



PEDIATRIC QUALITY INDICATORS (PDI) PARAMETER ESTIMATES ICD-9-CM Version 6.0

Prepared for:

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Executive Summary

This document provides statistical parameters associated with version 6.0 of Agency for Healthcare Research and Quality (AHRQ) Quality Indicators™ (QI) Inpatient Quality Indicators (IQI). The parameter estimates derived for the AHRQ QI are based on analysis of the 2012 Agency for Healthcare Research and Quality's Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID). HCUP is a family of health care databases and related software tools and products developed through a Federal-State-Industry partnership.¹ HCUP includes the largest collection of longitudinal hospital care data in the United States, with all-payer, encounter-level information beginning in 1988. The SID contain all-payer, encounter-level information on inpatient discharges, including clinical and resource information typically found on a billing record, such as patient demographics, up to 30 International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) diagnoses and procedures, length of stay (LOS), expected payer, admission and discharge dates and discharge disposition. To calculate parameter estimates we used a subset of 36 states that report information about whether a diagnosis was present on admission (POA) and information on the timing of procedures during the hospitalizations representing 82 percent of the US community hospital discharges.²

Two types of parameters are listed here. The majority of the document is devoted to listing covariates and coefficients for risk adjustment logistic regression models. The document also lists weights used to calculate the composite indicator, PDI #19. The regression coefficients are used by the prediction module to calculate risk-adjusted rates that account for differences in patient populations across providers or across areas. Covariates that are considered as potential risk adjusters include gender and age, birth weight, congenital anomalies, Major Diagnostic Categories (MDC), Modified Diagnosis-Related Group (MDRG) categories, patient point-of-

origin and whether they were transferred from another facility, and some indicator specific categories. Descriptions of some variable categories are provided in the Appendix tables at

¹ The AHRQ QI program would like to acknowledge the HCUP Partner organizations that participated in the HCUP SID: **Alaska** State Hospital and Nursing Home Association, **Arizona** Department of Health Services, **Arkansas** Department of Health, **California** Office of Statewide Health Planning and Development, **Colorado** Hospital Association, **Connecticut** Hospital Association, **Florida** Agency for Health Care Administration, **Georgia** Hospital Association, **Hawaii** Health Information Corporation, **Illinois** Department of Public Health, **Indiana** Hospital Association, **Iowa** Hospital Association, **Kansas** Hospital Association, **Kentucky** Cabinet for Health and Family Services, **Louisiana** Department of Health and Hospitals, **Maine** Health Data Organization, **Maryland** Health Services Cost Review Commission, **Massachusetts** Division of Health Care Finance and Policy, **Michigan** Health & Hospital Association, **Minnesota** Hospital Association (provides data for Minnesota and **North Dakota**), **Missouri** Hospital Industry Data Institute, **Montana** MHA - An Association of Montana Health Care Providers, **Nebraska** Hospital Association, **Nevada** Department of Health and Human Services, **New Jersey** Department of Health, **New Mexico** Department of Health, **New York** State Department of Health, **North Carolina** Department of Health and Human Services, **North Dakota** (data provided by the Minnesota Hospital Association), **Ohio** Hospital Association, **Oklahoma** State Department of Health, **Oregon** Association of Hospitals and Health Systems, **Pennsylvania** Health Care Cost Containment Council, **Rhode Island** Department of Health, **South Carolina** Budget & Control Board, **South Dakota** Association of Healthcare Organizations, **Tennessee** Hospital Association, **Texas** Department of State Health Services, **Utah** Department of Health, **Vermont** Association of Hospitals and Health Systems, **Virginia** Health Information, **Washington** State Department of Health, **West Virginia** Health Care Authority, **Wisconsin** Department of Health Services, **Wyoming** Hospital Association

² The states included in the analysis are Alaska, Arkansas, Arizona, California, Colorado, Florida, Georgia, Hawaii, Iowa, Illinois, Indiana, Kansas, Kentucky, Massachusetts, Maryland, Maine, Michigan, Minnesota, Montana, North Carolina, Nebraska, New Jersey, New Mexico, Nevada, New York, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Virginia, Vermont, Washington, Wisconsin.

the end of the document. Every covariate in every model is a binary indicator variable, coded using 0 or 1. The AHRQ QI software user does not need to manipulate or adjust these coefficients; rather this document is intended to make it transparent to the user how the risk adjusted QI rates are calculated.

The document provides a risk adjustment coefficient table for each risk-adjusted PDI, with the exception of PDI #11 Postoperative Wound Dehiscence Rate. Certain indicators (such as PDI #11 Postoperative Wound Dehiscence Rate) are not risk-adjusted because materially important risk factors (e.g., post-operative coughing) are not available in the Healthcare Cost and Utilization Project (HCUP) State Inpatient Database (SID).

Several PDI have populations at risk that are complex, and are therefore stratified in a manner described in the technical specifications so analysts may examine observed rates for each stratum. Categorical variables are used to identify the strata. Whereas the risk adjustment models in some of the other AHRQ QI modules fit individual models for individual QI strata, which results in stratum-specific coefficients for each variable in the models, the PDI module includes at most one risk adjustment model per QI, pooling the data across strata to fit coefficients on the covariates, and using binary indicator covariates to fit a separate regression intercept for each stratum. The variables that identify the strata, and whose coefficients are used to calculate the stratum-specific intercepts, are described in Table A.6.

Additional information on the risk adjustment process and composite indicators may be found in *Quality Indicator Empirical Methods*, available on the AHRQ QI™ website. (<http://www.qualityindicators.ahrq.gov/modules/Default.aspx>)

Table 1. Risk Adjustment Coefficients for PDI 01 Accidental Puncture or Laceration Rate

| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr> Chi-Square |
|------------|---|----|----------|----------------|-----------------|----------------|
| Intercept | Intercept | 1 | -11.5388 | 0.271 | 1813.249 | <.0001 |
| AGE_1_2 | Age Days < 179 | 1 | 0.5207 | 0.1165 | 19.9652 | <.0001 |
| AGE_3 | Age Days 180-364 | 1 | 0.1219 | 0.17 | 0.5138 | 0.4735 |
| AGE_5 | Age 4-9 years | 1 | 0.0226 | 0.1337 | 0.0284 | 0.8661 |
| AGE_6 | Age 10-14 years | 1 | 0.2707 | 0.1319 | 4.216 | 0.04 |
| AGE_7 | Age 15-17 years | 1 | 0.3233 | 0.1298 | 6.2024 | 0.0128 |
| GENDER_CAT | Gender: 1=Female 0=Male | 1 | -0.088 | 0.0674 | 1.7052 | 0.1916 |
| HPPD01_2 | Only minor therapeutic procedure with any or no diagnostic procedures | 1 | 2.0653 | 0.265 | 60.7581 | <.0001 |
| HPPD01_3 | One major therapeutic without diagnostic procedure | 1 | 4.1365 | 0.2738 | 228.2577 | <.0001 |
| HPPD01_4 | One major therapeutic with only minor diagnostic procedure(s) | 1 | 4.8574 | 0.2925 | 275.8191 | <.0001 |
| HPPD01_5 | One major therapeutic with major diagnostic procedure(s) | 1 | 4.5428 | 0.4068 | 124.7179 | <.0001 |
| HPPD01_6 | Two major therapeutic procedures with any or no diagnostic procedures | 1 | 6.1323 | 0.2565 | 571.3857 | <.0001 |
| HPPD01_7 | Three or more major therapeutic procedures with any or no diagnostic procedures | 1 | 7.0295 | 0.2527 | 773.8227 | <.0001 |
| CCS33 | Cancer of kidney and renal pelvis | 1 | 1.5934 | 0.5224 | 9.3018 | 0.0023 |
| CCS51 | Other endocrine disorders | 1 | 0.4413 | 0.1947 | 5.1375 | 0.0234 |
| CCS52 | Nutritional deficiencies | 1 | 0.3654 | 0.1363 | 7.19 | 0.0073 |
| CCS81 | Other hereditary and degenerative nervous system conditions | 1 | -0.601 | 0.2902 | 4.2879 | 0.0384 |
| CCS108 | Congestive heart failure nonhypertensive | 1 | -0.4464 | 0.2328 | 3.677 | 0.0552 |
| CCS138 | Esophageal disorders | 1 | 0.2581 | 0.1117 | 5.3427 | 0.0208 |
| CCS210 | Systemic lupus erythematosus and connective tissue disorders | 1 | 1.7554 | 0.529 | 11.0104 | 0.0009 |
| MDC_1 | MDC 1: Nervous System | 1 | -0.744 | 0.1967 | 14.3009 | 0.0002 |
| MDC_3 | MDC 3: Ear Nose Mouth And Throat | 1 | -1.2805 | 0.2101 | 37.1474 | <.0001 |
| MDC_4 | MDC 4: Respiratory System | 1 | 0.4835 | 0.1768 | 7.4818 | 0.0062 |

