Improving Outcomes for Mothers & Newborns Affected by Opioids

All lines have been muted to eliminate background noise

The webinar is being recorded and will be posted on the CMQCC YouTube Channel for additional viewing

Questions may be posted utilizing the ‘chat’ function and will be answered at the end of the webinar
Objectives for Today’s Webinar

Objectives for today’s webinar

1. Be familiar with the scope of the perinatal opioid epidemic
2. Have a solid understanding of key concepts of quality improvement in the care of mothers and newborns affected by opioids
Topics and Speakers

- **The Current Landscape and Opportunity in California**
  Elliot Main, MD, Medical Director California Maternal Quality Care Collaborative, Clinical Professor of Obstetrics & Gynecology, Stanford University

- **Just the Facts – The Neurobiology of Addiction and MAT**
  Helen DuPlessis, MD, MPH, Principal, Health Management Associates

- **Maternal Care: Emerging Best Practices**
  Elliot Main

- **Newborn Care: Emerging Best Practices**
  Henry Lee, MD, CMO California Perinatal Quality Collaborative (CPQCC), Associate Professor of Pediatrics, Stanford University
Current Landscape and Opportunities in California

Dr. Elliott Main, CMQCC
Drug Overdose Deaths Are Outpacing Other Public Health Epidemics

Drug overdose deaths per year compared to past epidemic death peaks.

- Car Crashes (1972)
- HIV (1995)
- Firearm Homicides (1993)

Source: CDC, NHTSA

The Huffington Post
Number of Opioid Pills Distributed, Per Person, Per Year

Average yearly total, by county, 2006 through 2012

76 Billion Opioid Pills
100,000 Deaths
From 2006-2012

Source: DEA Database, published by the Washington Post: “Where the pain pills went.” July 16, 2019
DEA Data, published by the Washington Post:
“Where the pain pills went.” July 16, 2019
Locations with:
High Rates of Prescribing Opioids...

*Also have:*
High Rates of Opioid Overdose Deaths...

*And also have:*
High Rates of Opioid Use in Pregnancy...

*And also have:*
High Rates of Neonatal Abstinence Syndrome (NAS)

But rising in certain areas

Neonatal Abstinence Syndrome

From 2004 to 2014, the incidence of NAS in the United States increased 433%, from 1.5 to 8.0 per 1,000 hospital births. MMWR 2019;68:6–10.

For Medicaid-covered infants, the healthcare costs associated with caring for NAS totaled $462 million in 2014 alone.


NAS cases per 1,000 hospital births

Source: MMWR 2016;65:799–802
Increase of Pregnancy-Associated Deaths Due to Drug Overdose (Illinois)

<table>
<thead>
<tr>
<th>Year</th>
<th>All Drug Poisoning</th>
<th>Opioid-Related Poisoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>1.1</td>
<td>2.8</td>
</tr>
<tr>
<td>2012</td>
<td>7.8</td>
<td>6.5</td>
</tr>
</tbody>
</table>

3x, 6x higher

Most Substance-Use Associated Pregnancy Deaths Occur After Delivery

Percent of Pregnancy-Associated Deaths Related to Substance Use by Time Period

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Substance use-related deaths</th>
<th>All pregnancy-associated deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy</td>
<td>2.4%</td>
<td>6.0%</td>
</tr>
<tr>
<td>0–&lt;7 days postpartum</td>
<td>2.4%</td>
<td>20.1%</td>
</tr>
<tr>
<td>7–&lt;42 days postpartum</td>
<td>4.9%</td>
<td>14.1%</td>
</tr>
<tr>
<td>42–&lt;365 days postpartum</td>
<td>59.8%</td>
<td>90.2%</td>
</tr>
</tbody>
</table>

