Written Case 8 and Rating Key for Time 3

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 stay calm with swaddling and holding. Able to sleep for 2 hrs. while being held. When baby woke up, she 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. Fusses frequently and is only able to stay consoled for a few in bassinet. The nurse's aide was unable to hold baby because she needed to help with 2 new mom-baby admissions. Baby calmed briefly when the aide would jiggle the bassinet between other tasks, but cried again as soon as the movement 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 RISK ASSESSMENT			
Are signs of withdrawal present? (e.g., hyperactive Moro, tremors/jitteriness, increased tone, excessive/disorganized suck) Yes / No	Y	Y	Y
If Yes, is timing of withdrawal consistent with known opioid exposure? Yes / No / Unsure	Y	Y	Y
Are co-exposures present that may be contributing to signs of withdrawal? Yes / No / Unsure (please list co-exposures)	Y	Y	Y
Are NPIs maximized to fullest extent possible in infant's clinical setting? Yes / No / Unsure	N	N	Y
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	Y	N	N
SLEEPING			
Sleeps < 1 hr due to NOWS/NAS? Yes / No	N	Y	Y
CONSOLING			
Takes > 10 min to console (*or* **cannot stay consoled for** ***at least*** **10 min) due to NOWS/NAS?** Yes / No	N	Y	Y
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	2	3	3
CARE PLAN			
Formal Parent/Caregiver Huddle Performed to formally review NPIs to be increased further? Yes / No	Y	Y	NA
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	N	N	Y
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 2'° Pharmacologic Agent (indicate name); Wean or Discontinue Medication	a+d	a+d	a+b?+ d***
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)	>3	0 In nursery	>3
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)	R	I	***
Parent/caregiver presence to help calm and care for infant	R	I	R
Skin-to-skin contact when caregiver fully awake/alert to help organize infant feeding behaviors, calming & sleep	I	I	NA
Holding by parent/caregiver/cuddler to help calm infant & aid in sleep (with caregiver fully awake/alert)	R/E	I	I
Safe & effective swaddling (e.g., extremities swaddled in flexed position, blanket snug, no extra blanket around baby's face)	R	R/I	R
Optimal feeding (e.g., baby offered feedings when showing hunger cues & fed till content)	I	R/E	R/E
Non-nutritive sucking with infant's hand, pacifier, adult caregiver's washed or gloved finger	I	R	R/I?
Quiet, low light environment to help limit overstimulation of infant (e.g., tv volume down, quiet "white noise" machine or phone app)	R	I	R
Rhythmic movement provided by parent/caregiver or infant calming device (e.g., "jiggling" or infant swing in presence of alert adult)	E	I	R/I
Additional help/support in room (e.g., other parent, family member, friend, cuddler, staff member, recovery coach, DCYF worker)	I	I	I
Limiting # of visitors & duration of visit(s) to minimize disruptions in infant's care environment & sleep	NA	NA	NA
Clustering care & assessments with infant's awake times (e.g., RN & infant provider perform assessment together after infant feedings)	I	R/E	R/I
Safe sleep/fall prevention (e.g., infant sleeps on back, safely swaddled, in own sleep space)	R/E	E	R
Parent/caregiver self-care & rest (e.g., identifying another adult to care for infant so parent can rest or take a walk/break)	R/E	E	R/I