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| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr> Chi-Square |
|-----------|---|----|----------|----------------|-----------------|----------------|
| MDC_5 | MDC 5: Circulatory System | 1 | 0.0602 | 0.1237 | 0.237 | 0.6264 |
| MDC_6 | MDC 6: Digestive System | 1 | 0.854 | 0.1054 | 65.6617 | <.0001 |
| MDC_7 | MDC 7: Hepatobiliary System And Pancreas | 1 | 0.8863 | 0.1971 | 20.2244 | <.0001 |
| MDC_8 | MDC 8: Musculoskeletal And Connective | 1 | -1.6837 | 0.1859 | 81.9928 | <.0001 |
| MDC_10 | MDC 10: Endocrine Nutritional And Metabolic | 1 | 0.5797 | 0.2523 | 5.281 | 0.0216 |
| MDC_11 | MDC 11: Kidney And Urinary Tract | 1 | 0.1148 | 0.1915 | 0.3592 | 0.549 |
| MDC_18 | MDC 18: Infectious and Parasitic | 1 | 0.1668 | 0.2716 | 0.3774 | 0.539 |
| mdrg_107 | EXTRACRANIAL PROCEDURES | 1 | 2.684 | 0.7574 | 12.5583 | 0.0004 |
| mdrg_514 | OTHER VASCULAR PROCEDURES | 1 | 1.1692 | 0.3418 | 11.6978 | 0.0006 |
| mdrg_601 | STOMACH - ESOPHAGEAL AND DUODENAL PROC | 1 | 0.4498 | 0.1415 | 10.106 | 0.0015 |
| mdrg_605 | APPENDECTOMY W COMPLICATED PRINCIPAL DIAG | 1 | -1.3555 | 0.352 | 14.8306 | 0.0001 |
| mdrg_606 | APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG | 1 | -1.0911 | 0.2537 | 18.4948 | <.0001 |
| mdrg_1103 | KIDNEY AND URETER PROCEDURES FOR NEOPLASM | 1 | 1.8978 | 0.2999 | 40.0412 | <.0001 |
| mdrg_1304 | UTERINE AND ADNEXA PROC FOR NON-MALIGNANCY | 1 | 0.3587 | 0.308 | 1.3569 | 0.2441 |
| mdrg_1308 | OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES | 1 | 2.0522 | 0.7325 | 7.8492 | 0.0051 |
| mdrg_1601 | SPLENECTOMY | 1 | 1.5772 | 0.4249 | 13.7766 | 0.0002 |
| mdrg_1707 | LYMPHOMA AND LEUKEMIA W MAJOR O.R. PROCEDURE | 1 | 1.5995 | 0.5957 | 7.2105 | 0.0072 |
| mdrg_1708 | LYMPHOMA AND NON-ACUTE LEUKEMIA W OTHER O.R. PROC | 1 | 2.3223 | 0.7272 | 10.1982 | 0.0014 |
| mdrg_2210 | EXTENSIVE BURNS OR FULL THICKNESS BURNS W MV >96 HRS W SKIN GRAFT | 1 | 0.2724 | 0.5894 | 0.2136 | 0.644 |

c-statistic=0.947

Table 2. Risk Adjustment Coefficients for PDI 02 Pressure Ulcer Rate

| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr> Chi-Square |
|-----------|------------------|----|----------|----------------|-----------------|----------------|
| Intercept | Intercept | 1 | -10.0619 | 0.3867 | 676.9985 | <.0001 |
| AGE_1_2 | Age Days < 179 | 1 | -0.2072 | 0.4743 | 0.1908 | 0.6622 |
| AGE_3 | Age Days 180-364 | 1 | -0.2662 | 0.5748 | 0.2145 | 0.6433 |

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| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|------------|--|----|----------|----------------|-----------------|-----------------|
| AGE_5 | Age 4-9 years | 1 | -0.6016 | 0.4538 | 1.7577 | 0.1849 |
| AGE_6 | Age 10-14 years | 1 | -0.2731 | 0.4296 | 0.4041 | 0.525 |
| AGE_7 | Age 15-17 years | 1 | 0.6312 | 0.3674 | 2.9516 | 0.0858 |
| GENDER_CAT | Gender: 1=Female 0=Male | 1 | -0.2008 | 0.259 | 0.6008 | 0.4383 |
| GPPD02_2 | Pressure risk high risk | 1 | 3.3945 | 0.296 | 131.4899 | <.0001 |
| CCS62 | Coagulation and hemorrhagic disorders | 1 | 1.3083 | 0.3886 | 11.3361 | 0.0008 |
| CCS82 | Paralysis | 1 | -1.1365 | 0.3851 | 8.7093 | 0.0032 |
| MDC_1 | MDC 1: Nervous System | 1 | 0.8454 | 0.3579 | 5.5784 | 0.0182 |
| MDC_3 | MDC 3: Ear Nose Mouth And Throat | 1 | 1.1802 | 0.5527 | 4.5597 | 0.0327 |
| MDC_4 | MDC 4: Respiratory System | 1 | 0.4289 | 0.3672 | 1.3642 | 0.2428 |
| mdrg_411 | INTERSTITIAL LUNG DISEASE | 1 | 3.6603 | 1.0501 | 12.1492 | 0.0005 |
| mdrg_602 | MAJOR SMALL AND LARGE BOWEL PROCEDURES | 1 | 2.1575 | 0.619 | 12.1483 | 0.0005 |
| mdrg_620 | ESOPHAGITIS - GASTROENT AND MISC DIGEST DISORDERS | 1 | 0.0533 | 1.0254 | 0.0027 | 0.9586 |
| mdrg_826 | OTHER MUSCULOSKELET SYS AND CONN TISS O.R. PROC | 1 | 2.3829 | 0.7478 | 10.1524 | 0.0014 |
| mdrg_2407 | LIMB REATTACHMENT - HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA | 1 | 2.0987 | 1.0494 | 3.9995 | 0.0455 |
| mdrg_2409 | OTHER MULTIPLE SIGNIFICANT TRAUMA | 1 | 2.1919 | 0.7525 | 8.484 | 0.0036 |

c-statistic=0.838

Table 3. Risk Adjustment Coefficients for PDI 05 Iatrogenic Pneumothorax Rate

| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|------------------|----|----------|----------------|-----------------|-----------------|
| Intercept | Intercept | 1 | -10.1114 | 0.2318 | 1902.933 | <.0001 |
| AGE_1 | Age Days < 59 | 1 | 0.0865 | 0.3141 | 0.0758 | 0.7831 |
| AGE_2 | Age Days 60-179 | 1 | 0.3695 | 0.3459 | 1.141 | 0.2854 |
| AGE_3 | Age Days 180-364 | 1 | 0.15 | 0.3751 | 0.16 | 0.6892 |
| AGE_5 | Age 4-9 years | 1 | -0.1475 | 0.2895 | 0.2597 | 0.6103 |
| AGE_6 | Age 10-14 years | 1 | 0.2379 | 0.2712 | 0.7692 | 0.3805 |

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| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|--------------|--|----|----------|----------------|-----------------|-----------------|
| AGE_7 | Age 15-17 years | 1 | 0.8607 | 0.2528 | 11.5936 | 0.0007 |
| GENDER_CAT | Gender: 1=Female 0=Male | 1 | 0.2479 | 0.1428 | 3.0133 | 0.0826 |
| TRANSFER_ALT | Transfer | 1 | 0.3978 | 0.2029 | 3.846 | 0.0499 |
| CCS42 | Secondary malignancies | 1 | 2.0299 | 0.3952 | 26.3794 | <.0001 |
| CCS52 | Nutritional deficiencies | 1 | 0.5863 | 0.2391 | 6.0114 | 0.0142 |
| CCS56 | Cystic fibrosis | 1 | 1.8279 | 0.5949 | 9.4403 | 0.0021 |
| CCS81 | Other hereditary and degenerative nervous system conditions | 1 | 0.6977 | 0.3317 | 4.423 | 0.0355 |
| CCS85 | Coma; stupor; and brain damage | 1 | 1.238 | 0.3879 | 10.1873 | 0.0014 |
| CCS95 | Other nervous system disorders | 1 | 0.7908 | 0.2091 | 14.2959 | 0.0002 |
| CCS213 | Cardiac and circulatory congenital anomalies | 1 | 1.1709 | 0.2265 | 26.7355 | <.0001 |
| CCS217 | Other congenital anomalies | 1 | 0.7835 | 0.2295 | 11.6559 | 0.0006 |
| ODC904 | Complex Perinatal Conditions | 1 | 0.5761 | 0.3112 | 3.4263 | 0.0642 |
| mdrg_120 | HYPERTENSIVE ENCEPHALOPATHY | 1 | 5.2153 | 1.0265 | 25.8103 | <.0001 |
| mdrg_416 | RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT | 1 | 2.3056 | 0.2897 | 63.3306 | <.0001 |
| mdrg_505 | OTHER CARDIOTHORACIC PROCEDURES | 1 | 5.5662 | 1.0459 | 28.3208 | <.0001 |
| mdrg_510 | PERMANENT CARDIAC PACEMAKER IMPLANT AND PROCEDURES | 1 | 4.8359 | 0.4441 | 118.5801 | <.0001 |
| mdrg_513 | PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT | 1 | 2.5391 | 0.7225 | 12.3497 | 0.0004 |
| mdrg_514 | OTHER VASCULAR PROCEDURES | 1 | 3.3619 | 0.4804 | 48.9716 | <.0001 |
| mdrg_611 | OTHER DIGESTIVE SYSTEM O.R. PROCEDURES | 1 | 2.7264 | 0.717 | 14.458 | 0.0001 |
| mdrg_802 | SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR EXT FUS | 1 | 3.6407 | 0.2488 | 214.149 | <.0001 |
| mdrg_810 | BIOPSIES OF MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE | 1 | 3.068 | 0.7242 | 17.9474 | <.0001 |
| mdrg_831 | PATHOLOGICAL FRACTURES AND MUSCULOSKELET AND CONN TISS MALIG | 1 | 2.51 | 0.7613 | 10.8688 | 0.001 |
| mdrg_902 | SKIN GRAFT EXC FOR SKIN ULCER OR CELLULITIS | 1 | 2.908 | 1.0075 | 8.3311 | 0.0039 |
| mdrg_1006 | OTHER ENDOCRINE - NUTRIT AND METAB O.R. PROC | 1 | 3.4724 | 1.0271 | 11.4298 | 0.0007 |
| mdrg_1101 | KIDNEY TRANSPLANT | 1 | 3.6514 | 0.7214 | 25.6211 | <.0001 |
| mdrg_1103 | KIDNEY AND URETER PROCEDURES FOR NEOPLASM | 1 | 3.389 | 0.7674 | 19.503 | <.0001 |
| mdrg_1506 | NEONATE W OTHER SIGNIFICANT PROBLEMS | 1 | -2.4598 | 0.6127 | 16.1175 | <.0001 |

