

## V.13.4 Special Report: Clinical and Utilization Profile for Term Inborns by Gestational Age

### I. Introduction

This V13.4 Special Report is a follow up to our V13.3 Special Report on the August, 2012 reVITALize Conference to standardize clinical obstetric definitions. This Report profiles your hospital's term infants subdivided into the reVITALize definitions of Early Term, Full Term, Late Term and Post Term. The Special Report looks at the volume, utilization and clinical profile for each category of term inborn using numeric gestational age. Data are provided for your hospital in comparison to your subgroup average and the NPIC/QAS data base average.

### II. Categories of Term Infants

Information was provided in the NPIC/QAS V13.3 special report related to the reVITALize project's efforts to standardize obstetric data definitions. Wide spread use of these operational definitions will improve the advancement and integration of performance measurement, registries, research, electronic health records, and birth certificates.

Most of our current members (over 80%) provide numeric gestational age (completed weeks) data for the majority of their discharges (over 94% of inborns or deliveries). Numeric gestational age data allows for discrimination of subcategories within the "term" period which is defined as greater than or equal to 37 weeks and 0 days using best EDD. The four subcategories for term infants put forth by reVITALize are:

- Early term - 37 weeks and 0 days through 38 weeks and 6 days
- Full term - 39 weeks and 0 days through 40 weeks and 6 days
- Late term - 41 weeks and 0 days through 41 weeks and 6 days
- Post term - Greater than or equal to 42 weeks and 0 days

ICD 9 codes group all "term" infants together in to the category: "greater than 37 weeks completed gestation". Infants less than 37 weeks completed gestation are grouped into ranges by the ICD 9 codes, preventing more refined week-specific analyses. If your hospital does not provide patient specific numeric gestational age, please connect with your NPIC/QAS hospital liaison to discuss submission of this information or other additional data elements.

We look forward to incorporating more gestational age specific analyses in future Special Reports.

### III. Description of Tables and Graphs

The tables and graphs in this special report provide clinical and utilization data for term newborns using numeric gestational age. Numeric gestational age is used to subcategorize term

inborns as: early term, full term, late term, and post-term, consistent with the reVITALize Data Definitions.

Data for your hospital is provided as well as data for your NPIC/QAS subgroup and the NPIC/QAS database average. *The report includes data for discharge date range 1/1/13 – 12/31/13.* Medical record numbers for the cases contributing to your hospital's rates are available by emailing [mservices@npic.org](mailto:mservices@npic.org). We are also happy to answer any questions you may have regarding this report.

### **Table 1: Overview**

**Section A: Inborns** displays the count of total inborns, the count and percent of inborns with numeric gestational age, and the total number and percent of *term* inborns with numeric gestational age. Data are provided for your hospital, your NPIC/QAS subgroup, and for the NPIC/QAS database.

**Section B: Categories of Term Inborns** enumerates the count and percent of term inborns for each of these categories: early term, full term, late term, and post-term. The count of total term inborns with numeric gestational age is repeated at the bottom of the table. Data are provided for your hospital, your NPIC/QAS subgroup, and for the NPIC/QAS database.

**\* In Table 1 Section B and each of the following tables and graphs, data are not displayed for your hospital if you did not provide a sufficient number of records with numeric gestational age.**

### **Table 2: Utilization Profile**

This table displays average length of stay (ALOS), average charge, case mix index (CMI), case mix adjusted average length of stay (CMI Adjusted ALOS) and case mix adjusted average charge (CMI Adjusted Average Charge) for each of the subcategories of term inborns. These data are provided for your hospital, your NPIC/QAS subgroup, and for the NPIC/QAS database.

### **Table 3: Clinical Profile**

This table enumerates the count and percent for each of the subcategories of term inborns for these clinical issues: total admitted to special care nursery; total with transitory tachypnea of newborn (TTN) dx 770.6; and total with unexpected newborn complications (measure specifications provided in the NPIC/QAS Quarterly Report Appendix K). These data are provided for your hospital, your NPIC/QAS subgroup, and for the NPIC/QAS database.

### **Graphs 1 - 4: Moderate Unexpected Newborn Complication (UNC) Rates for Term Inborns by Gestational Age Category**

These graphs display moderate unexpected newborn complication (UNC) rates for each of the four categories of term inborns: early term (graph 1); full term (graph 2); late term

(graph 3); and post term (graph 4). Data are displayed for your hospital in comparison to your subgroup average and the database average, with a 95% confidence interval.

