



INPATIENT QUALITY INDICATORS (IQI) RISK ADJUSTMENT COEFFICIENTS

Version 4.5

Prepared for:

Agency for Healthcare Research and Quality
U.S. Department of Health and Human Services
540 Gaither Road
Rockville, MD 20850
<http://www.qualityindicators.ahrq.gov>

Contract No. HHS A290201200001C

Prepared by:

Battelle
505 King Avenue
Columbus, OH 43201

May 2013

Table of Contents

Executive Summary iii

List of Risk Adjustment Coefficient Tables

Table 1. IQI #8 Esophageal Resection Mortality Rate 1

Table 2. IQI #9 Pancreatic Resection Mortality Rate 2

Table 2A. IQI #9A - Stratum A 3

Table 2B. IQI #9B - Stratum B 4

Table 3. IQI #11 - Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate 5

Table 3A. IQI #11A - Stratum A 6

Table 3B. IQI #11B - Stratum B 7

Table 3C. IQI #11C - Stratum C 8

Table 3D. IQI #11D - Stratum D 9

Table 4. IQI #12 Coronary Artery Bypass Graft (CABG) Mortality Rate 10

Table 5. IQI #13 Craniotomy Mortality Rate 11

Table 6. IQI #14 Hip Replacement Mortality Rate 12

Table 7. IQI #15 Acute Myocardial Infarction (AMI) Mortality Rate 13

Table 8. IQI #16 Heart Failure Mortality Rate 15

Table 9. IQI #17 Acute Stroke Mortality Rate 17

Table 9A. IQI #17A - Stratum A 19

Table 9B. IQI #17B - Stratum B 20

Table 9C. IQI #17C - Stratum C 21

Table 10. IQI #18 Gastrointestinal Hemorrhage Mortality Rate 22

Table 11. IQI #19 Hip Fracture Mortality Rate 23

Table 12. IQI #20 Pneumonia Mortality Rate 24

Table 13. IQI #30 Percutaneous Coronary Intervention (PCI) Mortality Rate 26

Table 14. IQI #31 Carotid Endarterectomy Mortality Rate 27

Table 15. IQI #32 Acute Myocardial Infarction (AMI) Mortality Rate, Without
Transfer Cases 28

Table 16. IQI #26 Coronary Artery Bypass Graft (CABG) Rate 29

Table 17. IQI #27 Percutaneous Coronary Intervention (PCI) Rate 30

Table 18. IQI #28 Hysterectomy Rate 31

Table 19. IQI #29 Laminectomy or Spinal Fusion Rate 32

List of Tables Describing Categorical Covariates

Table A.1. Population Age Categories	34
Table A.2. Major Diagnostic Categories (MDC).....	35
Table A.3. Categorical Variables Definition: Transfer, Point of Origin, Ruptured.....	36

Executive Summary

This document provides the risk adjustment covariates and coefficients for relevant Agency for Healthcare Research and Quality (AHRQ) Quality Indicators™ (QI) Inpatient Quality Indicators (IQI). These 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, Major Diagnostic Categories (MDC), All Payer Refined Diagnosis Related Group (APR-DRG), patient point-of-origin and whether they were transferred from another facility. Descriptions of some variable categories are provided in the Appendix tables at 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 IQI. IQI 9, 11, and 17 are stratified and individual models are fit for each stratum and each stratum has its own table of coefficients. Please note that the 3M™ APR-DRG grouper list is not provided in the Appendix, as this material is copyrighted by 3M™.

Additional information on the risk adjustment process can 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 IQI #8 Esophageal Resection Mortality Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-3.6965	0.1449	650.77	< 0.0001
AGE	65 to 74	1	0.6054	0.1609	14.15	0.0002
AGE	75+	1	0.7211	0.2102	11.77	0.0006
APR-DRG	'2203' to '2204'	1	1.6734	0.2586	41.87	< 0.0001
MDC	6	1	2.1151	0.2018	109.86	< 0.0001
MDC	Other	1	1.3847	0.3481	15.82	0.0001

c-statistic = 0.746

Table 2. Risk Adjustment Coefficients for IQI #9 Pancreatic Resection Mortality Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-3.8274	0.1028	1386.61	< 0.0001
SEX	Female	1	-0.2852	0.0738	14.93	0.0001
AGE	65 to 74	1	0.3947	0.0884	19.95	< 0.0001
AGE	75+	1	0.6624	0.1034	41.06	< 0.0001
APR-DRG	'2603' to '2604'	1	1.5700	0.1345	136.27	< 0.0001
MDC	7	1	2.7360	0.2398	130.23	< 0.0001
MDC	Other	1	0.8245	0.0953	74.86	< 0.0001

c-statistic = 0.724

Table 2A. Risk Adjustment Coefficients for IQI #9A Pancreatic Resection Mortality Rate - Stratum A

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-3.8504	0.1286	896.03	< 0.0001
SEX	Female	1	-0.0881	0.1019	0.75	0.3871
AGE	65 to 74	1	0.4468	0.1241	12.96	0.0003
AGE	75+	1	0.6249	0.1363	21.02	< 0.0001
APR-DRG	'2603' to '2604'	1	1.4833	0.1430	107.63	< 0.0001
MDC	7	1	2.7556	0.2679	105.82	< 0.0001
MDC	Other	1	1.0102	0.1817	30.92	< 0.0001

c-statistic = 0.742

Table 2B. Risk Adjustment Coefficients for IQI #9B Pancreatic Resection Mortality Rate - Stratum B

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-4.3407	0.2040	452.77	< 0.0001
SEX	Female	1	-0.5858	0.1444	16.45	< 0.0001
AGE	65 to 74	1	0.2023	0.1650	1.50	0.2207
AGE	75+	1	0.6575	0.1835	12.84	0.0003
APR-DRG	'2603' to '2604'	1	2.1965	0.2976	54.46	< 0.0001
MDC	7	1	3.1519	0.4575	47.46	< 0.0001
MDC	Other	1	1.3450	0.1968	46.72	< 0.0001

c-statistic = 0.713

Table 3. Risk Adjustment Coefficients for IQI #11 - Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-6.4212	0.1425	2031.34	< 0.0001
SEX	Female	1	0.4118	0.0678	36.93	< 0.0001
AGE	65 to 74	1	0.5184	0.1054	24.18	< 0.0001
AGE	75 to 79	1	0.8033	0.1141	49.60	< 0.0001
AGE	80 to 84	1	1.1127	0.1065	109.24	< 0.0001
AGE	85+	1	1.4150	0.1219	134.77	< 0.0001
APR-DRG	'1691' to '1692'	1	2.2915	0.1262	329.76	< 0.0001

c-statistic = 0.923

Table 3A. Risk Adjustment Coefficients for IQI #11A Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate - Stratum A

