

Welcome!

Neonatal Abstinence Syndrome Project Level I Webinar

Simplified Screening & Non-Pharmacologic Management of the Newborn at Risk for NAS

**Ohio Perinatal Quality Collaborative
October 7, 2014 and October 24, 2014**

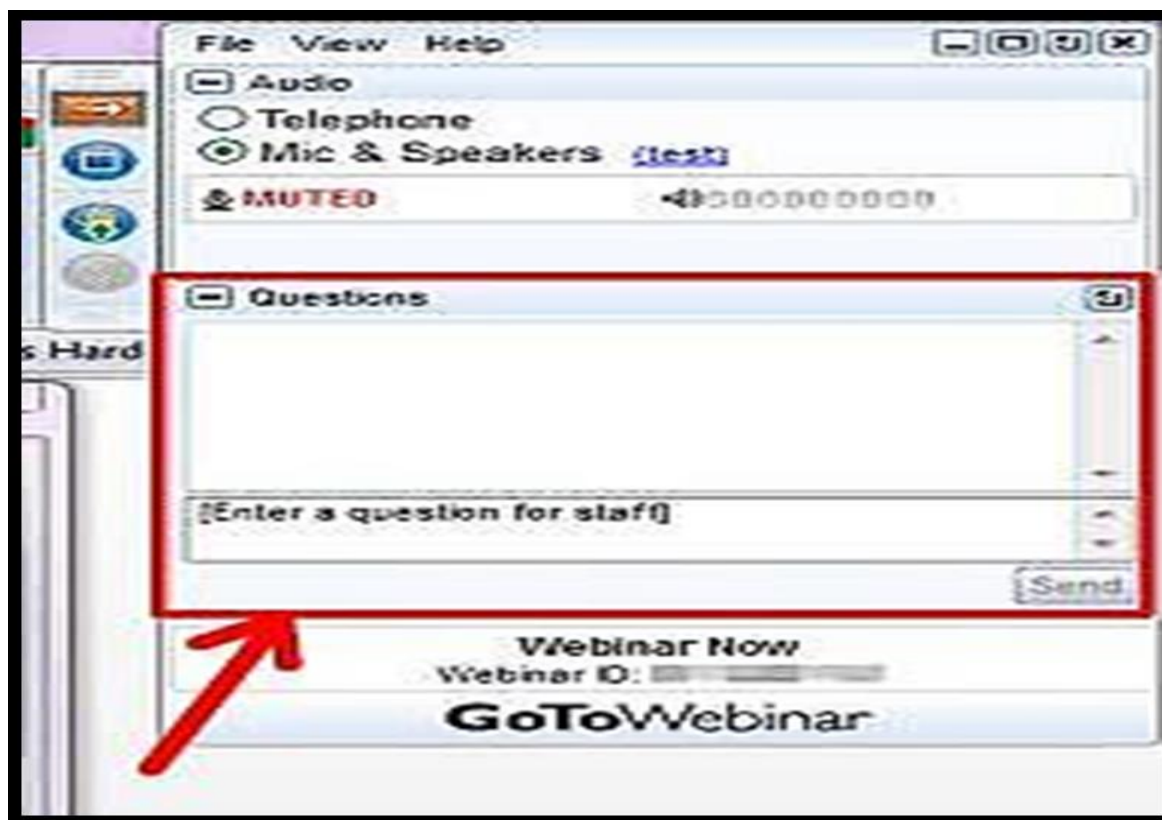


John R. Kasich, Governor
John B. McCarthy, Director



Ohio Children's Hospital Association
Saving, protecting and enhancing children's lives

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CME Requirements for Internet-based Activities

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OPQC Continuing Education Program for Level 1 Hospitals in Ohio.

Webinar #3: Neonatal Abstinence Syndrome (NAS):

A Simplified Approach to Scoring Babies at Risk for NAS and Triggers for Referral.

Presenters:

Moira Crowley, MD

**Co-Director, Neonatal ECMO Program, UH Rainbow Babies and Children's Hospital
Assistant Professor, Pediatrics, CWRU School of Medicine**

Leslie Clarke, RN, MS, MBA

Research Nurse, UH Rainbow Babies and Children's Hospital



Michele Walsh, MD, MSE

Division Chief, Neonatology, UH Case Medical Center

Division Chief, Neonatology, UH Rainbow Babies and Children's Hospital

William and Lois Briggs Chair in Neonatology, UH Rainbow Babies and Children's Hospital

Professor, Pediatrics, CWRU School of Medicine

Beth White, MSN, CNS

BEACON Quality Improvement Coordinator

Disclosure: Financial disclosure information (planning committee and presenters): Planning committee members/faculty were determined to have no conflicts of interest pertaining to this activity.

