Neuro-Developmental Care in the NICU

Where are We and How Can We Grow?

January 6, 2017

Asymmetry of Electrical Activity
Secondary to Cerebral Insult

Kangaroo Care

aEEG, vEEG, Brain Imaging

Positive Touch, Holding

Cerebral Sats via NIRS
What is Our NICU Culture?
QI Project: Holding Infants Survey Results

- 93 Participants (NICU staff)
- 59% RN’s
- 26% MD or NP
- 9% RT
Holding Survey Results

58% use tape and poseys
Other: hemostats, kelly clamps, pillows, safety pins, forceps, clamps
Suggestions: Velcro strap with clip made by NeoTech & Need more secure UAC/UVC’s
Holding Survey Results

On a scale of 1 to 5 how much does NICU bed space significantly limit your ability to facilitate holding of infants?

Answered: 93   Skipped: 0

62% believe space is an issue “frequently” or “all the time.”
Holding Survey Results

49% believe staffing is OK
32% believe staffing is inadequate
19% not sure
Holding Survey Results

If I knew there was evidence of a neurologic and/or developmental benefit for holding fragile, sick newborns I'd be more likely to endorse this practice.

Answered: 93  Skipped: 0

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<th>Answer Choices</th>
<th>Responses</th>
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<tr>
<td>True</td>
<td>76.34%</td>
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<tr>
<td>False</td>
<td>6.45%</td>
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<tr>
<td>Not Sure</td>
<td>17.20%</td>
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<td>Total</td>
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More than 2/3 Staff would be influenced by evidence based data
*Educate staff as part of QI project
Holding Survey Results

Holding During Cooling
46% Concern for Pt’s Temp drifting out of range
27% Not sure
27% Not concerned

• Review How Blanketrol works?
• Collect baby/blanket temps as part of QI project
Overwhelming majority noted HFOV & CT
45% Inotropes
• 45% Cooling Blanket
• 16% Other: critical airway, PPHN, post-op, VAD
“There isn’t enough education and secure practice methods to transfer kids at LPCH which makes me feel uncomfortable.”
Holding Survey Results

Would having an algorithm to determine readiness/safety for holding be helpful in your practice?

- Answered: 93  Skipped: 0

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<td>Yes</td>
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<td>20.43%</td>
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Holding Survey Results

48% Confident and proficient
29% Fairly confident but need some guidance
15% Reluctant but open to learning
*92% positive about facilitating holding
*QI project: develop holding Algorithm and policy and procedure for securing tubes and lines
2017 QI Collaborative (MD’S, NNP’S, RN’s RT’S, OT/PT) 
Holding Algorithm for Infants with HIE Undergoing Therapeutic Hypothermia

- Exclusion Versus Inclusion Criteria
- Determine Data to be collected
- How long & how often baby to be held?
- Policy and Procedures for securing tubes and lines

- Educate Staff
- Implement Holding Policy
- Revise Algorithm as needed

THANK YOU FOR YOUR SUPPORT!