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-1.0754	0.8732	1.52	0.2181
SEX	Female	1	0.1352	0.1053	1.65	0.1990
AGE	65 to 74	1	0.2916	0.1441	4.10	0.0429
AGE	75 to 79	1	0.6285	0.1663	14.28	0.0002
AGE	80 to 84	1	0.8488	0.1624	27.30	< 0.0001
AGE	85+	1	1.2200	0.1813	45.29	< 0.0001
APR-DRG	'1693' to '1694'	1	0.0802	0.8669	0.01	0.9263
MDC	5	1	-0.5914	0.8829	0.45	0.5030
MDC	Other	1	0.2695	0.9095	0.09	0.7670

c-statistic = 0.612

Table 3B. Risk Adjustment Coefficients for IQI #11B Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate - Stratum B

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-3.3433	0.2559	170.73	< 0.0001
SEX	Female	1	0.2970	0.1217	5.96	0.0146
AGE	65 to 74	1	0.9035	0.2167	17.39	< 0.0001
AGE	75 to 79	1	1.1289	0.2498	20.42	< 0.0001
AGE	80 to 84	1	1.8725	0.2294	66.63	< 0.0001
AGE	85+	1	2.1703	0.2732	63.09	< 0.0001
APR-DRG	'1691' to '1692'	1	-1.1094	0.1985	31.24	< 0.0001
APR-DRG	'1693' to '1694'	1	-0.0972	0.2538	0.15	0.7018
MDC	Other	1	0.6556	0.3318	3.91	0.0481
RUPTURED	AAA Repair	1	1.7535	0.6273	7.81	0.0052

c-statistic = 0.719

Table 3C. Risk Adjustment Coefficients for IQI #11C Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate - Stratum C

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-0.8357	1.0401	0.65	0.4217
SEX	Female	1	0.4803	0.1516	10.04	0.0015
AGE	65 to 74	1	0.5498	0.2368	5.39	0.0202
AGE	75 to 79	1	0.8190	0.2469	11.00	0.0009
AGE	80 to 84	1	0.9728	0.2381	16.69	< 0.0001
AGE	85+	1	1.3479	0.2289	34.67	< 0.0001
APR-DRG	'1693' to '1694'	1	-0.1217	1.0877	0.01	0.9109
APR-DRG	'1733' to '1734'	1	-1.3505	1.0450	1.67	0.1963
MDC	5	1	-1.2039	1.0768	1.25	0.2636
MDC	Other	1	-0.9959	1.1199	0.79	0.3739

c-statistic = 0.664

Table 3D. Risk Adjustment Coefficients for IQI #11D Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate - Stratum D

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-6.4135	0.2660	581.40	< 0.0001
SEX	Female	1	0.7596	0.1368	30.82	< 0.0001
AGE	65 to 74	1	0.5046	0.2981	2.87	0.0905
AGE	75 to 79	1	0.7483	0.3051	6.01	0.0142
AGE	80 to 84	1	0.7227	0.2901	6.20	0.0128
AGE	85+	1	1.1598	0.3050	14.46	0.0001
APR-DRG	'1691' to '1692'	1	2.5145	0.2520	99.54	< 0.0001
APR-DRG	'1693' to '1694'	1	4.1102	0.3817	115.98	< 0.0001
APR-DRG	'1733' to '1734'	1	2.7301	0.1678	264.64	< 0.0001
MDC	5	1	3.0684	0.2623	136.81	< 0.0001
MDC	Other	1	2.1378	0.3338	41.01	< 0.0001
RUPTURED	AAA Repair	1	1.6537	0.7549	4.80	0.0285

c-statistic = 0.825

Table 4. Risk Adjustment Coefficients for IQI #12 Coronary Artery Bypass Graft (CABG) Mortality Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-5.1640	0.0762	4592.72	< 0.0001
SEX	Female	1	0.4517	0.0287	247.56	< 0.0001
AGE	40 to 49	1	-0.0963	0.0864	1.24	0.2652
AGE	50 to 54	1	-0.2600	0.0852	9.31	0.0023
AGE	55 to 59	1	-0.1518	0.0650	5.45	0.0196
AGE	65 to 84	1	0.3022	0.0463	42.59	< 0.0001
AGE	85+	1	0.8401	0.0696	145.69	< 0.0001
APR-DRG	'1611' to '1612'	1	1.6326	0.2128	58.86	< 0.0001
APR-DRG	'1613'	1	2.8375	0.1359	435.86	< 0.0001
APR-DRG	'1614'	1	3.5087	0.1608	475.94	< 0.0001
APR-DRG	'1621' to '1622'	1	0.9300	0.0978	90.47	< 0.0001
APR-DRG	'1623'	1	2.4356	0.0794	941.17	< 0.0001
APR-DRG	'1624'	1	3.7135	0.1074	1196.34	< 0.0001
APR-DRG	'1652'	1	0.0695	0.0729	0.91	0.3403
APR-DRG	'1653'	1	1.6442	0.0666	608.63	< 0.0001
APR-DRG	'1654'	1	3.2220	0.0878	1346.81	< 0.0001
APR-DRG	'1661'	1	-0.2964	0.0731	16.45	< 0.0001
APR-DRG	'1663'	1	1.7607	0.0792	494.52	< 0.0001
APR-DRG	'1664'	1	3.6451	0.1195	930.32	< 0.0001
MDC	5	1	2.0294	0.0636	1016.64	< 0.0001
MDC	Other	1	2.1723	0.1095	393.43	< 0.0001

c-statistic = 0.814

Table 5. Risk Adjustment Coefficients for IQI #13 Craniotomy Mortality Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-4.3458	0.0592	5387.97	< 0.0001
AGE	18 to 24	1	-0.9149	0.1097	69.62	< 0.0001
AGE	25 to 59	1	-0.1707	0.0437	15.28	0.0001
AGE	65 +	1	0.0934	0.0399	5.47	0.0193
APR-DRG	'0212'	1	0.8858	0.0600	217.61	< 0.0001
APR-DRG	'0213'	1	2.5524	0.0538	2252.52	< 0.0001
APR-DRG	'0214'	1	3.6879	0.0654	3184.02	< 0.0001
APR-DRG	'0221' to '0222'	1	-1.0040	0.1209	68.98	< 0.0001
APR-DRG	'0223'	1	1.4448	0.1750	68.17	< 0.0001
APR-DRG	'0224'	1	3.3648	0.0980	1179.39	< 0.0001
APR-DRG	'0241' to '0242'	1	0.5755	0.0768	56.19	< 0.0001
APR-DRG	'0243'	1	2.7037	0.0985	753.70	< 0.0001
APR-DRG	'0244'	1	4.3735	0.1260	1204.87	< 0.0001
MDC	1	1	1.4273	0.1933	54.50	< 0.0001
TRANSFER	Transfer-in	1	0.2913	0.0427	46.64	< 0.0001