Commercial Support:

Commercial support received: None

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Continuing Education:

CME:

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The Cincinnati Children's designates this live activity for a maximum of *1.0 AMA PRA Category 1 Credit(s)*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Social Work:

Cincinnati Children's Hospital Medical Center Social Service is an approved provider of social work continuing education by the State of Ohio Counselor, Social Worker and Marriage and Family Therapist Board (RSX069302). This presentation is approved for 1.0 (one) clock hour.

Objectives:

- **Implement a standardized process for identification and evaluation of an infant with NAS.**
- **Discuss Non-medication based protocols for environmental support of infant with NAS.**

Hardware/Software Requirements:

Compatible with Mac and Window users and common web browsers. High-speed access recommended though not required (responsiveness may be noticeably slower using dial-up connection).

Adobe Flash Player 9.x is required and Speakers/headphones required to listen to audio

Provider Contact Information:

If you should have any questions about the content of the meeting, please contact Dr. Moira Crowley or Leslie Clarke, RN, MS, MBA

If you should have any questions regarding CME credit, please contact the CME office at cme@cchmc.org.



Agenda

Time	Topic	Presenter
12:00 pm	Welcome Overview of Agenda	Beth White, MSN, CNS
12:05 pm	A standardized process for identification and evaluation of an infant with NAS	Scott Wexelblatt, MD Leslie Clarke, RN, MS, MBA
12:30 pm	Non-pharmacologic management of the infant with NAS	Dr. Wexelblatt, MD
12:45 pm	Triggers for referral for a higher level of care	Dr. Wexelblatt and Nurse Clarke
12:55 pm	Next Steps	Beth White

Level 1 Key Driver Diagram

Project Name: OPQC Neonatal NAS

Leader: Michelle Walsh, MD

GLOBAL AIM

To reduce the number of moms and babies with narcotic exposure, and reduce the need for treatment of NAS.

SMART AIM

By increasing identification of and compassionate withdrawal treatment for full-term infants born with Neonatal Abstinence Syndrome (NAS), we will reduce length of stay by 20% across participating sites by June 30, 2015.

KEY DRIVERS

Prenatal Identification of Mom
Implement Optimal Med Rx Program

Improve recognition and non-judgmental support for Narcotic addicted women and infants

Utilize Lipsitz scoring tool to standardize identification

Optimize Non-Pharmacologic Rx Bundle

Standardize referral those needing treatment

Partner with Families to Establish Safety Plan for Infant

INTERVENTIONS

- All MD and RN staff to view “Nurture the Mother-Nurture the Child”
- Monthly education on addiction care

All staff view webinar on scoring with Lipsitz tool.

- Swaddling, low stimulation.
- Encourage kangaroo care
- Feed on demand- MBM if appropriate or lactose free, 22 calorie formula

Collaborate with DHS/ CPS to ensure infant safety.

Engage families in Safety Planning.

**Every nursery across Ohio
plays an important role in
this effort!!**

Participating OPQC Hospitals OB and NEO

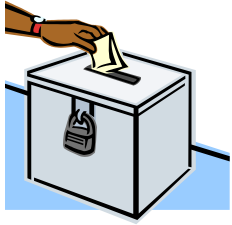
★ Charter OB and NEO Children's Hosp.
 ★ =OB Pilot Hosp.
 ★ ★ ★ =Wave 1, 2, and 3 OB hosp.



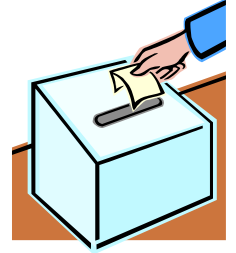
Drugs Frequently Associated with Neonatal Abstinence Syndrome (Illicit and Prescribed)

- Opiates and Narcotics
 - Heroin
 - Methadone (can be Rx)
 - Codeine
 - Meperidine (Demerol)
 - Oxycodone (Oxycontin, Percocet)
 - Morphine
 - Hydromorphone (Dilaudid)
 - Hydrocodone (Vicodin)
- Opioid Agonist/Antagonist
 - Buprenorphine (Subutex)





Scoring Tool Poll Level I Nurseries



Which NAS scoring tool do you use at your hospital?

