Tennessee Opioid Use Disorder Project Infomercial

October 2, 2018

A TIPQC, TDH, THA/TCPS, AIM Collaborative Inter-institutional Quality Improvement Project
WebEx Features

• Icons
  Give feedback, raise your hand, tell me to go faster or slower, clap

• Annotations

• Markers, pointers, eraser

• Recording
Ask Questions in the Chat Box

To ask questions on today’s call:

1) Type your chat into the chat box.
2) Select “all participants or host” in the drop down menu.
3) Press send.

Please note that Chat is visible to all attendees.
WebEx

- Have entire team together
- Follow slides on the internet
- Listen on your speakerphone
- Please do not place your phone on hold
- Mute/unmute, press *6 (depends on phone)
- Identify yourself & your center when you speak
- Asking questions
  - Hands, voice, chat...just ask ‘em!
  - *Now, let’s practice!*
Where are you?

• Click on your pointer, and let us know where you are!
## OUD Webinar Agenda

<table>
<thead>
<tr>
<th>Agenda Item</th>
<th>Who</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductions</td>
<td>Brenda Barker</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Tennessee Data</td>
<td>Morgan McDonald--Bethany Scalise</td>
<td>5 minutes</td>
</tr>
<tr>
<td>OUD Evidence Overview</td>
<td>Jessica Young</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Introduction to AIM</td>
<td>Amy Bross</td>
<td>5 minutes</td>
</tr>
<tr>
<td>AIM OUD Bundle</td>
<td>Jessica Young</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Tennessee OUD Project</td>
<td>Jessica Young</td>
<td>15 minutes</td>
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<tr>
<td>• Global AIM</td>
<td>Brenda Barker</td>
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<tr>
<td>• Smart AIM</td>
<td>Terri Scott</td>
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<tr>
<td>• Key Driver</td>
<td></td>
<td></td>
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<td>• Measures</td>
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<tr>
<td>AIM Resources</td>
<td>Amy Bross</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Q&amp;A</td>
<td>Brenda Barker</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Next Steps</td>
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</table>
INTRODUCTIONS
OUD TEAM

Brenda Barker, M Ed, MBA

Theresa Scott, MS

Nikki Zite, MD, MPH

Suzanne Baird, DNP, RN

Amy (Bross) Ushry, RN, MPH

Bethany Scalise, BSN, RN

Morgan McDonald, MD, MPH
Jessica Young, MD, MPH

- Associate Professor, Vanderbilt Department of Obstetrics and Gynecology
- Board certified Ob-Gyn and Addiction Medicine specialist
- Director of Vanderbilt Obstetric Drug Dependency Clinic
TENNESSEE DATA
Neonatal Abstinence Syndrome Surveillance
August Update (Data through 09/01/2018)

Quick Facts: NAS in Tennessee

- **502 cases** of Neonatal Abstinence Syndrome (NAS) have been reported since January 1, 2018.
- In the majority of NAS cases (73.1%), at least one of the substances causing NAS was prescribed to the mother by a health care provider.
- The highest rates of NAS in 2018 have occurred in the Northeast and Upper Cumberland Health Regions, and Sullivan County.

NAS Prevention Highlight – The federal “21st Century Cures Act” could lead to Tennessee receiving as much as $13.8 million dollars over the next two years to help battle the opioid epidemic. The Tennessee Department of Mental Health and Substance Abuse Services (TDMHSAS) is required to spend 20% of the money on prevention, which could include providing naloxone kits to those at high risk of overdose; conducting a statewide media campaign; using social media and athletes to widen awareness of the epidemic and resources for help. Nurses may also be hired to train individuals and community organizations on the use of naloxone; hold educational events; and distribute resources such as “safety kits” at treatment sites. For more information contact Sarah Cooper at TDMHSA.