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| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|--|----|----------|----------------|-----------------|-----------------|
| mdrg_1708 | LYMPHOMA AND NON-ACUTE LEUKEMIA W OTHER O.R. PROC | 1 | 4.2681 | 0.7221 | 34.9395 | <.0001 |
| mdrg_2109 | OTHER INJURY - POISONING AND TOXIC EFFECT DIAG | 1 | 1.744 | 0.7282 | 5.735 | 0.0166 |
| mdrg_2407 | LIMB REATTACHMENT - HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA | 1 | 3.2081 | 1.0105 | 10.0779 | 0.0015 |
| mdrg_2408 | OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA | 1 | 3.2962 | 0.721 | 20.8978 | <.0001 |
| mdrg_7702 | LIVER TRANSPLANT | 1 | 3.6906 | 1.0136 | 13.2569 | 0.0003 |

c-statistic=0.863

Table 4. Risk Adjustment Coefficients for PDI 06 Perioperative Hemorrhage or Hematoma Rate

| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|--------------|--------------------------------------|----|----------|----------------|-----------------|-----------------|
| Intercept | Intercept | 1 | -4.7477 | 0.1712 | 769.235 | <.0001 |
| TRNSFER | Transfer In | 1 | 0.2398 | 0.1205 | 3.9581 | 0.0466 |
| CHS_DAY_1 | Age <=28 days | 1 | 1.4868 | 0.1754 | 71.855 | <.0001 |
| CHS_DAY_2 | Age 29-90 days | 1 | 1.4257 | 0.2266 | 39.5811 | <.0001 |
| CHS_DAY_3 | Age 91-364 days | 1 | 0.5669 | 0.1947 | 8.4781 | 0.0036 |
| rsk2 | RACHS Risk 2 | 1 | -0.854 | 0.1902 | 20.1621 | <.0001 |
| rsk3 | RACHS Risk 3 | 1 | -0.2558 | 0.1517 | 2.8438 | 0.0917 |
| rsk4 | RACHS Risk 4 | 1 | 0.2412 | 0.1641 | 2.1606 | 0.1416 |
| rsk5_6 | RACH Risk 5 or 6 | 1 | 0.4667 | 0.2255 | 4.2831 | 0.0385 |
| CHSBW1 | Low Birth Weight | 1 | 0.8781 | 0.1514 | 33.64 | <.0001 |
| strcabn | Major Non-Cardiac Structural Anomaly | 1 | 0.6884 | 0.1231 | 31.244 | <.0001 |
| multiple_sur | Multiple Cardiac Procedures | 1 | 0.7871 | 0.1187 | 43.9403 | <.0001 |

c-statistic=0.796

Table 5. Risk Adjustment Coefficients for PDI 08 Perioperative Hemorrhage or Hematoma Rate

| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|--------------|---|----|----------|----------------|-----------------|-----------------|
| Intercept | Intercept | 1 | -6.655 | 0.1585 | 1762.207 | <.0001 |
| AGE_1 | Age Days < 59 | 1 | 0.3595 | 0.261 | 1.897 | 0.1684 |
| AGE_2 | Age Days 60-179 | 1 | -0.2021 | 0.1717 | 1.3859 | 0.2391 |
| AGE_3 | Age Days 180-364 | 1 | -0.0718 | 0.1714 | 0.1754 | 0.6754 |
| AGE_5 | Age 4-9 years | 1 | -0.0212 | 0.1422 | 0.0223 | 0.8813 |
| AGE_6 | Age 10-14 years | 1 | -0.1248 | 0.1659 | 0.566 | 0.4519 |
| AGE_7 | Age 15-17 years | 1 | 0.0738 | 0.1724 | 0.1831 | 0.6687 |
| GENDER_CAT | Gender: 1=Female 0=Male | 1 | 0.0015 | 0.0951 | 0.0002 | 0.9878 |
| GPPD08_2 | Coagulopathy | 1 | 2.2242 | 0.137 | 263.4411 | <.0001 |
| TRANSFER_ALT | Transfer | 1 | 0.4599 | 0.2862 | 2.5819 | 0.1081 |
| CCS62 | Coagulation and hemorrhagic disorders | 1 | -1.2056 | 0.2896 | 17.3345 | <.0001 |
| CCS103 | Pulmonary heart disease | 1 | 0.7518 | 0.193 | 15.175 | <.0001 |
| CCS213 | Cardiac and circulatory congenital anomalies | 1 | 0.3999 | 0.1244 | 10.3315 | 0.0013 |
| MDC_5 | MDC 5: Circulatory System | 1 | 2.3004 | 0.1522 | 228.5108 | <.0001 |
| MDC_7 | MDC 7: Hepatobiliary System And Pancreas | 1 | 1.2782 | 0.3899 | 10.7465 | 0.001 |
| MDC_10 | MDC 10: Endocrine Nutritional And Metabolic | 1 | 0.873 | 0.4124 | 4.481 | 0.0343 |
| MDC_16 | MDC 16: Blood and Immunological | 1 | 1.389 | 0.4046 | 11.7883 | 0.0006 |
| mdrg_103 | CRANIOTOMY AND ENDOVASCULAR INTRACRANIAL PROCEDURES | 1 | 0.4106 | 0.3713 | 1.223 | 0.2688 |
| mdrg_302 | OTHER EAR - NOSE - MOUTH AND THROAT O.R. PROCEDURES | 1 | 1.7027 | 0.1653 | 106.1335 | <.0001 |
| mdrg_514 | OTHER VASCULAR PROCEDURES | 1 | -1.2208 | 0.5078 | 5.7791 | 0.0162 |
| mdrg_609 | INGUINAL AND FEMORAL HERNIA PROCEDURES | 1 | 1.165 | 0.5991 | 3.7818 | 0.0518 |
| mdrg_610 | HERNIA PROCEDURES EXCEPT INGUINAL AND FEMORAL | 1 | 1.6524 | 0.7249 | 5.1961 | 0.0226 |
| mdrg_701 | PANCREAS - LIVER AND SHUNT PROCEDURES | 1 | 1.5001 | 0.5279 | 8.0748 | 0.0045 |
| mdrg_801 | COMBINED ANTERIOR/POSTERIOR SPINAL FUSION | 1 | 1.7558 | 0.7266 | 5.8391 | 0.0157 |
| mdrg_810 | BIOPSIES OF MUSCULOSKELETAL SYSTEM AND CONNECTIVE | 1 | 1.593 | 0.7189 | 4.9101 | 0.0267 |

