

Pain and Stress Assessment on Admission to the NICU

The Problem

NICU infants are especially vulnerable to the effects of pain and stress. In particular, preterm infants can have dramatic physiologic responses to the bright and noisy environment of the NICU. Although the intensive care measures used in the NICU to provide nursing, respiratory, and medical support to these infants is lifesaving, these same measures are known to have significant harmful effects on neurodevelopmental outcomes.

Goal

We sought to improve our care practices surrounding the assessment and management of pain and stress in NICU infants. We began by targeting complete and early assessment of pain and stress levels on all infants admitted to the NICU, as this assessment would then allow for appropriate intervention. Our specific goal was that a pain and stress assessment be completed on at least 95% of infants within 12 hours of NICU admission (less than 5% of infants unassessed).

The Team

- NICU Infant Pain and Stress Management Committee
Lucy Andrade RN, Cara Budway RN, Danielle Duross RN, Natalie Reilly RN, Ellen Keady RN, Susan Young RNC, MS, Camilia Martin, MD
- NICU clinical RNs, PCAs, RTs, NNPs, and MDs

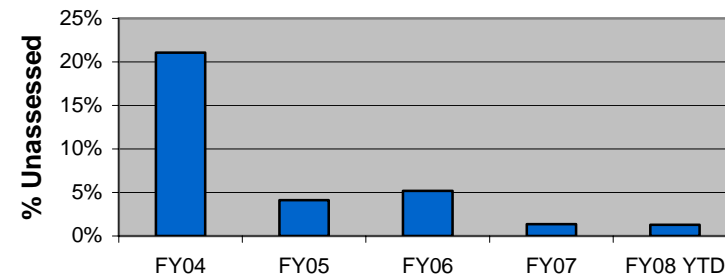
The Interventions

- Development of a pain and stress intervention worksheet, focused on common care activities, placed in the front of every patient record for easy access.
- Staff education around the anticipatory and proactive provision of pain and stress management techniques.
- Education during orientation of new staff on pain and stress management, as well as neurodevelopment of premature infants.
- Facilitating intervention for pain and stress by introduction of oral sucrose protocol.

Results and Progress to Date

We have seen a dramatic decrease in the percent of infants admitted to the NICU who do not have a pain and stress assessment completed on admission, below our target of 5% of infants unassessed.

Undocumented Admission Pain/Stress Assessment
Within 12 Hours of NICU Admission



Lessons Learned

- A planned approach to improving performance in a specific area can lead to significant results that can be sustained.
- Education of staff to achieve group acceptance of the importance of an intervention is essential to achieving widespread adoption.
- Involving all disciplines in the development of a plan for addressing a clinical need makes the process more robust and stable.

Next Steps

- Stress management has expanded to a review of the infant's immediate and extended environment using noise monitoring equipment.
- We will continue to track pain and stress assessments as well as responses to assessments to optimize interventions and management.
- Using the new documentation system, MetaVision, we have incorporated pain and stress management assessments and interventions into the MD and NNP procedure notes that link directly with the Pain and Stress Assessment portion of the medical record. This is a new process and now makes the assessments a multidisciplinary approach.