c-statistic = 0.876

Table 6. Risk Adjustment Coefficients for IQI #14 Hip Replacement Mortality Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-7.5118	0.2459	933.09	< 0.0001
SEX	Female	1	-0.3817	0.1312	8.46	0.0036
AGE	18 to 59	1	-0.5091	0.2856	3.18	0.0746
AGE	65 +	1	0.7385	0.2304	10.27	0.0014
APR-DRG	'3013' to '3014'	1	3.6718	0.1611	519.78	< 0.0001
MDC	8	1	5.2450	0.6303	69.26	< 0.0001
MDC	Other	1	3.5250	0.3888	82.21	< 0.0001

c-statistic = 0.724

Table 7. Risk Adjustment Coefficients for IQI #15 Acute Myocardial Infarction (AMI) Mortality Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-5.1609	0.0407	16086.28	< 0.0001
AGE	18 to 39	1	-0.4815	0.0722	44.43	< 0.0001
AGE	40 to 44	1	-0.4941	0.0653	57.16	< 0.0001
AGE	45 to 49	1	-0.4317	0.0435	98.36	< 0.0001
AGE	50 to 54	1	-0.2358	0.0364	41.95	< 0.0001
AGE	55 to 59	1	-0.1613	0.0323	25.00	< 0.0001
AGE	65 to 79	1	0.0173	0.0247	0.49	0.4836
AGE	80 to 84	1	0.0570	0.0274	4.33	0.0375
AGE	85+	1	0.2089	0.0257	66.05	< 0.0001
APR-DRG	'1611' to '1612'	1	1.3298	0.1681	62.62	< 0.0001
APR-DRG	'1613' to '1614'	1	3.0198	0.0716	1779.35	< 0.0001
APR-DRG	'1621' to '1622'	1	1.3740	0.2161	40.43	< 0.0001
APR-DRG	'1623'	1	3.0742	0.1090	796.18	< 0.0001
APR-DRG	'1624'	1	4.1672	0.1173	1261.27	< 0.0001
APR-DRG	'1651' to '1652'	1	0.4057	0.0767	27.96	< 0.0001
APR-DRG	'1653'	1	2.1239	0.0608	1220.56	< 0.0001
APR-DRG	'1654'	1	3.6326	0.0704	2664.15	< 0.0001
APR-DRG	'1731' to '1734'	1	3.1595	0.1019	961.04	< 0.0001
APR-DRG	'1742'	1	0.6930	0.0442	245.39	< 0.0001
APR-DRG	'1743'	1	2.1763	0.0465	2186.10	< 0.0001
APR-DRG	'1744'	1	4.1474	0.0392	11197.34	< 0.0001
APR-DRG	'1901'	1	0.1061	0.0779	1.86	0.1731
APR-DRG	'1902'	1	1.4698	0.0433	1152.89	< 0.0001
APR-DRG	'1903'	1	2.7050	0.0368	5393.03	< 0.0001
APR-DRG	'1904'	1	4.3352	0.0383	12823.65	< 0.0001

(CONTINUED)

AHRQ Quality Indicators™
Inpatient Quality Indicators (IQI) Risk Adjustment Coefficients

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
MDC	5	1	2.8773	0.0470	3740.82	< 0.0001
TRNSFER	Transfer-in	1	-0.0168	0.0218	0.59	0.4423

c-statistic = 0.864

Table 8. Risk Adjustment Coefficients for IQI #16 Heart Failure Mortality Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-4.9945	0.0456	11970.75	< 0.0001
SEX	Female	1	-0.1123	0.0122	85.35	< 0.0001
AGE	18 to 49	1	-0.2658	0.0392	45.95	< 0.0001
AGE	50 to 54	1	-0.2361	0.0399	34.98	< 0.0001
AGE	55 to 59	1	-0.1767	0.0377	22.01	< 0.0001
AGE	65 to 84	1	0.1332	0.0264	25.39	< 0.0001
AGE	85+	1	0.6179	0.0277	497.80	< 0.0001
APR-DRG	'1611'	1	-0.8107	0.2231	13.20	0.0003
APR-DRG	'1612'	1	-0.2612	0.1052	6.16	0.0130
APR-DRG	'1613'	1	0.8464	0.0958	78.06	< 0.0001
APR-DRG	'1614'	1	2.4867	0.1078	532.25	< 0.0001
APR-DRG	'1621' to '1622'	1	1.9184	0.3393	31.97	< 0.0001
APR-DRG	'1623'	1	2.5170	0.1195	443.56	< 0.0001
APR-DRG	'1624'	1	3.9789	0.1987	401.17	< 0.0001
APR-DRG	'1751' to '1753'	1	0.7925	0.0897	78.09	< 0.0001
APR-DRG	'1754'	1	2.7743	0.1004	763.97	< 0.0001
APR-DRG	'1801'	1	2.1386	0.4282	24.95	< 0.0001
APR-DRG	'1802'	1	1.3231	0.1887	49.14	< 0.0001
APR-DRG	'1803'	1	1.6642	0.1127	217.88	< 0.0001
APR-DRG	'1804'	1	2.8723	0.1423	407.14	< 0.0001
APR-DRG	'1911' to '1912'	1	-0.5022	0.0899	31.18	< 0.0001
APR-DRG	'1913'	1	1.2387	0.0660	352.67	< 0.0001
APR-DRG	'1914'	1	2.8517	0.0672	1799.14	< 0.0001
APR-DRG	'1942'	1	0.4978	0.0374	176.95	< 0.0001
APR-DRG	'1943'	1	1.6472	0.0373	1952.72	< 0.0001

(CONTINUED)

AHRQ Quality Indicators™
Inpatient Quality Indicators (IQI) Risk Adjustment Coefficients

