2018-2019

FINAL REPORT



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Opioid use disorder treatment in pregnancy: <u>A p</u>rogram for Green County

POPULATION HEALTH SCIENCES 780: PUBLIC HEALTH: PRINCIPLES AND PRACTICE



UniverCity Alliance UNIVERSITY OF WISCONSIN-MADISON

Acknowledgements

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Summary Statement

Similar to state and national trends, evidence in Green County, Wisconsin suggests that there is an increase in opioid use within the pregnant population leading to opioid use disorder (OUD). Medication-assisted treatment (MAT) is a recommended best practice for the care of pregnant women to stop and prevent opioid withdrawal and improve infant and maternal outcomes (SAMHSA, 2014). Significant barriers to MAT are noted in Green County as there are a total of two prescribing providers in the area and neither provide services to pregnant women. Mothers who are enrolled in MAT are forced to receive care 35-45 miles outside of Green County in Beloit or Madison, Wisconsin. Further transportation demands and financial constraints put patients at risk for missed doses, relapse, and drug overdose. To increase access to MAT, our goal is to increase the number of prescribing physicians in Green County by providing education on evidence-based interventions for OUD, outlining the MAT certification process, and providing information on disparities within the county.

Public Health Issue

Opioids are a broad class of both legal and illegal drugs including chemicals like morphine, fentanyl, and heroin. Medical opioids that are prescribed and monitored by a physician are used to treat pain. Once in the body, opioids attach to three receptor systems which signal an effect to block pain and calm the body (Kosten & George, 2002). The calming or euphoric effect is produced by the brain's reward system with the hormone dopamine, and long term use of opioids put the brain at risk for developing dependency on this response. Dependency can lead to misuse of opioid drugs and further addiction. Opioid misuse is characterized as taking a prescription in another way than prescribed (quantity or frequency) or

taking an opioid without a physician's prescription. High doses of opioids cause the heart and respiratory system to slow down and with drug overdose this can cause death (Krieger, 2018). The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), replaced opioid abuse and opioid dependence with one diagnosis, opioid use disorder (OUD). Opioid use disorder is a pattern of opioid use characterized by tolerance, craving, inability to control use, and continued use despite adverse consequences (Substance Abuse and Mental Health Services Administration [SAMHSA], 2016).

Opioid use disorder has nationally been on the rise since 1999 with cases in pregnant women paralleling this upward trend (Border, Mascola, & Terplan, 2017). The national prevalence of opioid use disorder in the United States among pregnant women at hospital delivery is estimated to have increased from 1.5 to 6.5 cases per 1,000 deliveries from 1999-2014 (Haight, Ko, Tong, Bohm, and Callaghan, 2018). Direct health risks associated with opioid use during pregnancy include neonatal abstinence syndrome (NAS), stunted growth, preterm labor, low birthweight, and fetal death (Border et al., 2017). Opioids pass through the placenta and directly challenge the fetus' regulatory systems. Fluctuating concentrations of opioid exposure can create a binge and withdrawal pattern that is attributed to high rates of fetal death (Brown, Logan et al). Abrupt discontinuation of opioid use during pregnancy can result in preterm labor, fetal distress, and fetal death. Pregnant women who stop using opioids have high relapse rates which poses a greater risk to the fetus. With relapse, this population is also at a greater risk of overdose death (SAMHSA, 2016).

Opioid use disorder is a chronic disease but with treatment there is a potential for individuals to regain control of their health and their lives (National Institute on Drug Abuse

[NIDB], 2014). The use of medication assisted treatment (MAT) during pregnancy is a recommended best practice for the care of pregnant women with opioid use disorder (Border, Mascola, & Terplan, 2017). Medication assisted treatment is the use of opioid agonist medications in combination with counseling and behavioral therapies to provide a whole-patient approach to the treatment of substance use disorders (SAMHSA, 2014). The goal of MAT is to stop and prevent opioid withdrawal and reduce opioid cravings, allowing the person to focus on other aspects of recovery (SAMHSA, 2014). Short-term treatment programs aimed at abstinence are associated with high relapse rates and generally do not facilitate patients' stable long-term recovery (NIDB, 2014).