**Graphs 5 - 8: Severe Unexpected Newborn Complication (UNC) Rates for Term Inborns by Gestational Age Category**

These graphs display severe unexpected newborn complication (UNC) rates for each of the four categories of term inborns: early term (graph 5); full term (graph 6); late term (graph 7); and post term (graph 8). Data are displayed for your hospital in comparison to your subgroup average and the database average, with a 95% confidence interval.

**Graphs 9 - 10: Moderate and Severe Unexpected Newborn Complication (UNC) Rates for Total Term Inborns**

These graphs display moderate (graph 9) and severe (graph 10) unexpected newborn complication (UNC) rates for all four categories of term inborns combined. Data are displayed for your hospital in comparison to your subgroup average and the database average, with a 95% confidence interval.

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**REFERENCES**

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<sup>1</sup> <http://www.acog.org/reVitalize>

<b>V13.4 Special Report: Clinical and Utilization Profile for Term Inborns by Gestational Age</b>			
<b>Table 1: Overview</b>			
	<b>Hospital SAMPLE</b>	<b>Subgroup Average</b>	<b>Database Average</b>
<b>Section A: Inborns</b>			
Total Inborns	2,409	4,229	4,025
Total Inborns with numeric GA	2,374	4,093	4,187
% of Total Inborns	98.6%	96.0%	96.5%
Total Term Inborns with numeric GA	2,002	3,595	3,738
% of Total Inborns with numeric GA	84.3%	87.4%	89.6%
<b>Section B: Categories of Term Inborns</b>			
<b>Early Term (37 0/7 - 38 6/7; 37 - 38 completed weeks)</b>			
Count	624	962	999
% of Total Term Inborns with numeric GA	31.2%	27.2%	26.5%
<b>Full Term (39 0/7 - 40 6/7; 39 - 40 completed weeks)</b>			
Count	1,261	2,290	2,409
% of Total Term Inborns with numeric GA	63.0%	63.0%	64.7%
<b>Late Term (41 0/7 - 41 6/7; 41 completed weeks)</b>			
Count	107	327	315
% of Total Term Inborns with numeric GA	5.3%	9.3%	8.4%
<b>Post Term (≥ 42 0/7; 42 or more completed weeks)</b>			
Count	10	15	15
% of Total Term Inborns with numeric GA	0.5%	0.6%	0.5%
<b>Total Term (37 - 50 completed weeks)</b>			
Count	2,002	3,595	3,738
% of Total Term Inborns with numeric GA	100.0%	100.0%	100.0%

**V13.4 Special Report:Utilization Profile for Term Inborns by Gestational Age**  
**Table 2: Utilization Profile**

	<b>Hospital SAMPLE</b>	<b>Subgroup Average</b>	<b>Database Average</b>
<b>Average Length of Stay</b>			
Early Term	2.8	3.0	2.8
Full Term	2.4	2.5	2.4
Late Term	2.4	2.4	2.4
Post Term	2.8	3.0	2.8
Total Term	2.5	2.6	2.5
<b>Average Charge</b>			
Early Term	\$6,060	\$14,499	\$8,681
Full Term	\$4,142	\$9,084	\$6,298
Late Term	\$4,504	\$8,081	\$6,067
Post Term	\$6,025	\$11,560	\$8,025
Total Term	\$4,769	\$10,453	\$6,922
<b>Case Mix Index (CMI)</b>			
Early Term	0.2821	0.2666	0.2068
Full Term	0.1592	0.1725	0.1514
Late Term	0.1587	0.1552	0.1488
Post Term	0.1647	0.1897	0.1611
Total Term	0.1976	0.1963	0.1661
<b>CMI-Adjusted ALOS</b>			
Early Term	10.1	11.3	13.3
Full Term	14.8	14.5	16.1
Late Term	15.2	15.5	16.1
Post Term	17.0	15.9	17.5
Total Term	12.7	13.4	15.2
<b>CMI-Adjusted Average Charge</b>			
Early Term	\$21,481	\$54,375	\$41,974
Full Term	\$26,012	\$52,652	\$41,587
Late Term	\$28,386	\$52,083	\$40,787
Post Term	\$36,589	\$60,933	\$49,799
Total Term	\$24,134	\$53,240	\$41,675

