ALLIANCE FOR INNOVATION ON MATERNAL HEALTH AIM

Tennessee Opioid Use Disorder Project Infomercial

October 2, 2018

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

THA
TENNESSEE HOSPITAL ASSOCIATION

TENNESSEE DEPARTMENT OF HEALTH

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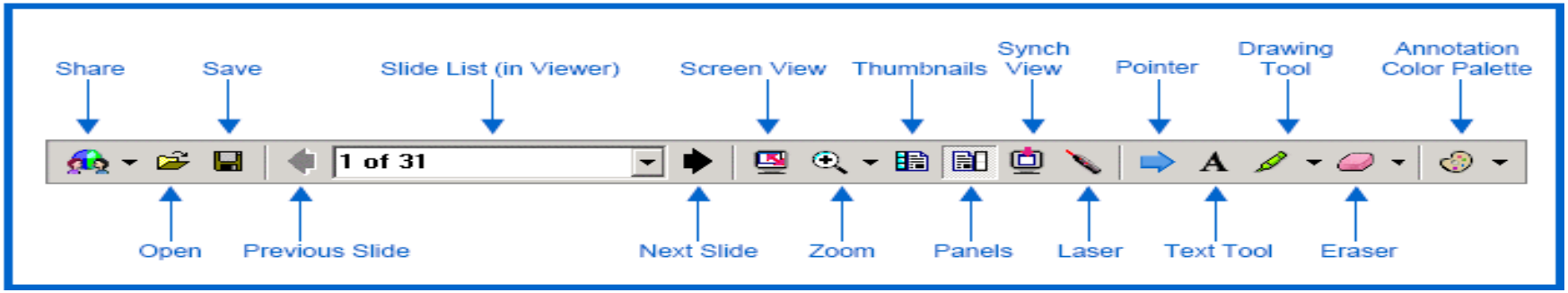
WebEx Features

- Icons

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

- Annotations
- Markers, pointers, eraser
- Recording



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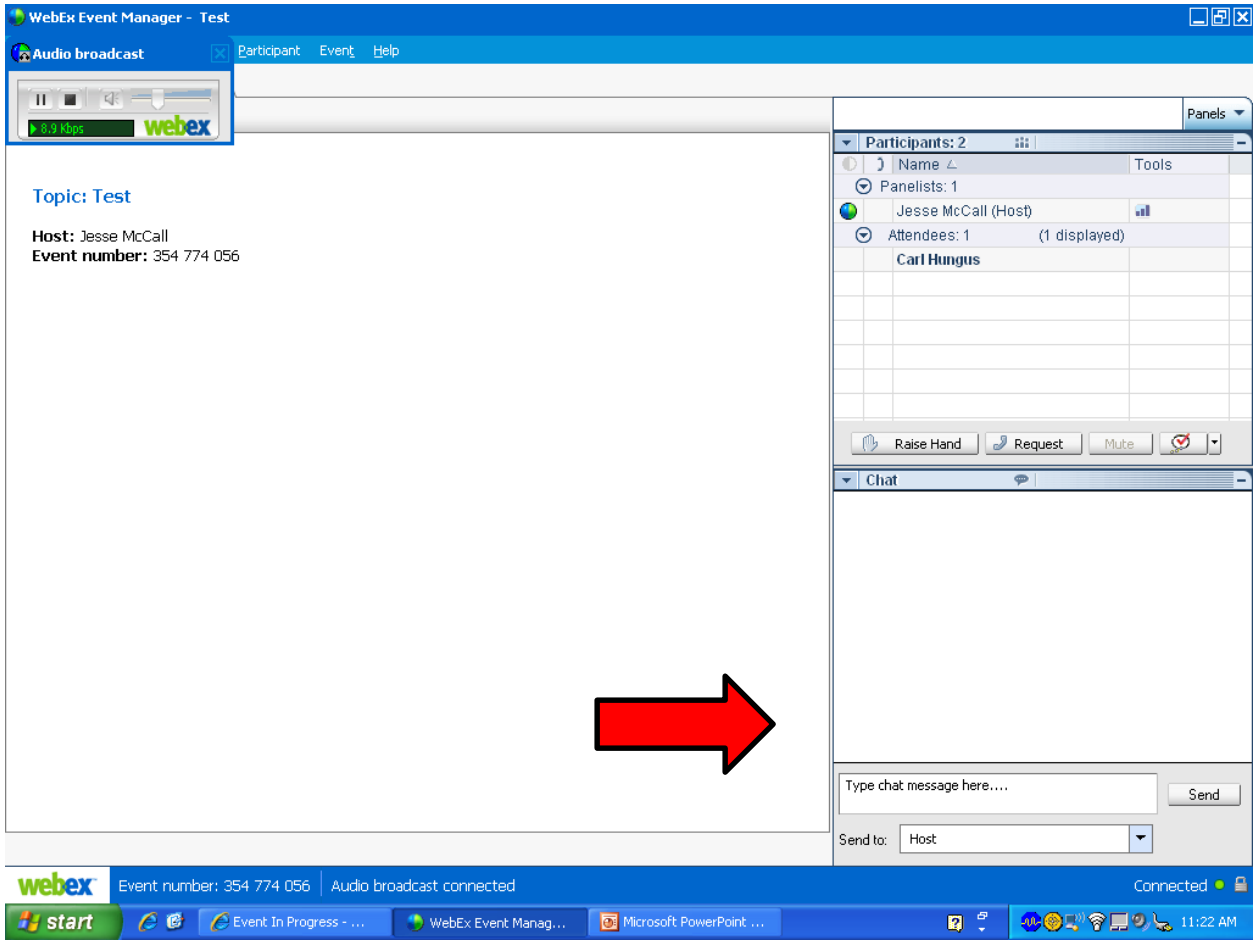
Ask Questions in the Chat Box