Similar to state and national trends, evidence from Green County, Wisconsin, suggests that there is an increase in opioid use disorder (OUD) within pregnant women. State data reports that babies born in Wisconsin with opioid addiction have quadrupled in 10 years with 2 cases per 1,000 births in 2006 and 8 cases per 1,000 births in 2015 (Wisconsin Department of Health Services, 2015b). From 2009-2014, Green County had a rate of 6.6 cases of neonates born with opioid addiction per 1,000 births (Wisconsin Department of Health Services, 2015a). The number of women using opioids during pregnancy in the state of Wisconsin tripled in 5 years with 5 cases per 1,000 pregnant women in 2009 and 16.4 cases per 1,000 women in 2014 (Wisconsin Department of Health Services, 2015b). A Green County community assessment was completed in 2016, but pregnant women with OUD were not an included demographic. While a community assessment is recommended to gather further statistical data on pregnant women with OUD in Green County, the Wisconsin Interactive Statistics on Health (WISH) database reports that there have been 21 opioid overdose deaths in the county from 2011-2016.

Medication-assisted treatment (MAT) is a recommended best practice for the care of pregnant women to stop and prevent opioid withdrawal and improve infant and maternal outcomes (SAMHSA, 2014). Significant barriers to MAT are noted in Green County as there are a total of two prescribing providers in the area and neither provide services to pregnant women. Mothers who are enrolled in MAT are forced to received care 35-45 miles outside of Green County in Beloit or Madison, Wisconsin. Further transportation demands and financial constraints put patients at risk for missed doses, relapse, and drug overdose. To increase access to MAT, our goal is to increase the number of prescribing physicians in Green County by providing education on evidence-based interventions for OUD, outlining the MAT certification process, and providing information on disparities within the county.

Community and Partnerships

When it comes to addressing issues related to the opioid epidemic, there are several agencies that play various intervening roles. The goal is to have consistency with care surrounding the issue within all organizations, however the ideologies between organizations are not always the same. Departments that are involved in the treatment of a pregnant woman with OUD include, but are not limited to: health care providers such as gynecologists and pediatricians, substance abuse counselors, social workers, and individuals in the justice system (SAMHSA, 2016a). Health care providers are focused on the physical health of the mother and baby. Substance abuse counselors are focused on the mental health of the mother and their progress with addiction treatment. Social workers are concerned with the safety of the baby and determining if the mother is healthy and responsible enough to keep the child in her custody. The justice system is focused on the safety of the mother and child and implementing

OPIOID USE DISORDER TREATMENT PROGRAM FOR GREEN COUNTY, WI any legal action necessary based on the actions of the mother's use of illegal drugs. Collaboration and alignment of policy and practices among these organizations is key to effective implementation of managing and supporting mothers and pregnant women with OUD (SAMHSA, 2016a).

The Green County public health department currently has several resources available to pregnant women with OUD seeking treatment. Public health nurses offer prenatal care coordination (PNCC) visits to disadvantaged pregnant women in the population including women who have OUD. These visits allow the public health nurses to follow these women throughout their pregnancies and the department learns first-hand the barriers these women face trying to access appropriate resources and care. Without appropriate treatment intervention, the health and safety of the mother and fetus are at risk. While the public health nurses are able to offer guidance and suggestions to treatment options, they are ill-equipped to provide any type of counseling or prescription services. The are unable to tackle this issue alone. It is imperative that the public health department establish relationships with other key partners in the community. A suggested partner is the Wisconsin Association for Perinatal Care, as this organization operates in Wisconsin and is committed to improving perinatal outcomes, including supporting pregnant women struggling with substance use disorders (WAPC, 2018). WAPC offers a variety of educational materials that target's several populations including best practice recommendations for health care providers, informational posters and flyers for patients, and a comprehensive care framework for interested community stakeholders.

