse and related harms are most prevalent.
- Identify the number and location of opioid treatment providers available to tribal people, including providers that offer opioid use disorder services.
- Identify all existing activities and their funding sources available to the tribes that address opioid use prevention, treatment, and recovery activities and remaining gaps in these activities.
- Develop comprehensive local tribal strategic plans to address the gaps in prevention, treatment, and recovery identified in the needs assessment and a comprehensive inter-tribal strategic plan to support local plans.

This strategic planning initiative will use existing collaborative networks to facilitate local and inter-tribal planning. For those tribes that have a Tribal Action Plan (TAP) in place, this initiative will enhance current efforts by focusing specifically on the opioid epidemic. For those tribes that do not have a TAP in place, these efforts will support the beginning of a TAP with the goal of integrating these strategic plans into the local tribal government’s long term TAP planning initiative.

To help build capacity, the project will use a train the trainers model combined with extensive technical assistance to facilitate this planning initiative at the local level. For this purpose the project will support the training of facilitators using the GONA Model or a locally selected approach. The Gathering of Native Americans (GONA) curriculum was developed between 1990 and 1994 and has stood the test of time as an effective healing and planning model for tribal communities addressing impacts of historical and intergenerational trauma. Impacts include substance abuse, suicide, meth and other drug use, violence, poverty and more. This training will
teach people how to facilitate a GONA for their local tribe. Participants will go through the four foundational phases of the GONA: belonging, mastery, interdependence and generosity. A handout packet will be distributed to each participant that they can duplicate for use in their local community. The training will be conducted by one of the original GONA curriculum developers, Theda New Breast of the Native Wellness Institute. The trained facilitators will work collaboratively across tribes to support their planning at the local level. The ITC will also provide extensive support. The GONA initiative will focus on the opioid crisis in tribal communities. If a tribe opts to use a different approach or has been using a specific strategic planning model the ITC will support the choice of the local tribe. Some of the other options available or currently in use include, the Community Readiness Model, http://www.happ.colostate.edu/, the SAMHSA Strategic Prevention Framework, or the Spectrum of Prevention, www.preventioninstitute.org. Based on the needs identified through the GONA, the local tribe will implement one or more of the following EBPs: Red Cliff Wellness, Project Venture, Lions Quest Skills for Adolescence, Celebrating Families, The Narconon Truth About Drugs, Family Spirit.

The ITC will also support local and inter-tribal data collection efforts through working with the Michigan Public Health Institute to do a comprehensive assessment of the data available on opioid use in tribal communities and where the data gaps exist. Developing strategies to fill these data gaps will be part of this two-year initiative. Based on the data assessment and with input from the local community strategic planning initiatives the ITC will work with the collaborating tribes to develop an inter-tribal strategic plan that will identify and address common shared training goals.

B.6. Michigan will employ the following EBPs to improve engagement and retention in services, as well as the quality treatment and recovery services themselves.

Motivational Interviewing: Michigan proposes to increase the availability of Motivational Interviewing trained clinicians in MAT programs. To encourage the use of Motivational Interviewing in programs, an increased rate of reimbursement will be offered to programs that complete the training, participate in fidelity activities and implement activities related to the intervention.

It has been found that individuals who received Motivational Interviewing in an opioid treatment program were initially more contemplative of change, complied with the program longer, and relapsed less quickly than individuals who did not receive Motivational Interviewing. They also reported more positive expected outcomes for abstention and fewer opiate-related problems.

Motivational Interviewing is an Advanced Facilitation Method based upon the way the brain responds to dialog. That characteristic is extremely useful in MAT in two very significant ways: engagement and compliance.

The dynamics of a MAT program that create stress on program staff stem in part, from the way in which they receive referrals. Specifically, many of participants are referred through the court
system as part of probation or parole. Staff have a view that this means the participants, because they are only as compliant as they need to be to stay out of jail, lack motivation and are only superficially connected to the program. Staff struggle to motivate individuals to participate more frequently and achieve higher levels of compliance for dosing and attending other aspects of the program. Unfortunately, staff have evolved a strategy for motivating participants that has been referred to in literature as “dosing with reality”. Staff believe they can motivate their client population by reminding them of the potential sanctions if they don’t participate, of which they are already well aware. As an intuitive practice, threats of consequences cause the brain to respond as if the person leveling the threat (dosing with reality) is a dangerous enemy and increases the need to protect themselves from that person by withholding information that is vital to achieving recovery. Practitioners actually strengthen resistance that is necessary for survival when they threaten, warn, admonish, or confront a participant.

Motivational Interviewing, as an advanced facilitation method, creates an unencumbered place of safety for an individual to explore everything that they struggle with, and the way those things interfere with their ability to perform critical life functions. These are necessary, not only for recovery, but for reinvestment in a lifestyle that supports their recovery and allows them to begin to prosper. It does this by creating a collaborative relationship with the most difficult to serve participant, keeping them in the active role and pushing the practitioner to the role of assistive partner. With Motivational Interventions, the person is helped to increase their ability to self-govern. Self-governance is achieved through the emphasis of choice and control with an assistive partner who can aid in success.

Clinical Trials on Motivational Interviewing have demonstrated an increase in the frequency of participation in the first appointment after intake and assessment, frequency of participation in programmatics, and length of participation. Increased frequency and increased length of participation in other research is connected to longer and more durable periods of abstinence from substances.

To implement Motivational Interviewing and Motivational Interventions in MAT programs practitioners will need to learn the basic skills of Motivational Interviewing and how to apply them in all aspects of the program. Coaching and feedback will be necessary to achieve a high degree of competency with fidelity to the method. Programs will need to participate in this strategy for sustainability, improvement and ability to train new staff as they come into the program.

Throughout the MAT program, Motivational Interviewing is used to facilitate discussion that becomes meaningful to the person and avoids evoking resistance. Even in the case of non-compliance the use of Motivational Interviewing is aimed at personal choice and control as it effects the outcomes for the individual’s choices developing discrepancy. Collateral benefits are the ability of staff to make sense out of resistance and use it to fuel change rather that feel that they have to confront, argue or control the person.
Fidelity to the Motivational Interviewing model will be monitored using the Michigan Fidelity Assistance Support Teams (MIFAST). The MIFAST process provides a mechanism to identify the areas where assistance is needed to have full implementation, program and practitioner competency, and efficacy with regard to treatment outcomes. This increase in transparency provides needed data and drives the ability to provide technical assistance, staff development and training, and resources in a targeted way.

Project ASSERT (Alcohol and Substance Abuse Services, Education, and Referral to Treatment) is a SBIRT model designed for use in health clinics or emergency departments (EDs). Project ASSERT targets three groups:

1. Out-of-treatment adults who are visiting a walk-in health clinic for routine medical care and have a positive screening result for cocaine and/or opiate use. Project ASSERT aims to reduce or eliminate their cocaine and/or opiate use through interaction with and interventionist or peer educators (substance abuse outreach workers who are in recovery themselves for cocaine and/or opiate use and/or are licensed alcohol and drug counselors).

2. Adolescents and young adults who are visiting a pediatric ED for acute care and have a positive screening result for marijuana use. Project ASSERT aims to reduce or eliminate their marijuana use through interaction with peer educators (adults who are under the age of 25 and, often, college educated).

3. Adults who are visiting an ED for acute care and have a positive screening result for high-risk and/or dependent alcohol use. Project ASSERT aims to motivate patients to reduce or eliminate their unhealthy use through collaboration with ED staff members (physicians, nurses, nurse practitioners, social workers, or emergency medical technicians).

Michigan is currently using this EBP in 5 counties and will be modifying it to include individuals who screen positive for any illicit substance, with a special emphasis on opioid use, and individuals who have been reversed using naloxone. In Michigan peer educators are Wellness Advocates, who have been trained in recovery coaching. Project ASSERT is in 5 EDs in Northern Michigan and we will focus on expanding this project to additional ED locations, Federally Qualified Health Centers, and other publicly funded health clinics.

Adolescents, young adults, and adults visiting a participating health clinic or ED for medical care are screened for substance use by Project ASSERT interventionists—Wellness Advocates who have been trained to deliver the intervention. Patients with a positive screening result are engaged by the Wellness Advocate with the Brief Negotiated Interview (BNI), a semi scripted, motivational interviewing counseling session that focuses on the negative consequences associated with drug use and unhealthy drinking. Using the BNI, the Wellness Advocate builds rapport with the patient; asks the patient for permission to discuss drug and alcohol use; explores the pros and cons of the behavior associated with drug and alcohol use; discusses the gap
between the client's real and desired quality of life; assesses the client's readiness for change in the targeted behavior; and develops an action plan, which includes direct referrals and access to substance abuse treatment.

When a Wellness Advocate delivers the intervention to an adult, young adult or adolescent who uses illicit substances, the Wellness Advocate follows up with each patient by telephone 10 days after the health clinic or ED visit. This call serves as a 5- to 10-minute booster session to discuss what has transpired since the BNI and to find out whether new service referrals are needed. When ED staff members deliver the intervention to an adult with high-risk and/or dependent alcohol use, a follow-up booster session is not provided. Individuals who are reversed using naloxone, or have an ED visit related to opioid use will receive more intensive outreach efforts from the Wellness Advocate to encourage engagement in treatment and peer supports in the community. This engagement piece is also a modification to the original EBP.

On average, Project ASSERT is delivered in 15 minutes, although more time may be needed, depending on the severity of the patient's substance use problem and associated treatment referral needs. The face-to-face component of the intervention is completed during the course of medical care, while the patient is waiting for the doctor, laboratory results, or medications.

Of those screened in the Michigan locations to date, 40% have screened positive for a substance use disorder, 78% agree to participate in the BNI, and of those 39% are referred to a support group and treatment. Of the patients screened, 42% agree to aftercare phone calls. Boston Medical has trained the majority of Michigan's Wellness Advocates, and has given permission for the Project ASSERT manager of the current locations to provide training to any additional Wellness Advocates.