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
APR-DRG	'1944'	1	2.9714	0.0406	5358.80	< 0.0001
MDC	Other	1	2.1169	0.0492	1850.30	< 0.0001
TRANSFER	Transfer-in	1	0.7764	0.0428	329.63	< 0.0001
NOPOUB04	UB-04 Point-of-Origin Data Not Available	1	0.0315	0.0309	1.04	0.3079

c-statistic = 0.773

Table 9. Risk Adjustment Coefficients for IQI #17 Acute Stroke Mortality Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-4.8190	0.0435	12283.36	< 0.0001
SEX	Female	1	0.0889	0.0119	55.58	< 0.0001
AGE	18 to 59	1	-0.1685	0.0239	49.82	< 0.0001
AGE	65 to 84	1	0.0315	0.0223	2.00	0.1574
AGE	85+	1	0.4676	0.0258	327.29	< 0.0001
APR-DRG	'0211'	1	1.6099	0.0729	488.23	< 0.0001
APR-DRG	'0212'	1	2.3177	0.0644	1293.18	< 0.0001
APR-DRG	'0213'	1	3.6171	0.0465	6049.04	< 0.0001
APR-DRG	'0214'	1	4.8732	0.0567	7374.43	< 0.0001
APR-DRG	'0221'	1	1.5959	0.8993	3.15	0.0760
APR-DRG	'0222'	1	2.1657	0.7023	9.51	0.0020
APR-DRG	'0223' to '0224'	1	4.0903	0.0844	2347.12	< 0.0001
APR-DRG	'0241'	1	0.8871	0.1667	28.34	< 0.0001
APR-DRG	'0242'	1	1.5332	0.0723	449.66	< 0.0001
APR-DRG	'0243'	1	2.9467	0.0772	1458.41	< 0.0001
APR-DRG	'0244'	1	4.8179	0.1050	2106.82	< 0.0001
APR-DRG	'0261' to '0263'	1	0.5856	0.1458	16.14	0.0001
APR-DRG	'0264'	1	3.3734	0.1984	289.20	< 0.0001
APR-DRG	'0441'	1	2.3209	0.0516	2023.71	< 0.0001
APR-DRG	'0442'	1	2.3736	0.0431	3035.50	< 0.0001
APR-DRG	'0443'	1	3.2257	0.0441	5351.97	< 0.0001
APR-DRG	'0444'	1	5.5956	0.0433	16695.42	< 0.0001
APR-DRG	'0452'	1	1.1227	0.0366	941.48	< 0.0001
APR-DRG	'0453'	1	2.1956	0.0392	3132.15	< 0.0001
APR-DRG	'0454'	1	4.2522	0.0397	11461.22	< 0.0001

(CONTINUED)

AHRQ Quality Indicators™
Inpatient Quality Indicators (IQI) Risk Adjustment Coefficients

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
MDC	OTHER	1	2.6431	0.0492	2882.30	< 0.0001
NOPOUB04	UB-04 Point-of-Origin Data Not Available	1	0.0350	0.0315	1.23	0.2665

c-statistic = 0.889

AHRQ Quality Indicators™
Inpatient Quality Indicators (IQI) Risk Adjustment Coefficients

Table 9A. Risk Adjustment Coefficients for IQI #17A Acute Stroke Mortality Rate - Stratum A

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-2.1406	0.2313	85.61	< 0.0001
SEX	Female	1	0.1132	0.0417	7.38	0.0066
AGE	18 to 59	1	-0.1998	0.0656	9.27	0.0023
AGE	65 to 84	1	0.1784	0.0683	6.81	0.0091
AGE	85+	1	0.6760	0.0965	49.12	< 0.0001
APR-DRG	'0211'	1	-0.5778	0.2316	6.22	0.0126
APR-DRG	'0212'	1	0.9270	0.2623	12.49	0.0004
APR-DRG	'0213'	1	0.9082	0.2211	16.87	< 0.0001
APR-DRG	'0214'	1	2.6021	0.2413	116.26	< 0.0001
APR-DRG	'0223' to '0224'	1	1.0355	0.2326	19.83	< 0.0001
APR-DRG	'0241'	1	-1.6556	0.2692	37.81	< 0.0001
APR-DRG	'0242'	1	-0.9033	0.3073	8.64	0.0033
APR-DRG	'0243'	1	0.5110	0.2828	3.26	0.0708
APR-DRG	'0244'	1	2.0440	0.2846	51.58	< 0.0001
APR-DRG	'0264'	1	2.2674	0.9688	5.48	0.0193
APR-DRG	'0442'	1	-1.0511	0.2269	21.46	< 0.0001
APR-DRG	'0443'	1	0.2698	0.2217	1.48	0.2237
APR-DRG	'0444'	1	3.3044	0.2233	219.05	< 0.0001
MDC	OTHER	1	0.0422	0.2239	0.04	0.8505
NOPOUB04	UB-04 Point-of-Origin Data Not Available	1	0.0714	0.0692	1.07	0.3016

c-statistic = 0.861

AHRQ Quality Indicators™
Inpatient Quality Indicators (IQI) Risk Adjustment Coefficients

Table 9B. Risk Adjustment Coefficients for IQI #17B Acute Stroke Mortality Rate - Stratum B

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-1.5808	0.1468	116.04	< 0.0001
SEX	Female	1	0.1029	0.0183	31.61	< 0.0001
AGE	18 to 59	1	-0.1203	0.0335	12.91	0.0003
AGE	65 to 84	1	0.0790	0.0328	5.79	0.0161
AGE	85+	1	0.3280	0.0376	76.08	< 0.0001
APR-DRG	'0211'	1	-1.9367	0.1694	130.64	< 0.0001
APR-DRG	'0212'	1	-1.1868	0.1548	58.78	< 0.0001
APR-DRG	'0213'	1	0.4967	0.1454	11.66	0.0006
APR-DRG	'0214'	1	1.4372	0.1548	86.14	< 0.0001
APR-DRG	'0222'	1	-1.1231	0.7993	1.97	0.1600
APR-DRG	'0223' to '0224'	1	1.4440	0.1650	76.58	< 0.0001
APR-DRG	'0241'	1	-1.7624	0.5083	12.02	0.0005
APR-DRG	'0242'	1	-0.5682	0.4209	1.82	0.1770
APR-DRG	'0243'	1	-0.4169	0.3778	1.22	0.2699
APR-DRG	'0244'	1	1.8300	0.4056	20.36	< 0.0001
APR-DRG	'0261' to '0263'	1	-1.8382	0.3570	26.51	< 0.0001
APR-DRG	'0264'	1	-0.2021	0.4944	0.17	0.6827
APR-DRG	'0441'	1	-0.7227	0.1431	25.49	< 0.0001
APR-DRG	'0442'	1	-0.6214	0.1411	19.39	< 0.0001
APR-DRG	'0443'	1	0.1245	0.1471	0.72	0.3972
APR-DRG	'0444'	1	2.3712	0.1418	279.70	< 0.0001
MDC	OTHER	1	-0.2590	0.1441	3.23	0.0722
NOPOUB04	UB-04 Point-of-Origin Data Not Available	1	-0.0540	0.0393	1.88	0.1700

c-statistic = 0.826

AHRQ Quality Indicators™
Inpatient Quality Indicators (IQI) Risk Adjustment Coefficients