Cumulative NAS Cases Reported

- **2018**: 502 cases
- **2017**: 433 cases
- **2016**: 351 cases
- **2015**: 294 cases
- **2014**: 220 cases
- **2013**: 162 cases
- **2012**: 118 cases
- **2011**: 48 cases

Maternal Source of Exposure

- Only illicit or diverted substances: 25.7%
- Only substances prescribed to mother: 48.6%
- Mix of prescribed and non-prescribed substances: 24.5%
- Unknown source of substance: 1.2%

Number of NAS cases reported weekly:

- Week 1: 48 cases
- Week 2: 118 cases
- Week 3: 162 cases
- Week 4: 220 cases
- Week 5: 294 cases
- Week 6: 351 cases
- Week 7: 433 cases
- Week 8: 502 cases
# Additional Details for Maternal Sources of Exposure

<table>
<thead>
<tr>
<th>Source of Exposure</th>
<th># Cases</th>
<th>% Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication assisted treatment</td>
<td>339</td>
<td>67.5</td>
</tr>
<tr>
<td>Legal prescription of an opioid pain reliever</td>
<td>31</td>
<td>6.2</td>
</tr>
<tr>
<td>Legal prescription of a non-opioid</td>
<td>33</td>
<td>6.6</td>
</tr>
<tr>
<td>Prescription opioid obtained without a prescription</td>
<td>166</td>
<td>33.1</td>
</tr>
<tr>
<td>Non-opioid prescription substance obtained without a prescription</td>
<td>63</td>
<td>12.6</td>
</tr>
<tr>
<td>Heroin</td>
<td>29</td>
<td>5.8</td>
</tr>
<tr>
<td>Other non-prescription substance</td>
<td>106</td>
<td>21.1</td>
</tr>
<tr>
<td>No known exposure</td>
<td>3</td>
<td>0.6</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>1.8</td>
</tr>
</tbody>
</table>

**Notes**
1. “Illicit” means drugs which are illegal or prohibited. “Diverted” means using legal/prescribed drugs for illegal purposes. For example, using a prescription drug purchased from someone else or using a prescription drug that was prescribed for someone else.
2. Multiple maternal substances may be reported; therefore the total number of cases in this table may not match the total number of cases reported.

More information on Neonatal Abstinence Syndrome in Tennessee can be found here: [http://tn.gov/health/nas](http://tn.gov/health/nas)

For questions or additional information, contact Dr. Angela Miller at angela.m.miller@tn.gov

Source: Tennessee Department of Health, Office of Informatics and Analytics
Number of people who died of a drug overdose in Tennessee by *contributing substance*, 2013-2017 (n= 7,287)

<table>
<thead>
<tr>
<th>Overdose Death</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Drug</td>
<td>1,166</td>
<td>1,263</td>
<td>1,451</td>
<td>1,631</td>
<td>1,776</td>
</tr>
<tr>
<td>Opioid</td>
<td>754</td>
<td>861</td>
<td>1,034</td>
<td>1,186</td>
<td>1,268</td>
</tr>
<tr>
<td>Prescription Opioids (Natural, semi-synthetic and synthetic)</td>
<td>637</td>
<td>697</td>
<td>848</td>
<td>1,009</td>
<td>1,083</td>
</tr>
<tr>
<td>Pain Relievers</td>
<td>578</td>
<td>603</td>
<td>689</td>
<td>739</td>
<td>644</td>
</tr>
<tr>
<td>(per CDC Definition, includes methadone)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heroin</td>
<td>63</td>
<td>147</td>
<td>205</td>
<td>260</td>
<td>311</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>53</td>
<td>69</td>
<td>169</td>
<td>294</td>
<td>500</td>
</tr>
<tr>
<td>Methadone</td>
<td>86</td>
<td>71</td>
<td>67</td>
<td>82</td>
<td>69</td>
</tr>
<tr>
<td>Benzodiazepine</td>
<td>371</td>
<td>388</td>
<td>492</td>
<td>573</td>
<td>504</td>
</tr>
<tr>
<td>Opioid and Benzodiazepine</td>
<td>340</td>
<td>352</td>
<td>447</td>
<td>522</td>
<td>447</td>
</tr>
</tbody>
</table>
Opioid Use Disorder per 1,000 Delivery hospitalizations

- National opioid use disorder rates at delivery more than quadrupled during 1999–2014
- In 2014, the national prevalence of opioid use disorder was 6.5 per 1,000 delivery hospitalizations
  - Rates ranged from 0.7 (District of Columbia) to 48.6 (Vermont)
Know the Basics