In addition to increasing the number of providers certified to prescribe MAT, a coalition bringing together key stakeholders in the community would help facilitate ideas regarding best

practices when treating pregnant women with OUD. It is important to identify strategies that address underlying issues preventing these women from seeking treatment. For example, women may avoid seeking treatment due to legal implications they may face if their child is born with neonatal abstinence syndrome, a postnatal drug withdrawal condition (Wisconsin Department of Health Services, 2015b). The mother may avoid seeking treatment or attempt to go through withdrawal herself, both of which are more dangerous for the mother and fetus than medication-assisted treatment (SAMHSA, 2016a). A coalition bringing together law enforcement and health care providers may promote a policy change in the way women seeking treatment for OUD are sanctioned. This coalition should include health administrators, healthcare providers, social workers, public health nurses, substance abuse counselors, law enforcement, legislative representatives, community members and local employers. These organizations should work together to discuss and understand the safest and healthiest treatment options for pregnant women with OUD and what kind of guidelines can be implemented to increase access to treatment.

Health Equity Focus

Pregnant women with OUD are a very small, disadvantaged population within Green County. Not only are these women directly impacted by this epidemic, but so are the children they are carrying. These individuals face barriers in regards to access to care and scrutinizing stigma surrounding their disease. Most individuals with OUD, pregnant or not, face challenges with finding treatment options in their communities. Green county does not have a federally certified opioid treatment program, so individuals with OUD must travel to Madison or Beloit in order to receive methadone as medication assisted treatment. Further, there are only two OPIOID USE DISORDER TREATMENT PROGRAM FOR GREEN COUNTY, WI independently federally certified MAT prescribing physicians in Green County (SAMHSA). Pregnant women are also a "high risk" patient population that many physicians are hesitant to treat due to safety concerns of the fetus. These patients are typically referred to addiction specialists, but access to care is oftentimes limited.

This lack of availability requires pregnant patients to travel long distances on a daily basis in order to receive their treatment. Pregnant patients with OUD are typically younger women and of low socioeconomic status (SAMHSA, 2016a). Younger patients with low income have difficulty finding adequate resources, such as transportation, time and finances to leave the county to seek treatment every day. The stress involved with getting to the treatment center may cause individuals to stop seeking treatment all together. In order to address these barriers to access, we will educate providers already in the county and expand their knowledge of acceptable treatment practices for pregnant women. If we are able to provide the tools for physicians to become certified to offer medication-assisted treatment options for patients with OUD, this would expand the resources available to pregnant individuals in Green County.

Evidence-Based Strategy

The Substance Abuse and Mental Health Services Administration (SAMHSA) is a public health agency within the U.S. Department of Health and Human Services whose mission is to reduce the impact of substance abuse and mental illness in the United States (SAMHSA, 2016c). SAMHSA has published clinical guidelines for standard of care for pregnant women with opioid use disorder (OUD). We propose an outreach and education program catered to physicians (and perhaps more specifically OBGYNs) in Green County that goes over the clinical guidelines of care for pregnant women with OUD, familiarizes strengths and weaknesses to the OPIOID USE DISORDER TREATMENT PROGRAM FOR GREEN COUNTY, WI recommended approaches, and teaches physicians how to become federally certified to prescribe medication assisted therapies to individuals with OUD.

Pregnant women are a subpopulation of individuals with OUD and therefore have specific needs that the general population does not. Care providers must take into consideration the risks to the fetus when determining a treatment plan. Current recommendations for standard of care for both pregnant women and the general population include medication-assisted treatment (MAT) combined with a form of talk therapy (SAMHSA, 2018). Evidence has shown that the medications of choice for pregnant women include buprenorphine or methadone, where safety of the fetus has been demonstrated (SAMHSA, 2018, p.34-37). The general population also has access to naltrexone, but current research does not show sufficient evidence for use in pregnant women.

