



ACHIEVING RISK APPROPRIATE NICU CARE

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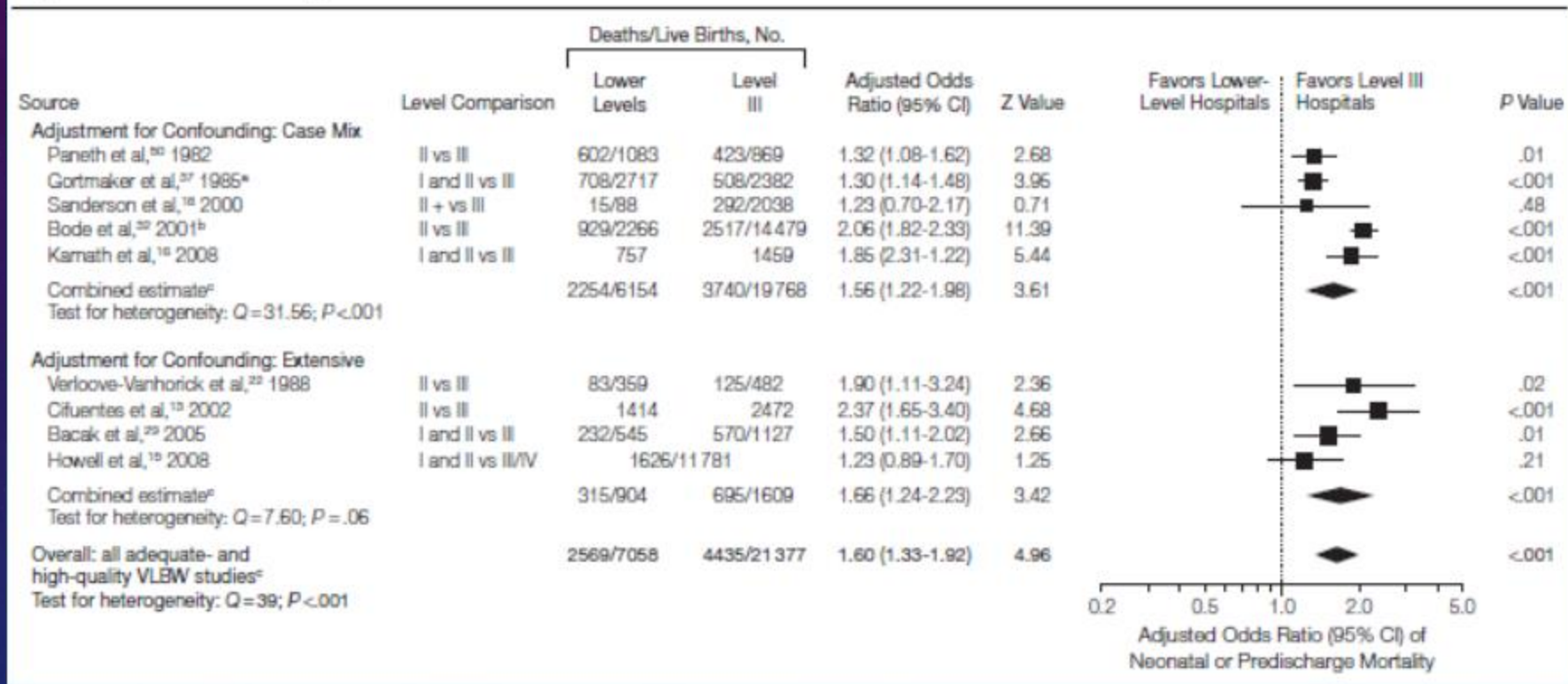
UNC SCHOOL OF MEDICINE

PROVISION OF RISK APPROPRIATE CARE

- Improving Outcomes: Provision of Risk Appropriate Care
- Evidence: risk of for very-low birth weight/very preterm infants at non-level III facilities
- Review of 30 years of evidence on perinatal regionalization
 - 104, 944 VLBW infants
 - VLBW ($\leq 1500\text{g}$) infants (37 studies)
 - OR 1.62, 95% CI 1.44-1.83
 - ELBW ($\leq 1000\text{g}$) infants (4 studies)
 - OR 1.64 95% CI 1.14-2.36
 - Very Preterm (≤ 32 weeks) infants (4 studies)
 - OR 1.55, 95% CI 1.21, 1.98

META-ANALYSIS OF HIGH QUALITY PUBLICATION ON VLBW INFANTS

Figure 3. Meta-analysis Results of Adequate- and High-Quality Publications on Very Low-Birth-Weight (VLBW) Infants, Stratified by Level of Adjustment for Confounding



PROVISION OF RISK APPROPRIATE CARE

- Healthy People 2020: MICH-33:
 - Increase the proportion of very low birth weight (VLBW) infants born at Level III hospitals or subspecialty perinatal centers
 - Baseline (Year): 75% (2003–06)
 - Target 84%
 - Numerator: Number of infants born very low birth weight (VLBW) at a subspecialty perinatal facilities (Level III facilities)
 - Denominator: Number of infants born VLBW