Table 9C. Risk Adjustment Coefficients for IQI #17C Acute Stroke Mortality Rate - Stratum C

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-5.1383	0.0524	9599.87	< 0.0001
SEX	Female	1	0.0407	0.0158	6.66	0.0098
AGE	18 to 59	1	-0.2393	0.0366	42.81	< 0.0001
AGE	65 to 84	1	-0.0287	0.0334	0.74	0.3897
AGE	85+	1	0.4964	0.0373	177.19	< 0.0001
APR-DRG	'0211'	1	3.3114	0.1733	365.31	< 0.0001
APR-DRG	'0212'	1	4.1946	0.1376	929.22	< 0.0001
APR-DRG	'0213'	1	4.2220	0.1349	979.88	< 0.0001
APR-DRG	'0214'	1	5.3068	0.1104	2309.94	< 0.0001
APR-DRG	'0221'	1	-2.6592	1.0923	5.93	0.0149
APR-DRG	'0222'	1	3.1751	1.1388	7.77	0.0053
APR-DRG	'0223' to '0224'	1	4.4502	0.3665	147.41	< 0.0001
APR-DRG	'0242'	1	1.7647	0.0813	470.97	< 0.0001
APR-DRG	'0243'	1	3.2006	0.0939	1161.64	< 0.0001
APR-DRG	'0244'	1	5.1228	0.1163	1939.19	< 0.0001
APR-DRG	'0261' to '0263'	1	0.7975	0.1773	20.23	< 0.0001
APR-DRG	'0264'	1	3.6649	0.2386	235.84	< 0.0001
APR-DRG	'0452'	1	1.4427	0.0420	1181.24	< 0.0001
APR-DRG	'0453'	1	2.5177	0.0445	3194.74	< 0.0001
APR-DRG	'0454'	1	4.5898	0.0469	9589.53	< 0.0001
MDC	OTHER	1	2.8093	0.0644	1902.00	< 0.0001
NOPOUB04	UB-04 Point-of-Origin Data Not Available	1	0.0493	0.0343	2.07	0.1507

c-statistic = 0.863

Table 10. Risk Adjustment Coefficients for IQI #18 Gastrointestinal Hemorrhage Mortality Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-5.2846	0.0670	6225.30	< 0.0001
AGE	18 to 59	1	-0.2916	0.0474	37.88	< 0.0001
AGE	65+	1	-0.0775	0.0423	3.35	0.0671
APR-DRG	'2201'	1	1.9247	0.2163	79.15	< 0.0001
APR-DRG	'2202'	1	2.9500	0.1257	550.99	< 0.0001
APR-DRG	'2203'	1	3.4545	0.1043	1097.79	< 0.0001
APR-DRG	'2204'	1	4.7295	0.1032	2099.86	< 0.0001
APR-DRG	'2211'	1	1.5025	0.1831	67.37	< 0.0001
APR-DRG	'2212'	1	2.7054	0.1122	581.53	< 0.0001
APR-DRG	'2213'	1	3.2361	0.1149	793.00	< 0.0001
APR-DRG	'2214'	1	4.7561	0.1306	1326.27	< 0.0001
APR-DRG	'2411' to '2413'	1	0.6808	0.0593	131.76	< 0.0001
APR-DRG	'2414'	1	3.3762	0.0662	2602.82	< 0.0001
APR-DRG	'2421' to '2423'	1	0.9352	0.0873	114.88	< 0.0001
APR-DRG	'2424'	1	4.1161	0.0913	2033.06	< 0.0001
APR-DRG	'2441' to '2442'	1	-0.8378	0.1056	62.91	< 0.0001
APR-DRG	'2443'	1	1.3553	0.0914	220.00	< 0.0001
APR-DRG	'2444'	1	3.0112	0.1046	828.62	< 0.0001
APR-DRG	'2532'	1	1.1874	0.0587	409.84	< 0.0001
APR-DRG	'2533'	1	2.4039	0.0596	1626.25	< 0.0001
APR-DRG	'2534'	1	4.0381	0.0617	4276.67	< 0.0001
APR-DRG	'2541' to '2534'	1	1.0596	0.0686	238.61	< 0.0001
APR-DRG	'2544'	1	3.6589	0.0888	1699.12	< 0.0001
MDC	Other	1	2.1146	0.0673	986.62	< 0.0001
TRANSFER	Transfer-in	1	0.4671	0.0449	108.30	< 0.0001

c-statistic = 0.821

AHRQ Quality Indicators™
Inpatient Quality Indicators (IQI) Risk Adjustment Coefficients

Table 11. Risk Adjustment Coefficients for IQI #19 Hip Fracture Mortality Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-4.8673	0.0850	3275.40	< 0.0001
SEX	Female	1	-0.5463	0.0269	413.58	< 0.0001
AGE	70 to 84	1	0.4429	0.0745	35.36	< 0.0001
AGE	85+	1	0.9903	0.0737	180.74	< 0.0001
APR-DRG	'3011' to '3012'	1	0.2460	0.0565	18.95	< 0.0001
APR-DRG	'3013'	1	1.4300	0.0633	510.23	< 0.0001
APR-DRG	'3014'	1	3.2881	0.0964	1163.73	< 0.0001
APR-DRG	'3082'	1	0.3729	0.0562	44.06	< 0.0001
APR-DRG	'3083'	1	1.3375	0.0601	494.56	< 0.0001
APR-DRG	'3084'	1	3.3167	0.0839	1562.32	< 0.0001
APR-DRG	'3401'	1	0.8764	0.1198	53.54	< 0.0001
APR-DRG	'3402'	1	1.8461	0.0715	666.33	< 0.0001
APR-DRG	'3403'	1	3.0592	0.0710	1854.08	< 0.0001
APR-DRG	'3404'	1	4.5938	0.0957	2302.79	< 0.0001
MDC	8	1	2.7556	0.1195	531.69	< 0.0001
MDC	24	1	1.8192	0.0856	451.82	< 0.0001
TRNSFER	Transfer-in	1	-0.0537	0.0730	0.54	0.4616
NOPOUB04	UB-04 Point-of-Origin Data Not Available	1	-0.1287	0.0434	8.78	0.0030