**V13.4 Special Report:Utilization Profile for Term Inborns by Gestational Age**  
**Table 3: Clinical Profile**

	<b>Hospital SAMPLE</b>	<b>Subgroup Average</b>	<b>Database Average</b>
<b>Total admitted to special care nursery *</b>			
Early Term	125	118	105
% of Total Early Term	20.0%	12.5%	11.2%
Full Term	150	176	166
% of Total Full Term	11.9%	7.9%	7.3%
Late Term	21	31	29
% of Total Late Term	19.6%	10.1%	8.8%
Post Term	1	2	2
% of Total Post Term	10.0%	14.3%	11.2%
<b>Total Term</b>	<b>297</b>	<b>327</b>	<b>302</b>
% of Total Term	14.8%	9.3%	8.4%
<b>Total with Transitory Tachypnea of Newborn (TTN) - dx 770.6</b>			
Early Term	25	28	34
% of Total Early Term	4.0%	2.9%	3.0%
Full Term	47	43	57
% of Total Full Term	3.7%	2.0%	2.1%
Late Term	10	7	8
% of Total Late Term	9.4%	2.5%	2.2%
Post Term	1	0	1
% of Total Post Term	10.0%	3.5%	2.2%
<b>Total Term</b>	<b>83</b>	<b>78</b>	<b>99</b>
% of Total Term	4.2%	2.3%	2.4%

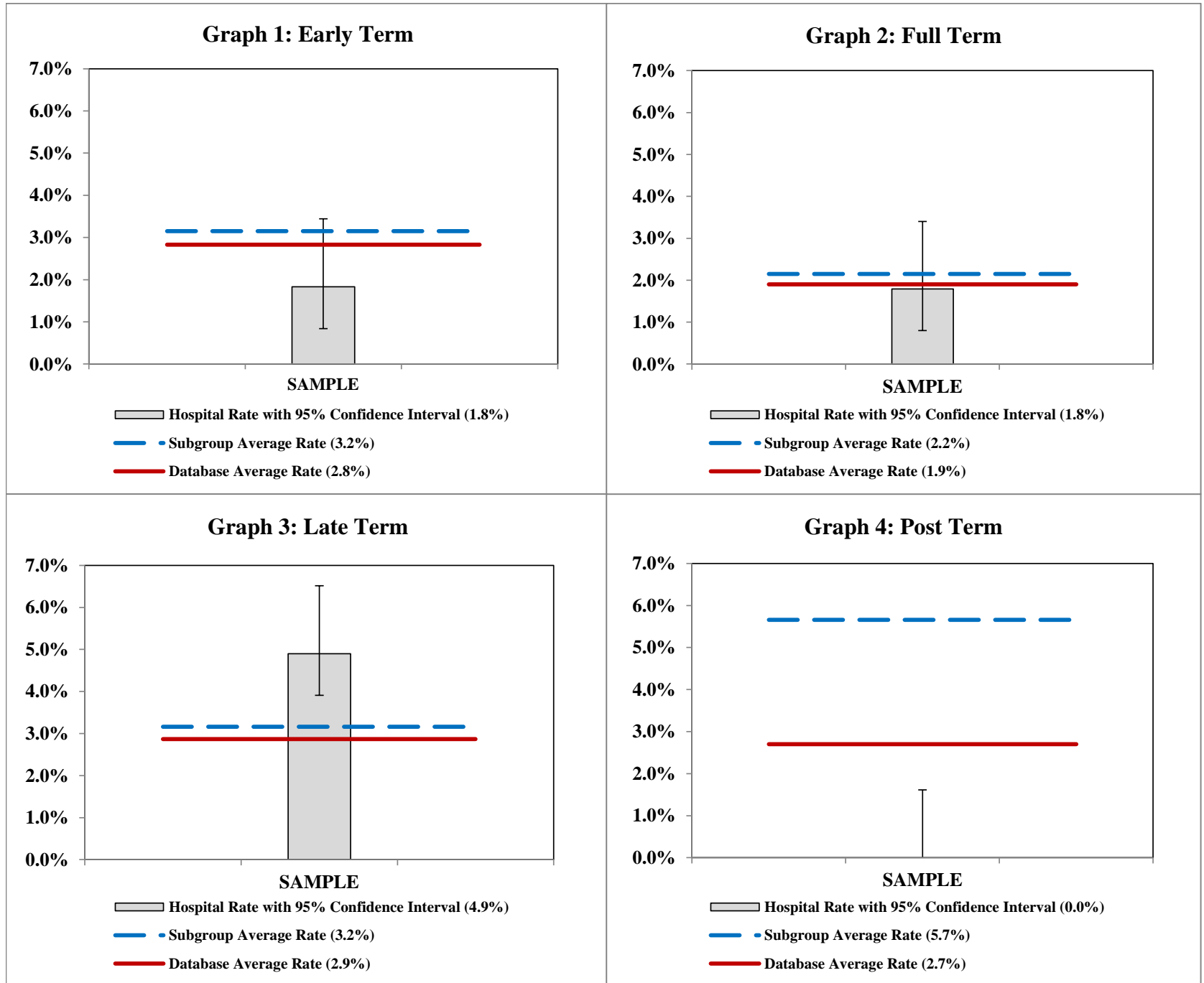
\* Special Care discharges are those having NICU or NINT days > 0 and/or NICU or NINT charges > 0

