







Written Case 1 Rating Sheet

Nurse/Provider Sign-out

- 2-day-old full-term baby boy born to 1st time mom.
- Mom using street oxycodone in pregnancy. Had been having irregular periods and didn't discover pregnancy until ~ 5 months.
- Tried stopping oxycodone abruptly but went through withdrawal and had significant cravings. Started taking Subutex from her friend as she heard this was safer and was worried that she would use heroin if she didn't stay on something.
- Was not able to get into a treatment program until 7 months gestation due to long wait lists. Now on Suboxone MAT w/out any unprescribed opiates or heroin. No other exposures present.
- Last assessment was approximately 3-4 hours ago.
- At that time, baby exclusively breastfeeding with good latch. Fed 10 times in past 24 hours. Weight down 2%; 2 voids and stools each in past day.
- Mom rooming-in with baby & keeping room calm/quiet. No visitors present.
- Baby was sleeping well & consoling within a few minutes with skin-to-skin contact. Was a little jittery and fussy with diaper change, but calmed with holding.

In-room Assessment

- Breastfed well x 20 min. Took only a few minutes to latch. Mom w/ some mild nipple pain, but baby content. Baby fell asleep after feeding.
- Awake again in ~1-1.5 hours, cueing to feed.
- Fussy but able to console within 3-5 minutes with skin-to-skin contact.
- Latched within few min after calming & breastfed x 30 min total. Was a little sleepy during feeding but would start nursing again when mom stimulated her.
- Content and calm after a feeding in mom's arms. Mom called out to RN to assess baby at this time as instructed by last shift's RN.
- Baby with mild tremors and fussiness on exam but calms when picked up. Tone and Moro are normal. Vital signs are stable. No other symptoms of withdrawal noted.
- Mom is worried that baby may feel badly as he withdraws from her Suboxone as she knows this is very uncomfortable from her own personal experience so is holding baby all of the time.
- In review of non-pharmacologic care interventions (NPIs) currently being used, mom shares that she doesn't know how to swaddle her baby, and has not yet learned about rhythmic movement.

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NOWS/NAS ASSESSMENT	

 $\textbf{Are signs of with drawal present? (e.g., \ hyperactive moro, tremors/jitteriness, increased tone, excessive/disorganized suck) \ Yes / None of the present of the prese$

If Yes, is timing of withdrawal consistent with known opioid exposure? Yes / No / Unsure

Are co-exposures present that may be contributing to signs of withdrawal? Yes / No / Unsure (please list co-exposures)

Are NPIs maximized to fullest extent possible in infant's clinical setting? Yes $/\,\mathrm{No}\,/\,\mathrm{Unsure}$

EATING

Takes > 10 min to coordinate feeding or breastfeeds < 10 min or feeds < 10 mL (or other age-appropriate duration/volume) due to NOWS/NAS? Yes / No

SLEEPING

Sleeps < 1 hr due to NOWS/NAS? Yes / No

CONSOLING

Takes > 10 min to console (or cannot stay consoled for at least 10 min) due to NOWS/NAS? Yes / No

Consoling Support Needed

- 1: Able to console on own
- 2: Able to console within (and stay consoled for) 10 min with caregiver support
- 3: Takes > 10 min to console (or cannot stay consoled for at least 10 min) despite caregiver's best efforts

CARE PLAN

Formal Parent/Caregiver Huddle Performed to formally review NPIs to be increased further? Yes / No

Full Care Team Huddle Performed to formally consider all possible etiologies for symptoms, re-assess if NPIs are maximized to fullest extent possible, and determine if NOWS/NAS medication treatment is needed? Yes / No

Management Decision

- a: Continue/Optimize NPIs
- b: Initiate NOWS/NAS Medication Treatment (e.g., if baby's symptoms & timing of symptoms are consistent with mother's particular opioid and NPIs are maximized to fullest extent possible in infant's clinical setting, OR other significant NOWS/NAS concerns are present (e.g., seizures, apnea)) please list medication(s) initiated
- c: Continue NOWS/NAS Medication Treatment
- d: Other (please describe e.g., Start 2nd Pharmacologic Agent (indicate name); Wean or Discontinue Medication Treatment)

PARENT/CAREGIVER PRESENCE SINCE LAST ASSESSMENT

> 3 hours (includes if parent/caregiver present entire time), 2-3 hours, 1-2 hours, < 1 hour, 0 hours (no parent/caregiver present)

NON-PHARM CARE INTERVENTIONS (I = Increase Now, R = Reinforce, E = Educate for Future, NA = Not Applicable/Available)

Rooming-in (i.e., caring for infant in their own room with earlier caregiver response to infant stress or hunger cues)

Parent/caregiver presence to help calm and care for infant

Skin-to-skin contact when caregiver fully awake/alert to help organize infant feeding behaviors, calming & sleep

Holding by parent/caregiver/cuddler to help calm infant & aid in sleep (with caregiver fully awake/alert)

Safe & effective swaddling (e.g., extremities swaddled in flexed position, blanket snug, no extra blanket around baby's face)

Optimal feeding (e.g., baby offered feedings when showing hunger cues & fed till content)

Non-nutritive sucking with infant's hand, pacifier, adult caregiver's washed or gloved finger

Quiet, low light environment to help limit overstimulation of infant (e.g., tv volume down, quiet "white noise" machine or phone app)

Rhythmic movement provided by parent/caregiver or infant calming device (e.g., "jiggling" or infant swing in presence of alert adult)

Additional help/support in room (e.g., other parent, family member, friend, cuddler, staff member, recovery coach, DCYF worker)

Limiting # of visitors & duration of visit(s) to minimize disruptions in infant's care environment & sleep