OUD OVERVIEW
Opioid Use Disorder

• Problematic use of opioids with 2 of the following:
  – Unsuccessful efforts to cut down or quit
  – Larger amounts over longer period of time
  – Excessive time spent in obtaining, using or recovering from use of drug
  – Cravings
  – Recurrent use despite negative consequences
  – Use is situations that are dangerous
  – Tolerance
  – Continued use despite health or psychiatric problems exacerbated by drug
OUD in Pregnancy

- In 2007, 22.8% of women enrolled in Medicaid across 46 states filled an opioid prescription during pregnancy (Desai, Hernandez-Diaz, Bateman, & Huybrechts, 2014)

- Rise in neonatal abstinence syndrome from 1.5 cases per 1000 hospital births in 1999 to 6.0 per 1000 in 2013 (Patrick, Davis, Lehmann, & Cooper, 2015)

- $1.5 billion in related annual hospital charges (Patrick, Davis, Lehmann, & Cooper, 2015)
Common obstetric and neonatal complications of OUD in Pregnancy

Maternal
- Preterm labor
- Preterm premature rupture of membranes
- Placental abruption
- Chorioamnionitis
- Preeclampsia
- Increased risk of Hepatitis C, HIV, and other infectious diseases
- Overdose
- Untreated concomitant psychiatric disorders
- Bacteremia/Septic thrombophlebitis

Fetal
- Intrauterine growth restriction
- Low Apgars
- Stillbirth
- Neonatal Abstinence Syndrome
- Higher risk for exposure to ETOH, tobacco, other substances
- Sudden Infant Death Syndrome
- Higher risk for neurocognitive Disorders

Mortality and Opioid Use Disorder

- Rates of death associated with opioid analgesics rose 400% between 2000 and 2014 (National Center for Health Statistics)
- Maternal mortality reviews in several states identified substance use as a major risk factor for maternal death (Virginia Department of Health, 2015; Maryland Department of Health and Mental Hygiene, 2016)
- Texas: 17% of maternal deaths were from overdose. Most frequent cause of accidental maternal death was overdose. (The Role of Opioid Overdoses in Confirmed Maternal Deaths, 2012-2015. Texas Department of State Health Services)
- Massachusetts: 1:5 maternal deaths was related to substance use. (Massachusetts Department of Public Health. Legislative Report: Chapter 55 – An Assessment of Fatal and Non-fatal Overdoses in Massachusetts (2011-2015).)
Target Areas for Improving Outcomes for OUD in Pregnancy

- Screening and Referrals for Treatment
- Access to Treatment
- Provider education and communication
- Maternal overdose
- Breastfeeding
- Optimize care of Opioid Exposed Newborns
- Postpartum contraception
- Postpartum OUD treatment
INTRODUCTION TO AIM
Alliance for Innovation on Maternal Health (AIM)

Goal:
Eliminate preventable maternal mortality and severe morbidity in every US birth center

By:
• Promoting safe maternal care for every US birth.
• Engaging multidisciplinary partners at the national, state, and local health/clinical levels.
• Developing and implementing evidence-based maternal safety bundles.
• Utilizing data-driven quality improvement strategies.
• Aligning existing safety efforts and developing/collecting resources.
AIM Maternal Safety Bundles

AIM Safety/Quality Improvement Bundles

- Obstetric Hemorrhage
- Severe Hypertension in Pregnancy
- Maternal Venous Thromboembolism Prevention
- Patient, Family and Staff Support
- Safe Reduction of Primary Cesarean Births

Safety Bundles

Safety Tools
- Maternal Early Warning Criteria
- Severe Maternal Mortality Case Review Forms
- Maternal Mental Health

For Every Birth
- Reducing Disparities in Maternity Care
- Postpartum Care Basics
- Interconception Care Coming Soon

Obstetric Care of Opioid Dependent Women

TIPQC
Evidence for Bundles

• California AIM hemorrhage bundle
  – Reduction in severe morbidity from maternal hemorrhage by 20.8%
  – Without the bundle only a 1.9% drop
  – In collaboration hospitals, all severe morbidity dropped by 11.9%