STATE CRITERIA FOR NICU LEVELS: FUNCTIONAL

- Population characteristics such as BW or gestational age (most often < 1.5 kg or <28 or <32 weeks)
- Respiratory care – supplemental O₂ concentration or duration; mode of ventilation or duration
- Neonatal surgery, cardiac surgery, ECMO
- 8 states use non-specific terms (eg mild, moderate, severe) that limit objectivity

STATE CRITERIA FOR NICU LEVELS: UTILIZATION

- Capacity: Minimum number of bed type per unit or per population base
- Volume: Deliveries or live births per year
- Occupancy: average daily census or percent capacity
- Case Mix:
 - VLBW admissions, VLBW patient days, ventilator days, or surgeries per year

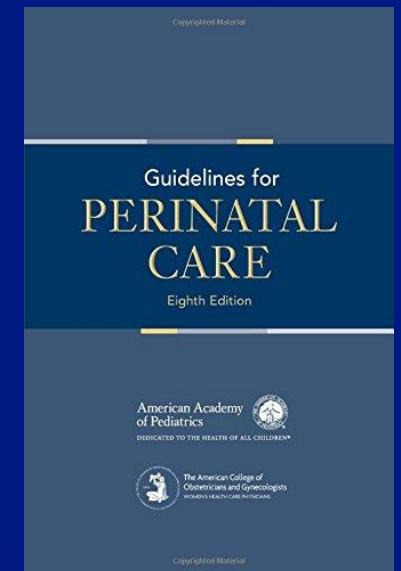
Levels of Neonatal Care

6th Edition (2007)

- Level I
- Level II A
- Level II B
- Level III A
- Level III B
- Level III C

7th Edition (2012)

- Level I
- Level II
- Level III
- Level IV



LEVEL I (BASIC)

- GPC 6th and 7th Edition
 - Provide neonatal resuscitation at every delivery, as needed
 - Provide care for infants born at 35-37 weeks who are physiologically stable
 - Stabilize infants born <35 weeks or who are ill until transfer to a higher level of care facility

LEVEL II (SPECIALTY CARE)

- GPC 6th and 7th Edition
 - Provide care for infants ≥ 32 weeks or ≥ 1500 grams who have physiological immaturity (e.g. apnea, inability to feed orally) or who are moderately ill with problems that are expected resolve rapidly and are not anticipated to need subspecialty services on an urgent basis.
 - Provide convalescent care after intensive care

LEVEL II (SPECIALTY CARE)

- GPC 6th Edition
 - IIA – assisted ventilation on a limited basis
 - IIB – mechanical ventilation for ≤ 24 hours or CPAP
- GPC 7th Edition – Combined II A and II B
 - II -assisted ventilation for ≤ 24 hours or CPAP

LEVEL II (SPECIALTY CARE)

- GPC 6th and 7th Edition
- Personnel and equipment continuously* available:
 - Neonatologists, NNPs
 - specialized nurses, respiratory therapists
 - Radiology and laboratory technicians
 - Portable x-ray machine
 - Blood gas analyzer

* II B requirement only

LEVEL III (SUBSPECIALTY CARE)

- GPC 6th Edition
- Provide sustained life support
 - III A – infants >1000 g or >28 wk, conventional ventilation (no HFV), minor surgical procedures
 - III B – infants <1000 g and <28 wk, severe and/or complex illness, HFV, iNO
 - III C – ECMO, CHD surgery requiring bypass

LEVEL III (SUBSPECIALTY CARE)

- GPC 7th Edition
- Provide sustained life support and comprehensive care for infants <32 wk and <1500 g, and all critically ill infants
- Provide a full range of respiratory support which may include conventional and/or HFO and iNO

LEVEL III (SUBSPECIALTY CARE)

- GPC 6th Edition (III B)
 - Prompt and on site access to a full range of pediatric medical subspecialists
 - Pediatric surgical specialists and pediatric anesthesiologists on site or at a closely related institution
- GPC 7th Edition (III)
 - Prompt and readily available access to a full range of pediatric medical subspecialists, pediatric surgical specialists, pediatric anesthesiologists and pediatric ophthalmologists on site or at a closely related institution by pre-arranged consultative agreement

LEVEL III (SUBSPECIALTY CARE)

- GPC 6th and 7th Edition
 - Capability to perform advanced imaging with interpretation on an urgent basis, including computed tomography, magnetic resonance imaging and echocardiography

LEVEL IV (SUBSPECIALTY CARE)

- GPC 6th Edition (III C)
 - Located within an institution with the capability to provide surgical repair of serious congenital heart anomalies that require cardio-pulmonary bypass, and/or ECMO for medical conditions.
- GPC 7th Edition (IV)
 - Located within an institution with the capability to provide surgical repair of complex congenital or acquired conditions.