c-statistic = 0.780

Table 12. Risk Adjustment Coefficients for IQI #20 Pneumonia Mortality Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-5.2858	0.0441	14393.74	< 0.0001
SEX	Female	1	-0.0802	0.0121	44.26	< 0.0001
AGE	18 to 24	1	-1.3299	0.0924	206.92	< 0.0001
AGE	25 to 29	1	-1.0483	0.0936	125.46	< 0.0001
AGE	30 to 34	1	-1.1133	0.0963	133.53	< 0.0001
AGE	35 to 39	1	-0.7935	0.0762	108.31	< 0.0001
AGE	40 to 44	1	-0.6704	0.0608	121.43	< 0.0001
AGE	45 to 49	1	-0.4763	0.0482	97.64	< 0.0001
AGE	50 to 54	1	-0.3217	0.0413	60.68	< 0.0001
AGE	55 to 59	1	-0.1671	0.0358	21.74	< 0.0001
AGE	80 to 84	1	0.1625	0.0268	36.64	< 0.0001
AGE	85+	1	0.6413	0.0289	492.37	< 0.0001
APR-DRG	'1211'	1	1.6275	0.1894	73.86	< 0.0001
APR-DRG	'1212'	1	3.0432	0.1411	464.89	< 0.0001
APR-DRG	'1213'	1	3.5566	0.1097	1052.07	< 0.0001
APR-DRG	'1214'	1	4.5066	0.1400	1036.54	< 0.0001
APR-DRG	'1301'	1	3.8377	0.1074	1275.71	< 0.0001
APR-DRG	'1302'	1	4.4578	0.0598	5563.51	< 0.0001
APR-DRG	'1303' to '1304'	1	4.7064	0.0475	9809.37	< 0.0001
APR-DRG	'1371'	1	-0.6092	0.2067	8.68	0.0032
APR-DRG	'1372'	1	1.0699	0.0569	353.21	< 0.0001
APR-DRG	'1373'	1	2.3129	0.0456	2575.44	< 0.0001
APR-DRG	'1374'	1	3.3333	0.0482	4780.66	< 0.0001
APR-DRG	'1392'	1	1.1038	0.0350	995.32	< 0.0001
APR-DRG	'1393'	1	2.3595	0.0355	4418.55	< 0.0001

(CONTINUED)

AHRQ Quality Indicators™
Inpatient Quality Indicators (IQI) Risk Adjustment Coefficients

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
APR-DRG	'1394'	1	3.5152	0.0384	8375.27	< 0.0001
MDC	4	1	2.9036	0.0460	3981.23	< 0.0001
MDC	25	1	1.8942	0.1108	292.09	< 0.0001
TRNSFER	Transfer-in	1	0.5412	0.0343	249.01	< 0.0001

c-statistic = 0.829

AHRQ Quality Indicators™
Inpatient Quality Indicators (IQI) Risk Adjustment Coefficients

Table 13. Risk Adjustment Coefficients for IQI #30 Percutaneous Coronary Intervention (PCI) Mortality Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-6.7561	0.0679	9901.80	< 0.0001
SEX	Female	1	0.1409	0.0238	34.93	< 0.0001
AGE	40 to 59	1	-0.2810	0.0396	50.35	< 0.0001
AGE	65 to 74	1	-0.0434	0.0396	1.20	0.2730
AGE	75 to 79	1	0.1834	0.0464	15.63	0.0001
AGE	80 to 84	1	0.3108	0.0452	47.23	< 0.0001
AGE	85+	1	0.7043	0.0457	237.09	< 0.0001
APR-DRG	'1653' to '1654'	1	4.3579	0.0845	2657.99	< 0.0001
APR-DRG	'1741'	1	0.6440	0.0726	78.61	< 0.0001
APR-DRG	'1742'	1	2.0570	0.0648	1007.01	< 0.0001
APR-DRG	'1743'	1	3.5154	0.0624	3175.23	< 0.0001
APR-DRG	'1744'	1	5.5541	0.0616	8133.77	< 0.0001
APR-DRG	'1752'	1	0.3796	0.0825	21.19	< 0.0001
APR-DRG	'1753'	1	2.1064	0.0792	706.98	< 0.0001
APR-DRG	'1754'	1	4.8180	0.0692	4843.85	< 0.0001
MDC	4	1	4.0932	0.0847	2333.03	< 0.0001
MDC	5	1	3.9287	0.0705	3103.71	< 0.0001
MDC	8	1	3.8656	0.1250	957.07	< 0.0001
MDC	18	1	4.6289	0.0959	2331.43	< 0.0001
MDC	Other	1	3.6593	0.0806	2063.54	< 0.0001
TRANSFER	Transfer-in	1	0.0296	0.0325	0.83	0.3621
NOPOUB04	UB-04 Point-of-Origin Data Not Available	1	0.0972	0.0403	5.83	0.0157

c-statistic = 0.922

Table 14. Risk Adjustment Coefficients for IQI #31 Carotid Endarterectomy Mortality Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-7.4134	0.2250	1085.73	< 0.0001
AGE	18 to 59	1	-0.2415	0.2281	1.12	0.2898
AGE	65+	1	0.0416	0.1797	0.05	0.8171
APR-DRG	'0242' to '0244'	1	2.2480	0.1864	145.49	< 0.0001
MDC	1	1	5.4724	0.3046	322.76	< 0.0001
MDC	5	1	3.9025	0.2008	377.74	< 0.0001
MDC	Other	1	3.7032	0.2745	181.98	< 0.0001

c-statistic = 0.815

Table 15. Risk Adjustment Coefficients for IQI #32 Acute Myocardial Infarction (AMI) Mortality Rate, Without Transfer Cases

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-5.1429	0.0493	10863.20	< 0.0001
AGE	18 to 39	1	-0.5153	0.0839	37.76	< 0.0001
AGE	40 to 44	1	-0.4995	0.0713	49.05	< 0.0001
AGE	45 to 49	1	-0.3989	0.0511	60.88	< 0.0001
AGE	50 to 54	1	-0.2132	0.0444	23.06	< 0.0001
AGE	55 to 59	1	-0.1541	0.0385	16.05	0.0001
AGE	65 to 84	1	0.0309	0.0286	1.17	0.2796
AGE	85+	1	0.1969	0.0296	44.12	< 0.0001
APR-DRG	'1611' to '1614'	1	2.5804	0.0828	971.28	< 0.0001
APR-DRG	'1621' to '1622'	1	1.5321	0.2286	44.92	< 0.0001
APR-DRG	'1623'	1	2.9364	0.1371	459.02	< 0.0001
APR-DRG	'1624'	1	4.1696	0.1331	981.80	< 0.0001
APR-DRG	'1651' to '1652'	1	0.4001	0.0856	21.83	< 0.0001
APR-DRG	'1653'	1	2.0923	0.0677	955.86	< 0.0001
APR-DRG	'1654'	1	3.5650	0.0798	1998.32	< 0.0001
APR-DRG	'1731' to '1734'	1	3.1666	0.1206	689.44	< 0.0001
APR-DRG	'1742'	1	0.6702	0.0486	189.96	< 0.0001
APR-DRG	'1743'	1	2.1841	0.0533	1681.17	< 0.0001
APR-DRG	'1744'	1	4.1365	0.0464	7950.77	< 0.0001
APR-DRG	'1901'	1	0.0998	0.0865	1.33	0.2488
APR-DRG	'1902'	1	1.4637	0.0509	826.81	< 0.0001
APR-DRG	'1903'	1	2.7026	0.0439	3788.26	< 0.0001
APR-DRG	'1904'	1	4.2851	0.0457	8776.48	< 0.0001
MDC	5	1	2.9629	0.0556	2836.35	< 0.0001