Data Source: Massachusetts DPH, Courtesy Dr. Ronald Iverson

Severe Maternal Morbidity Among Mothers with Opioid Use Disorder

Mother ICD-10 codes for OUD: F11.xx
Baby ICD-10 codes for OUD: P96.1, P04.49; after October 1 2018: P04.14 Newborn affected by maternal use of opiates
Examining data for the period Oct 1 2018 thru February 28 2019 (using the new ICD-10 code) finds results nearly identical to those for 2018 in its entirety presented above.
Pregnancy is a window of opportunity to **identify** women with Opioid Use Disorder (OUD) and link to **treatment** as well as begin to develop a **plan for optimizing her baby’s care.**
Perinatal Regions: Newborns Affected by Maternal Drugs-2017

Source: CMQCC Maternal Data Center
Overarching Goals

- Preserve Mother-Baby Dyad
- Refer Mother to Treatment and Keep in Treatment
- Reduce Incidence of NAS
- Integration with Community Services

• Starts in Prenatal Care
  • Self-reported screening and referral to Medication Assisted Treatment
  • Start as early as possible to ready mom for plan of safe care
• Labor considerations
• Post-delivery hospital stay
  • Maternal considerations
  • Newborn considerations
• Discharge Considerations
• SAMHSA data: > 400,000 infants are exposed to EtOH or other illicit/inappropriate drug use during pregnancy

• Number of pregnant women with OUD increased from 1.5/1000 → 6.5/1000 live births (1999-2014)

• CA prevalence 1.6/1000 live births (6.5/1000 in US)

• Annual rates of ↑ were lowest in CA and HI (0.1/1000/year) and highest in VT, ME, NM, WV (VT prevalence is 48.6/1000)
ADDICTION 101 – THE PROBLEM

What is Addiction?

It is a chronic neurobiological disorder centered around a dysregulation of the natural reward system.
ADDICTION 101 – NEUROBIOLOGY OF ADDICTION

- Ant. Cingulate Gyrus
- Nucleus Accumbens
- Amygdala
- Ventral Tegmental Area
- Periaqueductal Grey
CASE STUDY: KAYLA

- Family history of addiction
- Moderate early life trauma
- Addiction to oral opioids
- Poorly controlled anxiety
- Physical dependence, addiction to opioids & benzos
- Diversion after 1st offense → Overdose episode
- Pregnant
- NO SOCIAL SUPPORT
- Hospital Staff made her feel judged, inadequate and powerless

Lack of Dopamine

Survival Mode

Craving

Primal Action
MEDICATION ASSISTED TREATMENT (MAT): Evidence-base and Impact

<table>
<thead>
<tr>
<th>MAT</th>
<th>OD Deaths</th>
<th>Retention in Treatment</th>
<th>Pregnancy Outcomes</th>
<th>NAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detoxification/Withdrawal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methadone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buprenorphine (Mono)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buprenorphine/Naloxone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naltrexone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*MAT is the standard of care for the treatment of pregnant women with OUD*
This work will be accomplished through:

- **Outreach** and relationship building including the hosting of an informational community-facing events
- Development of **protocols, guidelines, safety bundles and toolkits** of OB, NICU, and Pediatrics
- Curating and **distribution of patient facing materials**
- Expanding **treatment access points** (quick start sites)
- Facilitation of **learning collaboratives**
- Providing **technical assistance** to providers
- Providing an online **resource library**

**Project Outcomes Include**

- Decrease in **NAS length of stay**
- Decrease in **NAS severity**
- Decrease in the number of unnecessary **Child Protective Service referrals**
- Increase in **moms in long term recovery**
- **Identify and treat** at least 50% of predicted individuals in the target counties

**HMA will work to deliver state-of-the-art treatment from the prenatal phase to the post-delivery phase.**
MOTHER & BABY SUBSTANCE USE EXPOSURE INITIATIVE COUNTY SELECTION

+ Regional distribution:
  
  + **Northern California**: Humboldt*, Mendocino*, Lake*, Shasta
  
  + **Central Valley**: Sacramento, Stanislaus, San Joaquin
  
  + **Southern California**: Ventura*, Orange*, San Diego*
    
    *same counties as Transitions

+ Diverse representation:
  
