



Patient Safety Indicators (PSI) Parameter Estimates, v2022

Prepared for:

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Table of Contents

Executive Summary.....	1
Acknowledgments	2
Parameter Estimates Tables.....	4
Composite Weights for PSI 90	99
Appendix Tables.....	100

Index of Tables

Table 1. Risk Adjustment Coefficients for PSI 02 – Death Rate in Low-Mortality Diagnosis Related Groups (DRGs).....	4
Table 2. Risk Adjustment Coefficients for PSI 03 – Pressure Ulcer Rate	6
Table 3. Risk Adjustment Coefficients for PSI 04 – Death Rate Among Surgical Inpatients with Serious Treatable Complications Stratum: Deep Vein Thrombosis/Pulmonary Embolism (DVT/PE)	9
Table 4. Risk Adjustment Coefficients for PSI 04 – Death Rate Among Surgical Inpatients with Serious Treatable Complications Stratum: Pneumonia	13
Table 5. Risk Adjustment Coefficients for PSI 04 – Death Rate Among Surgical Inpatients with Serious Treatable Complications Stratum: Sepsis.....	19
Table 6. Risk Adjustment Coefficients for PSI 4 – Death Rate Among Surgical Inpatients with Serious Treatable Complications Stratum: Shock/Cardiac Arrest.....	26
Table 7. Risk Adjustment Coefficients for PSI 04 – Death Rate Among Surgical Inpatients with Serious Treatable Complications Stratum: Gastrointestinal (GI) Hemorrhage/Acute Ulcer	31
Table 8. Risk Adjustment Coefficients for PSI 06 – Iatrogenic Pneumothorax Rate	35
Table 9. Risk Adjustment Coefficients for PSI 07 – Central Venous Catheter-Related Blood Stream Infection Rate.....	38
Table 10. Risk Adjustment Coefficients for PSI 08 – In-Hospital Fall with Hip Fracture Rate	40
Table 11. Risk Adjustment Coefficients for PSI 09 – Postoperative Hemorrhage or Hematoma Rate	46
Table 12. Risk Adjustment Coefficients for PSI 10 – Postoperative Acute Kidney Injury Requiring Dialysis Rate.....	53
Table 13. Risk Adjustment Coefficients for PSI 11 – Postoperative Respiratory Failure Rate	60
Table 14. Risk Adjustment Coefficients for PSI 12 – Perioperative Pulmonary Embolism or Deep Vein Thrombosis (PE/DVT) Rate	66
Table 15. Risk Adjustment Coefficients for PSI 13 – Postoperative Sepsis Rate.....	76
Table 16. Risk Adjustment Coefficients for PSI 14 – Postoperative Wound Dehiscence Rate Stratum: Open Approach.....	86
Table 17. Risk Adjustment Coefficients for PSI 14 – Postoperative Wound Dehiscence Rate Stratum: Non-Open Approach.....	92

Table 18. Risk Adjustment Coefficients for PSI 15 – Abdominopelvic Accidental Puncture or Laceration Rate92

Table 19. Composite Weights for PSI 90, v202299

Executive Summary

This document provides statistical parameters associated with Version 2022 Agency for Healthcare Research and Quality (AHRQ) Quality Indicators™ (QI) Patient Safety Indicators (PSI). The parameter estimates derived for the AHRQ QI are based on analysis of the 2019 AHRQ Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID).¹

HCUP is a family of healthcare databases and related software tools and products developed through a Federal- State-Industry partnership. 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, Tenth Revision, Clinical Modification/Procedural Classification System (ICD-10-CM/PCS)* diagnoses and procedures, length of stay (LOS), expected payer, admission and discharge dates and discharge disposition.

In 2019, the HCUP databases represent more than 97 percent of all annual discharges in the U.S.² The analytic dataset used to generate the risk adjustment regression models in this document consists of the same hospital discharge records that comprise the reference population for Version 2021 of the AHRQ QI software. This reference population file was limited to community hospitals and excludes rehabilitation and long-term acute care (LTAC) hospitals. Information on the type of hospital was obtained by the American Hospital Association (AHA) Annual Survey of Hospitals. AHA defines community hospitals as “all non-Federal, short-term, general, and other specialty hospitals, excluding hospital units of institutions.” Included among community hospitals are specialty hospitals such as obstetrics-gynecology, ear-nose-throat, orthopedic, and pediatric institutions. Also included are public hospitals and academic medical centers.

In 2019, 46 of the SID participants include indicators of the diagnoses being present on admission (POA) and 42 included the PRDAY data element. Discharges from these 46 participating States are used to develop hospital-level indicators.³ Edit checks on POA were developed during an HCUP evaluation of POA coding in the 2011 SID at hospitals that were required to report POA to CMS (Centers for Medicare and Medicaid Services, <http://www.hcup-us.ahrq.gov/reports/methods/2015-06.pdf>). The edits identify general patterns of suspect reporting of POA. The edits do not evaluate whether a valid POA value (e.g., Y or N) is appropriate for the specific diagnosis. There are three hospital-level edit checks:

1. Indication that a hospital has POA reported as Y on all diagnoses on all discharges
2. Indication that a hospital has POA reported as missing on all non-Medicare discharges

¹ Healthcare Cost and Utilization Project (HCUP) 2019 State Inpatient Databases (SID). Agency for Healthcare Research and Quality, Rockville, MD.

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

³ Colorado, Hawaii and New York were also not used in the development of PSI 17 due to missing age in days (AGEDAY data element). Delaware, Oklahoma, Wisconsin, and West Virginia were not used to develop PSI 04, PSI 09, PSI 10, PSI 11, PSI 12, PSI 14, AND PSI 15 due to incomplete procedure dates (PRDAY data element).

3. Indication that a hospital reported POA as missing on all nonexempt diagnoses for 15 percent or more of discharges. The cut-point of 15 percent was determined by 2 times the standard deviation plus the mean of the percentage for hospitals that are required to report POA to CMS.

This document is devoted to listing covariates and coefficients for risk adjustment regression models. The regression coefficients are used to calculate risk-adjusted rates that account for differences in patient populations across hospitals. Certain AHRQ QIs (such as PSI 18 Obstetric Trauma Rate – Vaginal Delivery with Instrument and PSI 19 Obstetric Trauma Rate – Vaginal Delivery without Instrument) are not risk-adjusted because materially important risk factors (e.g., whether the mother is nulliparous or multiparous or the size of the infant) are not available in the HCUP State Inpatient Database (SID).

The majority of the document is devoted to listing covariates and coefficients for risk adjustment regression models. The regression coefficients are used by the prediction module to calculate risk-adjusted rates that account for differences in patient populations across hospitals. Covariates that are considered as potential risk adjusters include sex and age, Major Diagnostic Categories (MDC), Modified Medicare Severity-Diagnosis-Related Group (MS-DRG) categories, Elixhauser Comorbidity Software Refined that were apparently present on admission, patient point-of-origin and whether they were transferred from another facility, and other indicator-specific risk stratifiers. 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.

In addition to the presentation of the covariates for the risk models, the document also lists weights used to calculate the composite indicator, PSI 90 Patient Safety and Adverse Events Composite.

Additional information on the risk adjustment process and composite indicators may be found in Quality Indicator Empirical Methods, available on the AHRQ QI website.

(<https://qualityindicators.ahrq.gov/modules/Default.aspx>)

Acknowledgments

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, **Alaska** Department of Health and Social Services, **Arizona** Department of Health Services, **Arkansas** Department of Health, **California** Department of Health Care Access and Information, **Colorado** Hospital Association, **Connecticut** Hospital Association, **Delaware** Division of Public Health, **District of Columbia** Hospital Association, **Florida** Agency for Health Care Administration, **Georgia** Hospital Association, **Hawaii** Laulima Data Alliance, a non-profit subsidiary of the Healthcare Association of Hawaii, **Hawaii** University of Hawaii at Hilo, **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, **Maine** Health Data Organization, **Maryland** Health Services Cost Review Commission, **Massachusetts** Center for Health Information and Analysis, **Michigan** Health & Hospital Association, **Minnesota** Hospital Association (provides data for Minnesota and North Dakota), **Mississippi** State Department of Health, **Missouri** Hospital Industry Data Institute, **Montana** Hospital Association, **Nebraska** Hospital Association, **Nevada** Department of Health and Human Services, **New Hampshire** Department of Health & 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, **Oregon** Office of Health Analytics, **Pennsylvania** Health Care Cost Containment Council, **Rhode Island** Department of Health, **South Carolina** Revenue and Fiscal Affairs Office, **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** Department of Health and Human Resources , **Wisconsin** Department of Health Services, **Wyoming** Hospital Association.

Parameter Estimates Tables

Table 1. Risk Adjustment Coefficients for PSI 02 – Death Rate in Low-Mortality Diagnosis Related Groups (DRGs)

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-8.160036219	0.1693159132	-48.1941482216	<.0001
Age_LT30	Age < 30	1	-2.635744046	0.5306486295	-4.9670231854	<.0001
Age_30_34	30 <= Age <= 34	1	-1.473800580	0.4452402179	-3.3101245597	0.0009
Age_35_39	35 <= Age <= 39	1	-2.000790522	0.5328105975	-3.7551627754	0.0002
Age_40_44	40 <= Age <= 44	1	-0.5375668887	0.2835529665	-1.8958253032	0.0580
Age_45_49	45 <= Age <= 49	1	-1.382919639	0.3771517491	-3.6667459234	0.0002
Age_50_54	50 <= Age <= 54	1	-1.065966974	0.3509423860	-3.0374415198	0.0024
Age_55_59	55 <= Age <= 59	1	-1.067214521	0.3383976016	-3.1537295642	0.0016
Age_60_64	60 <= Age <= 64	1	0.0197825033	0.2442956501	0.0809777140	0.9355
Age_70_74	70 <= Age <= 74	1	0.3176260080	0.2218680752	1.4315985194	0.1523
Age_75_79	75 <= Age <= 79	1	-0.1578364597	0.2409255073	-0.6551255676	0.5124
Age_80_84	80 <= Age <= 84	1	0.2577018136	0.2265264936	1.1376232837	0.2553
Age_85_89	85 <= Age <= 89	1	0.4895125076	0.2283856254	2.1433595337	0.0321
Age_90Plus	Age >= 90	1	0.9385935505	0.2177547810	4.3103235033	<.0001
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.1289882984	0.2323837952	0.5550658052	0.5788
Age_LT30_MALE	Age < 30 MALE	1	1.2381251509	0.5621207125	2.2025965658	0.0276
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.1316555014	0.6188441365	0.2127442010	0.8315
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.7958813958	0.6526668589	1.2194297672	0.2227
Age_40_44_MALE	40 <= Age <= 44 MALE	1	-0.3682564021	0.4637286005	-0.7941205301	0.4271
Age_45_49_MALE	45 <= Age <= 49 MALE	1	1.0815683292	0.4765974757	2.2693538767	0.0232
Age_50_54_MALE	50 <= Age <= 54 MALE	1	-0.0070551961	0.4811464252	-0.0146633036	0.9883
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.4836903329	0.4266642503	1.1336556380	0.2569

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Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.1965537332	0.3393569106	-0.5791947271	0.5625
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.1244671843	0.3062302103	-0.4064497233	0.6844
Age_75_79_MALE	75 <= Age <= 79 MALE	1	0.5724687250	0.3206201978	1.7855042478	0.0742
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.2927037766	0.3089389362	0.9474486452	0.3434
Age_85_89_MALE	85 <= Age <= 89 MALE	1	0.5048021912	0.2995995510	1.6849230564	0.0920
Age_90Plus_MALE	Age >= 90 MALE	1	0.0400197154	0.2972410229	0.1346372549	0.8929
CMR_ANEMDEF	Deficiency anemias	1	0.2290188361	0.0993726145	2.3046473850	0.0212
CMR_COAG	Coagulopathy	1	0.3260273932	0.1612458859	2.0219268940	0.0432
CMR_DEMENTIA	Dementia	1	0.4747653954	0.1034252935	4.5904186439	<.0001
CMR_DIAB_CX	Diabetes with chronic complications	1	0.0183795062	0.1017903971	0.1805622799	0.8567
CMR_HF	Heart failure	1	0.8615099920	0.0954699560	9.0238859229	<.0001
CMR_LIVER_SEV	Liver disease, moderate to severe	1	2.1914070337	0.2482320617	8.8280579816	<.0001
CMR_LUNG_CHRONIC	Chronic pulmonary disease	1	0.1693765632	0.0852576605	1.9866433377	0.0470
CMR_NEURO_OTHER	Other neurological disorders	1	0.8247956106	0.1271778798	6.4853700328	<.0001
CMR_PERIVASC	Peripheral vascular disease	1	0.3198986135	0.1232524637	2.5954743935	0.0094
CMR_PULMCIRC	Pulmonary circulation disease	1	0.2155247336	0.1587173500	1.3579153982	0.1745
CMR_RENLFL_MOD	Renal failure, moderate	1	0.2766504850	0.0991158091	2.7911842463	0.0053
CMR_RENLFL_SEV	Renal failure, severe	1	0.6685872532	0.1799223742	3.7159761601	0.0002
CMR_WGHTLOSS	Weight loss	1	1.1018621921	0.1292205005	8.5269921421	<.0001
PS02_NonWt_1	PS02 Comorbidity count using non-weighted method, category 1, count > 3 and count <= 4	1	0.2285200028	0.1085640922	2.1049317328	0.0353
PS02_NonWt_2	PS02 Comorbidity count using non-weighted	1	-0.1022396135	0.1303655347	-0.7842533973	0.4329

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Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	method, category 2, count >= 5					
MDC_5	Circulatory System	1	0.0328024788	0.0912451031	0.3594985120	0.7192
MDC_18	Infectious and Parasitic	1	0.9793042273	0.1902837367	5.1465471732	<.0001
MDC_21	Injuries Poison And Toxic	1	2.1696689347	0.2585233673	8.3925447727	<.0001
MDRG_109	SPINAL DISORDERS & INJURIES	1	1.3493543194	0.4545769701	2.9683736927	0.0030
MDRG_119	VIRAL MENINGITIS	1	1.8887664779	0.2978690086	6.3409298167	<.0001
MDRG_203	INTRAOCULAR PROCEDURES	1	1.0758602125	0.7353698026	1.4630192982	0.1435
MDRG_204	ACUTE MAJOR EYE INFECTIONS	1	0.7471551047	0.5788525847	1.2907519538	0.1968
MDRG_822	MAJOR SHOULDER OR ELBOW JOINT PROCEDURES	1	0.9180469309	0.7041255385	1.3038114381	0.1923
MDRG_909	NON-MALIGNANT BREAST DISORDERS	1	1.2151772982	0.4520779616	2.6879817231	0.0072
MDRG_1201	MAJOR MALE PELVIC PROCEDURES	1	1.5166262114	0.4735557601	3.2026349147	0.0014
MDRG_1206	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXC MALIGNANCY	1	1.2813644348	0.2940634673	4.3574417684	<.0001
MDRG_1909	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	1	2.6616005146	0.3084181540	8.6298438675	<.0001
MDRG_1915	PSYCHOSES	1	-0.1859829264	0.1132189284	-1.6426840370	0.1004
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.1452282268	0.1281567056	1.1332081780	0.2571
DNR	Do not resuscitate flag	1	1.4174750465	0.1077036898	13.1608772993	<.0001

c-statistic=0.869

Table 2. Risk Adjustment Coefficients for PSI 03 – Pressure Ulcer Rate

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-7.494686695	0.0734098313	-102.0937736	<.0001

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Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_LT30	Age < 30	1	-0.5332936084	0.1403564735	-3.7995654561	0.0001
Age_30_34	30 <= Age <= 34	1	-0.3038499233	0.2166700133	-1.4023626003	0.1608
Age_35_39	35 <= Age <= 39	1	-0.3856820252	0.1338824966	-2.8807501730	0.0040
Age_40_44	40 <= Age <= 44	1	-0.3472656172	0.1308644214	-2.6536289499	0.0080
Age_45_49	45 <= Age <= 49	1	-0.3285450038	0.1082493676	-3.0350755031	0.0024
Age_50_54	50 <= Age <= 54	1	-0.1745474398	0.0883674172	-1.9752465929	0.0482
Age_55_59	55 <= Age <= 59	1	-0.0282301700	0.0785985720	-0.3591689940	0.7195
Age_60_64	60 <= Age <= 64	1	0.0374714825	0.0709849751	0.5278790683	0.5976
Age_70_74	70 <= Age <= 74	1	0.1605175392	0.0648310241	2.4759371214	0.0133
Age_75_79	75 <= Age <= 79	1	0.2561709938	0.0646180587	3.9643870307	<.0001
Age_80_84	80 <= Age <= 84	1	0.1383543187	0.0747273363	1.8514552460	0.0641
Age_85_89	85 <= Age <= 89	1	0.1368280013	0.0736436823	1.8579733793	0.0632
Age_90Plus	Age >= 90	1	0.1399856381	0.0857537167	1.6324148217	0.1026
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.3680098060	0.0592484777	6.2112955527	<.0001
Age_LT30_MALE	Age < 30 MALE	1	0.4095000872	0.1582302977	2.5880004846	0.0097
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.2275229231	0.2391678903	0.9513104906	0.3414
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.3646642098	0.1543088197	2.3632104144	0.0181
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.2580707377	0.1446099120	1.7845992310	0.0743
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.1520433000	0.1377388887	1.1038516534	0.2697
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.1249390998	0.1097310586	1.1385937709	0.2549
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.0210585250	0.0917110571	0.2296181691	0.8184
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.0826791328	0.0898813540	-0.9198696852	0.3576
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.1823526443	0.0801622522	-2.2747944231	0.0229
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.2077714505	0.0833215088	-2.4936112352	0.0126
Age_80_84_MALE	80 <= Age <= 84 MALE	1	-0.0993673831	0.0965557560	-1.0291192073	0.3034

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Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_85_89_MALE	85 <= Age <= 89 MALE	1	-0.1821506377	0.0968937733	-1.8799003426	0.0601
Age_90Plus_MALE	Age >= 90 MALE	1	-0.2230849687	0.1101302624	-2.0256463909	0.0428
CMR_COAG	Coagulopathy	1	0.2697116423	0.0404474410	6.6682004022	<.0001
CMR_DIAB_CX	Diabetes with chronic complications	1	0.2390095307	0.0332047634	7.1980495092	<.0001
CMR_DRUG_ABUSE	Drug abuse	1	-0.1935852230	0.0595869208	-3.2487871565	0.0012
CMR_HF	Heart failure	1	0.3111408315	0.0580356165	5.3612049029	<.0001
CMR_HTN_CX	Hypertension, complicated	1	-0.1385292381	0.0367499687	-3.7695062860	0.0002
CMR_HTN_UNCX	Hypertension, uncomplicated	1	-0.5726774487	0.0336544789	-17.0163813814	<.0001
CMR_LIVER_SEV	Liver disease, moderate to severe	1	0.1978719216	0.0640376764	3.0899297545	0.0020
CMR_NEURO_OTHER	Other neurological disorders	1	0.4365443844	0.0399371581	10.9307823839	<.0001
CMR_PARALYSIS	Paralysis	1	0.6506760119	0.0374667100	17.3667773650	<.0001
CMR_RENLFL_SEVERE	Renal failure, severe	1	0.4759063908	0.0382809167	12.4319486447	<.0001
CMR_WGHTLOSS	Weight loss	1	1.1507945710	0.0422145683	27.2606025916	<.0001
PS03_NonWt_1	PS03 Comorbidity count using non-weighted method, category 1, count > 2 and count <= 5	1	0.2648500931	0.0249676567	10.6077273007	<.0001
MDC_1	Nervous System	1	0.4534071437	0.0464848342	9.7538724585	<.0001
MDC_18	Infectious and Parasitic	1	0.7454398800	0.0358223218	20.8093680573	<.0001
MDRG_308	EPISTAXIS	1	0.1375116317	1.0001772633	0.1374872603	0.8906
MDRG_416	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT	1	1.6448863034	0.0812543144	20.2436795488	<.0001
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-1.886406665	0.1847776210	-10.2090645761	<.0001
MDRG_705	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E.	1	-1.752328561	0.2493353287	-7.0279994833	<.0001

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Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_707	OTHER HEPATOBILIARY OR PANCREAS O.R. PROCEDURES	1	0.3227675191	0.3512553741	0.9188970274	0.3581
MDRG_838	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	1	2.0788497714	0.1325532379	15.6831308297	<.0001
MDRG_906	SKIN ULCERS	1	2.3257270917	0.1687305065	13.7836787187	<.0001
MDRG_911	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST	1	0.5260709722	0.3788314994	1.3886674501	0.1649
MDRG_1707	LYMPHOMA & LEUKEMIA W MAJOR O.R.PROCEDURE	1	0.1787123401	0.3136476869	0.5697868902	0.5688
MDRG_1807	SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS	1	1.5395489369	0.0680315188	22.6299362971	<.0001
MDRG_2213	FULL THICKNESS BURN W/O SKIN GRFT OR INHAL INJ	1	1.8677284528	0.6976074265	2.6773345319	0.0074
MDRG_2304	AFTERCARE	1	1.9301880939	0.1762706046	10.9501416799	<.0001
MDRG_7701	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	1	1.9678344661	0.1078136397	18.2521847140	<.0001
TRANSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.5510365068	0.0592207232	9.3047919162	<.0001
MEDICDR	Medical DRGs flag	1	-1.633261769	0.0450275953	-36.2724626369	<.0001

c-statistic=0.806

Table 3. Risk Adjustment Coefficients for PSI 04 – Death Rate Among Surgical Inpatients with Serious Treatable Complications Stratum: Deep Vein Thrombosis/Pulmonary Embolism (DVT/PE)

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-4.493574662	0.1747586577	-25.7130303152	<.0001
Age_LT30	Age < 30	1	-0.6379771371	0.3885263318	-1.6420434987	0.1006

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_30_34	30 <= Age <= 34	1	-1.025577206	0.5439404613	-1.8854585730	0.0594
Age_35_39	35 <= Age <= 39	1	-0.3326810116	0.3329610908	-0.9991588231	0.3177
Age_40_44	40 <= Age <= 44	1	-0.0404929293	0.2974287857	-0.1361432762	0.8917
Age_45_49	45 <= Age <= 49	1	-0.2663405871	0.2625312983	-1.0145098462	0.3103
Age_50_54	50 <= Age <= 54	1	-0.2630130993	0.2619259920	-1.0041504369	0.3153
Age_55_59	55 <= Age <= 59	1	-0.3149704377	0.2374442223	-1.3265028505	0.1847
Age_60_64	60 <= Age <= 64	1	-0.0070064256	0.1989400342	-0.0352187816	0.9719
Age_70_74	70 <= Age <= 74	1	0.2096185163	0.1789497006	1.1713823248	0.2414
Age_75_79	75 <= Age <= 79	1	0.2425204083	0.1842326401	1.3163813327	0.1880
Age_80_84	80 <= Age <= 84	1	0.2446171203	0.2032835954	1.2033293677	0.2288
Age_85Plus	Age >= 85	1	0.3644728472	0.2164251126	1.6840598710	0.0922
MALE	Patient Sex Flag: 1=Male / 0=Female	1	-0.1282251821	0.1877775958	-0.6828566613	0.4947
Age_LT30_MALE	Age < 30 MALE	1	0.1255140844	0.4603249331	0.2726641017	0.7851
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.0248534634	0.6884326849	0.0361015158	0.9712
Age_35_39_MALE	35 <= Age <= 39 MALE	1	-0.0424773705	0.4620438977	-0.0919336252	0.9268
Age_40_44_MALE	40 <= Age <= 44 MALE	1	-0.5402009873	0.4568369164	-1.1824810298	0.2370
Age_45_49_MALE	45 <= Age <= 49 MALE	1	-0.1550455549	0.3675286358	-0.4218597948	0.6731
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.0134283276	0.3250023604	0.0413176309	0.9670
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.5218616095	0.2918456291	1.7881426260	0.0738
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.2400724940	0.2604845125	-0.9216382645	0.3567
Age_70_74_MALE	70 <= Age <= 74 MALE	1	0.1175943403	0.2462940463	0.4774550668	0.6330
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.1567011964	0.2553903652	-0.6135752080	0.5395
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.3034350058	0.2787701954	1.0884772145	0.2764
Age_85Plus_MALE	Age >= 85 MALE	1	0.0933459734	0.3071324829	0.3039273882	0.7612
CMR_ANEMDEF	Deficiency anemias	1	-0.3204062161	0.0854081723	-3.7514702320	0.0002
CMR_CANCER_METS	Metastatic cancer	1	0.8463648959	0.0919613795	9.2034819422	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
CMR_COAG	Coagulopathy	1	0.5601608680	0.0994432612	5.6329696069	<.0001
CMR_DEMENTIA	Dementia	1	0.2133066247	0.1488265231	1.4332567892	0.1518
CMR_DEPRESS	Depression	1	-0.4094155445	0.1153196062	-3.5502683189	0.0004
CMR_DRUG_ABUSE	Drug abuse	1	-0.4724804897	0.2637974093	-1.7910732747	0.0733
CMR_HF	Heart failure	1	0.4215805244	0.1027179454	4.1042538663	<.0001
CMR_HTN_CX	Hypertension, complicated	1	0.0044646046	0.1113747476	0.0400863278	0.9680
CMR_LIVER_SEV	Liver disease, moderate to severe	1	1.2079439086	0.2337114667	5.1685264971	<.0001
CMR_NEURO_OTHER	Other neurological disorders	1	0.5914375838	0.1073841517	5.5076803642	<.0001
CMR_OBESE	Obesity	1	-0.1734063988	0.0895846174	-1.9356715902	0.0529
CMR_PERIVASC	Peripheral vascular disease	1	0.2499533785	0.0933599597	2.6773081246	0.0074
CMR_RENLFL_MOD	Renal failure, moderate	1	0.4702484894	0.1214546063	3.8718044842	0.0001
CMR_RENLFL_SEVERE	Renal failure, severe	1	0.7786644643	0.1490939113	5.2226442895	<.0001
CMR_WGHTLOSS	Weight loss	1	0.4242339325	0.0957536283	4.4304737064	<.0001
MDC_1	Nervous System	1	0.3034794674	0.1603756548	1.8923038396	0.0585
MDC_4	Respiratory System	1	0.5608483605	0.1502773848	3.7320875748	0.0002
MDC_8	Musculoskeletal And Connective	1	-0.5036906150	0.1015352389	-4.9607468340	<.0001
MDC_13	Female Reproductive System	1	-0.8360054194	0.3093812890	-2.7021848089	0.0069
MDRG_101	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE	1	1.0946657774	0.3539240087	3.0929401525	0.0020
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	1.2254845770	0.1955614754	6.2664927980	<.0001
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	1.6418844280	0.3678747428	4.4631616064	<.0001
MDRG_540	ENDOVASCULAR CARDIAC VALVE REPLACEMENT	1	-1.538258781	0.5035122058	-3.0550575813	0.0023

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_611	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES	1	0.5037255045	0.2682143004	1.8780710188	0.0604
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	0.4825667347	0.1731659148	2.7867304907	0.0053
MDRG_2406	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	1	2.9715245986	0.4471243686	6.6458569641	<.0001
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.2887494420	0.0892164164	3.2365057198	0.0012
RegVarPS04_DVT_PE_ANY	PSI04 DVT PE Regression variable: Any Triggering Complication POA	1	-0.3798119961	0.0741981196	-5.1188897808	<.0001
RegVarPS04_DVT_PE_SEVERE	PSI04 DVT PE Regression variable: Triggering Complication Severe	1	0.8186367148	0.0767649516	10.6641989375	<.0001
RegVarPS04_GIHEMORRHAGE_A	PSI04 GIHEMORRHAGE Regression variable: Any Triggering Complication POA	1	0.0580154300	0.2964855288	0.1956771051	0.8449
RegVarPS04_PNEUMONIA_ANY	PSI04 PNEUMONIA Regression variable: Any Triggering Complication POA	1	0.7737674188	0.2859955300	2.7055227710	0.0068
RegVarPS04_PNEUMONIA_SEVE	PSI04 PNEUMONIA Regression variable: Triggering Complication Severe	1	-0.0551385312	0.3760000747	-0.1466450008	0.8834
RegVarPS04_SEPSIS_ANY	PSI04 SEPSIS Regression variable: Any Triggering Complication POA	1	-0.2567362050	0.3405703822	-0.7538418443	0.4509
RegVarPS04_SEPSIS_SEVERE	PSI04 SEPSIS Regression variable: Triggering Complication Severe	1	1.9328805131	0.3258647630	5.9315419532	<.0001
RegVarPS04_SHOCK_ANY	PSI04 SHOCK Regression variable: Any Triggering Complication POA	1	0.4374530834	0.1809200616	2.4179357423	0.0156
RegVarPS04_SHOCK_SEVERE	PSI04 SHOCK Regression variable: Triggering Complication Severe	1	3.8043767175	0.1253435263	30.3516011607	<.0001
DNR	Do not resuscitate flag	1	0.7947072181	0.1273862817	6.2385620156	<.0001

c-statistic=0.874

Table 4. Risk Adjustment Coefficients for PSI 04 – Death Rate Among Surgical Inpatients with Serious Treatable Complications Stratum: Pneumonia

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-3.367876180	0.0761177139	-44.2456296722	<.0001
Age_LT30	Age < 30	1	-0.8227545255	0.1659361500	-4.9582597001	<.0001
Age_30_34	30 <= Age <= 34	1	-0.7353881626	0.1903824055	-3.8626897309	0.0001
Age_35_39	35 <= Age <= 39	1	-0.8469003775	0.1735331389	-4.8803380303	<.0001
Age_40_44	40 <= Age <= 44	1	-0.6281115251	0.1531133282	-4.1022655090	<.0001
Age_45_49	45 <= Age <= 49	1	-0.3949620206	0.1144826800	-3.4499718273	0.0006
Age_50_54	50 <= Age <= 54	1	-0.4227485379	0.1082132827	-3.9066233590	<.0001
Age_55_59	55 <= Age <= 59	1	-0.0660201328	0.0877840700	-0.7520741837	0.4520
Age_60_64	60 <= Age <= 64	1	0.0634574291	0.0778340601	0.8152912623	0.4149
Age_70_74	70 <= Age <= 74	1	0.2461395460	0.0753309809	3.2674411367	0.0011
Age_75_79	75 <= Age <= 79	1	0.2501321548	0.0744975540	3.3575888255	0.0008
Age_80_84	80 <= Age <= 84	1	0.3534749093	0.0790633791	4.4707791829	<.0001
Age_85Plus	Age >= 85	1	0.4983471358	0.0828217719	6.0171030456	<.0001
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.0499243765	0.0723592691	0.6899513645	0.4902
Age_LT30_MALE	Age < 30 MALE	1	0.0425969476	0.1944729878	0.2190378626	0.8266
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.1015932598	0.2289413910	0.4437522606	0.6572
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.3849926616	0.2061267506	1.8677472018	0.0618
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.0895987238	0.1850142739	0.4842800608	0.6282
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.0693182504	0.1406885698	0.4927070513	0.6222
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.1696723967	0.1329917741	1.2758112128	0.2020
Age_55_59_MALE	55 <= Age <= 59 MALE	1	-0.1092939557	0.1108516689	-0.9859477696	0.3242
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.1246775765	0.0983211774	-1.2680643162	0.2048
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.1577414333	0.0969759406	-1.6266037982	0.1038
Age_75_79_MALE	75 <= Age <= 79 MALE	1	0.0579138250	0.0958964098	0.6039206804	0.5459

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.0383963113	0.1026900195	0.3739049958	0.7085
Age_85Plus_MALE	Age >= 85 MALE	1	-0.0786227456	0.1062243315	-0.7401575941	0.4592
CMR_ALCOHOL	Alcohol abuse	1	-0.0827351087	0.0506867404	-1.6322830805	0.1026
CMR_ANEMDEF	Deficiency anemias	1	-0.2944309155	0.0322663746	-9.1250076677	<.0001
CMR_BLDLOSS	Chronic blood loss anemia	1	-0.2498247406	0.1272371817	-1.9634570427	0.0496
CMR_CANCER_L YMPH	Lymphoma	1	0.4299234979	0.1103195832	3.8970732616	<.0001
CMR_CANCER_M ETS	Metastatic cancer	1	0.8581201433	0.0509035308	16.8577725375	<.0001
CMR_CANCER_S OLID	Solid tumor without metastasis, malignant	1	0.1395039672	0.0612424214	2.2778976381	0.0227
CMR_CBVD	Cerebrovascular disease	1	0.1200018579	0.0410545283	2.9229871338	0.0035
CMR_COAG	Coagulopathy	1	0.4949179349	0.0356441375	13.8849743312	<.0001
CMR_DEMENTIA	Dementia	1	-0.1762873150	0.0515398988	-3.4204047601	0.0006
CMR_DEPRESS	Depression	1	-0.2045456531	0.0426634517	-4.7944000084	<.0001
CMR_DRUG_ABU SE	Drug abuse	1	-0.1692079586	0.0649294970	-2.6060260180	0.0092
CMR_HF	Heart failure	1	0.1291103853	0.0302011519	4.2750152634	<.0001
CMR_HTN_UNCX	Hypertension, uncomplicated	1	-0.2538386955	0.0346057838	-7.3351523203	<.0001
CMR_LIVER_SEV	Liver disease, moderate to severe	1	0.7202497114	0.0851047840	8.4630931127	<.0001
CMR_NEURO_OT H	Other neurological disorders	1	0.3431673051	0.0332733787	10.3135695440	<.0001
CMR_NEURO_SEI Z	Seizures and epilepsy	1	0.1263666653	0.0492201727	2.5673754955	0.0102
CMR_OBESE	Obesity	1	-0.2104869630	0.0356997709	-5.8960312056	<.0001
CMR_PARALYSIS	Paralysis	1	-0.3028517229	0.0461708553	-6.5593699960	<.0001
CMR_PERIVASC	Peripheral vascular disease	1	0.1221847249	0.0342674811	3.5656173449	0.0004

