

Medication Assisted Treatment for Pregnant Women with Opioid Use Disorder : The MAT4Moms program



Sobering Statistics



- In 2012, 259 million prescriptions were written for opioids, which is more than enough to give every American adult their own bottle of pills.
- Four in five new heroin users started out misusing prescription painkillers
- 94% of respondents in a 2014 survey of people in treatment for opioid addiction said they chose to use heroin because prescription opioids were “far more expensive and harder to obtain.”



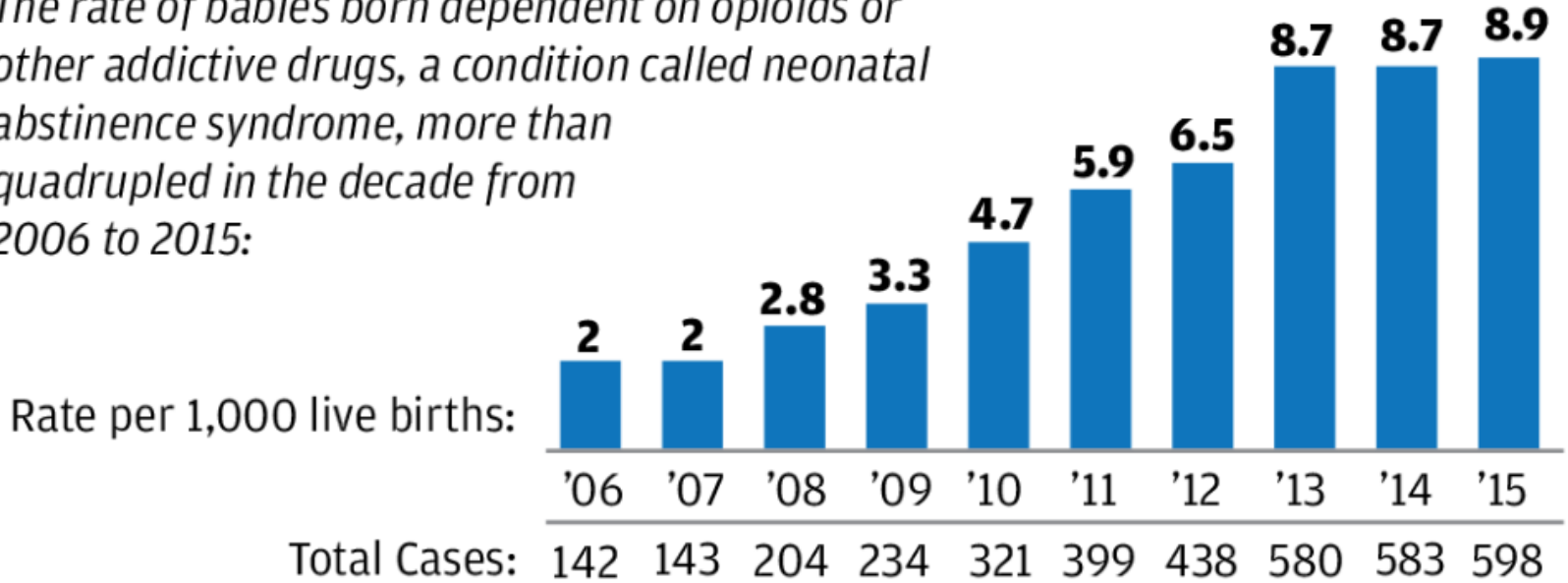
Scope of the Problem in Pregnancy

- **2012 National Survey on Drug Use and Health:**
 - 5.9% of pregnant women use illicit drugs
- **Local numbers- unknown d/t no screening**
 - Approximately 100 NAS babies/year
- **Prenatal substance abuse associated with increased morbidity and mortality for mother, fetus, newborn**
 - Thromboembolic events
 - Infectious disease
 - Perinatal transmission of HIV, hepatitis
 - Preterm birth, placental abruption, IUGR, intrauterine death
 - NAS
 - Child abuse/neglect



Neonatal abstinence syndrome rising in Wisconsin

The rate of babies born dependent on opioids or other addictive drugs, a condition called neonatal abstinence syndrome, more than quadrupled in the decade from 2006 to 2015:



