Magee-Womens Hospital

- Urban hospital setting
- Located in Pittsburgh, Pennsylvania
  - Allegheny County
- Population: 305,000 residents
- One of the top 12 hospitals in the nation for gynecological care
- 45% of Allegheny County births are at MWH
- Our NICU is the largest in the state and one of the largest in the country
- Serves both men and women
  - Geriatrics
  - Orthopedics
  - Bariatrics
  - Urology
  - And more

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 669,000 in 2012

In 2012, 156,000 people used heroin for the first time, which was an increase from the 90,000 people who were first-time users in 2007

The misuse and abuse of prescription drugs, particularly opioid pain relievers has been called a public epidemic by the Centers for Disease Control and Prevention

In 2011 over half of the 41,340 drug overdose deaths were related to prescription drug and 74% of these were opioid-related
According to the CDC:

- There were 430,000 Emergency Department visits related to opioid use in 2011.
- Providers wrote over 259 million prescriptions for opioids in 2012.
- The estimated societal costs of opioid abuse were $55 billion in 2007, 45% of which were healthcare related.
- 1.9 million Americans met criteria in 2013 for a opioid substance use disorder based on their written prescriptions.
- 4.5 million Americans report using a prescription medication from a friend/family member in the last year.

Prior to 2002, St. Francis Hospital of Pittsburgh is the primary place for women with substance use disorders.

2002 - St. Francis Hospital closes resulting in the loss of the only treatment center for addicted pregnant women in the region.

2002 - Magee-Womens Hospital develops an inpatient methadone conversion center and an average 300-350 conversion/year.

2009 - Dr. David Kelley, Chief Medical Officer of the Office of Medical Assistance Programs, approached Western Pennsylvania Medicaid providers regarding the establishment of a pregnancy addiction program in the Western PA.

2010 - NEJM article: Medical Home approach with the use of Buprenorphine for the treatment of opioid addiction in pregnancy.

2012 - University of Pittsburgh, Magee-Womens Hospital, Western Psychiatric Institute and Clinic, and West Penn Hospital, apply for a CFIM grant to establish a Behavioral Health and Addiction in Pregnancy program - program not funded.

2014 - Magee-Womens Hospital, three insurance providers (UPMC for You, Gateway Health, United Healthcare) and Community Care Behavioral Health develop a shared savings approach to establish a Pregnancy Recovery Program (Medical Home Approach) at Magee-Womens Hospital.

July 15, 2014 - Pregnancy Recovery Center opens.
Substance Use Disorder in the Pregnant Patient at Magee

2013: Completed 343 inpatient Methadone conversions of addicted pregnant patients (average 3 day inpatient stay)
2013: 250 babies born to mothers taking methadone received medication treatment for NAS (neonatal abstinence syndrome) with an average NICU length of stay of 10+ days
Increasing number and unknown number of babies are delivering at Magee-Womens Hospital on Subutex (primarily from illicit sources)
Magee is the only facility in Western Pennsylvania treating addicted pregnant women

The Journal of New England Medicine published an article in 2010, demonstrated shorter withdrawal phase for infants who’s mothers were converted to Subutex compared to methadone

Our 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: Focus on the pregnancy and wrap recovery around this life event

Magee Pregnancy Recovery Program

• The Pregnancy Recovery Center’s goal is to offer comprehensive care for women suffering from opioid addiction by providing medical support to prevent withdrawal during pregnancy, minimizing fetal exposure to illicit substances and engaging the mother as a leader in her recovery
• Pregnancy Recovery Center operates from the outset on an outpatient basis. The pregnancy recovery center will also provide consistent, collaborative care throughout the patient’s pregnancy.
• Treating pregnant patients with buprenorphine is a relatively new practice. Early research suggests babies born to mothers taking it instead of undergoing methadone treatment recover more quickly after birth.
Pregnant women with SUD are often judged negatively by caregivers, especially women addicted to alcohol or drugs. As a result, pregnant women with SUD are often reluctant to disclose their problems to caregivers and may be reluctant to seek timely prenatal care, keep medical appointments, and adhere to care plans for medical or behavioral health disorders.

- Recent advances in brief screening techniques and improved therapies for SUD emphasize taking a non-judgmental, empathic stance that makes it possible to intervene effectively with SUD.

- Research strongly suggests that increased integration and coordination of services improves clinical outcomes and reduces costs during pregnancy. 12-14
"Medication treats the symptoms of the disease. Counseling treats the disease that causes these symptoms."

