

Pediatric Research Forum 2021 – Grand Round Speakers

- **Title: Envision NM 2.0 Maintenance of Certification (MOC), American Board of Medical Specialties (ABMS) Multi-Specialty Portfolio Program**
- **Category** (one of the above listed categories): Program
- **Authors:** Sylvia Negrete, MD; Patricia Roldan, MS; Elizabeth Yakes Jimenez, PhD, RDN, LD; Alberta S. Kong, MD, MPH; Vanessa Will, PhD
- **Identify one contact person** for a poster or a presenter if chosen for oral presentation:

Sylvia Negrete, MD

- **Abstract:** 300 count word limit

Physician participation in initiatives approved by the American Board of Medical Specialties (ABMS) Multi-Specialty Portfolio Program can earn them *25 Improvement in Medical Practice (IMP/Part IV) credit* from their ABMS Member Board for maintenance of certification (MOC) and *20 Category 1 Performance Improvement-Continuing Medical Education (PI-CME) credits* for physician assistants through the National Commission on Certification of Physician Assistants (NCCPA).

As an approved portfolio sponsor, Envision NM 2.0 has been approved by the ABMS Multi-Specialty Portfolio Approval Program Organization to approve QI Activities for *MOC (IMP/Part IV)* for physicians and *Category 1 PI-CME* credit for physician assistants

ONLY American Board of Pediatrics (ABP) Residents can “bank” Maintenance of Certification (MOC) (IMP/Part IV) credit that will be applied towards the MOC requirements once board certification is achieved. Pediatric residents are able to earn MOC credit for approved quality improvement projects that are completed during residency. Once the resident passes the (ABP) examination, they will be enrolled in MOC and the “banked MOC Part (IMP/IV credit)” will count!

Participating physicians, physician assistants and other health care team members can also earn *25 CME Credits* from UNM Health Science School Of Medicine Office Of Continuing Medical Education.

Associations between maternal iron-deficiency anemia and neonatal outcomes in New Mexico

In Progress Research

Brandi Bahringer, MD

Background: Iron deficiency anemia (IDA) in pregnant women is associated with adverse neonatal outcomes such as premature labor, low birth weight and adverse neurodevelopmental outcomes. Neonates born to mothers not identified as having IDA and without treatment may be at higher risk than those with mothers that receive treatment. In New Mexico, there is currently no data to evaluate this.

Objective: Evaluate the effect of maternal IDA on neonatal outcomes including birth weight, length of stay, gestational age and mortality. We hypothesized infants born to mothers with IDA are likely to have associated morbidity and mortality.

Methods: Retrospective chart review of infants identified as being born to mothers with possible IDA who were admitted to the NICU over 1 year was performed. Maternal charts were also reviewed. Chi-squared test or Fisher exact test used for categorical variables. Wilcoxon Rank Sum test used for median comparison. Risk of adverse outcome was adjusted for prematurity.

Results: 182 neonatal-maternal dyad charts were reviewed, 33 were excluded for major anomalies or multiple gestation. 69 mothers were identified having IDA. 63 were screened for IDA (98%). Only 52 mothers were treated for IDA (48%). No statistically significant difference was identified between IDA and non-IDA groups regarding gestational age, birth weight or length of stay.

Conclusions: In this study there was no statistically significant associated morbidity or mortality of neonates born to mothers with IDA in the state of New Mexico. The study did identify gaps in maternal medical care such as obtaining iron studies and treating for IDA. As IDA is easily identifiable and treatable, additional research into gaps in maternal medical care and potential interventions would be beneficial to the maternal-infant dyad.

Antibiotic use for children in the PICU with severe viral bronchiolitis

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Original Completed Research

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BACKGROUND: Viral bronchiolitis is not treated with antibiotics, but with supportive care. Antibiotics may be used for secondary bacterial pneumonia, which is difficult to diagnose in small children. Children with severe bronchiolitis are admitted to the PICU, and often receive empiric antibiotics.

OBJECTIVES: To examine clinical factors associated with systemic antibiotic use in severe bronchiolitis based on retrospective chart review of PICU patients.

METHODS: We identified children discharged from the UNMH PICU from January 2017-January 2019 diagnosed with severe viral bronchiolitis. Variables extracted included demographics, treatments, lab values and outcomes. Stata/SE 15.1 was used to calculate descriptive statistics and to examine relationships between clinical factors and antibiotic administration using a t-test, Pearson's chi-square test or Fisher's exact test.

RESULTS: Children (n=208) were on average 11.3 ± 8.6 (SD) months old with a length of stay of 10.8 ± 6.4 days. Seventy children (34%) received antibiotics. Fifteen children (7%) had a definitive diagnosis of bacterial pneumonia (positive tracheal culture). Children who received antibiotics were slightly younger than those who did not (average age 10.3 vs. 11.9 months; $p = 0.09$). Fifty-four percent of children on a ventilator (n=26) received antibiotics versus 31% of children who were not ventilated ($p=0.02$). Forty-one percent of children with elevated temperature ($\geq 38^{\circ}\text{C}$; n=115) received antibiotics versus 24% of children with normal temperature (n=89; $p=0.009$). Seventy-two percent of children with high CRP (>2 mg/L; n=18) received antibiotics versus 56% of children with normal CRP (n=18; $p=0.24$).

CONCLUSIONS: In the UNMH PICU, a substantial proportion of children with severe viral bronchiolitis receive antibiotics without a definitive diagnosis of bacterial pneumonia. These children were younger and sicker, with fever, elevated CRP and mechanical ventilation. An evidence-based, expert opinion supported, clinical decision-making algorithm is needed to better identify children that require systemic antibiotics in the setting of severe viral bronchiolitis.