SOURCE: Wisconsin Department of Health Services

State Journal



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Neonatal Abstinence Syndrome (NAS) Symptoms

- hyperirritability
- excessive crying
- poor sleep
- poor feeding
- diarrhea
- hypertonia tremors
- poor sucking reflex
- seizures



Barriers To Care

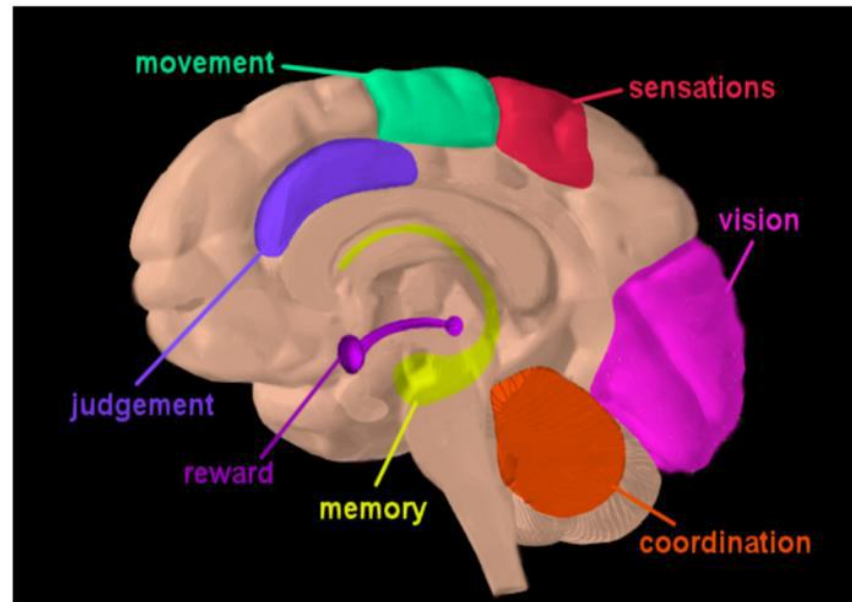


- Lack of trained providers
- In pregnancy specifically, lack of providers who understand both pregnancy and addiction
- Fear of being treated differently
- Stigma of addiction
- Fear of legal ramifications
- Lack of transportation or support
- Inconvenience of methadone clinics

