Written Case 8 Rating Sheet

24-hr. old, full-term, baby girl, small for gestational age, born to 20-year-old woman who presented to emergency department with abdominal pain and found to be in labor. Delivered precipitously in emergency department not long after. Mom unaware of pregnancy; using heroin, cigarettes, and marijuana up until the delivery. Lives alone. No family in area. Does not know who father of the baby is. Transferred to the birthing unit for postpartum care; both mom and baby stable. Blood sugars and temperatures normal since birth.

Time 1 (24 hrs. of life)

Mom present in room entire time, holding baby when she is awake. Baby fussy with tremors and exaggerated Moro with any noise able to calm within approximately 5 min. and remain calm. Able to sleep for 2 hrs. while held. When baby woke up, was excessively rooting making it hard for mom to get bottle in baby's mouth. Last feeding approximately 3 hrs. ago. After 15 min. of trying, baby able to take 15 mL of formula. Mom keeping room calm; no visitors are present. RN performed assessment and vital signs 4 hrs. after last assessment.

Time 2 (27 hrs. of life)

During past 3 hrs., mom off unit for smoking break and then trip to methadone treatment center for new intake visit. No family available to keep baby in room. Baby in nursery and being watched by a nurse's aide who is also answering phones and checking in visitors. Baby is fussy despite being swaddled in blanket and sucking on a pacifier while in her bassinet. Baby has not slept for more than 15-20 min. at a time. Has a hard time keeping pacifier in her mouth due to excessive rooting on blanket. Startles out of sleep with disturbed tremors and exaggerated Moro. Bottle-feeds 15 mL of formula within 10 min. after taking 5 min. to coordinate feeding. Baby fusses frequently and is only able to stay consoled for a few minutes in bassinet. The nurse's aide was unable to hold baby as she needed to help with 2 new mom-baby admissions. Baby calmed briefly when aide would jiggle the bassinet between other tasks, but cried again as soon as movement was stopped. At the time of this assessment, the mother has just returned and is eager to hold her baby skin-to-skin.

Time 3 (30 hrs. of life)

Mom now back in room with baby, and mom is sleepy after first dose of methadone medication-assisted treatment. Mom unable to hold baby as she is worried about falling asleep; called for staff to help. No staff available to help because there are now 5 new admissions in active labor. Baby fussy, unable to stay asleep for more than 20 min. at a time because startling self out of sleep, even though room is quiet. Baby is safely/effectively swaddled in a blanket and is sucking a pacifier. Mom tries to console baby while in bassinet but mom keeps drifting off to sleep. Baby consoles within a few min. when mom "shooshes" baby and jiggles her back and forth, but baby will not stay consoled for more than 5 min. because mom falls asleep and stops jiggling/shooshing noise. Drinks bottle readily when mom offers it, taking 30 mL in 5-10 min. and then pushes nipple out of mouth. When mom tries to offer more, baby grimaces and bites down on nipple. Mom reviews the ESC pamphlet and cannot think of anything else to try to soothe her baby. She calls again for the nurse. The nurse comes quickly, and says she cannot think of anything else either.

Perform assessment of ESC behaviors, signs of withdrawal, and NPIs for time period since last ESC assessment	Time 1	Time 2	Time 3
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 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**.