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| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|---|----|----------|----------------|-----------------|-----------------|
| | TISSUE | | | | | |
| mdrg_815 | BACK AND NECK PROC EXC SPINAL FUSION OR DISC DEVICE/NEUROSTIM | 1 | 2.2075 | 0.4665 | 22.3892 | <.0001 |
| mdrg_1103 | KIDNEY AND URETER PROCEDURES FOR NEOPLASM | 1 | 1.888 | 0.7217 | 6.8438 | 0.0089 |
| mdrg_1203 | TESTES PROCEDURES | 1 | 2.0056 | 0.7228 | 7.6996 | 0.0055 |
| mdrg_2102 | SKIN GRAFTS FOR INJURIES | 1 | 2.6022 | 0.7225 | 12.9732 | 0.0003 |
| mdrg_2104 | OTHER O.R. PROCEDURES FOR INJURIES | 1 | 1.3434 | 0.7191 | 3.4901 | 0.0617 |
| mdrg_7701 | HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM | 1 | 1.7051 | 0.4421 | 14.8719 | 0.0001 |
| mdrg_7702 | LIVER TRANSPLANT | 1 | 2.1855 | 0.4826 | 20.5084 | <.0001 |

c-statistic=0.817

Table 6. Risk Adjustment Coefficients for PDI 09 Postoperative Respiratory Failure Rate

| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|--------------|---|----|----------|----------------|-----------------|-----------------|
| Intercept | Intercept | 1 | -4.9215 | 0.1105 | 1982.376 | <.0001 |
| AGE_1 | Age Days < 59 | 1 | 0.8028 | 0.1942 | 17.092 | <.0001 |
| AGE_2 | Age Days 60-179 | 1 | 0.378 | 0.1658 | 5.1997 | 0.0226 |
| AGE_3 | Age Days 180-364 | 1 | 0.0094 | 0.1741 | 0.0029 | 0.9571 |
| AGE_5 | Age 4-9 years | 1 | -0.6137 | 0.1237 | 24.6047 | <.0001 |
| AGE_6 | Age 10-14 years | 1 | -0.7709 | 0.1308 | 34.7583 | <.0001 |
| AGE_7 | Age 15-17 years | 1 | -1.0438 | 0.1465 | 50.7356 | <.0001 |
| GENDER_CAT | Gender: 1=Female 0=Male | 1 | -0.2065 | 0.0799 | 6.6754 | 0.0098 |
| TRANSFER_ALT | Transfer | 1 | 1.5207 | 0.168 | 81.9743 | <.0001 |
| CCS42 | Secondary malignancies | 1 | 1.3767 | 0.2454 | 31.4711 | <.0001 |
| CCS51 | Other endocrine disorders | 1 | 0.8567 | 0.1822 | 22.1134 | <.0001 |
| CCS52 | Nutritional deficiencies | 1 | 0.5035 | 0.1293 | 15.1692 | <.0001 |
| CCS58 | Other nutritional endocrine and metabolic disorders | 1 | 0.5676 | 0.1034 | 30.153 | <.0001 |
| CCS82 | Paralysis | 1 | 0.8719 | 0.1299 | 45.0889 | <.0001 |
| CCS83 | Epilepsy and convulsions | 1 | 0.6514 | 0.1254 | 26.9851 | <.0001 |

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| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|--|----|----------|----------------|-----------------|-----------------|
| CCS98 | Essential hypertension | 1 | 0.8947 | 0.2268 | 15.5662 | <.0001 |
| CCS103 | Pulmonary heart disease | 1 | 0.9366 | 0.2969 | 9.9538 | 0.0016 |
| CCS133 | Other lower respiratory disease | 1 | 0.5979 | 0.1408 | 18.0458 | <.0001 |
| CCS138 | Esophageal disorders | 1 | 0.7526 | 0.1092 | 47.4779 | <.0001 |
| CCS224 | Other perinatal conditions | 1 | 0.6406 | 0.1802 | 12.6409 | 0.0004 |
| ODC903 | Dependence on ventilator | 1 | 1.3131 | 0.2859 | 21.0976 | <.0001 |
| MDC_1 | MDC 1: Nervous System | 1 | 1.8824 | 0.2766 | 46.3068 | <.0001 |
| MDC_3 | MDC 3: Ear Nose Mouth And Throat | 1 | 2.354 | 0.3919 | 36.0861 | <.0001 |
| mdrg_103 | CRANIOTOMY AND ENDOVASCULAR INTRACRANIAL PROCEDURES | 1 | -1.1055 | 0.2958 | 13.9698 | 0.0002 |
| mdrg_104 | SPINAL PROCEDURES | 1 | -1.3045 | 0.314 | 17.2588 | <.0001 |
| mdrg_105 | VENTRICULAR SHUNT PROCEDURES | 1 | -2.6137 | 0.4489 | 33.905 | <.0001 |
| mdrg_108 | PERIPH/CRANIAL NERVE AND OTHER NERV SYST PROC | 1 | -2.0032 | 0.4342 | 21.2879 | <.0001 |
| mdrg_301 | MAJOR HEAD AND NECK PROCEDURES | 1 | -1.4947 | 0.4878 | 9.3887 | 0.0022 |
| mdrg_302 | OTHER EAR - NOSE - MOUTH AND THROAT O.R. PROCEDURES | 1 | -2.3847 | 0.421 | 32.0782 | <.0001 |
| mdrg_602 | MAJOR SMALL AND LARGE BOWEL PROCEDURES | 1 | 0.9185 | 0.1658 | 30.6876 | <.0001 |
| mdrg_604 | PERITONEAL ADHESIOLYSIS | 1 | 0.9421 | 0.368 | 6.5539 | 0.0105 |
| mdrg_610 | HERNIA PROCEDURES EXCEPT INGUINAL AND FEMORAL | 1 | 1.3686 | 0.2975 | 21.1616 | <.0001 |
| mdrg_701 | PANCREAS - LIVER AND SHUNT PROCEDURES | 1 | 2.4447 | 0.2528 | 93.5243 | <.0001 |
| mdrg_801 | COMBINED ANTERIOR/POSTERIOR SPINAL FUSION | 1 | 2.6497 | 0.3021 | 76.9186 | <.0001 |
| mdrg_802 | SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR EXT FUS | 1 | 1.3203 | 0.1407 | 88.0202 | <.0001 |
| mdrg_811 | HIP AND FEMUR PROCEDURES EXCEPT MAJOR JOINT | 1 | -0.8906 | 0.243 | 13.4351 | 0.0002 |
| mdrg_819 | SOFT TISSUE PROCEDURES | 1 | -1.9594 | 0.7141 | 7.5279 | 0.0061 |
| mdrg_1102 | MAJOR BLADDER PROCEDURES | 1 | 1.2668 | 0.3304 | 14.6971 | 0.0001 |
| mdrg_1103 | KIDNEY AND URETER PROCEDURES FOR NEOPLASM | 1 | 0.7702 | 0.453 | 2.8916 | 0.089 |

c-statistic=0.819

Table 7. Risk Adjustment Coefficients for PDI 10 Postoperative Sepsis Rate

| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|--------------|--|----|----------|----------------|-----------------|-----------------|
| Intercept | Intercept | 1 | -8.2038 | 0.1871 | 1921.871 | <.0001 |
| AGE_1 | Age Days < 59 | 1 | 0.4351 | 0.1723 | 6.3767 | 0.0116 |
| AGE_2 | Age Days 60-179 | 1 | 0.4027 | 0.1201 | 11.2389 | 0.0008 |
| AGE_3 | Age Days 180-364 | 1 | 0.2653 | 0.1336 | 3.9409 | 0.0471 |
| AGE_5 | Age 4-9 years | 1 | -0.4892 | 0.1196 | 16.7341 | <.0001 |
| AGE_6 | Age 10-14 years | 1 | -0.6365 | 0.1304 | 23.8403 | <.0001 |
| AGE_7 | Age 15-17 years | 1 | -0.2627 | 0.1192 | 4.8561 | 0.0275 |
| GENDER_CAT | Gender: 1=Female 0=Male | 1 | -0.0338 | 0.0714 | 0.2247 | 0.6354 |
| HPPD10_2 | Medium risk not immunocompromised | 1 | 0.6224 | 0.2056 | 9.1605 | 0.0025 |
| HPPD10_3 | High risk not immunocompromised | 1 | 1.6948 | 0.0918 | 340.6224 | <.0001 |
| GPPD10_2 | Non-elective Class (Clean) | 1 | 0.7521 | 0.134 | 31.4867 | <.0001 |
| GPPD10_3 | Elective Class 2 3 9 (Clean-contaminated or other) | 1 | 2.2651 | 0.1603 | 199.6158 | <.0001 |
| GPPD10_4_5 | Non-Elective Class 2 3 9 (Clean-contaminated other) or Class 4 | 1 | 2.6531 | 0.1511 | 308.3597 | <.0001 |
| GPPD10_9 | Other procedure class | 1 | 0.5197 | 1.0207 | 0.2592 | 0.6107 |
| TRANSFER_ALT | Transfer | 1 | 0.3513 | 0.0965 | 13.2587 | 0.0003 |
| CCS42 | Secondary malignancies | 1 | 0.746 | 0.24 | 9.6628 | 0.0019 |
| CCS51 | Other endocrine disorders | 1 | 0.5241 | 0.1546 | 11.4971 | 0.0007 |
| CCS62 | Coagulation and hemorrhagic disorders | 1 | 0.8061 | 0.1282 | 39.5531 | <.0001 |
| CCS82 | Paralysis | 1 | 1.029 | 0.142 | 52.5424 | <.0001 |
| CCS85 | Coma; stupor; and brain damage | 1 | 0.7757 | 0.24 | 10.4415 | 0.0012 |
| CCS103 | Pulmonary heart disease | 1 | 0.7843 | 0.1419 | 30.5249 | <.0001 |
| CCS106 | Cardiac dysrhythmias | 1 | -0.3202 | 0.1616 | 3.9271 | 0.0475 |
| CCS151 | Other liver diseases | 1 | 0.4166 | 0.1324 | 9.8986 | 0.0017 |
| CCS161 | Other diseases of kidney and ureters | 1 | 0.4534 | 0.1475 | 9.4478 | 0.0021 |
| CCS213 | Cardiac and circulatory congenital anomalies | 1 | 0.3381 | 0.1088 | 9.6638 | 0.0019 |