• Illinois Hypertension in Pregnancy Bundle
  – Increase in treatment of severe HTN within 60 minutes by 37.4%
  – Increased education on preeclampsia at discharge by 44%
  – Increase in scheduling follow-up within 10 days of discharge by 22%

• Ohio NAS Treatment Bundle
  – Decreased LOS and treatment for infants w/ NAS
States Implementing Opioid Bundle

States:
- Maryland
- Virginia
- Ohio
- Illinois
- Massachusetts
- Tennessee
- Oklahoma
- New Mexico
- Texas
- New Jersey
- New York
- Maine
- Vermont
- New Hampshire
AIM Bundle

- Readiness
- Recognition and Prevention
- Response
- Reporting
Readiness
For Every Setting

• Within every clinical setting, research resources/barriers and educate staff
  – Identify clinical training needs regarding EBP of substance use disorders and ways to reduce stigma
  – Provide educational opportunities (i.e. CME, in-service trainings) to address clinical training needs
  – Know state and local reporting guidelines for prenatal substance use and substance-exposed infants
Readiness

• Prepare inpatient and outpatient clinical settings
  – Identify a validated screening tool to use in inpatient and outpatient clinical settings
  – Incorporate patient education materials regarding OUD and NAS into clinical settings
  – Develop prenatal, intrapartum, and postpartum clinical pathways for women with OUD/SUD (i.e.
    – rooming-in, breastfeeding support, pain management)
Readiness

- Identify state, county and community resources for collaboration and referrals
  - Ensure social services provider (i.e. social work, case management) involvement to assist with linkages to available resources (i.e. home visiting, transportation, WIC)
  - Identify local, women centered SUD treatment facilities (i.e. location, eligibility, Medicaid-billing)
  - Collaborate with local child welfare officials to develop a “plan of safe care” after delivery
Recognition

• Universal Prenatal Screening
  – SUD
  – STIs
  – Psych-mental health disorders
  – Intimate partner violence
• Brief intervention and referral pathways for women with positive screens
Response

- Best practice protocols for medical care
  - Prenatal
  - Labor and birth
  - Postpartum
- Patient education on pregnancy and postpartum care
- Provider education on OUD and pregnancy and postpartum care
  - Screening
  - Stigma of OUD
  - MAT and related issues
  - Intra and post-partum management
  - Neonatal management/NAS and maternal contribution to infant health
Response

• Access to OUD treatment programs
  – Behavioral Health
  – MAT

• Coordination of care for all providers and services

• Ensure access to immediate postpartum contraception services and provider referrals to address co-morbidities (i.e. infectious disease, hepatology)
Reporting & Systems Learning

- Incorporate EBP compliance measures for the care of women with OUD into hospital and system level QI initiatives
- Collect data
- Monitor process and outcome measures
- On-going continuing education
- Use outcome data to engage child welfare, legal systems, and community
TENNESSEE OUD PROJECT
TN OUD Project

• 2 separate, yet aligned initiatives for OB and Neonatal teams

• OB Teams will have their own specific:
  – OB AIMS
  – OB Measures
  – OB Data Form
  – OB Monthly Team Calls
Tennessee OUD Project

Global AIM

• Optimize the care and improve outcomes of women and infants effected by opioid use disorder during the antepartum, intrapartum, and postpartum periods by implementing evidence based practices for screening and management.
Tennessee OUD Project

SMART AIM: Decrease the complications associated with OUD during pregnancy by December 2019:
1. Reducing Pregnancy associated opioid deaths by 10%
2. Reducing LOS for NAS babies by 10%
3. Increase Medication Assisted Treatment or Behavior health treatment by 10%
4. Increase OEN receiving mothers’ milk at newborn discharge by 10%
5. Increase OENs who go home to biological mother by 10%
6. Increase number of Prenatal Care sites who have OUD universal screening protocol by 10%
7. Increase in delivery sites limiting opioid prescriptions post delivery by 10%
8. Increase number of delivery sites with OUD specific pain management and Opioid prescribing guidelines by 10%
Decrease the complications associated with OUD during pregnancy by December 2019
1. Reducing Pregnancy associated opioid deaths by 10%
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8. Increase number of delivery sites with OUD specific pain management and Opioid prescribing guidelines by 10%
# Tennessee OUD Project Timeline

