

# Implementation of Eat, Sleep, Console for Newborns with Neonatal Opioid Withdrawal Syndrome

Malissa da Graca, MS, CRNP  
Rachel Reid, DNP, RN  
Barbara Wise, PhD

## Background/Significance

- Dramatic rise in opioid use epidemic è parallel rise of neonatal opioid withdrawal syndrome (NOWS).
  - 7.3 per 1000 newborns
  - Average length of stay is 16 days
  - Annual cost of \$1.5 billion in hospital costs

**Every 15 minutes a baby is born with NAS.**

- Upwards of 55-94% of newborns with chronic in utero opioid use will exhibit signs/symptoms of NOWS.
  - Gastrointestinal
  - Autonomic
  - Central nervous system
- Management of NOWS includes initiating opioid agonist for management of withdrawal
  - Results in neonatal care unit admissions, (NICU) prolonged length of stay, and disruptions to family bonding.

## Objectives

- Quality Improvement Project: Implementation of Eat, Sleep, Console (ESC) in a community hospital for all newborns with in utero opioid exposure
  - Decrease average length of stay (ALOS)
  - Reduce total morphine doses
  - Increase breastfeeding rates

Eat	Sleep	Console
Able to eat at least 1 ounce/feed or breast feed well. If unable to eat (too sleepy or uncoordinated), consider placing a NG tube for feeding	Able to sleep for at least 1 hour undisturbed (may have to be held to sleep)	Should be able to be consoled within 10 minutes. Another person should try to console baby after 10 minutes.

## Implementation

- Community hospital in mid-Atlantic with ~ 80 deliveries/month providing obstetric care to women and newborns ≥ 32 weeks gestation.
- Multidisciplinary team with representatives across physician, nursing, social work, lactation, and IT
- Updates to NOWS Policy
  - FNASS replaced with ESC assessment tool – integrated into EHR
  - Morphine updated to PRN dosing
  - Welcome Letter for parents describing collaborative approach to care
  - Newborn symptom diary
- Education of staff on ESC approach

## Preliminary Results

- Baseline staff attitudes and beliefs were collected regarding NOWS
- 26 nurses participated in the survey.
  - 42.3% believed that the neonatal care units are most appropriate place to care for newborns with NOWS**
  - 11% found caring for the patient with NAS stressful or upsetting
  - 92.3% of staff involve families in plan of care
  - 38.46% of staff encourage breastfeeding
- Policy updated to include ESC assessment tool, Morphine order changes to PRN dosing
- EHR flowsheet changed to reflect new collection tool and nonpharmacologic interventions utilized.
- Development of patient education handouts
- Learning module added to education channel

## Preliminary Conclusion

- Implementation delayed to April 2021 due to:
  - COVID-19
  - Change in leadership
  - Hospital system initiative to update Newborn Fall Policy
- Baseline staff attitudes and beliefs regarding NOWS
  - 26 participants
  - 42.3% responded neonatal care units are most appropriate place to care for newborns with NAS**
  - 11% found caring for the patient with NAS stressful or upsetting
  - 92.3% of staff involve families in plan of care
  - 38.46% of staff encourage breastfeeding
- Staff currently undergoing education for go live April 15
- Update to NOWS policy will require observation period of 3-5 days
- Implementation to EHR for compliance and tracking