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

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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!***

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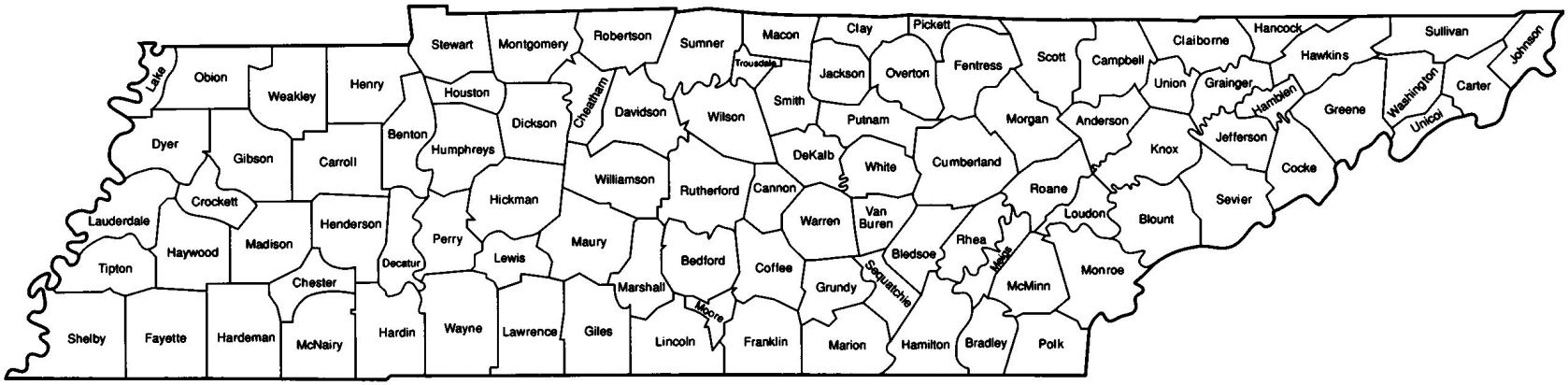
Where are you?

- Click on your pointer, and let us know where you are!



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OUD Webinar Agenda

Agenda Item	Who	Time
Introductions	Brenda Barker	5 minutes
Tennessee Data	Morgan McDonald-- Bethany Scalise	5 minutes
OUD Evidence Overview	Jessica Young	10 minutes
Introduction to AIM	Amy Bross	5 minutes
AIM OUD Bundle	Jessica Young	10 minutes
Tennessee OUD Project • Global AIM • Smart AIM • Key Driver • Measures	Jessica Young Brenda Barker Terri Scott	15 minutes
AIM Resources	Amy Bross	5 minutes
Q&A Next Steps	Brenda Barker	5 minutes

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INTRODUCTIONS

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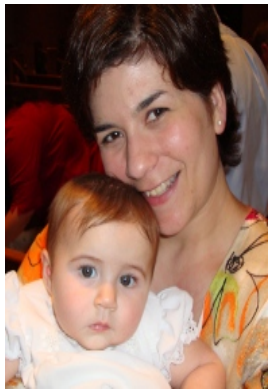
OUD TEAM

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

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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

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TENNESSEE DATA

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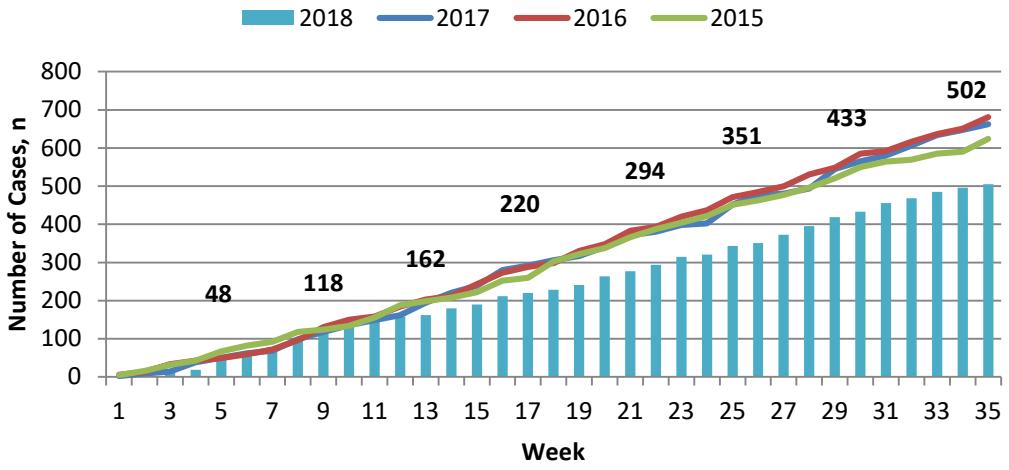
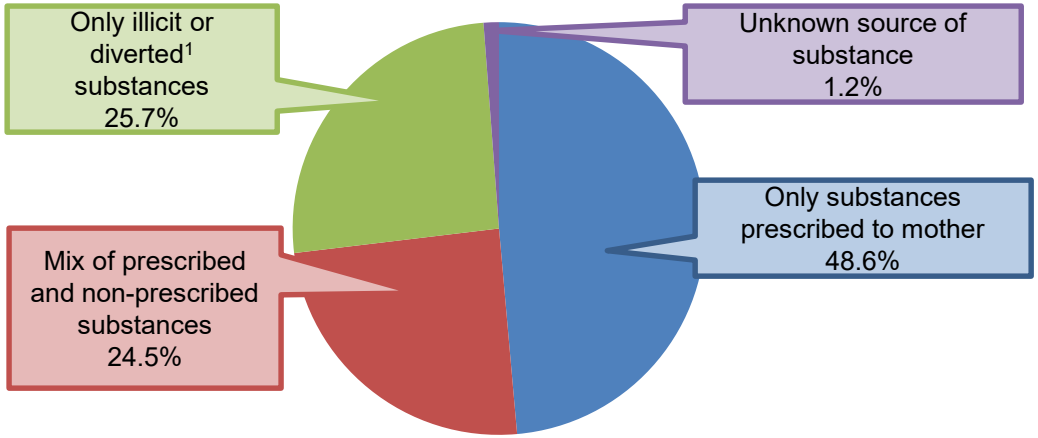
Neonatal Abstinence Syndrome Surveillance
August Update (Data through 09/01/2018)