c-statistic = 0.860

Table 16. Risk Adjustment Coefficients for IQI #26 Coronary Artery Bypass Graft (CABG) Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-5.3220	0.0060	775461.6	< 0.0001
SEX	Female	1	-1.1420	0.0117	9481.70	< 0.0001
AGE9	Male, Age 40-44	1	-2.8810	0.0200	20712.88	< 0.0001
AGE10	Male, Age 45-49	1	-2.0110	0.0134	22640.94	< 0.0001
AGE11	Male, Age 50-54	1	-1.3450	0.0105	16280.44	< 0.0001
AGE12	Male, Age 55-59	1	-0.7980	0.0092	7403.14	< 0.0001
AGE13	Male, Age 60-64	1	-0.4160	0.0087	2274.08	< 0.0001
AGE15	Male, Age 70-74	1	0.1469	0.0089	269.07	< 0.0001
AGE16	Male, Age 75-79	1	0.2258	0.0095	563.25	< 0.0001
AGE17	Male, Age 80-84	1	0.0370	0.0112	10.81	0.0010
AGE18	Male, Age 85-high	1	-0.8820	0.0179	2426.16	< 0.0001
AGE9	Female, Age 40-44	1	0.0976	0.0391	6.23	0.0126
AGE10	Female, Age 45-49	1	-0.0310	0.0270	1.35	0.2457
AGE11	Female, Age 50-54	1	-0.1720	0.0219	62.29	< 0.0001
AGE12	Female, Age 55-59	1	-0.1790	0.0190	89.34	< 0.0001
AGE13	Female, Age 60-64	1	-0.0720	0.0174	17.52	< 0.0001
AGE15	Female, Age 70-74	1	0.0878	0.0169	26.90	< 0.0001
AGE16	Female, Age 75-79	1	0.1833	0.0173	112.02	< 0.0001
AGE17	Female, Age 80-84	1	0.1931	0.0195	97.60	< 0.0001
AGE18	Female, Age 85-high	1	-0.0580	0.0297	3.85	0.0497

c-statistic = 0.709

Table 17. Risk Adjustment Coefficients for IQI #27 Percutaneous Coronary Intervention (PCI) Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-4.6330	0.0043	1159280	< 0.0001
SEX	Female	1	-0.8170	0.0074	12065.20	< 0.0001
AGE9	Male, Age 40-44	1	-1.9470	0.0095	41877.58	< 0.0001
AGE10	Male, Age 45-49	1	-1.2920	0.0073	31270.44	< 0.0001
AGE11	Male, Age 50-54	1	-0.8400	0.0064	17105.37	< 0.0001
AGE12	Male, Age 55-59	1	-0.5010	0.0060	6764.43	< 0.0001
AGE13	Male, Age 60-64	1	-0.2770	0.0060	2139.22	< 0.0001
AGE15	Male, Age 70-74	1	0.1235	0.0064	370.52	< 0.0001
AGE16	Male, Age 75-79	1	0.1818	0.0068	700.23	< 0.0001
AGE17	Male, Age 80-84	1	0.1628	0.0076	450.84	< 0.0001
AGE18	Male, Age 85-high	1	-0.2050	0.0095	457.92	< 0.0001
AGE9	Female, Age 40-44	1	-0.2730	0.0184	220.27	< 0.0001
AGE10	Female, Age 45-49	1	-0.2850	0.0139	422.12	< 0.0001
AGE11	Female, Age 50-54	1	-0.2950	0.0120	604.97	< 0.0001
AGE12	Female, Age 55-59	1	-0.2470	0.0112	493.64	< 0.0001
AGE13	Female, Age 60-64	1	-0.1130	0.0107	113.00	< 0.0001
AGE15	Female, Age 70-74	1	0.1026	0.0108	90.11	< 0.0001
AGE16	Female, Age 75-79	1	0.2307	0.0111	430.82	< 0.0001
AGE17	Female, Age 80-84	1	0.2608	0.0119	478.18	< 0.0001
AGE18	Female, Age 85-high	1	0.2069	0.0139	220.40	< 0.0001

c-statistic = 0.701

Table 18. Risk Adjustment Coefficients for IQI #28 Hysterectomy Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-6.2230	0.0089	486932.4	< 0.0001
AGE5	Female, Age 18-24	1	-2.9670	0.0277	11500.41	< 0.0001
AGE6	Female, Age 25-29	1	-0.7900	0.0138	3286.30	< 0.0001
AGE7	Female, Age 30-34	1	0.2120	0.0110	368.54	< 0.0001
AGE8	Female, Age 35-39	1	0.9063	0.0100	8156.52	< 0.0001
AGE9	Female, Age 40-44	1	1.3403	0.0096	19366.49	< 0.0001
AGE10	Female, Age 45-49	1	1.3310	0.0095	19304.76	< 0.0001
AGE11	Female, Age 50-54	1	0.7272	0.0101	5188.65	< 0.0001
AGE12	Female, Age 55-59	1	0.0355	0.0114	9.73	0.0018
AGE13	Female, Age 60-64	1	-0.1220	0.0121	102.35	< 0.0001
AGE15	Female, Age 70-74	1	-0.1600	0.0142	127.23	< 0.0001
AGE16	Female, Age 75-79	1	-0.4300	0.0166	672.15	< 0.0001
AGE17	Female, Age 80-84	1	-0.9860	0.0221	1996.65	< 0.0001
AGE18	Female, Age 85-high	1	-1.9970	0.0334	3581.49	< 0.0001

c-statistic = 0.712

Table 19. Risk Adjustment Coefficients for IQI #29 Laminectomy or Spinal Fusion Rate