Maintaining Independence and Sobriety through Systems Integration, Outreach, and Networking- Criminal Justice edition (MISSION-CJ) is listed in SAMHSA’s Registry of Evidence Based Practices. MISSION is an evidenced-based wraparound treatment designed specifically to treat Co-Occurring Disorders (COD) in the prisoner re-entry population. The model uses a Risk-Need-Responsivity paradigm to facilitate treatment so that reduced recidivism and symptom improvement are part of recovery goals and program outcomes. MISSION-CJ is delivered by specialized case managers called Reentry Service Specialists (RSS) along with Peer Support Specialists (PSS) who use the MISSION-CJ Treatment Manual to guide the service components described below. The clients also use the MISSION-CJ Participant Workbook, which offers didactic exercises to reinforce treatment skills.

MISSION has core treatment components, illustrated in the table below, that the teams deliver. Independently, all of these components have been found to be effective with the population targeted for this grant. Moreover, through sustained after care and case management/planning, participants remain engaged in recovery and treatment services. Delivered in three stages, MISSION-CJ provides stabilization and skills-building foundations, with a gradient reduction in the intensity of services to facilitate self-empowerment over time. In Stage 1, clients receive three months of in-reach service that will focus on treatment planning, initiation of MAT for
those interested and commencing the Dual Recovery Therapy component of MISSION-CJ prior to prison release. Stage 2 is the ‘transition’ between prison and community. During active transitioning, basic needs, including insurance, service planning, identification, and housing are secured. Upon release, in Stage 3, the same MISSION-CJ providers will continue to deliver MISSION-CJ services for six months. MISSION-CJ staff are responsible for helping the client execute the prerelease plan in the community and ongoing MAT services to sustain recovery.

**Table 4: ESSENTIAL SERVICES PROVIDED IN MISSION-CJ MODEL**

<table>
<thead>
<tr>
<th>1. Critical time intervention (CTI) case management is a three-stage intervention (rebuilding community bridges, try-out, and transfer of care), designed to systematically facilitate linkages to, and improve engagement with, mainstream and community-based treatment providers.</th>
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<tr>
<td>2. Dual Recovery Treatment (DRT) is a structured 13-session treatment approach that blends and modifies traditional addiction treatment therapies (relapse prevention, motivational enhancement therapy, and 12-step facilitation therapy) with traditional mental health approaches (cognitive-behavioral therapy, motivational enhancement therapy, and social skills training).</td>
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<tr>
<td>3. Peer Support helps participants achieve sobriety and mental health stability by providing personal and intensive support provided by an individual with lived experience. Peer support is used to facilitate engagement and bolster the effectiveness of the other MISSION-CJ components and includes 11 structured sessions as well as workbook facilitation.</td>
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<tr>
<td>4. Vocational Support helps program participants identify, obtain, and retain employment using evidence-based practices for people with COD such as Individual Placement and Support.</td>
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<tr>
<td>5. Trauma-Informed Care: case managers and peer support specialists are cross-trained to screen for trauma-related symptoms, deliver trauma-informed services, support around violence, and refer clients to providers when more intense treatment is needed.</td>
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<tr>
<td>6 Risk, Needs, Responsivity (RNR) Treatment Planning. This is a CJ tool that the MISSION-CJ developers created to integrate risk and need into treatment planning and to tailor the delivery of MISSION-CJ to the clients’ needs.</td>
</tr>
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Pharmacological Drug Treatment Services: In addition to these core components MISSION-CJ staff will also play a key role in assisting clients with accessing and engaging in MAT prerelease and post-release, while also offering ongoing support in the community. Prior to prison release, all eligible participants are authorized for their first dose of Vivitrol. Once released, all participants will be tightly linked to the CMH/PIHP and MAT providers, with the MISSION-CJ team providing the primary linkage and support. Furthermore, a small percentage of psychiatric time is requested as part of this grant in order to develop a safety net for MAT prescribing and any acute pharmacotherapy issues requiring immediate attention. Participants will receive a comprehensive psychiatric evaluation upon release and ongoing medication management can be connected to previous providers where appropriate and available. Participants who do not have health insurance coverage upon release will be reviewed by the program with a determination of assignment to an interim physician/prescriber until they have health coverage and a permanent provider. For clients who do not initiate MAT, but who assess appropriate for MAT, the
MISSION-CJ teams will continue to educate clients on benefits of pharmacotherapy recognizing that the combination of both might optimize outcomes.

<table>
<thead>
<tr>
<th>Table 5: Stages of MISSION-CJ</th>
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<tr>
<td><strong>Stage I: Pre-Release</strong></td>
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<tr>
<td>In-reach into facility for 90 days prior to release.</td>
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<tr>
<td>Dual Recovery Therapy</td>
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<tr>
<td>Building bridges outside</td>
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<tr>
<td>Case-Management</td>
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<tr>
<td>Medicaid Initiation</td>
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<tr>
<td>MAT: Vivitrol</td>
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</table>

Identification and recruitment: MDOC re-entry planning includes the use of risk/needs assessment (Correctional Offender Management Profile for Alternative Sanctions - COMPAS) to determine risk of recidivism and violence, as well as service needs upon an individual’s return to the community. Parole plans utilize the risk/needs assessment, court mandates, and prison-based assessment to inform parole conditions. Those readying themselves for parole are expected to secure acceptable housing and family support.

Information for the MDOC Vivitrol pilot project is already being disseminated to those with OUD disorders in RSAT/ASAT programs, but now a specialized expansion using MISSION-CJ and targeting of those with co-occurring mental health disorders will occur within two facilities: 1) Women’s Huron Valley – the 2000 bed sole prison for women in the state located in Ann Arbor, and 2) Detroit Recovery Center – a facility that houses those who have paroled but require continued services, as well as males and females who violate parole. MDOC Program Coordinators in each facility will identify and recruit eligible individuals into the program.

Eligibility for the program, based upon OUD and a co-occurring mental health disorder, will be determined using the following: admission screening (i.e. substance abuse screening; history of psychiatric hospitalization or currently taking psychiatric meds), probation screening instrument (PSI), institutional history of mental health treatment, positive drug screens/tickets for substance use, institutional facility, and intended county of residence. For the purposes of the MISSION-CJ initiative, only individuals from three PIHP regions that contain the three largest counties in Michigan (Wayne, Oakland and Macomb) are eligible. All individuals interested in entering the program will complete the referral checklist, Addiction Severity Index and Basis-24.

This project intends to both expand the MAT pilot in the identified counties by modifying eligibility criteria to include those with a co-occurring MH disorder, and enhance intervention by providing much needed pre- and post-release wraparound support to help with the community.

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transition for those individuals. PIHPs will be assembling the clinical teams, which will work with MDOC and MISSION-CJ to implement the intervention.

The Inter-Tribal Council (ITC) Tribal Opioid Treatment and Recovery (TOTR) initiative will provide assistance to patients with treatment costs and develop strategies to eliminate or reduce treatment cost for AI/AN under and uninsured patients with an OUD. The project will serve a total of 500 uninsured or underinsured AI/AN OUD patients at an average cost per patient of $3600. ($1,800,000 cost for direct patient care over a 24-month period.) The project will also provide training to OUD prevention and treatment providers using SAMHSAs Opioid Overdose Prevention Toolkit, the CDC’s guidelines for prescribing opioids and other appropriate resources.

The ITC will implement the TOTR project using the existing Access to Recovery (ATR) infrastructure, entitled Anishnaabek Healing Circle. The ITC has operated a successful SAMHSA funded ATR initiative since September 30, 2007. The project provides vouchers for enrolled patients to access a wide array of substance abuse treatment and recovery support services from authorized providers. Since 2007, the project has served 12,942 AI/AN patients.

Funding for this very successful ATR initiative will end on September 29, 2017. The ITC is partnering with OROSC for funding through this Opioid STR project, beginning April 1, 2017 thru September 30, 2018.

Based on data from January 2017, currently 55% of our enrolled patients are uninsured, 26% have Medicaid, and 19% have health insurance. We will continue to implement our payer of last resort policy that requires patients with Medicaid or private insurance to exhaust those resources before they have access to funds available through this project. Also, during the time when the ATR and the TOTR project are both operational, (4/1/17 – 9/30/17) TOTR funds will not be used to supplement ATR funds but will only be used to supplement the cost of treating complex OUD patients with a focus on treatment of women with children, including pregnant women.

AI/AN patients with an OUD account for about 20% or 533 of the 2669 ATR patients enrolled in FY 2015 and FY 2016. Of these patients, 58% were women and 42% were men. The average direct cost per OUD patient is higher than it is for other patients at about $3,000 with a total cost of $1,599,000. This total cost includes the cost of treatment (80%) and recovery support (20%) services. We have based the target numbers for this TOTR initiative on this past performance data with a small increase in cost to help us target some of the complex OUD cases, with an emphasis on women with children. As mentioned, 58% of the OUD patients we serve are women (309); 68% of these women (210) have children and 8% of the women (25) have children in court ordered protective services. These cases require significant treatment and case management resources.

**MAT Trained Peers:** Currently, a recovery community organization in Michigan, the Detroit Recovery Project (DRP), is engaged in training peers to work more effectively in MAT programs. DRP is using the Medication Assisted Recovery Services (MARSTM) Project, a peer-
initiated and peer-based recovery support project sponsored by the National Alliance of Medication-Assisted (NAMA) Recovery. The growing MARS™ Community currently includes seventeen programs across the United States and two programs in Haiphong, Vietnam. The goals for training and technical assistance services include: 1) assist MAT programs to develop a holistic approach that includes MAT education and a supportive peer community; 2) assist interested drug-free programs to integrate medication-assisted treatment into their other services; 3) assist anyone from any organization that is interested in promoting an effective approach to medication-assisted treatment and recovery efforts.