TN Department of Health

Cumulative NAS Cases Reported



Maternal Source of Exposure



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.

Additional Details for Maternal Sources of Exposure

Source of Exposure	# Cases[2]	% Cases
Medication assisted treatment	339	67.5
Legal prescription of an opioid pain reliever	31	6.2
Legal prescription of a non-opioid	33	6.6
Prescription opioid obtained without a prescription	166	33.1
Non-opioid prescription substance obtained without a prescription	63	12.6
Heroin	29	5.8
Other non-prescription substance	106	21.1
No known exposure	3	0.6
Other	9	1.8

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

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

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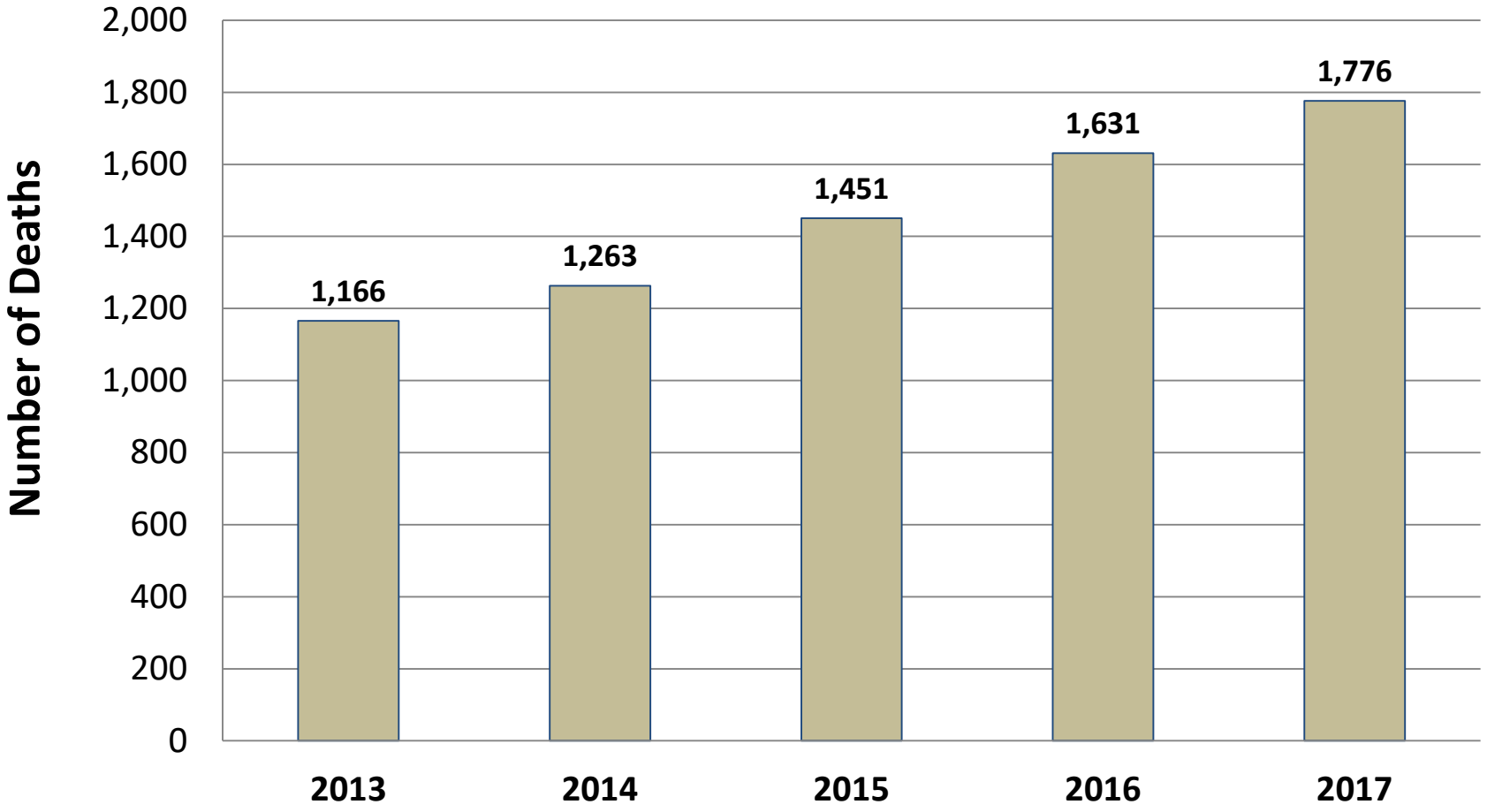
Drug Overdose Deaths in Tennessee, 2013-2017