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
CMR_PSYCHOSES	Psychoses	1	-0.2403296616	0.0739881409	-3.2482186813	0.0012
CMR_PULMCIRC	Pulmonary circulation disease	1	0.1412565831	0.0523572391	2.6979379636	0.0070
CMR_RENLFL_M OD	Renal failure, moderate	1	0.0577101115	0.0379901238	1.5190819552	0.1287
CMR_RENLFL_SE V	Renal failure, severe	1	0.3270565296	0.0430947795	7.5892377952	<.0001
CMR_THYROID_H YPO	Hypothyroidism	1	-0.1761347939	0.0389161200	-4.5260111758	<.0001
CMR_THYROID_O TH	Other thyroid disorders	1	-0.3758652233	0.1323240568	-2.8404904775	0.0045
CMR_WGHTLOSS	Weight loss	1	0.1266528177	0.0333925822	3.7928428828	0.0001
PS04_PNEUMONI A_NonWt_1	PS04_PNEUMONIA Comorbidity count using non-weighted method, category 1, count > 3 and count <= 5	1	0.0680639975	0.0251827815	2.7027990282	0.0069
MDC_1	Nervous System	1	0.1444061458	0.0765026977	1.8875954728	0.0591
MDC_3	Ear Nose Mouth And Throat	1	-1.206371902	0.1980922657	-6.0899495385	<.0001
MDC_5	Circulatory System	1	0.0972903935	0.0553819987	1.7567150999	0.0790
MDC_6	Digestive System	1	-0.3099947280	0.0668701048	-4.6357745208	<.0001
MDC_8	Musculoskeletal And Connective	1	-0.4053449550	0.0650238751	-6.2337865026	<.0001
MDC_10	Endocrine Nutritional And Metabolic	1	-0.5157303719	0.1995835667	-2.5840322447	0.0098
MDC_11	Kidney And Urinary Tract	1	-0.6412725162	0.1541339815	-4.1604875820	<.0001
MDC_13	Female Reproductive System	1	-1.208482629	0.3365251646	-3.5910616989	0.0003
MDC_14	Pregnancy Childbirth And Puerperium	1	-1.677148300	0.5143338957	-3.2608162013	0.0011
MDC_17	Myeloproliferative DDs	1	0.2395104719	0.1555164851	1.5400969982	0.1235
MDC_24	Multiple Significant Trauma	1	0.2901941225	0.1504216843	1.9292040490	0.0537
MDRG_101	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE	1	1.2903033948	0.0984609066	13.1047279487	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	1.6139081742	0.0699144573	23.0840406341	<.0001
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	1.1665934795	0.0841523032	13.8628823552	<.0001
MDRG_104	SPINAL PROCEDURES	1	0.8305243567	0.1699388937	4.8871940893	<.0001
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	1.3974286116	0.0852877467	16.3848696403	<.0001
MDRG_502	PERC CARDIOVASC PROC W NON-DRUG-ELUTING STENT	1	0.5016926333	0.1700991611	2.9494127434	0.0032
MDRG_503	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC	1	0.1622374784	0.0889553783	1.8238074124	0.0682
MDRG_506	CORONARY BYPASS W PTCA	1	-0.7370543388	0.3741607187	-1.9698870081	0.0489
MDRG_507	CORONARY BYPASS WITH CARDIAC CATHETERIZATION OR OPEN ABLATION	1	-0.5157094044	0.1640647168	-3.1433291346	0.0017
MDRG_508	CORONARY BYPASS W/O CARDIAC CATH	1	-0.5118336435	0.1451078822	-3.5272628593	0.0004
MDRG_510	PERMANENT CARDIAC PACEMAKER IMPLANT AND PROCEDURES	1	-0.9007125184	0.2562596189	-3.5148437444	0.0004
MDRG_512	AICD PROCEDURES	1	-0.7192921205	0.4572925891	-1.5729363159	0.1157
MDRG_513	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT	1	0.3737090010	0.1447217382	2.5822589309	0.0098
MDRG_517	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	1	-0.6821298507	0.3583836288	-1.9033510346	0.0570
MDRG_537	CARDIAC DEFIBRILLATOR IMPLANT W AMI/HF/SHOCK	1	-1.782286719	0.3956497642	-4.5047081539	<.0001
MDRG_538	CARDIAC DEFIBRILLATOR IMPLANT W/OUT AMI/HF/SHOCK	1	-1.990621168	0.3877312593	-5.1340229098	<.0001
MDRG_539	CARDIAC DEFIBRILLATOR IMPLANT W/OUT CARDIAC CATH	1	-1.462393721	0.3361662928	-4.3502092627	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_541	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON	1	0.3203977643	0.1364166798	2.3486700069	0.0188
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	0.4305805710	0.0651145670	6.6126612066	<.0001
MDRG_543	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES	1	-0.6192366477	0.2275327715	-2.7215272932	0.0065
MDRG_604	PERITONEAL ADHESIOLYSIS	1	-0.5293164571	0.2212221408	-2.3926920477	0.0167
MDRG_610	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL	1	-0.9903673775	0.3345939375	-2.9599083141	0.0031
MDRG_704	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E.	1	0.4738049838	0.2397732115	1.9760547091	0.0481
MDRG_705	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E.	1	-1.221274532	0.2107739624	-5.7942381410	<.0001
MDRG_801	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	1	-1.216852605	0.3677303529	-3.3090893788	0.0009
MDRG_803	SPINAL FUSION EXCEPT CERVICAL	1	-0.8377488899	0.3141621574	-2.6666129900	0.0077
MDRG_811	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT	1	0.2656955713	0.0808322552	3.2869993633	0.0010
MDRG_812	MAJOR JOINT/LIMB REATTACHMENT PROCEDURE OF UPPER EXTREMITIES	1	-1.042603983	0.4331305568	-2.4071356000	0.0161
MDRG_1103	KIDNEY & URETER PROCEDURES FOR NEOPLASM	1	-1.011267849	0.4760266249	-2.1243934601	0.0336
MDRG_1710	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R. PROC	1	0.6041529535	0.3176681731	1.9018365848	0.0572
MDRG_2210	EXTENSIVE BURNS OR FULL THICKNESS BURNS W MV >96 HRS W SKIN GRAFT	1	1.4079518552	0.3455212632	4.0748631279	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_2406	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	1	2.5000859324	0.1869821790	13.3707177147	<.0001
MDRG_2408	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA	1	0.6437677689	0.1627723245	3.9550198155	<.0001
MDRG_7701	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	1	0.4416354441	0.1732525409	2.5490849474	0.0108
MDRG_7702	LIVER TRANSPLANT	1	-2.531999234	0.9987320481	-2.5352137628	0.0112
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.2187749455	0.0345995287	6.3230614395	<.0001
RegVarPS04_DVT_PE_ANY	PSI04 DVT PE Regression variable: Any Triggering Complication POA	1	-0.1644255115	0.0907147248	-1.8125559212	0.0699
RegVarPS04_DVT_PE_SEVERE	PSI04 DVT PE Regression variable: Triggering Complication Severe	1	0.4090868918	0.0841819760	4.8595543970	<.0001
RegVarPS04_GIHEMORRHAGE_A	PSI04 GIHEMORRHAGE Regression variable: Any Triggering Complication POA	1	0.1853734517	0.0658035231	2.8170748742	0.0048
RegVarPS04_GIHEMORRHAGE_S	PSI04 GIHEMORRHAGE Regression variable: Triggering Complication Severe	1	0.1548424955	0.1627406669	0.9514677464	0.3414
RegVarPS04_PNEUMONIA_ANY	PSI04 PNEUMONIA Regression variable: Any Triggering Complication POA	1	-0.1236785488	0.0275642375	-4.4869207352	<.0001
RegVarPS04_PNEUMONIA_SEVE	PSI04 PNEUMONIA Regression variable: Triggering Complication Severe	1	0.3881398845	0.0264150986	14.6938646782	<.0001
RegVarPS04_SEPSIS_ANY	PSI04 SEPSIS Regression variable: Any Triggering Complication POA	1	-0.4885454974	0.0924779279	-5.2828335229	<.0001
RegVarPS04_SEPSIS_SEVERE	PSI04 SEPSIS Regression variable: Triggering Complication Severe	1	1.9784560945	0.0872445634	22.6771275642	<.0001

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Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
RegVarPS04_SHOCK_ANY	PSI04 SHOCK Regression variable: Any Triggering Complication POA	1	0.3697858248	0.0547524032	6.7537825350	<.0001
RegVarPS04_SHOCK_SEVERE	PSI04 SHOCK Regression variable: Triggering Complication Severe	1	1.7212593471	0.0531352217	32.3939430784	<.0001
DNR	Do not resuscitate flag	1	0.8899425871	0.0478997591	18.5792706373	<.0001

c-statistic=0.821

Table 5. Risk Adjustment Coefficients for PSI 04 – Death Rate Among Surgical Inpatients with Serious Treatable Complications Stratum: Sepsis

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-2.242127541	0.0702912702	-31.8976671697	<.0001
Age_LT30	Age < 30	1	-0.9424027223	0.1620242017	-5.8164318180	<.0001
Age_30_34	30 <= Age <= 34	1	-0.8568936750	0.1930309290	-4.4391522088	<.0001
Age_35_39	35 <= Age <= 39	1	-0.8551275734	0.1591802602	-5.3720704581	<.0001
Age_40_44	40 <= Age <= 44	1	-0.6874917241	0.1374724539	-5.0009416776	<.0001
Age_45_49	45 <= Age <= 49	1	-0.5984305514	0.1116511367	-5.3598249809	<.0001
Age_50_54	50 <= Age <= 54	1	-0.4503122313	0.0980024668	-4.5949071090	<.0001
Age_55_59	55 <= Age <= 59	1	-0.3931219574	0.0881978725	-4.4572725663	<.0001
Age_60_64	60 <= Age <= 64	1	-0.0999036880	0.0799891459	-1.2489655543	0.2117
Age_70_74	70 <= Age <= 74	1	0.0918997549	0.0720282371	1.2758851061	0.2020
Age_75_79	75 <= Age <= 79	1	0.3197845714	0.0736068007	4.3444976328	<.0001
Age_80_84	80 <= Age <= 84	1	0.4899625907	0.0774435002	6.3267103015	<.0001
Age_85Plus	Age >= 85	1	0.4336834965	0.0896239991	4.8389215019	<.0001
MALE	Patient Sex Flag: 1=Male / 0=Female	1	-0.1262386381	0.0708062719	-1.7828736734	0.0746
Age_LT30_MALE	Age < 30 MALE	1	0.0588096840	0.1891960185	0.3108399662	0.7559
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.0343570726	0.2348846920	0.1462720807	0.8837

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Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.2233310937	0.2070195813	1.0787921236	0.2807
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.0860556350	0.1722905141	0.4994798202	0.6174
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.0326174093	0.1469810514	0.2219157435	0.8244
Age_50_54_MALE	50 <= Age <= 54 MALE	1	-0.0640959614	0.1249428794	-0.5130021153	0.6079
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.1614889249	0.1139920138	1.4166687605	0.1566
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.0076838903	0.0986184870	-0.0779153128	0.9379
Age_70_74_MALE	70 <= Age <= 74 MALE	1	0.0543721480	0.0962708319	0.5647831947	0.5722
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.1245394664	0.0956993872	-1.3013611694	0.1931
Age_80_84_MALE	80 <= Age <= 84 MALE	1	-0.1767698804	0.1055033747	-1.6754902950	0.0938
Age_85Plus_MALE	Age >= 85 MALE	1	0.0509418510	0.1204707558	0.4228565734	0.6724
CMR_ALCOHOL	Alcohol abuse	1	-0.1072785525	0.0536177911	-2.0008014185	0.0454
CMR_ANEMDEF	Deficiency anemias	1	-0.3134207171	0.0331555166	-9.4530488199	<.0001
CMR_CANCER_L EUK	Leukemia	1	0.4518451722	0.1302061217	3.4702298644	0.0005
CMR_CANCER_M ETS	Metastatic cancer	1	0.5035133467	0.0515864769	9.7605686041	<.0001
CMR_CANCER_S OLID	Solid tumor without metastasis, malignant	1	0.2289476899	0.0560791144	4.0825839092	<.0001
CMR_COAG	Coagulopathy	1	0.4736753337	0.0368119714	12.8674264400	<.0001
CMR_DEMENTIA	Dementia	1	-0.2598788290	0.0638653488	-4.0691679292	<.0001
CMR_DEPRESS	Depression	1	-0.3228372189	0.0441019670	-7.3202453445	<.0001
CMR_DIAB_CX	Diabetes with chronic complications	1	-0.0723445655	0.0306067058	-2.3636834975	0.0181
CMR_DIAB_UNC X	Diabetes without chronic complications	1	-0.1342605974	0.0540653260	-2.4833032064	0.0130
CMR_DRUG_ABU SE	Drug abuse	1	-0.1717835595	0.0735936098	-2.3342184198	0.0196

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Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
CMR_HF	Heart failure	1	0.1415189131	0.0380788684	3.7164684489	0.0002
CMR_HTN_CX	Hypertension, complicated	1	-0.1579200870	0.0375833825	-4.2018593455	<.0001
CMR_HTN_UNCX	Hypertension, uncomplicated	1	-0.2835458728	0.0350921375	-8.0800399363	<.0001
CMR_LIVER_MLD	Liver disease, mild	1	0.2893181356	0.0521483270	5.5479849928	<.0001
CMR_LIVER_SEV	Liver disease, moderate to severe	1	0.7552152783	0.0783425780	9.6399084289	<.0001
CMR_LUNG_CHRONIC	Chronic pulmonary disease	1	0.0409618363	0.0289986489	1.4125429220	0.1578
CMR_NEURO_MOVT	Neurological disorders affecting movement	1	-0.2338331558	0.0903496039	-2.5880927623	0.0097
CMR_NEURO_OTH	Other neurological disorders	1	0.1417203119	0.0419845907	3.3755315854	0.0007
CMR_OBESE	Obesity	1	-0.1210907010	0.0338671857	-3.5754580246	0.0003
CMR_PARALYSIS	Paralysis	1	-0.1949925379	0.0512184660	-3.8070749277	0.0001
CMR_PERIVASC	Peripheral vascular disease	1	0.1830882067	0.0363294948	5.0396573779	<.0001
CMR_PSYCHOSES	Psychoses	1	-0.4741008298	0.0822536928	-5.7638850472	<.0001
CMR_PULMCIRC	Pulmonary circulation disease	1	0.1886024055	0.0546641214	3.4502046436	0.0006
CMR_RENLFL_SEV	Renal failure, severe	1	0.3134541532	0.0424840095	7.3781678467	<.0001
CMR_THYROID_HYPO	Hypothyroidism	1	-0.1816730827	0.0435880704	-4.1679542404	<.0001
CMR_THYROID_OTH	Other thyroid disorders	1	-0.3012142878	0.1353700837	-2.2251170976	0.0261
CMR_WGHTLOSS	Weight loss	1	-0.0866746257	0.0348971430	-2.4837169574	0.0130
MDC_3	Ear Nose Mouth And Throat	1	-0.6169701149	0.1800025935	-3.4275623642	0.0006
MDC_4	Respiratory System	1	0.2877422520	0.0949823777	3.0294277615	0.0025
MDC_5	Circulatory System	1	0.2940141468	0.0486092783	6.0485190765	<.0001
MDC_8	Musculoskeletal And Connective	1	-0.2671472880	0.0765627781	-3.4892580262	0.0005

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDC_10	Endocrine Nutritional And Metabolic	1	0.0126175470	0.1342820201	0.0939630416	0.9251
MDC_11	Kidney And Urinary Tract	1	-0.5181609955	0.0930102273	-5.5710109580	<.0001
MDC_13	Female Reproductive System	1	-0.8002913656	0.1533203439	-5.2197336997	<.0001
MDC_14	Pregnancy Childbirth And Puerperium	1	-2.627448473	0.4269371673	-6.1541806955	<.0001
MDC_17	Myeloproliferative DDs	1	0.8666089443	0.1752345955	4.9454215478	<.0001
MDC_18	Infectious and Parasitic	1	0.8354939828	0.3023726982	2.7631263922	0.0057
MDC_22	Burns	1	0.7348901452	0.2135092533	3.4419592309	0.0006
MDC_24	Multiple Significant Trauma	1	0.5128721652	0.1052306232	4.8737919594	<.0001
MDRG_101	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE	1	1.1920772403	0.1328068077	8.9760251070	<.0001
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	1.2876883377	0.0764951552	16.8335933823	<.0001
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	0.8746863828	0.0955691704	9.1523906624	<.0001
MDRG_104	SPINAL PROCEDURES	1	0.4031726839	0.1943837562	2.0741068685	0.0381
MDRG_401	MAJOR CHEST PROCEDURES	1	0.3971506954	0.1228159726	3.2337055758	0.0012
MDRG_402	OTHER RESP SYSTEM O.R. PROCEDURES	1	0.5161165504	0.1642575139	3.1421183621	0.0017
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	1.1879996562	0.0859789318	13.8173344512	<.0001
MDRG_502	PERC CARDIOVASC PROC W NON-DRUG-ELUTING STENT	1	0.7142808373	0.2208524689	3.2341990153	0.0012
MDRG_503	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC	1	0.4191979061	0.0791506980	5.2961997429	<.0001
MDRG_505	OTHER CARDIOTHORACIC PROCEDURES	1	0.4077586853	0.1536256097	2.6542364005	0.0079

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_510	PERMANENT CARDIAC PACEMAKER IMPLANT AND PROCEDURES	1	-0.5190785537	0.2580127874	-2.0118326649	0.0442
MDRG_513	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT	1	0.6603817671	0.1764436193	3.7427353265	0.0002
MDRG_519	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	1	0.6055948956	0.1692720628	3.5776423211	0.0003
MDRG_537	CARDIAC DEFIBRILLATOR IMPLANT W AMI/HF/SHOCK	1	-1.488580551	0.3935449782	-3.7824915420	0.0002
MDRG_538	CARDIAC DEFIBRILLATOR IMPLANT W/OUT AMI/HF/SHOCK	1	-0.9077699796	0.4800935581	-1.8908189128	0.0586
MDRG_539	CARDIAC DEFIBRILLATOR IMPLANT W/OUT CARDIAC CATH	1	-0.8855813903	0.3834605742	-2.3094457420	0.0209
MDRG_541	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON	1	0.5771325152	0.1009209646	5.7186583354	<.0001
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	0.4541325398	0.0654298739	6.9407521834	<.0001
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	-0.1069850114	0.0454479977	-2.3540093479	0.0186
MDRG_607	MINOR SMALL & LARGE BOWEL PROCEDURES	1	0.5137113380	0.2505242034	2.0505457401	0.0403
MDRG_611	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES	1	0.5869399894	0.1034835937	5.6718168387	<.0001
MDRG_701	PANCREAS, LIVER & SHUNT PROCEDURES	1	0.1376985559	0.1151830036	1.1954763427	0.2319
MDRG_702	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E.	1	-0.7776746228	0.3920733730	-1.9834925714	0.0473
MDRG_704	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E.	1	-0.8160973242	0.3983638283	-2.0486230580	0.0405
MDRG_705	LAPAROSCOPIC	1	-1.917710904	0.4611574472	-4.1584732411	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	CHOLECYSTECTOMY W/O C.D.E.					
MDRG_706	HEPATOBIILIARY DIAGNOSTIC PROCEDURES	1	0.8715007190	0.2705212797	3.2215606839	0.0013
MDRG_707	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES	1	0.5111526458	0.3243241978	1.5760546064	0.1150
MDRG_801	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	1	-0.5677297541	0.2130172654	-2.6651818721	0.0077
MDRG_803	SPINAL FUSION EXCEPT CERVICAL	1	-0.3716950466	0.2210546707	-1.6814620808	0.0927
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-0.2627914064	0.1171498381	-2.2432075933	0.0249
MDRG_811	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT	1	0.2533723720	0.0935451932	2.7085557608	0.0068
MDRG_826	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC	1	-0.5498819972	0.3100625722	-1.7734549297	0.0762
MDRG_1002	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DIS	1	-0.9267743934	0.2667418422	-3.4744245066	0.0005
MDRG_1004	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DIS	1	-1.484427926	0.5118385816	-2.9001876365	0.0037
MDRG_1104	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM	1	-0.8469746975	0.2621023003	-3.2314660980	0.0012
MDRG_1201	MAJOR MALE PELVIC PROCEDURES	1	-1.632684016	0.5973957002	-2.7330026241	0.0063
MDRG_1204	TRANSURETHRAL PROSTATECTOMY	1	-2.538848781	0.7215004497	-3.5188457362	0.0004
MDRG_1708	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC	1	-0.0109509691	0.2330453910	-0.0469907131	0.9625
MDRG_1709	MYELOPROLIF DISORD OR POORLY	1	-0.8209370026	0.2974887437	-2.7595565206	0.0058

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	DIFF NEOPL W MAJ O.R. PROC					
MDRG_1710	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R. PROC	1	-1.073717035	0.3387205556	-3.1699199151	0.0015
MDRG_2101	WOUND DEBRIDEMENTS FOR INJURIES	1	-0.5501761965	0.2681736402	-2.0515670225	0.0402
MDRG_2201	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ	1	-0.9807415696	0.4386330165	-2.2359045778	0.0254
MDRG_2210	EXTENSIVE BURNS OR FULL THICKNESS BURNS W MV >96 HRS W SKIN GRAFT	1	0.2812160524	0.3565949382	0.7886148184	0.4303
MDRG_2406	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	1	1.4538318045	0.1972103133	7.3719866896	<.0001
MDRG_2407	LIMB REATTACHMENT, HIP & FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	1	0.1379345308	0.1687539115	0.8173708662	0.4137
MDRG_7701	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	1	0.3732992125	0.1260546623	2.9614074211	0.0031
MDRG_7702	LIVER TRANSPLANT	1	-1.140002013	0.3052359685	-3.7348220100	0.0002
MDRG_7703	LUNG TRANSPLANT	1	-1.088219933	0.4834115968	-2.2511250049	0.0244
MDRG_7705	ALLOGENEIC OR AUTOLOGOUS BONE MARROW TRANSPLANT	1	0.1475709083	0.3600047688	0.4099137596	0.6819
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.2659393981	0.0371897056	7.1508874322	<.0001
RegVarPS04_DVT_PE_ANY	PSI04 DVT PE Regression variable: Any Triggering Complication POA	1	-0.1645501249	0.0848417464	-1.9394947873	0.0524
RegVarPS04_DVT_PE_SEVERE	PSI04 DVT PE Regression variable: Triggering Complication Severe	1	0.0858447043	0.0727653328	1.1797472910	0.2381
RegVarPS04_GIHE_MORRHAGE_A	PSI04 GIHEMORRHAGE Regression variable: Any Triggering Complication	1	0.0622078199	0.0673541509	0.9235929641	0.3557

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	POA					
RegVarPS04_GIHEMORRHAGE_S	PSI04 GIHEMORRHAGE Regression variable: Triggering Complication Severe	1	0.3987054706	0.1494618739	2.6676065278	0.0076
RegVarPS04_PNEUMONIA_ANY	PSI04 PNEUMONIA Regression variable: Any Triggering Complication POA	1	0.0253360976	0.0440470173	0.5752057500	0.5652
RegVarPS04_PNEUMONIA_SEVE	PSI04 PNEUMONIA Regression variable: Triggering Complication Severe	1	0.0846393001	0.0292687499	2.8917975776	0.0038
RegVarPS04_SEPSIS_ANY	PSI04 SEPSIS Regression variable: Any Triggering Complication POA	1	-0.4764988812	0.0349638449	-13.6283318659	<.0001
RegVarPS04_SEPSIS_SEVERE	PSI04 SEPSIS Regression variable: Triggering Complication Severe	1	1.3238761863	0.0284359354	46.5564493433	<.0001
RegVarPS04_SHOCK_ANY	PSI04 SHOCK Regression variable: Any Triggering Complication POA	1	-0.0846834516	0.0539958541	-1.5683324776	0.1168
RegVarPS04_SHOCK_SEVERE	PSI04 SHOCK Regression variable: Triggering Complication Severe	1	1.3136046700	0.0504004053	26.0633751230	<.0001
DNR	Do not resuscitate flag	1	0.7969580562	0.0612731115	13.0066522844	<.0001

c-statistic=0.806

Table 6. Risk Adjustment Coefficients for PSI 4 – Death Rate Among Surgical Inpatients with Serious Treatable Complications Stratum: Shock/Cardiac Arrest

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-2.774046949	0.0742976381	-37.3369466289	<.0001
Age_LT30	Age < 30	1	-0.2868354958	0.1308794827	-2.1916001640	0.0284
Age_30_34	30 <= Age <= 34	1	-0.0196310612	0.1269499447	-0.1546362330	0.8771
Age_35_39	35 <= Age <= 39	1	-0.2774047728	0.1238517183	-2.2398136794	0.0251

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_40_44	40 <= Age <= 44	1	-0.0460704120	0.1130216040	-0.4076248286	0.6835
Age_45_49	45 <= Age <= 49	1	-0.2205015001	0.1072455577	-2.0560432045	0.0398
Age_50_54	50 <= Age <= 54	1	-0.1482883338	0.0929452753	-1.5954370282	0.1106
Age_55_59	55 <= Age <= 59	1	-0.0796855444	0.0853911368	-0.9331828503	0.3507
Age_60_64	60 <= Age <= 64	1	-0.0760765404	0.0815668181	-0.9326898146	0.3510
Age_70_74	70 <= Age <= 74	1	0.1780264130	0.0756197675	2.3542311605	0.0186
Age_75_79	75 <= Age <= 79	1	0.2448177883	0.0819135045	2.9887353711	0.0028
Age_80_84	80 <= Age <= 84	1	0.5071137370	0.0868280589	5.8404361854	<.0001
Age_85Plus	Age >= 85	1	0.5185040303	0.1002625201	5.1714641683	<.0001
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.0400253467	0.0731611720	0.5470845479	0.5843
Age_LT30_MALE	Age < 30 MALE	1	0.3852848518	0.1818688581	2.1184762243	0.0341
Age_30_34_MALE	30 <= Age <= 34 MALE	1	-0.1137857829	0.1929687316	-0.5896591743	0.5554
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.3182476143	0.1722917143	1.8471440468	0.0647
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.0003676580	0.1625076946	0.0022624036	0.9982
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.1962947648	0.1457670902	1.3466329370	0.1781
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.0309598972	0.1283876679	0.2411438549	0.8094
Age_55_59_MALE	55 <= Age <= 59 MALE	1	-0.1299230100	0.1150940684	-1.1288419272	0.2590
Age_60_64_MALE	60 <= Age <= 64 MALE	1	0.0034174266	0.1063838289	0.0321235537	0.9744
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.0467080620	0.1015423049	-0.4599862300	0.6455
Age_75_79_MALE	75 <= Age <= 79 MALE	1	0.0592976015	0.1087317056	0.5453570435	0.5855
Age_80_84_MALE	80 <= Age <= 84 MALE	1	-0.1976124453	0.1171400483	-1.6869759583	0.0916
Age_85Plus_MALE	Age >= 85 MALE	1	0.1021423094	0.1423028181	0.7177813533	0.4729
CMR_BLDLOSS	Chronic blood loss anemia	1	-0.3205305981	0.1149605940	-2.7881779919	0.0053
CMR_CANCER_LEUK	Leukemia	1	0.5661728759	0.1505228150	3.7613758142	0.0002

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Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
CMR_CANCER_METS	Metastatic cancer	1	0.3492942042	0.0568841773	6.1404457408	<.0001
CMR_CANCER_SOLID	Solid tumor without metastasis, malignant	1	0.1743182788	0.0634006346	2.7494721444	0.0060
CMR_CBVD	Cerebrovascular disease	1	0.2075247902	0.0600700044	3.4547157487	0.0006
CMR_COAG	Coagulopathy	1	0.4278838697	0.0385892022	11.0881760926	<.0001
CMR_DEPRESS	Depression	1	-0.2407777136	0.0461806923	-5.2138177530	<.0001
CMR_HF	Heart failure	1	0.0677486096	0.0357990957	1.8924670634	0.0584
CMR_LIVER_MILD	Liver disease, mild	1	0.2658116560	0.0568777639	4.6733844219	<.0001
CMR_LIVER_SEV	Liver disease, moderate to severe	1	0.7133285871	0.0758581476	9.4034538057	<.0001
CMR_LUNG_CHRONIC	Chronic pulmonary disease	1	0.1531830662	0.0347884461	4.4032741784	<.0001
CMR_NEURO_OTH	Other neurological disorders	1	0.3592425545	0.0464354150	7.7363915941	<.0001
CMR_OBESE	Obesity	1	-0.0827345856	0.0367289079	-2.2525740700	0.0243
CMR_PARALYSIS	Paralysis	1	-0.3245318070	0.0564461326	-5.7494073054	<.0001
CMR_PERIVASC	Peripheral vascular disease	1	0.2845812500	0.0446022032	6.3804303327	<.0001
CMR_PSYCHOSES	Psychoses	1	-0.1704086681	0.0796825543	-2.1385944449	0.0325
CMR_RENLFL_MOD	Renal failure, moderate	1	0.0874107876	0.0437702585	1.9970361283	0.0458
CMR_RENLFL_SEV	Renal failure, severe	1	0.1545047284	0.0466720980	3.3104303241	0.0009
CMR_THYROID_OTH	Other thyroid disorders	1	-0.5017744224	0.1413293994	-3.5503895484	0.0004
CMR_ULCER_PE	Peptic ulcer disease x bleeding	1	-0.2701320027	0.0814491609	-3.3165719552	0.0009

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
PTIC						
CMR_WGHTLOSS	Weight loss	1	-0.3005215094	0.0393049453	-7.6458956348	<.0001
PS04_SHOCK_No nWt_2	PS04_SHOCK Comorbidity count using non-weighted method, category 2, count >= 4	1	0.0211752174	0.0378436333	0.5595450408	0.5758
MDC_3	Ear Nose Mouth And Throat	1	-0.2140754117	0.1219382314	-1.7556053532	0.0792
MDC_6	Digestive System	1	0.0395496845	0.0897569023	0.4406311214	0.6595
MDC_7	Hepatobiliary System And Pancreas	1	0.4064620519	0.0905655204	4.4880441251	<.0001
MDC_8	Musculoskeletal And Connective	1	-0.0730598005	0.0563771128	-1.2959124157	0.1950
MDC_9	Skin Subcutaneous And Breast	1	-0.1968201057	0.1333244121	-1.4762495673	0.1399
MDC_13	Female Reproductive System	1	-0.1457505485	0.1166986644	-1.2489478709	0.2117
MDC_14	Pregnancy Childbirth And Puerperium	1	-0.6013749875	0.1179956940	-5.0965841819	<.0001
MDC_16	Blood and Immunological	1	0.5356257361	0.1361033776	3.9354330923	<.0001
MDC_17	Myeloproliferative DDs	1	0.4878747745	0.1265950491	3.8538219159	0.0001
MDRG_101	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE	1	1.8226507865	0.1239146826	14.7089170458	<.0001
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	2.1360891370	0.0836837041	25.5257479271	<.0001
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	1.0676859900	0.1160404404	9.2009818881	<.0001
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL PROC	1	0.6629450231	0.1082973750	6.1215243965	<.0001
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	0.6563152587	0.0912014270	7.1963266407	<.0001
MDRG_604	PERITONEAL ADHESIOLYSIS	1	0.7236050234	0.1342712580	5.3891282017	<.0001
MDRG_607	MINOR SMALL & LARGE BOWEL PROCEDURES	1	1.1397076214	0.2377162166	4.7944041757	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_611	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES	1	0.9950564079	0.1309122707	7.6009407111	<.0001
MDRG_701	PANCREAS, LIVER & SHUNT PROCEDURES	1	0.1680965852	0.1238046355	1.3577567958	0.1745
MDRG_706	HEPATOBIILIARY DIAGNOSTIC PROCEDURES	1	1.0763261794	0.2594094209	4.1491406741	<.0001
MDRG_707	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES	1	0.8958516858	0.2819096842	3.1777967764	0.0015
MDRG_806	REVISION OF HIP OR KNEE REPLACEMENT	1	-0.7410893358	0.1607528733	-4.6101156418	<.0001
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-0.3449846250	0.1250029802	-2.7598112016	0.0058
MDRG_811	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT	1	0.4341439480	0.1497642334	2.8988493326	0.0037
MDRG_1006	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC	1	0.5686690978	0.2247766785	2.5299292685	0.0114
MDRG_1101	KIDNEY TRANSPLANT	1	-0.5780461738	0.2107244208	-2.7431380363	0.0061
MDRG_1304	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY	1	-0.8290756095	0.2505536764	-3.3089740349	0.0009
MDRG_1708	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC	1	0.9531640712	0.2519320284	3.7834176041	0.0002
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	0.7421174319	0.0511926607	14.4965591227	<.0001
MDRG_2501	HIV W EXTENSIVE O.R. PROCEDURE	1	1.5759120290	0.2973910231	5.2991244081	<.0001
MDRG_7702	LIVER TRANSPLANT	1	-1.713772451	0.2253285497	-7.6056605057	<.0001
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.2380382467	0.0431264823	5.5195377388	<.0001
RegVarPS04_DVT	PSI04 DVT PE Regression variable:	1	-0.2188018671	0.0988514578	-2.2134409739	0.0269

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
_PE_ANY	Any Triggering Complication POA					
RegVarPS04_DVT _PE_SEVERE	PSI04 DVT PE Regression variable: Triggering Complication Severe	1	0.3736049788	0.0770043618	4.8517378785	<.0001
RegVarPS04_GIH EMORRHAGE_A	PSI04 GIHEMORRHAGE Regression variable: Any Triggering Complication POA	1	0.0840196450	0.0651860391	1.2889208501	0.1974
RegVarPS04_GIH EMORRHAGE_S	PSI04 GIHEMORRHAGE Regression variable: Triggering Complication Severe	1	0.1546307732	0.1506131701	1.0266749791	0.3046
RegVarPS04_PNE UMONIA_ANY	PSI04 PNEUMONIA Regression variable: Any Triggering Complication POA	1	0.0396258609	0.0556224800	0.7124073013	0.4762
RegVarPS04_PNE UMONIA_SEVE	PSI04 PNEUMONIA Regression variable: Triggering Complication Severe	1	-0.2920173087	0.0439266489	-6.6478394346	<.0001
RegVarPS04_SEPS IS_ANY	PSI04 SEPSIS Regression variable: Any Triggering Complication POA	1	-0.2055285107	0.0626040978	-3.2829881384	0.0010
RegVarPS04_SEPS IS_SEVERE	PSI04 SEPSIS Regression variable: Triggering Complication Severe	1	0.9201782909	0.0469272977	19.6085932213	<.0001
RegVarPS04_SHO CK_ANY	PSI04 SHOCK Regression variable: Any Triggering Complication POA	1	-0.2317202370	0.0387750672	-5.9760112280	<.0001
RegVarPS04_SHO CK_SEVERE	PSI04 SHOCK Regression variable: Triggering Complication Severe	1	2.2343073032	0.0344677022	64.8232160426	<.0001
DNR	Do not resuscitate flag	1	1.1116714954	0.0708453265	15.6915290025	<.0001

c-statistic=0.852

Table 7. Risk Adjustment Coefficients for PSI 04 – Death Rate Among Surgical Inpatients with Serious Treatable Complications Stratum: Gastrointestinal (GI) Hemorrhage/Acute Ulcer