The main risk for the fetus of pregnant women with OUD is neonatal abstinence syndrome (NAS), which is a postnatal opioid withdrawal syndrome characterized by hypersensitivity and hyperirritability, tremors, vomiting, respiratory difficulties, poor sleep, lowgrade fevers and in some cases convulsions (Border, Mascola, & Terplan, 2017). The range of symptoms and severity depends on the type of opioid taken and if the fetus was exposed to multiple substances (National Institute on Drug Abuse, 2014). Treatment of NAS includes nonpharmacological and pharmacological methods and requires longer hospital stays. If no improvement is observed after non-pharmacological care then the neonate will receive medication (often morphine) in tapering doses to relieve NAS symptoms while their body adapts to becoming opioid-free (Whitten, 2012). The risk of NAS does not increase in babies born to mothers that use MAT (compared to mothers that attempt to suddenly withdraw from

opioid use during pregnancy), however there is a 50% chance the baby will still go through NAS at birth and will need further clinical care. At this time there does not seem to be a risk for developmental defects in children whose mothers used MAT (buprenorphine or methadone) during pregnancy, compared with other forms of opioid use. It has been shown that there is an elevated risk to the mother and fetus if complete withdrawal of opioids is decided during pregnancy. There is a risk of relapse, miscarriage, premature birth, or overdose (Border et al., 2017). The use of MAT should be combined with a form of talk therapy, which can come from a variety of sources such as speaking with a social worker, psychiatrist, joining a peer support group, and receiving strong support from loved ones (SAMHSA, 2018, p.34-37).

It should also be noted that there are social considerations for both pregnant women and prescribers that use MAT as part of the treatment plan. According to the Wisconsin Association for Perinatal Care, drug screening of pregnant women can only be done with consent and the law does not require reporting to Child Protective Services (CPS) (Leipold, 2017). This allows for freedom of physicians to treat the expectant mother as they see fit without legal barriers. However, if it is suspected that a neonate is born with drugs in his or her system, then a drug screen at physician discretion is allowed and consent from the mother is not needed. If the screen comes back positive for any controlled substance, then CPS must be notified. From our understanding of the law, it does not matter if the drug screen comes back positive for an authorized prescription drug - all positive screens must be reported. Once the report is made, it is up to CPS to determine whether the neonate is in safe and appropriate care with the mother. According to the Wisconsin Department of Children and Families, the positive screen of infants for harmful substances does not in itself classify as maltreatment under OPIOID USE DISORDER TREATMENT PROGRAM FOR GREEN COUNTY, WI federal law, so other factors such as the mother receiving treatment for her addiction may allow for protection of the mother-infant bond in these cases (2017).

Physicians can become federally certified to prescribe buprenorphine for individuals with OUD by applying for a physician waiver and completing an MAT training (SAMHSA, 2016b). The Providers Clinical Support System offers an 8 hour online training module free of cost to physicians, which is just one of a few available options (See appendix I)(PCSS). Once the training is completed, the physician must apply online for a waiver through SAMHSA (See appendix II). Trainings qualify for continuing medical education credits. In the first year after receiving the waiver, the physician will be allowed to treat up to 30 patients for OUD and will then qualify to increase the number of patients in years following (SAMHSA, 2016b). Since Green County only has two physicians certified to prescribe MAT to patients with OUD, increasing the amount of certified physicians will help eliminate the barrier to prescriber access.

After the program is implemented, it is hopeful that access to MAT will be increased in both the general population and in pregnant women. An immediate goal is to allow for physician engagement in the current public health problem of OUD, and to see the need to become certified. When more physicians are certified, pregnant women may have more access to MAT within Green County instead of needing to travel to other areas such as Madison and Beloit to receive medications. In practicality, most physicians in Green County will need to prescribe buprenorphine, rather than methadone, since buprenorphine should be readily available through Green County pharmacies. Methadone is currently only available to treat OUD through certified opioid treatment programs (SAMHSA, 2015). There are no opioid treatment programs in Green County. A long term goal is to have physicians sharing the OPIOID USE DISORDER TREATMENT PROGRAM FOR GREEN COUNTY, WI certification process with colleagues, and to have more Green County citizens treated for OUD so that ultimately the rates of OUD and overdoses will be decreased across the state of Wisconsin.