Source: Tennessee Department of Health, Office of Informatics and Analytics

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Number of people who died of a drug overdose in Tennessee by *contributing substance*, 2013-2017 (n= 7,287)

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

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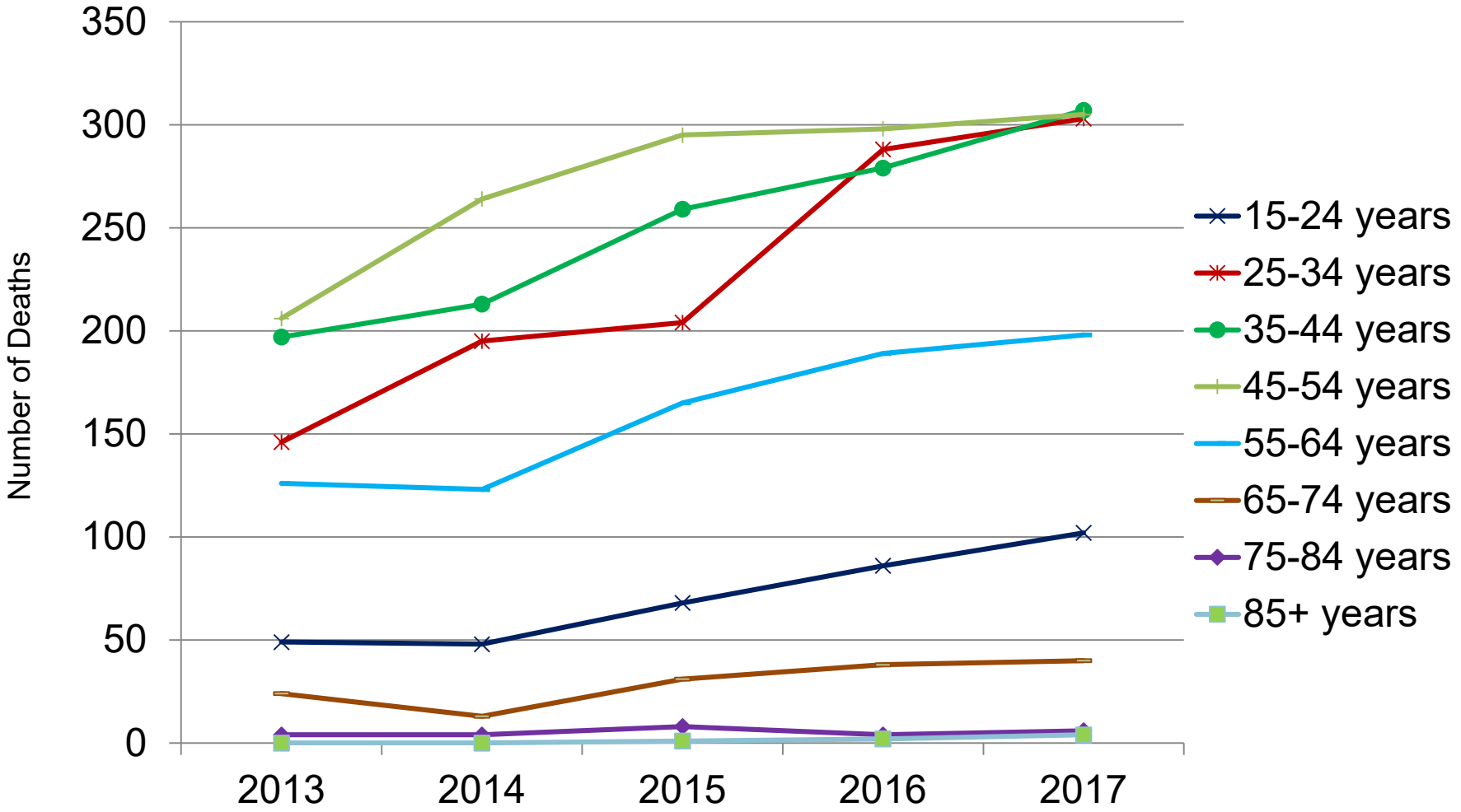
All Opioid Deaths by Age Distribution, 2013-2017