- A. We use the *Lipsitz* scoring tool
- B. We use the *Modified Finnegan* tool
- C. We use another scoring tool
- D. We do NOT use a scoring tool

“Each nursery should adopt an abstinence scoring method to measure the severity of withdrawal...Use of an abstinence scoring sheet results in more objective criteria for determining when pharmacologic treatment is necessary and whether a drug dose should be increased or decreased”

-American Academy of Pediatrics, Committee on Drugs, 1998



NAS Scoring Tools

- Modified Finnegan
- Lipsitz
- Ostrea
- Neonatal Withdrawal Inventory
- Neonatal Narcotic Withdrawal Index

A Comparison of Two NAS Scoring Methods

LIPSITZ

- “Screening tool”
- Emphasis on tremors, crying, hyperreflexia, tone and tachypnea
- Simplified scoring (11 items)
- Subjective ratings of gross symptoms
- Q 3 hours
- Pharm Tx if ≥ 4

MODIFIED FINNEGAN

- “Screening, Monitoring and Management tool”
- Complex scoring (31 items)
- Resource intensive
 - Training
 - Maintaining competence
 - Maintaining inter-rater reliability
- Potential for bias & subjectivity
- Q 3-4 hours
- Pharm Tx if $\geq 8 \times 2$ or $> 12 \times 1$

Correlation between the Lipsitz and Finnegan Scoring Systems for the Assessment of NAS

“Lipsitz scoring system correlated better with the Finnegan scoring system in the Level I nursery, with a decreasing correlation in Levels II and III”



Sean Loudin, MD, James Kiger, MD, Dilip Purohit, MD-Medical University of South Carolina

OPQC recommends the Lipsitz Tool for Level 1 Nurseries





Neonatal Drug Withdrawal: Lipsitz Scoring Tool

Instructions: Score each category with the highest score in that time interval. Score every 3 hours for first 72 hours (if exposed to narcotics or opiates) or for first 96 hours (if exposed to Methadone or Suboxone).

A total score of 4 is recommended for initiation of pharmacologic treatment.

Name:

DOB:

MR#:

Patient Identification Label



Date: Day of Life: (DOB=DOL #1)

SIGNS	SCORING CATEGORIES				INTERVALS (NOTE TIME in column)								COMMENTS	
	Score 0	Score 1	Score 2	Score 3										Time and Initial
Tremors (muscle activity of limbs)	Normal	Minimally increased when hungry or disturbed	Moderate/marked increase when undisturbed; stop when fed or cuddled	Marked increase or continuous even when undisturbed, going on to seizure- like movements										
Irritability (excessive crying)	None	Slightly increased	Moderate to severe irritability when disturbed or hungry	Marked irritability even when undisturbed										
Reflexes	Normal	Increased	Markedly increased											
Stools	Normal	Explosive, but frequency \leq 8/day	Explosive, > 8 per day											
Muscle Tone	Normal	Increased	Rigidity											
Skin Abrasions	No	Redness of elbows, heels, pressure points when supine	Breakdown of skin at pressure points											
Respiratory Rate (bpm)	<55	55-75	76-95											
Repetitive Sneezing	No	Yes												
Repetitive Yawning	No	Yes												
Forceful Vomiting	No	Yes												
Fever >38°C or >100.4°F	No	Yes												
TOTAL SCORE														
Signatures with Initials	<i>Nurse Signatures</i>													





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SIGNS	SCORING CATEGORIES				INTERVALS (NOTE TIME in column)								COMMENTS	
	Score 0	Score 1	Score 2	Score 3	3a									Time and Initial
Tremors (muscle activity of limbs)	Normal	Minimally increased when hungry or disturbed	Moderate/marked increase when undisturbed; stop when fed or cuddled	Marked increase or continuous even when undisturbed, going on to seizure-like movements	0									
Irritability (excessive crying)	None	Slightly increased	Moderate to severe irritability when disturbed or hungry	Marked irritability even when undisturbed	1									
Reflexes	Normal	Increased	Markedly increased		1									
Stools	Normal	Explosive, but frequency ≤8/day	Explosive, > 8 per day		0									
Muscle Tone	Normal	Increased	Rigidity		0									
Skin Abrasions	No	Redness of elbows, heels, pressure points when supine	Breakdown of skin at pressure points		0									
Respiratory Rate (bpm)	<55	55-75	76-95		0									
Repetitive Sneezing	No	Yes			0									
Repetitive Yawning	No	Yes			0									
Forceful Vomiting	No	Yes			0									
Fever >38°C or >100.4°F	No	Yes			0									
TOTAL SCORE					2									
Signatures with Initials	Cherry Ames CA <i>Nurse Signatures</i>				CA									





