

Improving Outcomes for Very Low Birth Weight Infants, One “Micro-step” at a Time

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When I provide counseling for expectant parents facing the imminent birth of an extremely preterm infant, I am often asked not only if their son or daughter will survive, but also if their child survives will he or she have a major disability. While there is no crystal ball for clinicians to confidently predict morbidity and mortality outcomes, balanced information should be conveyed to parents including the possibility of survival with and without major morbidity. This information can help provide parents with an

understanding of the quality of life other preterm infants have beyond their time in the neonatal intensive care unit (NICU)—as a child, adolescent and adult.

To help improve survival and morbidity for very low birth weight infants, it is important to stop and ask: has survival without major morbidity changed over the past 10 years, and what aspects of care do we need to focus more attention on? A recently published article *in Pediatrics* by Dr. Lee and colleagues ([10.1542/peds.2019-3865](#)) addresses these questions by analyzing data from the California Perinatal Quality Care Collaborative which represents > 90% of NICUs in the state. In this population-based study of almost 50,000 infants, the authors provide a closer look at trends for very low birth weight infants from 2008 to 2017. The primary outcome, survival without major morbidity, increased from 62% to 67.2%, with the greatest improvement seen for necrotizing enterocolitis and nosocomial infection. While these trends are promising, the persistent burden of bronchopulmonary dysplasia among the most immature survivors remains a challenge for researchers and clinicians in neonatal medicine, as the incidence is unchanged.

In an accompanying commentary, Drs. Roger Soll and William (Bill) Edwards ([10.1542/peds.2020-0436](#)) highlight additional areas for improvement. These include the need for better understanding of a premature infant's long-term health trajectory, the importance of continuing to decrease variation in outcomes across centers, and finally how to resolve the significant differences that persist in outcomes across various racial

and ethnic groups. These findings are valuable for counseling families, and in helping researchers focus attention on critical areas in need for improvement.

Let's keep pushing forward to improve outcomes for all infants, no matter how small, one "micro-step" at a time.

- [Resuscitation Opportunities for Fellows of Very Low Birth Weight Infants in the Vermont Oxford Network](#)
- [Lung Function of Adults Born at Very Low Birth Weight](#)
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