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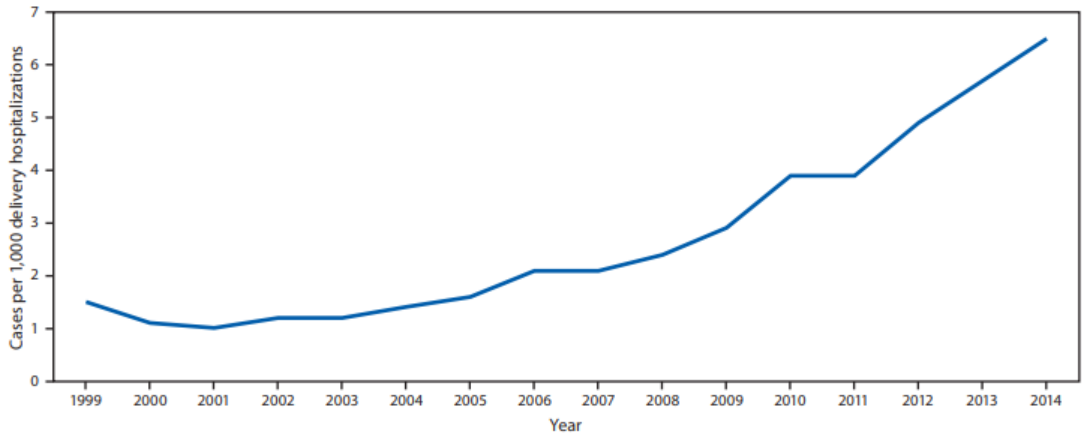
Opioid Use Disorder per 1,000 Delivery hospitalizations

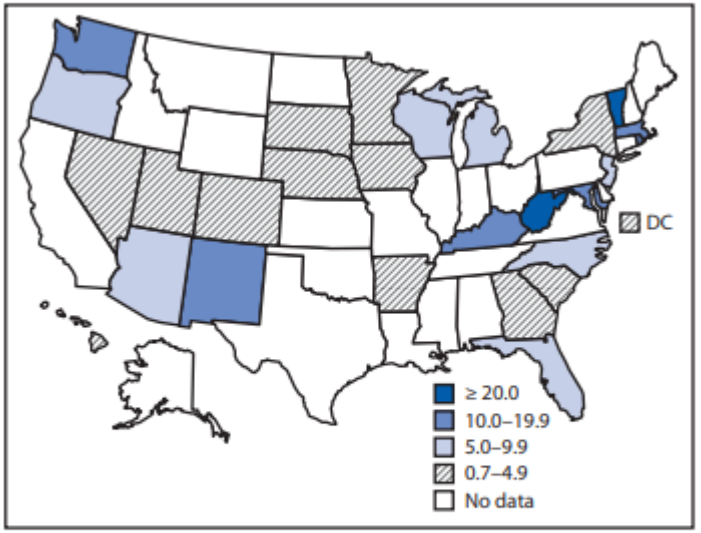
- National opioid use disorder rates at delivery more than quadrupled during 1999–2014
- In 2014, the national prevalence of opioid use disorder was 6.5 per 1,000 delivery hospitalizations
  - Rates ranged from 0.7 (District of Columbia) to 48.6 (Vermont)

FIGURE 1. National prevalence of opioid use disorder per 1,000 delivery hospitalizations* — National Inpatient Sample (NIS),† Healthcare Cost and Utilization Project (HCUP), United States, 1999–2014



* Prevalence numerator consisted of cases of opioid type dependence and nondependent opioid abuse based on *International Classification of Diseases, Ninth Revision* (ICD-9) codes (304.00–304.03, 304.70–304.73, 305.50–305.53), and denominator consisted of delivery hospitalization discharges.
† Includes data from all states participating in HCUP each year (https://www.hcup-us.ahrq.gov/partners.jsp?NIS), weighted to produce national estimates. Rates before 2012 are weighted with trend weights, and rates after 2012 are weighted using original NIS discharge weights to account for the change in NIS design in 2012.

FIGURE 2. Prevalence of opioid use disorder per 1,000 delivery hospitalizations* — State Inpatient Database, Healthcare Cost and Utilization Project, 28 states, 2013–2014†



* Prevalence numerator consisted of opioid type dependence and nondependent opioid abuse based on *International Classification of Diseases, Ninth Revision* (ICD-9) codes (304.00–304.03, 304.70–304.73, 305.50–305.53), and denominator consisted of state delivery hospitalization discharges.
† Prevalence reported are for 2014, except for two states (Massachusetts and South Carolina) for which 2014 data were not available; 2013 data are reported for these states.

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Know the Basics

OUD OVERVIEW

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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

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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)

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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

Center for Substance Abuse Treatment. Medication-assisted treatment for opioid addiction during pregnancy. In: Medication-assisted treatment for opioid addiction in opioid treatment programs. Treatment Improvement Protocol (TIP) Series, No. 43. Rockville (MD): Substance Abuse and Mental Health Services Administration; 2005. p. 211–24.

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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)
- Colorado: 2004-2012, 30% of maternal deaths were due to self-harm (overdose and suicide). (Metz et al Maternal Deaths From Suicide and Overdose in Colorado, 2004–2012. *Obstetrics and gynecology*. 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).)

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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

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INTRODUCTION TO AIM

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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.