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| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|--|----|----------|----------------|-----------------|-----------------|
| CCS216 | Nervous system congenital anomalies | 1 | 0.4123 | 0.1758 | 5.5019 | 0.019 |
| CCS217 | Other congenital anomalies | 1 | 0.3115 | 0.1142 | 7.4454 | 0.0064 |
| CCS224 | Other perinatal conditions | 1 | 0.4437 | 0.1513 | 8.6028 | 0.0034 |
| CCS227 | Spinal cord injury | 1 | 1.0151 | 0.3727 | 7.4184 | 0.0065 |
| ODC903 | Dependence on ventilator | 1 | 0.8534 | 0.1945 | 19.2557 | <.0001 |
| MDC_1 | MDC 1: Nervous System | 1 | 1.4398 | 0.1762 | 66.7587 | <.0001 |
| MDC_2 | MDC 2: Disorders of the Eye | 1 | 1.741 | 0.4 | 18.9481 | <.0001 |
| MDC_3 | MDC 3: Ear Nose Mouth And Throat | 1 | 0.7239 | 0.2678 | 7.3064 | 0.0069 |
| MDC_4 | MDC 4: Respiratory System | 1 | 0.855 | 0.1935 | 19.5289 | <.0001 |
| MDC_5 | MDC 5: Circulatory System | 1 | 2.4597 | 0.1664 | 218.5495 | <.0001 |
| MDC_6 | MDC 6: Digestive System | 1 | 1.0838 | 0.1433 | 57.188 | <.0001 |
| MDC_7 | MDC 7: Hepatobiliary System And Pancreas | 1 | 0.3419 | 0.2282 | 2.2444 | 0.1341 |
| MDC_10 | MDC 10: Endocrine Nutritional And Metabolic | 1 | 0.859 | 0.2468 | 12.1102 | 0.0005 |
| MDC_16 | MDC 16: Blood and Immunological | 1 | 1.3325 | 0.2584 | 26.5882 | <.0001 |
| MDC_17 | MDC 17: Myeloproliferative DDs | 1 | 2.9261 | 0.4649 | 39.6043 | <.0001 |
| MDC_22 | MDC 22: Burns | 1 | 3.3201 | 0.2615 | 161.2301 | <.0001 |
| mdrg_101 | INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE | 1 | 2.3977 | 0.6172 | 15.0919 | 0.0001 |
| mdrg_401 | MAJOR CHEST PROCEDURES | 1 | -0.8921 | 0.321 | 7.7225 | 0.0055 |
| mdrg_503 | CARDIAC VALVE AND OTH MAJ CARDIOTHORACIC PROC | 1 | 0.5487 | 0.2071 | 7.0214 | 0.0081 |
| mdrg_601 | STOMACH - ESOPHAGEAL AND DUODENAL PROC | 1 | -1.2341 | 0.1975 | 39.0397 | <.0001 |
| mdrg_611 | OTHER DIGESTIVE SYSTEM O.R. PROCEDURES | 1 | -0.9036 | 0.3962 | 5.2012 | 0.0226 |
| mdrg_701 | PANCREAS - LIVER AND SHUNT PROCEDURES | 1 | 1.0958 | 0.4156 | 6.9524 | 0.0084 |
| mdrg_802 | SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR EXT FUS | 1 | 1.3941 | 0.4436 | 9.8768 | 0.0017 |
| mdrg_805 | WND DEBRID AND SKN GRFT EXC HAND - FOR MUSCULO-CONN TISS DIS | 1 | 2.4174 | 0.5249 | 21.2105 | <.0001 |
| mdrg_819 | SOFT TISSUE PROCEDURES | 1 | 1.2425 | 0.5237 | 5.6296 | 0.0177 |
| mdrg_1006 | OTHER ENDOCRINE - NUTRIT AND METAB O.R. PROC | 1 | 2.8777 | 0.423 | 46.2797 | <.0001 |

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| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|--|----|----------|----------------|-----------------|-----------------|
| mdrg_1104 | KIDNEY AND URETER PROCEDURES FOR NON-NEOPLASM | 1 | -1.6551 | 0.5184 | 10.1938 | 0.0014 |
| mdrg_1707 | LYMPHOMA AND LEUKEMIA W MAJOR O.R. PROCEDURE | 1 | -1.0996 | 0.5402 | 4.1439 | 0.0418 |
| mdrg_1708 | LYMPHOMA AND NON-ACUTE LEUKEMIA W OTHER O.R. PROC | 1 | -2.8155 | 0.742 | 14.3978 | 0.0001 |
| mdrg_1709 | MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC | 1 | -1.8049 | 0.654 | 7.6167 | 0.0058 |
| mdrg_1710 | MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R. PROC | 1 | -1.1745 | 0.5585 | 4.4226 | 0.0355 |
| mdrg_2201 | FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ | 1 | -2.3265 | 0.3922 | 35.1781 | <.0001 |
| mdrg_2407 | LIMB REATTACHMENT - HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA | 1 | 0.955 | 0.4313 | 4.9024 | 0.0268 |
| mdrg_2408 | OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA | 1 | 1.2698 | 0.2534 | 25.1088 | <.0001 |
| mdrg_7701 | HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM | 1 | 1.0445 | 0.2313 | 20.3936 | <.0001 |
| mdrg_7705 | ALLOGENEIC OR AUTOLOGOUS BONE MARROW TRANSPLANT | 1 | 3.1849 | 0.3803 | 70.1195 | <.0001 |

c-statistic=0.903

Table 8. Risk Adjustment Coefficients for PDI 11 Postoperative Wound Dehiscence Rate

| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|------------|--|----|----------|----------------|-----------------|-----------------|
| Intercept | Intercept | 1 | -7.1136 | 0.6769 | 110.4293 | <.0001 |
| AGE_1 | Age Days < 59 | 1 | -0.1217 | 0.5957 | 0.0417 | 0.8381 |
| AGE_5_6_7 | Age 4-17 years | 1 | -0.6867 | 0.557 | 1.5199 | 0.2176 |
| GENDER_CAT | Gender: 1=Female 0=Male | 1 | 0.0218 | 0.3681 | 0.0035 | 0.9529 |
| GPPD11_3 | Elective Class 2 3 9 (Clean-contaminated or other) | 1 | -0.9342 | 0.8491 | 1.2104 | 0.2712 |
| GPPD11_4 | Non-Elective Class 2 3 9 (Clean-contaminated or other) | 1 | -0.4211 | 0.7013 | 0.3605 | 0.5482 |
| GPPD11_5 | Class 4 (Contaminated) | 1 | -0.5924 | 1.1978 | 0.2446 | 0.6209 |
| GPPD11_9 | Other procedure class | 1 | -0.0606 | 0.7428 | 0.0067 | 0.935 |

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| | | | | | | |
|--------------|---|---|--------|--------|---------|--------|
| TRANSFER_ALT | Transfer | 1 | 0.2731 | 0.4329 | 0.3979 | 0.5282 |
| ODC904 | Complex Perinatal Conditions | 1 | 1.19 | 0.5509 | 4.6657 | 0.0308 |
| mdrg_602 | MAJOR SMALL AND LARGE BOWEL PROCEDURES | 1 | 1.1763 | 0.5091 | 5.3386 | 0.0209 |
| mdrg_1102 | MAJOR BLADDER PROCEDURES | 1 | 2.3655 | 1.1175 | 4.4805 | 0.0343 |
| mdrg_2408 | OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA | 1 | 3.022 | 0.8746 | 11.9394 | 0.0005 |

c-statistic=0.77

Table 9. Risk Adjustment Coefficients for PDI 12 Central Venous Catheter-Related Blood Stream Infection Rate

| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|--------------|---|----|----------|----------------|-----------------|-----------------|
| Intercept | Intercept | 1 | -9.3429 | 0.2642 | 1250.255 | <.0001 |
| AGE_1 | Age Days < 59 | 1 | 0.3856 | 0.1446 | 7.1088 | 0.0077 |
| AGE_2 | Age Days 60-179 | 1 | 0.2548 | 0.1391 | 3.3546 | 0.067 |
| AGE_3 | Age Days 180-364 | 1 | 0.1463 | 0.1466 | 0.9966 | 0.3181 |
| AGE_5 | Age 4-9 years | 1 | -0.5244 | 0.1156 | 20.5947 | <.0001 |
| AGE_6 | Age 10-14 years | 1 | -0.4813 | 0.1229 | 15.3329 | <.0001 |
| AGE_7 | Age 15-17 years | 1 | -0.5756 | 0.1381 | 17.3715 | <.0001 |
| GENDER_CAT | Gender: 1=Female 0=Male | 1 | -0.0295 | 0.0627 | 0.2208 | 0.6384 |
| GPPD12_2 | Medium risk not immunocompromised | 1 | 1.2393 | 0.1794 | 47.7441 | <.0001 |
| GPPD12_3 | High risk not immunocompromised | 1 | 1.8893 | 0.0898 | 442.5139 | <.0001 |
| TRANSFER_ALT | Transfer | 1 | 0.5431 | 0.0817 | 44.1787 | <.0001 |
| CCS4 | Mycoses | 1 | 0.764 | 0.1512 | 25.5275 | <.0001 |
| CCS6 | Hepatitis | 1 | 0.9198 | 0.3317 | 7.6871 | 0.0056 |
| CCS21 | Cancer of bone and connective tissue | 1 | -1.9692 | 0.7305 | 7.2671 | 0.007 |
| CCS41 | Cancer other and unspecified primary | 1 | -1.433 | 0.5162 | 7.707 | 0.0055 |
| CCS51 | Other endocrine disorders | 1 | 0.578 | 0.138 | 17.5337 | <.0001 |
| CCS58 | Other nutritional endocrine and metabolic disorders | 1 | 0.5107 | 0.0823 | 38.5397 | <.0001 |
| CCS62 | Coagulation and hemorrhagic disorders | 1 | 0.529 | 0.113 | 21.9156 | <.0001 |
| CCS81 | Other hereditary and degenerative nervous system conditions | 1 | 0.5051 | 0.1734 | 8.4813 | 0.0036 |

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| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|---|----|----------|----------------|-----------------|-----------------|
| CCS82 | Paralysis | 1 | 0.7047 | 0.176 | 16.03 | <.0001 |
| CCS83 | Epilepsy and convulsions | 1 | 0.4097 | 0.1387 | 8.7258 | 0.0031 |
| CCS103 | Pulmonary heart disease | 1 | 0.6741 | 0.1632 | 17.0522 | <.0001 |
| CCS108 | Congestive heart failure nonhypertensive | 1 | 0.6046 | 0.1631 | 13.7364 | 0.0002 |
| CCS151 | Other liver diseases | 1 | 0.4498 | 0.1237 | 13.2292 | 0.0003 |
| CCS213 | Cardiac and circulatory congenital anomalies | 1 | 0.8951 | 0.0871 | 105.5116 | <.0001 |
| CCS214 | Digestive congenital anomalies | 1 | 0.4711 | 0.1551 | 9.2218 | 0.0024 |
| CCS217 | Other congenital anomalies | 1 | 0.3225 | 0.1049 | 9.4593 | 0.0021 |
| ODC903 | Dependence on ventilator | 1 | 0.8052 | 0.2022 | 15.8546 | <.0001 |
| ODC904 | Complex Perinatal Conditions | 1 | 0.794 | 0.1098 | 52.3239 | <.0001 |
| MDC_1 | MDC 1: Nervous System | 1 | 1.4148 | 0.2996 | 22.2991 | <.0001 |
| MDC_2 | MDC 2: Disorders of the Eye | 1 | 1.7646 | 0.5165 | 11.6743 | 0.0006 |
| MDC_3 | MDC 3: Ear Nose Mouth And Throat | 1 | 0.0678 | 0.4543 | 0.0222 | 0.8814 |
| MDC_4 | MDC 4: Respiratory System | 1 | 1.1248 | 0.2816 | 15.9477 | <.0001 |
| MDC_5 | MDC 5: Circulatory System | 1 | 2.0638 | 0.2805 | 54.1228 | <.0001 |
| MDC_6 | MDC 6: Digestive System | 1 | 1.4891 | 0.2795 | 28.3744 | <.0001 |
| MDC_8 | MDC 8: Musculoskeletal And Connective | 1 | 1.3479 | 0.3221 | 17.5077 | <.0001 |
| MDC_10 | MDC 10: Endocrine Nutritional And Metabolic | 1 | 1.1292 | 0.2995 | 14.2119 | 0.0002 |
| MDC_11 | MDC 11: Kidney And Urinary Tract | 1 | 0.9148 | 0.3485 | 6.8887 | 0.0087 |
| MDC_13 | MDC 13: Female Reproductive System | 1 | 1.4049 | 0.7537 | 3.4749 | 0.0623 |
| MDC_15 | MDC 15: Newborn And Other Neonates | 1 | 0.628 | 0.291 | 4.6559 | 0.0309 |
| MDC_16 | MDC 16: Blood and Immunological | 1 | 1.6393 | 0.3183 | 26.5267 | <.0001 |
| MDC_17 | MDC 17: Myeloproliferative DDs | 1 | 2.6135 | 0.2753 | 90.1243 | <.0001 |
| MDC_18 | MDC 18: Infectious and Parasitic | 1 | 1.1005 | 0.3089 | 12.6894 | 0.0004 |
| MDC_21 | MDC 21: Injuries Poison And Toxic | 1 | 1.1874 | 0.4776 | 6.1817 | 0.0129 |
| MDC_22 | MDC 22: Burns | 1 | 3.8134 | 0.4563 | 69.8477 | <.0001 |
| mdrg_128 | SEIZURES | 1 | -2.7035 | 1.0137 | 7.1127 | 0.0077 |
| mdrg_410 | SIMPLE PNEUMONIA AND PLEURISY | 1 | -2.4547 | 0.7191 | 11.6528 | 0.0006 |
| mdrg_416 | RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT | 1 | 0.876 | 0.2298 | 14.531 | 0.0001 |

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| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|---|----|----------|----------------|-----------------|-----------------|
| mdrg_530 | CARDIAC CONGENITAL AND VALVULAR DISORDERS | 1 | -1.0982 | 0.5908 | 3.4557 | 0.063 |
| mdrg_601 | STOMACH - ESOPHAGEAL AND DUODENAL PROC | 1 | 0.8705 | 0.2574 | 11.4359 | 0.0007 |
| mdrg_602 | MAJOR SMALL AND LARGE BOWEL PROCEDURES | 1 | 1.6352 | 0.2135 | 58.6835 | <.0001 |
| mdrg_604 | PERITONEAL ADHESIOLYSIS | 1 | 1.7659 | 0.381 | 21.4808 | <.0001 |
| mdrg_701 | PANCREAS - LIVER AND SHUNT PROCEDURES | 1 | 3.5022 | 0.5225 | 44.9324 | <.0001 |
| mdrg_710 | DISORDERS OF PANCREAS EXCEPT MALIGNANCY | 1 | 1.8505 | 0.6314 | 8.589 | 0.0034 |
| mdrg_813 | KNEE PROCEDURES W PDX OF INFECTION | 1 | 2.131 | 1.0237 | 4.3332 | 0.0374 |
| mdrg_1006 | OTHER ENDOCRINE - NUTRIT AND METAB O.R. PROC | 1 | 2.4888 | 0.5488 | 20.5662 | <.0001 |
| mdrg_1101 | KIDNEY TRANSPLANT | 1 | 2.187 | 0.4378 | 24.9481 | <.0001 |
| mdrg_1502 | NEONATES - DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY OR EXTREME IMMATUREITY OR RESPIRATORY D | 1 | 1.0567 | 0.134 | 62.1721 | <.0001 |
| mdrg_1505 | FULL TERM NEONATE W MAJOR PROBLEMS | 1 | -0.735 | 0.1942 | 14.3185 | 0.0002 |
| mdrg_1506 | NEONATE W OTHER SIGNIFICANT PROBLEMS | 1 | -4.9631 | 1.0058 | 24.3478 | <.0001 |
| mdrg_1603 | MAJOR HEMATOL/IMMUN DIAG EXC SICKLE CELL CRISIS AND COAGUL | 1 | -0.5462 | 0.329 | 2.756 | 0.0969 |
| mdrg_1707 | LYMPHOMA AND LEUKEMIA W MAJOR O.R. PROCEDURE | 1 | 1.361 | 0.4326 | 9.8981 | 0.0017 |
| mdrg_1710 | MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R. PROC | 1 | 1.7774 | 0.4093 | 18.8595 | <.0001 |
| mdrg_1715 | CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS | 1 | -1.4666 | 0.3177 | 21.3082 | <.0001 |
| mdrg_2108 | COMPLICATIONS OF TREATMENT | 1 | 1.8246 | 0.5328 | 11.7264 | 0.0006 |
| mdrg_2214 | NON-EXTENSIVE BURNS | 1 | -1.8206 | 0.8031 | 5.1396 | 0.0234 |
| mdrg_2302 | REHABILITATION | 1 | 0.9955 | 0.756 | 1.7337 | 0.1879 |
| mdrg_2303 | SIGNS AND SYMPTOMS | 1 | 2.4496 | 0.5152 | 22.6028 | <.0001 |
| mdrg_2305 | OTHER FACTORS INFLUENCING HEALTH STATUS | 1 | 1.6562 | 0.5651 | 8.5894 | 0.0034 |
| mdrg_2408 | OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA | 1 | 2.485 | 0.7566 | 10.787 | 0.001 |
| mdrg_2409 | OTHER MULTIPLE SIGNIFICANT TRAUMA | 1 | 1.9488 | 0.7553 | 6.6571 | 0.0099 |
| mdrg_7701 | HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM | 1 | 1.3261 | 0.271 | 23.9526 | <.0001 |
| mdrg_7702 | LIVER TRANSPLANT | 1 | 2.5118 | 0.3414 | 54.1348 | <.0001 |