**V13.4 Special Report: Utilization Profile for Term Inborns by Gestational Age**  
**Table 3: Clinical Profile (continued)**

	<b>Hospital SAMPLE</b>	<b>Subgroup Average</b>	<b>Database Average</b>
<b>Total with Unexpected Newborn Complications (UNC) *</b>			
Early Term (numerator/denominator)	18/492	36/758	34/804
Total UNC Rate	3.7%	4.5%	4.2%
Moderate UNC Rate	1.8%	3.2%	2.8%
Severe UNC Rate	1.8%	1.4%	1.4%
Full Term (numerator/denominator)	28/1,176	73/2,108	68/2,236
Total UNC Rate	2.4%	3.4%	3.0%
Moderate UNC Rate	1.8%	2.2%	1.9%
Severe UNC Rate	0.6%	1.2%	1.1%
Late Term (numerator/denominator)	9/102	15/306	14/295
Total UNC Rate	8.8%	5.2%	4.7%
Moderate UNC Rate	4.9%	3.2%	2.9%
Severe UNC Rate	3.9%	2.0%	1.9%
Post Term (numerator/denominator)	1/10	1/14	1/15
Total UNC Rate	10.0%	8.0%	4.9%
Moderate UNC Rate	0.0%	5.7%	2.7%
Severe UNC Rate	10.0%	2.3%	2.2%
Total Term (numerator/denominator)	56/1,780	125/3,186	117/3,349
Total UNC Rate	3.2%	3.8%	3.4%
Moderate UNC Rate	2.0%	2.5%	2.2%
Severe UNC Rate	1.2%	1.3%	1.2%