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-3.257343522	0.1381878503	-23.5718517615	<.0001
Age_LT30	Age < 30	1	-2.171100624	0.7958311763	-2.7280919479	0.0064

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_30_34	30 <= Age <= 34	1	-1.041201187	0.4575566110	-2.2755680102	0.0229
Age_35_39	35 <= Age <= 39	1	-1.103005884	0.4841761070	-2.2781088696	0.0227
Age_40_44	40 <= Age <= 44	1	-0.9320709999	0.3715179232	-2.5088183951	0.0121
Age_45_49	45 <= Age <= 49	1	-0.5121680788	0.2843246407	-1.8013496037	0.0716
Age_50_54	50 <= Age <= 54	1	-0.0553891823	0.1981220913	-0.2795709552	0.7798
Age_55_59	55 <= Age <= 59	1	0.1316747206	0.1739588997	0.7569300609	0.4491
Age_60_64	60 <= Age <= 64	1	-0.1949685106	0.1795109545	-1.0861092640	0.2774
Age_70_74	70 <= Age <= 74	1	0.1395066636	0.1614807028	0.8639215780	0.3876
Age_75_79	75 <= Age <= 79	1	0.1370038685	0.1599284789	0.8566571099	0.3916
Age_80_84	80 <= Age <= 84	1	0.2648516374	0.1653860659	1.6014144598	0.1093
Age_85Plus	Age >= 85	1	0.2962765025	0.1853673458	1.5983208973	0.1100
MALE	Patient Sex Flag: 1=Male / 0=Female	1	-0.1128630915	0.1525189646	-0.7399938215	0.4593
Age_LT30_MALE	Age < 30 MALE	1	1.8012289451	0.8776645453	2.0522977199	0.0401
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.1252920700	0.6733514602	0.1860723225	0.8524
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.4439153646	0.5564662888	0.7977399053	0.4250
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.5828007781	0.4767869975	1.2223504020	0.2216
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.4820509708	0.3461796405	1.3924879293	0.1638
Age_50_54_MALE	50 <= Age <= 54 MALE	1	-0.0803570384	0.2611496167	-0.3077049833	0.7583
Age_55_59_MALE	55 <= Age <= 59 MALE	1	-0.1656023753	0.2302483222	-0.7192337985	0.4720
Age_60_64_MALE	60 <= Age <= 64 MALE	1	0.1724721623	0.2226031721	0.7747965165	0.4385
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.2205235641	0.2144348642	-1.0283941695	0.3038
Age_75_79_MALE	75 <= Age <= 79 MALE	1	0.0189424613	0.2123772042	0.0891925351	0.9289
Age_80_84_MALE	80 <= Age <= 84 MALE	1	-0.0137391659	0.2325160991	-0.0590890950	0.9529
Age_85Plus_MALE	Age >= 85 MALE	1	-0.0949790074	0.2604772532	-0.3646345554	0.7154
CMR_ANEMDEF	Deficiency anemias	1	-0.4065026291	0.0729464108	-5.5726200217	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
CMR_BLDLOSS	Chronic blood loss anemia	1	-0.7977375166	0.1922457552	-4.1495715517	<.0001
CMR_CANCER_METS	Metastatic cancer	1	0.3918382241	0.1209879241	3.2386556497	0.0012
CMR_CBVD	Cerebrovascular disease	1	0.1824245208	0.1039139023	1.7555352729	0.0792
CMR_COAG	Coagulopathy	1	0.6561163268	0.0770922188	8.5107983298	<.0001
CMR_DEPRESS	Depression	1	-0.3318697720	0.0994624581	-3.3366335235	0.0008
CMR_DIAB_CX	Diabetes with chronic complications	1	-0.2115951432	0.0679803538	-3.1125925550	0.0019
CMR_HF	Heart failure	1	0.2717274102	0.0721055552	3.7684670695	0.0002
CMR_HTN_UNCX	Hypertension, uncomplicated	1	-0.2962988232	0.0759636987	-3.9005318120	<.0001
CMR_LIVER_SEV	Liver disease, moderate to severe	1	0.5010081828	0.1211450868	4.1356046374	<.0001
CMR_NEURO_OTH	Other neurological disorders	1	0.5793848459	0.0876781557	6.6080866044	<.0001
CMR_OBESE	Obesity	1	-0.2971846835	0.0777539235	-3.8221181648	0.0001
CMR_PERIVASC	Peripheral vascular disease	1	0.3340650821	0.0699041009	4.7789053582	<.0001
CMR_PSYCHOSES	Psychoses	1	-0.6589625892	0.2291790591	-2.8753176308	0.0040
CMR_RENLFL_SEV	Renal failure, severe	1	0.3930010435	0.0885681607	4.4372722693	<.0001
MDRG_101	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE	1	1.4549746271	0.3307430143	4.3991091704	<.0001
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	1.5117347371	0.1454780700	10.3914956896	<.0001
MDRG_401	MAJOR CHEST PROCEDURES	1	0.8144854789	0.2165182945	3.7617397674	0.0002
MDRG_402	OTHER RESP SYSTEM O.R. PROCEDURES	1	1.1262659495	0.2339687117	4.8137459978	<.0001
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	2.0502168397	0.1500529060	13.6632931284	<.0001
MDRG_503	CARDIAC VALVE & OTH MAJ	1	0.4587067742	0.1662842585	2.7585700438	0.0058

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	CARDIOTHORACIC PROC					
MDRG_513	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT	1	0.8218926514	0.2129625957	3.8593286701	0.0001
MDRG_540	ENDOVASCULAR CARDIAC VALVE REPLACEMENT	1	-0.9860001714	0.3748617441	-2.6303035369	0.0085
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	0.4617991365	0.1096303584	4.2123289849	<.0001
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-1.846729024	0.5779383768	-3.1953735860	0.0014
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.3918731241	0.0668142249	5.8651151757	<.0001
RegVarPS04_DVT_PE_ANY	PSI04 DVT PE Regression variable: Any Triggering Complication POA	1	-0.2403940330	0.2235673379	-1.0752645500	0.2823
RegVarPS04_DVT_PE_SEVERE	PSI04 DVT PE Regression variable: Triggering Complication Severe	1	0.2545464302	0.2533832815	1.0045904715	0.3151
RegVarPS04_GIHE_MORRHAGE_A	PSI04 GIHEMORRHAGE Regression variable: Any Triggering Complication POA	1	-0.4492924231	0.0609561733	-7.3707452192	<.0001
RegVarPS04_GIHE_MORRHAGE_S	PSI04 GIHEMORRHAGE Regression variable: Triggering Complication Severe	1	0.1917191248	0.1236749947	1.5501850262	0.1211
RegVarPS04_PNEUMONIA_ANY	PSI04 PNEUMONIA Regression variable: Any Triggering Complication POA	1	0.0593957918	0.3784305636	0.1569529460	0.8753
RegVarPS04_PNEUMONIA_SEVE	PSI04 PNEUMONIA Regression variable: Triggering Complication Severe	1	0.0803576643	0.4179257653	0.1922773636	0.8475
RegVarPS04_SEPSIS_S_ANY	PSI04 SEPSIS Regression variable: Any Triggering Complication POA	1	-0.3854832642	0.2583614295	-1.4920310087	0.1357
RegVarPS04_SEPSIS_S_SEVERE	PSI04 SEPSIS Regression variable: Triggering Complication Severe	1	2.1940301245	0.2556173917	8.5832583992	<.0001
RegVarPS04_SHOCK_K_ANY	PSI04 SHOCK Regression variable: Any Triggering Complication POA	1	1.0007846363	0.0910445781	10.9922486044	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
RegVarPS04_SHOCK_SEVERE	PSI04 SHOCK Regression variable: Triggering Complication Severe	1	2.4471832080	0.1025612904	23.8606904940	<.0001
DNR	Do not resuscitate flag	1	0.9472576805	0.1110910934	8.5268553183	<.0001

c-statistic=0.861

Table 8. Risk Adjustment Coefficients for PSI 06 – Iatrogenic Pneumothorax Rate

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-7.945200539	0.0689845324	-115.173652214	<.0001
Age_LT30	Age < 30	1	-0.4867557527	0.1462319028	-3.3286563562	0.0009
Age_30_34	30 <= Age <= 34	1	-0.5835341361	0.1939373499	-3.0088796016	0.0026
Age_35_39	35 <= Age <= 39	1	-0.5474643873	0.1635121026	-3.3481582004	0.0008
Age_40_44	40 <= Age <= 44	1	-0.4526397676	0.1543445741	-2.9326574657	0.0034
Age_45_49	45 <= Age <= 49	1	-0.4233761579	0.1313658845	-3.2228775332	0.0013
Age_50_54	50 <= Age <= 54	1	-0.4784873842	0.1241115499	-3.8553010127	0.0001
Age_55_59	55 <= Age <= 59	1	-0.3612954032	0.1060044833	-3.4083030465	0.0007
Age_60_64	60 <= Age <= 64	1	-0.0734164121	0.0959198430	-0.7653933718	0.4440
Age_70_74	70 <= Age <= 74	1	-0.0824548566	0.0889212493	-0.9272795564	0.3538
Age_75_79	75 <= Age <= 79	1	0.0027566611	0.0885510217	0.0311307655	0.9752
Age_80_84	80 <= Age <= 84	1	0.0021877070	0.0867167974	0.0252281805	0.9799
Age_85_89	85 <= Age <= 89	1	0.0611540253	0.0915646974	0.6678777628	0.5042
Age_90Plus	Age >= 90	1	-0.0738986614	0.1046294290	-0.7062894459	0.4800
MALE	Patient Sex Flag: 1=Male / 0=Female	1	-0.4674224379	0.0927860802	-5.0376353546	<.0001
Age_LT30_MALE	Age < 30 MALE	1	0.5096419974	0.2059983041	2.4740106464	0.0134
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.4955119535	0.2628477375	1.8851672771	0.0594

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_35_39_MALE	35 <= Age <= 39 MALE	1	-0.0985141710	0.2572953266	-0.3828836391	0.7018
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.2520002161	0.2198184015	1.1464018223	0.2516
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.2362888550	0.2007735671	1.1768922496	0.2392
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.1836135499	0.1792748527	1.0242013710	0.3057
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.3944100215	0.1453433758	2.7136429120	0.0067
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.0762271880	0.1382562747	-0.5513470416	0.5814
Age_70_74_MALE	70 <= Age <= 74 MALE	1	0.1863760883	0.1283948304	1.4515856108	0.1466
Age_75_79_MALE	75 <= Age <= 79 MALE	1	0.2210871044	0.1293085853	1.7097635394	0.0873
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.1388348080	0.1339699627	1.0363129555	0.3001
Age_85_89_MALE	85 <= Age <= 89 MALE	1	0.2263267167	0.1412451132	1.6023684754	0.1091
Age_90Plus_MALE	Age >= 90 MALE	1	0.2370540572	0.1707713587	1.3881370917	0.1651
CMR_CBVD	Cerebrovascular disease	1	0.1849900508	0.0643375497	2.8753045733	0.0040
CMR_COAG	Coagulopathy	1	0.2663428606	0.0596433609	4.4655910808	<.0001
CMR_NEURO_OT H	Other neurological disorders	1	0.6456373908	0.0516532618	12.4994505309	<.0001
CMR_OBESE	Obesity	1	-0.5691288334	0.0523409198	-10.8734969888	<.0001
CMR_VALVE	Valvular disease	1	0.1265463575	0.0536722935	2.3577594551	0.0184
CMR_WGHTLOSS	Weight loss	1	1.0475138351	0.0463102543	22.6194792075	<.0001
MDRG_101	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE	1	1.4842366456	0.2439124083	6.0851215245	<.0001
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	0.6402302779	0.1650315522	3.8794416553	0.0001
MDRG_108	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC	1	1.2884309713	0.1652300804	7.7977990963	<.0001
MDRG_402	OTHER RESP SYSTEM O.R. PROCEDURES	1	1.3452824476	0.2173999789	6.1880523373	<.0001
MDRG_405	RESPIRATORY NEOPLASMS	1	2.4514057574	0.2587742523	9.4731440080	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_412	PNEUMOTHORAX	1	1.9528635093	0.3789022042	5.1540040876	<.0001
MDRG_416	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT	1	2.6419120816	0.0951135704	27.7763947795	<.0001
MDRG_510	PERMANENT CARDIAC PACEMAKER IMPLANT AND PROCEDURES	1	3.2313859783	0.0509304839	63.4469914973	<.0001
MDRG_512	AICD PROCEDURES	1	2.9029927219	0.1995986499	14.5441500880	<.0001
MDRG_517	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	1	1.4074367959	0.2439567572	5.7692060347	<.0001
MDRG_537	CARDIAC DEFIBRILLATOR IMPLANT W AMI/HF/SHOCK	1	2.6021329560	0.2438537721	10.6708743260	<.0001
MDRG_538	CARDIAC DEFIBRILLATOR IMPLANT W/OUT AMI/HF/SHOCK	1	2.3961196330	0.1930808555	12.4099286102	<.0001
MDRG_802	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR EXT FUS	1	1.7031458867	0.2038023210	8.3568522591	<.0001
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-3.041902963	0.2777453351	-10.9521298075	<.0001
MDRG_822	MAJOR SHOULDER OR ELBOW JOINT PROCEDURES	1	1.4412581698	0.7073981569	2.0374073012	0.0416
MDRG_1103	KIDNEY & URETER PROCEDURES FOR NEOPLASM	1	2.1703823655	0.1032649034	21.0176187032	<.0001
MDRG_1109	OTHER KIDNEY & URINARY TRACT PROCEDURES	1	0.1995752310	0.2187026665	0.9125413704	0.3615
MDRG_1713	LYMPHOMA & NON-ACUTE LEUKEMIA	1	0.6358518657	0.4091823684	1.5539571469	0.1202
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	0.1449947357	0.1005112829	1.4425717354	0.1491
MDRG_1807	SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS	1	2.7735681447	0.1227491302	22.5954199425	<.0001
MDRG_7702	LIVER TRANSPLANT	1	2.4249064906	0.2288663054	10.5952970490	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.1693865374	0.0552495953	3.0658421418	0.0022
MEDICDR	Medical DRGs flag	1	-1.717784056	0.0452663773	-37.9483439508	<.0001

c-statistic=0.845

Table 9. Risk Adjustment Coefficients for PSI 07 – Central Venous Catheter-Related Blood Stream Infection Rate

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-9.387047227	0.1264344978	-74.2443509536	<.0001
Age_LT30	Age < 30	1	-0.0682962770	0.1645322642	-0.4150935219	0.6781
Age_30_34	30 <= Age <= 34	1	-0.8200758215	0.2177712378	-3.7657673699	0.0002
Age_35_39	35 <= Age <= 39	1	0.1450634062	0.1861982013	0.7790805993	0.4359
Age_40_44	40 <= Age <= 44	1	0.4291455694	0.1853263092	2.3156214106	0.0206
Age_45_49	45 <= Age <= 49	1	0.4140070390	0.1782129469	2.3231030423	0.0202
Age_50_54	50 <= Age <= 54	1	0.5175024447	0.1676547080	3.0867158501	0.0020
Age_55_59	55 <= Age <= 59	1	0.1710329886	0.1665794844	1.0267350099	0.3045
Age_60_64	60 <= Age <= 64	1	0.1100703226	0.1641705727	0.6704631701	0.5026
Age_70_74	70 <= Age <= 74	1	-0.5267585589	0.1855316464	-2.8391844143	0.0045
Age_75_79	75 <= Age <= 79	1	-0.5752321786	0.1832578482	-3.1389224754	0.0017
Age_80_84	80 <= Age <= 84	1	-0.8081045772	0.2173385148	-3.7181839494	0.0002
Age_85_89	85 <= Age <= 89	1	-1.446331439	0.2877676741	-5.0260386033	<.0001
Age_90Plus	Age >= 90	1	-1.430455916	0.3088795561	-4.6311123127	<.0001
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.0982850441	0.1572191844	0.6251466348	0.5319
Age_LT30_MALE	Age < 30 MALE	1	0.7427179714	0.2200031645	3.3759422197	0.0007
Age_30_34_MALE	30 <= Age <= 34 MALE	1	1.6105489745	0.2774910098	5.8039681201	<.0001
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.5395246020	0.2454948321	2.1977024827	0.0280

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_40_44_MALE	40 <= Age <= 44 MALE	1	-0.1992424968	0.2638661793	-0.7550891793	0.4502
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.2286034916	0.2281839806	1.0018384770	0.3164
Age_50_54_MALE	50 <= Age <= 54 MALE	1	-0.3664406399	0.2297112177	-1.5952230961	0.1107
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.0690708820	0.2215072016	0.3118222860	0.7552
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.0366200360	0.2274159138	-0.1610267081	0.8721
Age_70_74_MALE	70 <= Age <= 74 MALE	1	0.3165160731	0.2440082679	1.2971530672	0.1946
Age_75_79_MALE	75 <= Age <= 79 MALE	1	0.4286518193	0.2382226100	1.7993750436	0.0720
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.6332678841	0.2754810268	2.2987713220	0.0215
Age_85_89_MALE	85 <= Age <= 89 MALE	1	0.5666044538	0.3759955964	1.5069443877	0.1318
Age_90Plus_MALE	Age >= 90 MALE	1	0.1224624446	0.5161139002	0.2372779431	0.8124
CMR_COAG	Coagulopathy	1	0.4891380249	0.0905419897	5.4023335079	<.0001
CMR_DIAB_UNC X	Diabetes without chronic complications	1	-0.6932417566	0.1117430950	-6.2038889892	<.0001
CMR_DRUG_ABUSE	Drug abuse	1	0.7981998268	0.0778126567	10.2579690888	<.0001
CMR_HF	Heart failure	1	0.9899407042	0.0620424236	15.9558677291	<.0001
CMR_LIVER_MLD	Liver disease, mild	1	0.5424637330	0.0893376921	6.0720589500	<.0001
CMR_LIVER_SEV	Liver disease, moderate to severe	1	0.7632621738	0.1381323727	5.5255850526	<.0001
CMR_NEURO_OTHER	Other neurological disorders	1	0.7536768961	0.0766782067	9.8290887203	<.0001
CMR_PARALYSIS	Paralysis	1	0.6300284190	0.0843057661	7.4731355689	<.0001
CMR_RENLFL_MOD	Renal failure, moderate	1	0.0481682933	0.0752696521	0.6399430839	0.5222
CMR_WGHTLOSS	Weight loss	1	1.3164254210	0.0781452032	16.8458890285	<.0001
MDRG_416	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT	1	1.7259203818	0.1589314376	10.8595279064	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	1.0383438172	0.1241970667	8.3604536321	<.0001
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	0.7183011455	0.1004104206	7.1536513952	<.0001
MDRG_1807	SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS	1	2.2389029934	0.1497821610	14.9477279481	<.0001
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.7553885699	0.0837061325	9.0242918591	<.0001
MEDICDR	Medical DRGs flag	1	-1.356513516	0.0616343196	-22.0090612786	<.0001

c-statistic=0.817

Table 10. Risk Adjustment Coefficients for PSI 08 – In-Hospital Fall with Hip Fracture Rate

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-8.433562055	0.1146305948	-73.5716504984	<.0001
Age_LT30	Age < 30	1	-2.358807348	0.4259189928	-5.5381595740	<.0001
Age_30_34	30 <= Age <= 34	1	-1.953450891	0.4600707191	-4.2459796079	<.0001
Age_35_39	35 <= Age <= 39	1	-1.768716043	0.3923917346	-4.5075262480	<.0001
Age_40_44	40 <= Age <= 44	1	-1.526483969	0.3287826433	-4.6428362310	<.0001
Age_45_49	45 <= Age <= 49	1	-1.963810366	0.3619159103	-5.4261509641	<.0001
Age_50_54	50 <= Age <= 54	1	-0.9565260873	0.2186277216	-4.3751363282	<.0001
Age_55_59	55 <= Age <= 59	1	-0.4267195228	0.1558826903	-2.7374400705	0.0062
Age_60_64	60 <= Age <= 64	1	-0.2230476426	0.1403966311	-1.5886965438	0.1121
Age_70_74	70 <= Age <= 74	1	0.2587687585	0.1191418483	2.1719384263	0.0299
Age_75_79	75 <= Age <= 79	1	0.5399241654	0.1205772832	4.4778265937	<.0001
Age_80_84	80 <= Age <= 84	1	0.5733350551	0.1266016809	4.5286527862	<.0001
Age_85_89	85 <= Age <= 89	1	0.7447553204	0.1323174944	5.6285476386	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_90Plus	Age >= 90	1	0.8210818773	0.1390195518	5.9062330921	<.0001
MALE	Patient Sex Flag: 1=Male / 0=Female	1	-0.5918131100	0.1447314925	-4.0890417131	<.0001
Age_LT30_MALE	Age < 30 MALE	1	-0.0482281633	0.6629371805	-0.0727492208	0.9420
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.6398751762	0.6162122059	1.0384006842	0.2991
Age_35_39_MALE	35 <= Age <= 39 MALE	1	-0.3060654836	0.7024372371	-0.4357193319	0.6630
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.2724725926	0.5095432150	0.5347389281	0.5928
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.9992163054	0.4751240636	2.1030639826	0.0355
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.5504407239	0.3140678397	1.7526172828	0.0797
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.0758516031	0.2354946180	0.3220948475	0.7474
Age_60_64_MALE	60 <= Age <= 64 MALE	1	0.3122996803	0.2091824262	1.4929537151	0.1354
Age_70_74_MALE	70 <= Age <= 74 MALE	1	0.0350889497	0.1900330327	0.1846465805	0.8535
Age_75_79_MALE	75 <= Age <= 79 MALE	1	0.1479721696	0.1877381615	0.7881837575	0.4306
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.1391936629	0.1971391310	0.7060681572	0.4801
Age_85_89_MALE	85 <= Age <= 89 MALE	1	0.2253359789	0.2003761807	1.1245646970	0.2608
Age_90Plus_MALE	Age >= 90 MALE	1	0.4010668013	0.2261206316	1.7736851273	0.0761
CMR_AIDS	Acquired immune deficiency syndrome	1	0.3462150501	0.3228263281	1.0724498590	0.2835
CMR_ALCOHOL	Alcohol abuse	1	0.5343350243	0.1150246331	4.6453964663	<.0001
CMR_ANEMDEF	Deficiency anemias	1	0.1540958721	0.0650904704	2.3674106398	0.0179
CMR_CANCER_L EUK	Leukemia	1	-0.0308537954	0.2788949348	-0.1106287407	0.9119
CMR_CANCER_M ETS	Metastatic cancer	1	0.2964059711	0.1156360364	2.5632664381	0.0104
CMR_CANCER_S OLID	Solid tumor without metastasis, malignant	1	0.3281229768	0.1190144754	2.7570005722	0.0058
CMR_CBVD	Cerebrovascular disease	1	0.1235641723	0.1127048098	1.0963522543	0.2729
CMR_COAG	Coagulopathy	1	0.3385252909	0.0890132621	3.8030882484	0.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
CMR_DEMENTIA	Dementia	1	0.9435755833	0.0733771791	12.8592512711	<.0001
CMR_DEPRESS	Depression	1	0.4450440331	0.0625289345	7.1174095136	<.0001
CMR_DIAB_UNCX	Diabetes without chronic complications	1	-0.2931708104	0.0927789495	-3.1598849968	0.0016
CMR_DRUG_ABUSE	Drug abuse	1	0.2321175885	0.1445082830	1.6062580196	0.1082
CMR_HF	Heart failure	1	0.3544472020	0.0831121472	4.2646858975	<.0001
CMR_HTN_CX	Hypertension, complicated	1	-0.2473973933	0.0910917910	-2.7159131515	0.0066
CMR_HTN_UNCX	Hypertension, uncomplicated	1	-0.3321197089	0.0636510035	-5.2178236084	<.0001
CMR_LIVER_MLD	Liver disease, mild	1	0.0616500125	0.1209006065	0.5099231039	0.6101
CMR_LUNG_CHRONIC	Chronic pulmonary disease	1	0.3732037651	0.0542486432	6.8795041313	<.0001
CMR_NEURO_MOT	Neurological disorders affecting movement	1	-0.0973572426	0.1253179722	-0.7768817263	0.4372
CMR_NEURO_OTHER	Other neurological disorders	1	0.4168477719	0.0842073690	4.9502528945	<.0001
CMR_OBESE	Obesity	1	-0.8458245092	0.0893284047	-9.4687072044	<.0001
CMR_PARALYSIS	Paralysis	1	0.0294598852	0.1239843414	0.2376097241	0.8122
CMR_PERIVASC	Peripheral vascular disease	1	-0.0694453406	0.0871829977	-0.7965468318	0.4257
CMR_PSYCHOSES	Psychoses	1	0.5632729111	0.1049955608	5.3647307281	<.0001
CMR_PULMCIRC	Pulmonary circulation disease	1	0.3515556106	0.1025484852	3.4281892115	0.0006
CMR_RENLFL_MOD	Renal failure, moderate	1	0.0708160508	0.0885148910	0.8000467496	0.4237
CMR_RENLFL_SEV	Renal failure, severe	1	0.3372970459	0.1042734806	3.2347346981	0.0012
CMR_THYROID_HYPO	Hypothyroidism	1	-0.0212194726	0.0637817663	-0.3326886946	0.7394

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
CMR_THYROID_OTH	Other thyroid disorders	1	-0.2842420758	0.2301241625	-1.2351683230	0.2168
CMR_WGHTLOSS	Weight loss	1	0.8528434763	0.0709425705	12.0216038176	<.0001
PS08_NonWt_1	PS08 Comorbidity count using non-weighted method, category 1, count > 3 and count <= 6	1	0.2764040429	0.0859308100	3.2165883569	0.0013
PS08_NonWt_2	PS08 Comorbidity count using non-weighted method, category 2, count >= 7	1	-0.1209953067	0.1576281637	-0.7675995448	0.4427
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	-2.032444820	0.4511783817	-4.5047477954	<.0001
MDRG_107	EXTRACRANIAL PROCEDURES	1	-0.9691201669	0.3795710968	-2.5531980045	0.0107
MDRG_111	DEGENERATIVE NERVOUS SYSTEM DISORDERS	1	2.0216471733	0.1588867604	12.7238239883	<.0001
MDRG_114	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION	1	-0.5837874913	0.3546836132	-1.6459387172	0.0998
MDRG_402	OTHER RESP SYSTEM O.R. PROCEDURES	1	-0.9309859098	0.3195139351	-2.9137568276	0.0036
MDRG_410	SIMPLE PNEUMONIA & PLEURISY	1	-0.2994435202	0.2680503146	-1.1171168392	0.2639
MDRG_503	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC	1	-2.577293218	0.7101175842	-3.6293893784	0.0003
MDRG_507	CORONARY BYPASS WITH CARDIAC CATHETERIZATION OR OPEN ABLATION	1	-2.621519614	1.0005843778	-2.6199885508	0.0088
MDRG_509	AMPUTATION FOR CIRC SYS DISORDERS EXC UPPER LIMB & TOE	1	-1.351928492	0.5058995566	-2.6723259071	0.0075
MDRG_510	PERMANENT CARDIAC PACEMAKER IMPLANT AND PROCEDURES	1	-1.516953262	0.3052994439	-4.9687390299	<.0001
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-1.976629379	0.2890505655	-6.8383515378	<.0001
MDRG_514	OTHER VASCULAR PROCEDURES	1	-1.466689627	0.2950164087	-4.9715527114	<.0001
MDRG_524	HEART FAILURE & SHOCK	1	-1.352317028	0.2989066463	-4.5242119724	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_530	CARDIAC CONGENITAL & VALVULAR DISORDERS	1	1.1424312158	0.7078297169	1.6139915978	0.1065
MDRG_531	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS	1	-0.6811728394	0.4135269337	-1.6472272634	0.0995
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	-1.621743583	0.4080550465	-3.9743255163	<.0001
MDRG_543	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES	1	-3.089424899	1.0007260710	-3.0871833843	0.0020
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL PROC	1	-2.440537129	0.7071549232	-3.4512057385	0.0006
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	-1.668498400	0.2448875353	-6.8133251349	<.0001
MDRG_604	PERITONEAL ADHESIOLYSIS	1	-2.641263658	1.0011735951	-2.6381675172	0.0083
MDRG_611	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES	1	-0.9052279002	0.4107881544	-2.2036368149	0.0275
MDRG_615	G.I. HEMORRHAGE	1	-0.4922472549	0.3614046147	-1.3620392075	0.1732
MDRG_711	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA	1	0.0706468131	0.7460627622	0.0946928552	0.9246
MDRG_801	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	1	-3.027710106	1.0009517161	-3.0248313250	0.0025
MDRG_804	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY	1	0.9266931194	0.3800788124	2.4381604263	0.0148
MDRG_805	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS	1	0.3575964733	0.2615914321	1.3670037678	0.1716
MDRG_806	REVISION OF HIP OR KNEE REPLACEMENT	1	0.9132656908	0.1523645408	5.9939516509	<.0001
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	0.1210986802	0.0888708185	1.3626371651	0.1730
MDRG_810	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	1	-0.9872530809	0.4977320354	-1.9835031920	0.0473

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_811	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT	1	1.4539488786	0.1608438828	9.0395037325	<.0001
MDRG_838	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	1	2.2536599524	0.2318165157	9.7217402547	<.0001
MDRG_902	SKIN GRAFT EXC FOR SKIN ULCER OR CELLULITIS	1	-0.8091630314	1.0010451425	-0.8083182236	0.4189
MDRG_903	OTHER SKIN, SUBCUT TISS & BREAST PROC	1	-2.174523864	0.7058724200	-3.0806188240	0.0021
MDRG_906	SKIN ULCERS	1	1.4710013560	0.5862153671	2.5093189953	0.0121
MDRG_1104	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM	1	-1.802983404	0.4486928306	-4.0183022343	<.0001
MDRG_1107	TRANSURETHRAL PROCEDURES	1	-0.4912686898	0.4474098389	-1.0980283558	0.2722
MDRG_1109	OTHER KIDNEY & URINARY TRACT PROCEDURES	1	-1.130923784	0.3573348501	-3.1648852143	0.0016
MDRG_1110	RENAL FAILURE	1	-1.360751819	0.4533461736	-3.0015734080	0.0027
MDRG_1113	KIDNEY & URINARY TRACT INFECTIONS	1	-0.4089251128	0.2921992139	-1.3994736924	0.1617
MDRG_1708	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC	1	0.0108722795	0.4119614060	0.0263915001	0.9789
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	-0.3060498299	0.1169376450	-2.6172053492	0.0089
MDRG_1808	SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS	1	-1.125617401	0.2277142031	-4.9431145947	<.0001
MDRG_1909	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	1	3.5401941595	0.2367443839	14.9536563477	<.0001
MDRG_1915	PSYCHOSES	1	1.9316012937	0.1761846602	10.9635043789	<.0001
MDRG_2104	OTHER O.R. PROCEDURES FOR INJURIES	1	-0.3890021328	0.3165927060	-1.2287147665	0.2192
MDRG_2304	AFTERCARE	1	1.7620974164	0.4005149708	4.3995794038	<.0001
MDRG_2407	LIMB REATTACHMENT, HIP & FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	1	3.0490546343	0.2713274369	11.2375462975	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.0776185154	0.0836181279	0.9282498585	0.3533
MEDICDR	Medical DRGs flag	1	-2.783248345	0.0832964458	-33.4137707641	<.0001

c-statistic=0.882

Table 11. Risk Adjustment Coefficients for PSI 09 – Postoperative Hemorrhage or Hematoma Rate

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-6.140886080	0.0430979247	-142.486816184	<.0001
Age_LT30	Age < 30	1	-0.4450245573	0.0866966493	-5.1331229198	<.0001
Age_30_34	30 <= Age <= 34	1	-0.1294546853	0.0816089833	-1.5862798438	0.1127
Age_35_39	35 <= Age <= 39	1	-0.0776688857	0.0731228512	-1.0621698212	0.2882
Age_40_44	40 <= Age <= 44	1	0.0493354072	0.0631256252	0.7815432652	0.4345
Age_45_49	45 <= Age <= 49	1	0.0165201687	0.0621752535	0.2657032786	0.7905
Age_50_54	50 <= Age <= 54	1	0.0475257728	0.0550209792	0.8637754814	0.3877
Age_55_59	55 <= Age <= 59	1	0.0419331522	0.0555174736	0.7553144901	0.4501
Age_60_64	60 <= Age <= 64	1	-0.0282905485	0.0545304706	-0.5188025727	0.6039
Age_70_74	70 <= Age <= 74	1	0.0422489135	0.0544142963	0.7764303929	0.4375
Age_75_79	75 <= Age <= 79	1	0.0468988215	0.0556884863	0.8421636964	0.3997
Age_80_84	80 <= Age <= 84	1	0.0482455881	0.0638106142	0.7560746555	0.4496
Age_85_89	85 <= Age <= 89	1	-0.0614413079	0.0779440269	-0.7882747445	0.4305
Age_90Plus	Age >= 90	1	-0.4747127620	0.1176362476	-4.0354293129	<.0001
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.1432149962	0.0492897561	2.9055732349	0.0037
Age_LT30_MALE	Age < 30 MALE	1	0.4022360268	0.1075206856	3.7410106204	0.0002
Age_30_34_MALE	30 <= Age <= 34 MALE	1	-0.0977570770	0.1176498898	-0.8309151599	0.4060
Age_35_39_MALE	35 <= Age <= 39 MALE	1	-0.0221128605	0.1042054489	-0.2122044547	0.8319