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| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|---|----|----------|----------------|-----------------|-----------------|
| mdrg_7705 | ALLOGENEIC OR AUTOLOGOUS BONE MARROW TRANSPLANT | 1 | 2.2693 | 0.1555 | 213.0917 | <.0001 |

c-statistic=0.929

Table 10. Risk Adjustment Coefficients for NQI 01 Neonatal Iatrogenic Pneumothorax Rate

| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|--------------|---------------------------------|----|----------|----------------|-----------------|-----------------|
| Intercept | Intercept | 1 | -8.6004 | 1.0919 | 62.0376 | <.0001 |
| AGE_N1 | Age 0-1 years | 1 | 1.0725 | 1.0695 | 1.0056 | 0.316 |
| GENDER_CAT | Gender: 1=Female 0=Male | 1 | -0.9671 | 0.3703 | 6.8204 | 0.009 |
| TRANSFER_ALT | Transfer | 1 | 1.0545 | 0.4728 | 4.9735 | 0.0257 |
| BWHTCAT_2 | Birth Weight 2000 to 2499 grams | 1 | -1.222 | 0.366 | 11.1492 | 0.0008 |
| BWHTCAT_3 | Birth Weight 1750 to 1999 grams | 1 | -1.7479 | 0.7364 | 5.6334 | 0.0176 |

c-statistic=0.732

Table 11. Risk Adjustment Coefficients for NQI 02 Neonatal Mortality Rate

| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|------------|---|----|----------|----------------|-----------------|-----------------|
| Intercept | Intercept | 1 | -7.0355 | 0.0239 | 86770.22 | <.0001 |
| GENDER_CAT | Gender: 1=Female 0=Male | 1 | -0.3464 | 0.0279 | 154.2456 | <.0001 |
| BWHTCAT_2 | Birth Weight 2000 to 2499 grams | 1 | 1.1366 | 0.0583 | 379.5761 | <.0001 |
| BWHTCAT_3 | Birth Weight 1750 to 1999 grams | 1 | 1.7761 | 0.0789 | 507.1685 | <.0001 |
| BWHTCAT_4 | Birth Weight 1500 to 1749 grams | 1 | 2.2945 | 0.0753 | 929.624 | <.0001 |
| BWHTCAT_5 | Birth Weight 1250 to 1499 grams | 1 | 2.6694 | 0.0746 | 1279.202 | <.0001 |
| BWHTCAT_6 | Birth Weight 1000 to 1249 grams | 1 | 3.5321 | 0.0619 | 3259.209 | <.0001 |
| BWHTCAT_7 | Birth Weight 750 to 999 grams | 1 | 4.5037 | 0.0496 | 8237.879 | <.0001 |
| BWHTCAT_8 | Birth Weight <= 749 grams | 1 | 6.538 | 0.0364 | 32329.06 | <.0001 |
| CONGCAT_2 | Congenital anomalies related to genitourinary conditions | 1 | 3.6491 | 0.066 | 3061.254 | <.0001 |
| CONGCAT_3 | Congenital birth defect related to central nervous system | 1 | 2.3912 | 0.076 | 990.9455 | <.0001 |

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| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|---|----|----------|----------------|-----------------|-----------------|
| CONGCAT_4 | Congenital birth defects related to pulmonary conditions | 1 | 1.5327 | 0.0955 | 257.8095 | <.0001 |
| CONGCAT_5 | Congenital birth defects related to cardiovascular conditions | 1 | 3.4168 | 0.065 | 2760.767 | <.0001 |
| CONGCAT_6 | Congenital birth defects related to skeletal conditions | 1 | 5.1221 | 0.1912 | 717.3228 | <.0001 |
| CONGCAT_7 | Congenital birth defects related to chromosomal syndromes | 1 | 3.5753 | 0.1059 | 1140.253 | <.0001 |
| CONGCAT_8 | Other congenital birth defects | 1 | 2.6492 | 0.0932 | 807.6641 | <.0001 |

c-statistic=0.879

Table 12. Risk Adjustment Coefficients for NQI 03 Neonatal Blood Stream Infection Rate

| Parameter | Label | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|--------------|---|----|----------|----------------|-----------------|-----------------|
| Intercept | Intercept | 1 | -5.0454 | 0.1681 | 901.278 | <.0001 |
| AGEDAY_0 | AgeDay=0 | 1 | 0.1122 | 0.1591 | 0.4974 | 0.4806 |
| GENDER_CAT | Gender: 1=Female 0=Male | 1 | -0.1433 | 0.0565 | 6.4367 | 0.0112 |
| TRANSFER_ALT | Transfer | 1 | 0.1436 | 0.0937 | 2.3482 | 0.1254 |
| BWHTCAT_3 | Birth Weight 1750 to 1999 grams | 1 | 0.4082 | 0.1725 | 5.5986 | 0.018 |
| BWHTCAT_4 | Birth Weight 1500 to 1749 grams | 1 | 0.5221 | 0.1455 | 12.8712 | 0.0003 |
| BWHTCAT_5 | Birth Weight 1250 to 1499 grams | 1 | 0.2813 | 0.1198 | 5.5099 | 0.0189 |
| BWHTCAT_6 | Birth Weight 1000 to 1249 grams | 1 | 1.2449 | 0.0981 | 161.0887 | <.0001 |
| BWHTCAT_7 | Birth Weight 750 to 999 grams | 1 | 1.9284 | 0.0887 | 472.2531 | <.0001 |
| BWHTCAT_8 | Birth Weight <= 749 grams | 1 | 2.4522 | 0.0885 | 768.2928 | <.0001 |
| CONGCAT_2 | Congenital anomalies related to genitourinary conditions | 1 | 0.7586 | 0.2019 | 14.1237 | 0.0002 |
| CONGCAT_4 | Congenital birth defects related to pulmonary conditions | 1 | 0.5998 | 0.1336 | 20.1644 | <.0001 |
| CONGCAT_5 | Congenital birth defects related to cardiovascular conditions | 1 | 0.5937 | 0.1373 | 18.7116 | <.0001 |

c-statistic=0.75

Table 13. Risk Adjustment Coefficients (non SES) for PDI 14 Asthma Admission Rate

| PARAMETER | LABEL | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|-------------------|----|--------------|----------------|-----------------|-----------------|
| INTERCEPT | | 1 | -5.99302097 | 0.008488703 | 498435.4098 | <.0001 |
| SEX | Female | 1 | -0.526015116 | 0.014112582 | 1389.259943 | <.0001 |
| AGE | Male, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Male, Age 5-9 | 1 | -0.54307483 | 0.011988467 | 2052.069583 | <.0001 |
| AGE | Male, Age 10-14 | 1 | -1.412069653 | 0.015560937 | 8234.5667 | <.0001 |
| AGE | Male, Age 15-17 | 1 | -2.320098309 | 0.027696753 | 7017.05815 | <.0001 |
| AGE | Female, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Female, Age 5-9 | 1 | 0.085287008 | 0.019670988 | 18.79807691 | <.0001 |
| AGE | Female, Age 10-14 | 1 | 0.186966267 | 0.024865628 | 56.53633258 | <.0001 |
| AGE | Female, Age 15-17 | 1 | 0.733372833 | 0.038545508 | 361.9946004 | <.0001 |

c-statistic=0.613

Table 14. Risk Adjustment Coefficients (non SES) for PDI 15 Diabetes Short-Term Complications Admission Rate

| PARAMETER | LABEL | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|-------------------|----|--------------|----------------|-----------------|-----------------|
| INTERCEPT | | 1 | -8.096535653 | 0.023659406 | 117109.1424 | <.0001 |
| SEX | Female | 1 | 0.276098548 | 0.031694757 | 75.88455639 | <.0001 |
| AGE | Male, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Male, Age 5-9 | 1 | -1.11859058 | 0.043158545 | 671.7516306 | <.0001 |
| AGE | Male, Age 10-14 | 1 | -0.182441995 | 0.031097218 | 34.41965879 | <.0001 |
| AGE | Male, Age 15-17 | 0 | 0 | . | . | . |
| AGE | Female, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Female, Age 5-9 | 1 | -0.083902771 | 0.058564114 | 2.052529749 | 0.152 |
| AGE | Female, Age 10-14 | 1 | -0.106245064 | 0.042077148 | 6.375656938 | 0.0116 |
| AGE | Female, Age 15-17 | 0 | 0 | . | . | . |