- **Perinatal Addiction Center - Outpatient clinic of Western Psychiatric Institute and Clinic**
- Specifically treat pregnant women with substance use disorders
- Weekly counseling sessions
  - Women specific groups:
    - Yoga
    - Relapse Prevention
    - Art Therapy
    - Journaling
    - Women's Issues
Intrapartum Pain Management

• Buprenorphine dosing during labor and delivery - patients should continue their regular buprenorphine dosing schedule (dose, timing and frequency) while in labor

• Regional anesthesia - similar to all other patients, buprenorphine patients should be offered regional (i.e. epidural) anesthesia for pain management

• Partial opioid agonist use - partial opioid agonists (i.e. naltrexone and buprenorphine) MUST be avoided in labor as they can precipitate severe withdrawal symptoms

• Supplemental opioid use - if there is a need for the use of supplemental opioid use in labor, full opioid agonists (i.e. morphine, fentanyl) should be used. However, large doses may be necessary to mitigate pain and will increase the risk of sedation and respiratory suppression in the newborn at the time of delivery. As a result, supplemental opioid use should only be used with extreme caution and not near the time of expected delivery

Postpartum Pain Management

Vaginal delivery:
- Continue their regular buprenorphine dosing schedule (dose, timing and frequency).
- Oral acetaminophen and ibuprofen can also be used for additional pain control.
- Pelvic pain from regional anesthesia can be treated with oxycodone and muscle relaxants.
- Pain can be treated with heating pads.
- The use of supplemental opiates should be avoided in the postpartum period.

Cesarean section:
- Buprenorphine dosing schedule should be stopped following a cesarean section.
- Patients should be given an IV Toradol for the first 24 hours.
- In unique circumstances, IV acetaminophen or a PCA as a full opioid agonist (i.e. fentanyl).
- Following the first 24 hours, patients should then be transitioned to PO buprenorphine, acetaminophen, and oxycodone (5-15 mg every 6 hours X 3 days).
- Buprenorphine and acetaminophen can continue to be used after oxycodone discontinuation.
- Patients will be instructed to restart their previous buprenorphine dosing schedule 8-12 hours following their last oxycodone dose.

Babies of the Substance Use Disorder Patients

- Babies born to pregnant women with Substance Use Disorders (SUD) are at increased risk for neonatal abstinence syndrome (NAS), prematurity (late pre-term), low birth weight, perinatal death, cognitive, behavioral and physical problems during childhood, high rates of child abuse and neglect, involvement in the foster care system, challenges in maternal-infant attachment and developmental delays.14
Enrolled Patients
- 84 Enrolled Patients
  - Nine ‘No Show’ patients
  - Four missed appointments
  - One incarceration
  - Five positive opiate screens
  - One positive ecstasy screen
  - Two positive cocaine screens
  - One positive methadone
  - One positive amphetamine
  - One instance of buprenorphine prescription
  - Two polysubstance use
  - One delivered at WP
  - Discharged after delivery
- 32 Graduates
- 24 Active Patients
- 67% Success rate

Graduates vs. Discharges
- 84 Patients that completed induction (active patients)
  - 24 Active patients
  - 32 Graduates to Community Recovery
  - 28 Unsuccessful discharges

Gestational Age on Admission
- First Trimester
  (Earliest admissions: between 5-7 weeks)
- Third Trimester
  (Latest admission: 39 weeks)
- Of the current active patients:
  - 12 patients are prescribed less than 16mg daily
  - 5 patients are prescribed 16mg daily
  - 7 patients are prescribed greater than 16mg daily

- Nicotine Data (Active PRC Patients)
  - 21 of our active patients started the program as smokers - 87%
  - 1 switched to nicotine gum or patches
  - 1 Quit Smoking

- NAS Treatment
  - 36 Deliveries (37 babies)
  - 23 babies did not require medication for NAS
  - 14 babies required medication for NAS treatment
Breastfeeding vs. Bottle feeding

- 36 Deliveries (37 babies)
  - 20 mothers are breast feeding
  - 14 are bottle feeding only

Comparative Data

- Total Number of Deliveries Grouped by PT Type
  - July 2014 through July 2015
  - Gest Age = 39 Weeks

Comparative Data

- Avg Total Maternal Charges Grouped by PT Type
  - July 2014 through July 2015
  - Gest Age = 39 Weeks

- Breastfeeding
- Bottle Feeding
- PNC
Next Steps

PA Surgeon General and Staff visited the PRC with possible replication of the program in other areas of the state
Expansion of the PRC to other sites or practice sites
Butler, or UPMC Horizon
Expand the criterion for eligibility for Magee’s site
Apply for Grants to expand the program and educate providers
Contributions to the Literature of Drug addiction in pregnancy

Questions

Thank You