



# **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.<sup>1</sup> 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.<sup>2</sup>

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

<sup>1</sup> 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

<sup>2</sup> 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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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
mrg_1708	LYMPHOMA AND NON-ACUTE LEUKEMIA W OTHER O.R. PROC	1	4.2681	0.7221	34.9395	<.0001
mrg_2109	OTHER INJURY - POISONING AND TOXIC EFFECT DIAG	1	1.744	0.7282	5.735	0.0166
mrg_2407	LIMB REATTACHMENT - HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	1	3.2081	1.0105	10.0779	0.0015
mrg_2408	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA	1	3.2962	0.721	20.8978	<.0001
mrg_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**