c-statistic=0.557

Table 15. Risk Adjustment Coefficients (non SES) for PDI 16 Gastroenteritis Admission Rate

| PARAMETER | LABEL | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|-------------------|----|--------------|----------------|-----------------|-----------------|
| INTERCEPT | | 1 | -6.633941575 | 0.009282899 | 510711.9429 | <.0001 |
| SEX | Female | 1 | -0.136878984 | 0.013760476 | 98.94790694 | <.0001 |
| AGE | Male, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Male, Age 5-9 | 1 | -1.109100288 | 0.018035566 | 3781.656761 | <.0001 |
| AGE | Male, Age 10-14 | 1 | -2.235429186 | 0.028653167 | 6086.625514 | <.0001 |
| AGE | Male, Age 15-17 | 1 | -2.208140266 | 0.035574658 | 3852.75906 | <.0001 |
| AGE | Female, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Female, Age 5-9 | 1 | 0.070507202 | 0.026365961 | 7.151213625 | 0.0075 |
| AGE | Female, Age 10-14 | 1 | 0.153481213 | 0.040968472 | 14.0349512 | 0.0002 |
| AGE | Female, Age 15-17 | 1 | 0.433941557 | 0.047815725 | 82.36088314 | <.0001 |

c-statistic=0.651

Table 16. Risk Adjustment Coefficients (non SES) for PDI 17 Perforated Appendix Admission Rate

| PARAMETER | LABEL | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|-------------------|----|--------------|----------------|-----------------|-----------------|
| INTERCEPT | | 1 | 0.554965183 | 0.051872497 | 114.4609012 | <.0001 |
| SEX | Female | 1 | 0.161829644 | 0.080247492 | 4.066803798 | 0.0437 |
| AGE | Male, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Male, Age 5-9 | 1 | -0.852612842 | 0.056813338 | 225.2180173 | <.0001 |
| AGE | Male, Age 10-14 | 1 | -1.098718857 | 0.05558043 | 390.7773168 | <.0001 |
| AGE | Male, Age 15-17 | 1 | -1.353423299 | 0.058392264 | 537.2255644 | <.0001 |
| AGE | Female, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Female, Age 5-9 | 1 | -0.050324391 | 0.088063145 | 0.326564273 | 0.5677 |
| AGE | Female, Age 10-14 | 1 | -0.120011318 | 0.086227011 | 1.93712542 | 0.164 |
| AGE | Female, Age 15-17 | 1 | -0.563489919 | 0.091879015 | 37.61314401 | <.0001 |

c-statistic=0.568

Table 17. Risk Adjustment Coefficients (non SES) for PDI 18 Urinary Tract Infection Admission Rate

| PARAMETER | LABEL | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|-------------------|----|--------------|----------------|-----------------|-----------------|
| INTERCEPT | | 1 | -8.311161592 | 0.021449817 | 150133.0384 | <.0001 |
| SEX | Female | 1 | 1.277867554 | 0.024375613 | 2748.277504 | <.0001 |
| AGE | Male, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Male, Age 5-9 | 1 | -1.536873145 | 0.049203479 | 975.6283602 | <.0001 |
| AGE | Male, Age 10-14 | 1 | -1.890993665 | 0.056971016 | 1101.722501 | <.0001 |
| AGE | Male, Age 15-17 | 1 | -1.600598956 | 0.062423476 | 657.4597437 | <.0001 |
| AGE | Female, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Female, Age 5-9 | 1 | 0.579057368 | 0.053617717 | 116.634371 | <.0001 |
| AGE | Female, Age 10-14 | 1 | 0.081993722 | 0.064235107 | 1.629357136 | 0.2018 |
| AGE | Female, Age 15-17 | 1 | 0.922433793 | 0.066555757 | 192.0875229 | <.0001 |

c-statistic=0.688

Table 18. Risk Adjustment Coefficients (non SES) for PDI 90 Pediatric Quality Overall Composite

| PARAMETER | LABEL | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|-------------------|----|--------------|----------------|-----------------|-----------------|
| INTERCEPT | | 1 | -7.202991851 | 0.015141333 | 226306.8115 | <.0001 |
| SEX | Female | 1 | 0.592901803 | 0.01902892 | 970.8167312 | <.0001 |
| AGE | Male, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Male, Age 5-9 | 1 | 0.91177719 | 0.017306097 | 2775.74256 | <.0001 |
| AGE | Male, Age 10-14 | 1 | 0.334733637 | 0.018132205 | 340.7983575 | <.0001 |
| AGE | Male, Age 15-17 | 0 | 0 | . | . | . |
| AGE | Female, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Female, Age 5-9 | 1 | -0.708029712 | 0.022684316 | 974.207808 | <.0001 |
| AGE | Female, Age 10-14 | 1 | -0.61039015 | 0.023818038 | 656.7545209 | <.0001 |

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| PARAMETER | LABEL | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|-------------------|----|----------|----------------|-----------------|-----------------|
| AGE | Female, Age 15-17 | 0 | 0 | . | . | . |

c-statistic=0.544

Table 19. Risk Adjustment Coefficients (non SES) for PDI 91 Pediatric Quality Acute Composite

| PARAMETER | LABEL | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|-------------------|----|--------------|----------------|-----------------|-----------------|
| INTERCEPT | | 1 | -8.54689551 | 0.029631271 | 83198.64081 | <.0001 |
| SEX | Female | 1 | 1.196591395 | 0.03400153 | 1238.496633 | <.0001 |
| AGE | Male, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Male, Age 5-9 | 1 | 0.806745488 | 0.034297134 | 553.2958843 | <.0001 |
| AGE | Male, Age 10-14 | 1 | -0.088049682 | 0.038201123 | 5.3125537 | 0.0212 |
| AGE | Male, Age 15-17 | 0 | 0 | . | . | . |
| AGE | Female, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Female, Age 5-9 | 1 | -0.748156391 | 0.040661203 | 338.5511788 | <.0001 |
| AGE | Female, Age 10-14 | 1 | -0.715887426 | 0.045963237 | 242.5874143 | <.0001 |
| AGE | Female, Age 15-17 | 0 | 0 | . | . | . |

c-statistic=0.579

Table 20. Risk Adjustment Coefficients (non SES) for PDI 92 Pediatric Quality Chronic Composite

| PARAMETER | LABEL | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|-----------------|----|-------------|----------------|-----------------|-----------------|
| INTERCEPT | | 1 | -7.50557493 | 0.017611035 | 181634.4281 | <.0001 |
| SEX | Female | 1 | 0.246066338 | 0.023751509 | 107.3302133 | <.0001 |
| AGE | Male, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Male, Age 5-9 | 1 | 0.945870083 | 0.020048516 | 2225.863373 | <.0001 |
| AGE | Male, Age 10-14 | 1 | 0.449614695 | 0.02074055 | 469.93789 | <.0001 |
| AGE | Male, Age 15-17 | 0 | 0 | . | . | . |
| AGE | Female, Age 0-4 | 0 | 0 | . | . | . |

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| PARAMETER | LABEL | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|-------------------|----|--------------|----------------|-----------------|-----------------|
| AGE | Female, Age 5-9 | 1 | -0.625928133 | 0.028211783 | 492.2524453 | <.0001 |
| AGE | Female, Age 10-14 | 1 | -0.406675653 | 0.02883042 | 198.9731193 | <.0001 |
| AGE | Female, Age 15-17 | 0 | 0 | . | . | . |

c-statistic=0.557

Table 21. Risk Adjustment Coefficients (non SES) for PQI 09 Low Birth Weight Rate

| PARAMETER | LABEL | DF | Estimate | Standard Error | Wald Chi-Square | Pr > Chi-Square |
|-----------|-------------------|----|--------------|----------------|-----------------|-----------------|
| INTERCEPT | | 1 | -2.744699811 | 0.003288259 | 696719.2249 | <.0001 |
| SEX | Female | 1 | 0.106425058 | 0.004599093 | 535.4801199 | <.0001 |
| AGE | Male, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Male, Age 5-9 | 0 | 0 | . | . | . |
| AGE | Male, Age 10-14 | 0 | 0 | . | . | . |
| AGE | Male, Age 15-17 | 0 | 0 | . | . | . |
| AGE | Female, Age 0-4 | 0 | 0 | . | . | . |
| AGE | Female, Age 5-9 | 0 | 0 | . | . | . |
| AGE | Female, Age 10-14 | 0 | 0 | . | . | . |
| AGE | Female, Age 15-17 | 0 | 0 | . | . | . |

c-statistic=0.502