DRP will be able to train 150 peers per year for the Opioid STR project across Michigan in topics that include: the brain disease of addiction, defining recovery, stigma and advocacy, regulations and clinic operations, basics of medications used in addiction, leadership development, ethics, stages of change, and co-occurring disorders. Basic peer recovery training will be completed by participants prior to engaging in the MARS Project training.

Once trained, the peers will be equipped to work in primary health care centers, FQHCs, hospitals, Opioid Treatment Programs (OTPs), and non-specialized treatment programs. Michigan will focus on OTPs initially to encourage and support engagement with the program and help with connections to other resources individuals need to be successful in recovery.

**Michigan Opioid Collaborative:** The combination of specific medications and counseling (MAT) is an important and evidence-based treatment option for individuals with OUDs. Medications used in MAT have a long history of use in specialty addictions treatment, and can be used for treatment in both specialty addiction and other clinical settings. Despite the potential for wide dissemination of buprenorphine and naltrexone in particular, their use remains relatively underutilized. This has been best quantified in terms of buprenorphine use; of the eligible clinicians who have obtained the training and DEA waiver necessary to prescribe the drug, an estimated 34-56% do not use the treatment in their practice. Among those who do, each clinician treats an average of only 13 patients with buprenorphine. Increasing the number of clinicians with training in MAT, the number of clinicians already certified to provide MAT who do so in practice, and the number of patients each provider treats could help reduce the gap between the prevalence of OUDs in Michigan (9.2 residents per 1,000) and the treatment capacity in the state (5.3 residents per 1,000, based on the assumption that every waivered prescriber has a 100 patient panel).

Training on MAT is not a routine part of clinician education except for the few, but very critical individuals who complete addictions fellowships. Furthermore, among those physicians who have obtained additional training in MAT, lack of support and staff knowledge are cited as common reasons for not providing the treatment. Two strategies for addressing limitations in clinician knowledge and comfort with providing a particular type of treatment are providing additional training and access to experts for ongoing consultation. In Michigan, a method for providing clinician training and access to experts in the absence of sufficient numbers of specialists has been developed for child psychiatry in a program called Michigan Child
Collaborative Care (MC3), which is operated by the University of Michigan (UM). For clinicians in an enrolled county, the program provides two types of expert consultation: (1) a behavioral health consultant (BHC) located in the county, and (2) a team of psychiatrists located at the UM. A participating clinician initiates program contact via the BHC, which provides answers to questions within the scope of their expertise and suggests local resources. The BHC also triages referral to UM psychiatrists for same-day consultation. When appropriate, the UM psychiatrists are able to provide tele-psychiatry consultation directly to patients and family members. In those situations, the UM psychiatrist does not request identifying information that could violate confidentiality and provides feedback to the patient’s referring clinician.

In order to address provider barriers to MAT delivery in both specialty addictions and other clinical settings, UM will build on the processes and infrastructure of the MC3 program to initiate a parallel program for opioid use disorders, called the Michigan Opioid Collaborative (MOC). For a participating county, a resident BHC with specialist training in addictions will be first hired to complement an existing UM team of addictions specialist physicians, social workers, clinical psychologists, and nurse care managers. Local trainings and enrollment meetings will be provided with leadership from the county’s BHC and support from the UM team. Both the BHC and the UM consulting team will provide assistance that addresses the whole patient, and considers all medical and social needs. For example, the physicians on the UM team will provide consultation for addressing polypharmacy related to psychiatric and non-psychiatric comorbidities, and the BHC will provide patients with assistance in accessing legal and housing resources. The program will also seek to address barriers to treatment engagement that result from poverty and health disparities, as well as to improve linkage to recovery services, by enlisting BHCs that are engaged with the organizations that oversee existing behavioral health services.

The MOC program will have several benefits beyond the existing national clinician mentoring program for medication-assisted treatment (Provider’s Clinical Support System, pessmat.org/mentoring/). These include: (1) the availability of the BHC for in-person consultation, (2) the availability of the BHC and UM team members directly to patients and their families for consultation, (3) the incorporation of non-physician clinical team members, and (4) the ability to provide state and locality specific information on resources, referrals, and regulatory issues. From an implementation framework, the program includes the following discrete implementation strategies39: developing academic partnerships, external facilitation, centralizing technical assistance, and providing ongoing consultation.

The MOC program will use tele-mentoring and consultant services to increase access to MAT for individuals with OUDs. Specifically, the program will help to increase the workforce of physicians prescribing the medications used in MAT, increase clinician access to training on counseling services that accompany those medications in MAT, and provide a process for linkages to other OUD treatment in the community. Given that MAT reduces the risk of opioid overdose death for individuals with an OUD compared to not receiving treatment or other

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modalities of treatment, increasing access to MAT through MOC and other programs is also essential in the ultimate goal of reducing opioid-related morbidity and mortality.

**Phase 1:** Based on the experience of the MC3 team, we will need to engage contracting, legal, and information technology services at UM to build the program. The timeline of this step will be shortened by the existing MC3 program experience and IT infrastructure.

**Phase 2:** UM will initiate the program in the four counties included in the Community Mental Health Partnership of Southeast Michigan (CMHPSM) PIHRegion: Lenawee, Livingston, Monroe, and Washtenaw, which include rural, suburban, and micropolitan regions. This will allow the project to build on CMHPSM’s ongoing initiatives to improve mental health and substance use disorder specialty care and to integrate behavioral health into primary care. UM will contact the leadership of MAT clinics that are in the CMHPSM provider networks for substance use disorder treatment as well as primary care and family medicine clinics that partner with CMHPSM and enroll those clinics that wish to participate. Despite the strengths of CMHPSM as an organization, access to combined medications for addiction and counseling for opioid use disorders is limited in the four-county area.

**Phase 3:** During the second year of the project, the MOC program will be made available to up to six other counties in the state that wish to enroll from among the 43 other counties currently enrolled in the MC3 program, and coordinated with the results of the needs assessment. If more than 6 counties request enrollment, priority will be given to counties with the greatest limitations to access for medications and counseling services.

**B.7. Project ASSERT (Alcohol and Substance Abuse Services, Education, and Referral to Treatment).** As mentioned above in the EBPs, Project ASSERT is a SBIRT model designed for use in health clinics or EDs. Project ASSERT targets three groups:

1. Out-of-treatment adults who are visiting a walk-in health clinic for routine medical care and have a positive screening result for cocaine and/or opiate use. Project ASSERT aims to reduce or eliminate their cocaine and/or opiate use through interaction with and interventionist or peer educators (substance abuse outreach workers who are in recovery themselves for cocaine and/or opiate use and/or are licensed alcohol and drug counselors).

2. Adolescents and young adults who are visiting a pediatric ED for acute care and have a positive screening result for marijuana use. Project ASSERT aims to reduce or eliminate their marijuana use through interaction with peer educators (adults who are under the age of 25 and, often, college educated).

3. Adults who are visiting an ED for acute care and have a positive screening result for high-risk and/or dependent alcohol use. Project ASSERT aims to motivate patients to reduce or eliminate their unhealthy use through collaboration with ED staff members (physicians, nurses, nurse practitioners, social workers, or emergency medical technicians).
OROSC will employ this both as an outreach and engagement strategy to encourage individuals’ involvement in the formal treatment system as needed, but also as a strategy for brief intervention to interrupt and educate the cycle of misuse for those who do not require formal treatment services.

**MAT Trained Peers:** The ability to match individuals with highly complex needs to peers within the MAT program will encourage engagement and retention in the clinical process, and provide support to the individuals’ treatment needs. The Opioid STR project will ensure that peers are involved in the clinical process, helping the individual to meet recovery goals and working with clinical staff and the individual to modify the recovery plan as needed.

**Angel Program:** The Michigan State Police (MSP) Angel Program aims to combat heroin and other drug related addiction, overdoses, and death. The program allows an individual struggling with drug addiction to walk into a MSP post during regular business hours and ask for assistance, without fear of being charged for possession of substances or paraphernalia. MSP officers will maintain a stigma free and professional environment at all times, and notify an Angel volunteer of the need for assistance. If accepted into the MSP Angel Program, the individual will be guided through a professional substance abuse assessment and intake process to ensure proper treatment placement. The Angel volunteer, who is a member of the local community, will be present to support the individual during the process, and to provide transportation to the identified treatment facility.

Another important part of this program is to increase MSP’s ability to respond to overdose emergencies and administer life-saving Narcan Nasal Spray. MSP will provide 600 additional Narcan Nasal Spray units throughout the state, approximately 20 units per MSP post. MSP has implemented the Angel Program in its 7th District and is currently working to expand the program across the state by December 31, 2017.

**CLAS Standards:** OROSC is committed to developing a culturally competent SUD service delivery system and the proposed activities will be implemented and monitored in adherence to the National Standards for Culturally and Linguistically Appropriate Services (CLAS) in Health and Health Care. The CLAS standard of ‘Governance, Leadership, and Workforce’ is and will continue to be addressed by requiring training in CLAS policies and procedures for our PIHPs and sub-grantees. The standard of ‘Communication and Language Assistance’ is, and will continue to be, supported in MDHHS’ contract language with PIHPs to provide assistance to those with language barriers and in need of LEP services. MDHHS requires PIHP subcontractors to provide limited language proficiency accommodations and make information available to individuals connected to treatment, recovery support services, or access centers. The standard ‘Engagement, Continuous Improvement, and Accountability’ will be upheld in the MDHHS maintenance of a conflict and grievance resolution procedure embedded in our recipient rights process that is culturally and linguistically appropriate.