  + Mix of urban and rural
  
  + Population range: 64,665 - 3,095,313
  
  + Variety of challenges to maximize learning and scalability
Mother & Baby Substance Exposure Initiative – A Project of the California State Opioid Response (SOR)

Addiction Free CA Website

Mother & Baby Substance Exposure Initiative

The goal of the Mother & Baby Substance Exposure Initiative is to increase access to MAT using the three FDA-approved medications for the treatment of opioid use disorder, reducing unmet treatment need, and reducing opioid overdose related deaths through the provision of prevention, treatment and recovery activities for opioid use disorder (OUD). The aim is to decrease neonatal abstinence syndrome (NAS) severity and length of stay in the hospital, and to increase the number of mothers in long-term recovery.

Goals
- Decrease NAS length of stay by decreasing NAS severity
- Increase the number of moms identified
- Decrease the number of Child Protective Service referrals
- Increase the number of moms in long-term recovery
- Increase ability to identify and treat 100% of predicted individuals in the partners catchment area

Tasks for this work
- Develop an outreach and implementation plan to build on the framework of existing treatment access points
- Develop or build upon existing protocols, guidelines, safety bundles, and tool kits
- Distribute OUD patient education materials
- Coordinate learning collaboratives
- Provide technical assistance
- Develop a resource library

Impact
At the very least, with the dissemination of patient and community level information, we will make pregnant and/or parenting mothers feel more comfortable within the healthcare system and see it as a refuge rather than an adversary. Along with this, we will implement standardized approaches to pregnant and/or parenting women in the prehospital, hospital, and post-delivery phase in each of the counties we work.

Locations
The Mother & Baby Substance Exposure Initiative will reach up to 16 counties including: Humboldt, Lake, Mendocino, Orange, Sacramento, San Diego, San Joaquin, Shasta, Stanislaus, and Ventura.

For more information about Mother & Baby Substance Exposure Initiative, please contact Charles Robbins at crobbins@healthmanagement.com.

HMA Learning Management System coming soon
HMA is happy to announce it will be linking to its Learning Management System for use by technical assistance participants by the end of July 2019. Announcements will be made about the launch. Please check back here periodically for further updates.
Maternal Care: Emerging Best Practices

Dr. Elliott Main, CMQCC
Key Reference Documents

MNO-OB Toolkit.
*Updated January 2019*

[Image of Alliancet for Innovation on Maternal Health logo]

[Image of PATIENT SAFETY BUNDLE]

[Image of A Toolkit for the Perinatal Care of Women with Substance Use Disorders]

Mother & Baby Substance Exposure Initiative – A Project of the California State Opioid Response (SOR)
National Safety Bundle Commentary

Safety: Consensus Statement

National Partnership for Maternal Safety
Consensus Bundle on Obstetric Care for Women With Opioid Use Disorder

Elizabeth E. Krans, MD, MSc, Melinda Campopiano, MD, Lisa M. Cleveland, PhD, RN,
Daisy Goodman, DNP, CNM, Deborah Kilday, MSN, RN, Susan Kendig, JD, MSN, Lisa R. Leffert, MD,
Elliott K. Main, MD, Kathleen T. Mitchell, MHS, LCADC, David T. O’Gurek, MD, FAAFP,
Robyn D’Oria, MA, RNC, Deidre McDaniel, MSW, LCSW, and Mishka Terplan, MD, MPH

August 2019
# The Toolkit: Maternal Care

<table>
<thead>
<tr>
<th>Section 1</th>
<th>Topic Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prenatal Care</td>
<td>Educate Staff About Opioid Use Disorder</td>
</tr>
<tr>
<td></td>
<td>Maternal Screening &amp; Toxicology</td>
</tr>
<tr>
<td></td>
<td>Brief Intervention</td>
</tr>
<tr>
<td></td>
<td>Referral to Services</td>
</tr>
<tr>
<td></td>
<td>Antenatal Care Plan</td>
</tr>
<tr>
<td></td>
<td>Preparation for Labor &amp; Delivery and Postpartum Care</td>
</tr>
</tbody>
</table>
Screen Every Prenatal Patient

