







Written Case 4 Rating Sheet

Nurse/Provider Sign-out

- 2-day-old term small for gestational age baby girl born to 19-year-old first-time mom using heroin until discovered pregnancy approximately 3 months ago.
- Tried to get into addiction treatment program at that time but placed on wait list for 1 month. Switched to street Subutex and experienced signs of withdrawal until found "right dose" of Subutex. Now in treatment program, on Subutex, with negative weekly urine screens for 8 weeks.
- Mom smokes ½ pack per day and takes no other medications. She is otherwise healthy. All prenatal labs performed at that time within normal limits (including infection serologies). Repeat HIV, Hep C, Hep B, and syphilis testing on admission results pending.
- Delivery complicated by maternal hypotension, tight nuchal cord, and Apgars 2¹, 5⁵, 9¹⁰. cord pH 7.02, base deficit 12.
- No withdrawal symptoms appreciated to date. Vital signs stable. Feeding difficulties have been present due to latching difficulties related to ankyloglossia. Sleeping/consoling well thus far, including during last assessment 3 hours ago.

In-room Assessment

- Baby slept 2.5 hours since last assessment. Mom woke baby to try to feed her before she got too hungry. Took a while to get baby to wake up to feed.
- Baby sleepy, latching within a few tries but problems sustaining latch for more than 5 minutes; seemed to tire with feeding. Nurse helped feed baby by bottle, coaching parents on tips to help baby feed better. Over 45 minutes, baby able to take 15 mL with nurse providing frequent palatal stimulation and chin support to help baby maintain seal on bottle nipple.
- Parents present in room the whole time, providing calm room, limiting visitors, holding baby and responsive to teaching regarding all NPIs, including feeding tips.
- Baby not fussy and self-soothes easily.
- Tone slightly lower than expected for term gestation; no jitteriness present. Moro/startle reflex within normal limits for age. As nurse talking with parents regarding ways to optimize feeding, baby had a few jerking movements of arms and legs.

NOWS/NAS ASSESSMENT	
Are signs of withdrawal present? (e.g., hyperactive moro, tremors/jitteriness, increased tone, excessive/disorganized suck) Yes / No	
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 / No / 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	
b) Initiate NOWSINAS Medication Treatment (e.g., it days s symptoms actiming 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 2 nd 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/Avail	able)
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)	
Ontional Comments: (e.g., staff caring for/consoling haby as narents not available or able to safely care for haby)	









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 nonresponsiveness 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. Takes > 10 min to console (or cannot stay consoled for at least 10 min) despite caregiver's best efforts: Baby with presence 3. 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.
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