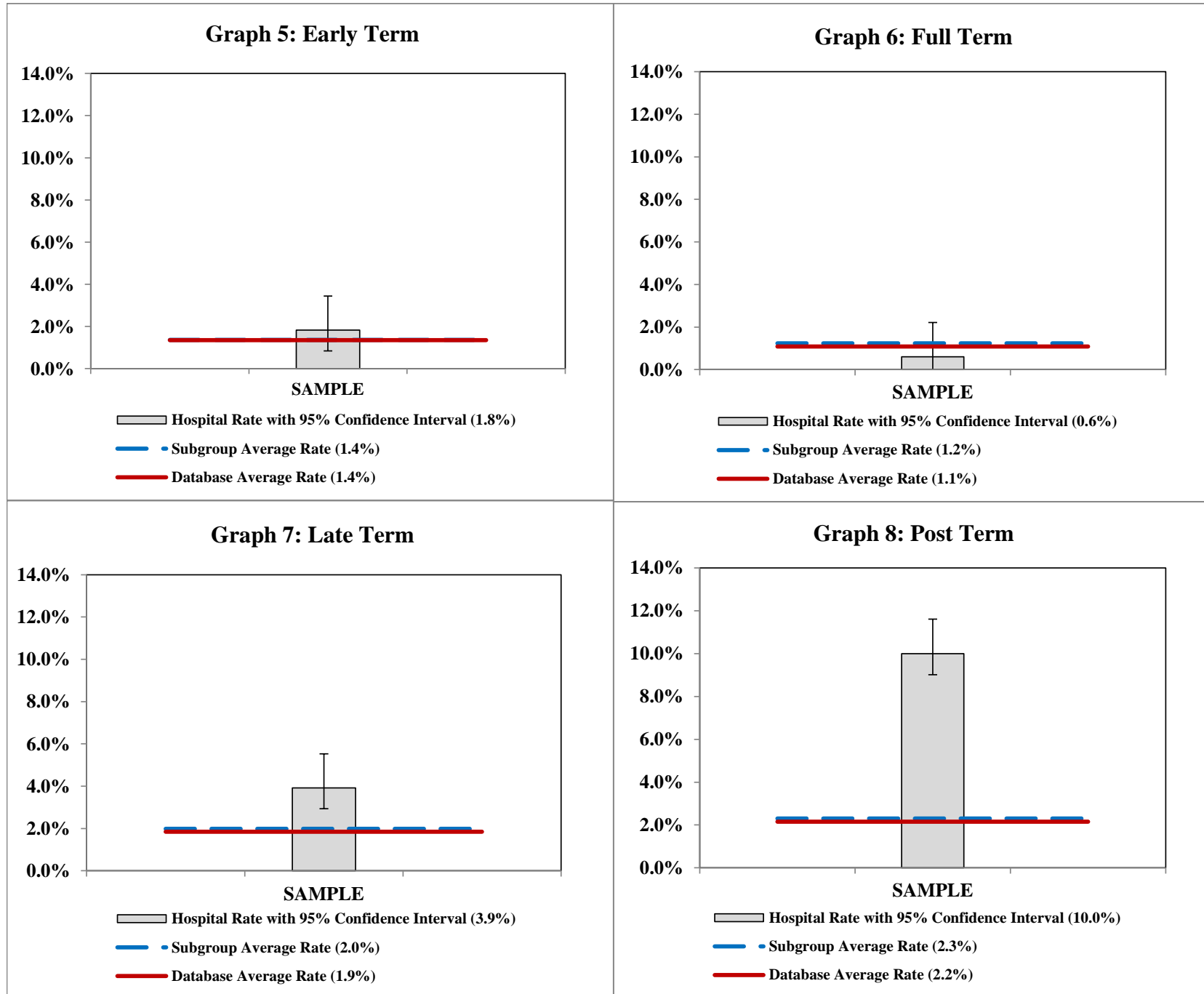
\* See Quarterly Report Appendix K for complete measure specifications, including numerator/denominator inclusions and exclusions.

**Graphs 1 - 4: Moderate Unexpected Newborn Complication (UNC) Rates by GA Category**  
**NPIC ID: SAMPLE**



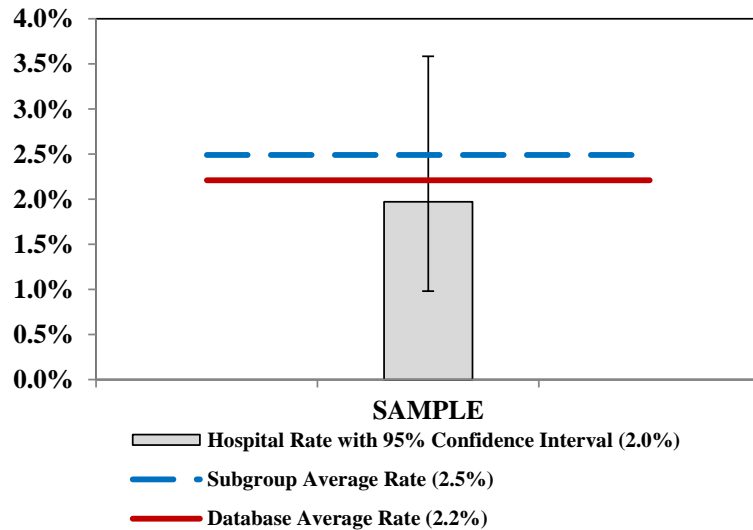


**Graphs 5 - 8: Severe Unexpected Newborn Complication (UNC) Rates by GA Category**  
**NPIC ID: SAMPLE**



**Graphs 9 - 10: Unexpected Newborn Complication (UNC) Rates - Total Term Inborns**  
**NPIC ID: SAMPLE**

**Graph 9: Moderate UNC Rates  
Total Term Inborns**



**Graph 10: Severe UNC Rates  
Total Term Inborns**