Effect on Brain

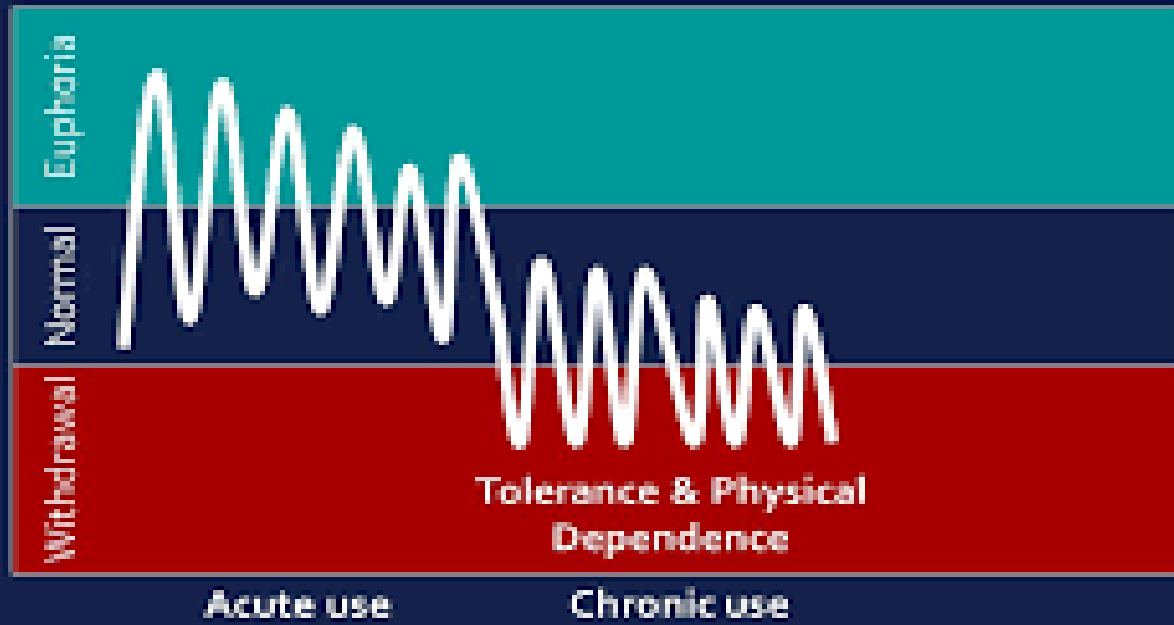
NEUROLOGICAL EFFECTS OF OPIOIDS

- Desensitizes reward center: decreased pleasure and motivation.
- Increases strength of condition responses: increased cravings.
- Increases stress reactivity: negative emotions when cravings not satiated.
- Weakens executive functions: decision making, inhibitory control, self-regulation.