• Screening based only on factors, such as poor adherence to prenatal care or prior adverse pregnancy outcome, can lead to missed cases and may add to stereotyping and focus on minority populations.
• Therefore, it is essential that screening be universal.
• Multiple validated screening tools are available:
  • 4P, 4P+, 5P, NIDA, CRAFFT, Substance Use Risk Profile--Pregnancy

What to do with a Positive?
• SBIRT (Screening, brief intervention, referral for treatment)
• Motivational Interviewing
• Trauma Informed Care
### Adverse Childhood Experience (ACE) Questionnaire

**Finding your ACE Score**

While you were growing up, during your first 18 years of life:

1. Did a parent or other adult in the household *often*:
   - Swear at you, insult you, put you down, or humiliate you?
   - Act in a way that made you afraid that you might be physically hurt?
   - Yes _No_ If yes enter __________

2. Did a parent or other adult in the household *often*:
   - Push, grab, slap, or throw something at you?
   - Ever hit you so hard that you had marks or were injured?
   - Yes _No_ If yes enter __________

3. Did an adult or person at least 5 years older than you ever:
   - Touch or fondle you or have you touch their body in a sexual way?
   - Try to or actually have oral, anal, or vaginal sex with you?
   - Yes _No_ If yes enter __________

4. Did you *often* feel that:
   - No one in your family loved you or thought you were important or special?
   - Your family didn’t look out for each other, feel close to each other, or support each other?
   - Yes _No_ If yes enter __________

5. Did you *often* feel that:
   - You didn’t have enough to eat, had to wear dirty clothes, and had no one to protect you?
   - Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?
   - Yes _No_ If yes enter __________

6. Were your parents ever separated or divorced?
   - Yes _No_ If yes enter __________

7. Was your mother or stepmother:
   - *Often* pushed, grabbed, slapped, or had something thrown at her?
   - *Sometimes or often* kicked, bitten, hit, hit with a fist, or hit with something hard?
   - Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?
   - Yes _No_ If yes enter __________

8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?
   - Yes _No_ If yes enter __________

9. Was a household member depressed or mentally ill or did a household member attempt suicide?
   - Yes _No_ If yes enter __________

10. Did a household member go to prison?
    - Yes _No_ If yes enter __________

Now add up your “Yes” answers: __________ This is your ACE Score.
Reducing Stigma

ANTI-STIGMA TOOLKIT
A Guide to Reducing Addiction-Related Stigma

A guide to provide the addiction treatment and recovering community with practical information and tools to enhance their capacity to engage in effective stigma reduction efforts

Mim Landry

Healing the Stigma of Addiction
A Guide for Treatment Professionals

Second Edition, Revised 2005

GREAT LAKES ADDICTION TECHNOLOGY TRANSFER CENTER

Written by Pamela Woll, MA, CADC

Foreword by William L. White, MA

CHICAGO, ILLINOIS
www.glattc.org · 2005
Opioid Use Disorder Clinical Pathway

• Screen for co-morbid psychiatric conditions and domestic violence
• Additional Lab testing
• Assess level of care required
• Consultation considerations
• Coordinate care with MAT program
• Narcan Toolkit
• Education
Educational Resources

### Opioid Use Disorder and Pregnancy

**Taking helpful steps for a healthy pregnancy**

**Introduction**

If you have an opioid use disorder (OUD) and are pregnant, you can take helpful steps now to ensure you have a healthy pregnancy and a healthy baby. During pregnancy, OUD should be treated with medical, counseling, and recovery support. Good prenatal care is also very important. Ongoing contact between the healthcare professionals treating your OUD and those supporting your pregnancy is very important.

The actions you take or don’t take play a vital role during your pregnancy. Below are some important things to know about OUD and pregnancy, as well as the Do’s and Don’ts for making sure you have a healthy pregnancy and a healthy baby.