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	Score 0	Score 1	Score 2	Score 3	3a	6a							Time and Initial
Tremors (muscle activity of limbs)	Normal	Minimally increased when hungry or disturbed	Moderate/marked increase when undisturbed; stop when fed or cuddled	Marked increase or continuous even when undisturbed, going on to seizure-like movements	0	1							
Irritability (excessive crying)	None	Slightly increased	Moderate to severe irritability when disturbed or hungry	Marked irritability even when undisturbed	1	1							6a-Difficult to console CA
Reflexes	Normal	Increased	Markedly increased		1	1							
Stools	Normal	Explosive, but frequency ≤8/day	Explosive, > 8 per day		0	0							
Muscle Tone	Normal	Increased	Rigidity		0	0							
Skin Abrasions	No	Redness of elbows, heels, pressure points when supine	Breakdown of skin at pressure points		0	0							
Respiratory Rate (bpm)	<55	55-75	76-95		0	0							
Repetitive Sneezing	No	Yes			0	0							
Repetitive Yawning	No	Yes			0	0							
Forceful Vomiting	No	Yes			0	0							
Fever >38°C or >100.4°F	No	Yes			0	0							
TOTAL SCORE					2	3							
Signatures with Initials	<i>Cherry Ames CA</i>				CA	CA							
	<i>Nurse Signatures</i>												





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Irritability (excessive crying)	None	Slightly increased	Moderate to severe irritability when disturbed or hungry	Marked irritability even when undisturbed	1	1	3						6a-Difficult to console CA 9a-Inconsolable SB
Reflexes	Normal	Increased	Markedly increased		1	1	1						
Stools	Normal	Explosive, but frequency ≤8/day	Explosive, > 8 per day		0	0	0						
Muscle Tone	Normal	Increased	Rigidity		0	0	0						
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Forceful Vomiting	No	Yes			0	0	0						
Fever >38°C or >100.4°F	No	Yes			0	0	0						
TOTAL SCORE					2	3	7						
Signatures with Initials	<i>Cherry Ames CA</i> <i>Sue Barton SB</i> <i>Nurse Signatures</i>				CA	CA	SB						





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Date: 10/07/2014 Day of Life: 3 (DOB=DOL #1)

SIGNS	SCORING CATEGORIES				INTERVALS (NOTE TIME in column)								COMMENTS		
	Score 0	Score 1	Score 2	Score 3	3a	6a	9a	10							
Tremors (muscle activity of limbs)	Normal	Minimally increased when hungry or disturbed	Moderate/marked increase when undisturbed; stop when fed or cuddled	Marked increase or continuous even when undisturbed, going on to seizure-like movements	0	1	2	2							9a-Fittery unless snugly bundled; Dr. Ohio notified-Baby rewrapped /cuddled 10a-Less irritable SB
Irritability (excessive crying)	None	Slightly increased	Moderate to severe irritability when disturbed or hungry	Marked irritability even when undisturbed	1	1	3	1							6a-Difficult to console CA 9a-Inconsolable SB
Reflexes	Normal	Increased	Markedly increased		1	1	1	1							
Stools	Normal	Explosive, but frequency ≤8/day	Explosive, > 8 per day		0	0	0	0							
Muscle Tone	Normal	Increased	Rigidity		0	0	0	0							
Skin Abrasions	No	Redness of elbows, heels, pressure points when supine	Breakdown of skin at pressure points		0	0	0	0							
Respiratory Rate (bpm)	<55	55-75	76-95		0	0	1	1							
Repetitive Sneezing	No	Yes			0	0	0	0							
Repetitive Yawning	No	Yes			0	0	0	0							
Forceful Vomiting	No	Yes			0	0	0	0							
Fever >38°C or >100.4°F	No	Yes			0	0	0	0							
TOTAL SCORE					2	3	7	5							
Signatures with Initials	<i>Cherry Ames CA Sue Barton SB</i>				<i>CA</i>	<i>CA</i>	<i>SB</i>	<i>SB</i>							
	<i>Nurse Signatures</i>														