Evaluation

Evaluation of the program should include a pre and post survey to Green County providers about their knowledge of opioid use disorder. The survey we suggest is located at the end of this document (Appendix III). We recommend the survey be succinct with a space for open answers (as seen in the sample survey provided). The survey would best be distributed by department heads in the Monroe Clinic, with strategic choice of departments for targeted response (such as OBGYN, addiction medicine or psychiatry, or internal medicine). The survey could go out one month prior to the scheduled outreach event, and then be implemented again in 6 months to determine whether physicians have been getting their certification for MAT.

Another way to evaluate would be to consult the SAMHSA web page of providers in the United States that have become MAT certified. Currently, there are only two providers in Green County with the certification, so checking again 6 months post implementation can help determine efficacy of the program (SAMHSA).

Qualitative interviews with pregnant women with OUD may also be useful for determining ease of access to care for this population. Since contact with this population in Green County has already been successful, keeping track of the population concerns and outcomes would be recommended post project implementation.

It is not advised to monitor rates of neonatal abstinence syndrome within newborn

patients at the Monroe Clinic. MAT still can cause NAS to occur and so even if the program was

successful, these rates may stay consistent (SAMHSA, 2018).

The overall goal for the project is to improve outcomes for pregnant women with OUD

in Green County, as well as raise awareness of OUD and physician MAT certification. The

project will be sustained through physician awareness and networking with colleagues about

the certification process.

Funding Opportunities

- Grants.gov
 - 1. Disaster Recovery National Dislocated Worker Grants to Address the Opioid Crisis - ETA-TEGL-4-18
 - 2. HEALing Communities Study RFA-DA-19-017
 - 3. SBIRT Program for Women of Reproductive Age Misusing Opioids in Rural Primary Care Settings – WH-AST-19-002
 - 4. Prescription Drug Overdose Prevention for States Program CDC-RFA-CE15-15010301SUPP17
- Wisconsin Department of Health Services
 - 1. Opportunities for funding for counties in Wisconsin demonstrating need for opioid prevention programs

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Appendix I

Where Can Physicians Be Certified to Prescribe Buprenorphine for OUD Treatment?

Website/Organization	Cost	Training Details
Providers Clinical Support System	Free	8 hours of training and pass an evaluation at the end
https://pcssnow.org/medication- assisted-treatment/		 Options for online webinar or in person training Clinical mentoring also available for case by case consultation on prescribing MAT
American Society of Addiction Medicine – Treatment of Opioid Use Disorder	Free to members of the American Society of Addiction	8 hours of online only training
https://www.asam.org/education/live- online-cme/waiver-training	Medicine	

*Trainings are also offered to Physician Assistants and Nurse Practitioners. A minimum of 24 hours of training is required rather than the 8 hour requirement for physicians. See websites for more details.

Once training is completed, a certificate of completion will be given which can be forwarded to SAMHSA following the steps outlined in Appendix II.

Appendix II



Providers Clinical Support System

Steps to Obtain Your MAT Waiver



Take 8-hour MAT waiver course

PCSS offers several free courses each month. Find 8-hour medication assisted treament (MAT) co**urses** on <u>PCSS</u>

Check Your Eligibility

To apply for a waiver you must have a valid medical license and an active DEA number. Apply for a DEA number with Drug Enforcement Agency's Diversion Control Division (Registration Support) here.





Forward your Certificate of Completion to SAMHSA

When you complete the 8 hour waiver training, PCSS will send you via email your certificate of completion. Fax the Certificate of Completion to 301 576-5237 or <u>email</u> it to SAMHSA.

Complete your Notice of Intent Form

Once you have finished the 8-hour course, complete the NOI form <u>online</u> and submit it to the Substance Abuse and Mental Health Services Administration (SAMHSA) for review.