Volkow, Koob, & McLellan, 2016
www.drugabuse.gov

Natural History of Opioid Use Disorder

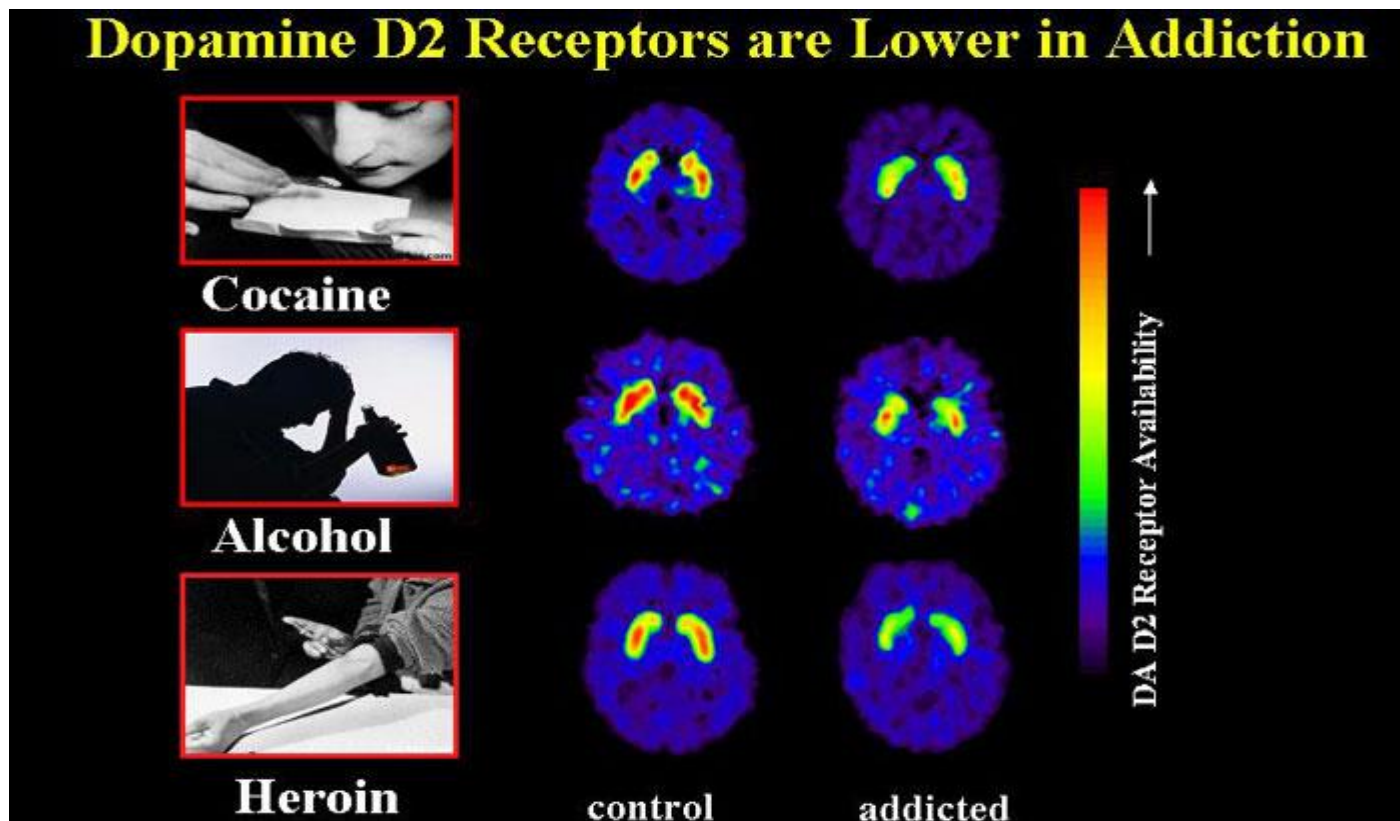


ASAM
BUPRENORPHINE COURSE
FOR A FULL-SCALE TREATMENT OF OPIOID USE DISORDER

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Substance use affect on brain

- Changes to brain are reversible, but can take years



Condon, T. (2004.)



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Why Use Medication for OUD?

- **Goal is Harm Reduction**
 - 80-90% relapse without medication assisted treatment even after they “detox”
 - Less risk of accidental overdose
 - Increased treatment retention
 - 80% decrease in crime
 - Less HIV/Hep C exposure



Other maternal/fetal benefits of pharmacotherapy for OUD

- Helps remove mother from drug-seeking environment
- Eliminates illegal behavior; prostitution
- Prevents fluctuation of maternal drug
- Reduces maternal mortality and severe morbidity
- Leads to improvement in the mother's nutrition and infant birth weight
- Enhances woman's ability to prepare for the birth
- More likely to retain custody of her children
- Children are monitored more closely when mother is in a treatment program



Detox vs maintenance therapy

- Studies from 1970s demonstrated fetal distress and a 5x increase risk in still birth with antepartum detox
- More recent data shows 2nd trimester detox can be safe for fetus however maternal relapse rates prior to delivery is 70-98%!
- Maintenance therapy in pregnancy



retention in PNC
addiction recovery
in- hospital deliveries



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OUD in Pregnancy (MAT4Moms)

- **We provide a comprehensive program for pregnant and postpartum women**
 - Use Buprenorphine/Naloxone
 - **Induction after 12 hours of abstinence (need to be in mild to moderate withdrawal)**
 - Can be done inpatient or outpatient
 - **Close follow ups (bi-weekly, weekly, monthly)**
 - Individual/small group therapy
 - Social worker to aid with community resources
 - Coordinate care with OB/PAC to limit transportation and increase likelihood of compliance
 - Assists in providing resources for cessation of other substances, including tobacco



Goals of the Program

- Identify pregnant women with opioid substance use disorder who could benefit from treatment
- Provide treatment in a non-judgmental, supportive environment
- Decrease negative outcomes associated with prenatal substance abuse
- Identify newborns at risk of NAS
- Decrease NICU length of stay
- Provide appropriate support beyond pregnancy
- Train a primary care workforce who will be able to extend the impact of an addictionologist



Why Family Medicine Doctors?

- Experience with obstetrical care, low and high risk: prenatal care, delivery, postpartum care
- Experience with infant care including NAS babies
- Experience with substance use, addiction
- Provide services inpatient and outpatient
- Used to thinking about care from a whole family perspective
- Coming to FM office decreases stigma for patients

Program Components

- **Coordinator**
 - Performs intake to make sure patients are appropriate for out program
 - Patient Tracking, Navigator, Communication
- **Behavioral Health**
 - Intake and create BH treatment plan
 - Group and individual counseling
- **MAT Prescribers**
 - FM Faculty and eventually resident doctors
- **Social Work**
 - Link to services and programs. Coordinate with legal system, CPS, insurance. Help obtain baby items.