Neonatal Drug Withdrawal: Lipsitz Scoring Tool

The Lipsitz Scoring Tool is an alternative method for screening newborn infants for possible drug exposure. It has only 11 items to score and is less resource intensive, a consideration for nurseries without the resources to maintain staff competencies for the more complex Finnegan Scoring System. It is also useful for those nurseries that routinely transfer babies to a higher level of care for treatment.

There is a reported 77% sensitivity using a value of >4 as an indication of significant signs of withdrawal. (MCN, 2013; Western Australian Centre for Evidence Based Nursing & Midwifery, 2007; AAP, 1998)

Instructions:

- Label the tool in the upper right hand corner with the infant identifying information (name, DOB, MR#) as appropriate for your nursery.
- At the beginning of each 24 hour period, fill in the date and infant's day of life spaces.
Remember the infant's date of birth is considered DOL #1.
- It is recommended that each sheet start with the beginning of the new day (after midnight)
- Each staff member utilizing the tool should enter his/her name and initials at the bottom of the document for identification purposes.
- Enter the initial time the infant is scored for that day. Enter subsequent intervals as the infant receives additional scores.
- *The infant should be scored at least every 3 hours.*
- All staff who will be using the tool should receive standardized training on use of the tool, definition or terms, as well as practice to assure some level of consistency across scorers.
- If there is not enough room for comments-Use an asterisk and continue notes on the back of the scoring tool. Documentation of all non-pharmacologic interventions is extremely important for staff at the receiving nursery to know.

For each time interval, select the highest score the infant demonstrates. Score the infant every 3 hours for the first 72 hours (if exposed to narcotics or opiates) or for the first 96 hours (if exposed to Methadone or Suboxone).

Please remember: A total score of 4 is recommended for initiation of pharmacologic treatment

SIGNS:

Tremors (muscle activity of limbs)

Tremors are involuntary movements that are rhythmical in nature and generally of equal amplitude. Seizures, while the incidence is rare, should be reported immediately.

Irritability (excessive crying)

While all infants will occasionally cry, normally they can self-soothe within 15-20 seconds or be consoled by a caregiver via rocking, holding, or offering a pacifier. Look for a high pitched cry with no apparent cause. The infant can appear inconsolable even after normal comforting measures.

Reflexes

A typical newborn will exhibit a startle reflex. In infants withdrawing from drugs the Moro reflex is exaggerated. The infant should be evaluated at rest and with gentle handling, not when crying or over-stimulated.



Stools

Note any loose, watery stools, frequent in number, which may also be explosive, with or without a water ring. (These are NOT 'breast milk' stools)

Muscle Tone

Infants in withdrawal will demonstrate varying degrees of stiffness or rigidity.

Skin Abrasions

Rub marks may or may not be present since most infants are now placed on their backs in a 'safe sleep' position. When extremities are frequently rubbed against bed linens, excoriation and abrasions may occur. If there is any skin breakdown on elbows, heels or other pressure points, this should be scored. (Diaper rash is not scored).

Respiratory Rate

Measure breaths per minute (bpm) and note if infant is tachypneic or if breathing is labored or retractions are present. Respirations should be counted for a full minute when the infant is calm or asleep by touch or direct visualization of the chest and/or abdomen.

Repetitive Sneezing

If the infants sneezes several times in a row this can be a sign of autonomic nervous system dysregulation. This item is scored as either yes or no.

Repetitive Yawning

If the infant yawns excessively, this can represent alterations in autonomic nervous system regulation. This is scored as either yes or no.

Forceful Vomiting

Score yes if vomiting is observed that is not necessarily related to burping and occurs frequently during feeding. Note particularly if vomiting is forceful and projectile during or right after the baby is fed. This is scored as either yes or no.

Fever $>38^{\circ}\text{C}$ or $>100.4^{\circ}\text{F}$

Score utilizing an axillary temperature. Make sure that the baby is not bundled too warmly to ascertain if the fever is indeed due to withdrawal and not because the baby is overheated due to being dressed in clothing that is too heavy or because of an infection. This item is scored as either yes or no.