**Things to know**

- **OUD** is a treatable illness like diabetes or high blood pressure.
- You should not try to stop opioid use on your own. Suddenly stopping the use of opioids can lead to withdrawal for you and your baby. You may be more likely to start using drugs again and even experience overdoses.
- For pregnant women, OUD is best treated with the medicines called methadone or buprenorphine along with counseling and recovery support services. Both of these medicines stop and prevent withdrawal and reduce opioid cravings, allowing you to focus on your recovery and caring for your baby.
- Tobacco, alcohol, and benzodiazepines may harm your baby, so make sure your treatment includes steps to stop using these substances.
- Depression and anxiety are common in women with OUD, and new mothers may also experience depression and anxiety after giving birth. Your healthcare professionals should check for these conditions regularly and, if you have them, help you get treatment for them.
- Mothers with OUD are at risk for hepatitis B and C and for HIV. They will ask you about any symptoms of depression or other feelings. You should be ready to answer questions about all substances you have used. They need this information to plan the best possible treatment for you and help you prepare for your baby. These issues may be hard to talk about, but do the best you can to answer their questions completely and honestly. Expect them to treat you with respect and to answer any questions you may have.

**About OUD**

People with OUD typically feel a strong craving for opioids and find it hard to cut back or stop using them. Over time, many people build up a tolerance to opioids and need larger amounts. They also spend more time looking for and using opioids and less time on everyday tasks and relationships. Those who suddenly reduce or stop opioid use may suffer withdrawal symptoms, such as nausea, vomiting, muscle aches, dizziness, fever, and trouble sleeping.

If you are concerned about your opioid use, there are three of these symptoms, please check with your healthcare professionals about treatment or tapering or find a provider at the website: www.samhsa.gov/med Help.

**SAMHSA** mission is to reduce the impact of substance abuse and mental illness on America’s communities.
- 1-800-MAM-MED (1-800-626-6333) or 1-800-488-4680 (in Spanish) - www.samhsa.gov/med Help
- Publication No. HHS Publication No. SMA 18-5077

**Don’t Do**

- Don’t hide your substance use or pregnancy from healthcare professionals.
- Don’t attempt to clean up or other substances on your own.
- Don’t let your fear or feeling embarrassed stop you from getting the care and help you need.

**What to expect when you meet with healthcare professionals about OUD treatment and your pregnancy**

The healthcare professionals who are treating your OUD and providing your prenatal care need a complete picture of your overall health. Together, they will make sure you are tested for hepatitis B and C and for HIV. They will ask you about any symptoms of depression or other feelings. You should be ready to answer questions about all substances you have used. They need this information to plan the best possible treatment for you and help you prepare for your baby. These issues may be hard to talk about, but do the best you can to answer their questions completely and honestly. Expect them to treat you with respect and to answer any questions you may have.

**Remember:** Pregnancy is a time for you to feel engaged and supported. Work with your healthcare professionals to gain a better understanding of what you need for a healthy future for you and your baby.

Do you have questions for your healthcare professionals? If so, write them down and take them to your next visit.

**Next Appointment**

Date: ________

Time: ________

Location: ________

Mother & Baby Substance Exposure Initiative – A Project of the California State Opioid Response (SOR)
### Section 2

<table>
<thead>
<tr>
<th>Topic Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educate Staff About Opioid Use Disorder</td>
</tr>
<tr>
<td>Maternal Screening and Toxicology</td>
</tr>
<tr>
<td>Intrapartum Care Plan</td>
</tr>
<tr>
<td>Anesthetic Pain Management Plan</td>
</tr>
<tr>
<td>Care Pathways to Minimize Opioid Use</td>
</tr>
<tr>
<td>Breastfeeding</td>
</tr>
</tbody>
</table>

### Section 4

<table>
<thead>
<tr>
<th>Topic Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan of Safe Care</td>
</tr>
<tr>
<td>Discharge Checklist</td>
</tr>
<tr>
<td>Setting Follow-Up Visits for Mother</td>
</tr>
</tbody>
</table>
Anesthetic Pain Management Plan