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_40_44_MALE	40 <= Age <= 44 MALE	1	-0.0326150565	0.0906569649	-0.3597633843	0.7190
Age_45_49_MALE	45 <= Age <= 49 MALE	1	-0.1852076333	0.0879038822	-2.1069334891	0.0351
Age_50_54_MALE	50 <= Age <= 54 MALE	1	-0.1225454557	0.0772071107	-1.5872301734	0.1125
Age_55_59_MALE	55 <= Age <= 59 MALE	1	-0.0867115543	0.0726645474	-1.1933130721	0.2327
Age_60_64_MALE	60 <= Age <= 64 MALE	1	0.0350822766	0.0709882680	0.4941982328	0.6212
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.0382656331	0.0704208977	-0.5433846250	0.5869
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.0803327455	0.0748326883	-1.0734980579	0.2830
Age_80_84_MALE	80 <= Age <= 84 MALE	1	-0.0823589729	0.0840720352	-0.9796238753	0.3273
Age_85_89_MALE	85 <= Age <= 89 MALE	1	-0.1640491814	0.1112644530	-1.4744078363	0.1404
Age_90Plus_MALE	Age >= 90 MALE	1	0.2631347895	0.1665567811	1.5798503533	0.1141
CMR_ALCOHOL	Alcohol abuse	1	0.1280856847	0.0476129080	2.6901462220	0.0071
CMR_ANEMDEF	Deficiency anemias	1	-0.3239243189	0.0293513078	-11.0361119545	<.0001
CMR_CANCER_L EUK	Leukemia	1	0.4795840786	0.1182954262	4.0541219043	<.0001
CMR_CANCER_M ETS	Metastatic cancer	1	0.1190478925	0.0426654411	2.7902651318	0.0053
CMR_CANCER_N SITU	Solid tumor without metastasis, in situ	1	0.6638383630	0.1902368913	3.4895353808	0.0005
CMR_CANCER_S OLID	Solid tumor without metastasis, malignant	1	0.0904462170	0.0509246834	1.7760781427	0.0757
CMR_DEMENTIA	Dementia	1	-0.2538164845	0.0602951817	-4.2095649642	<.0001
CMR_DIAB_CX	Diabetes with chronic complications	1	-0.0777039841	0.0263394060	-2.9501038851	0.0032
CMR_HF	Heart failure	1	0.1555000765	0.0337843743	4.6027218137	<.0001
CMR_HTN_CX	Hypertension, complicated	1	0.0993682545	0.0281069203	3.5353661451	0.0004
CMR_LIVER_MLD	Liver disease, mild	1	0.1471688758	0.0432333827	3.4040564642	0.0007
CMR_LIVER_SEV	Liver disease, moderate to severe	1	0.2433086249	0.1100721508	2.2104467223	0.0271

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
CMR_PARALYSIS	Paralysis	1	0.2175520507	0.0426037476	5.1064064256	<.0001
CMR_PERIVASC	Peripheral vascular disease	1	0.4419327655	0.0287363734	15.3788635578	<.0001
CMR_PULMCIRC	Pulmonary circulation disease	1	0.0980152146	0.0491440557	1.9944470021	0.0461
CMR_RENLFL_SE V	Renal failure, severe	1	0.1870926788	0.0422419891	4.4290688634	<.0001
CMR_THYROID_OTH	Other thyroid disorders	1	0.1649460410	0.0694833075	2.3738944915	0.0176
CMR_ULCER_PEP TIC	Peptic ulcer disease x bleeding	1	0.4854726652	0.0791465621	6.1338440039	<.0001
CMR_VALVE	Valvular disease	1	0.2187476082	0.0338067292	6.4705345193	<.0001
CMR_WGHTLOSS	Weight loss	1	0.4266879910	0.0365796340	11.6646325905	<.0001
PS09_NonWt_1	PS09 Comorbidity count using non-weighted method, category 1, count > 2 and count <= 3	1	0.0785017001	0.0218323959	3.5956520993	0.0003
MDRG_101	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE	1	1.1524145271	0.1646383419	6.9996728222	<.0001
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	-0.7685404168	0.1263101066	-6.0845520412	<.0001
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	0.3855779973	0.0631032263	6.1102739054	<.0001
MDRG_105	VENTRICULAR SHUNT PROCEDURES	1	-2.391868090	0.5787026348	-4.1331556928	<.0001
MDRG_107	EXTRACRANIAL PROCEDURES	1	0.9541331377	0.0526823710	18.1110515703	<.0001
MDRG_108	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC	1	-0.2967447477	0.1738901109	-1.7065073233	0.0879
MDRG_301	MAJOR HEAD AND NECK PROCEDURES	1	0.8863786992	0.0961771906	9.2161009689	<.0001
MDRG_302	OTHER EAR, NOSE, MOUTH AND THROAT O.R. PROCEDURES	1	1.1911944538	0.1151124314	10.3480956823	<.0001
MDRG_304	MOUTH PROCEDURES	1	0.2824276270	0.4046173903	0.6980115876	0.4852

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_401	MAJOR CHEST PROCEDURES	1	0.1937132956	0.0635238525	3.0494576129	0.0023
MDRG_402	OTHER RESP SYSTEM O.R. PROCEDURES	1	-1.174251595	0.2001008652	-5.8682984377	<.0001
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	1.0806213325	0.0945682314	11.4268958704	<.0001
MDRG_503	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC	1	1.0598449945	0.0592232995	17.8957438027	<.0001
MDRG_506	CORONARY BYPASS W PTCA	1	0.6564107358	0.2288485419	2.8683195027	0.0041
MDRG_507	CORONARY BYPASS WITH CARDIAC CATHETERIZATION OR OPEN ABLATION	1	0.6728275095	0.0700482905	9.6051952831	<.0001
MDRG_508	CORONARY BYPASS W/O CARDIAC CATH	1	0.4675587482	0.0668826161	6.9907365413	<.0001
MDRG_511	PERC CARDIOVASC PROC W DRUG- ELUTING STENT	1	-1.450454830	0.0802488977	-18.0744517506	<.0001
MDRG_512	AICD PROCEDURES	1	-0.2035830321	0.2620991220	-0.7767406110	0.4373
MDRG_513	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT	1	-1.620710714	0.2870302408	-5.6464806977	<.0001
MDRG_514	OTHER VASCULAR PROCEDURES	1	0.6404821763	0.0461380215	13.8818734594	<.0001
MDRG_515	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	1	-3.286456165	1.0009536613	-3.2833249847	0.0010
MDRG_517	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	1	0.4158357067	0.1891586665	2.1983434030	0.0279
MDRG_536	OTHER ENDOVASCULAR CARDIAC VALVE PROCEDURES	1	0.4905100452	0.5007554029	0.9795401953	0.3273
MDRG_538	CARDIAC DEFIBRILLATOR IMPLANT W/OUT AMI/HF/SHOCK	1	-1.032355161	0.3165604668	-3.2611626179	0.0011
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	0.4202802587	0.0550406882	7.6358103918	<.0001
MDRG_543	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES	1	-1.040825651	0.1576508587	-6.6020931330	<.0001
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL	1	0.2513389547	0.0653008334	3.8489394656	0.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	PROC					
MDRG_605	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG	1	-1.391363606	0.2563347269	-5.4279169389	<.0001
MDRG_606	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG	1	-0.6639128045	0.1312968115	-5.0565797961	<.0001
MDRG_609	INGUINAL & FEMORAL HERNIA PROCEDURES	1	0.0497748978	0.1535531782	0.3241541361	0.7458
MDRG_610	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL	1	0.3008863899	0.0834755429	3.6044855689	0.0003
MDRG_611	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES	1	-0.0974250089	0.1315623259	-0.7405236125	0.4590
MDRG_701	PANCREAS, LIVER & SHUNT PROCEDURES	1	0.4361313675	0.1047777467	4.1624427073	<.0001
MDRG_702	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E.	1	0.3316847086	0.2451801531	1.3528203831	0.1761
MDRG_705	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E.	1	-0.7817366108	0.0747831256	-10.4533824222	<.0001
MDRG_801	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	1	-0.3315013570	0.0789957469	-4.1964456342	<.0001
MDRG_803	SPINAL FUSION EXCEPT CERVICAL	1	-0.4052511777	0.0769655043	-5.2653611653	<.0001
MDRG_804	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY	1	-1.735795628	0.3539984934	-4.9033983479	<.0001
MDRG_806	REVISION OF HIP OR KNEE REPLACEMENT	1	-1.003308368	0.1125630730	-8.9132993658	<.0001
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-2.909483378	0.0969183721	-30.0199365077	<.0001
MDRG_808	CERVICAL SPINAL FUSION	1	0.3038069493	0.0587428688	5.1718098764	<.0001
MDRG_810	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	1	-1.473154888	0.2546354347	-5.7853491190	<.0001
MDRG_811	HIP & FEMUR PROCEDURES EXCEPT	1	-1.979018510	0.1284975190	-15.4012196118	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	MAJOR JOINT					
MDRG_812	MAJOR JOINT/LIMB REATTACHMENT PROCEDURE OF UPPER EXTREMITIES	1	-2.621153490	0.2118901915	-12.3703389534	<.0001
MDRG_813	KNEE PROCEDURES W PDX OF INFECTION	1	-1.166752925	0.3539998177	-3.2959139142	0.0010
MDRG_814	KNEE PROCEDURES W/O PDX OF INFECTION	1	-1.910484152	0.4073274058	-4.6902912134	<.0001
MDRG_815	BACK & NECK PROC EXC SPINAL FUSION OR DISC DEVICE/NEUROSTIM	1	0.3781239630	0.0804754608	4.6986243936	<.0001
MDRG_816	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR	1	-2.585878432	0.2104251265	-12.2888291673	<.0001
MDRG_820	FOOT PROCEDURES	1	-1.786855243	0.3770741360	-4.7387372196	<.0001
MDRG_824	SHOULDER,ELBOW OR FOREARM PROC,EXC MAJOR JOINT PROC	1	-3.882465541	0.9995272481	-3.8843018524	0.0001
MDRG_825	HAND OR WRIST PROC, EXCEPT MAJOR THUMB OR JOINT PROC	1	-2.712718945	0.7078839670	-3.8321519791	0.0001
MDRG_826	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC	1	-0.4298304627	0.0968481643	-4.4381890533	<.0001
MDRG_901	SKIN GRAFT FOR SKIN ULCER OR CELLULITIS	1	0.7126560578	0.1946022071	3.6621170350	0.0003
MDRG_902	SKIN GRAFT EXC FOR SKIN ULCER OR CELLULITIS	1	1.3375659982	0.1076676700	12.4230978330	<.0001
MDRG_903	OTHER SKIN, SUBCUT TISS & BREAST PROC	1	1.7116447020	0.0472492389	36.2258681963	<.0001
MDRG_904	MASTECTOMY FOR MALIGNANCY	1	1.9429751410	0.1051951843	18.4701909539	<.0001
MDRG_905	BREAST BIOPSY, LOCAL EXCISION & OTHER BREAST PROCEDURES	1	1.6929266512	0.0985290928	17.1819977508	<.0001
MDRG_1002	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DIS	1	-1.112332700	0.1578217062	-7.0480336746	<.0001
MDRG_1003	O.R. PROCEDURES FOR OBESITY	1	-0.4840022566	0.0774138780	-6.2521381063	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_1005	THYROID, PARATHYROID & THYROGLOSSAL PROCEDURES	1	1.7438215152	0.0789858307	22.0776498859	<.0001
MDRG_1101	KIDNEY TRANSPLANT	1	1.3136082877	0.1151938774	11.4034557813	<.0001
MDRG_1102	MAJOR BLADDER PROCEDURES	1	-0.6128670944	0.2101205931	-2.9167397895	0.0035
MDRG_1105	MINOR BLADDER PROCEDURES	1	1.8378275477	0.1597423071	11.5049518240	<.0001
MDRG_1107	TRANSURETHRAL PROCEDURES	1	-2.929751266	0.7064273898	-4.1472786988	<.0001
MDRG_1304	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY	1	0.3513458349	0.0593704536	5.9178566700	<.0001
MDRG_1601	SPLENECTOMY	1	0.8748673802	0.2790014994	3.1357085253	0.0017
MDRG_1707	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE	1	0.4638720764	0.1852356384	2.5042269421	0.0123
MDRG_1708	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC	1	-1.447939672	0.3788233037	-3.8222032744	0.0001
MDRG_1709	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC	1	0.5894230798	0.1535546906	3.8385221421	0.0001
MDRG_1909	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	1	0.9956755014	0.2654066603	3.7515090997	0.0002
MDRG_2102	SKIN GRAFTS FOR INJURIES	1	0.4050327692	0.2504261493	1.6173741055	0.1058
MDRG_2104	OTHER O.R. PROCEDURES FOR INJURIES	1	0.2910032772	0.0902625329	3.2239653350	0.0013
MDRG_2501	HIV W EXTENSIVE O.R. PROCEDURE	1	0.2322141162	0.4460356292	0.5206178631	0.6026
MDRG_7701	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	1	2.1229401230	0.1289755503	16.4600198830	<.0001
MDRG_7702	LIVER TRANSPLANT	1	1.7416200799	0.1866319593	9.3318426640	<.0001
MDRG_7704	SIMULTANEOUS PANCREAS/KIDNEY TRANSPLANT	1	2.1830403186	0.2686400256	8.1262660453	<.0001
TRANSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.1147974647	0.0352257044	3.2589118257	0.0011

c-statistic=0.769

Table 12. Risk Adjustment Coefficients for PSI 10 – Postoperative Acute Kidney Injury Requiring Dialysis Rate

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-6.799465045	0.1007981568	-67.4562438579	<.0001
Age_LT30	Age < 30	1	-1.352316103	0.3784276421	-3.5735130116	0.0004
Age_30_34	30 <= Age <= 34	1	-0.9971120725	0.3238094915	-3.0793170014	0.0021
Age_35_39	35 <= Age <= 39	1	-1.159440349	0.3176840237	-3.6496652720	0.0003
Age_40_44	40 <= Age <= 44	1	-1.086082959	0.2676734652	-4.0574920573	<.0001
Age_45_49	45 <= Age <= 49	1	-0.8141306469	0.1969363160	-4.1339792646	<.0001
Age_50_54	50 <= Age <= 54	1	-0.5058810831	0.1480497737	-3.4169662703	0.0006
Age_55_59	55 <= Age <= 59	1	-0.3613535746	0.1300084558	-2.7794620932	0.0054
Age_60_64	60 <= Age <= 64	1	-0.2281764157	0.1188354650	-1.9201036973	0.0548
Age_70_74	70 <= Age <= 74	1	0.0697358990	0.1034760514	0.6739327408	0.5004
Age_75_79	75 <= Age <= 79	1	0.0639459735	0.1056315820	0.6053679434	0.5449
Age_80_84	80 <= Age <= 84	1	0.1025479495	0.1145640916	0.8951142380	0.3707
Age_85_89	85 <= Age <= 89	1	-0.2502992570	0.1775385087	-1.4098307958	0.1586
Age_90Plus	Age >= 90	1	-0.8380747080	0.3732983462	-2.2450533643	0.0248
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.0423967931	0.0935094793	0.4533956714	0.6503
Age_LT30_MALE	Age < 30 MALE	1	0.3471749712	0.4591859165	0.7560662440	0.4496
Age_30_34_MALE	30 <= Age <= 34 MALE	1	-0.1078247695	0.5081980010	-0.2121707864	0.8320
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.6625909870	0.3198647660	2.0714722511	0.0383
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.8271367917	0.3030004331	2.7298204929	0.0063
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.5349202533	0.2429948763	2.2013643310	0.0277
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.0530638552	0.2064182249	0.2570696229	0.7971
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.0373417209	0.1639029018	0.2278283089	0.8198
Age_60_64_MALE	60 <= Age <= 64 MALE	1	0.1902228976	0.1502243528	1.2662587259	0.2054

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.0349053459	0.1259697384	-0.2770931044	0.7817
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.0554097450	0.1333309393	-0.4155805495	0.6777
Age_80_84_MALE	80 <= Age <= 84 MALE	1	-0.1158424721	0.1494397200	-0.7751785948	0.4382
Age_85_89_MALE	85 <= Age <= 89 MALE	1	0.2123518103	0.2097877102	1.0122223561	0.3114
Age_90Plus_MALE	Age >= 90 MALE	1	-0.2733681030	0.5274811982	-0.5182518428	0.6043
CMR_ALCOHOL	Alcohol abuse	1	0.2913223073	0.1047307053	2.7816322497	0.0054
CMR_ANEMDEF	Deficiency anemias	1	0.2812575008	0.0608096846	4.6252090023	<.0001
CMR_AUTOIMMUNE	Autoimmune conditions	1	-0.1771732431	0.1168992742	-1.5156060150	0.1296
CMR_BLDLOSS	Chronic blood loss anemia	1	-0.0528842471	0.2241008791	-0.2359841128	0.8134
CMR_CANCER_LEUK	Leukemia	1	0.0503528104	0.2375383482	0.2119776062	0.8321
CMR_CANCER_LYMPH	Lymphoma	1	0.1669672640	0.2007729460	0.8316223240	0.4056
CMR_CANCER_METS	Metastatic cancer	1	0.1481760924	0.1047784724	1.4141845069	0.1573
CMR_CANCER_SOLID	Solid tumor without metastasis, malignant	1	-0.0070371644	0.1015465931	-0.0692998572	0.9448
CMR_COAG	Coagulopathy	1	0.5914543518	0.0685335547	8.6301426224	<.0001
CMR_DEMENTIA	Dementia	1	-0.5730275686	0.1720894430	-3.3298240640	0.0009
CMR_DEPRESS	Depression	1	-0.2164125775	0.0703498388	-3.0762341613	0.0021
CMR_DIAB_CX	Diabetes with chronic complications	1	0.3161109939	0.0541760204	5.8348876743	<.0001
CMR_DIAB_UNCX	Diabetes without chronic complications	1	-0.8047600111	0.0996614059	-8.0749413854	<.0001
CMR_HF	Heart failure	1	0.6071470846	0.0737328699	8.2344154748	<.0001
CMR_HTN_CX	Hypertension, complicated	1	0.2258299049	0.0805050272	2.8051652523	0.0050
CMR_HTN_UNCX	Hypertension, uncomplicated	1	-0.6453745457	0.0703603881	-9.1724131001	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
CMR_LIVER_MLD	Liver disease, mild	1	0.2279071103	0.0997581004	2.2845975357	0.0223
CMR_LIVER_SEV	Liver disease, moderate to severe	1	0.9409124339	0.1332819086	7.0595660271	<.0001
CMR_LUNG_CHRONIC	Chronic pulmonary disease	1	0.0488413944	0.0447258682	1.0920166856	0.2748
CMR_OBESE	Obesity	1	0.3609501116	0.0485301646	7.4376444948	<.0001
CMR_PARALYSIS	Paralysis	1	0.1452672625	0.1299219118	1.1181121066	0.2635
CMR_PERIVASC	Peripheral vascular disease	1	0.4634249155	0.0603973880	7.6729297545	<.0001
CMR_PULMCIRC	Pulmonary circulation disease	1	0.4277829350	0.0666371465	6.4195866303	<.0001
CMR_RENLFL_MOD	Renal failure, moderate	1	0.5680898050	0.0658623128	8.6254153750	<.0001
CMR_RENLFL_SEV	Renal failure, severe	1	1.9207672478	0.0834110983	23.0277179766	<.0001
CMR_THYROID_HYPO	Hypothyroidism	1	-0.2179882165	0.0584666108	-3.7284223192	0.0002
CMR_THYROID_OTHER	Other thyroid disorders	1	-0.4100352652	0.2057048204	-1.9933187001	0.0462
CMR_ULCER_PEP TIC	Peptic ulcer disease x bleeding	1	-0.1281994022	0.2554164186	-0.5019231065	0.6157
CMR_VALVE	Valvular disease	1	0.0495034939	0.0596915726	0.8293213233	0.4069
CMR_WGHTLOSS	Weight loss	1	1.0614389243	0.0803880661	13.2039365494	<.0001
PS10_NonWt_1	PS10 Comorbidity count using non-weighted method, category 1, count > 2 and count <= 4	1	0.4473636191	0.0780144979	5.7343651671	<.0001
PS10_NonWt_2	PS10 Comorbidity count using non-weighted method, category 2, count >= 5	1	0.3151990529	0.1219680202	2.5842762082	0.0098
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	-2.881517096	0.4932242316	-5.8422050489	<.0001
MDRG_104	SPINAL PROCEDURES	1	-2.506686292	1.0026152614	-2.5001477523	0.0124

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_106	CAROTID ARTERY STENT PROCEDURE	1	-2.592114602	0.9957648852	-2.6031391949	0.0092
MDRG_107	EXTRACRANIAL PROCEDURES	1	-2.816847005	0.3802936455	-7.4070314830	<.0001
MDRG_301	MAJOR HEAD AND NECK PROCEDURES	1	-2.256346189	0.7083415396	-3.1853930102	0.0014
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	1.5420157684	0.1437267574	10.7288009328	<.0001
MDRG_502	PERC CARDIOVASC PROC W NON-DRUG-ELUTING STENT	1	-0.9843649306	0.9898631550	-0.9944454702	0.3200
MDRG_503	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC	1	0.8439491631	0.0860821742	9.8039945057	<.0001
MDRG_505	OTHER CARDIOTHORACIC PROCEDURES	1	-0.2036579091	0.1629746375	-1.2496294654	0.2114
MDRG_506	CORONARY BYPASS W PTCA	1	1.4581920004	0.3146498205	4.6343328533	<.0001
MDRG_507	CORONARY BYPASS WITH CARDIAC CATHETERIZATION OR OPEN ABLATION	1	0.3764153425	0.1391833832	2.7044560486	0.0068
MDRG_508	CORONARY BYPASS W/O CARDIAC CATH	1	0.1103912008	0.1023337443	1.0787370442	0.2807
MDRG_509	AMPUTATION FOR CIRC SYS DISORDERS EXC UPPER LIMB & TOE	1	-1.350231697	0.3247413286	-4.1578683634	<.0001
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-1.259217676	0.2561325166	-4.9162741711	<.0001
MDRG_513	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT	1	-0.5139606666	0.5714601538	-0.8993814585	0.3684
MDRG_514	OTHER VASCULAR PROCEDURES	1	-1.266317880	0.1693722665	-7.4765361863	<.0001
MDRG_515	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	1	-0.7973355292	0.7223330268	-1.1038336884	0.2697
MDRG_517	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	1	-1.409858684	1.0019877386	-1.4070618126	0.1594
MDRG_537	CARDIAC DEFIBRILLATOR IMPLANT W AMI/HF/SHOCK	1	-0.6585844359	0.9997312770	-0.6587614603	0.5100
MDRG_539	CARDIAC DEFIBRILLATOR IMPLANT W/OUT CARDIAC CATH	1	-1.758582471	0.5874760673	-2.9934538080	0.0028

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_540	ENDOVASCULAR CARDIAC VALVE REPLACEMENT	1	-1.276496055	0.1274716448	-10.0139608061	<.0001
MDRG_541	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON	1	0.2581851251	0.1260026150	2.0490457680	0.0405
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	0.1606335198	0.1214230036	1.3229249399	0.1859
MDRG_543	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES	1	-1.648613226	0.3857561080	-4.2737190479	<.0001
MDRG_604	PERITONEAL ADHESIOLYSIS	1	-0.3123932471	0.2569264659	-1.2158858216	0.2240
MDRG_611	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES	1	-0.4183778687	0.3943488196	-1.0609334880	0.2887
MDRG_701	PANCREAS, LIVER & SHUNT PROCEDURES	1	0.5009726777	0.1312354572	3.8173576589	0.0001
MDRG_704	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E.	1	-0.2840527331	0.3767318494	-0.7539918209	0.4509
MDRG_705	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E.	1	-2.273894315	0.7073662234	-3.2145927249	0.0013
MDRG_801	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	1	-1.818478403	0.2129962299	-8.5376084062	<.0001
MDRG_803	SPINAL FUSION EXCEPT CERVICAL	1	-2.031745695	0.2513438968	-8.0835290671	<.0001
MDRG_804	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY	1	-2.982874403	0.9988648258	-2.9862643334	0.0028
MDRG_806	REVISION OF HIP OR KNEE REPLACEMENT	1	-1.761399441	0.2432279749	-7.2417633801	<.0001
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-3.235880339	0.1626971598	-19.8889786606	<.0001
MDRG_808	CERVICAL SPINAL FUSION	1	-2.592809834	0.3784629833	-6.8508941372	<.0001
MDRG_809	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS	1	-1.684801258	0.5720702172	-2.9450952123	0.0032

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_811	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT	1	-1.679263018	0.5001984901	-3.3571932960	0.0008
MDRG_812	MAJOR JOINT/LIMB REATTACHMENT PROCEDURE OF UPPER EXTREMITIES	1	-3.161895127	0.3805417004	-8.3089320390	<.0001
MDRG_815	BACK & NECK PROC EXC SPINAL FUSION OR DISC DEVICE/NEUROSTIM	1	-2.036016658	0.4070559652	-5.0018101495	<.0001
MDRG_816	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR	1	-2.856291280	0.7081363837	-4.0335327291	<.0001
MDRG_820	FOOT PROCEDURES	1	-1.329940287	0.7088977440	-1.8760678788	0.0606
MDRG_826	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC	1	-1.841405198	0.3539044324	-5.2031142566	<.0001
MDRG_901	SKIN GRAFT FOR SKIN ULCER OR CELLULITIS	1	-1.483939949	1.0000859495	-1.4838124164	0.1379
MDRG_903	OTHER SKIN, SUBCUT TISS & BREAST PROC	1	-2.195057069	0.5809144302	-3.7786237600	0.0002
MDRG_1001	ADRENAL & PITUITARY PROCEDURES	1	-1.073589740	0.4374255588	-2.4543370142	0.0141
MDRG_1002	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DIS	1	-1.827352996	0.4970416800	-3.6764582713	0.0002
MDRG_1003	O.R. PROCEDURES FOR OBESITY	1	-1.966814770	0.2435953650	-8.0741058818	<.0001
MDRG_1004	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DIS	1	-2.073755439	1.0052814630	-2.0628605180	0.0391
MDRG_1005	THYROID, PARATHYROID & THYROGLOSSAL PROCEDURES	1	-2.614177939	0.9949735139	-2.6273844498	0.0086
MDRG_1006	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC	1	-2.392744077	1.0050171057	-2.3807993547	0.0173
MDRG_1101	KIDNEY TRANSPLANT	1	-0.1731559223	1.0002407413	-0.1731142466	0.8626
MDRG_1102	MAJOR BLADDER PROCEDURES	1	0.4685120224	0.1793565137	2.6121829235	0.0090
MDRG_1103	KIDNEY & URETER PROCEDURES FOR NEOPLASM	1	0.3597990711	0.1166478397	3.0844897955	0.0020

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_1104	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM	1	-1.015984398	0.2900158126	-3.5032034603	0.0005
MDRG_1109	OTHER KIDNEY & URINARY TRACT PROCEDURES	1	-0.3355495449	0.5764514703	-0.5820950456	0.5605
MDRG_1201	MAJOR MALE PELVIC PROCEDURES	1	-0.7434312437	0.2325728465	-3.1965521983	0.0014
MDRG_1203	TESTES PROCEDURES	1	1.0155556563	0.7395782632	1.3731550897	0.1697
MDRG_1302	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY	1	-0.8945910591	0.4067265280	-2.1994903147	0.0278
MDRG_1303	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG	1	-0.5114705892	0.2986382618	-1.7126760184	0.0868
MDRG_1304	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY	1	-1.686439947	0.3034360656	-5.5578098265	<.0001
MDRG_1708	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC	1	0.1472074898	0.4082482158	0.3605833024	0.7184
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	0.1697389561	0.2639244254	0.6431346999	0.5201
MDRG_2301	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES	1	-1.536806966	0.6914285827	-2.2226546672	0.0262
MDRG_2501	HIV W EXTENSIVE O.R. PROCEDURE	1	1.4047031259	1.0584602394	1.3271194076	0.1845
MDRG_7701	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	1	2.2875165926	0.2086668096	10.9625320694	<.0001
MDRG_7702	LIVER TRANSPLANT	1	1.4824874874	0.2921078294	5.0751378019	<.0001
MDRG_7705	ALLOGENEIC OR AUTOLOGOUS BONE MARROW TRANSPLANT	1	2.5151565178	0.4121891501	6.1019474118	<.0001
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.3968777079	0.1457704898	2.7226203910	0.0065

c-statistic=0.924

Table 13. Risk Adjustment Coefficients for PSI 11 – Postoperative Respiratory Failure Rate

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-5.698298442	0.0461179567	-123.559213264	<.0001
Age_LT30	Age < 30	1	-0.3904282793	0.1268436399	-3.0780280314	0.0021
Age_30_34	30 <= Age <= 34	1	-0.9245351688	0.1237259856	-7.4724413342	<.0001
Age_35_39	35 <= Age <= 39	1	-0.7654185323	0.1029627469	-7.4339365939	<.0001
Age_40_44	40 <= Age <= 44	1	-0.7305302992	0.0899246650	-8.1238033970	<.0001
Age_45_49	45 <= Age <= 49	1	-0.4126534422	0.0663917532	-6.2154322261	<.0001
Age_50_54	50 <= Age <= 54	1	-0.3594563133	0.0535217031	-6.7160851097	<.0001
Age_55_59	55 <= Age <= 59	1	-0.1308730431	0.0459692312	-2.8469704565	0.0044
Age_60_64	60 <= Age <= 64	1	0.0006764582	0.0412550830	0.0163969655	0.9869
Age_70_74	70 <= Age <= 74	1	0.1024669381	0.0394613159	2.5966427091	0.0094
Age_75_79	75 <= Age <= 79	1	0.2293859719	0.0411557792	5.5736029365	<.0001
Age_80_84	80 <= Age <= 84	1	0.1511481452	0.0514820654	2.9359378677	0.0033
Age_85_89	85 <= Age <= 89	1	0.2012042078	0.0697431513	2.8849314086	0.0039
Age_90Plus	Age >= 90	1	0.1255984793	0.1119371442	1.1220446992	0.2618
MALE	Patient Sex Flag: 1=Male / 0=Female	1	-0.0341397427	0.0386663443	-0.8829317414	0.3773
Age_LT30_MALE	Age < 30 MALE	1	0.3962029134	0.1265281469	3.1313421001	0.0017
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.5225564954	0.1643208357	3.1800988191	0.0015
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.6210467184	0.1424851443	4.3586769795	<.0001
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.4663223427	0.1174633288	3.9699397896	<.0001
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.2532792303	0.0919871395	2.7534200060	0.0059
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.2067721148	0.0714915324	2.8922602139	0.0038
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.0573715442	0.0608533992	0.9427829001	0.3458
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.0471597644	0.0564827458	-0.8349410728	0.4038
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.0381973672	0.0513970375	-0.7431822734	0.4574

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.0740517610	0.0556882595	-1.3297553508	0.1836
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.0653408110	0.0669318078	0.9762295859	0.3290
Age_85_89_MALE	85 <= Age <= 89 MALE	1	0.0794315823	0.0885896316	0.8966239143	0.3699
Age_90Plus_MALE	Age >= 90 MALE	1	-0.1775555548	0.1672395707	-1.0616838708	0.2884
CMR_ALCOHOL	Alcohol abuse	1	0.6596041389	0.0446799418	14.7628692376	<.0001
CMR_ANEMDEF	Deficiency anemias	1	0.1877244343	0.0270627372	6.9366388494	<.0001
CMR_BLDLOSS	Chronic blood loss anemia	1	0.1889995767	0.0849059397	2.2259876905	0.0260
CMR_CANCER_L EUK	Leukemia	1	0.1985228946	0.1076678372	1.8438458472	0.0652
CMR_CANCER_M ETS	Metastatic cancer	1	0.2842202486	0.0440945286	6.4457033029	<.0001
CMR_CANCER_S OLID	Solid tumor without metastasis, malignant	1	0.2137339819	0.0439640118	4.8615668446	<.0001
CMR_CBVD	Cerebrovascular disease	1	0.0608543453	0.0378370484	1.6083269657	0.1078
CMR_COAG	Coagulopathy	1	0.5294917167	0.0355685413	14.8865176258	<.0001
CMR_DEMENTIA	Dementia	1	0.9524068187	0.1755734974	5.4245477421	<.0001
CMR_DEPRESS	Depression	1	0.0953224399	0.0256013093	3.7233423790	0.0002
CMR_DIAB_CX	Diabetes with chronic complications	1	0.2768756719	0.0232157839	11.9261823246	<.0001
CMR_DRUG_ABU SE	Drug abuse	1	0.4393240729	0.0551173591	7.9707025207	<.0001
CMR_HF	Heart failure	1	0.5627397045	0.0297630945	18.9072982764	<.0001
CMR_HTN_CX	Hypertension, complicated	1	0.3151755924	0.0304093634	10.3644258524	<.0001
CMR_LIVER_MLD	Liver disease, mild	1	0.1782731910	0.0383197654	4.6522516308	<.0001
CMR_LIVER_SEV	Liver disease, moderate to severe	1	0.3896593201	0.0754508867	5.1644100844	<.0001
CMR_LUNG_CHR ONIC	Chronic pulmonary disease	1	0.5359076422	0.0214973505	24.9290089297	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
CMR_NEURO_OT H	Other neurological disorders	1	0.9077233395	0.0490493355	18.5063330746	<.0001
CMR_NEURO_SEI Z	Seizures and epilepsy	1	0.4352634137	0.0469653756	9.2677511581	<.0001
CMR_OBESE	Obesity	1	0.3637127436	0.0231576239	15.7059612698	<.0001
CMR_PARALYSIS	Paralysis	1	0.6730700937	0.0477497869	14.0957716654	<.0001
CMR_PERIVASC	Peripheral vascular disease	1	0.3223755538	0.0249656740	12.9127518965	<.0001
CMR_PULMCIRC	Pulmonary circulation disease	1	0.3281227199	0.0356076985	9.2149376098	<.0001
CMR_RENLFL_M OD	Renal failure, moderate	1	0.1516085151	0.0288981550	5.2463043178	<.0001
CMR_RENLFL_SE V	Renal failure, severe	1	0.5442431699	0.0388514300	14.0083175784	<.0001
CMR_THYROID_O TH	Other thyroid disorders	1	-0.1576772503	0.0720255395	-2.1891852725	0.0286
CMR_ULCER_PEP TIC	Peptic ulcer disease x bleeding	1	0.6201655927	0.0790398455	7.8462399423	<.0001
CMR_VALVE	Valvular disease	1	0.1374224655	0.0283043746	4.8551670079	<.0001
CMR_WGHTLOSS	Weight loss	1	1.1783446036	0.0352416944	33.4360938881	<.0001
PS11_NonWt_1	PS11 Comorbidity count using non-weighted method, category 1, count > 3 and count <= 5	1	0.1122032492	0.0264751718	4.2380555613	<.0001
PS11_NonWt_2	PS11 Comorbidity count using non-weighted method, category 2, count >= 6	1	-0.3087563351	0.0470293200	-6.5651881636	<.0001
MDC_6	Digestive System	1	0.3710139265	0.0396102030	9.3666252225	<.0001
MDC_7	Hepatobiliary System And Pancreas	1	0.0513464889	0.0876156999	0.5860421016	0.5578
MDC_8	Musculoskeletal And Connective	1	-0.8366435649	0.0487546415	-17.1602854414	<.0001
MDC_9	Skin Subcutaneous And Breast	1	-0.8263916818	0.0977198217	-8.4567457026	<.0001
MDC_12	Male Reproductive System	1	-0.4838947747	0.1523297552	-3.1766267473	0.0015

