

# Neonatal Intensive Care: All Condition Readmissions Without Gestational Age Reported

## Technical Specifications

**Eligible Population:** Indication of NICU stay in the first 30 days of life without a specified congenital anomaly.

**Numerator Statement:** Number of infants admitted to the NICU during their initial birth hospitalization who were readmitted to the hospital within 7, 14, 30, or 90 days of discharge, assessed cumulatively.

**Denominator Statement:** Number of eligible newborns discharged from the NICU.

**Adjusted Metric:** Rates are adjusted for race, gender, and complications. Gestational age is also included in the adjustment. Note that these variables may not be available in all datasets. The adjusted results of readmissions using all of these variables are described as Adjusted Model with complications of prematurity, which has the greatest face validity for practicing physicians, based on data that support the idea that each of these variables contributes in some way to a patient's risk for readmission. Medical complication variables and/or gestational age may be excluded (Adjusted Model) from analyses that focus solely on the overall quality of care of the NICU; some variation in readmission rates may occur because of differential rates of complications at the hospital level. Gestational age and birth weight may be imputed using logistic regression with five imputations. The variables used to impute were length of stay, days per NICU CPT code, complications, and whether the patient ever entered the well-baby grower care (CPT code). After imputing, models and rates were determined by stratifying by imputation then combining to determine final values.

**Supplement:** Codes to identify NICU stay and complications and Tables 1-5 (see Supporting Documents) with more information.