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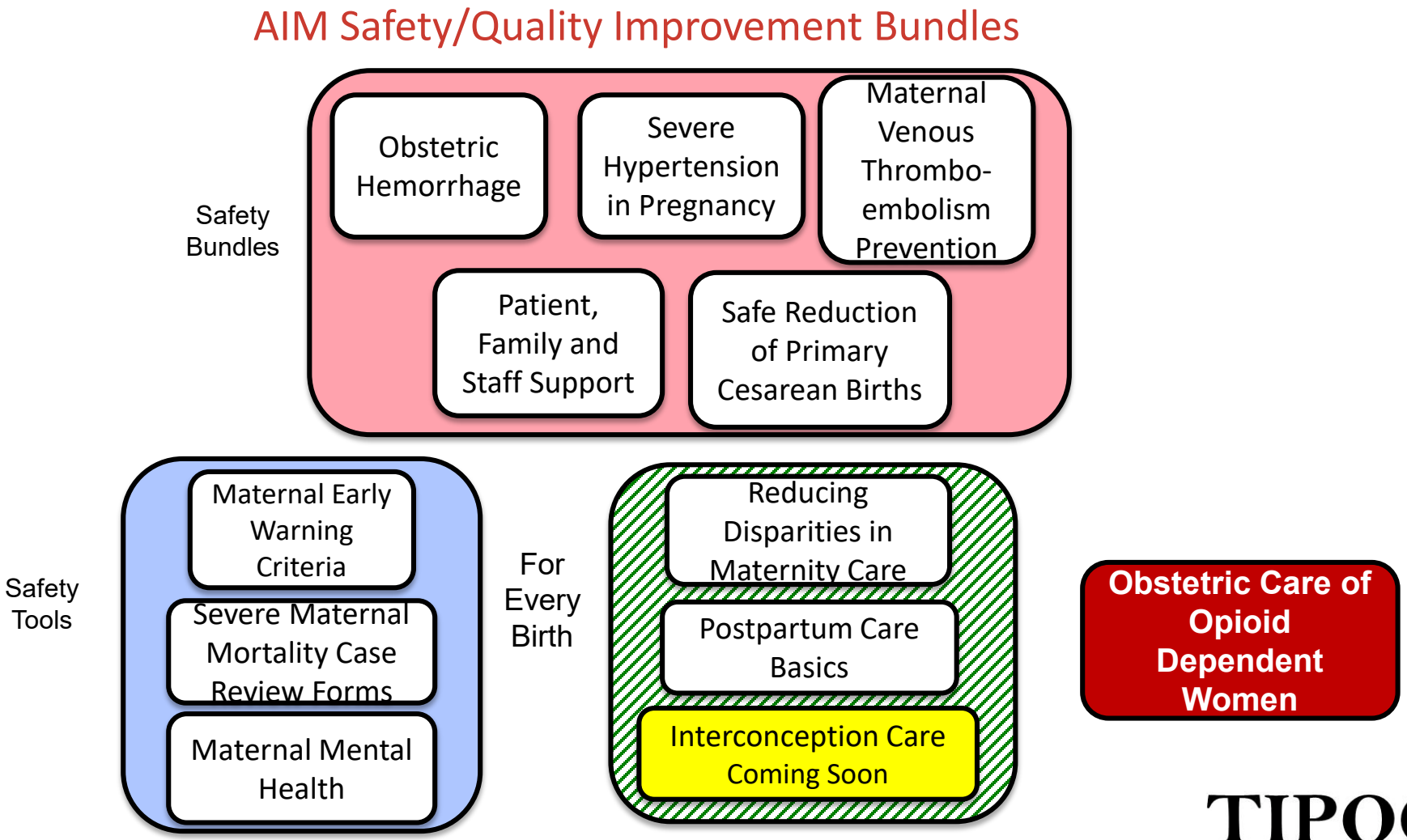
AIM Maternal Safety Bundles



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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