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDC_17	Myeloproliferative DDs	1	-0.1674589284	0.1587923841	-1.0545778334	0.2916
MDC_23	Factors Influencing Health	1	-0.6456189153	0.2227830390	-2.8979715791	0.0038
MDRG_101	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE	1	1.6244310561	0.2371934696	6.8485488179	<.0001
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	1.1463026415	0.1444540944	7.9354112210	<.0001
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	0.1239291523	0.0623861823	1.9864839904	0.0470
MDRG_105	VENTRICULAR SHUNT PROCEDURES	1	-1.548881041	0.3029592863	-5.1125055770	<.0001
MDRG_106	CAROTID ARTERY STENT PROCEDURE	1	-0.9072251830	0.1612434672	-5.6264306315	<.0001
MDRG_107	EXTRACRANIAL PROCEDURES	1	-0.6879947941	0.0792041353	-8.6863494095	<.0001
MDRG_108	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC	1	-0.6955872891	0.2355645243	-2.9528524773	0.0031
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	1.7755625266	0.0914678094	19.4118842279	<.0001
MDRG_503	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC	1	1.6994968968	0.0571287996	29.7485140226	<.0001
MDRG_505	OTHER CARDIOTHORACIC PROCEDURES	1	0.9325845930	0.0732996046	12.7229143749	<.0001
MDRG_506	CORONARY BYPASS W PTCA	1	2.1859847242	0.1460419957	14.9681926358	<.0001
MDRG_507	CORONARY BYPASS WITH CARDIAC CATHETERIZATION OR OPEN ABLATION	1	1.6788700129	0.0662675459	25.3347244277	<.0001
MDRG_508	CORONARY BYPASS W/O CARDIAC CATH	1	1.4938443068	0.0493239251	30.2864036960	<.0001
MDRG_510	PERMANENT CARDIAC PACEMAKER IMPLANT AND PROCEDURES	1	-0.3640566485	0.2040167898	-1.7844445491	0.0744
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-0.9164610225	0.1184047570	-7.7400692843	<.0001
MDRG_514	OTHER VASCULAR PROCEDURES	1	-0.3617219966	0.0611574554	-5.9146018144	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_519	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	1	-0.1570471357	0.1596492087	-0.9837013096	0.3253
MDRG_537	CARDIAC DEFIBRILLATOR IMPLANT W AMI/HF/SHOCK	1	0.5416198507	0.2875752568	1.8834021282	0.0596
MDRG_540	ENDOVASCULAR CARDIAC VALVE REPLACEMENT	1	-0.5764729548	0.0734506791	-7.8484360129	<.0001
MDRG_541	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON	1	0.4876424505	0.0624479884	7.8087775557	<.0001
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	0.8801605894	0.0560449058	15.7045600575	<.0001
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL PROC	1	0.3478780698	0.0514002536	6.7680224391	<.0001
MDRG_603	RECTAL RESECTION	1	-0.6182497647	0.2438178665	-2.5357032840	0.0112
MDRG_604	PERITONEAL ADHESIOLYSIS	1	0.3323149312	0.0833481236	3.9870715385	<.0001
MDRG_608	ANAL & STOMAL PROCEDURES	1	-1.285707854	0.3322180741	-3.8700719623	0.0001
MDRG_610	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL	1	0.2069459384	0.0708739010	2.9199174235	0.0035
MDRG_701	PANCREAS, LIVER & SHUNT PROCEDURES	1	0.8796634184	0.0974546589	9.0263865107	<.0001
MDRG_702	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E.	1	0.5359925856	0.2191605815	2.4456614502	0.0145
MDRG_801	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	1	0.7465188582	0.0606871729	12.3010979413	<.0001
MDRG_802	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR EXT FUS	1	1.4298551353	0.0973728580	14.6843295480	<.0001
MDRG_806	REVISION OF HIP OR KNEE REPLACEMENT	1	-0.4394161768	0.0966528807	-4.5463329575	<.0001
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-1.077938410	0.0578006065	-18.6492577871	<.0001
MDRG_808	CERVICAL SPINAL FUSION	1	0.5400879366	0.0693775936	7.7847603010	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_809	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS	1	0.4822335577	0.1530409846	3.1510092484	0.0016
MDRG_812	MAJOR JOINT/LIMB REATTACHMENT PROCEDURE OF UPPER EXTREMITIES	1	-0.7500958631	0.0931532418	-8.0522786843	<.0001
MDRG_1002	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DIS	1	-0.8751430434	0.1819193811	-4.8106091726	<.0001
MDRG_1003	O.R. PROCEDURES FOR OBESITY	1	-1.452215901	0.0920054059	-15.7840279715	<.0001
MDRG_1004	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DIS	1	-0.9178302392	0.3230417431	-2.8412125017	0.0045
MDRG_1101	KIDNEY TRANSPLANT	1	-0.4961353885	0.1851859304	-2.6791203160	0.0074
MDRG_1102	MAJOR BLADDER PROCEDURES	1	0.5964246874	0.0855741538	6.9696825631	<.0001
MDRG_1103	KIDNEY & URETER PROCEDURES FOR NEOPLASM	1	0.2169709701	0.0658513177	3.2948614805	0.0010
MDRG_1201	MAJOR MALE PELVIC PROCEDURES	1	-0.6226023062	0.2042153206	-3.0487541500	0.0023
MDRG_1304	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY	1	-0.8849198524	0.0962403563	-9.1948937670	<.0001
MDRG_1707	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE	1	0.6695977445	0.2475838501	2.7045291696	0.0068
MDRG_1709	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC	1	0.8715416213	0.1985162577	4.3902783154	<.0001
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	1.0241634995	0.0891832524	11.4838097041	<.0001
MDRG_2101	WOUND DEBRIDEMENTS FOR INJURIES	1	-0.6157374898	0.2642543362	-2.3300941761	0.0198
MDRG_2104	OTHER O.R. PROCEDURES FOR INJURIES	1	0.1650268548	0.0976649646	1.6897242069	0.0911
MDRG_7701	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	1	2.7222860607	0.1125184619	24.1941279142	<.0001
MDRG_7702	LIVER TRANSPLANT	1	1.3376040369	0.1740073545	7.6870546131	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_7705	ALLOGENEIC OR AUTOLOGOUS BONE MARROW TRANSPLANT	1	1.9778615854	0.3325152797	5.9481825524	<.0001
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.2106262634	0.0693525104	3.0370387780	0.0024

c-statistic=0.868

Table 14. Risk Adjustment Coefficients for PSI 12 – Perioperative Pulmonary Embolism or Deep Vein Thrombosis (PE/DVT) Rate

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-5.959030801	0.0451084166	-132.104632677	<.0001
Age_LT30	Age < 30	1	-0.4230806643	0.0711964188	-5.9424430527	<.0001
Age_30_34	30 <= Age <= 34	1	-0.4227619513	0.0841029339	-5.0267206126	<.0001
Age_35_39	35 <= Age <= 39	1	-0.2108216669	0.0751151517	-2.8066463555	0.0050
Age_40_44	40 <= Age <= 44	1	-0.2569999435	0.0630820106	-4.0740607476	<.0001
Age_45_49	45 <= Age <= 49	1	-0.1500155345	0.0564698124	-2.6565615896	0.0079
Age_50_54	50 <= Age <= 54	1	-0.1563989937	0.0507422870	-3.0822220102	0.0021
Age_55_59	55 <= Age <= 59	1	-0.1119643794	0.0468872176	-2.3879510259	0.0169
Age_60_64	60 <= Age <= 64	1	0.0256706128	0.0401043994	0.6400946819	0.5221
Age_70_74	70 <= Age <= 74	1	0.1583912780	0.0385772927	4.1058163214	<.0001
Age_75_79	75 <= Age <= 79	1	0.2282808176	0.0400266439	5.7032215415	<.0001
Age_80_84	80 <= Age <= 84	1	0.2700609820	0.0448133954	6.0263450196	<.0001
Age_85_89	85 <= Age <= 89	1	0.1527163499	0.0523338660	2.9181171124	0.0035
Age_90Plus	Age >= 90	1	0.0389892473	0.0640250329	0.6089687985	0.5425
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.1262340654	0.0386871623	3.2629445470	0.0011
Age_LT30_MALE	Age < 30 MALE	1	0.1716661256	0.0898243881	1.9111304765	0.0560
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.4057799179	0.1035305467	3.9194221505	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.1767873099	0.0952679255	1.8556855200	0.0635
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.2052695247	0.0836119435	2.4550263512	0.0141
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.1016509919	0.0708159493	1.4354251119	0.1512
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.0767283644	0.0659285379	1.1638111039	0.2445
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.0186217218	0.0614671016	0.3029542850	0.7619
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.0559450944	0.0529387745	-1.0567886190	0.2906
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.1686421677	0.0535306643	-3.1503843608	0.0016
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.1898231107	0.0569166079	-3.3351093428	0.0009
Age_80_84_MALE	80 <= Age <= 84 MALE	1	-0.2015000769	0.0604710222	-3.3321758027	0.0009
Age_85_89_MALE	85 <= Age <= 89 MALE	1	-0.1701028350	0.0760877368	-2.2356143326	0.0254
Age_90Plus_MALE	Age >= 90 MALE	1	-0.0807233255	0.0963942670	-0.8374286981	0.4024
CMR_AIDS	Acquired immune deficiency syndrome	1	0.1865079025	0.0863737732	2.1593117400	0.0308
CMR_ANEMDEF	Deficiency anemias	1	-0.0647607810	0.0214735236	-3.0158432478	0.0026
CMR_AUTOIMMUNE	Autoimmune conditions	1	-0.0950147338	0.0382029268	-2.4871061412	0.0129
CMR_BLDLOSS	Chronic blood loss anemia	1	0.1592780308	0.0653079233	2.4388775945	0.0147
CMR_CANCER_LYMPH	Lymphoma	1	0.2475497672	0.0641972495	3.8560805788	0.0001
CMR_CANCER_METS	Metastatic cancer	1	0.6911568946	0.0282275176	24.4852170332	<.0001
CMR_CANCER_NSITU	Solid tumor without metastasis, in situ	1	0.4281086882	0.2605023427	1.6433966920	0.1003
CMR_CANCER_SOLID	Solid tumor without metastasis, malignant	1	0.2331473560	0.0364061872	6.4040585957	<.0001
CMR_COAG	Coagulopathy	1	0.2441695095	0.0269837743	9.0487530235	<.0001
CMR_DEMENTIA	Dementia	1	-0.1703427045	0.0368336200	-4.6246528212	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
CMR_DEPRESS	Depression	1	-0.1553613053	0.0212873545	-7.2982908840	<.0001
CMR_DIAB_CX	Diabetes with chronic complications	1	-0.1406040010	0.0221392454	-6.3508940113	<.0001
CMR_DIAB_UNCX	Diabetes without chronic complications	1	-0.3062052546	0.0272028318	-11.2563742276	<.0001
CMR_HF	Heart failure	1	0.0472806986	0.0258197713	1.8311819263	0.0671
CMR_HTN_UNCX	Hypertension, uncomplicated	1	-0.3538427967	0.0201147275	-17.5912299683	<.0001
CMR_LIVER_MLD	Liver disease, mild	1	-0.1565907436	0.0329826987	-4.7476631593	<.0001
CMR_NEURO_MOVT	Neurological disorders affecting movement	1	-0.1817492423	0.0462962339	-3.9257889229	<.0001
CMR_NEURO_OTH	Other neurological disorders	1	0.4482437585	0.0283741456	15.7976125216	<.0001
CMR_OBESE	Obesity	1	0.2327190960	0.0192651788	12.0797786928	<.0001
CMR_PARALYSIS	Paralysis	1	0.2825418673	0.0359590823	7.8573158568	<.0001
CMR_PERIVASC	Peripheral vascular disease	1	0.1715292803	0.0261057672	6.5705512080	<.0001
CMR_PULMCIRC	Pulmonary circulation disease	1	0.4474816911	0.0373156809	11.9917868501	<.0001
CMR_RENLFL_MOD	Renal failure, moderate	1	-0.3640643894	0.0266817476	-13.6446980295	<.0001
CMR_RENLFL_SEV	Renal failure, severe	1	-0.2718810293	0.0369784489	-7.3524184378	<.0001
CMR_THYROID_HYPO	Hypothyroidism	1	-0.2540472464	0.0232558798	-10.9240006742	<.0001
CMR_THYROID_OTH	Other thyroid disorders	1	0.1721863783	0.0573602725	3.0018403148	0.0027
CMR_ULCER_PEP TIC	Peptic ulcer disease x bleeding	1	0.4751823549	0.0501034121	9.4840318256	<.0001
CMR_WGHTLOSS	Weight loss	1	0.5454284489	0.0247038658	22.0786678729	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
PS12_NonWt_1	PS12 Comorbidity count using non-weighted method, category 1, count > 1 and count <= 3	1	0.5938112688	0.0261442758	22.7128597023	<.0001
PS12_NonWt_2	PS12 Comorbidity count using non-weighted method, category 2, count >= 4	1	0.7069258101	0.0393806247	17.9511070531	<.0001
MDC_3	Ear Nose Mouth And Throat	1	-0.4088224046	0.1232391401	-3.3173097785	0.0009
MDC_4	Respiratory System	1	0.5835453463	0.0620855527	9.3990521294	<.0001
MDC_5	Circulatory System	1	-0.1704897677	0.0381012077	-4.4746552098	<.0001
MDC_6	Digestive System	1	0.4635906042	0.0538358203	8.6111923495	<.0001
MDC_9	Skin Subcutaneous And Breast	1	-0.4820677282	0.1186845901	-4.0617550074	<.0001
MDC_10	Endocrine Nutritional And Metabolic	1	-0.3807173678	0.0827831147	-4.5989737068	<.0001
MDC_12	Male Reproductive System	1	-0.6721370436	0.1025035854	-6.5572052037	<.0001
MDC_16	Blood and Immunological	1	0.4739504257	0.1409984014	3.3613886464	0.0008
MDC_17	Myeloproliferative DDs	1	0.3082515778	0.0783588841	3.9338433853	<.0001
MDC_18	Infectious and Parasitic	1	0.7408541462	0.0461279234	16.0608605796	<.0001
MDC_21	Injuries Poison And Toxic	1	0.1808855471	0.0566436151	3.1933969401	0.0014
MDC_22	Burns	1	2.4350352430	0.2259857962	10.7751694286	<.0001
MDC_24	Multiple Significant Trauma	1	1.6974423483	0.0469000037	36.1927977281	<.0001
MDRG_101	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE	1	1.7648353074	0.2937783351	6.0073705120	<.0001
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	0.2542572687	0.0666344224	3.8157045493	0.0001
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	-0.3642254364	0.0610553948	-5.9654914676	<.0001
MDRG_104	SPINAL PROCEDURES	1	0.2789953470	0.0975516600	2.8599753908	0.0042
MDRG_105	VENTRICULAR SHUNT PROCEDURES	1	-0.6833680387	0.1745777107	-3.9144060022	<.0001
MDRG_106	CAROTID ARTERY STENT PROCEDURE	1	-1.625292882	0.2517251022	-6.4566182209	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_107	EXTRACRANIAL PROCEDURES	1	-2.469173371	0.2112794142	-11.6867674030	<.0001
MDRG_108	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC	1	-0.2924521445	0.1396289122	-2.0944956163	0.0362
MDRG_201	ORBITAL PROCEDURES	1	-1.590626638	0.7010463855	-2.2689320862	0.0233
MDRG_203	INTRAOCULAR PROCEDURES	1	-2.282481893	1.0008105839	-2.2806332482	0.0226
MDRG_301	MAJOR HEAD AND NECK PROCEDURES	1	-0.7901292919	0.2007141361	-3.9365901529	<.0001
MDRG_302	OTHER EAR, NOSE, MOUTH AND THROAT O.R. PROCEDURES	1	-0.6947723801	0.2658866728	-2.6130395053	0.0090
MDRG_401	MAJOR CHEST PROCEDURES	1	-0.8884581703	0.0838383590	-10.5972752877	<.0001
MDRG_402	OTHER RESP SYSTEM O.R. PROCEDURES	1	-0.8784080327	0.0966344460	-9.0900095106	<.0001
MDRG_502	PERC CARDIOVASC PROC W NON-DRUG-ELUTING STENT	1	-1.001832876	0.2344270356	-4.2735381333	<.0001
MDRG_505	OTHER CARDIOTHORACIC PROCEDURES	1	-0.2006942911	0.1066533115	-1.8817445829	0.0599
MDRG_508	CORONARY BYPASS W/O CARDIAC CATH	1	-0.4051887871	0.0761380177	-5.3217669622	<.0001
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-1.826109706	0.0735051544	-24.8432878087	<.0001
MDRG_512	AICD PROCEDURES	1	-0.6166899714	0.2561109125	-2.4079019730	0.0160
MDRG_513	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT	1	-1.548865387	0.2477032972	-6.2529058142	<.0001
MDRG_514	OTHER VASCULAR PROCEDURES	1	-0.5584147896	0.0680056563	-8.2112991826	<.0001
MDRG_515	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	1	-1.201944943	0.3006868608	-3.9973311114	<.0001
MDRG_516	CARDIAC PACEMAKER DEVICE REPLACEMENT	1	-1.585135284	0.7035790345	-2.2529598049	0.0243
MDRG_517	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	1	-0.2515378634	0.2038943080	-1.2336679031	0.2173

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_519	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	1	-0.5827228278	0.1471129196	-3.9610581423	<.0001
MDRG_536	OTHER ENDOVASCULAR CARDIAC VALVE PROCEDURES	1	-0.0102114893	0.5054211907	-0.0202039200	0.9839
MDRG_539	CARDIAC DEFIBRILLATOR IMPLANT W/OUT CARDIAC CATH	1	-1.291085870	0.1945117989	-6.6375709712	<.0001
MDRG_540	ENDOVASCULAR CARDIAC VALVE REPLACEMENT	1	-1.531595444	0.1219791353	-12.5562084030	<.0001
MDRG_543	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES	1	-1.214295494	0.1423438523	-8.5307196222	<.0001
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL PROC	1	-0.1675664068	0.0692200502	-2.4207784647	0.0155
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	-0.3191679363	0.0563710179	-5.6619154352	<.0001
MDRG_603	RECTAL RESECTION	1	-1.393958998	0.3770772764	-3.6967462253	0.0002
MDRG_604	PERITONEAL ADHESIOLYSIS	1	-0.3680477846	0.0839791425	-4.3826094600	<.0001
MDRG_605	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG	1	-1.571841481	0.1894832270	-8.2954122452	<.0001
MDRG_606	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG	1	-2.571437658	0.2362705975	-10.8834433258	<.0001
MDRG_607	MINOR SMALL & LARGE BOWEL PROCEDURES	1	-1.118578550	0.1873187348	-5.9715252242	<.0001
MDRG_608	ANAL & STOMAL PROCEDURES	1	-1.825057077	0.2677663431	-6.8158568985	<.0001
MDRG_609	INGUINAL & FEMORAL HERNIA PROCEDURES	1	-1.140239124	0.1781393538	-6.4008266556	<.0001
MDRG_610	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL	1	-0.6792730698	0.0985645740	-6.8916553118	<.0001
MDRG_701	PANCREAS, LIVER & SHUNT PROCEDURES	1	0.2411424661	0.0703982138	3.4254060310	0.0006

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_704	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E.	1	-0.4773694173	0.1615065871	-2.9557272296	0.0031
MDRG_705	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E.	1	-1.598920008	0.0872832985	-18.3187395080	<.0001
MDRG_706	HEPATOBIILIARY DIAGNOSTIC PROCEDURES	1	-0.2507281271	0.2174847490	-1.1528538359	0.2490
MDRG_707	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES	1	0.3912208614	0.1701723429	2.2989685317	0.0215
MDRG_801	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	1	0.2238216057	0.0586441733	3.8166043297	0.0001
MDRG_802	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR EXT FUS	1	0.8748169968	0.0814144860	10.7452253220	<.0001
MDRG_804	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY	1	0.4666444608	0.1117484456	4.1758474425	<.0001
MDRG_805	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS	1	0.1467475730	0.0784643887	1.8702442641	0.0614
MDRG_806	REVISION OF HIP OR KNEE REPLACEMENT	1	-0.1498905654	0.0639820689	-2.3426964464	0.0191
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-0.6656982521	0.0386011988	-17.2455331147	<.0001
MDRG_808	CERVICAL SPINAL FUSION	1	-0.7506919255	0.0852171416	-8.8091657570	<.0001
MDRG_809	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS	1	-0.5412479126	0.1471025442	-3.6793919216	0.0002
MDRG_810	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	1	-0.5841778819	0.1073519678	-5.4417063246	<.0001
MDRG_811	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT	1	0.1650286196	0.0398398795	4.1422971517	<.0001
MDRG_812	MAJOR JOINT/LIMB REATTACHMENT PROCEDURE OF UPPER EXTREMITIES	1	-1.779582856	0.1261045179	-14.1119674841	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_814	KNEE PROCEDURES W/O PDX OF INFECTION	1	-0.2407706402	0.1438826389	-1.6733821540	0.0943
MDRG_815	BACK & NECK PROC EXC SPINAL FUSION OR DISC DEVICE/NEUROSTIM	1	-0.3762236285	0.0824436592	-4.5634028394	<.0001
MDRG_817	LOCAL EXCISION & REMOVAL INT FIX DEVICES EXC HIP & FEMUR	1	-0.9280330863	0.2570923349	-3.6097267801	0.0003
MDRG_818	LOCAL EXCISION & REMOVAL INT FIX DEVICES OF HIP & FEMUR	1	-0.1616109768	0.2883535792	-0.5604611437	0.5752
MDRG_820	FOOT PROCEDURES	1	-1.672695776	0.2864457758	-5.8394848791	<.0001
MDRG_824	SHOULDER,ELBOW OR FOREARM PROC,EXC MAJOR JOINT PROC	1	-1.138405595	0.2233968234	-5.0958898059	<.0001
MDRG_825	HAND OR WRIST PROC, EXCEPT MAJOR THUMB OR JOINT PROC	1	-1.985426353	0.4077963778	-4.8686708882	<.0001
MDRG_826	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC	1	-0.5660831052	0.0805485946	-7.0278458403	<.0001
MDRG_903	OTHER SKIN, SUBCUT TISS & BREAST PROC	1	-0.7804087915	0.1734182020	-4.5001550159	<.0001
MDRG_904	MASTECTOMY FOR MALIGNANCY	1	-0.9523378266	0.4174148776	-2.2815138549	0.0225
MDRG_905	BREAST BIOPSY, LOCAL EXCISION & OTHER BREAST PROCEDURES	1	-0.7505493498	0.3316140450	-2.2633219586	0.0236
MDRG_913	SKIN DEBRIDEMENT FOR SKIN ULCER OR CELLULITIS	1	-0.7814100570	0.1882676911	-4.1505265854	<.0001
MDRG_1002	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DIS	1	-1.070115253	0.1650909536	-6.4819738995	<.0001
MDRG_1003	O.R. PROCEDURES FOR OBESITY	1	-2.359465523	0.1822846572	-12.9438514389	<.0001
MDRG_1004	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DIS	1	-1.103337355	0.2424472288	-4.5508350835	<.0001
MDRG_1005	THYROID, PARATHYROID & THYROGLOSSAL PROCEDURES	1	-0.9428510351	0.2734676448	-3.4477608338	0.0006

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_1101	KIDNEY TRANSPLANT	1	-0.7065703359	0.1658425462	-4.2604889522	<.0001
MDRG_1102	MAJOR BLADDER PROCEDURES	1	0.5766016359	0.0919751086	6.2691052494	<.0001
MDRG_1103	KIDNEY & URETER PROCEDURES FOR NEOPLASM	1	-0.1492937415	0.0911859273	-1.6372454157	0.1016
MDRG_1106	PROSTATECTOMY	1	-0.3986386883	0.2565033139	-1.5541268544	0.1202
MDRG_1109	OTHER KIDNEY & URINARY TRACT PROCEDURES	1	-0.2292194218	0.1087067557	-2.1086032814	0.0350
MDRG_1202	PENIS PROCEDURES	1	0.4994533293	0.3776409195	1.3225614689	0.1860
MDRG_1205	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC FOR MALIGNANCY	1	-0.1270597816	0.5108775009	-0.2487089007	0.8036
MDRG_1206	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXC MALIGNANCY	1	-0.3064068527	0.3348920118	-0.9149422558	0.3602
MDRG_1302	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY	1	0.2384275945	0.1074237276	2.2195058743	0.0265
MDRG_1303	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG	1	0.3114111057	0.1094354234	2.8456152134	0.0044
MDRG_1304	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY	1	-1.024412929	0.1026402807	-9.9806130875	<.0001
MDRG_1305	D&C, CONIZATION, LAPAROSCOPY & TUBAL INTERRUPTION	1	0.1486801738	0.1605717456	0.9259423151	0.3545
MDRG_1307	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	1	-0.9291033799	0.5008536518	-1.8550396438	0.0636
MDRG_1601	SPLENECTOMY	1	0.0572488193	0.2472887559	0.2315059540	0.8169
MDRG_1602	OTHER O.R. PROC OF THE BLOOD & BLOOD FORMING ORGANS	1	-0.8840284438	0.2781966141	-3.1777110115	0.0015
MDRG_1707	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE	1	-0.0897532560	0.1464071045	-0.6130389393	0.5399

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_1709	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC	1	-0.0128007761	0.1429032839	-0.0895765009	0.9286
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	-0.5700248374	0.0493587776	-11.5486011861	<.0001
MDRG_2101	WOUND DEBRIDEMENTS FOR INJURIES	1	-0.1342927442	0.1573504275	-0.8534628494	0.3934
MDRG_2102	SKIN GRAFTS FOR INJURIES	1	-0.0082583708	0.2102373824	-0.0392811720	0.9687
MDRG_2103	HAND PROCEDURES FOR INJURIES	1	-2.320930246	0.7077044181	-3.2795192263	0.0010
MDRG_2201	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ	1	-2.463579661	0.2576864012	-9.5603790110	<.0001
MDRG_2210	EXTENSIVE BURNS OR FULL THICKNESS BURNS W MV >96 HRS W SKIN GRAFT	1	-0.6771301594	0.2628585152	-2.5760252004	0.0100
MDRG_2406	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	1	-0.3295841385	0.7306359375	-0.4510921536	0.6519
MDRG_7701	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	1	0.8664503281	0.1100043725	7.8765080744	<.0001
MDRG_7702	LIVER TRANSPLANT	1	0.0093996323	0.1522066229	0.0617557376	0.9508
MDRG_7703	LUNG TRANSPLANT	1	0.7345231432	0.2164999867	3.3927168057	0.0007
MDRG_7704	SIMULTANEOUS PANCREAS/KIDNEY TRANSPLANT	1	1.0763183674	0.3409486933	3.1568338244	0.0016
MDRG_7705	ALLOGENEIC OR AUTOLOGOUS BONE MARROW TRANSPLANT	1	-1.259347742	0.9592787800	-1.3128068380	0.1892
TRANSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.5107019082	0.0255394063	19.9966241293	<.0001

c-statistic=0.758

Table 15. Risk Adjustment Coefficients for PSI 13 – Postoperative Sepsis Rate

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-4.188794096	0.0647277439	-64.7140444132	<.0001
Age_LT30	Age < 30	1	-0.6425199597	0.1079053787	-5.9544757430	<.0001
Age_30_34	30 <= Age <= 34	1	-0.8736594550	0.1316619774	-6.6356245941	<.0001
Age_35_39	35 <= Age <= 39	1	-0.5445785821	0.0972419470	-5.6002435045	<.0001
Age_40_44	40 <= Age <= 44	1	-0.5134433153	0.0872520903	-5.8845961566	<.0001
Age_45_49	45 <= Age <= 49	1	-0.3550957658	0.0778652537	-4.5603879658	<.0001
Age_50_54	50 <= Age <= 54	1	-0.1938487933	0.0624707010	-3.1030353444	0.0019
Age_55_59	55 <= Age <= 59	1	-0.1357508555	0.0570241195	-2.3805866136	0.0173
Age_60_64	60 <= Age <= 64	1	-0.0711638869	0.0529837276	-1.3431272217	0.1792
Age_70_74	70 <= Age <= 74	1	0.1473746865	0.0503312744	2.9280936797	0.0034
Age_75_79	75 <= Age <= 79	1	0.3095098349	0.0507159752	6.1028075180	<.0001
Age_80_84	80 <= Age <= 84	1	0.3184884615	0.0636430838	5.0042902126	<.0001
Age_85_89	85 <= Age <= 89	1	0.1713688700	0.0816596949	2.0985734790	0.0359
Age_90Plus	Age >= 90	1	-0.0227931675	0.1503672931	-0.1515832801	0.8795
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.2048047601	0.0503489894	4.0677034955	<.0001
Age_LT30_MALE	Age < 30 MALE	1	0.1351102621	0.1342505334	1.0064039130	0.3142
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.3977650240	0.1732340742	2.2961130825	0.0217
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.0820795939	0.1412348753	0.5811566991	0.5611
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.0334733522	0.1299521756	0.2575820842	0.7967
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.0762859903	0.1088412173	0.7008924766	0.4834
Age_50_54_MALE	50 <= Age <= 54 MALE	1	-0.0771051398	0.0871586049	-0.8846532114	0.3763
Age_55_59_MALE	55 <= Age <= 59 MALE	1	-0.0618936592	0.0777064716	-0.7965058499	0.4257
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.0470534144	0.0704364838	-0.6680261685	0.5041
Age_70_74_MALE	70 <= Age <= 74 MALE	1	0.0167863092	0.0662915094	0.2532195953	0.8001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.0269378526	0.0703503006	-0.3829102705	0.7018
Age_80_84_MALE	80 <= Age <= 84 MALE	1	-0.0626981137	0.0828491990	-0.7567739282	0.4492
Age_85_89_MALE	85 <= Age <= 89 MALE	1	0.2459357318	0.1073117700	2.2917871161	0.0219
Age_90Plus_MALE	Age >= 90 MALE	1	0.3130959658	0.1881903532	1.6637195290	0.0962
CMR_AIDS	Acquired immune deficiency syndrome	1	0.0405199674	0.1423904309	0.2845694554	0.7760
CMR_ALCOHOL	Alcohol abuse	1	0.4538365798	0.0552447768	8.2150133704	<.0001
CMR_ANEMDEF	Deficiency anemias	1	0.0937253799	0.0341481087	2.7446726457	0.0061
CMR_AUTOIMMUNE	Autoimmune conditions	1	-0.0976674303	0.0538301357	-1.8143634427	0.0696
CMR_BLDLOSS	Chronic blood loss anemia	1	-0.0335769312	0.0974729546	-0.3444743349	0.7305
CMR_CANCER_LEUK	Leukemia	1	0.5037167993	0.0995485814	5.0600098174	<.0001
CMR_CANCER_LYMPH	Lymphoma	1	0.2352108467	0.0985128433	2.3876160593	0.0170
CMR_CANCER_METS	Metastatic cancer	1	0.2305201452	0.0413162550	5.5794056192	<.0001
CMR_CANCER_SOLID	Solid tumor without metastasis, malignant	1	-0.0043396347	0.0464335732	-0.0934589860	0.9255
CMR_COAG	Coagulopathy	1	0.5196551587	0.0437574329	11.8758145706	<.0001
CMR_DEMENTIA	Dementia	1	0.3775122790	0.0597499433	6.3182031284	<.0001
CMR_DIAB_CX	Diabetes with chronic complications	1	0.1753183873	0.0310826131	5.6404005214	<.0001
CMR_DIAB_UNCX	Diabetes without chronic complications	1	-0.4218163491	0.0394640346	-10.6886270936	<.0001
CMR_DRUG_ABUSE	Drug abuse	1	0.3866724895	0.0740430933	5.2222627735	<.0001
CMR_HF	Heart failure	1	0.6588957498	0.0366907628	17.9580826400	<.0001
CMR_HTN_CX	Hypertension, complicated	1	0.0726042006	0.0379859660	1.9113427478	0.0560

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
CMR_HTN_UNCX	Hypertension, uncomplicated	1	-0.3987173635	0.0313402893	-12.7221979396	<.0001
CMR_LUNG_CHRONIC	Chronic pulmonary disease	1	0.1635889731	0.0243593449	6.7156556877	<.0001
CMR_NEURO_MOV	Neurological disorders affecting movement	1	-0.1288212309	0.0661566816	-1.9472142161	0.0515
CMR_NEURO_OTHER	Other neurological disorders	1	0.7975516074	0.0553340357	14.4134003012	<.0001
CMR_NEURO_SEIZ	Seizures and epilepsy	1	0.3044429373	0.0604081064	5.0397695823	<.0001
CMR_OBESE	Obesity	1	0.1381874817	0.0259400691	5.3271824873	<.0001
CMR_PARALYSIS	Paralysis	1	0.7232406784	0.0532249381	13.5883798781	<.0001
CMR_PERIVASC	Peripheral vascular disease	1	0.2792990820	0.0340152260	8.2110018130	<.0001
CMR_PSYCHOSES	Psychoses	1	0.2772107233	0.0600629727	4.6153347210	<.0001
CMR_PULMCIRC	Pulmonary circulation disease	1	0.2420665899	0.0498879778	4.8522028901	<.0001
CMR_RENLFL_SEV	Renal failure, severe	1	0.2269798600	0.0494254806	4.5923652554	<.0001
CMR_THYROID_HYPO	Hypothyroidism	1	-0.2248574844	0.0305741217	-7.3545034752	<.0001
CMR_THYROID_OTHER	Other thyroid disorders	1	-0.1943935142	0.0904304317	-2.1496470883	0.0316
CMR_ULCER_PEP TIC	Peptic ulcer disease x bleeding	1	0.4747683623	0.0861524671	5.5107924161	<.0001
CMR_VALVE	Valvular disease	1	-0.1218831450	0.0414699859	-2.9390688819	0.0033
CMR_WGHTLOSS	Weight loss	1	1.0862914402	0.0408012891	26.6239490173	<.0001
PS13_NonWt_1	PS13 Comorbidity count using non-weighted method, category 1, count > 2 and count <= 4	1	0.3342906949	0.0387147057	8.6347213306	<.0001
PS13_NonWt_2	PS13 Comorbidity count using non-weighted method, category 2, count >= 5	1	0.1046127535	0.0643828818	1.6248535413	0.1042

