Neonatal Abstinence Scoring Tool used at AHN Saint Vincent for Process Improvement

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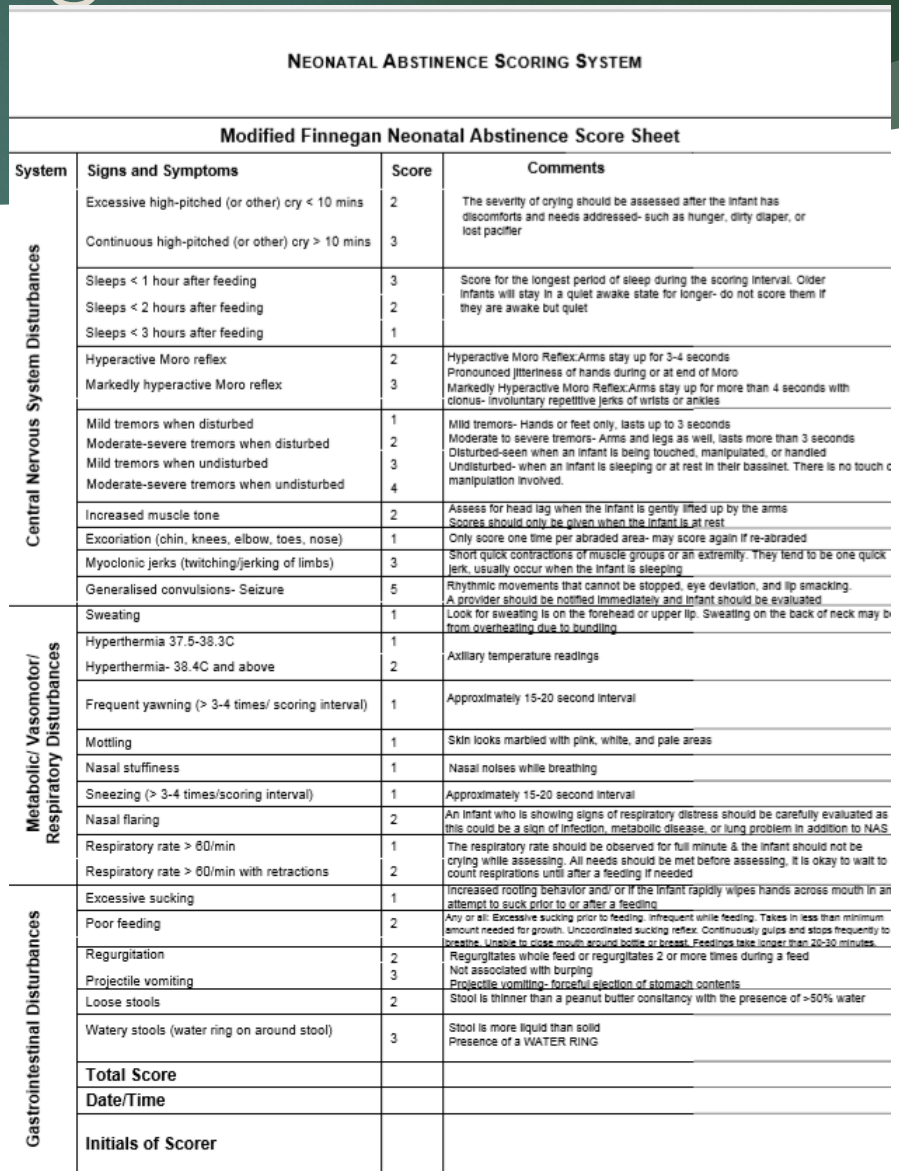
Root Cause Analysis

- Lack of standardized training for NICU and Mother- Baby nurses
- Care delivery models different in NICU and Mother- Baby units
- Nurse to patient ratios

Researched Modified Finnigan NAS Scoring

- EPIC documentation only included signs and symptoms
- Defined operational definition