OROSC relies on a document called Transforming Cultural and Linguistic Theory into Action: A Toolkit for Communities that identifies cultural competency as an integral component to the
OROSC strategic plan and system. Core components of this document must be infused into routine business practices and operations, requires continuous quality improvement, must be data driven, must be administratively friendly versus burdensome, and need to identify roles and responsibilities throughout the system. In addition, six key implementation principles were identified: inclusion, diversity, respect, excellence, relationships, and accountability. This document and more information are available on the OORSC website at www.michigan.gov/documents/mdch/Transform_Cultural-Linguistic_Theory_into_Action_390866_7.pdf. This document has already been provided to all PIHPs and will be provided to key stakeholders, and compliments the National Standards for CLAS in Health and Health Care. The CLAS Standards; Governance Leadership, and Workforce; Communication and Language Assistance; Engagement, Continuous Improvement, and Accountability; and the related elements, will be provided to regions and key stakeholders to be used in the development of key deliverables related to this grant project. In addition, discussion, practical implications, and implementation of the key principles included in the CLAS Toolkit and the CLAS Standards will be integrated into the Michigan Opioid STR Strategic Plan, and planning process.

The state is committed through our Health Disparities Reduction & Minority Health Section, to ensuring a continued focus on assuring health equity and eliminating health disparities among Michigan’s marginalized populations. As such, training entitled Applying a Health Equity Framework to the Enhanced CLAS Standards was provided and will be replicated as needed for the ROSC-TSC, MAT Workgroup, sub-grantees, and providers. Monitoring for adherence will be part of the Michigan Opioid STR project plan and quality improvement plans.

B.8. During FY15, Michigan’s publicly funded SUD treatment services system served 79,402 unduplicated individuals with $130.9 million. Based on the annual allocation of the grant and the unit cost of each type of service, a total of 7,545 unduplicated individuals will be served per year through the Opioid STR project grant funds.

<table>
<thead>
<tr>
<th>Table 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Year</td>
</tr>
<tr>
<td>FY15 (Baseline)</td>
</tr>
<tr>
<td>FY17 (Year 1)</td>
</tr>
<tr>
<td>FY18 (Year 2)</td>
</tr>
</tbody>
</table>

Section C: Proposed Evidence-Based Service/Practice

C.1. OORSC will use the results of the needs assessment to confirm the results of our initial needs inquiry to identify the PIHP regions and counties with the highest need for prevention and
treatment interventions. Based on the needs and population identified, the most appropriate EBPs will be implemented. Fidelity and outcomes will be reviewed to determine success, and adjustments made as needed to further impact the incidence of OUDs in the identified regions. Successful interventions will continue to be supported and expanded across the state to address the needs of individuals with OUDs, and to impact perception of harm surrounding prescription and illicit opioids. OROSC, in collaboration with the PIHPs, MDOC, LARA, MSP, and UM will implement the identified EBPs to expand and improve the quality of prevention, treatment and recovery services throughout Michigan.

C.2. The Strengthening Families Program: For Parents and Youth 10-14 (SFP 10-14) is a family skills training intervention designed to enhance school success and reduce youth substance use and aggression among 10- to 14-year-olds. It is theoretically based on several etiological and intervention models including the biopsychosocial vulnerability, resiliency, and family process models. This intervention model has been shown to produce a wide range of positive outcomes as many as 10 years past baseline. In relation to the opioid crisis, SFP 10-14 has proven to be significantly effective in both improving risk perception of harm within youth and decreasing the use of opioids in the long term. In addition, it is recognized as a Model Program by the CSAP and SAMHSA/NREPP.

SFP 10-14 is a modified version of the full scale Strengthening Families Program currently being implemented within six Prepaid Inpatient Health Plan Regions (PIHP) in eight counties through the PFS 2015/2020 grant. OROSC intends to expand the reach of this program to all ten of the Regional PIHPs in Michigan. Due to the statewide implications of the opioid crisis in Michigan, program expansion will increase availability of substance abuse prevention services while targeting regions with current service gaps.

Motivational Interviewing was chosen for this initiative, as it can be used in conjunction with other EBPs, such as Cognitive Behavioral Therapy. Motivational Interviewing is successful with individuals who would be considered to have complex needs, and helps to build engagement between the therapist and the individual. The population of individuals with an OUD in Michigan tends to have highly complex needs, including co-occurring SUD and mental health disorders, as well as physical health and life circumstance challenges.

Project ASSERT was chosen for multiple purposes: 1) as a connection to primary health to promote screening and referral for SUDs; 2) as a support and resource for individuals who have experienced an opioid overdose reversal; and 3) to provide an earlier brief intervention to help engage individuals in formal treatment.

MISSION-CJ was identified as the best means to engage the prisoner re-entry population with a co-occurring substance use and mental health disorder into supportive services and offer MAT to aid in their recovery. This intervention supports a current program through MDOC, and provides additional needed supports to prevent recidivism and relapse.
C.3. ITC: The TOTR project will use the established successful Anishnaabek Healing Circle (ATR) implementation model. This model project is the longest operating tribal Access to Recovery initiative in the nation. Eva Petoskey has served as the Project Director since its inception. The project will use the TOT following ATR infrastructure:

The Anishnaabek Healing Circle ATR initiative has a system for enrolling and serving patients. Patients enroll through 12 Tribal Access and Care Coordination Centers; these centers are responsible for implementing a uniform enrollment process and for providing comprehensive care coordination services. The patient enrollment process includes a comprehensive screening, intake, orientation, and clinical assessment.

The Anishnaabek Healing Circle ATR initiative has an enrolled and trained network of clinical and recovery support providers. Our current ATR service providers include a combination of tribal and non-tribal treatment and recovery support providers. All providers meet or exceed licensing or accreditation standards established by State rules and SAMHSA requirements. We have signed MOUs with 43 provider organizations with 418 active individual providers within these organizations: 20 of these organizations are secular and 23 are faith based. Eligibility criteria and the process for entry into ATR, for both patients and providers, are available on the website www.atrhealingcircle.com.

The Anishnaabek Healing Circle ATR initiative has an electronic voucher management system that is capable of issuing and tracking patient numbers and service dosage and duration. This system is also used to issue payments to providers. This system has been fully functional for ten years and meets and exceeds SAMHSA requirements. All providers are trained to use the system; effective processes are in place for on-going training of new providers.

Motivational Interviewing has proven successful across populations, gender, race and ethnicity, and is in practice in many programs across Michigan. The intervention has shown positive outcomes in engagement and retention in treatment, and helps establish the therapeutic relationship between clinician and the individual. This is especially important in MAT treatment, as the client population has frequently reported a lack of connection and interest on the part of the Opioid Treatment Program. Through the employment of Motivational Interviewing the client and program will participate equally in the treatment and recovery process to ensure positive outcomes.

Project ASSERT helps to connect with individuals who are frequently high utilizers of ED services, but rarely connect to formal treatment and recovery services. It services individuals with a potential SUD across race, gender, ethnicity and age, meeting them at a vulnerable time and offering support from the peer perspective. The PIHP regions will take steps to ensure that the peer Wellness Advocate employee reflects the potential population served within the ED.

C.4. Project ASSERT will be modified to include individuals who have been reversed from an opioid overdose. Section A shows that this population is especially vulnerable, and frequently hard to reach, and by capitalizing on the opportunity to connect individuals to peers, BNI, and
treatment services OROSC may be able to reach them at a critical time when they are motivated for services.

The MISSION-CJ Model will be modified from its original conception to include MAT in the reintegration process for the prison population identified as having a co-occurring substance use and mental health disorder. OROSC worked with the program developers to modify this project appropriately to ensure success, and MISSION-CJ staff and their evaluator will be involved in the training, implementation and monitoring of the intervention.

C.5. The Anishnaabek Healing Circle ATR services support healing and recovery from inter-generational trauma and addictions. The system uses evidence based practices, such as medication assisted treatment, cognitive behavioral therapy, motivational interviewing and motivational enhancement therapy all within a trauma informed culturally competent service system. The ATR model also includes services that represent tribal best practices such as talking circles and indigenous healing ceremonies. Based on this multifaceted and community responsive approach the project has produced outstanding patient outcomes while building a foundation for sustainability.

Michigan Fidelity Assistance Support Teams (MIFAST) are a method of managing EBPs through a process of ascertainment of strengths and assistance for improvement of competency in the workforce.

MIFAST was initially formed to provide a method of rapid implementation of Assertive Community Treatment Level supports and Services for people with very severe symptoms of mental illness comorbid with a very severe substance use disorder. MIFAST now includes Supported Employment and Motivational Interviewing. The function of MIFAST was to provide, at the request of providers, an outside assessment using the SAMHSA Integrated Dual Disorder Toolkit (IDDT) (Now Integrated Treatment for Co-occurring Disorders) in order to ascertain areas of strength and provide technical assistance, training and consultation for areas that have not been fully implemented. MIFAST reviews began in 2006 and have continued through the current year. Use of data from site reviews has been used to improve the implementation and outcomes of EBPs, as well as shape the way in which MIFAST provides assistance through the site visit process. In 2012 MIFAST expanded its menu to include Dual Disorder Competency in Mental Health Treatment (DDCMHT) (with ten sites participating, 9 of which are listed in the National Registry for DD Competent treatment), and Supported Employment (SE).

The role of MIFAST is to create efficiency in the process of “knowing” how EBP supports and services are provided by their elements and with regard to quality. Additionally, the process provides a way to know the areas where assistance is needed to have full implementation, program and practitioner competency, and efficacy with regard to treatment outcomes. This increase in transparency accomplishes the “need to know” and drives our ability to provide technical assistance, staff development and training, and resources in a targeted way that is welcomed by the provider of the EBP supports and services.
From the MIFAST experience with Co-occurring Disorders, Motivational Interviewing and Supported Employment it is clear that this approach is a more effective way for us to influence and effect competency of the workforce by bring other EBPs under the MIFAST structure of technical assistance through ascertainment of needs. For the Opioid STR project, OROSC will track and report on:

- Process Outcomes (degree of implementation) of Motivational Interviewing
- Treatment Outcomes when implementation is attained to the degree that they are recorded
- Use of the site review process to determine ways to improve support from our team to the sites where supports and services are provided

The MISSION-CJ project will be performing its own evaluation as services are implemented and delivered to the re-entry population. Through these efforts, fidelity will be measured and technical assistance provided to ensure that clinical teams are adhering to the intervention model.

