

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

Background/Significance

- Dramatic rise in opioid use epidemic èparallel 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 \geq 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

Figures

Welcome				
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Figure 1: ParentWelcome Letter

	Monitoring Ty
Intervention [360096]	
Newborn Functional Assessment [NUR00643]	Routine, See
Newborn Peripheral IV Insert & Maintain Panel [400011]	
Peripheral IV-Insert/Maintain [IVT00003]	Routine,
	Reason:
0 to 28 days [363568]	"And" L
normal saline flush 0.9 % for sterile field [98351]	1 mL -
normal saline flush 0.9 % for sterile field [98351]	contin
	Scan
Ancillary Consults [98849]	
Consult to Care Management [CON00066]	Routine, once
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	SCN Admissi
Medications	
Morphine Sulfate (Single Response) [360098]	
mamphine 0.16ma/0.4ml anal colution [416953]	0.04 malka a

Figure 3: Provider Order Set

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

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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

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

Comments, Starting today, On admission & every 3-4 hours following feeding: once inked Panel every 3 hours, Intravenous, every 3 hours uous PRN, Intravenous, continuous PRN, Line Care ach flush being used

0.04 mg/kg every 3 hours PRN, Oral, every 3 hours PRN, for Neonatal Abstinence Syndrom. Notify provider prior to each administration. Give with feedings. Hold if respiratory rate <30 o



MPTOM 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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