TOTAL SCORE

Add the column to obtain the "total score" for that time interval. A total score of 4 is recommended for initiation of pharmacologic treatment.

Recommendations:

- All babies suspected of being exposed to narcotics or opiates should receive Non-Pharmacologic management
- Do not wake up a baby to perform the scoring. Clinical judgment should be used should a fussy baby have just gone to sleep.
- If a baby receives a score of 4, confirm that all possible non-pharmacologic interventions have been implemented and rescore the infant in an hour. If the score remains at 4 or higher, the infant should be transferred to a higher level of care.

**Any questions or comments about
the Lipsitz tool?**



Non-Pharmacologic Management of Infants with NAS

- Feeding on Demand
 - Breast Milk Feeds (*contraindicated if Mom not in Treatment program/still using illicit drugs/HIV+*)
 - Low Lactose Formula
 - 22 kcal/oz feeds
- Swaddling
- Low Stimulation
- Rooming In
- Clothed Cuddling



Non-Pharmacologic Management of Infants with NAS

Other interventions in the literature:

Skin-to-Skin/Kangaroo Care

Rocker Beds

Massage therapy

Music therapy

Aromatherapy (lavender, mother's scent)

Color Therapy (B&W more soothing?)



Central Nervous System Disturbances



- **Excessive or high pitched crying**
- **Sleeplessness**
- **Myoclonic jerks, tremors, jitteriness, irritability, Hyperactive reflexes**
- **Excoriation**

Central Nervous System Disturbances and Techniques



- **Excessive or high pitched crying** → Reduce environmental stimuli: Hold newborn infant firmly and close to the body. Gentle rocking, talking/singing/humming, use of infant sling
- **Sleeplessness** (Difficulty regulating sleep and wake states) → Wrap or swaddle infant, minimize handling, skin to skin contact
- **Myoclonic jerks, tremors, jitteriness, irritability, Hyperactive reflexes** → “Cluster” care to minimize handling. Slow movements, reduced lighting, noise levels, massage and relaxation baths
- **Excoriation** (chin, knees, elbow, toes, nose) → *Safe Sleep* positioning on back, short haired sheepskin covered with soft cotton sheet

Metabolic/Vasomotor/Respiratory Disturbances

- **Sweating**
- **Hyperthermia**
- **Nasal flaring/tachypnea**
- **Nasal stuffiness/excessive nasal secretions**



Metabolic/Vasomotor/Respiratory Disturbances and Techniques

- **Sweating**→ Clean skin regularly, dry clean clothing and bedding
- **Hyperthermia** (temp)→Ensure adequate hydration and reduce environmental temperature; Avoid heavy bedding and clothing; Dress or swaddle in loose, light fabrics; Skin to skin contact with mother
- **Nasal flaring/tachypnea**→ Avoid swaddling so that respiration can be observed. Refer to medical staff if cyanosis or mottling observed.
- **Nasal stuffiness/excessive nasal secretions**→ Use gentle suction if secretions cause obstruction



Gastrointestinal Disturbances

- **Excessive/frantic sucking or rooting**
- **Poor feeding**
- **Regurgitation/vomiting**
- **Loose or watery stools/diarrhea**



Gastrointestinal Disturbances and Techniques



- **Excessive/frantic sucking** or rooting-fists, fingers, thumbs → Apply mittens, Keep hands clean, Consider non-nutritive sucking (pacifier)
- **Poor feeding** (infrequent, uncoordinated suck) → Feed on demand; Reduce environmental stimuli during feeding; Frequent small feeds with rest between sucking; Weigh and assess hydration daily; Careful monitoring of fluid intake & weight gain. Assess coordination of suck/swallow reflex-support cheeks and jaw if necessary
- **Regurgitation/vomiting** → Burp when infants stops sucking and at end of feed. Rubbing instead of patting may decrease stimulation and avoid stress
- **Loose or watery stools/diarrhea** → Frequent diaper changes using barrier creams, occasional skin exposure to allow buttocks to air dry

What have you observed when implementing Non-Pharmacologic techniques in your nursery?