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_101	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE	1	-0.2911807356	0.2955255080	-0.9852981478	0.3245
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	-2.011974623	0.2570321910	-7.8277145554	<.0001
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	-2.551733149	0.1021221632	-24.9870651818	<.0001
MDRG_104	SPINAL PROCEDURES	1	-2.384413158	0.2285974547	-10.4306198888	<.0001
MDRG_105	VENTRICULAR SHUNT PROCEDURES	1	-2.806235533	0.2703186892	-10.3812116772	<.0001
MDRG_106	CAROTID ARTERY STENT PROCEDURE	1	-3.450453111	0.2805753979	-12.2977749871	<.0001
MDRG_107	EXTRACRANIAL PROCEDURES	1	-3.422461383	0.1470394418	-23.2758050558	<.0001
MDRG_108	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC	1	-1.893934060	0.2216877838	-8.5432495534	<.0001
MDRG_202	EXTRAOCULAR PROCEDURES EXCEPT ORBIT	1	-2.185498306	1.0219393922	-2.1385791792	0.0325
MDRG_301	MAJOR HEAD AND NECK PROCEDURES	1	-2.045476891	0.1621937723	-12.6113158491	<.0001
MDRG_302	OTHER EAR, NOSE, MOUTH AND THROAT O.R. PROCEDURES	1	-1.933933671	0.2424702241	-7.9759635589	<.0001
MDRG_304	MOUTH PROCEDURES	1	-3.133347761	1.0047035174	-3.1186789996	0.0018
MDRG_401	MAJOR CHEST PROCEDURES	1	-1.490014005	0.0713082665	-20.8953895174	<.0001
MDRG_402	OTHER RESP SYSTEM O.R. PROCEDURES	1	-2.014314026	0.1559799488	-12.9139292739	<.0001
MDRG_502	PERC CARDIOVASC PROC W NON-DRUG-ELUTING STENT	1	-3.688080669	1.0058661863	-3.6665718751	0.0002
MDRG_503	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC	1	-1.503623214	0.0657197726	-22.8793124991	<.0001
MDRG_505	OTHER CARDIOTHORACIC PROCEDURES	1	-2.320091126	0.1358323056	-17.0805546955	<.0001
MDRG_506	CORONARY BYPASS W PTCA	1	-1.244226965	0.3397730755	-3.6619351392	0.0003

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_507	CORONARY BYPASS WITH CARDIAC CATHETERIZATION OR OPEN ABLATION	1	-1.565275402	0.1033939746	-15.1389421716	<.0001
MDRG_508	CORONARY BYPASS W/O CARDIAC CATH	1	-1.799065126	0.0726975082	-24.7472736095	<.0001
MDRG_509	AMPUTATION FOR CIRC SYS DISORDERS EXC UPPER LIMB & TOE	1	-0.8526082825	0.2048112216	-4.1628982829	<.0001
MDRG_510	PERMANENT CARDIAC PACEMAKER IMPLANT AND PROCEDURES	1	-2.622279579	0.2963632660	-8.8481936849	<.0001
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-2.822360427	0.1273470052	-22.1627546129	<.0001
MDRG_512	AICD PROCEDURES	1	-2.350344658	0.4102621589	-5.7288848291	<.0001
MDRG_513	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT	1	-2.471379382	0.4117031293	-6.0028190362	<.0001
MDRG_514	OTHER VASCULAR PROCEDURES	1	-2.505464437	0.0904996337	-27.6848019726	<.0001
MDRG_515	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	1	-1.013432216	1.0454126843	-0.9694087617	0.3323
MDRG_516	CARDIAC PACEMAKER DEVICE REPLACEMENT	1	-2.659213858	0.9922594816	-2.6799581228	0.0074
MDRG_517	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	1	-2.808118834	0.7096856729	-3.9568487023	<.0001
MDRG_518	VEIN LIGATION & STRIPPING	1	-2.078237197	1.0079202132	-2.0619064586	0.0392
MDRG_519	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	1	-1.767574750	0.1958302178	-9.0260572133	<.0001
MDRG_536	OTHER ENDOVASCULAR CARDIAC VALVE PROCEDURES	1	-2.038626771	0.7220459074	-2.8234032624	0.0048
MDRG_537	CARDIAC DEFIBRILLATOR IMPLANT W AMI/HF/SHOCK	1	-2.579151371	0.5835040540	-4.4201087428	<.0001
MDRG_538	CARDIAC DEFIBRILLATOR IMPLANT W/OUT AMI/HF/SHOCK	1	-2.127915648	0.4412858291	-4.8220801742	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_539	CARDIAC DEFIBRILLATOR IMPLANT W/OUT CARDIAC CATH	1	-3.262393724	0.3157255120	-10.3330063605	<.0001
MDRG_540	ENDOVASCULAR CARDIAC VALVE REPLACEMENT	1	-3.164483794	0.0851333009	-37.1709279580	<.0001
MDRG_541	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON	1	-1.801114393	0.0907208586	-19.8533658225	<.0001
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	-1.454240858	0.0809619472	-17.9620291677	<.0001
MDRG_543	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES	1	-2.359375590	0.1539541238	-15.3251860502	<.0001
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL PROC	1	-0.2922720959	0.0481125989	-6.0747517857	<.0001
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	-0.5744695364	0.0419590814	-13.6911847746	<.0001
MDRG_603	RECTAL RESECTION	1	-1.944390956	0.3024138680	-6.4295694131	<.0001
MDRG_606	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG	1	-2.052019308	0.7071375073	-2.9018674402	0.0037
MDRG_607	MINOR SMALL & LARGE BOWEL PROCEDURES	1	-1.328010325	0.2498715193	-5.3147726829	<.0001
MDRG_608	ANAL & STOMAL PROCEDURES	1	-2.167090403	0.3353330296	-6.4625020850	<.0001
MDRG_609	INGUINAL & FEMORAL HERNIA PROCEDURES	1	-2.127768777	0.2869563309	-7.4149567284	<.0001
MDRG_610	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL	1	-1.748854998	0.1158442250	-15.0966092418	<.0001
MDRG_611	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES	1	-1.090193197	0.1323322942	-8.2383004421	<.0001
MDRG_701	PANCREAS, LIVER & SHUNT PROCEDURES	1	-0.2749692326	0.0607027594	-4.5297649601	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_702	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E.	1	-0.0953283055	0.1658714865	-0.5747118294	0.5655
MDRG_703	CHOLECYSTECTOMY W C.D.E.	1	-1.140844666	1.0094016388	-1.1302187578	0.2584
MDRG_705	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E.	1	-1.355110977	0.1616855968	-8.3811483758	<.0001
MDRG_706	HEPATOBIILIARY DIAGNOSTIC PROCEDURES	1	-1.178429369	0.2359681019	-4.9940197803	<.0001
MDRG_707	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES	1	-0.2643951894	0.3263749243	-0.8100965168	0.4179
MDRG_801	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	1	-1.880687901	0.0697595108	-26.9595912957	<.0001
MDRG_802	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR EXT FUS	1	-1.297002445	0.1314528171	-9.8666766790	<.0001
MDRG_803	SPINAL FUSION EXCEPT CERVICAL	1	-2.303625029	0.0794759985	-28.9851662278	<.0001
MDRG_804	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY	1	-3.046008615	0.2554025898	-11.9263027704	<.0001
MDRG_805	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS	1	-1.846526069	0.1782889137	-10.3569315121	<.0001
MDRG_806	REVISION OF HIP OR KNEE REPLACEMENT	1	-3.078120994	0.1344951356	-22.8864856834	<.0001
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-3.660326107	0.0662921120	-55.2151077689	<.0001
MDRG_808	CERVICAL SPINAL FUSION	1	-2.675731080	0.1044511423	-25.6170590567	<.0001
MDRG_809	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS	1	-1.913744381	0.3035622470	-6.3042898120	<.0001
MDRG_810	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	1	-2.270295177	0.3497746482	-6.4907367908	<.0001
MDRG_811	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT	1	-2.184982169	0.1750709063	-12.4805555376	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_812	MAJOR JOINT/LIMB REATTACHMENT PROCEDURE OF UPPER EXTREMITIES	1	-3.624388007	0.1294879792	-27.9901503565	<.0001
MDRG_814	KNEE PROCEDURES W/O PDX OF INFECTION	1	-3.196256663	0.3772525472	-8.4724588000	<.0001
MDRG_815	BACK & NECK PROC EXC SPINAL FUSION OR DISC DEVICE/NEUROSTIM	1	-2.502535836	0.1361905273	-18.3752562434	<.0001
MDRG_816	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR	1	-2.841475269	0.1900574783	-14.9506101738	<.0001
MDRG_817	LOCAL EXCISION & REMOVAL INT FIX DEVICES EXC HIP & FEMUR	1	-2.284094396	0.3577822056	-6.3840357621	<.0001
MDRG_819	SOFT TISSUE PROCEDURES	1	-2.588825582	0.2768298151	-9.3516862738	<.0001
MDRG_820	FOOT PROCEDURES	1	-3.014956822	0.5784055359	-5.2125310627	<.0001
MDRG_824	SHOULDER,ELBOW OR FOREARM PROC,EXC MAJOR JOINT PROC	1	-3.111882229	0.7071293258	-4.4007257451	<.0001
MDRG_826	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC	1	-2.613743599	0.1373743512	-19.0264308859	<.0001
MDRG_901	SKIN GRAFT FOR SKIN ULCER OR CELLULITIS	1	-2.334485730	1.0112924652	-2.3084179996	0.0210
MDRG_902	SKIN GRAFT EXC FOR SKIN ULCER OR CELLULITIS	1	-1.720379762	0.2017694748	-8.5264620139	<.0001
MDRG_903	OTHER SKIN, SUBCUT TISS & BREAST PROC	1	-3.006998451	0.2499094817	-12.0323503948	<.0001
MDRG_904	MASTECTOMY FOR MALIGNANCY	1	-3.196720047	0.5001200144	-6.3919058520	<.0001
MDRG_905	BREAST BIOPSY, LOCAL EXCISION & OTHER BREAST PROCEDURES	1	-2.655703372	0.3797530375	-6.9932379990	<.0001
MDRG_913	SKIN DEBRIDEMENT FOR SKIN ULCER OR CELLULITIS	1	-1.941705455	0.3375614503	-5.7521540228	<.0001
MDRG_1001	ADRENAL & PITUITARY PROCEDURES	1	-1.870628728	0.1894205438	-9.8755324541	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_1002	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DIS	1	-1.747785706	0.5802429607	-3.0121618428	0.0026
MDRG_1003	O.R. PROCEDURES FOR OBESITY	1	-2.821138408	0.1024574418	-27.5347340247	<.0001
MDRG_1004	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DIS	1	-1.924889488	0.5050936705	-3.8109554739	0.0001
MDRG_1005	THYROID, PARATHYROID & THYROGLOSSAL PROCEDURES	1	-2.317384952	0.2248264809	-10.3074377279	<.0001
MDRG_1006	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC	1	-1.912291822	0.3387516562	-5.6451143116	<.0001
MDRG_1101	KIDNEY TRANSPLANT	1	-2.515263499	0.2050871792	-12.2643624491	<.0001
MDRG_1102	MAJOR BLADDER PROCEDURES	1	-0.1056432018	0.0747072203	-1.4140962721	0.1573
MDRG_1103	KIDNEY & URETER PROCEDURES FOR NEOPLASM	1	-1.404568825	0.0775328863	-18.1157814628	<.0001
MDRG_1104	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM	1	-0.9196490040	0.0883058041	-10.4143664535	<.0001
MDRG_1105	MINOR BLADDER PROCEDURES	1	-2.008327999	0.4479277817	-4.4835977606	<.0001
MDRG_1106	PROSTATECTOMY	1	-1.985190628	0.5098860825	-3.8934003032	<.0001
MDRG_1107	TRANSURETHRAL PROCEDURES	1	-1.760836071	0.2340617322	-7.5229558223	<.0001
MDRG_1108	URETHRAL PROCEDURES	1	-1.547187796	0.5732885338	-2.6987942446	0.0070
MDRG_1109	OTHER KIDNEY & URINARY TRACT PROCEDURES	1	-2.002815329	0.1918507107	-10.4394470123	<.0001
MDRG_1201	MAJOR MALE PELVIC PROCEDURES	1	-2.235624282	0.1257263343	-17.7816707595	<.0001
MDRG_1202	PENIS PROCEDURES	1	-2.639143302	0.7095539088	-3.7194401570	0.0002
MDRG_1204	TRANSURETHRAL PROSTATECTOMY	1	-1.255057137	0.1379954913	-9.0949140792	<.0001
MDRG_1205	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC FOR MALIGNANCY	1	-2.581671481	1.0019264113	-2.5767076825	0.0100

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_1206	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXC MALIGNANCY	1	-1.723644064	0.3472076593	-4.9643031137	<.0001
MDRG_1301	PELVIC EVISCERATION, RAD HYSTERECTOMY & RAD VULVECTOMY	1	-0.8005081797	0.1837499098	-4.3565092404	<.0001
MDRG_1302	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY	1	-0.9399148177	0.1118559886	-8.4029011710	<.0001
MDRG_1303	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG	1	-1.139763475	0.1217839365	-9.3588982972	<.0001
MDRG_1304	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY	1	-2.063969634	0.0949034301	-21.7481036344	<.0001
MDRG_1305	D&C, CONIZATION, LAPAROSCOPY & TUBAL INTERRUPTION	1	-1.768832474	0.5016677116	-3.5259045642	0.0004
MDRG_1306	VAGINA, CERVIX & VULVA PROCEDURES	1	-2.364028420	0.3490514728	-6.7727215155	<.0001
MDRG_1307	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	1	-2.087829526	0.4099605945	-5.0927566059	<.0001
MDRG_1601	SPLENECTOMY	1	-1.261963778	0.3202236273	-3.9408827785	<.0001
MDRG_1602	OTHER O.R. PROC OF THE BLOOD & BLOOD FORMING ORGANS	1	-2.932553892	0.5712572499	-5.1335084013	<.0001
MDRG_1707	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE	1	-1.386894779	0.1756525311	-7.8956720401	<.0001
MDRG_1708	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC	1	-1.424725083	0.2188955870	-6.5086971514	<.0001
MDRG_1709	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC	1	-0.4937165728	0.0997448696	-4.9497941586	<.0001
MDRG_1710	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R. PROC	1	-1.071928193	0.1693142124	-6.3309994944	<.0001
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	-1.302639450	0.5066497887	-2.5710845626	0.0101

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_2101	WOUND DEBRIDEMENTS FOR INJURIES	1	-1.547324175	0.3125386055	-4.9508257458	<.0001
MDRG_2102	SKIN GRAFTS FOR INJURIES	1	-1.456142587	0.3839603893	-3.7924291862	0.0001
MDRG_2104	OTHER O.R. PROCEDURES FOR INJURIES	1	-1.060337185	0.1096073608	-9.6739596437	<.0001
MDRG_2201	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ	1	-2.500544360	0.7199464310	-3.4732366908	0.0005
MDRG_2210	EXTENSIVE BURNS OR FULL THICKNESS BURNS W MV >96 HRS W SKIN GRAFT	1	1.7358730566	0.4715485924	3.6812177677	0.0002
MDRG_2301	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES	1	-1.750297191	0.2137311029	-8.1892488584	<.0001
MDRG_2501	HIV W EXTENSIVE O.R. PROCEDURE	1	-0.7193838251	0.7996825866	-0.8995867074	0.3683
MDRG_7701	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	1	0.1299357132	0.1336209861	0.9724199537	0.3308
MDRG_7702	LIVER TRANSPLANT	1	-1.200936746	0.2221724079	-5.4054270641	<.0001
MDRG_7705	ALLOGENEIC OR AUTOLOGOUS BONE MARROW TRANSPLANT	1	1.8159050552	0.2948511063	6.1587188122	<.0001
TRANSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.4026224268	0.0977323779	4.1196421859	<.0001
HPPS13_1	Medium immune risk	1	0.2104435626	0.0522497206	4.0276495309	<.0001
HPPS13_2	High immune risk	1	0.4238749644	0.0417506010	10.1525476222	<.0001
HPPS13_3	Very High immune risk	1	1.0023257772	0.1173619739	8.5404645467	<.0001

c-statistic=0.872

Table 16. Risk Adjustment Coefficients for PSI 14 – Postoperative Wound Dehiscence Rate Stratum: Open Approach

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-7.035282786	0.1532193460	-45.9164130944	<.0001
Age_LT30	Age < 30	1	-1.044310868	0.3223122305	-3.2400596985	0.0012

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_30_34	30 <= Age <= 34	1	-0.8916557879	0.3228542089	-2.7617908122	0.0057
Age_35_39	35 <= Age <= 39	1	-0.7630560013	0.2763826080	-2.7608683733	0.0058
Age_40_44	40 <= Age <= 44	1	-0.4466845486	0.2176150342	-2.0526364376	0.0401
Age_45_49	45 <= Age <= 49	1	-0.5441177950	0.2095742682	-2.5963005842	0.0094
Age_50_54	50 <= Age <= 54	1	-0.1069655398	0.1683317723	-0.6354447430	0.5251
Age_55_59	55 <= Age <= 59	1	0.1312109176	0.1521967917	0.8621135580	0.3886
Age_60_64	60 <= Age <= 64	1	0.2526082376	0.1444463960	1.7488026325	0.0803
Age_70_74	70 <= Age <= 74	1	0.1139487721	0.1434109454	0.7945611944	0.4269
Age_75_79	75 <= Age <= 79	1	0.0259578725	0.1564056060	0.1659651026	0.8682
Age_80_84	80 <= Age <= 84	1	-0.3521960576	0.1931634280	-1.8233061056	0.0683
Age_85_89	85 <= Age <= 89	1	-0.1784695480	0.2247260018	-0.7941651012	0.4271
Age_90Plus	Age >= 90	1	-0.5823682282	0.3508118134	-1.6600587722	0.0969
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.7466074287	0.1264723479	5.9033254386	<.0001
Age_LT30_MALE	Age < 30 MALE	1	0.4747871336	0.3590961926	1.3221725638	0.1861
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.7491958751	0.3592596829	2.0853881211	0.0370
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.3607451390	0.3240544395	1.1132238755	0.2656
Age_40_44_MALE	40 <= Age <= 44 MALE	1	-0.0474506037	0.2748725940	-0.1726276271	0.8629
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.1624753626	0.2580069382	0.6297325325	0.5289
Age_50_54_MALE	50 <= Age <= 54 MALE	1	-0.2529358607	0.2100699064	-1.2040556642	0.2286
Age_55_59_MALE	55 <= Age <= 59 MALE	1	-0.1553659688	0.1877497811	-0.8275161112	0.4079
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.2632408169	0.1757790713	-1.4975663195	0.1342
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.1217768400	0.1752076200	-0.6950430579	0.4870
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.1613054887	0.1967716060	-0.8197599843	0.4124
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.2904068650	0.2327245439	1.2478566297	0.2121
Age_85_89_MALE	85 <= Age <= 89 MALE	1	-0.3261871286	0.3118024735	-1.0461338710	0.2955

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_90Plus_MALE	Age >= 90 MALE	1	0.3792937758	0.4426981705	0.8567773736	0.3916
CMR_AIDS	Acquired immune deficiency syndrome	1	0.4793440719	0.2427774560	1.9744175587	0.0483
CMR_ALCOHOL	Alcohol abuse	1	0.4962880681	0.0873144367	5.6839176539	<.0001
CMR_ANEMDEF	Deficiency anemias	1	-0.1730603912	0.0704772921	-2.4555482476	0.0141
CMR_BLDLOSS	Chronic blood loss anemia	1	-0.3404624601	0.2083953263	-1.6337336646	0.1023
CMR_CANCER_METS	Metastatic cancer	1	-0.4403396194	0.0889502481	-4.9504034976	<.0001
CMR_CANCER_SOLID	Solid tumor without metastasis, malignant	1	-0.6397417751	0.1239674243	-5.1605635808	<.0001
CMR_COAG	Coagulopathy	1	0.0344420870	0.0933502382	0.3689555339	0.7122
CMR_DIAB_CX	Diabetes with chronic complications	1	-0.3826860060	0.0791959902	-4.8321386589	<.0001
CMR_DIAB_UNCX	Diabetes without chronic complications	1	-0.6618498050	0.0985011333	-6.7192100542	<.0001
CMR_DRUG_ABUSE	Drug abuse	1	0.0957797127	0.1234277697	0.7759980835	0.4378
CMR_HF	Heart failure	1	0.0347281356	0.0785774506	0.4419605794	0.6585
CMR_HTN_UNCX	Hypertension, uncomplicated	1	-0.4033331898	0.0565212417	-7.1359576928	<.0001
CMR_LIVER_MLD	Liver disease, mild	1	0.0420340427	0.0915542029	0.4591164728	0.6462
CMR_LIVER_SEV	Liver disease, moderate to severe	1	0.2798714528	0.1725115812	1.6223342856	0.1047
CMR_LUNG_CHRONIC	Chronic pulmonary disease	1	0.4319463969	0.0540646922	7.9894359771	<.0001
CMR_NEURO_MOVEMENT	Neurological disorders affecting movement	1	-0.3899699318	0.1695139247	-2.3005185706	0.0214
CMR_NEURO_SEIZURES	Seizures and epilepsy	1	0.1677003177	0.1311722746	1.2784738105	0.2011
CMR_OBESE	Obesity	1	0.5720290386	0.0534495695	10.7022197650	<.0001
CMR_PERIVASC	Peripheral vascular disease	1	0.1179554700	0.0837568995	1.4083075028	0.1590

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
CMR_PSYCHOSES	Psychoses	1	0.1066124642	0.1135643158	0.9387848942	0.3478
CMR_RENLFL_M OD	Renal failure, moderate	1	-0.2843980458	0.0936026345	-3.0383551428	0.0024
CMR_RENLFL_SE V	Renal failure, severe	1	-0.3537313232	0.1276917089	-2.7701980526	0.0056
CMR_ULCER_PEP TIC	Peptic ulcer disease x bleeding	1	0.1220963530	0.1196739537	1.0202416587	0.3076
CMR_WGHTLOSS	Weight loss	1	0.6297406472	0.0577462343	10.9053110497	<.0001
PS14_OPEN_NonW t_1	PS14_OPEN Comorbidty count using non-weighted method, category 1, count > 0 and count <= 3	1	0.7551644359	0.1070649333	7.0533312140	<.0001
PS14_OPEN_NonW t_2	PS14_OPEN Comorbidty count using non-weighted method, category 2, count >= 4	1	0.9199758862	0.1389957564	6.6187336216	<.0001
MDRG_402	OTHER RESP SYSTEM O.R. PROCEDURES	1	1.7106421542	0.3786198526	4.5180994663	<.0001
MDRG_503	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC	1	-0.9486024130	0.5847069318	-1.6223553399	0.1047
MDRG_508	CORONARY BYPASS W/O CARDIAC CATH	1	0.9578765414	0.6013359407	1.5929141708	0.1112
MDRG_519	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	1	0.6666812448	0.3541509326	1.8824777329	0.0598
MDRG_540	ENDOVASCULAR CARDIAC VALVE REPLACEMENT	1	0.9627123085	0.7183968446	1.3400842665	0.1802
MDRG_541	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON	1	0.1030650546	0.2338446144	0.4407416216	0.6594
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	-0.8894039844	0.2520799230	-3.5282618849	0.0004
MDRG_543	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES	1	1.6681123479	1.0206537735	1.6343567145	0.1022
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL	1	0.1683901654	0.1103344245	1.5261797601	0.1270

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	PROC					
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	0.4779757641	0.0654770032	7.2999028799	<.0001
MDRG_606	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG	1	-1.824934367	1.0037324197	-1.8181482744	0.0690
MDRG_607	MINOR SMALL & LARGE BOWEL PROCEDURES	1	-0.7272202070	0.3351127780	-2.1700760303	0.0300
MDRG_609	INGUINAL & FEMORAL HERNIA PROCEDURES	1	-2.254056790	0.5777916853	-3.9011582327	<.0001
MDRG_610	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL	1	3.0542892800	0.2183181701	13.9900828174	<.0001
MDRG_611	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES	1	-1.012419810	0.3372882068	-3.0016460381	0.0027
MDRG_704	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E.	1	-1.563664846	0.3578793870	-4.3692509334	<.0001
MDRG_705	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E.	1	0.5236551966	0.4546960203	1.1516599514	0.2495
MDRG_801	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	1	-3.202253199	0.4082143863	-7.8445378362	<.0001
MDRG_803	SPINAL FUSION EXCEPT CERVICAL	1	-3.356115843	0.5020763874	-6.6844725772	<.0001
MDRG_805	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS	1	1.6659091306	0.3895008177	4.2770362856	<.0001
MDRG_816	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR	1	2.0273170733	0.7377875457	2.7478331467	0.0060
MDRG_901	SKIN GRAFT FOR SKIN ULCER OR CELLULITIS	1	1.5101735654	1.0079009763	1.4983352541	0.1340
MDRG_903	OTHER SKIN, SUBCUT TISS & BREAST PROC	1	-2.187747952	1.0023856203	-2.1825412376	0.0291
MDRG_1101	KIDNEY TRANSPLANT	1	-0.4939173559	0.2370657948	-2.0834610761	0.0372

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_1102	MAJOR BLADDER PROCEDURES	1	0.9313191792	0.1465348608	6.3556151361	<.0001
MDRG_1103	KIDNEY & URETER PROCEDURES FOR NEOPLASM	1	-0.8594950660	0.2546694812	-3.3749433261	0.0007
MDRG_1201	MAJOR MALE PELVIC PROCEDURES	1	-0.8484740061	0.4062656294	-2.0884710510	0.0368
MDRG_1302	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY	1	-0.9500027890	0.4069078890	-2.3346875662	0.0196
MDRG_1303	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG	1	-0.9941618814	0.4466908079	-2.2256152663	0.0260
MDRG_1304	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY	1	-1.133874814	0.2217089013	-5.1142502971	<.0001
MDRG_1307	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	1	1.4255629603	0.7220693285	1.9742743586	0.0484
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	0.6058195449	0.0822991982	7.3611840474	<.0001
MDRG_2101	WOUND DEBRIDEMENTS FOR INJURIES	1	2.6216416750	0.2972812112	8.8187264330	<.0001
MDRG_2102	SKIN GRAFTS FOR INJURIES	1	2.4776158950	0.7642954613	3.2416990819	0.0012
MDRG_2104	OTHER O.R. PROCEDURES FOR INJURIES	1	0.5468141308	0.1670510197	3.2733360847	0.0011
MDRG_2407	LIMB REATTACHMENT, HIP & FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	1	1.5728368011	0.2893736596	5.4353143372	<.0001
MDRG_2408	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA	1	0.9153070026	0.1474617982	6.2070788068	<.0001
MDRG_7701	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	1	0.9026120651	0.4477452195	2.0159055323	0.0438
MDRG_7702	LIVER TRANSPLANT	1	-1.854113094	0.4807718276	-3.8565344051	0.0001
TRANSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.4136849674	0.0728952449	5.6750610817	<.0001

c-statistic=0.798

Table 17. Risk Adjustment Coefficients for PSI 14 – Postoperative Wound Dehiscence Rate Stratum: Non-Open Approach

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-9.421653711	0.3025270574	-31.1431770461	<.0001
Age_LT60	Age<60	1	-1.245273083	0.4276945855	-2.9115942195	0.0036
Age_70Plus	Age >= 70	1	-0.4931715416	0.3843179863	-1.2832382537	0.1994
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.5832977413	0.3267553236	1.7851208508	0.0742
Age_LT60_MALE	Age<=60 MALE	1	0.8310386172	0.5086204121	1.6339073255	0.1023
Age_70Plus_MALE	Age >= 70 MALE	1	-0.3487121239	0.5093864310	-0.6845728559	0.4936
CMR_HTN_CX	Hypertension, complicated	1	0.6791472797	0.2314569008	2.9342278294	0.0033
CMR_LUNG_CHRONIC	Chronic pulmonary disease	1	1.1037900369	0.1985801894	5.5584096286	<.0001
CMR_WGHTLOSS	Weight loss	1	0.9166912585	0.2900015497	3.1609874478	0.0016
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	1.4362396589	0.2139666706	6.7124457050	<.0001
MDRG_1103	KIDNEY & URETER PROCEDURES FOR NEOPLASM	1	1.4986444085	0.3342389731	4.4837512352	<.0001
TRANSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.3040094665	0.4314331939	0.7046501539	0.4810

c-statistic=0.784

Table 18. Risk Adjustment Coefficients for PSI 15 – Abdominopelvic Accidental Puncture or Laceration Rate

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Intercept	Intercept	1	-6.636191657	0.0879316802	-75.4698607299	<.0001
Age_LT30	Age < 30	1	-0.3512390488	0.1378048401	-2.5488150385	0.0108
Age_30_34	30 <= Age <= 34	1	-0.4328836997	0.1610521345	-2.6878482611	0.0072
Age_35_39	35 <= Age <= 39	1	-0.3017794718	0.1396562980	-2.1608726284	0.0307

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_40_44	40 <= Age <= 44	1	0.0071181786	0.1101133438	0.0646441055	0.9485
Age_45_49	45 <= Age <= 49	1	0.0026739794	0.1058264165	0.0252675982	0.9798
Age_50_54	50 <= Age <= 54	1	-0.0506177206	0.0996282066	-0.5080661624	0.6114
Age_55_59	55 <= Age <= 59	1	-0.0283940097	0.0918076984	-0.3092770024	0.7571
Age_60_64	60 <= Age <= 64	1	0.1075859120	0.0888411125	1.2109923996	0.2259
Age_70_74	70 <= Age <= 74	1	0.2216955238	0.0837962547	2.6456495528	0.0082
Age_75_79	75 <= Age <= 79	1	0.2332374180	0.0930387786	2.5068839209	0.0122
Age_80_84	80 <= Age <= 84	1	0.1381087662	0.1016304007	1.3589316321	0.1742
Age_85_89	85 <= Age <= 89	1	0.1151154756	0.1251160592	0.9200695446	0.3575
Age_90Plus	Age >= 90	1	0.1288431526	0.1574081094	0.8185293190	0.4131
MALE	Patient Sex Flag: 1=Male / 0=Female	1	-0.0481873694	0.0914262180	-0.5270629204	0.5981
Age_LT30_MALE	Age < 30 MALE	1	0.0160314496	0.2002297066	0.0800652902	0.9362
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.5154593087	0.2161180989	2.3850816347	0.0171
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.0925683546	0.2004029436	0.4619111521	0.6441
Age_40_44_MALE	40 <= Age <= 44 MALE	1	-0.1423393845	0.1774655468	-0.8020677087	0.4225
Age_45_49_MALE	45 <= Age <= 49 MALE	1	-0.0757493833	0.1594248304	-0.4751416893	0.6347
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.0672001662	0.1453161226	0.4624412281	0.6438
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.0305059533	0.1322123764	0.2307344758	0.8175
Age_60_64_MALE	60 <= Age <= 64 MALE	1	0.0248467362	0.1217848171	0.2040216244	0.8383
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.0758570435	0.1294631119	-0.5859355794	0.5579
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.0604976465	0.1331448269	-0.4543747430	0.6496
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.1193747702	0.1409465431	0.8469506775	0.3970
Age_85_89_MALE	85 <= Age <= 89 MALE	1	-0.0982608746	0.1836772818	-0.5349647688	0.5927
Age_90Plus_MALE	Age >= 90 MALE	1	-0.2078437497	0.2528252619	-0.8220845820	0.4110
CMR_ALCOHOL	Alcohol abuse	1	0.2367315013	0.0760322305	3.1135677572	0.0018

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
CMR_CANCER_METS	Metastatic cancer	1	-0.2310394725	0.0635687397	-3.6344825073	0.0003
CMR_CANCER_SOLID	Solid tumor without metastasis, malignant	1	-0.0207774165	0.0772043604	-0.2691223189	0.7878
CMR_COAG	Coagulopathy	1	0.2321938809	0.0588170931	3.9477279247	<.0001
CMR_DIAB_UNCX	Diabetes without chronic complications	1	-0.2867837228	0.0605458692	-4.7366356568	<.0001
CMR_HF	Heart failure	1	0.1211861441	0.0611953931	1.9803148242	0.0477
CMR_HTN_CX	Hypertension, complicated	1	0.0643186705	0.0673241075	0.9553586807	0.3394
CMR_HTN_UNCX	Hypertension, uncomplicated	1	-0.2074846785	0.0409256426	-5.0697964711	<.0001
CMR_LUNG_CHRONIC	Chronic pulmonary disease	1	0.1731657159	0.0396522561	4.3671087871	<.0001
CMR_NEURO_MOVEMENT	Neurological disorders affecting movement	1	-0.2144084620	0.1215786143	-1.7635376356	0.0778
CMR_PARALYSIS	Paralysis	1	0.2660982633	0.0791661119	3.3612647745	0.0008
CMR_PERIVASC	Peripheral vascular disease	1	0.2944663892	0.0566545828	5.1975740484	<.0001
CMR_RENLFL_MOD	Renal failure, moderate	1	-0.1720948870	0.0704665388	-2.4422213690	0.0146
CMR_RENLFL_SEVERE	Renal failure, severe	1	0.0860620028	0.0837774264	1.0272695946	0.3043
CMR_ULCER_PEP_TIC	Peptic ulcer disease x bleeding	1	0.2814164536	0.0904041549	3.1128707970	0.0019
CMR_WGHTLOSS	Weight loss	1	0.5992143806	0.0445909995	13.4380118660	<.0001
PS15_NonWt_1	PS15 Comorbidity count using non-weighted method, category 1, count > 0 and count <= 4	1	0.3274767367	0.0401669240	8.1528955732	<.0001
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	-0.5341414546	0.3522716355	-1.5162772154	0.1294
MDRG_103	CRANIOTOMY & ENDOVASCULAR	1	-1.087955902	0.4969776858	-2.1891443684	0.0286