<table>
<thead>
<tr>
<th>October 2018</th>
<th>November 2018</th>
<th>December 2018</th>
<th>January-February 2019</th>
<th>March 2019</th>
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<tr>
<td><strong>READINESS</strong></td>
<td><strong>READINESS</strong></td>
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</tr>
<tr>
<td>• TN OUD Bundle</td>
<td>• Determine pilot teams</td>
<td>• Pilot Teams begin work &amp; data collection</td>
<td>• Recruit additional teams</td>
<td>• Kick Off</td>
</tr>
<tr>
<td>• Introduction Webinar</td>
<td>• Team packet submission</td>
<td></td>
<td>• Pilot teams continue development</td>
<td></td>
</tr>
<tr>
<td>• Begin community resource mapping</td>
<td>• Review TN data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• OB Team Recruitment</td>
<td>• Pilot Teams begin work &amp; data collection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• IRB Submission</td>
<td>• Collect TN data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Collect TN data</td>
<td></td>
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## Planned Measures: Mothers

<table>
<thead>
<tr>
<th>TYPE OF MEASURE</th>
<th>SPECIFIC MEASURES*</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OUTCOME</strong></td>
<td>• Percent of pregnancy associated opioid deaths</td>
<td>Annually</td>
</tr>
<tr>
<td><strong>STRUCTURE</strong></td>
<td>• Percent of Prenatal Care Sites which have implemented a universal screening protocol for OUD</td>
<td>Annually</td>
</tr>
<tr>
<td></td>
<td>• Percent of delivery sites using post-delivery and discharge pain management prescribed practices for routine vaginal and cesarean births focused on limiting opioid prescription</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Percent of delivery sites with OUD specific pain management and opioid prescribing guidelines</td>
<td></td>
</tr>
<tr>
<td><strong>PROCESS</strong></td>
<td>• Percent of women with OUD during pregnancy who receive MAT or behavioral health treatment</td>
<td>Quarterly</td>
</tr>
</tbody>
</table>

* Detailed definitions (numerators, denominators, and ICD-10 codes) provided by AIM
## Planned Measures: Infants

<table>
<thead>
<tr>
<th>TYPE OF MEASURE</th>
<th>SPECIFIC MEASURES</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>OUTCOME</td>
<td>• Average length of stay for infants with NAS</td>
<td>Annually</td>
</tr>
<tr>
<td>STATE SURVEILLANCE</td>
<td>• Percent of newborns diagnosed as affected by maternal use of opiates</td>
<td>Annually</td>
</tr>
<tr>
<td></td>
<td>• Percent of newborns diagnosed with NAS</td>
<td></td>
</tr>
<tr>
<td>PROCESS</td>
<td>• Percent of OEN receiving mother’s milk at newborn discharge</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>• Percent of OEN who go home to biological mother</td>
<td></td>
</tr>
</tbody>
</table>

* Detailed definitions (numerators, denominators, and ICD-10 codes) provided by AIM
AIM RESOURCES
AIM Resources

• https://safehealthcareforeverywoman.org/national-collaborative-on-maternal-oud/oud-resources/
Obstetric Care for Women with Opioid Use Disorder Bundle Complete Resource Listing

1. READINESS

Opioid use disorder (OUD)

- American College of Obstetricians and Gynecologists. Tobacco, Alcohol, and Substance Abuse.


NEXT STEPS
OB Team Members

- Passion concerning OUD care
- Leadership qualities
- Organized
- Proven follow through
- Committed to full scope of the project
- Inter-professional
OB Team Members

- Key Contact
- Physician Leader
- Nursing Leader
- Outpatient Leader
- Addiction Medicine
- Information Technology
- Administration Leadership
- Quality Coordinator
- Clinical Educator
- Lactation Consultant
- Social Work
- Patient Family
Next Steps

• Determine if want to be a pilot team
• Complete Enrollment Form/determine team
• Review bundle
• Complete AIM survey
• Survey current practices
• Complete IRB as indicated

• Determine if you want to start with Kick off in March 2019
• Begin to survey current practices
• Review bundle
Q & A