When to Transfer

- All non-pharmacologic interventions have been exhausted and...
- Scores for infant still remain at treatment level 4 or above for the Lipsitz; at $\geq 8 \times 2$ or $>12 \times 1$ for the Modified Finnegan

“Goal is that by using the non-pharmacologic measures and consistent scoring, fewer infants will need pharmacologic therapy”

**Important to document which
Non-Pharmacologic items you
initiated before transferring the infant**



Additional Questions ~ Suggestions



Watch your Email to Register for...

-- Progesterone as a Primary Intervention to Prevent Preterm Birth:

- Jay Iams, MD
- Monday, November 3 and Thursday, November 6 @ Noon

--The New IPHIS Variables webinars

Friday, November 14th and
Monday, November 17th @ Noon



Contact us.....

Email us at: info.opqc.net

OPQC Website:
<https://opqc.net>

The Ohio Perinatal Quality Collaborative is a collaborative effort to make sure every Ohio mother and baby gets the best available care.

OBSTETRICS PROJECTS

- Progesterone Project
 - Interested in joining OPQC's Progesterone Project?
 - Action Period Calls
 - Progesterone Data Collection Forms
- 39-Weeks Delivery Charter Project (QOBS)
- 39-Weeks Dissemination & Birth Registry Accuracy Project
 - 39-Weeks Dissemination Resources
 - Key Driver Diagrams
- Antenatal Corticosteroids (ANCS) Project
- NEONATAL PROJECTS
 - Neonatal Abstinence

NEONATAL ABSTINENCE SYNDROME (NAS) PROJECT

It is estimated that one infant is born addicted to narcotics every hour in the United States. The NAS epidemic is steadily increasing, overwhelming social service systems and public payers. In Ohio in 2011, treating infants born with NAS cost more than \$70 million and nearly 18,000 inpatient days. Preliminary data from pilot work funded by the Ohio Children's Hospital Association (OCHA) estimates that up to 50% of neonates with NAS in Ohio were not receiving optimal care, despite evidence-informed data and national guidelines that exist to indicate best practices for identification and treatment of these infants. Thus, there is substantial opportunity for improvement, and reducing variation in identification and treatment will correct deficiencies in both under-identification, and under- and over-treatment.

The aim of the OPQC NAS Project is to increase the identification of and compassionate withdrawal treatment for full-term infants born with NAS, thereby reducing the length of stay for these infants by 20% across participating sites by June 30, 2015. With funding from the Ohio Department of Medicaid, OPQC will test strategies for implementing evidence-informed treatment protocols to all 37 Level 2 and Level 3 NICUs across Ohio, and will then disseminate identification protocols to all Level 1 hospitals.

[OCHA Patient/ally Better Practices Protocol](#)
[NAS Information \(One-Page\)](#)
[NAS Key Driver Diagram](#)
[Action Period Calls](#)

facebook

Ohio Perinatal Quality Collaborative

Timeline

134 likes

ABOUT

- The Ohio Perinatal Quality Collaborative is a collaborative effort to make sure every Ohio mother and baby gets the best available care.
- [http://www.opqc.net/](#)

PHOTOS

POSTS TO PAGE

Ramesh Meher Daugherty

Ohio Perinatal Quality Collaborative shared a link via Facebook: Ohio's neonatal...

The ABCs of Safe Sleep - 700 Children
<http://700children.org/nationalactionplan/opsafe-sleep/>
Every week in Ohio, three babies die from sleep-related injuries enough to fill seven kindergarten classes each year! Learn the ABCs of safe sleep in infants.

Ohio Perinatal Quality Collaborative shared a link.

The Ohio Collaborative to Prevent Infant Mortality is hosting the Ohio Infant Mortality Summit in Columbus, OH December 3-4. Have you pre-registered for this free event?

Follow us on Twitter!
[@OhioPQC](https://twitter.com/OhioPQC)

OPQC

The Ohio Perinatal Quality Collaborative: a collaborative effort to make sure every Ohio mother and baby gets the best available care.

Ohio
opqc.net

284 TWEETS 30 PHOTOVIDEOS 175 FOLLOWING 136 FOLLOWERS

SummaWomen'sResearch @SummaWomensResch · Sep 25
Supporting all opiate addicted pregnant women with enhanced prenatal care! @DoctorViv @SummitADMBoard #womenshealth

Helping those with addiction take the first step of their recovery since 1935.

Women's Health Services at Summa is passionate about serving all women during their pregnancy and beyond. We believe every woman deserves high quality care and a healthy start at any point in life's journey.