- Teamwork, pre-planning
- Address fear with clear plan
- Epidural is primary analgesia
- Avoid nalbuphine (Nubaine) and butorphanol (Stadol), may precipitate withdrawal
- Caution with intrathecal opioids
- Alternatives: acupuncture, TENS, Nitrous oxide
- Doula helpful to reduce anxiety
Maternal Discharge Checklist

• Part of the **Plan for Safe Care** for the Mother
• Goal: maintain the Mother-Baby Dyad
• Warm handoffs are critical
• Metric: 100% completed for all OUD moms
• Remember postpartum is the time of greatest risk for mothers with OUD

---

**Opiate Use Disorder (OUD) Discharge Checklist**

**MATERNAL (UNDELIVERED) or MOTHER & NEWBORN**

**DISCHARGE CHECKLIST—MATERNAL PLAN OF SAFE CARE:**

- Use closed loop communication to discuss outcome of OUD admission needs assessment, clinical plan of care, and discharge Plan of Safe Care
- Ensure pain management aligns with OUD best practices

Referral to social worker if not already done complete with warm handoff
- Patient intake assessment complete and documented
- Patient education: use teach back to validate understanding of clinical management, maternal/newborn discharge Plan of Safe Care, OUD, postpartum and neonatal follow up needs, and a warm handoff
- Complete and document depression screening utilizing a validated screening tool if not completed earlier during admission.

Schedule Maternal discharge follow up appointments and complete warm handoff for the following:
- OB provider - Prenatal: confirm frequency with obstetrical provider
- OB provider - Postpartum: 1 - 2 weeks
- Behavioral Health: Established - 2 weeks / Not Established - 1 week
- Home visitation/Public Health: 24 - 48 hours
- Drug treatment therapy: 24 hours

Referral to CPS if required:
- Suspected Child Abuse Report faxed
- Referral complete

Facilitate additional referrals per social and OUD needs assessment:
- Public Health Department
- Smoking Cessation program
- Recovery Group
- Parenting Class
- Lactation Consultant
- Community Support/Peer groups
- WIC - Women, Infants & Children
- Infectious Disease Provider
- Other: ________
Working With The Local Communities

Our scope is broader than the hospital setting. We will work to support hospitals and providers who work with mothers and their newborns from the prenatal period through the period after discharge home, helping them connect to wraparound services in the local community through best practices.

Our goal is to learn from the individual communities and:

1. Support current efforts and activities
2. Provide additional resources
3. Share efforts from other communities
Newborn Care: Emerging Best Practices

Dr. Henry Lee, CPQCC
The Toolkit: Newborn Care

<table>
<thead>
<tr>
<th>Section 3</th>
<th>Topic Area</th>
</tr>
</thead>
</table>
| Inpatient Care of Substance Exposed Newborns | Educate Staff  
Newborn Screening and Toxicology  
Relationships With Parents  
Non-pharmacologic Care of Neonatal Abstinence Syndrome (NAS)  
Pharmacologic NAS Care |

<table>
<thead>
<tr>
<th>Section 4</th>
<th>Topic Area</th>
</tr>
</thead>
</table>
| Discharge Plan for Newborn | Plan of Safe Care  
Discharge Checklist  
Setting Follow-Up Visits for the Newborn |
### Education of Staff About Neonatal Abstinence Syndrome

**Identification, evaluation, and treatment**

- Clinical providers and staff with strong foundation of knowledge can educate and support families.

- Positive interactions with families of newborns with NAS contribute to better outcomes.

- Provider and staff interactions with families should be supportive and non-judgmental.

- Families can play valuable role in care, including mothers being encouraged to breastfeed if on stable MAT dose.

---

**Language Matters Information Sheet**

**OPIODS and NAS**

When reporting on mothers, babies, and substance use

**LANGUAGE MATTERS**

- **I am not an addict.**
  - I was exposed to substances in utero. I am not addicted. Addiction is a set of behaviors associated with having a Substance Use Disorder (SUD).