The Strengthening Families – Iowa program ensures fidelity through the use of trained observers, who attend trainings to measure whether activities are carried out and content is delivered as intended, and how the facilitator delivers the content and leads the activities. Observers complete fidelity observations, which are then shared with group facilitators for feedback and improvement as needed.

The fidelity process for Project ASSERT is less defined and relies heavily on supervision feedback at regular intervals to ensure that the Wellness Advocates are able to offer the BNI and successful at making connections within the community for treatment and recovery services as needed. WSU will also be tracking the activities of the Wellness Advocates in order to report on their contacts with individuals, and the outcomes of those contacts.

Section D: Staff and Organizational Experience

D.1. OROSC, as the SSA, is responsible for the administration and coordination of the SABG for the prevention and treatment of substance use disorders. OROSC has been awarded multiple federal grants in the past, such as Partnership for Success, Strategic Prevention Framework, BRSS TACS, and the State Youth Treatment Planning grant, and has experience managing the financial responsibilities, as well as implementing programmatic improvements. OROSC and other partnering organizations, including PIHPs, the ITC and their funded providers are capable and have experience with similar projects, including implementing culturally appropriate and competent interventions. OROSC allocates SABG funding through 10 regional PIHPs located geographically, by population size, throughout the state. PIHP responsibilities include planning, administering, funding, and maintaining the provision of substance abuse treatment and prevention services, and recovery supports for all 83 counties in Michigan. All PIHPs have Substance Abuse Prevention and Treatment Directors as a point of contact and additional coordinators, who provide technical assistance to providers and local communities.
The OROSC regional treatment provider network currently serves individuals with OUDs across the lifespan, and has access to a network of 41 MAT providers. Recovery support services are offered through traditional SUD treatment providers as well as stand-alone recovery programs. There is a deficit in the availability of peers to work within the context of MAT and the prisoner re-entry population, and this project affords the state the opportunity to improve in this area. Independent of SUD services, there are connections to the population through the MDOC, MSP, LARA and Population Health.

To assist in assuring linkages to the population of focus that are rooted in the culture and languages of our target population, the OROSC toolkit, *Transforming Cultural and Linguistic Theory into Action*, will be utilized. This toolkit provides a framework for organizations and individuals, including staff assigned to this project, to examine their own cultural values and evaluate their interpersonal strengths and weaknesses. Self-evaluation is ongoing, recognizing that individuals continually adapt and re-evaluate the way things are done. The ultimate goal is to continually improve the quality of services and health outcomes for all cultural groups and reduce disparities that occur when an individual’s culture deviates from the majority or mainstream.

**D.2.** Wayne State University School of Social Work is our identified partner in this project and will function as the evaluator. The lead evaluator has worked with OROSC for a number of years, including on the State Youth Treatment planning grant, and several substance use prevention-related grants with CSAP. In addition, our PIHP network is OROSC’s connection to provider organizations, community-based efforts, and local culturally specific agencies that are frequently the first point of contact for individuals and families in need. The PIHP network has worked with OROSC on multiple grant projects, as well as administering public SABG and Medicaid funds.

The ITC, MDOC, MSP, LARA and Population Health all have experience working with the traditionally complex needs of the population of focus, and we have utilized their expertise and capabilities to our benefit during the other endeavors. We are all committed to continuing this valuable partnership for future efforts.

Eva Petoskey, M.S., (.30 FTE TOTR Director) will be responsible for coordinating the programmatic and fiscal activities of the project. Ms. Petoskey has 40 years’ experience as an administrator and evaluator in tribal communities. She has over 20 years of successful experience with SAMHSA grants. Eva is the visionary person behind the development of many successful tribal healing and recovery initiatives; she has a unique capacity for taking a vision forward into a complex community setting. Tribal grantees across the country look to her spirit and heartfelt guidance to discover a path for Native American treatment and recovery support programs to provide services in a way that is congruent with Anishnaabek life ways. She is an enrolled member of the Grand Traverse Band of Ottawa and Chippewa Indians and previously
served as the Vice-Chairperson of her local tribal council for several years. She has been on the healing path of recovery since 1979.

Connie DePlonty, BA, CADC I, TOT Services/Voucher Coordinator (.30 FTE) will manage and monitor the electronic voucher system and work with providers to facilitate patient access and care coordination. Ms. DePlonty brings a wealth of experience to the position. She has been with the program since the inception of the voucher system development for ATR II. She has practical experience with field-testing modifications to the system. She maintains an excellent rapport with end-users who count on her to train and re-train providers in voucher issuance, voucher redemption and trouble-shooting. She is an enrolled member of the Sault Tribe of Chippewa Indians.

D.3. Although not directly funded by this project, as the Acting Director of OROSC, Larry Scott, Ed.S will provide oversight and guidance to the Opioid STR project and is the senior grantee agency staff for this project. Mr. Scott has over 30 years’ experience in SUD services; communicable disease; surveillance and research analysis; training and certification coordination; state team leader for peri-natal substance abuse prevention; state methadone authority; and National Prevention Network (NPN) Representative for the central region. In addition, he has been the Project Director for five major SAMHSA Center for Substance Abuse Prevention (CSAP)-funded projects in Michigan. Mr. Scott’s involvement in this project will be on an in-kind basis, estimated at .05 FTE.

Debra Pinals, M.D., is the current Medical Director of Behavioral Health and Forensic Programs for MDHHS. Dr. Pinals will not be directly funded by this project, but will provide guidance to the initiative and interventions as needed. She has over 20 years’ experience working with individuals with an SUD, and the criminal justice population. Dr. Pinals has implemented various forms of the MISSION Model in the past, and will assist in the monitoring of this project on an in-kind basis at .05 FTE.

The current State Opioid Treatment Authority (SOTA) is Lisa Miller, B.A. Ms. Miller will not be directly funded by this project, but will provide support to the grant. She will continue to support the Project Coordinator in-kind as needed for the duration of the project, estimated at .25 FTE in-kind. Ms. Miller has 5 years’ experience as the SOTA, and 25 years’ experience in the SUD prevention field. She is the SOTA representative for the state of Michigan.

Also providing support to the Opioid STR project is Angie Smith-Butterwick, MSW. Ms. Smith-Butterwick will not be directly funded by this project, but will provide support to the grant. She will continue to support the Project Coordinator in-kind as needed for the duration of the project, estimated at .10 FTE in-kind. Ms. Smith-Butterwick has 19 years’ experience working with the adolescent population; women and families with substance use disorders; the FASD State Task Force; and is the State Youth Coordinator and Women’s Services Network representative for the state of Michigan.
Wayne State University will be the evaluator for the MYTIE-I initiative and Elizabeth Agius will be the principal investigator at .20 FTE. Ms. Agius has extensive experience in political science, public policy, and research and evaluation. She has been a program evaluator and consultant for community and faith-based organizations in the metro-Detroit area since 1998, and has also consulted on national research projects. She has been affiliated with Wayne State University since 1991 in various capacities, and is currently the Manager of Community Research Partnerships in the School of Social Work. Ms. Agius, through Wayne State University, has also been the evaluator for prior CSAP-funded projects in Michigan.

Also from Wayne State University, as investigator is Dr. Stella Resko at .17 FTE. Dr. Resko has a Ph.D. in Social Work from Ohio State University and completed a two year post-doctoral fellowship at the University of Michigan Addiction Research Center. Currently, she is an assistant professor at Wayne State University, jointly appointed to the Merrill-Palmer Skillman Institute for Children and Families and the School of Social Work. Dr. Resko is coordinator of the university’s graduate certificate in alcohol and drug abuse studies. Her research is focused on understanding the social context and patterns of drug and alcohol use and violence (youth violence, intimate partner violence/dating violence) among adolescents and adult women. She is particularly interested in community based intervention and prevention research designed to prevent the initiation and escalation of substance use among youth. Dr. Resko has been part of a NIDA Clinical Trials Network, and large randomized controlled trials designed to test brief interventions to reduce drug and alcohol use and violence among youth in primary care and emergency department settings.

Additionally from Wayne State University, as Consultant is Dr. Eugene Schoener at .24 FTE. Dr. Schoener has a Ph.D in Physiology from Rutgers University, and completed a 3 year post-doctoral fellowship at Columbia University College of Physicians and Surgeons. Currently, he is a professor in the Departments of Pharmacology and Psychiatry at Wayne State University’s School of Medicine. He is also the Director of Wayne State University’s Project CARE within the School of Medicine. Dr. Schoener’s research is focused on pain management, chronic pain among individuals with SUD, prisoner re-entry, SBIRT and Motivational Interviewing.

OROSC will hire a Project Coordinator for the Opioid STR project at 1.0 FTE. The Project Coordinator will be required to have a bachelor’s degree, and experience with OUD and MAT. This position will be hired within two months of the project start to manage the activities of the project. The Project Coordinator will attend the ROSC-TSC meetings, MAT Workgroup meetings, and facilitate the Strategic Planning Subcommittee for the project. They will also work collaboratively with the Project Assistant towards the key activities and goals of the Opioid STR project.

OROSC will also hire a Project Assistant as support for the project at 1.0 FTE. The Project Assistant will be hired within two months of the project start to support the activities of the Opioid STR initiative. The clerical support will attend Strategic Planning Subcommittee
meetings for the purpose of record keeping, and assist the Project Coordinator in basic tasks of the project.