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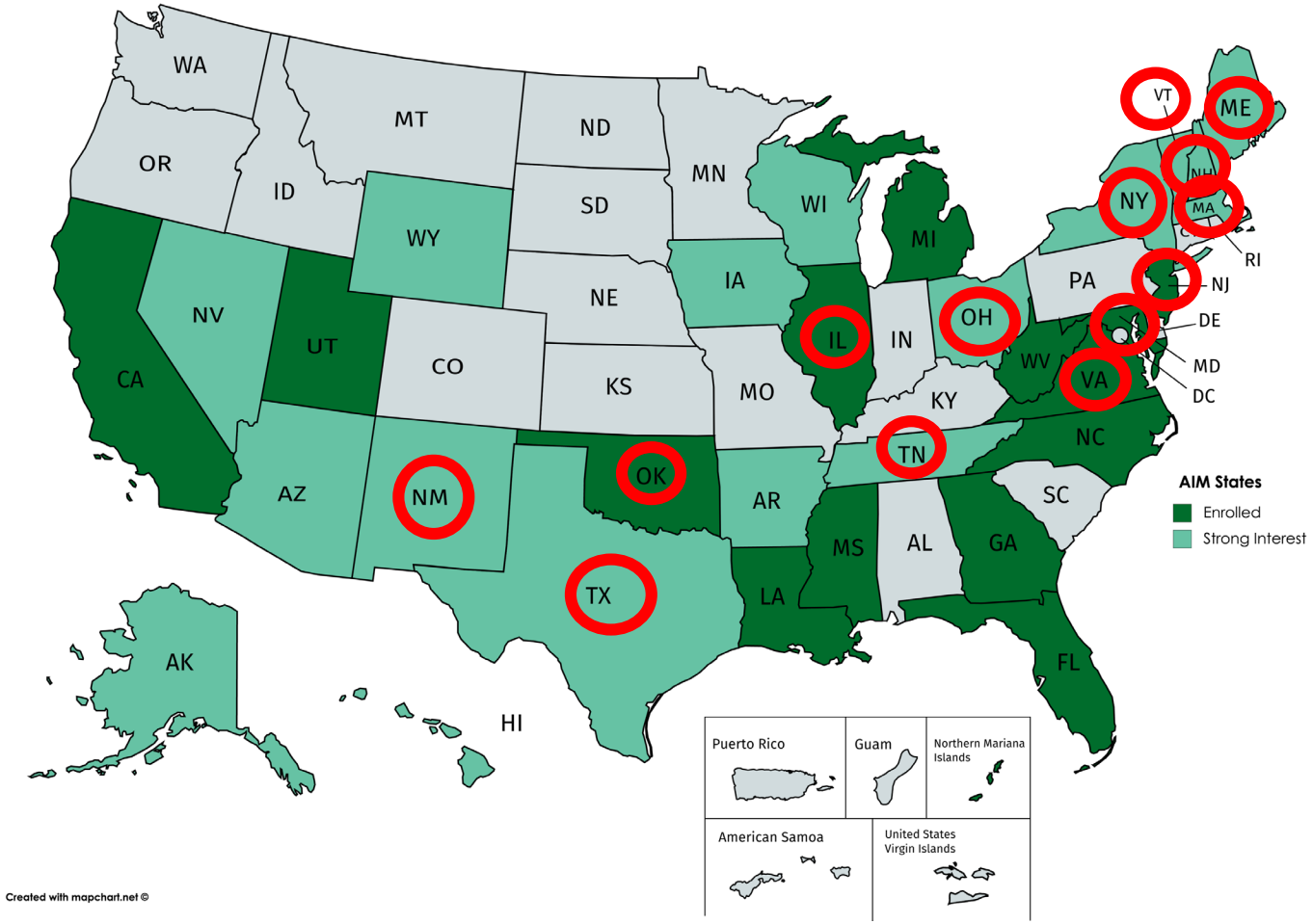
States Implementing Opioid Bundle



States:

Maryland
Virginia
Ohio
Illinois
Massachusetts
Tennessee
Oklahoma
New Mexico
Texas
New Jersey
New York
Maine
Vermont
New Hampshire

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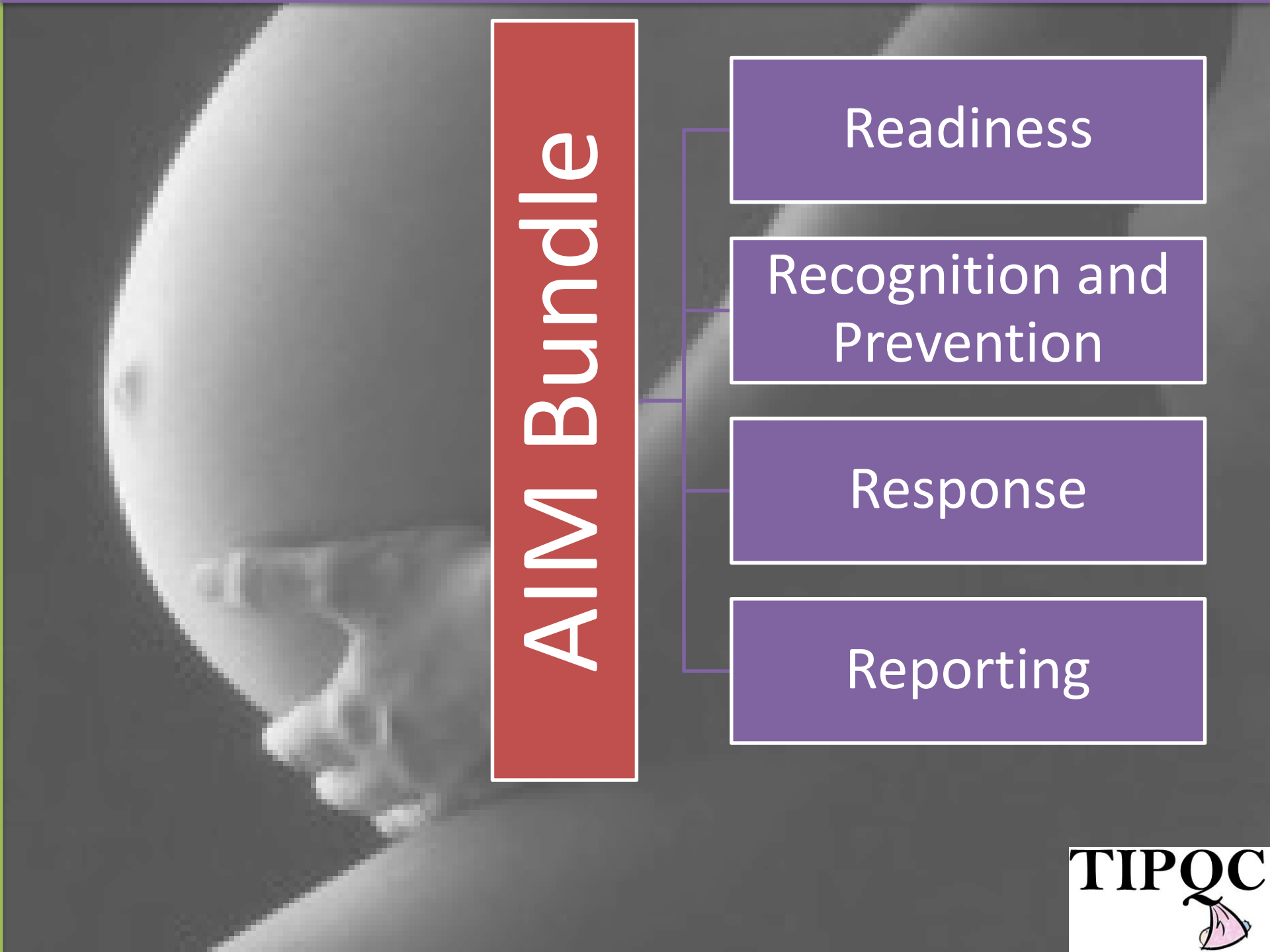
AIM Bundle
Readiness
Recognition and Prevention
Response
Reporting
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Readiness
For Every Setting