- **I was exposed to opioids.**
  - While I was in the womb my mother and I shared a blood supply. I was exposed to the medications and substances she used. I may have become physiologically dependent on some of those substances.

- **NAS is a temporary and treatable condition.**
  - There are evidence-based pharmacological and non-pharmacological treatments for Neonatal Abstinence Syndrome.
Newborn Screening & Toxicology

Identifying substance-exposed newborns

• Importance of maternal screening

• Selective newborn screening policies can be developed in conjunction with policies of maternal care team

• There is not a perfect newborn screening test. False positives can occur. In one study, both meconium and umbilical cord toxicology samples were negative for opiates in significant percentage of newborns with diagnosis of NAS.*


• Universal biological toxicology screening for newborns is not recommended as specific maternal situation will guide newborn approach

“A detailed, professionally obtained history is more helpful than toxicology screening of the newborn to accurately screen for substance abuse.”*

  *Vermont Guidelines for Screening for Substance Abuse During Pregnancy
Therapeutic Relationship With Parents / Caregivers

Empower parents to be involved with care of newborn

Yale New Haven Children’s Hospital project – Interventions:

- Standardized non pharmacologic care
- Prenatal counseling of parents
- Transfer from WBN to inpatient unit
- Novel approach to assessment
- Rapid morphine weans
- Empowering message to parents
- Spread of change to NICU

(2008 → 2016)

Average length of stay

- 22.4 days
- 5.9 days

Neonates treated with morphine

- 98%
- 14%

Empowering Message to Parents

“On the inpatient unit, we explained that our first-line and most important treatment would center around measures to comfort the infant and that these should be performed by a family member. Parents were told that they were the treatment of their infants and must be present as much as possible. Nurses and physicians focused on supporting and coaching parents on the care of their infants.”

Non-pharmacologic Care

“Eat-Sleep-Console”

QI Project 2016 – large urban academic center – 120-130 opioid-exposed neonates annually

Implementation of non-pharmacologic bundle as first-line treatment for NAS:

• Parental presence
• Skin-to-skin contact
• Holding
• Breastfeeding
• Creating calm, low stimulation environment

Non-pharmacologic Care

“Eat-Sleep-Console”

- Transition from Finnegan scoring to function-based ESC assessments.*
  
  Neonate’s ability to effectively eat, sleep, and console

- “Cuddler” program

Pharmacologically treated neonates: 87% → 40%
Adjunctive agent use: 34% → 2.4%
Mean length of stay: 17 days → 11 days
Parental presence at bedside: 56% → 76%


Pharmacologic Therapy

Growing evidence

• Morphine as a prn dosing regimen initially instead of scheduled dosing

• PRN dosing may minimize pharmacotherapy exposure and therefore side effects (for morphine - respiratory depression, bradycardia, hypotension, urinary retention, decreased intestinal motility)

• Considering policies for when to move to scheduled or escalated dosing

• Develop weaning protocol
Pharmacologic Therapy

*Methadone as first-line pharmacotherapy?*

- Randomized controlled trial methadone v. morphine
- Length of stay 14 days (methadone) vs. 21 days (morphine) treatments (p – 0.008)

Dyad-centered Plan of Safe Care

Newborn visits

• Positive outcomes for the mother/baby unit need to support mother’s recovery and well-being

• A mother may be more likely to follow up for baby’s clinic visits than her own

• Partnerships in community with pediatric and maternal medical homes with MAT provider, public health nursing, and other programs to collaboratively provide care will lead to optimal outcomes
Questions

The webinar evaluation will be sent to your registered email address within 24 hours. We would appreciate five minutes of your time to support our efforts at quality webinar programming.
Thank You!

CMQCC https://www.cmqcc.org
CPQCC https://www.cpqc.org
HMA https://www.healthmanagement.com

For further information or questions please contact Christina Oldini at cmoldini@stanford.edu