OUD in Pregnancy Program

- **How do patients get to the program**
 - Self referral
 - Referral from a community agency
 - Referred by their obstetrical provider or PCP after a positive 4P's screen or other disclosure of opioid use
 - Referred after delivery with baby with NAS
 - De-escalation of care after PHP->IOP->MAT4Moms
 - Can utilize the program for both medication assisted treatment AND behavioral health, or JUST behavioral health (e.g. getting methadone or buprenorphine from outside provider)



OUD in Pregnancy Program

- **Who qualifies for the program**

- Women who have opioid use disorder
- May have other co-existing substance use disorder
- Interested in treatment
- Pregnant, Planning to get pregnant, Post-partum (up to 1 year after delivery)
- Must give permission for us to coordinate care with their obstetrical provider
- Must have US documentation of viable pregnancy if pregnant

General Overview

Patient referred or self referred to program



Coordinator makes phone contact same day, sets up intake day within 24-48 hours



Intake day includes extensive assessment by behavioral health and the coordinator



Intake Day

- **We have same day availability for inductions- outpatient vs inpatient**
- **Tasks of Intake Day**
 - Confirm diagnosis of opioid use disorder
 - Screen for co-existing substance use disorder, mental health issues
 - Complete assessment to confirm appropriate for outpatient therapy
 - Review expectations, rules of the program, sign consents, provide instructions and Rx for medication for induction day



Induction Day

- Goal is to do most inductions as outpatient
- Start in mild withdrawal (off substance for around 12 hours)
- Serial COWS assessments and medication administration, takes 3-4 hrs
- Home with comfort meds and just enough strips until next appointment
- Follow up by phone next day, in person 1-3 days



Induction Day

- Can be done inpatient if needed
- Teaching Service would direct therapy
- Patient monitored on L&D

Follow Up

- **With MAT providers**
 - 1-2 times a week for the first 4 weeks
 - If stable decrease to every 2 weeks
 - Post-partum return to weekly visits
- **With Behavioral health**
 - Treatment plan established at first visit
 - Usually mirrors MAT plan for individual counseling
 - Weekly group
- **With Social Work**
 - Sees patient following intake day, and periodically as needed. Can also make home visits.



Urine Drug Testing

- **Urine drug testing is done at EVERY MAT visit, and once per day per patient**
 - POCT result available immediately
 - Temperature measured within 5 minutes
 - Confirmatory within 48-72 hours
 - Tests levels of around 100 substances
 - Can request additional testing if concern it isn't urine
 - Provides actual levels
 - Scanned into media
- **If BH visit only- obtain UDS**



Other Program Components

- All patients recommended to have a NICU tour/NNP consult
- Patients receive support and counseling on total abstinence (including cigarettes)
- Patients receive education on how they can help decrease their child's likelihood of elevated NAS scores
- Program is notified at delivery, will make visit in hospital and coordinate transition of care around MAT



Preventing NAS

- **We strongly recommend the following:**
 - Breastfeeding (unless active heroin use, cocaine use, alcohol use)
 - Skin to skin with infant
 - Decreased stimulation in the room (visitors, loud noises)
 - Maternal UDS on admission
- **All babies receive 5 days of monitoring NAS scoring**



Other Program Components

- Relapse or struggle prompts **INCREASE** in care
- Only reasons to get kicked out of the program are: diversion, misuse, not using meds
- If we have escalated to MAT/BH visits 5/5 weekdays, would transition to PHP

Program Leadership & Participation

- **Susanne Krasovich, MD- Medical Director**
- **Maureen Longeway, MD- Director of Education**
- **Kristen Fox, MD- Director of Advocacy, Addiction Fellow**
- **Jessica Knipfer, NP, Jenny Gruber, NP- Program Coordinators**
- **Colleen Allen, MSW- Social Worker, Director of Community Outreach**
- **Carrie Laux, LCSW, Aaron Grace PsyD- Behavioral Health Providers**
- **Simon Griesbach, MD, Anna Witt, MD- MAT providers**
- **Michelle Morgan, MD- Resident liaison**
- **John Dang, MD, Pat Ginn, MD, Mike Mazzone, MD- additional waiver trained faculty**
- **Deb Schaber, RN- PHMG-Barstow Clinic Manager**
- **Megan Anderson- WHSL Leadership**
- **Olin Yauchler- Director of Behavioral Health**
- **Subhadeep Barman, MD- Addiction Medicine Advisor**
- **Randy Kuhlmann, MD- Perinatology Advisor**



Questions?