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
INTERCEPT		1	-5.1780	0.0056	846689.0	< 0.0001
SEX	Female	1	-0.0410	0.0078	28.11	< 0.0001
AGE5	Male, Age 18-24	1	-2.7870	0.0150	34642.69	< 0.0001
AGE6	Male, Age 25-29	1	-2.1760	0.0136	25753.10	< 0.0001
AGE7	Male, Age 30-34	1	-1.5360	0.0108	20198.89	< 0.0001
AGE8	Male, Age 35-39	1	-1.1210	0.0094	14235.28	< 0.0001
AGE9	Male, Age 40-44	1	-0.8760	0.0086	10334.90	< 0.0001
AGE10	Male, Age 45-49	1	-0.6540	0.0079	6743.45	< 0.0001
AGE11	Male, Age 50-54	1	-0.5160	0.0077	4452.22	< 0.0001
AGE12	Male, Age 55-59	1	-0.3960	0.0077	2598.84	< 0.0001
AGE13	Male, Age 60-64	1	-0.2900	0.0078	1355.34	< 0.0001
AGE15	Male, Age 70-74	1	0.0769	0.0085	81.98	< 0.0001
AGE16	Male, Age 75-79	1	0.0557	0.0093	35.60	< 0.0001
AGE17	Male, Age 80-84	1	-0.2150	0.0115	354.01	< 0.0001
AGE18	Male, Age 85-high	1	-0.8790	0.0166	2788.38	< 0.0001
AGE5	Female, Age 18-24	1	-0.1150	0.0221	27.24	< 0.0001
AGE6	Female, Age 25-29	1	-0.0260	0.0195	1.88	0.1699
AGE7	Female, Age 30-34	1	-0.0560	0.0155	13.01	0.0003
AGE8	Female, Age 35-39	1	-0.0360	0.0134	7.26	0.0070
AGE9	Female, Age 40-44	1	0.0429	0.0121	12.61	0.0004
AGE10	Female, Age 45-49	1	0.0716	0.0111	41.68	< 0.0001
AGE11	Female, Age 50-54	1	0.0245	0.0108	5.13	0.0235
AGE12	Female, Age 55-59	1	-0.0150	0.0109	2.04	0.1534
AGE13	Female, Age 60-64	1	-0.0030	0.0110	0.10	0.7489
AGE15	Female, Age 70-74	1	-0.0260	0.0118	5.15	0.0233

(CONTINUED)

AHRQ Quality Indicators™
Inpatient Quality Indicators (IQI) Risk Adjustment Coefficients

PARAMETER	LABEL	DF	ESTIMATE	STANDARD ERROR	WALD CHI-SQUARE	PR > CHI-SQUARE
AGE16	Female, Age 75-79	1	-0.1020	0.0129	62.89	< 0.0001
AGE17	Female, Age 80-84	1	-0.1960	0.0157	157.34	< 0.0001
AGE18	Female, Age 85-high	1	-0.4810	0.0225	456.37	< 0.0001

c-statistic = 0.663

Table A.1. Population Age Categories

POPCAT	AGE RANGE
1	low - 4
2	5 - 9
3	10 - 14
4	15 - 17
5	18 - 24
6	25 - 29
7	30 - 34
8	35 - 39
9	40 - 44
10	45 - 49
11	50 - 54
12	55 - 59
13	60 - 64
14	65 - 69
15	70 - 74
16	75 - 79
17	80 - 84
18	85 - high

Table A.2. Major Diagnostic Categories (MDC)

MDC	DESCRIPTION
1	DISEASES & DISORDERS OF THE NERVOUS SYSTEM
2	DISEASES & DISORDERS OF THE EYE
3	DISEASES & DISORDERS OF THE EAR, NOSE, MOUTH & THROAT
4	DISEASES & DISORDERS OF THE RESPIRATORY SYSTEM
5	DISEASES & DISORDERS OF THE CIRCULATORY SYSTEM
6	DISEASES & DISORDERS OF THE DIGESTIVE SYSTEM
7	DISEASES & DISORDERS OF THE HEPATOBILIARY SYSTEM & PANCREAS
8	DISEASES & DISORDERS OF THE MUSCULOSKELETAL SYSTEM & CONN TISSUE
9	DISEASES & DISORDERS OF THE SKIN, SUBCUTANEOUS TISSUE & BREAST
10	ENDOCRINE, NUTRITIONAL & METABOLIC DISEASES & DISORDERS
11	DISEASES & DISORDERS OF THE KIDNEY & URINARY TRACT
12	DISEASES & DISORDERS OF THE MALE REPRODUCTIVE SYSTEM
13	DISEASES & DISORDERS OF THE FEMALE REPRODUCTIVE SYSTEM
14	PREGNANCY, CHILDBIRTH & THE PUERPERIUM
15	NEWBORNS & OTHER NEONATES WITH CONDTN ORIG IN PERINATAL PERIOD
16	DISEASES & DISORDERS OF BLOOD, BLOOD FORMING ORGANS, IMMUNOLOG DISORD
17	MYELOPROLIFERATIVE DISEASES & DISORDERS, POORLY DIFFERENTIATED NEOPLASM
18	INFECTIOUS & PARASITIC DISEASES, SYSTEMIC OR UNSPECIFIED SITES
19	MENTAL DISEASES & DISORDERS
20	ALCOHOL/DRUG USE & ALCOHOL/DRUG INDUCED ORGANIC MENTAL DISORDERS
21	INJURIES, POISONINGS & TOXIC EFFECTS OF DRUGS
22	BURNS
23	FACTORS INFLUENCING HLTH STAT & OTHR CONTACTS WITH HLTH SERVCS
24	MULTIPLE SIGNIFICANT TRAUMA
25	HUMAN IMMUNODEFICIENCY VIRUS INFECTIONS
<i>OTHER</i>	<i>REPRESENTS ALL OTHER MDCs NOT EXPLICITLY INCLUDED AS A PARAMETER IN THE QI RISK ADJUSTMENT MODEL</i>

Table A.3. Categorical Variables Definitions: Transfer, Point of Origin, Ruptured

CATEGORY	DESCRIPTION	DEFINITION
TRNSFER	Transfer-in	If admission type (ATYPE) not equal to '4' (newborn) and - admission source (ASOURCE) equal to '2' (Another Hospital) or - point of origin (POINTOFORIGINUB04) equal to '4' (Transfer from a Hospital), then TRNSFER=1
NOPOUB04	UB-04 Point-of-Origin Data Not Available	If admission source (ASOURCE) is not equal to missing and point of origin (POINTOFORIGINUB04) is equal to missing, then NOPOUB04=1
NOPRDAY	Procedure Days Data Not Available	If PRDAY1 and PRDAY2 and . . . PRDAYn is equal to missing, where n is the number of Procedure Codes reported in the user's data – then NOPRDAY = 1
RUPTURED	AAA Repair	If ICD-9-CM diagnosis code 441.3 Abdominal aneurysm, ruptured is present in the record, then RUPTURED=1