NPM 5: RISK-APPROPRIATE PERINATAL CARE

GOAL

To ensure that higher risk mothers and newborns deliver at appropriate level hospitals.

SIGNIFICANCE

Very low birth weight infants (<1,500 grams or 3.25 pounds) are the most fragile newborns with a risk of death 100 times higher than that of normal birth weight infants (≥2,500 grams or 5.5 pounds).[1] VLBW infants are significantly more likely to survive and thrive when born in a facility with a level-III Neonatal Intensive Care Unit (NICU), a subspecialty facility equipped to handle high-risk neonates. In 2012, the AAP provided updated guidelines on the definitions of neonatal levels of care to include Level I (basic care), Level II (specialty care), and Levels III and IV (subspecialty intensive care) based on the availability of appropriate personnel, physical space, equipment, and organization.[2] Given overwhelming evidence of improved outcomes, the AAP recommends that VLBW and/or very preterm infants (<32 weeks' gestation) be born in only level III or IV facilities.[2]

DEFINITION

Numerator: Number of VLBW infants born in a hospital with a level III or higher NICU.
Denominator: Number of VLBW infants (<1,500 grams).

STATUS

Table 1 lists the number of VLBW infants that meet the criteria for the above-listed numerator and denominator. As evidenced by this table, the percentage of VLBW infants born at Christiana Hospital (the single Level III birthing hospital in Delaware) has increased from 69.4 percent to 90.0 percent from 2021 to 2023.

Table 1. Number and Percentage of VLBW Infants Born at Christiana Care, Delaware Health Statistics Center.

Year	Numerator	Denominator	Percentage
2021	34	49	69.4%
2022	97	112	86.6%
2023	108	120	90.0%

[1] Ely DM, Driscoll AK. Infant Mortality in the United States, 2020: Data From the Period Linked Birth/Infant Death File. Natl Vital Stat Rep. 2022;71(5):1-18.
[2] American Academy of Pediatrics Committee on Fetus And Newborn. Levels of neonatal care. Pediatrics. 2012;130(3):587-597. doi:10.1542/peds.2012-1999