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The Pregnancy Pact: Treating mom and baby separate but equal

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Magee-Womens Hospital of UPMC

- Urban Teaching Hospital
- Located in Pittsburgh, Pennsylvania (Allegheny County)
- Rated by US News and World Report as one of the top 9 hospitals in the nation for providing gynecological care in 2015
- Over 10,000 births per year
- Serves the tri-state area (Ohio, WV, PA) and eastern corridor of Pennsylvania
- Largest NICU in Pennsylvania, treating more than 2,000 seriously or critically ill babies each year
- Medical services for both men and women – geriatrics, orthopedics, bariatrics, urology, general medicine in addition to the Women's Health Service line

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Setting the Stage

- Magee-Womens Hospital and the nation are facing an increasing number of pregnant women with substance use disorders
- The number of past users of heroin has increased from 373,000 in 2007 to 668,000 in 2012
- The misuse and abuse of prescription drugs, particularly opioid pain relievers has been called a public health epidemic by the Centers for Disease Control and Prevention (CDC)
- Of the 21.5 million Americans 12 or older that had a substance use disorder in 2014, 1.9 million had a substance use disorder involving prescription pain relievers and 586,000 had a substance use disorder involving heroin
- Drug overdose is the leading cause of accidental death in the US with 47,055 lethal drug overdoses in 2014. Opioid addiction is driving this epidemic

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At Magee

- Women began to seek treatment in the Outpatient Clinic at Magee after St. Francis closed its doors in 2002
- Maternal Addiction Committee formed to address treatment concerns and issues
- Methadone conversion program opened in 2002
- Connected with our UPMC partner – WPIC – Perinatal Addiction Center (PAC) and Kelly Street Methadone Maintenance Program
- Leading facility in the tri-state area (West Virginia, Ohio, Pennsylvania) for obstetrical substance use
- Pregnancy Recovery Center opened in July 2014 for outpatient Subutex treatment
- Initiating a Perinatal Addictions Service for consultative and uniform treatment for the obstetrical substance use treatment

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Focus

"All women do amazing things.
Women with addiction will do no less."

- Women are highly motivated and are more active in seeking recovery during pregnancy (Chen et al.,2004).
- Our philosophy is to focus on the pregnancy and wrap recovery around this life event.

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Medication Assisted Treatment (MAT)

- The combination of medication and behavioral counseling for the treatment of substance use disorders (SUD)- Specifically for opioid use disorders (SAMSHA, 2016).
- Protects the mother and fetus from repeated withdrawal and relapse with opiates
- Two MAT treatment options available during pregnancy:
  - Methadone
  - Subutex (buprenorphine)
- Vivitrol is not available in pregnancy (FDA, 2013)

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Methadone

- Accepted MAT treatment option since the 1970s
- Full opiate agonist
- Inpatient Conversion
  - Three to four Days
- Daily dosing
  - Weekend and weekly dosing can be available
- Emergency dosing
  - Up to three consecutive times
- Conversion from methadone to Subutex does not exist

(SAMSHA, 2005)

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Subutex

- Accepted MAT treatment option since 2010
- Partial opiate agonist
- Outpatient Conversion
  - Two days
- Weekly appointments
  - Biweekly appointments can be available
- Administration includes up to four times a day
- Conversion from Subutex to methadone available

- Not an option for:
  - Heavy opioid use
  - Polysubstance use
- Suboxone
  - Becoming more available

(SAMSHA, 2005)

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Medical Home Model Approach

- Pregnancy Recovery Center (PRC)
  - Hospital-based outpatient buprenorphine (Subutex) clinic
- Team members:
  - Social services, obstetricians, addiction specialists, pharmacy, behavioral counseling, and a nurse coordinator
- PRC deliveries vs. community Subutex deliveries
  - Lower neonatal abstinence syndrome rate
  - Lower length of stay for newborn

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Medical Detoxification

- **Dr. Jennifer Bell**
  - Study completed over 5 years in Tennessee
  - No adverse fetal outcomes associated with medical wean and detox in pregnancy
- **300 women separated into four detox groups**
- **Acute detox while incarcerated**
  - 18.5% NAS rate
- **Inpatient detox and intensive outpatient treatment**
  - 17.4% NAS rate
- **Slow buprenorphine detox**
  - 17.2% NAS rate
- **Inpatient detox and no intensive outpatient treatment**
  - 70.1% NAS rate

(Bell et al., 2016)

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Polysubstance Use:
Benzodiazepines/Cocaine

- Benzodiazepines
  - Adverse effects include CNS depression/respiratory depression
  - Not eligible for Subutex treatment
  - Benefits present with intensive outpatient treatment of methadone
  - Inpatient wean of benzodiazepines with cohesive methadone conversion
- Cocaine
  - No MAT exists
  - Inpatient 30-60 day treatment is most effect
  - If combined with opiates, methadone treatment is recommended after discharge from inpatient facility

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Incarceration

- Methadone conversion and maintenance
- Subutex conversion and maintenance

- Concerns with Subutex maintenance in the jail population
  - Multiple administration times of Subutex may not be met
  - Methadone inmates are connected with methadone clinics- Subutex inmates are not
    - No enough clinics/providers to take patient population
  - Inappropriate administration reported
    - Crushed and diluted in water

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Research

- Administration times of Subutex
  - Six to eight hour baseline serum levels
  - More effective dosing three/four times daily
- Third trimester dosing
  - Physiological changes in pregnancy cause dilution and increased metabolism
  - Lost 40% of medication
  - Can be dosed above 16mg daily
  - Decrease to 16mg daily one week after delivery
  - Methadone doses are increased in the third trimester
- Hepatitis C treatment

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Neonatal Abstinence Syndrome (NAS)

- Methadone
  - 60% of newborns require medication treatment
  - Average length of stay: 4 weeks
- Subutex (Community clinics)
  - 45% of newborns require medication treatment
  - Average length of stay: 14 days
- Subutex (Pregnancy Recovery Center)
  - 36% of newborns require medication treatment
  - Average length of stay: 14 days
- Rooming-in
  - Skin-to-skin (Holmes et al., 2016)

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Postpartum Pain Management

- Methadone
    - IV Toradol for 24 hours
    - Daily Methadone and Motrin
- Subutex
    - Vaginal Delivery
        - IV Toradol for 24 hours
        - Daily Subutex and Motrin
    - Cesarean Delivery
        - IV Toradol for 48 hours
        - Discontinue Subutex
        - Administer Oxycodone for five days
        - Reconvert to Subutex after five days of opiates

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Breastfeeding

- Supported in Methadone, Subutex and Suboxone populations (Ilett et al., 2012; Debelak et al. (2013)
- Methadone can decrease withdrawal symptoms in newborns
- No evidence in the decrease of withdrawal symptoms with the use of buprenorphine products

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