D.4. Key staff members identified above have experience with the OUD population, MAT services and philosophy, and are familiar with cultures of the target population through their previous work and involvement in other programs. This work included SUD treatment service planning and implementation, provision of mental health services, evaluation of programming for the target population, and oversight of previous grant activities. Our diverse staff has worked with the target populations identified in this grant for a combined 20 plus years. The Project Coordinator will be required to hold a bachelor's degree in a field relevant to the grant activity, and have experience working with the OUD and MAT client population. These personal as well as professional experiences will be an asset to this grant. All funded program activity is in accordance to a plan that shows clear evidence of how age, culture, ethnicity, language, gender, and disability are considered. The state building that houses OROSC is accessible and in compliance with the Americans with Disabilities Act (ADA) and environmental requirements (See Assurances). Sub-recipient PIHPs, providers and other entities under contract with OROSC must also be in compliance with the ADA and other environmental regulations required by the state.

D.5. The ROSC-TSC has individuals with lived experience who participate in the meetings and activities regularly. In addition, the Medication Assisted Treatment Workgroup has individuals with lived experience who are very involved in the process of improving MAT services in Michigan. Through their valuable input, OROSC will ensure that the voice of the individual with an OUD is taken into consideration throughout the Opioid STR project activities.

Section E: Data Collection and Performance Measurement

E.1. OROSC will contract with Wayne State University School of Social Work (WSU) to conduct a performance assessment of the evidenced based prevention and treatment strategies selected, as well as the overall project implementation. Elizabeth Agius is the Manager of Community Partnerships and will co-lead the performance assessment with assistance from Dr. Stella Resko and Dr. Eugene Schoener. Other faculty and staff will also be included in the team. Our goals will be: 1) collect data in line with GPRA requirements; 2) analyze data to assess performance and outcome measures for GPRA requirements; 3) provide providers and OROSC with regular reporting and feedback on GPRA data; 4) assess performance and outcomes on evidence-based practices used; and 5) complete reporting requirements as outlined in the grant. Being housed in a university affords access to high quality survey software, data analytics software (e.g., Qualtrics, SPSS) and other tools that make managing a project of this scale, with multiple indicators, easier to handle. WSU has established a cooperative-working relationship with OROSC, which enables us to ensure that all elements of the required performance measures are fully documented. In addition, WSU strives to assist OROSC and its staff in developing evaluation capacity that will help them to continue data gathering and use after the grant period. A final evaluation plan will be created within a month of the grant start date.
**GPRA Requirements:** In response to Section I-2.2 Data Collection and Performance Measurement, the evaluation team will provide support to OROSC and grantees to comply with collecting and reporting all required GPRA data. The first requirement is compliance with the standard block grant reporting. Michigan and its provider network is very familiar with these requirements including details on expenditures by service, source of funds, and IOM categories of service (for prevention activities) and by specialty populations (for treatment services). The reporting also includes the treatment utilization matrix and other tables for tracking client conditions. The Co-Principal Investigators will work with the state staff to ensure proper recording and reporting, as well as submission to the federal system.

The additional required performance measures include:

- Number of people who receive OUD treatment
- Number of people who receive OUD recovery services
- Number of OUD prevention & treatment providers trained registration
- Number and rates of opioid use
- Number and rates of opioid overdose-related deaths

This data is available at varying times, so the evaluation team will work with the state epidemiologist and Project Director to ensure timely collection and reporting. These numbers will be shared with the entire project team to help focus efforts on these outcomes.

We are flexible and will adjust the design to incorporate any additional performance measures that SAMHSA may add upon award. The Co PI’s have experience participating in national cross-site evaluations and will do everything necessary to successfully contribute to the process.

The Inter-Tribal Council voucher system provides extensive information on providers, services, and patients. The information on services includes the type of service, date of service, and units (in quarter hour units). The ITC has the capacity to meet all of the following required performance measures:

- Number of people receiving OUD treatment and recovery services; number of providers implementing MAT; number of providers trained; rates of opioid use and OUD death rates.
- Expenditures for clinical treatment and recovery support services – total expenditures by patients, provider or timeframe. Total expenditures for training.
- Number of eligible clinical treatment providers – To manage our providers, we have created a database that allows us to report the number and types of providers by organization, region, faith-based and secular. We are able to generate reports that show the types of organizations and the types of treatment and recovery support services that the organization provides and services available from any individual staff member within an organization and by region.
Evaluation of MISSION-CJ Project: In addition to SAMHA reports, it is important to assess and define collaborations across MDOC and PHIP systems, development of new MAT providers who work with those on parole, as well as determining the number of those on parole who participate in MAT. Measurement activities will use qualitative and quantitative data from clients, service providers, and stakeholders for evaluation of: 1) process/expansion; and 2) outcomes/performance. Dr. Kubiak will lead the evaluation with the help of the evaluation assistant. Feasibility of the model within Michigan will be an underlying consideration. Dr. Kubiak will work closely with Dr. Smelson from UMASS as it relates to the implementation of the model and fidelity adherence. The ‘system broker’ position (TBD) will be responsible for coordinating activities, agreements (MOU), and collaborations; working closely with the evaluators as they will be assessing and collecting data on the collaboration of the multiple systems and barriers to implementation.

Formal and informal observational and semi-structured interviews with offenders and program staff (the RSS and PSS) in Year 1 will (1) provide data on clients served, (2) describe service coordination, and (3) identify barriers to services. The Addiction Severity Index (ASI), Behavior and Symptom Identification Scale (BASIS-24), and Treatment Services Review (TSR) will be administered with clients according to the schedule described in Table 7 (below). The voluntary nature of the program precludes use of a case/control design, but the outcome evaluation will use data collected by the prison on a similar population of high-risk offenders with CODs on parole, which will be the basis for a naturally occurring comparison group.

Table 7. Client evaluation measures and assessment schedule

<table>
<thead>
<tr>
<th>Measure</th>
<th>Participants</th>
<th>Pre-release</th>
<th>1 mo. PR*</th>
<th>6 mo. PR*</th>
<th>12 mo. PR*</th>
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<tbody>
<tr>
<td>Focus Group</td>
<td>6-8</td>
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<td>COMPASS risk/need; SV Data</td>
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<tr>
<td>Referral checklist, ASI, Basis-24</td>
<td>All</td>
<td>X</td>
<td>X</td>
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</tr>
<tr>
<td>Recidivism data (arrest, confinement)</td>
<td>All</td>
<td></td>
<td>X</td>
<td>X</td>
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</tr>
<tr>
<td>Services Tracking log/ GRPA</td>
<td>All</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Mental Health Treatment/Continuity</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
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</tr>
</tbody>
</table>

*Post-Release

E.2. Data collection: The evaluation team has provided a set of sample documents for data collection with this application (Appendix C). These will be modified as plans are finalized, and new documents will be created to satisfy all data collection needs. All tools will be reviewed by and with the project staff to ensure that procedures are understood and that they reflect the needs of the grant. With respect to the administration of the grant, key members of the evaluation team will attend and observe meetings with OROSC and implementation staff. We will gather and review all documents and conduct annual surveys with both groups to track perceptions of
process, progress, and barriers; summary reports are provided on these items as they are ready. For the training components evaluators will collect attendance numbers and satisfaction surveys for each event. In some cases, we will ask for group level identifications (social worker, law enforcement, and peer) to meet expectations for description of where training is focused. This will include trainings to prevention, treatment and recovery fields, to non-SUD stakeholders such as families and community members, law enforcements and health professionals.

For each prevention, treatment and recovery component, the evaluation team will track activities via written logs (electronic submission may be used to ease the process). These logs will form the basis for quarterly progress meetings and discussion about revisions needed to meet targets. All principal staff and implementation staff of the various program components will receive an annual feedback survey to assess perceptions of grant communication, progress and barriers. Evaluation staff will conduct routine check-ins with programs to document efforts and clarify any issues. OROSC will direct this process to provide any additional data deemed necessary.

Management: As most of the data will be survey data, management tools will consist primarily of online and other databases. Some storage is cloud based and some is locally resident. This data is downloadable and readable in most analytic software (e.g. Excel, SPSS, and STATA). The evaluation team and Wayne State University uses standard research protocols for data entry and cleaning, with original versions stored before analysis to protect data integrity. Any physical data is stored in locked cabinets and all computers are password protected with a two-factor authentication system to ensure security.

To the extent possible, surveys and data collection will be distributed electronically using Qualtrics software available to Wayne State University. Basic reports and tables are available in the software, and export to SPSS is also easily done for any additional analyses. Much of the process performance data includes qualitative data (open-ended response, focus group notes). The evaluation team will use Nvivo software for qualitative data management. Qualitative data will be analyzed according to standard grounded theory coding procedures for rigorous analysis including, identifying in-vivo codes and organizing codes into meaningful themes. This information will allow us to identify specific barriers to intervention implementation, tolerability of the intervention for providers and clients, factors that facilitate intervention implementation and effectiveness, as well as clients perspectives on the more and less useful components of the interventions implemented. The evaluation team will use SPSS statistical software to analyze quantitative data including descriptive statistics (e.g. frequencies and percentages for nominal variables and means and standard deviations for continuous variables). WSU will examine Bi-variate tests of relationships between all of the variables of interest in the evaluation (e.g. chi-square tests, t-tests). Multivariate analyses (e.g. multiple regression, logistic regression and repeated measures ANOVA) will also be utilized to identify factors (e.g. client demographics, program characteristics) that predict successful or unsuccessful implementation and intervention outcomes.
Qualitative Data Analysis: Much of the process performance data includes qualitative data (e.g., open-ended response items, focus group transcripts/notes). The evaluation team will code data with the assistance of specialized coding software (Nvivo) and will identify themes as an organizing framework. The coding process for this project will proceed in two-phases. First, we will begin with a “start list” of deductive codes developed from prior research, clinical experience and theory. Charmaz encourages this approach where sensitizing concepts such as literature searches and clinical experiences serve as points of departure from which to study the data. The start-list will have included themes identified in previous studies. Two or more members of the research team will independently read the documents (e.g., focus group transcripts or notes) and begin open coding in NVivo, using the thematic approach suggested by this list. As coding and analysis continues, this initial “start list” will be refined by removing codes that were not useful and adding codes that emerged as themes in the data. The coders will compare themes, discuss and clarify the meaning of the thematic codes, and revise the coding framework until there is consensus. After 25% of the transcripts are coded, the list of codes will be organized hierarchically and developed into a fixed codebook that will be used to analyze the remaining interviews in NVivo. Because data have multiple meanings the coded categories will not be mutually exclusive. The comments that providers make addressing one particular situation or topic often will fit into more than one category. Twice during the coding process, at about half way through and about three-quarters of the way through, the coders will complete a self-check and compared coding on the same sections of an intervention session. The goal of this comparison is to ensure high levels of agreement between coders (ideally >80%). During analysis, the coders will begin writing thematic and then integrative memos to explore connections and contradictions across relevant themes. These memos will form the beginnings of reports and manuscripts.