Once SAMHSA has obtained all documentation, the process requires approxiately 45 days.

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Appendix III

Pre, Post, and Evaluation Survey for Green County Providers

- a. I have encountered patients with opioid use disorder.
 - Yes
 - 🛛 No
- b. I have encountered pregnant women with opioid use disorder.
 - Yes
 - 🛛 No
- c. I have prescribed medication assisted therapy to treat patients with opioid use disorder or recommended an opioid treatment program for these patients.
 - 🗅 Yes
 - 🛛 No
- d. I have prescribed medication assisted therapy to treat pregnant women with opioid use disorder or recommended an opioid treatment program.
 - 🛛 Yes
 - 🛛 No
- e. I am certified to prescribe buprenorphine for patients with opioid use disorder.
 - 🛛 Yes
 - □ No, but I am **not** interested in being certified
 - No, but I am interested in being certified
- f. Please add any details about your experience with opioid use disorder in Green County.

Appendix IV

Program: Opioid Use Disorder Treatment in Pregnancy Logic Model

Situation: Significant barriers to medication assisted treatment (MAT) for opioid use disorder (OUD) in pregnant women are noted in Green County as there are a total of two prescribing providers in the area and neither provide services to pregnant women. Mothers who are enrolled in MAT are forced to receive care 35-45 miles outside of Green County in Beloit or Madison, Wisconsin. Further transportation demands, and financial constraints put patients at risk for missed doses, relapse, and drug overdose. To increase access to MAT, our goal is to increase the number of prescribing physicians in Green County by providing education on evidence-based interventions for OUD, outlining the MAT certification process, and providing information on disparities within the county.

Inputs	Outputs		Outcomes Impact			
•	Activities	Participation	Short	Medium	Long	
 Public Health Department staff Coalition members Providers (mental health, prescribing physicians, OBGYN) -Current prescribing MAT physicians Time Money 	 -Community Assessment identifying county statistical data on OUD during pregnancy, NAS rates, and MAT rates. -Understand participant needs, community perspectives, and barriers to OUD treatment with focus groups - Understand knowledgebase and perspectives of Physicians with presurvey -Create presentation to educate providers on evidence-based treatment practices, MAT certification process, and disparities in Green County -Evaluate physician knowledgebase and perspectives with post-survey 	-Pregnant Women -New mothers -Neonates -Providers (mental health, prescribing physicians, OBGYN) -Community -Public Health Department -Healthcare systems -Families -Current prescribing MAT physicians	 -Identify county statistical data on OUD during pregnancy, NAS rates, and MAT rates. -Providers will become more aware of opioid epidemic in Green County -Providers will become more aware of treatment disparities in Green County -Providers will become more aware of treatment options for OUD during pregnancy 	 -Community will become more engaged in opioid epidemic -Providers will become certified to prescribed MAT increasing Green County providers to greater than 2 (baseline) -Providers will prescribed MAT to pregnant women increasing providers who serve pregnant women to greater than 0 (baseline) -Patients on MAT will not have to travel outside of Green County for treatment 	-MAT is known within community and prompt referrals are made during perinatal care. -Primary prevention of OUD before pregnancy -Decrease in NAS -Decrease in OUD during pregnancy	

Assumptions

-Green county physicians are resisted to treating OUD during pregnancy -There are no current providers who treat OUD during pregnancy in Green County -There is an increase in OUD during pregnancy

External Factors

-Provider or community opinion regarding MAT during pregnancy -Policy

About Univer<mark>City</mark> Year

UniverCity Year is a three-phase partnership between UW-Madison and one community in Wisconsin. The concept is simple. The community partner identifies projects that would benefit from UW-Madison expertise. Faculty from across the university incorporate these projects into their courses, and UniverCity Year staff provide administrative support to ensure the collaboration's success. The results are powerful. Partners receive big ideas and feasible recommendations that spark momentum towards a more sustainable, livable, and resilient future. Join us as we create better places together.





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