

# From The National Perinatal Information Center *Neonatal Special Care Statistics: CY 2018 Update with CY 2017 and Five-Year Trend Comparisons*

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The National Perinatal Information Center (NPIC) is driven by data, collaboration and research to strengthen, connect and empower our shared purpose of improving patient care.

For over 30 years, NPIC has worked with hospitals, public and private entities, patient safety organizations, insurers and researchers to collect and interpret the data that drives better outcomes for mothers and newborns.



In the calendar year (CY) 2018, the NPIC Perinatal Center Data Base (PCDB) profiled 309,497 newborns across 80 hospitals. 91.5 % percent of those were born at the reporting hospitals, and 4.0 % were transferred in following delivery, presumably for a higher level of care. The 2018 rate of infants transferred in is unchanged from the CY 2017 rate.

In CY 2018, 15.5 % percent of total neonates were admitted to a special care nursery, whether to an intensive care or intermediate care bed. When NPIC isolated just those facilities that participated in the Trend Data Base for the previous five year period (2014-2018), the 2018 admission rate was 16.7%, reflecting a stable trend from the 16.1% for the same cohort of hospitals in 2014.

Below is a table that profiles key metrics from the NPIC Calendar Year 2018 Perinatal Center Data Base (PCDB) in comparison to CY 2017 and the NPIC Trend Data Bases for years 2013-2017 and 2014-2018.

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**Key Metrics from the NPIC Perinatal Center Database (PCDB)**

	<b>2017</b>	<b>2018</b>
<b>Special Care Admissions</b>	<b>52,658</b>	<b>50,999</b>
Percent of Total neonates	14.4%	15.5%
Percent of special care admissions transferred from an acute care facility	4.0%	4.0%
Special Care Admission Trends	16.2 to 15.8 % * (CY 2013-2017)	16.1 to 16.7% (CY2014-2018)
Special Care ALOS Trends	15.5 days to 15.0 days	14.3 days to 14.3 days
Percent ≤ 1500 grams (ALOS)	9.2 % (48.6)	10.4% (50.0)
Percent 1500-2499 grams (ALOS)	28.3% (15.6)	26.9% (16.5)
Percent ≥ 2500 grams (ALOS)	53.7% (7.0)	54.9% (6.8)
Percent discharge to home with or without home health	85.2%	85.0%
Percent died	1.2%	1.2%
Complication rates:		
MAS for Inborns	1.4%	1.3%
MAS for Transfers In	2.5%	1.1%
IVH Grade III	.3%	.4%
IVH Grade IV	.4%	.4%
Infection Septicemia/Bacteremia	6.1%	5.1%
RDS	18.7%	19.2%
TTN	18.0%	17.7%
NEC	.7%	.7%
PDA without repair	5.9%	6.1%
PDA with repair	.3%	.4%
IE/pneumothorax	3.1%	3.2%
ROP with eye procedure	2.7%	1.9%
<b>Complications for neonates 500-1499 grams : Trends</b>	<b>2013-2017</b>	<b>2014-2018</b>
Proportion of BPD to RDS	20.2% to 13.7% *	17.4%-16.3%*
NEC	4.4% to 4.6%	4.3%-3.8%
IVH Grade III or IV	5.4% to 4.6%	4.4%-4.9%
<b>Linked mother/infant records: Rate of infant special care admission for infant linked to a mother with a specific condition</b>		
Hypertension	22.8%	23.1%
Diabetes Mellitus	34.8%	36.4%
Obesity	17.1%	18.2%
Thyroid dysfunction	16.6%	17.7%
Primary C-section ≥ 37 weeks	12.9%	14.1%
Repeat C-section ≥ 37 weeks	8.0%	9.4%

\*Significant change

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## Increased Attention on Special Care Admissions

As we stated in our review of CY 2017 Special Care statistics from the Perinatal Center Data Base (Neonatology Today, August 2018), the ultimate goal is to keep infants out of the special care nursery. While there will always be a need for neonatal special care services, greater payer scrutiny is likely to drive some decreases in admissions as well as external attention on unnecessary special care admissions as a quality of care issue.

The Joint Commission's newest measure for the Perinatal Care Measure set is PC-06: Unexpected Complications in Term Newborns. (1) This measure must be reported by almost all hospitals with more than 300 deliveries annually and includes analysis of 100% of all newborn discharges starting with 1/1/2019 discharges. (This is a departure from other PC measures that permit sampling). The PC-06 denominator is all live-born single term newborns 2500 grams or over in birth weight, excluding those that have congenital anomalies, (1) pre-existing fetal conditions or indications of maternal substance abuse. Numerator cases reflect severe and moderate complications as defined by the TJC algorithm in consultation with the measure developer, the California Maternal Quality Care Collaborative. PC-06 is divided into an overall rate (PC-06.0), a severe rate (PC-06.1) and moderate rate (PC-06.2). The severe category includes infants transferred out to another acute care facility (for a higher level of care). Since not all transfers are for a higher level of care, TJC abstraction guidelines include the following language:

“For PC-06 Only: If a newborn is transferred to another acute care facility for purposes other than medical treatment or the need for a higher level of care, abstract allowable value 8 (not documented or unable to determine). Examples include: Newborn is transferred to another facility covered by their health-care plan or for disaster evacuation.”

This qualifier will require hospitals to review their transferred out cases carefully to ensure only those meeting the measure definition are included in their numerator. On the positive side, the measure may also incentivize greater antepartum referral/transfer of high-risk pregnancies to the appropriate level of care.

### References

- 1 Source: *Specification Manual for Joint Commission National Quality Measures v2018B1*, [www.jointcommission.org](http://www.jointcommission.org).

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