NEONATAL ABSTINENCE SCORING SYSTEM

Modified Finnegan Neonatal Abstinence Score Sheet

System	Signs and Symptoms	Score	Comments
Central Nervous System Disturbances	Excessive high-pitched (or other) cry < 10 mins	2	The severity of crying should be assessed after the infant has discomforts and needs addressed- such as hunger, dirty diaper, or lost pacifier
	Continuous high-pitched (or other) cry > 10 mins	3	
	Sleeps < 1 hour after feeding	3	Score for the longest period of sleep during the scoring interval. Older infants will stay in a quiet awake state for longer- do not score them if they are awake but quiet
	Sleeps < 2 hours after feeding	2	
	Sleeps < 3 hours after feeding	1	
	Hyperactive Moro reflex	2	Hyperactive Moro Reflex:Arms stay up for 3-4 seconds Pronounced jitteriness of hands during or at end of Moro
	Markedly hyperactive Moro reflex	3	Markedly Hyperactive Moro Reflex:Arms stay up for more than 4 seconds with clonus- involuntary repetitive jerks of wrists or ankles
	Mild tremors when disturbed	1	Mild tremors- Hands or feet only, lasts up to 3 seconds
	Moderate-severe tremors when disturbed	2	Moderate to severe tremors- Arms and legs as well, lasts more than 3 seconds
	Mild tremors when undisturbed	3	Disturbed-seen when an infant is being touched, manipulated, or handled Undisturbed- when an infant is sleeping or at rest in their bassinet. There is no touch c
	Moderate-severe tremors when undisturbed	4	manipulation involved.
	Increased muscle tone	2	Assess for head lag when the infant is gently lifted up by the arms Scores should only be given when the infant is at rest
	Excoriation (chin, knees, elbow, toes, nose)	1	Only score one time per abraded area- may score again if re-abraded
	Myoclonic jerks (twitching/jerking of limbs)	3	Short quick contractions of muscle groups or an extremity. They tend to be one quick jerk, usually occur when the infant is sleeping
	Generalised convulsions- Seizure	5	Rhythmic movements that cannot be stopped, eye deviation, and lip smacking. A provider should be notified immediately and infant should be evaluated
Metabolic/ Vasomotor/ Respiratory Disturbances	Sweating	1	Look for sweating is on the forehead or upper lip. Sweating on the back of neck may b from overheating due to bundling
	Hyperthermia 37.5-38.3C	1	Axillary temperature readings
	Hyperthermia- 38.4C and above	2	
	Frequent yawning (> 3-4 times/ scoring interval)	1	Approximately 15-20 second interval
	Mottling	1	Skin looks marbled with pink, white, and pale areas
	Nasal stuffiness	1	Nasal noises while breathing
	Sneezing (> 3-4 times/scoring interval)	1	Approximately 15-20 second interval
	Nasal flaring	2	An infant who is showing signs of respiratory distress should be carefully evaluated as this could be a sign of infection, metabolic disease, or lung problem in addition to NAS
	Respiratory rate > 60/min	1	The respiratory rate should be observed for full minute & the infant should not be crying while assessing. All needs should be met before assessing, it is okay to wait to
	Respiratory rate > 60/min with retractions	2	count respirations until after a feeding if needed
Gastrointestinal Disturbances	Excessive sucking	1	Increased rooting behavior and/ or if the infant rapidly wipes hands across mouth in an attempt to suck prior to or after a feeding
	Poor feeding	2	Any or all: Excessive sucking prior to feeding, infrequent while feeding. Takes in less than minimum amount needed for growth. Uncoordinated sucking reflex. Continuously gulps and stops frequently to breathe. Unable to close mouth around bottle or breast. Feedings take longer than 20-30 minutes.
	Regurgitation	2	Regurgitates whole feed or regurgitates 2 or more times during a feed Not associated with burping
	Projectile vomiting	3	Projectile vomiting- forceful ejection of stomach contents
	Loose stools	2	Stool is thinner than a peanut butter consitancy with the presence of >50% water
	Watery stools (water ring on around stool)	3	Stool is more liquid than solid Presence of a WATER RING
	Total Score		
	Date/Time		
	Initials of Scorer		

Standardized Education

- Two hours of education for NICU and Mother- Baby Nurses

Eat, Sleep, & Console Consideration

- Plan of care for infant on Mother- Baby unit on observation, not requiring medications

Implementation Plan

- Definition of Inter-Rater Reliability Tool (IRR)
- Super- users role and responsibilities
- Goal of each nurse scoring NAS infant is to be 90%-100%
- Debrief at end of scoring activity

Current State

- Ready to implement data collection

Next Steps

- Hybrid NAS scoring implemented to meet patient population
- Eat, Sleep, and Console scoring tool to score NAS infant on Mother- Baby unit
- NAS infant requiring medications in NICU. Modified Finnegan scoring tool used
- EPIC documentation to include definitions of NAS symptoms