LEVEL IV (SUBSPECIALTY CARE)

- GPC 6th Edition (III C)
 - Urgent access to pediatric medical subspecialists
 - Pediatric surgical specialists on site or at a closely related institution
- GPC 7th Edition (IV)
 - Immediate on-site access to pediatric medical and surgical subspecialists, and pediatric anesthesiologists

TEXAS MANDATES NICU VERIFICATION

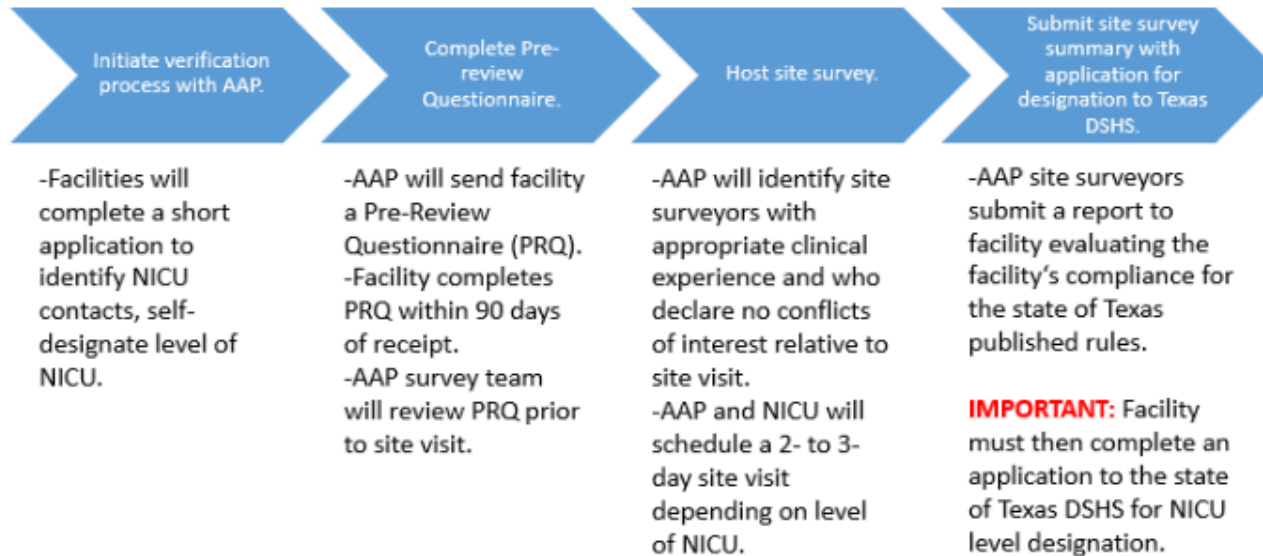
- House Bill 3433, 84th Legislature, required hospitals that provide neonatal care to have a Level, I, II, III or IV designation from TDSHS by Sept. 1 to receive Medicaid reimbursements for neonatal services provided.
- After September 1, 2018, hospitals enrolled in Texas Medicaid may be reimbursed for inpatient neonatal services only if the hospitals have received a neonatal level of care designation from the Department of State Health Services in accordance with 25 Texas Administrative Code §§133.181 -133.190.
 - Maternal levels of care September 1, 2020
- A hospital that does not meet the minimum requirements for any level of care designation for neonatal services will not be reimbursed for inpatient neonatal services rendered to Texas Medicaid
- The legislation required applications and site visits to receive an official designation.
- Hospitals apply for a certain level of NICU, fill out a questionnaire and provide documentation before the AAP or Texas Perinatal Services, a division of the nonprofit Texas EMS, Trauma & Acute Care Foundation sends a team to visit the NICU for two or three days.

AAP NICU VERIFICATION PROGRAM

- The state of Texas approved the AAP NICU Verification Program as a survey agency that can verify that your neonatal intensive care unit (NICU) facility meets the standards for desired level of care as outlined in the Texas Administrative Code (Texas Title 25, Chapter 133) and can provide the documentation needed for state designation to be eligible to receive payment through the Medicaid program for neonatal services.
- Why should a NICU facility select the AAP NICU Verification Program as a survey agency?
- The AAP is the leading authority in NICU verification, having developed the standards for each level of care described in the Texas rules.
- The AAP can provide consultation to your NICU facility related to the AAP perinatal guidelines.
- NICU facilities meeting the level of care described in the AAP policy will receive a certificate of recognition.
- Survey team
 - The survey team consists of experienced and credentialed neonatologists, neonatal nurses, and pediatric surgeons most of whom actively practice in Texas. The AAP NICU Verification Program provides NICU services for Level II, III, and IV Texas hospitals.

AAP NICU VERIFICATION PROGRAM

AAP NICU Verification Program Verification Process





That's all Folks!