Clustering care & assessments with infant's awake times (e.g., RN & infant provider perform assessment together after infant feedings)

Safe sleep/fall prevention (e.g., infant sleeps on back, safely swaddled, in own sleep space)

Parent/caregiver self-care & rest (e.g., identifying another adult to care for infant so parent can rest or take a walk/break)

Optional Comments: (e.g., staff caring for/consoling baby as parents not available or able to safely care for baby)









DEFINITIONS

EATING

- Takes > 10 min to coordinate feeding or breastfeeds < 10 min or feeds < 10 mL (or other age-appropriate duration/volume) due to NOWS/NAS?: Baby unable to coordinate feeding within 10 minutes of showing hunger OR sustain feeding for at least 10 minutes at breast OR with 10 mL by alternate feeding method (or other age-appropriate duration/volume) due to opioid withdrawal symptoms (e.g., fussiness, tremors, uncoordinated suck, excessive rooting).
- Special Note: Do not indicate Yes if poor eating is clearly due to non-opioid related factors (e.g., prematurity, transitional sleepiness or spittiness in first 24 hours, inability to latch due to infant/maternal anatomical factors).

SLEEPING

- Sleeps < 1 hour due to NOWS/NAS: Baby unable to sleep for at least one hour, after feeding well, due to opioid withdrawal symptoms (e.g., fussiness, restlessness, increased startle, tremors).
- Special Note: Do not indicate Yes if sleep < 1 hour is clearly due to non-opioid related factors (e.g., symptoms in first day likely due to nicotine or SSRI withdrawal, physiologic cluster feeding in first few days of life, interruptions in sleep for routine newborn testing).

CONSOLING

- Takes > 10 min to console (or cannot stay consoled for at least 10 min) due to NOWS/NAS: Baby takes longer than 10 minutes to console OR cannot stay consoled for at least 10 minutes (due to opioid withdrawal symptoms) despite infant caregiver/provider's best efforts to implement NPIs (e.g., skin-to-skin contact, non-nutritive sucking when baby not hungry).
- Special Note: Do not indicate Yes if infant's difficulties consoling are clearly due to non-opioid related factors (e.g., caregiver non-responsiveness to infant hunger cues, circumcision pain).

CONSOLING SUPPORT NEEDED

- 1. Able to console on own: Able to console on own without any caregiver support needed.
- 2. Able to console within (and stay consoled for) 10 min with caregiver support: Baby with absence of crying, grimacing, or other signs of distress while being held (or otherwise consoled) by a caregiver.
- 3. Takes > 10 min to console (or cannot stay consoled for at least 10 min) despite caregiver's best efforts: Baby with presence of crying, grimacing, squirming/tensing, or other signs of distress despite a caregiver's best efforts to implement recommended NPIs (e.g., parent/caregiver presence, skin-to-skin, holding, safe swaddling, optimal feeding, non-nutritive sucking when not hungry).

CARE PLAN

- Formal Parent/Caregiver Huddle: RN bedside huddle with parent/caregiver to formally review NPIs that can be optimized ("Increased") further to help with infant's current eating, sleeping, and/or consoling difficulties. To be performed if infant receives Yes for any ESC item or 3 for Consoling Support Needed.
- Full Care Team Huddle: Formal huddle with parent/caregiver, infant RN and physician or associate provider to 1) consider all potential etiologies for symptoms, 2) re-assess if NPIs are maximized to fullest extent possible in infant's clinical setting, and 3) determine if NOWS medication treatment is needed. To be performed if infant receives 2nd Yes in a row for any single ESC item (or 2nd "3" for Consoling Support Needed) despite maximal non-pharm care OR other significant concerns are present.

PARENT/CAREGIVER PRESENCE SINCE LAST ASSESSMENT: Time (in hours) since last assessment that parent (or other caregiver) spent together with infant in own room *or* in Nursery.

OPTIMAL FEEDING:

- Baby feeding at early hunger cues and until content without any limit placed on duration or volume of feeding. Feedings are encouraged at least every 3 hours, optimally 8-12 times per day, to ensure baby does not become too hungry or disorganized with feeding and to optimize nutritional intake. A baby may remain sleeping for more than 3 hours for therapeutic rest if feeding difficulties or excessive weight loss are not present. If a pacifier is used, it should be introduced only after a baby has been fed or offered a feeding. As infants with NOWS/NAS may have poor feeding, have excessive/watery stools, or be hypermetabolic, closely follow daily weights and provide increased volume and/or caloric density of feedings, as needed, for more than expected weight loss and/or poor weight gain for age.
- Breastfeeding: Baby latching deeply with comfortable latch for mother, and sustained active suckling for baby with only brief pauses noted. If feeding difficulties present: a) assist directly with breastfeeding to help achieve more optimal latch and position, b) demonstrate hand expression and have mother express colostrum prior to and/or during feedings, and/or c) have baby feed on a clean or gloved adult finger first to organize suck prior to latching. As able based on infant's symptoms, consider withholding pacifiers until babies are breastfeeding well due to the potential to interfere with a good latch/suck. Consider use of nipple shield to facilitate palatal stimulation, or supplementation at the breast (as tolerated by mother), if infant requires assistance to maintain latch/suck.
- Bottle feeding: Baby effectively coordinating suck and swallow without gagging or excessive spitting up. If feeding difficulties are present: a) assess need for altered nipple shape/flow rate, b) instruct parent to provide chin support during feedings, and/or c) modify position of bottle and flow of milk to assist baby with feeding (e.g., modified side-lying position).
- Consult a feeding specialist (e.g., lactation, speech therapy, feeding team) when feeding difficulties are present.