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	INTRACRANIAL PROCEDURES					
MDRG_108	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC	1	-0.2650763601	0.3344389442	-0.7926001583	0.4280
MDRG_115	NONSPECIFIC CVA & PRECEREBRAL OCCLUSION W/O INFARCT	1	3.9755366731	0.9975846330	3.9851623025	<.0001
MDRG_401	MAJOR CHEST PROCEDURES	1	-0.3172638345	0.3568613067	-0.8890396031	0.3740
MDRG_402	OTHER RESP SYSTEM O.R. PROCEDURES	1	-1.234409968	0.3559344172	-3.4680826251	0.0005
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	1.0538879937	0.2955460817	3.5659007479	0.0004
MDRG_505	OTHER CARDIOTHORACIC PROCEDURES	1	1.2312244129	0.3377126412	3.6457753206	0.0003
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-0.8198269128	0.4455538553	-1.8400175492	0.0658
MDRG_512	AICD PROCEDURES	1	0.8691660365	1.0002936337	0.8689108949	0.3849
MDRG_517	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	1	0.5971757324	0.7140386693	0.8363352827	0.4030
MDRG_519	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	1	0.8054856143	0.2789384435	2.8876823290	0.0039
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL PROC	1	0.9726234094	0.0753569563	12.9068828804	<.0001
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	1.3240232530	0.0508014957	26.0626825035	<.0001
MDRG_611	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES	1	-0.6623845306	0.2016910666	-3.2841540378	0.0010
MDRG_701	PANCREAS, LIVER & SHUNT PROCEDURES	1	0.6720677722	0.1195684228	5.6207797731	<.0001
MDRG_702	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E.	1	2.6858653494	0.1184007728	22.6845254939	<.0001
MDRG_704	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E.	1	1.5357906860	0.1401417057	10.9588411128	<.0001
MDRG_706	HEPATOBIILIARY DIAGNOSTIC	1	1.0470904491	0.2066750085	5.0663621917	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	PROCEDURES					
MDRG_707	OTHER HEPATOBILIARY OR PANCREAS O.R. PROCEDURES	1	1.2195634029	0.2267385597	5.3787207805	<.0001
MDRG_801	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	1	-0.6863555285	0.1574982171	-4.3578622101	<.0001
MDRG_803	SPINAL FUSION EXCEPT CERVICAL	1	-1.022013359	0.1844939354	-5.5395498872	<.0001
MDRG_808	CERVICAL SPINAL FUSION	1	-0.9635080900	0.5827408235	-1.6534075717	0.0982
MDRG_809	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS	1	0.5480384599	0.5758385935	0.9517223508	0.3412
MDRG_810	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	1	-2.079997394	1.0022624022	-2.0753022254	0.0380
MDRG_811	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT	1	-1.966627584	0.7089729533	-2.7739105908	0.0055
MDRG_813	KNEE PROCEDURES W PDX OF INFECTION	1	0.4872598945	1.0035872880	0.4855182009	0.6273
MDRG_815	BACK & NECK PROC EXC SPINAL FUSION OR DISC DEVICE/NEUROSTIM	1	-1.868144504	0.5018223086	-3.7227211141	0.0002
MDRG_826	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC	1	-0.3697490403	0.2681361148	-1.3789602364	0.1679
MDRG_903	OTHER SKIN, SUBCUT TISS & BREAST PROC	1	-0.9932719441	0.5019913608	-1.9786634227	0.0479
MDRG_1003	O.R. PROCEDURES FOR OBESITY	1	-0.7643229598	0.1726019623	-4.4282402679	<.0001
MDRG_1102	MAJOR BLADDER PROCEDURES	1	1.0024949907	0.1441792594	6.9531151348	<.0001
MDRG_1103	KIDNEY & URETER PROCEDURES FOR NEOPLASM	1	0.8412387164	0.1268277763	6.6329217511	<.0001
MDRG_1104	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM	1	-0.8315077499	0.1231441480	-6.7523123379	<.0001
MDRG_1105	MINOR BLADDER PROCEDURES	1	0.7020918920	0.3564024756	1.9699411203	0.0488
MDRG_1109	OTHER KIDNEY & URINARY TRACT PROCEDURES	1	-0.7933513653	0.2683589577	-2.9563066278	0.0031

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_1301	PELVIC EVISCERATION, RAD HYSTERECTOMY & RAD VULVECTOMY	1	0.3863072224	0.3389053630	1.1398675401	0.2543
MDRG_1303	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG	1	0.3886358289	0.1848662767	2.1022537801	0.0355
MDRG_1304	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY	1	0.3047551459	0.0953135427	3.1973960591	0.0014
MDRG_1306	VAGINA, CERVIX & VULVA PROCEDURES	1	0.5760804624	0.3787446224	1.5210261173	0.1283
MDRG_1605	COAGULATION DISORDERS	1	1.5868338305	0.5048986660	3.1428758625	0.0017
MDRG_1707	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE	1	1.0630586450	0.2772757345	3.8339404158	0.0001
MDRG_1708	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC	1	-1.063610609	0.4962302693	-2.1433811580	0.0321
MDRG_1709	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC	1	0.8166851457	0.2272073335	3.5944488809	0.0003
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	0.2842539999	0.0679132381	4.1855462643	<.0001
MDRG_2102	SKIN GRAFTS FOR INJURIES	1	0.5672171876	0.9917632717	0.5719280032	0.5674
MDRG_2104	OTHER O.R. PROCEDURES FOR INJURIES	1	0.5406767848	0.1625625762	3.3259609777	0.0009
MDRG_2406	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	1	-0.3224820161	1.0010592328	-0.3221407940	0.7473
MDRG_2408	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA	1	0.4914509722	0.1724012024	2.8506238080	0.0044
MDRG_7703	LUNG TRANSPLANT	1	0.4778084035	0.9802331543	0.4874436264	0.6259
TRANSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.2975338723	0.0601600691	4.9457036370	<.0001
HPPS15_3	1 major ther PR/no diag PR	1	-1.498769362	0.0719475575	-20.8314140692	<.0001
HPPS15_4	1 major ther PR/minor diag PR	1	-0.9784870236	0.0942408132	-10.3828372271	<.0001
HPPS15_5	1 major ther PR/major diag PR	1	-0.9947084324	0.1215074931	-8.1863958116	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
HPPS15_6	2 major therapeutic PR	1	-0.7660876968	0.0623334483	-12.2901542957	<.0001
HPPS15_7	3+ major therapeutic PR	1	-0.0773592293	0.0553960479	-1.3964756014	0.1626
MEDICDR	Medical DRGs flag	1	-2.932801409	0.0811979708	-36.1191465728	<.0001

c-statistic=0.835

Composite Weights for PSI 90

To utilize the composite measure, users must use these “Component Weights” when using the AHRQ QI software to compute the composite measure using their own data. Table 19 provides the NQF weights for this composite measure. These component weights are included in the PSI_HOSP_Composite_Wt_v2022.sas macro. The sum of the weights for the indicators included in the same composite always equals one.

Table 19. Composite Weights for PSI 90, v2022

Indicator	Harm Weight	Volume Weight	Component Weight
PSI 3 Pressure Ulcer Rate	0.3080	0.1068	0.1669
PSI 6 Iatrogenic Pneumothorax Rate	0.1381	0.0435	0.0305
PSI 8 In Hospital Fall With Hip Fracture Rate	0.1440	0.0199	0.0145
PSI 9 Perioperative Hemorrhage or Hematoma Rate	0.0570	0.1499	0.0434
PSI 10 Postoperative Acute Kidney Injury Requiring Dialysis Rate	0.3584	0.0314	0.0572
PSI 11 Postoperative Respiratory Failure Rate	0.2219	0.2129	0.2397
PSI 12 Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate	0.1557	0.2288	0.1808
PSI 13 Postoperative Sepsis Rate	0.3102	0.1367	0.2151
PSI 14 Postoperative Wound Dehiscence Rate	0.1441	0.0238	0.0174
PSI 15 Abdominopelvic Accidental Puncture or Laceration Rate	0.1474	0.0461	0.0345

Source: Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project, State Inpatient Databases (SID), 2019. 2012-2013 Medicare Fee-for-Service claims data.

Appendix Tables

Table A.1. Population Age Categories

POPCAT	Age Range
Age_LT30	< 30
Age_30_34	30 - 34
Age_35_39	35 - 39
Age_40_44	40 - 44
Age_45_49	45 - 49
Age_50_54	50 - 54
Age_55_59	55 - 59
Age_60_64	60 - 64
Age_65_69	65 - 69
Age_70_74	70 - 74
Age_75_79	75 - 79
Age_80_84	80 - 84
Age_85_89	85 - 89
Age_90Plus	90 plus

Table A.2. Modified Diagnosis-Related Group (MDRG) Categories

The modified DRG (MDRG) pools individual CMS-DRGs and MS-DRGs into a larger category. The MDRG is a four digit code. The first two digits are the Major Diagnostic Category (MDC), and the second two digits are a sequence number (e.g., 01-04) within MDC. MS-DRGs that are divided into separate MS-DRGs due to the presence of CC and Major CC (MCC) are pooled into a single MDRG. The CMS crosswalk was used to pool MS-DRGs into a single MDRG.

Column headers are abbreviated as follows:

- M/S – Medical / Surgical DRG Indicator (MEDICDR* / SURGIDR*)
- MDRG – Modified DRG
- MS-DRG – Diagnosis-Related Group (DRG) Version 38.1