- 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

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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

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Recognition

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

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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

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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)

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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

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TENNESSEE OUD PROJECT

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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

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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.

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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%*

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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.

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%*
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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%*

Primary Drivers

1. Readiness
2. Recognition
3. Response
4. Reporting

Interventions

1. Readiness

1. Create hospital improvement teams
2. Research resources/barriers and educate staff
3. Prepare inpatient & outpatient settings ie screening tools, patient education, clinical pathways
4. ID state, county & community resources

2. Recognition

1. Screen all pregnant women for substance abuse with validated screening tool
2. Screen all pregnant women with history of substance use for HIV, STI, Hepatitis, psychiatric disorders and intimate partner violence
3. Develop brief intervention and referral clinical pathways for women screening positive

3. Response

1. ID a lead coordinator for women with SUD to receive an individualized plan:
   a. Ensure adherence with prenatal, intrapartum and post partum clinical pathways
   b. Have a plan of safe care prior to hospital discharge
   c. Ensure and follow OUD treatment engagement during pregnancy and postpartum; obtain patient consent to communicate and share records with OUD treatment providers
2. Ensure access to immediate postpartum contraception services and provider referrals to address co-morbidities

4. Reporting

1. Incorporate EBP compliance measures for the care of women with OUD into hospital and system level QI initiatives
   a. ID and monitor maternal and neonatal outcome metrics relevant to OUD
   b. Create a process to conduct multidisciplinary case reviews for adverse events related to substance use
   c. Provide ongoing continuing education and EBP feedback for clinical and non-clinical staff
2. Use outcome data to engage child welfare, public health agencies, court systems, and law enforcement to help drive initiatives to expand treatment access and improve maternal and neonatal outcomes

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Tennessee OUD Project Timeline

October 2018	November 2018	December 2018	January-February 2019	March 2019
READINESS	READINESS			
• TN OUD Bundle • Introduction Webinar • Begin community resource mapping • OB Team Recruitment • IRB Submission • Collect TN data	• Determine pilot teams • Team packet submission • Review TN data • Pilot Teams begin work & data collection	• Pilot Teams begin work & data collection	• Recruit additional teams • Pilot teams continue development	• Kick Off

Planned Measures: Mothers

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

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

Planned Measures: Infants

TYPE OF MEASURE	SPECIFIC MEASURES	FREQUENCY
OUTCOME	• Average length of stay for infants with NAS	Annually
STATE SURVEILLANCE	• Percent of newborns diagnosed as affected by maternal use of opiates • Percent of newborns diagnosed with NAS	Annually
PROCESS	• Percent of OEN receiving mother's milk at newborn discharge • Percent of OEN who go home to biological mother	Quarterly

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

AIM RESOURCES

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AIM Resources

- https://safehealthcareforeverywoman.org/national-collaborative-on-maternal-oud/oud-resources/

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COUNCIL ON PATIENT SAFETY IN WOMEN'S HEALTH CARE

safe health care for every woman

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.
- Alcohol abuse and other substance use disorders: ethical issues in obstetric and gynecologic practice. Committee Opinion No. 633. American College of Obstetricians and Gynecologists. *Obstet Gynecol.* 2015; 125:1529-37.
- Nonmedical use of prescription drugs. Committee Opinion No. 538. American College of Obstetricians and Gynecologists. *Obstet Gynecol.* 2012; 120:977-82.
- Opioid use and opioid use disorder in pregnancy. Committee Opinion No. 711. American College of Obstetricians and Gynecologists. *Obstet Gynecol.* August 2017; 130(2):e81-e94.
- McLellan AT, Lewis DC, O'Brien CP, Kleber HD. Drug dependence, a chronic medical illness: implications for treatment, insurance, and outcomes evaluation. *JAMA* 2000; 284(13):1689-1695.

NEXT STEPS

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OB Team Members

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

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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

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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

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Q & A

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Tennessee Initiative for Perinatal Quality Care

Special Thanks to Our Partners

Tennessee Department of Health

TN

Alliance for Innovation on Maternal Health AIM

Tennessee Center for Patient Safety

March of Dimes