Quantitative Analysis: Broadly, analyses will fall into three groups: (a) descriptive (univariate) analyses summarizing sample characteristics and prevalence rates; (b) bivariate measures of association; and (c) multivariate analyses that will examine factors related to program outcomes. Prior to hypothesis testing, data will be examined and described using standard univariate summary measures (e.g., frequency, percentage, mean, and standard deviation) and bivariate statistical measures of association (e.g., chi-square tests for categorical variables and t-tests for continuous variables), as well as graphical displays (e.g., scatterplots, histograms). We will determine distributions of key variables, calculate transformations or collapse categories, if necessary, and review data for outliers and clear anomalies. Tests for linearity, independence, missing data, and distributional assumptions (i.e. normality) will be performed as appropriate. The failure of statistical assumptions necessary for the techniques planned will be addressed in one of the following ways: 1) a different method of analysis will be used (e.g., non-parametric tests, robust methods); or 2) the data will be appropriately transformed to a distribution that meets the assumptions of the proposed statistical test.

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For multivariate analyses, we will use regression models (e.g. logistic regression, linear regression and Poisson/negative binomial regression) carefully selected based on the characteristics of the outcome variables. Logistic regression will be utilized for categorical outcomes such as opioid overdose (a yes or no). Linear regression will be used for continuous outcomes such as the perception of services. Poisson or negative binomial regression will be used for count variables such as the number of services utilized. The multivariate analyses will determine the most robust variables that are associated with outcomes. We have used each of these statistical approaches in prior publications.45-48

Reporting on the data collected and analyzed will take multiple forms. First, the evaluation team will have monthly meeting with OROSC staff and routine calls and emails to communicate results. Written summaries will utilize the appropriate levels of quantitative and qualitative data as it has been collected and as describe in the details for each component. During quarterly meetings with the program staff and key implementers, we will review reports and conduct sense-making sessions to help with context and interpretation. Written summaries will be shared with the project team as a way to keep everyone informed of progress and to assist with recommended adjustments as needed. Progress reports to other state partners and stakeholders such as the SEOW and TSC will be given regularly as Ms. Agius attends these meetings as part of other work with OROSC.

As required, the evaluation team will prepare both mid-year and annual reports for the Opioid STR grant as part of the local performance assessment. These reports will include data on the key indicators requested: Number of people receiving OUD treatment and recovery services, number of providers implementing MAT, number of providers trained, number and rates of opioid use and of opioid overdose-related deaths. A progress report on each strategy will also be included to provide context for the data reported. Finally, a fiscal reporting will also be included, describing the amounts expended, the purposes of those expenditures and the recipients of the amounts expended.

E.3. Quality Improvement:

Summary of Evaluation Plans by Component

Strengthening Families: This family based prevention component will be expanded and started across the state. To begin we will track the number of new sites conducting Strengthening Families and the number of current sites expanding classes. Each class will track the number of families enrolled (adults and youth) and the number that completed each of the sessions. In preparation, trainings in Strengthening Families will be expanded. For this we will observe training and collect the sign in logs for all training to document the number of staff trained and record information on the training participants (including the region where the staff is from). Strengthening Families has an observational fidelity assessment which will be conducted by evaluation staff at selected sites over the course of both years. This will allow the evaluation team to assess the quality and degree to which Strengthening Families has been implemented. The program also comes with outcome evaluation tools that will be required at each site. This
consists of pre and posttest surveys for both youth and parent participants. These surveys will be analyzed regularly and provided to the sites so that they can be used for feedback, along with the observations of fidelity. Results will also be compiled at the end of the evaluation.

**Michigan OPEN Evaluation:** This component will describe evaluation of the measures to reduce opioid prescribing and patient-reported pain outcomes and opioid consumption following both surgical and dental care. Summary of opioid prescribing and patient-reported opioid consumption data collected by surgical Collaborative Quality Initiatives (CQIs). Track and summarize number of provider education sessions provided. Document level of feedback to providers regarding opioid prescribing, pain outcomes, and patient-reported opioid consumption through informational tools. Track materials for prescribing guidelines developed (copies of materials) and amounts disseminated in various settings. Track and summarize the amount of opioids prescribed postoperatively for surgical procedure according to CQI and health insurance claims data. Track number of pill disposal strategies toolkits distributed to providers (copies of toolkit).

**Overdose Education and Naloxone Distribution:** Project Red will provide technical assistance and support to communities across the state to establish and expand overdose education and Naloxone distribution. This service aligns with the Opioid Overdose Toolkit from SAMHSA. Evaluation of this component will include monitoring the number of overdose education trainings provided, the number of people who attend, and general audience description (e.g., field/profession, geographic location, demographics). We will assess the number of training of trainers to identified champions, and the regions where new local expertise is developed, and where possible, the number of subsequent trainings that are provided. Technical assistance provide by Project Red will be tracked by hours, community targeted and the types of TA provided, including tracking connections made between communities for support. Evaluation team members will attend and document quarterly calls Project Red holds for participants and the bi-annual meetings to monitor the activities taking place.

**Intertribal OUD Prevention Initiative:** Based on the needs assessment, a strategic planning process will be engaged in by tribes across the state to focus efforts on addressing opioids. Evaluation will consist of monitoring the Training of Trainers approach in planning, tracking the number’s trained, and the subsequent trainings provided as a result, as well as the number of new strategic plans created. Once plans are submitted, evaluators’ will track the technical assistance provided to tribes by the Inter-Tribal Council to support their implementation, as well as document the prevention activities that are funded.

**Motivational Interviewing (MI):** This component will expand trainings in Michigan to increase the number of trained MI clinicians in MAT programs. The evaluation team will work closely with the state trainers who are implementing this component. We will work with them to document the number of new clinicians trained in MI and to assess which MAT programs they work for. Surveys will be used as part of each training to assess knowledge gains and satisfaction. After training the MI trainers, the evaluation team will work with the clinicians to
assess fidelity and to provide support to ensure proper implementation. Evaluators will track the MAT sites where the MI trained clinicians work. Together with the site staff we might explore whether clients who have MI trained clinicians have longer length of stay or treatment outcomes.

Project ASSERT: The first step in this process will be to work with Boston Medical to develop fidelity measures appropriate to the intervention, which will be measured by the project evaluator. As this is a project expansion, new peer Wellness Advocates will be trained to provide the intervention at various publicly funded clinics. We will gather sign in sheets to determine the number of people trained, and at what locations. Once working, the Wellness Advocates will have a log to track the number of clients they meet with, as well as their follow up activities (calls, referrals) that take place. The Wellness Advocates will be debriefed quarterly via phone or email to discuss their implementation and share feedback.

Angel Program: This treatment support program will be offered through Michigan State Police (MSP) locations. MSP will keep a log to track the number of people who seek assistance, as well as the disposition of each case (intake, referred out, other). The “Angel” volunteers will track the number of hours of support they provide, as well as notes about the services they perform (coaching, transportation etc.). This data will be collected quarterly from all MSP sites. In addition, the program will expand MSP ability to distribute Narcan Kits. We will provide a tracking form to document the number of Narcan Kits distributed and locations. MSP staff will participate in the quarterly check in with staff regarding progress, problems and solutions.

MISSION CJ-OUD: The MISSION-CJ Project will be evaluated by another team with specialty in this area. The Project PI Dr. Sheryl Kubiak and Co-PI Elizabeth Agius have worked together previously and will maintain communications around this project to ensure that the state is aware of all activities and progress. A full description of the evaluation is below.

ITC Tribal Opioid Treatment and Recovery: This program represents an expansion of access through treatment vouchers, plus training and assistance to expand services for OUD. Evaluation will entail details on the number of vouchers and the costs of each voucher. The evaluator will work with the Intertribal Council Project Director to report required GPRA data on the number of people receiving OUD treatment and recovery services; the number of providers implementing MAT, the number of providers trained and tribal rates of opioid use and OUD death rates. The Project Director will also be part of quarterly meetings to debrief about the implementation process and share feedback with the team.

MAT Trained Peers: The expansion of this recovery service will involve the training of 150 new peer recovery coaches to work especially in Medication Assisted Treatment program. The Detroit Recovery Project will provide the training across the state. They will utilize sign-in sheets at all training sessions to track the number of people trained, as well as what region of the state they come from. After training we will work with our PIHP network MAT programs to document where the MAT trained peers are placed. The Detroit Recovery Project staff will participate in the quarterly meetings to debrief about the process.
**Michigan Opioid Collaborative:** This component will use a team-based approach to providing both client and clinician support to access for MAT OUD services. First, a Behavioral Health Consultant (BHC) will be added in the target county to work with the existing University of Michigan addictions specialist team. These BHC will work with clients and with clinicians and will track their interactions to separately document the number of encounters and types of support provided. The UM addiction specialist team will track their telepsychology contacts with patients and family members. The Behavioral Health Consultants will be debriefed quarterly via phone or email to discuss their implementation and share feedback. UM will seek psychiatrist feedback as well and interface with the UM team to gather that data. In year two, we will document the six counties that receive the program and replicate the evaluation procedures and measures there.