## Figures

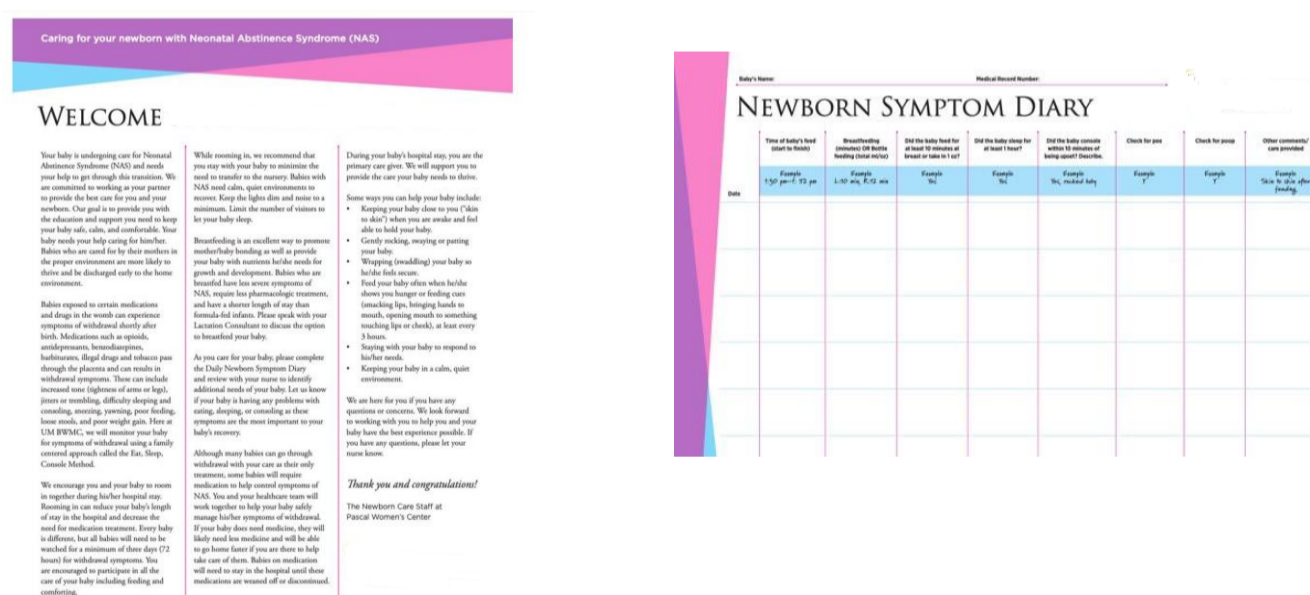


Figure 1: Parent Welcome Letter

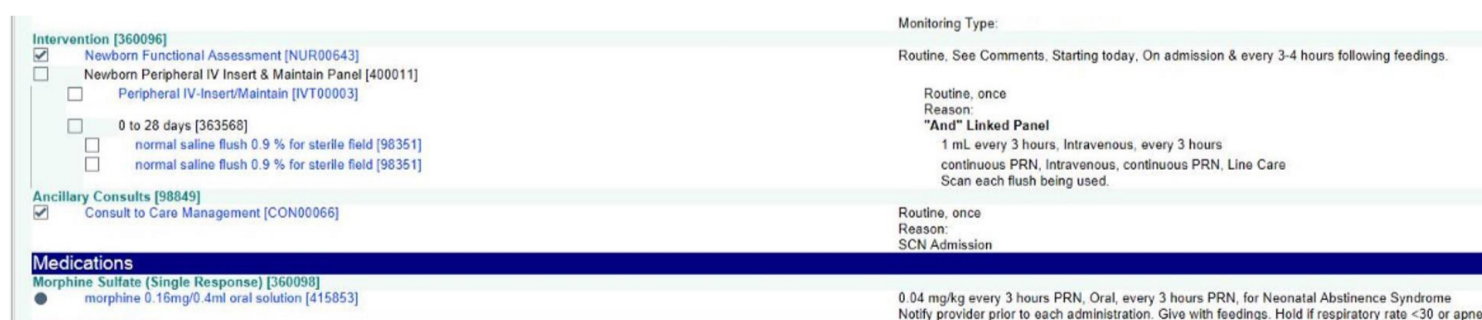


Figure 3: Provider Order Set

SKIN TO SKIN	<input checked="" type="checkbox"/>
NB FUNCTIONAL WITHDRAWAL	<input checked="" type="checkbox"/>
Newborn Functional W...	<input checked="" type="checkbox"/>

SKIN TO SKIN Total Time (minutes)	
Newborn Functional Withdrawal Assessment	
Newborn Eating	
Newborn Sleeping	
Newborn Consolable	
Parent/caregiver presence	
NON-Pharmacologic Interventions in place	
Actions Taken	
Physician Notification	
Provider Notified	

## Discussion

- Although unable to report on primary outcomes at this time:
- Current literature supports updates to approach of newborns with NOWS.
  - Successfully update to NOWS care policy to adopt ESC and morphine PRN
  - Positive messaging though family involvement

**Emphasis on Family Centered Care and Partnership**

Figure 2: Parent Symptom Diary

- Non-pharmacologic care **CAN** be prioritized for newborns with NOWS
- Conflict in staff practice of non pharmacologic care and belief in where to care for newborns with NOWS
- Incorporation into EHR for sustainability and tracking
- Large multi-disciplinary QI project can be implemented across multiple units

## References

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