**Table 8 - Summary of Evaluation Activities:**

<table>
<thead>
<tr>
<th>Program/Activity</th>
<th>Indicators and Data</th>
<th>Responsible Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengthening Families</td>
<td>Number trained by region. Number enrolled vs. completed, observational fidelity tools. Pre &amp; Post tests for Parents and Youth</td>
<td>Project staff will administer pre- and post-tests. Agius/PD observations for fidelity</td>
</tr>
<tr>
<td>Michigan OPEN Opioid Education to Physicians</td>
<td>Number of opioid prescriptions, patient reported pain outcomes, and opioid consumption following surgical and dental care. Reduction in the amount of opioids prescribed to surgical and dental patients in Michigan (MAPS and Dental data)</td>
<td>Project Director Agius/Resko PI</td>
</tr>
<tr>
<td>Project Red-OEND Opioid Overdose Toolkit</td>
<td>Track number of kits distributed, track when each kit was used and disposition (utilize tracking document). Number of new communities with distribution, cross track those with numbers of deaths per year to identify any impact, number of saves from these kits</td>
<td>Students PD/APD</td>
</tr>
<tr>
<td>Tribal Prevention Initiative</td>
<td>Track number of TOT sessions via sign in sheets. Satisfaction surveys after trainings. Track activities and plan development. Number trained via TOT (sign in sheets)</td>
<td>Project Director Agius</td>
</tr>
<tr>
<td>Media Campaign</td>
<td>Track mode of delivery, number of campaigns delivered.</td>
<td>Project Director Agius/Resko</td>
</tr>
<tr>
<td>Motivational Interviewing</td>
<td>Track number of individuals trained via sign in sheets. Satisfaction surveys after training. Summary of MIFAST fidelity reports.</td>
<td>Project Director Resko</td>
</tr>
</tbody>
</table>
| ITC - Treatment and Recovery Services | Track the amount of provided to each individual for treatment costs  
Track training attendance via sign in sheets satisfaction surveys. | Agius/Resko Brown  
PD/APD |
|--------------------------------------|---------------------------------------------------------------------|------------|
| Project ASSERT                       | Number of referrals to peer educators and ED staff members (physicians, nurses, nurse practitioners, social workers, or emergency medical technicians). | Students  
Resko/Brown |
| Michigan Opioid Collaborative        | Track contacts of BHC with clients, clinicians,  
Track services provided on logs created. Track number of tele-psychiatry and consultant services. | Agius/ Students PD/APD  
Schoener |
| MAT                                  | Track number of providers implementing MAT.  
Track number of clients accessing the MAT Program. | Agius/ Project Director  
Schoener |

Local Performance Assessment: Quality Improvement Measures

The performance assessment will evaluate the grant goals by tracking process and outcome measures across the grant. The lead evaluator has worked with OROSC for a number of years on several substance abuse-related grants with CSAP and CSAT and has developed a good rapport with management and staff to understand the systems in place. The evaluator will schedule quarterly meetings between project staff from the various activities and the WSU evaluation team, and utilize a Plan, Do, Study, Act model of continuous improvement. This process will make problem identification and solution building more formalized. The team will meet to 1) (plan) identify issues/problems, determine steps to address those issues and a data collection strategy to measure it; 2) (do) implement processes and interventions, 3) (study) look at the results of our activities, and 4) (act) make adjustments where needed to continue addressing the issues. This will require routine updates on process and outcome progress from all participants. Electronic tracking logs for key activities will be created for each strategy to enable routine data transfers to the evaluation team.

As has been done in the past, the performance assessment will start with process measures designed to provide feedback from our partners including members of the IC and workgroups. WSU will use an online survey to gather information on the goals, process, and meeting progress on a regular basis (see Appendix C for drafts of sample instruments).

Fidelity Measures: Treatment fidelity refers to the extent to which an intervention is implemented as intended and is critical for the successful translation of evidence based treatments into practice. Monitoring treatment fidelity is important for implementing interventions consistently and at a high level of quality throughout the course of a study, particularly when different therapists or facilitators with different levels of expertise are
implementing the intervention in multiple settings. For both Strengthening Families and Motivational Interviewing WSU will evaluate therapist competence and intervention fidelity using intervention-specific instruments. In both cases evaluation staff will receive training in the program intervention and the fidelity tools. The scope of implementation across the state will not allow for every instance of each program to be monitored but a plan will be developed to include diverse regions for representation. WSU plans to create fidelity instruments for other EBPs such as Project ASSERT and will work with developers, implementers and our own faculty experts to ensure that instruments capture the intended activities. Regular review of fidelity measures can help project staff and evaluation team identify needs for clarification of goals, additional training or technical assistance and provide lessons for sharing success across program components.

Table 9: MISSION-CJ with Persons with COD on Parole – with and without MAT

<table>
<thead>
<tr>
<th>Objective</th>
<th>Indicators/Data</th>
<th>Responsible Person</th>
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<tbody>
<tr>
<td>1. Development of a clear plan for implementation</td>
<td>Protocols written jointly between MDOC, CMH (PHIP), UMASS and MSU on plan of implementation, ongoing service delivery and data collection needs; MOU executed for sharing of information, IRB approval obtained. Prison clearances for needed staff.</td>
<td>System Broker (MSU) would participate in and obtain all written MOU documents for operation and data sharing.</td>
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<td>2) Coordination between multiple systems of care (CMH, CJ reentry specialists, parole officers).</td>
<td>A schedule of routine meetings (begin with weekly and eventually move to monthly) between MDOC in-facility coordinators and CMH/PHIP Team supervisors, to coordinate recruitment, screening eligibility, in-reach access and communication regarding discharge and parole requirements. Meetings organized by facility and within county. Within county assessment of resources/services will be developed to assist teams with reentry service identification.</td>
<td>System’s Broker (MSU) would attend and collect minutes of each meeting and document implementation barriers. Efforts to circumvent barriers will also be documented – including development of MAT resources within counties.</td>
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<tr>
<td>3) Train personnel in mental health and substance abuse provider agencies (PHIP) in MISSION-CJ and MAT to enhance knowledge of dual recovery services</td>
<td>All CMH/PHIP team members will be trained in the MISSION-CJ model, including information about MAT. Training will begin during the first three months of grant and will take the form of multiple methods (in person, web-based, written materials). Similarly, parole officers and in-facility coordinators will be provided information to augment MH/MAT knowledge, while PHIP staff will train in comportment in prison.</td>
<td>Smelson coordinates training. System’s Broker (MSU) will attend training and document training hours and attendance.</td>
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<tr>
<td>4) Ensure fidelity to the EBP during implementation and treatment</td>
<td>Fidelity monitoring will employ multiple methods: weekly phone calls with MISSION-CJ team members, bi-annual focus groups, and service log review. Any Team deficiencies will be addressed through training.</td>
<td>Smelson (UMASS) will communicate results of fidelity checks and document issues.</td>
</tr>
<tr>
<td>5) Monitor feasibility/process indicators</td>
<td>1) feasibility will be measured through access to target population (system cooperation, in-reach, etc.), program development with behavioral health</td>
<td>Kubiak (MSU) will use descriptive statistics to analyze and visually display</td>
</tr>
<tr>
<td>(system, provider and individual levels)</td>
<td>systems, and access to providers; 2) Process indicators will include the numbers recruited/ screened and admitted, types and number of available treatment services, MAT initiation, and number of referrals made to community services.</td>
<td>process data to stakeholders including SAMHSA.</td>
</tr>
<tr>
<td>6)Assess outcomes associated with relapse, recidivism and mental health symptoms/engagement</td>
<td>Relapse will be determined by ASI measures at multiple time points, positive drug screen (MDOC), overdose, and morbidity. Recidivism will be assessed using multiple criminal justice indicators (arrest, jail, return to prison) available from multiple criminal justice databases (MDOC, state police). Mental Health symptoms will be assessed with validated instruments (BSI) will be administered at admission as well as 1 mon, 6 mon and 9 mon post release. MH Treatment engagement will be assessment by monitoring continued engagement in MH services in the year following release.</td>
<td>Kubisak (MSU) with support from evaluation assistant, students and Team Members. Data collection from multiple sources will test the differences between those with COD involved in MISSION; MISSION + MAT; and TAU Group (recidivism and relapse variables only on TAU).</td>
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<tr>
<td>7) Build a sustaining infrastructure for service enhancement</td>
<td>State level stakeholders will meet at least semi-annually for advisory meetings to review program benefits and cost-effectiveness and throughout the funding period will examine all means available for sustainability based on outcomes and a determination of this project’s priority across agencies and other state initiatives.</td>
<td>System Broker w/ Kubisak, Smelson, State Administrators</td>
</tr>
</tbody>
</table>

**MISSION-CJ Quality improvement process:** Data obtained from collaborating agencies on the project implementation, as well as ongoing participant activities, will be reported quarterly as a tool for continued project improvement. The evaluation team has a strong record of engaging with state and local stakeholders in the interest of understanding implementation barriers, improving service delivery and enhancing project outcomes. Evaluation members will routinely attend the monthly collaborator meetings that will be organized by the ‘system broker’.

Confidentiality procedures will be monitored by the IRBs of MSU, UMass, MDHHS, and any required by the facilities. MOUs will be put in place to allow evaluators to receive relevant outcomes and recidivism data. Document reviews, interviews, and reports will not include identifiers. Focus groups will be conducted with stakeholders (including agency representatives, clients, etc.). Evaluators will report results regarding stakeholder input, and successes and barriers to implementation and project expansion efforts, and offer feedback on project goals for year 2 planning and at month 21 to inform sustainability.
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