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	7701	1	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM WITH MCC
S	7701	2	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM WITHOUT MCC
S	7799	3	ECMO OR TRACHEOSTOMY WITH MV >96 HOURS OR PDX EXCEPT FACE MOUTH AND NECK WITH MAJOR O.R. PROCEDURE
S	7799	4	TRACHEOSTOMY WITH MV >96 HOURS OR PDX EXCEPT FACE MOUTH AND NECK WITHOUT MAJOR O.R. PROCEDURE
S	7702	5	LIVER TRANSPLANT WITH MCC OR INTESTINAL TRANSPLANT
S	7702	6	LIVER TRANSPLANT WITHOUT MCC
S	7703	7	LUNG TRANSPLANT
S	7704	8	SIMULTANEOUS PANCREAS AND KIDNEY TRANSPLANT
S	7706	10	PANCREAS TRANSPLANT
S	7799	11	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES OR LARYNGECTOMY W MCC
S	7799	12	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES OR LARYNGECTOMY W CC
S	7799	13	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES OR LARYNGECTOMY W/O CC/MCC
M	7705	14	ALLOGENEIC BONE MARROW TRANSPLANT
M	7705	16	AUTOLOGOUS BONE MARROW TRANSPLANT WITH CC/MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	7705	17	AUTOLOGOUS BONE MARROW TRANSPLANT WITHOUT CC/MCC
M	7707	18	CHIMERIC ANTIGEN RECEPTOR (CAR) T-CELL AND OTHER IMMUNOTHERAPIES
S	7704	19	SIMULTANEOUS PANCREAS AND KIDNEY TRANSPLANT WITH HEMODIALYSIS
S	101	20	INTRACRANIAL VASCULAR PROCEDURES WITH PDX HEMORRHAGE WITH MCC
S	101	21	INTRACRANIAL VASCULAR PROCEDURES WITH PDX HEMORRHAGE WITH CC
S	101	22	INTRACRANIAL VASCULAR PROCEDURES WITH PDX HEMORRHAGE WITHOUT CC/MCC
S	102	23	CRANIOTOMY W MAJOR DEVICE IMPLANT OR ACUTE COMPLEX CNS PDX W MCC OR CHEMOTHERAPY IMPLANT OR EPILEPSY W NEUROSTIMULATOR
S	102	24	CRANIOTOMY WITH MAJOR DEVICE IMPLANT OR ACUTE COMPLEX CNS PDX WITHOUT MCC
S	103	25	CRANIOTOMY AND ENDOVASCULAR INTRACRANIAL PROCEDURES WITH MCC
S	103	26	CRANIOTOMY AND ENDOVASCULAR INTRACRANIAL PROCEDURES WITH CC
S	103	27	CRANIOTOMY AND ENDOVASCULAR INTRACRANIAL PROCEDURES WITHOUT CC/MCC
S	104	28	SPINAL PROCEDURES WITH MCC
S	104	29	SPINAL PROCEDURES WITH CC OR SPINAL NEUROSTIMULATORS
S	104	30	SPINAL PROCEDURES WITHOUT CC/MCC
S	105	31	VENTRICULAR SHUNT PROCEDURES WITH MCC
S	105	32	VENTRICULAR SHUNT PROCEDURES WITH CC
S	105	33	VENTRICULAR SHUNT PROCEDURES WITHOUT CC/MCC
S	106	34	CAROTID ARTERY STENT PROCEDURE WITH MCC
S	106	35	CAROTID ARTERY STENT PROCEDURE WITH CC
S	106	36	CAROTID ARTERY STENT PROCEDURE WITHOUT CC/MCC
S	107	37	EXTRACRANIAL PROCEDURES WITH MCC
S	107	38	EXTRACRANIAL PROCEDURES WITH CC
S	107	39	EXTRACRANIAL PROCEDURES WITHOUT CC/MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	108	40	PERIPHERAL CRANIAL NERVE AND OTHER NERVOUS SYSTEM PROCEDURES WITH MCC
S	108	41	PERIPHERAL CRANIAL NERVE AND OTHER NERVOUS SYSTEM PROCEDURES WITH CC OR PERIPHERAL NEUROSTIMULATOR
S	108	42	PERIPHERAL CRANIAL NERVE AND OTHER NERVOUS SYSTEM PROCEDURES WITHOUT CC/MCC
M	109	52	SPINAL DISORDERS AND INJURIES WITH CC/MCC
M	109	53	SPINAL DISORDERS AND INJURIES WITHOUT CC/MCC
M	110	54	NERVOUS SYSTEM NEOPLASMS WITH MCC
M	110	55	NERVOUS SYSTEM NEOPLASMS WITHOUT MCC
M	111	56	DEGENERATIVE NERVOUS SYSTEM DISORDERS WITH MCC
M	111	57	DEGENERATIVE NERVOUS SYSTEM DISORDERS WITHOUT MCC
M	112	58	MULTIPLE SCLEROSIS AND CEREBELLAR ATAXIA WITH MCC
M	112	59	MULTIPLE SCLEROSIS AND CEREBELLAR ATAXIA WITH CC
M	112	60	MULTIPLE SCLEROSIS AND CEREBELLAR ATAXIA WITHOUT CC/MCC
M	113	61	ISCHEMIC STROKE, PRECEREBRAL OCCLUSION OR TRANSIENT ISCHEMIA WITH THROMBOLYTIC AGENT WITH MCC
M	113	62	ISCHEMIC STROKE, PRECEREBRAL OCCLUSION OR TRANSIENT ISCHEMIA WITH THROMBOLYTIC AGENT WITH CC
M	113	63	ISCHEMIC STROKE, PRECEREBRAL OCCLUSION OR TRANSIENT ISCHEMIA WITH THROMBOLYTIC AGENT WITHOUT CC/MCC
M	114	64	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION WITH MCC
M	114	65	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION WITH CC OR TPA IN 24 HOURS
M	114	66	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION WITHOUT CC/MCC
M	115	67	NONSPECIFIC CVA AND PRECEREBRAL OCCLUSION WITHOUT INFARCTION WITH MCC
M	115	68	NONSPECIFIC CVA AND PRECEREBRAL OCCLUSION WITHOUT INFARCTION WITHOUT MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	116	69	TRANSIENT ISCHEMIA W/O THROMBOLYTIC
M	117	70	NONSPECIFIC CEREBROVASCULAR DISORDERS WITH MCC
M	117	71	NONSPECIFIC CEREBROVASCULAR DISORDERS WITH CC
M	117	72	NONSPECIFIC CEREBROVASCULAR DISORDERS WITHOUT CC/MCC
M	118	73	CRANIAL AND PERIPHERAL NERVE DISORDERS WITH MCC
M	118	74	CRANIAL AND PERIPHERAL NERVE DISORDERS WITHOUT MCC
M	119	75	VIRAL MENINGITIS WITH CC/MCC
M	119	76	VIRAL MENINGITIS WITHOUT CC/MCC
M	120	77	HYPERTENSIVE ENCEPHALOPATHY WITH MCC
M	120	78	HYPERTENSIVE ENCEPHALOPATHY WITH CC
M	120	79	HYPERTENSIVE ENCEPHALOPATHY WITHOUT CC/MCC
M	121	80	NONTRAUMATIC STUPOR AND COMA WITH MCC
M	121	81	NONTRAUMATIC STUPOR AND COMA WITHOUT MCC
M	122	82	TRAUMATIC STUPOR AND COMA COMA >1 HOUR WITH MCC
M	122	83	TRAUMATIC STUPOR AND COMA COMA >1 HOUR WITH CC
M	122	84	TRAUMATIC STUPOR AND COMA COMA >1 HOUR WITHOUT CC/MCC
M	123	85	TRAUMATIC STUPOR AND COMA COMA <1 HOUR WITH MCC
M	123	86	TRAUMATIC STUPOR AND COMA COMA <1 HOUR WITH CC
M	123	87	TRAUMATIC STUPOR AND COMA COMA <1 HOUR WITHOUT CC/MCC
M	124	88	CONCUSSION WITH MCC
M	124	89	CONCUSSION WITH CC
M	124	90	CONCUSSION WITHOUT CC/MCC
M	125	91	OTHER DISORDERS OF NERVOUS SYSTEM WITH MCC
M	125	92	OTHER DISORDERS OF NERVOUS SYSTEM WITH CC
M	125	93	OTHER DISORDERS OF NERVOUS SYSTEM WITHOUT CC/MCC
M	126	94	BACTERIAL AND TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM WITH MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	126	95	BACTERIAL AND TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM WITH CC
M	126	96	BACTERIAL AND TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM WITHOUT CC/MCC
M	127	97	NON-BACTERIAL INFECTION OF NERVOUS SYSTEM EXCEPT VIRAL MENINGITIS WITH MCC
M	127	98	NON-BACTERIAL INFECTION OF NERVOUS SYSTEM EXCEPT VIRAL MENINGITIS WITH CC
M	127	99	NON-BACTERIAL INFECTION OF NERVOUS SYSTEM EXCEPT VIRAL MENINGITIS WITHOUT CC/MCC
M	128	100	SEIZURES WITH MCC
M	128	101	SEIZURES WITHOUT MCC
M	129	102	HEADACHES WITH MCC
M	129	103	HEADACHES WITHOUT MCC
S	201	113	ORBITAL PROCEDURES WITH CC/MCC
S	201	114	ORBITAL PROCEDURES WITHOUT CC/MCC
S	202	115	EXTRAOCULAR PROCEDURES EXCEPT ORBIT
S	203	116	INTRAOCULAR PROCEDURES WITH CC/MCC
S	203	117	INTRAOCULAR PROCEDURES WITHOUT CC/MCC
M	204	121	ACUTE MAJOR EYE INFECTIONS WITH CC/MCC
M	204	122	ACUTE MAJOR EYE INFECTIONS WITHOUT CC/MCC
M	205	123	NEUROLOGICAL EYE DISORDERS
M	206	124	OTHER DISORDERS OF THE EYE WITH MCC
M	206	125	OTHER DISORDERS OF THE EYE WITHOUT MCC
S	301	129	MAJOR HEAD AND NECK PROCEDURES WITH CC/MCC OR MAJOR DEVICE
S	301	130	MAJOR HEAD AND NECK PROCEDURES WITHOUT CC/MCC
S	301	131	CRANIAL AND FACIAL PROCEDURES WITH CC/MCC
S	301	132	CRANIAL AND FACIAL PROCEDURES WITHOUT CC/MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	302	133	OTHER EAR NOSE MOUTH AND THROAT O.R. PROCEDURES WITH CC/MCC
S	302	134	OTHER EAR NOSE MOUTH AND THROAT O.R. PROCEDURES WITHOUT CC/MCC
S	303	135	SINUS AND MASTOID PROCEDURES WITH CC/MCC
S	303	136	SINUS AND MASTOID PROCEDURES WITHOUT CC/MCC
S	304	137	MOUTH PROCEDURES WITH CC/MCC
S	304	138	MOUTH PROCEDURES WITHOUT CC/MCC
S	305	139	SALIVARY GLAND PROCEDURES
S	301	140	MAJOR HEAD AND NECK PROCEDURES WITH MCC
S	301	141	MAJOR HEAD AND NECK PROCEDURES WITH CC
S	301	142	MAJOR HEAD AND NECK PROCEDURES WITHOUT CC/MCC
S	302	143	OTHER EAR, NOSE, MOUTH AND THROAT O.R. PROCEDURES WITH MCC
S	302	144	OTHER EAR, NOSE, MOUTH AND THROAT O.R. PROCEDURES WITH CC
S	302	145	OTHER EAR, NOSE, MOUTH AND THROAT O.R. PROCEDURES WITHOUT CC/MCC
M	306	146	EAR NOSE MOUTH AND THROAT MALIGNANCY WITH MCC
M	306	147	EAR NOSE MOUTH AND THROAT MALIGNANCY WITH CC
M	306	148	EAR NOSE MOUTH AND THROAT MALIGNANCY WITHOUT CC/MCC
M	307	149	DYSEQUILIBRIUM
M	308	150	EPISTAXIS WITH MCC
M	308	151	EPISTAXIS WITHOUT MCC
M	309	152	OTITIS MEDIA AND URI WITH MCC
M	309	153	OTITIS MEDIA AND URI WITHOUT MCC
M	310	154	OTHER EAR NOSE MOUTH AND THROAT DIAGNOSES WITH MCC
M	310	155	OTHER EAR NOSE MOUTH AND THROAT DIAGNOSES WITH CC
M	310	156	OTHER EAR NOSE MOUTH AND THROAT DIAGNOSES WITHOUT CC/MCC
M	311	157	DENTAL AND ORAL DISEASES WITH MCC
M	311	158	DENTAL AND ORAL DISEASES WITH CC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	311	159	DENTAL AND ORAL DISEASES WITHOUT CC/MCC
S	401	163	MAJOR CHEST PROCEDURES WITH MCC
S	401	164	MAJOR CHEST PROCEDURES WITH CC
S	401	165	MAJOR CHEST PROCEDURES WITHOUT CC/MCC
S	402	166	OTHER RESPIRATORY SYSTEM O.R. PROCEDURES WITH MCC
S	402	167	OTHER RESPIRATORY SYSTEM O.R. PROCEDURES WITH CC
S	402	168	OTHER RESPIRATORY SYSTEM O.R. PROCEDURES WITHOUT CC/MCC
M	403	175	PULMONARY EMBOLISM W MCC OR ACUTE COR PULMONALE
M	403	176	PULMONARY EMBOLISM WITHOUT MCC
M	404	177	RESPIRATORY INFECTIONS AND INFLAMMATIONS WITH MCC
M	404	178	RESPIRATORY INFECTIONS AND INFLAMMATIONS WITH CC
M	404	179	RESPIRATORY INFECTIONS AND INFLAMMATIONS WITHOUT CC/MCC
M	405	180	RESPIRATORY NEOPLASMS WITH MCC
M	405	181	RESPIRATORY NEOPLASMS WITH CC
M	405	182	RESPIRATORY NEOPLASMS WITHOUT CC/MCC
M	406	183	MAJOR CHEST TRAUMA WITH MCC
M	406	184	MAJOR CHEST TRAUMA WITH CC
M	406	185	MAJOR CHEST TRAUMA WITHOUT CC/MCC
M	407	186	PLEURAL EFFUSION WITH MCC
M	407	187	PLEURAL EFFUSION WITH CC
M	407	188	PLEURAL EFFUSION WITHOUT CC/MCC
M	408	189	PULMONARY EDEMA AND RESPIRATORY FAILURE
M	409	190	CHRONIC OBSTRUCTIVE PULMONARY DISEASE WITH MCC
M	409	191	CHRONIC OBSTRUCTIVE PULMONARY DISEASE WITH CC
M	409	192	CHRONIC OBSTRUCTIVE PULMONARY DISEASE WITHOUT CC/MCC
M	410	193	SIMPLE PNEUMONIA AND PLEURISY WITH MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	410	194	SIMPLE PNEUMONIA AND PLEURISY WITH CC
M	410	195	SIMPLE PNEUMONIA AND PLEURISY WITHOUT CC/MCC
M	411	196	INTERSTITIAL LUNG DISEASE WITH MCC
M	411	197	INTERSTITIAL LUNG DISEASE WITH CC
M	411	198	INTERSTITIAL LUNG DISEASE WITHOUT CC/MCC
M	412	199	PNEUMOTHORAX WITH MCC
M	412	200	PNEUMOTHORAX WITH CC
M	412	201	PNEUMOTHORAX WITHOUT CC/MCC
M	413	202	BRONCHITIS AND ASTHMA WITH CC/MCC
M	413	203	BRONCHITIS AND ASTHMA WITHOUT CC/MCC
M	414	204	RESPIRATORY SIGNS AND SYMPTOMS
M	415	205	OTHER RESPIRATORY SYSTEM DIAGNOSES WITH MCC
M	415	206	OTHER RESPIRATORY SYSTEM DIAGNOSES WITHOUT MCC
M	416	207	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT >96 HOURS OR PERIPHERAL EXTRACORPOREAL MEMBRANE OXYGENATION (ECMO)
M	416	208	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT <=96 HOURS
S	501	215	OTHER HEART ASSIST SYSTEM IMPLANT
S	503	216	CARDIAC VALVE AND OTHER MAJOR CARDIOTHORACIC PROCEDURES WITH CARDIAC CATHETERIZATION WITH MCC
S	503	217	CARDIAC VALVE AND OTHER MAJOR CARDIOTHORACIC PROCEDURES WITH CARDIAC CATHETERIZATION WITH CC
S	503	218	CARDIAC VALVE AND OTHER MAJOR CARDIOTHORACIC PROCEDURES WITH CARDIAC CATHETERIZATION WITHOUT CC/MCC
S	503	219	CARDIAC VALVE AND OTHER MAJOR CARDIOTHORACIC PROCEDURES WITHOUT CARDIAC CATHETERIZATION WITH MCC
S	503	220	CARDIAC VALVE AND OTHER MAJOR CARDIOTHORACIC PROCEDURES WITHOUT CARDIAC CATHETERIZATION WITH CC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	503	221	CARDIAC VALVE AND OTHER MAJOR CARDIOTHORACIC PROCEDURES WITHOUT CARDIAC CATHETERIZATION WITHOUT CC/MC
S	537	222	CARDIAC DEFIBRILLATOR IMPLANT WITH CARDIAC CATHETERIZATION WITH AMI/HF/SHOCK WITH MCC
S	537	223	CARDIAC DEFIBRILLATOR IMPLANT WITH CARDIAC CATHETERIZATION WITH AMI/HF/SHOCK WITHOUT MCC
S	538	224	CARDIAC DEFIBRILLATOR IMPLANT WITH CARDIAC CATHETERIZATION WITHOUT AMI/HF/SHOCK WITH MCC
S	538	225	CARDIAC DEFIBRILLATOR IMPLANT WITH CARDIAC CATHETERIZATION WITHOUT AMI/HF/SHOCK WITHOUT MCC
S	539	226	CARDIAC DEFIBRILLATOR IMPLANT WITHOUT CARDIAC CATHETERATION WITH MCC
S	539	227	CARDIAC DEFIBRILLATOR IMPLANT WITHOUT CARDIAC CATHETERIZATION WITHOUT MCC
S	505	228	OTHER CARDIOTHORACIC PROCEDURES WITH MCC
S	505	229	OTHER CARDIOTHORACIC PROCEDURES WITHOUT MCC
S	505	230	OTHER CARDIOTHORACIC PROCEDURES WITHOUT CC/MCC
S	506	231	CORONARY BYPASS WITH PTCA WITH MCC
S	506	232	CORONARY BYPASS WITH PTCA WITHOUT MCC
S	507	233	CORONARY BYPASS WITH CARDIAC CATHETERIZATION OR OPEN ABLATION WITH MCC
S	507	234	CORONARY BYPASS WITH CARDIAC CATHETERIZATION OR OPEN ABLATION WITHOUT MCC
S	508	235	CORONARY BYPASS WITHOUT CARDIAC CATHETERIZATION WITH MCC
S	508	236	CORONARY BYPASS WITHOUT CARDIAC CATHETERIZATION WITHOUT MCC
S	509	239	AMPUTATION FOR CIRCULATORY SYSTEM DISORDERS EXCEPT UPPER LIMB AND TOE WITH MCC
S	509	240	AMPUTATION FOR CIRCULATORY SYSTEM DISORDERS EXCEPT UPPER LIMB AND TOE WITH CC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	509	241	AMPUTATION FOR CIRCULATORY SYSTEM DISORDERS EXCEPT UPPER LIMB AND TOE WITHOUT CC/MCC
S	510	242	PERMANENT CARDIAC PACEMAKER IMPLANT WITH MCC
S	510	243	PERMANENT CARDIAC PACEMAKER IMPLANT WITH CC
S	510	244	PERMANENT CARDIAC PACEMAKER IMPLANT WITHOUT CC/MCC
S	512	245	AICD GENERATOR PROCEDURES
S	511	246	PERCUTANEOUS CARDIOVASCULAR PROCEDURES W DRUG-ELUTING STENT W MCC OR 4+ ARTERIES OR STENTS
S	511	247	PERCUTANEOUS CARDIOVASCULAR PROCEDURES WITH DRUG-ELUTING STENT WITHOUT MCC
S	502	248	PERCUTANEOUS CARDIOVASCULAR PROCEDURES W NON-DRUG-ELUTING STENT W MCC OR 4+ ARTERIES OR STENTS
S	502	249	PERCUTANEOUS CARDIOVASCULAR PROCEDURES WITH NON-DRUG-ELUTING STENT WITHOUT MCC
S	513	250	PERCUTANEOUS CARDIOVASCULAR PROCEDURES WITHOUT CORONARY ARTERY STENT WITH MCC
S	513	251	PERCUTANEOUS CARDIOVASCULAR PROCEDURES WITHOUT CORONARY ARTERY STENT WITHOUT MCC
S	514	252	OTHER VASCULAR PROCEDURES WITH MCC
S	514	253	OTHER VASCULAR PROCEDURES WITH CC
S	514	254	OTHER VASCULAR PROCEDURES WITHOUT CC/MCC
S	515	255	UPPER LIMB AND TOE AMPUTATION FOR CIRCULATORY SYSTEM DISORDERS WITH MCC
S	515	256	UPPER LIMB AND TOE AMPUTATION FOR CIRCULATORY SYSTEM DISORDERS WITH CC
S	515	257	UPPER LIMB AND TOE AMPUTATION FOR CIRCULATORY SYSTEM DISORDERS WITHOUT CC/MCC
S	516	258	CARDIAC PACEMAKER DEVICE REPLACEMENT WITH MCC
S	516	259	CARDIAC PACEMAKER DEVICE REPLACEMENT WITHOUT MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	517	260	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT WITH MCC
S	517	261	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT WITH CC
S	517	262	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT WITHOUT CC/MCC
S	518	263	VEIN LIGATION AND STRIPPING
S	519	264	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES
S	512	265	AICD LEAD PROCEDURES
S	540	266	ENDOVASCULAR CARDIAC VALVE REPLACEMENT & SUPPLEMENT PROCEDURES W MCC
S	540	267	ENDOVASCULAR CARDIAC VALVE REPLACEMENT & SUPPLEMENT PROCEDURES W/O MCC
S	541	268	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON W MCC
S	541	269	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON W/O MCC
S	542	270	OTHER MAJOR CARDIOVASCULAR PROCEDURES W MCC
S	542	271	OTHER MAJOR CARDIOVASCULAR PROCEDURES W CC
S	542	272	OTHER MAJOR CARDIOVASCULAR PROCEDURES W/O CC/MCC
S	543	273	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES WITH MCC
S	543	274	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES WITHOUT MCC
M	520	280	ACUTE MYOCARDIAL INFARCTION DISCHARGED ALIVE WITH MCC
M	520	281	ACUTE MYOCARDIAL INFARCTION DISCHARGED ALIVE WITH CC
M	520	282	ACUTE MYOCARDIAL INFARCTION DISCHARGED ALIVE WITHOUT CC/MCC
M	520	283	ACUTE MYOCARDIAL INFARCTION EXPIRED WITH MCC
M	520	284	ACUTE MYOCARDIAL INFARCTION EXPIRED WITH CC
M	520	285	ACUTE MYOCARDIAL INFARCTION EXPIRED WITHOUT CC/MCC
M	522	286	CIRCULATORY DISORDERS EXCEPT AMI WITH CARDIAC CATETERIZATION WITH MCC
M	522	287	CIRCULATORY DISORDERS EXCEPT AMI WITH CARDIAC CATETERIZATION WITHOUT MCC
M	523	288	ACUTE AND SUBACUTE ENDOCARDITIS WITH MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	523	289	ACUTE AND SUBACUTE ENDOCARDITIS WITH CC
M	523	290	ACUTE AND SUBACUTE ENDOCARDITIS WITHOUT CC/MCC
M	524	291	HEART FAILURE & SHOCK W MCC
M	524	292	HEART FAILURE AND SHOCK WITH CC
M	524	293	HEART FAILURE AND SHOCK WITHOUT CC/MCC
M	525	294	DEEP VEIN THROMBOPHLEBITIS WITH CC/MCC
M	525	295	DEEP VEIN THROMBOPHLEBITIS WITHOUT CC/MCC
M	526	296	CARDIAC ARREST, UNEXPLAINED W MCC
M	526	297	CARDIAC ARREST UNEXPLAINED WITH CC
M	526	298	CARDIAC ARREST UNEXPLAINED WITHOUT CC/MCC
M	527	299	PERIPHERAL VASCULAR DISORDERS WITH MCC
M	527	300	PERIPHERAL VASCULAR DISORDERS WITH CC
M	527	301	PERIPHERAL VASCULAR DISORDERS WITHOUT CC/MCC
M	528	302	ATHEROSCLEROSIS WITH MCC
M	528	303	ATHEROSCLEROSIS WITHOUT MCC
M	529	304	HYPERTENSION WITH MCC
M	529	305	HYPERTENSION WITHOUT MCC
M	530	306	CARDIAC CONGENITAL AND VALVULAR DISORDERS WITH MCC
M	530	307	CARDIAC CONGENITAL AND VALVULAR DISORDERS WITHOUT MCC
M	531	308	CARDIAC ARRHYTHMIA AND CONDUCTION DISORDERS WITH MCC
M	531	309	CARDIAC ARRHYTHMIA AND CONDUCTION DISORDERS WITH CC
M	531	310	CARDIAC ARRHYTHMIA AND CONDUCTION DISORDERS WITHOUT CC/MCC
M	532	311	ANGINA PECTORIS
M	533	312	SYNCOPE AND COLLAPSE
M	534	313	CHEST PAIN
M	535	314	OTHER CIRCULATORY SYSTEM DIAGNOSES WITH MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	535	315	OTHER CIRCULATORY SYSTEM DIAGNOSES WITH CC
M	535	316	OTHER CIRCULATORY SYSTEM DIAGNOSES WITHOUT CC/MCC
S	536	319	OTHER ENDOVASCULAR CARDIAC VALVE PROCEDURES W MCC
S	536	320	OTHER ENDOVASCULAR CARDIAC VALVE PROCEDURES W/O MCC
S	601	326	STOMACH ESOPHAGEAL AND DUODENAL PROCEDURES WITH MCC
S	601	327	STOMACH ESOPHAGEAL AND DUODENAL PROCEDURES WITH CC
S	601	328	STOMACH ESOPHAGEAL AND DUODENAL PROCEDURES WITHOUT CC/MCC
S	602	329	MAJOR SMALL AND LARGE BOWEL PROCEDURES WITH MCC
S	602	330	MAJOR SMALL AND LARGE BOWEL PROCEDURES WITH CC
S	602	331	MAJOR SMALL AND LARGE BOWEL PROCEDURES WITHOUT CC/MCC
S	603	332	RECTAL RESECTION WITH MCC
S	603	333	RECTAL RESECTION WITH CC
S	603	334	RECTAL RESECTION WITHOUT CC/MCC
S	604	335	PERITONEAL ADHESIOLYSIS WITH MCC
S	604	336	PERITONEAL ADHESIOLYSIS WITH CC
S	604	337	PERITONEAL ADHESIOLYSIS WITHOUT CC/MCC
S	605	338	APPENDECTOMY WITH COMPLICATED PRINCIPAL DIAGNOSIS WITH MCC
S	605	339	APPENDECTOMY WITH COMPLICATED PRINCIPAL DIAGNOSIS WITH CC
S	605	340	APPENDECTOMY WITH COMPLICATED PRINCIPAL DIAGNOSIS WITHOUT CC/MCC
S	606	341	APPENDECTOMY WITHOUT COMPLICATED PRINCIPAL DIAGNOSIS WITH MCC
S	606	342	APPENDECTOMY WITHOUT COMPLICATED PRINCIPAL DIAGNOSIS WITH CC
S	606	343	APPENDECTOMY WITHOUT COMPLICATED PRINCIPAL DIAGNOSIS WITHOUT CC/MCC
S	607	344	MINOR SMALL AND LARGE BOWEL PROCEDURES WITH MCC
S	607	345	MINOR SMALL AND LARGE BOWEL PROCEDURES WITH CC
S	607	346	MINOR SMALL AND LARGE BOWEL PROCEDURES WITHOUT CC/MCC
S	608	347	ANAL AND STOMAL PROCEDURES WITH MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	608	348	ANAL AND STOMAL PROCEDURES WITH CC
S	608	349	ANAL AND STOMAL PROCEDURES WITHOUT CC/MCC
S	609	350	INGUINAL AND FEMORAL HERNIA PROCEDURES WITH MCC
S	609	351	INGUINAL AND FEMORAL HERNIA PROCEDURES WITH CC
S	609	352	INGUINAL AND FEMORAL HERNIA PROCEDURES WITHOUT CC/MCC
S	610	353	HERNIA PROCEDURES EXCEPT INGUINAL AND FEMORAL WITH MCC
S	610	354	HERNIA PROCEDURES EXCEPT INGUINAL AND FEMORAL WITH CC
S	610	355	HERNIA PROCEDURES EXCEPT INGUINAL AND FEMORAL WITHOUT CC/MCC
S	611	356	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES WITH MCC
S	611	357	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES WITH CC
S	611	358	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES WITHOUT CC/MCC
M	612	368	MAJOR ESOPHAGEAL DISORDERS WITH MCC
M	612	369	MAJOR ESOPHAGEAL DISORDERS WITH CC
M	612	370	MAJOR ESOPHAGEAL DISORDERS WITHOUT CC/MCC
M	613	371	MAJOR GASTROINTESTINAL DISORDERS AND PERITONEAL INFECTIONS WITH MCC
M	613	372	MAJOR GASTROINTESTINAL DISORDERS AND PERITONEAL INFECTIONS WITH CC
M	613	373	MAJOR GASTROINTESTINAL DISORDERS AND PERITONEAL INFECTIONS WITHOUT CC/MCC
M	614	374	DIGESTIVE MALIGNANCY WITH MCC
M	614	375	DIGESTIVE MALIGNANCY WITH CC
M	614	376	DIGESTIVE MALIGNANCY WITHOUT CC/MCC
M	615	377	G.I. HEMORRHAGE WITH MCC
M	615	378	G.I. HEMORRHAGE WITH CC
M	615	379	G.I. HEMORRHAGE WITHOUT CC/MCC
M	616	380	COMPLICATED PEPTIC ULCER WITH MCC
M	616	381	COMPLICATED PEPTIC ULCER WITH CC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	616	382	COMPLICATED PEPTIC ULCER WITHOUT CC/MCC
M	617	383	UNCOMPLICATED PEPTIC ULCER WITH MCC
M	617	384	UNCOMPLICATED PEPTIC ULCER WITHOUT MCC
M	618	385	INFLAMMATORY BOWEL DISEASE WITH MCC
M	618	386	INFLAMMATORY BOWEL DISEASE WITH CC
M	618	387	INFLAMMATORY BOWEL DISEASE WITHOUT CC/MCC
M	619	388	G.I. OBSTRUCTION WITH MCC
M	619	389	G.I. OBSTRUCTION WITH CC
M	619	390	G.I. OBSTRUCTION WITHOUT CC/MCC
M	620	391	ESOPHAGITIS GASTROENTERITIS AND MISCELLANEOUS DIGESTIVE DISORDERS WITH MCC
M	620	392	ESOPHAGITIS GASTROENTERITIS AND MISCELLANEOUS DIGESTIVE DISORDERS WITHOUT MCC
M	621	393	OTHER DIGESTIVE SYSTEM DIAGNOSES WITH MCC
M	621	394	OTHER DIGESTIVE SYSTEM DIAGNOSES WITH CC
M	621	395	OTHER DIGESTIVE SYSTEM DIAGNOSES WITHOUT CC/MCC
S	701	405	PANCREAS LIVER AND SHUNT PROCEDURES WITH MCC
S	701	406	PANCREAS LIVER AND SHUNT PROCEDURES WITH CC
S	701	407	PANCREAS LIVER AND SHUNT PROCEDURES WITHOUT CC/MCC
S	702	408	BILIARY TRACT PROCEDURE EXCEPT ONLY CHOLECYSTECTOMY WITH OR WITHOUT C.D.E. WITH MCC
S	702	409	BILIARY TRACT PROCEDURE EXCEPT ONLY CHOLECYSTECTOMY WITH OR WITHOUT C.D.E. WITH CC
S	702	410	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST WITH OR WITHOUT C.D.E. WITHOUT CC/MCC
S	703	411	CHOLECYSTECTOMY WITH C.D.E. WITH MCC
S	703	412	CHOLECYSTECTOMY WITH C.D.E. WITH CC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	703	413	CHOLECYSTECTOMY WITH C.D.E. WITHOUT CC/MCC
S	704	414	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE WITHOUT C.D.E. WITH MCC
S	704	415	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE WITHOUT C.D.E. WITH CC
S	704	416	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE WITHOUT C.D.E. WITHOUT CC/MCC
S	705	417	LAPAROSCOPIC CHOLECYSTECTOMY WITHOUT C.D.E. WITH MCC
S	705	418	LAPAROSCOPIC CHOLECYSTECTOMY WITHOUT C.D.E. WITH CC
S	705	419	LAPAROSCOPIC CHOLECYSTECTOMY WITHOUT C.D.E. WITHOUT CC/MCC
S	706	420	HEPATOBIILIARY DIAGNOSTIC PROCEDURES WITH MCC
S	706	421	HEPATOBIILIARY DIAGNOSTIC PROCEDURES WITH CC
S	706	422	HEPATOBIILIARY DIAGNOSTIC PROCEDURES WITHOUT CC/MCC
S	707	423	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES WITH MCC
S	707	424	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES WITH CC
S	707	425	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES WITHOUT CC/MCC
M	708	432	CIRRHOSIS AND ALCOHOLIC HEPATITIS WITH MCC
M	708	433	CIRRHOSIS AND ALCOHOLIC HEPATITIS WITH CC
M	708	434	CIRRHOSIS AND ALCOHOLIC HEPATITIS WITHOUT CC/MCC
M	709	435	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS WITH MCC
M	709	436	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS WITH CC
M	709	437	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS WITHOUT CC/MCC
M	710	438	DISORDERS OF PANCREAS EXCEPT MALIGNANCY WITH MCC
M	710	439	DISORDERS OF PANCREAS EXCEPT MALIGNANCY WITH CC
M	710	440	DISORDERS OF PANCREAS EXCEPT MALIGNANCY WITHOUT CC/MCC
M	711	441	DISORDERS OF LIVER EXCEPT MALIGNANCY CIRRHOSIS OR ALCOHOLIC HEPATITIS WITH MCC
M	711	442	DISORDERS OF LIVER EXCEPT MALIGNANCY CIRRHOSIS OR ALCOHOLIC HEPATITIS WITH CC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	711	443	DISORDERS OF LIVER EXCEPT MALIGNANCY CIRRHOSIS OR ALCOHOLIC HEPATITIS WITHOUT CC/MCC
M	712	444	DISORDERS OF THE BILIARY TRACT WITH MCC
M	712	445	DISORDERS OF THE BILIARY TRACT WITH CC
M	712	446	DISORDERS OF THE BILIARY TRACT WITHOUT CC/MCC
S	801	453	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION WITH MCC
S	801	454	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION WITH CC
S	801	455	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION WITHOUT CC/MCC
S	802	456	SPINAL FUSION EXCEPT CERVICAL WITH SPINAL CURVATURE OR MALIGNANCY OR INFECTION OR EXTENSIVE FUSIONS WITH MCC
S	802	457	SPINAL FUSION EXCEPT CERVICAL WITH SPINAL CURVATURE OR MALIGNANCY OR INFECTION OR EXTENSIVE FUSIONS WITH CC
S	802	458	SPINAL FUSION EXCEPT CERVICAL WITH SPINAL CURVATURE OR MALIGNANCY OR INFECTION OR EXTENSIVE FUSIONS WITHOUT CC/MCC
S	803	459	SPINAL FUSION EXCEPT CERVICAL WITH MCC
S	803	460	SPINAL FUSION EXCEPT CERVICAL WITHOUT MCC
S	804	461	BILATERAL OR MULTIPLE MAJOR JOINT PROCEDURES OF LOWER EXTREMITY WITH MCC
S	804	462	BILATERAL OR MULTIPLE MAJOR JOINT PROCEDURES OF LOWER EXTREMITY WITHOUT MCC
S	805	463	WOUND DEBRIDEMENT AND SKIN GRAFT EXCEPT HAND FOR MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE DISORDERS WITH MCC
S	805	464	WOUND DEBRIDEMENT AND SKIN GRAFT EXCEPT HAND FOR MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE DISORDERS WITH CC
S	805	465	WOUND DEBRIDEMENT AND SKIN GRAFT EXCEPT HAND FOR MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE DISORDERS WITHOUT CC/MCC
S	806	466	REVISION OF HIP OR KNEE REPLACEMENT WITH MCC
S	806	467	REVISION OF HIP OR KNEE REPLACEMENT WITH CC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	806	468	REVISION OF HIP OR KNEE REPLACEMENT WITHOUT CC/MCC
S	807	469	MAJOR HIP AND KNEE JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W MCC OR TOTAL ANKLE REPLACEMENT
S	807	470	MAJOR HIP AND KNEE JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MCC
S	808	471	CERVICAL SPINAL FUSION WITH MCC
S	808	472	CERVICAL SPINAL FUSION WITH CC
S	808	473	CERVICAL SPINAL FUSION WITHOUT CC/MCC
S	809	474	AMPUTATION FOR MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE DISORDERS WITH MCC
S	809	475	AMPUTATION FOR MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE DISORDERS WITH CC
S	809	476	AMPUTATION FOR MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE DISORDERS WITHOUT CC/MCC
S	810	477	BIOPSIES OF MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE WITH MCC
S	810	478	BIOPSIES OF MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE WITH CC
S	810	479	BIOPSIES OF MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE WITHOUT CC/MCC
S	811	480	HIP AND FEMUR PROCEDURES EXCEPT MAJOR JOINT WITH MCC
S	811	481	HIP AND FEMUR PROCEDURES EXCEPT MAJOR JOINT WITH CC
S	811	482	HIP AND FEMUR PROCEDURES EXCEPT MAJOR JOINT WITHOUT CC/MCC
S	812	483	MAJOR JOINT/LIMB REATTACHMENT PROCEDURE OF UPPER EXTREMITIES
S	813	485	KNEE PROCEDURES WITH PDX OF INFECTION WITH MCC
S	813	486	KNEE PROCEDURES WITH PDX OF INFECTION WITH CC
S	813	487	KNEE PROCEDURES WITH PDX OF INFECTION WITHOUT CC/MCC
S	814	488	KNEE PROCEDURES WITHOUT PDX OF INFECTION WITH CC/MCC
S	814	489	KNEE PROCEDURES WITHOUT PDX OF INFECTION WITHOUT CC/MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	816	492	LOWER EXTREMITY AND HUMERUS PROCEDURES EXCEPT HIP FOOT AND FEMUR WITH MCC
S	816	493	LOWER EXTREMITY AND HUMERUS PROCEDURES EXCEPT HIP FOOT AND FEMUR WITH CC
S	816	494	LOWER EXTREMITY AND HUMERUS PROCEDURES EXCEPT HIP FOOT AND FEMUR WITHOUT CC/MCC
S	817	495	LOCAL EXCISION AND REMOVAL OF INTERNAL FIXATION DEVICES EXCEPT HIP AND FEMUR WITH MCC
S	817	496	LOCAL EXCISION AND REMOVAL OF INTERNAL FIXATION DEVICES EXCEPT HIP AND FEMUR WITH CC
S	817	497	LOCAL EXCISION AND REMOVAL INTERNAL FIXATION DEVICES EXCEPT HIP AND FEMUR WITHOUT CC/MCC
S	818	498	LOCAL EXCISION AND REMOVAL INTERNAL FIXATION DEVICES OF HIP AND FEMUR WITH CC/MCC
S	818	499	LOCAL EXCISION AND REMOVAL INTERNAL FIXATION DEVICES OF HIP AND FEMUR WITHOUT CC/MCC
S	819	500	SOFT TISSUE PROCEDURES WITH MCC
S	819	501	SOFT TISSUE PROCEDURES WITH CC
S	819	502	SOFT TISSUE PROCEDURES WITHOUT CC/MCC
S	820	503	FOOT PROCEDURES WITH MCC
S	820	504	FOOT PROCEDURES WITH CC
S	820	505	FOOT PROCEDURES WITHOUT CC/MCC
S	821	506	MAJOR THUMB OR JOINT PROCEDURES
S	822	507	MAJOR SHOULDER OR ELBOW JOINT PROCEDURES WITH CC/MCC
S	822	508	MAJOR SHOULDER OR ELBOW JOINT PROCEDURES WITHOUT CC/MCC
S	823	509	ARTHROSCOPY
S	824	510	SHOULDER ELBOW OR FOREARM PROCEDURES EXCEPT MAJOR JOINT PROCEDURES WITH MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	824	511	SHOULDER ELBOW OR FOREARM PROCEDURES EXCEPT MAJOR JOINT PROCEDURES WITH CC
S	824	512	SHOULDER ELBOW OR FOREARM PROCEDURES EXCEPT MAJOR JOINT PROCEDURES WITHOUT CC/MCC
S	825	513	HAND OR WRIST PROCEDURES EXCEPT MAJOR THUMB OR JOINT PROCEDURES WITH CC/MCC
S	825	514	HAND OR WRIST PROCEDURES EXCEPT MAJOR THUMB OR JOINT PROCEDURES WITHOUT CC/MCC
S	826	515	OTHER MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE O.R. PROCEDURES WITH MCC
S	826	516	OTHER MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE O.R. PROCEDURES WITH CC
S	826	517	OTHER MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE O.R. PROCEDURES WITHOUT CC/MCC
S	815	518	BACK AND NECK PROCEDURES EXCEPT SPINAL FUSION WITH MCC OR DISC DEVICE OR NEUROSTIMULATOR
S	815	519	BACK AND NECK PROCEDURES EXCEPT SPINAL FUSION WITH CC
S	815	520	BACK AND NECK PROCEDURES EXCEPT SPINAL FUSION WITHOUT CC/MCC
S	841	521	HIP REPLACEMENT WITH PRINCIPAL DIAGNOSIS OF HIP FRACTURE WITH MCC
S	841	522	HIP REPLACEMENT WITH PRINCIPAL DIAGNOSIS OF HIP FRACTURE WITHOUT MCC
M	827	533	FRACTURES OF FEMUR WITH MCC
M	827	534	FRACTURES OF FEMUR WITHOUT MCC
M	828	535	FRACTURES OF HIP AND PELVIS WITH MCC
M	828	536	FRACTURES OF HIP AND PELVIS WITHOUT MCC
M	829	537	SPRAINS STRAINS AND DISLOCATIONS OF HIP PELVIS AND THIGH WITH CC/MCC
M	829	538	SPRAINS STRAINS AND DISLOCATIONS OF HIP PELVIS AND THIGH WITHOUT CC/MCC
M	830	539	OSTEOMYELITIS WITH MCC
M	830	540	OSTEOMYELITIS WITH CC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	830	541	OSTEOMYELITIS WITHOUT CC/MCC
M	831	542	PATHOLOGICAL FRACTURES AND MUSCULOSKELETAL AND CONNECTIVE TISSUE MALIGNANCY WITH MCC
M	831	543	PATHOLOGICAL FRACTURES AND MUSCULOSKELETAL AND CONNECTIVE TISSUE MALIGNANCY WITH CC
M	831	544	PATHOLOGICAL FRACTURES AND MUSCULOSKELETAL AND CONNECTIVE TISSUE MALIGNANCY WITHOUT CC/MCC
M	832	545	CONNECTIVE TISSUE DISORDERS WITH MCC
M	832	546	CONNECTIVE TISSUE DISORDERS WITH CC
M	832	547	CONNECTIVE TISSUE DISORDERS WITHOUT CC/MCC
M	833	548	SEPTIC ARTHRITIS WITH MCC
M	833	549	SEPTIC ARTHRITIS WITH CC
M	833	550	SEPTIC ARTHRITIS WITHOUT CC/MCC
M	834	551	MEDICAL BACK PROBLEMS WITH MCC
M	834	552	MEDICAL BACK PROBLEMS WITHOUT MCC
M	835	553	BONE DISEASES AND ARTHROPATHIES WITH MCC
M	835	554	BONE DISEASES AND ARTHROPATHIES WITHOUT MCC
M	836	555	SIGNS AND SYMPTOMS OF MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE WITH MCC
M	836	556	SIGNS AND SYMPTOMS OF MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE WITHOUT MCC
M	837	557	TENDONITIS MYOSITIS AND BURSITIS WITH MCC
M	837	558	TENDONITIS MYOSITIS AND BURSITIS WITHOUT MCC
M	838	559	AFTERCARE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE WITH MCC
M	838	560	AFTERCARE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE WITH CC
M	838	561	AFTERCARE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE WITHOUT CC/MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	839	562	FRACTURE SPRAIN STRAIN AND DISLOCATION EXCEPT FEMUR HIP PELVIS AND THIGH WITH MCC
M	839	563	FRACTURE SPRAIN STRAIN AND DISLOCATION EXCEPT FEMUR HIP PELVIS AND THIGH WITHOUT MCC
M	840	564	OTHER MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE DIAGNOSES WITH MCC
M	840	565	OTHER MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE DIAGNOSES WITH CC
M	840	566	OTHER MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE DIAGNOSES WITHOUT CC/MCC
S	913	570	SKIN DEBRIDEMENT WITH MCC
S	913	571	SKIN DEBRIDEMENT WITH CC
S	913	572	SKIN DEBRIDEMENT WITHOUT CC/MCC
S	901	573	SKIN GRAFT FOR SKIN ULCER OR CELLULITIS WITH MCC
S	901	574	SKIN GRAFT FOR SKIN ULCER OR CELLULITIS WITH CC
S	901	575	SKIN GRAFT FOR SKIN ULCER OR CELLULITIS WITHOUT CC/MCC
S	902	576	SKIN GRAFT EXCEPT FOR SKIN ULCER OR CELLULITIS WITH MCC
S	902	577	SKIN GRAFT EXCEPT FOR SKIN ULCER OR CELLULITIS WITH CC
S	902	578	SKIN GRAFT EXCEPT FOR SKIN ULCER OR CELLULITIS WITHOUT CC/MCC
S	903	579	OTHER SKIN SUBCUTANEOUS TISSUE AND BREAST PROCEDURES WITH MCC
S	903	580	OTHER SKIN SUBCUTANEOUS TISSUE AND BREAST PROCEDURES WITH CC
S	903	581	OTHER SKIN SUBCUTANEOUS TISSUE AND BREAST PROCEDURES WITHOUT CC/MCC
S	904	582	MASTECTOMY FOR MALIGNANCY WITH CC/MCC
S	904	583	MASTECTOMY FOR MALIGNANCY WITHOUT CC/MCC
S	905	584	BREAST BIOPSY LOCAL EXCISION AND OTHER BREAST PROCEDURES WITH CC/MCC
S	905	585	BREAST BIOPSY LOCAL EXCISION AND OTHER BREAST PROCEDURES WITHOUT CC/MCC
M	906	592	SKIN ULCERS WITH MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	906	593	SKIN ULCERS WITH CC
M	906	594	SKIN ULCERS WITHOUT CC/MCC
M	907	595	MAJOR SKIN DISORDERS WITH MCC
M	907	596	MAJOR SKIN DISORDERS WITHOUT MCC
M	908	597	MALIGNANT BREAST DISORDERS WITH MCC
M	908	598	MALIGNANT BREAST DISORDERS WITH CC
M	908	599	MALIGNANT BREAST DISORDERS WITHOUT CC/MCC
M	909	600	NON-MALIGNANT BREAST DISORDERS WITH CC/MCC
M	909	601	NON-MALIGNANT BREAST DISORDERS WITHOUT CC/MCC
M	910	602	CELLULITIS WITH MCC
M	910	603	CELLULITIS WITHOUT MCC
M	911	604	TRAUMA TO THE SKIN SUBCUTANEOUS TISSUE AND BREAST WITH MCC
M	911	605	TRAUMA TO THE SKIN SUBCUTANEOUS TISSUE AND BREAST WITHOUT MCC
M	912	606	MINOR SKIN DISORDERS WITH MCC
M	912	607	MINOR SKIN DISORDERS WITHOUT MCC
S	1001	614	ADRENAL AND PITUITARY PROCEDURES WITH CC/MCC
S	1001	615	ADRENAL AND PITUITARY PROCEDURES WITHOUT CC/MCC
S	1002	616	AMPUTATION OF LOWER LIMB FOR ENDOCRINE NUTRITIONAL AND METABOLIC DISORDERS WITH MCC
S	1002	617	AMPUTATION OF LOWER LIMB FOR ENDOCRINE NUTRITIONAL AND METABOLIC DISORDERS WITH CC
S	1002	618	AMPUTATION OF LOWER LIMB FOR ENDOCRINE NUTRITIONAL AND METABOLIC DISORDERS WITHOUT CC/MCC
S	1003	619	O.R. PROCEDURES FOR OBESITY WITH MCC
S	1003	620	O.R. PROCEDURES FOR OBESITY WITH CC
S	1003	621	O.R. PROCEDURES FOR OBESITY WITHOUT CC/MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	1004	622	SKIN GRAFTS AND WOUND DEBRIDEMENT FOR ENDOCRINE NUTRITIONAL AND METABOLIC DISORDERS WITH MCC
S	1004	623	SKIN GRAFTS AND WOUND DEBRIDEMENT FOR ENDOCRINE NUTRITIONAL AND METABOLIC DISORDERS WITH CC
S	1004	624	SKIN GRAFTS AND WOUND DEBRIDEMENT FOR ENDOCRINE NUTRITIONAL AND METABOLIC DISORDERS WITHOUT CC/MCC
S	1005	625	THYROID PARATHYROID AND THYROGLOSSAL PROCEDURES WITH MCC
S	1005	626	THYROID PARATHYROID AND THYROGLOSSAL PROCEDURES WITH CC
S	1005	627	THYROID PARATHYROID AND THYROGLOSSAL PROCEDURES WITHOUT CC/MCC
S	1006	628	OTHER ENDOCRINE NUTRITIONAL AND METABOLIC O.R. PROCEDURES WITH MCC
S	1006	629	OTHER ENDOCRINE NUTRITIONAL AND METABOLIC O.R. PROCEDURES WITH CC
S	1006	630	OTHER ENDOCRINE NUTRITIONAL AND METABOLIC O.R. PROCEDURE WITHOUT CC/MCC
M	1007	637	DIABETES WITH MCC
M	1007	638	DIABETES WITH CC
M	1007	639	DIABETES WITHOUT CC/MCC
M	1008	640	MISCELLANEOUS DISORDERS OF NUTRITION METABOLISM FLUIDS AND ELECTROLYTES WITH MCC
M	1008	641	MISCELLANEOUS DISORDERS OF NUTRITION METABOLISM FLUIDS AND ELECTROLYTES WITHOUT MCC
M	1009	642	INBORN AND OTHER DISORDERS OF METABOLISM
M	1010	643	ENDOCRINE DISORDERS WITH MCC
M	1010	644	ENDOCRINE DISORDERS WITH CC
M	1010	645	ENDOCRINE DISORDERS WITHOUT CC/MCC
S	1101	650	KIDNEY TRANSPLANT WITH HEMODIALYSIS WITH MCC
S	1101	651	KIDNEY TRANSPLANT WITH HEMODIALYSIS WITHOUT MCC
S	1101	652	KIDNEY TRANSPLANT
S	1102	653	MAJOR BLADDER PROCEDURES WITH MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	1102	654	MAJOR BLADDER PROCEDURES WITH CC
S	1102	655	MAJOR BLADDER PROCEDURES WITHOUT CC/MCC
S	1103	656	KIDNEY AND URETER PROCEDURES FOR NEOPLASM WITH MCC
S	1103	657	KIDNEY AND URETER PROCEDURES FOR NEOPLASM WITH CC
S	1103	658	KIDNEY AND URETER PROCEDURES FOR NEOPLASM WITHOUT CC/MCC
S	1104	659	KIDNEY AND URETER PROCEDURES FOR NON-NEOPLASM WITH MCC
S	1104	660	KIDNEY AND URETER PROCEDURES FOR NON-NEOPLASM WITH CC
S	1104	661	KIDNEY AND URETER PROCEDURES FOR NON-NEOPLASM WITHOUT CC/MCC
S	1105	662	MINOR BLADDER PROCEDURES WITH MCC
S	1105	663	MINOR BLADDER PROCEDURES WITH CC
S	1105	664	MINOR BLADDER PROCEDURES WITHOUT CC/MCC
S	1106	665	PROSTATECTOMY WITH MCC
S	1106	666	PROSTATECTOMY WITH CC
S	1106	667	PROSTATECTOMY WITHOUT CC/MCC
S	1107	668	TRANSURETHRAL PROCEDURES WITH MCC
S	1107	669	TRANSURETHRAL PROCEDURES WITH CC
S	1107	670	TRANSURETHRAL PROCEDURES WITHOUT CC/MCC
S	1108	671	URETHRAL PROCEDURES WITH CC/MCC
S	1108	672	URETHRAL PROCEDURES WITHOUT CC/MCC
S	1109	673	OTHER KIDNEY AND URINARY TRACT PROCEDURES WITH MCC
S	1109	674	OTHER KIDNEY AND URINARY TRACT PROCEDURES WITH CC
S	1109	675	OTHER KIDNEY AND URINARY TRACT PROCEDURES WITHOUT CC/MCC
M	1110	682	RENAL FAILURE WITH MCC
M	1110	683	RENAL FAILURE WITH CC
M	1110	684	RENAL FAILURE WITHOUT CC/MCC
M	1118	685	ADMIT FOR RENAL DIALYSIS

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	1112	686	KIDNEY AND URINARY TRACT NEOPLASMS WITH MCC
M	1112	687	KIDNEY AND URINARY TRACT NEOPLASMS WITH CC
M	1112	688	KIDNEY AND URINARY TRACT NEOPLASMS WITHOUT CC/MCC
M	1113	689	KIDNEY AND URINARY TRACT INFECTIONS WITH MCC
M	1113	690	KIDNEY AND URINARY TRACT INFECTIONS WITHOUT MCC
M	1115	691	URINARY STONES WITH ESW LITHOTRIPSY WITH CC/MCC
M	1115	692	URINARY STONES WITH ESW LITHOTRIPSY WITHOUT CC/MCC
M	1115	693	URINARY STONES W MCC
M	1115	694	URINARY STONES W/O MCC
M	1116	695	KIDNEY AND URINARY TRACT SIGNS AND SYMPTOMS WITH MCC
M	1116	696	KIDNEY AND URINARY TRACT SIGNS AND SYMPTOMS WITHOUT MCC
M	1117	697	URETHRAL STRICTURE
M	1118	698	OTHER KIDNEY AND URINARY TRACT DIAGNOSES WITH MCC
M	1118	699	OTHER KIDNEY AND URINARY TRACT DIAGNOSES WITH CC
M	1118	700	OTHER KIDNEY AND URINARY TRACT DIAGNOSES WITHOUT CC/MCC
S	1201	707	MAJOR MALE PELVIC PROCEDURES WITH CC/MCC
S	1201	708	MAJOR MALE PELVIC PROCEDURES WITHOUT CC/MCC
S	1202	709	PENIS PROCEDURES WITH CC/MCC
S	1202	710	PENIS PROCEDURES WITHOUT CC/MCC
S	1203	711	TESTES PROCEDURES WITH CC/MCC
S	1203	712	TESTES PROCEDURES WITHOUT CC/MCC
S	1204	713	TRANSURETHRAL PROSTATECTOMY WITH CC/MCC
S	1204	714	TRANSURETHRAL PROSTATECTOMY WITHOUT CC/MCC
S	1205	715	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY WITH CC/MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	1205	716	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY WITHOUT CC/MCC
S	1206	717	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES EXCEPT MALIGNANCY WITH CC/MCC
S	1206	718	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXCEPT MALIGNANCY WITHOUT CC/MCC
M	1207	722	MALIGNANCY MALE REPRODUCTIVE SYSTEM WITH MCC
M	1207	723	MALIGNANCY MALE REPRODUCTIVE SYSTEM WITH CC
M	1207	724	MALIGNANCY MALE REPRODUCTIVE SYSTEM WITHOUT CC/MCC
M	1208	725	BENIGN PROSTATIC HYPERTROPHY WITH MCC
M	1208	726	BENIGN PROSTATIC HYPERTROPHY WITHOUT MCC
M	1209	727	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM WITH MCC
M	1209	728	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM WITHOUT MCC
M	1210	729	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES WITH CC/MCC
M	1210	730	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES WITHOUT CC/MCC
S	1301	734	PELVIC EVISCERATION RADICAL HYSTERECTOMY AND RADICAL VULVECTOMY WITH CC/MCC
S	1301	735	PELVIC EVISCERATION RADICAL HYSTERECTOMY AND RADICAL VULVECTOMY WITHOUT CC/MCC
S	1302	736	UTERINE AND ADNEXA PROCEDURES FOR OVARIAN OR ADNEXAL MALIGNANCY WITH MCC
S	1302	737	UTERINE AND ADNEXA PROCEDURES FOR OVARIAN OR ADNEXAL MALIGNANCY WITH CC
S	1302	738	UTERINE AND ADNEXA PROCEDURES FOR OVARIAN OR ADNEXAL MALIGNANCY WITHOUT CC/MCC
S	1303	739	UTERINE ADNEXA PROCEDURES FOR NON-OVARIAN AND NON-ADNEXAL MALIGNANCY WITH MCC
S	1303	740	UTERINE ADNEXA PROCEDURES FOR NON-OVARIAN AND NON-ADNEXAL MALIGNANCY WITH CC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	1303	741	UTERINE ADNEXA PROCEDURES FOR NON-OVARIAN AND NON-ADNEXAL MALIGNANCY WITHOUT CC/MCC
S	1304	742	UTERINE AND ADNEXA PROCEDURES FOR NON-MALIGNANCY WITH CC/MCC
S	1304	743	UTERINE AND ADNEXA PROCEDURES FOR NON-MALIGNANCY WITHOUT CC/MCC
S	1305	744	D&C CONIZATION LAPAROSCOPY AND TUBAL INTERRUPTION WITH CC/MCC
S	1305	745	D&C CONIZATION LAPAROSCOPY AND TUBAL INTERRUPTION WITHOUT CC/MCC
S	1306	746	VAGINA CERVIX AND VULVA PROCEDURES WITH CC/MCC
S	1306	747	VAGINA CERVIX AND VULVA PROCEDURES WITHOUT CC/MCC
S	1307	748	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES
S	1308	749	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES WITH CC/MCC
S	1308	750	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES WITHOUT CC/MCC
M	1309	754	MALIGNANCY FEMALE REPRODUCTIVE SYSTEM WITH MCC
M	1309	755	MALIGNANCY FEMALE REPRODUCTIVE SYSTEM WITH CC
M	1309	756	MALIGNANCY FEMALE REPRODUCTIVE SYSTEM WITHOUT CC/MCC
M	1310	757	INFECTIONS FEMALE REPRODUCTIVE SYSTEM WITH MCC
M	1310	758	INFECTIONS FEMALE REPRODUCTIVE SYSTEM WITH CC
M	1310	759	INFECTIONS FEMALE REPRODUCTIVE SYSTEM WITHOUT CC/MCC
M	1311	760	MENSTRUAL AND OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS WITH CC/MCC
M	1311	761	MENSTRUAL AND OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS WITHOUT CC/MCC
S	1401	765	CESAREAN SECTION WITH CC/MCC
S	1401	766	CESAREAN SECTION WITHOUT CC/MCC
S	1413	767	VAGINAL DELIVERY WITH STERILIZATION AND/OR D&C
S	1402	768	VAGINAL DELIVERY WITH O.R. PROCEDURE EXCEPT STERILIZATION AND/OR D&C
S	1403	769	POSTPARTUM AND POST ABORTION DIAGNOSES WITH O.R. PROCEDURE
S	1404	770	ABORTION WITH D&C ASPIRATION CURETTAGE OR HYSTEROTOMY

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	1405	774	VAGINAL DELIVERY WITH COMPLICATING DIAGNOSES
M	1405	775	VAGINAL DELIVERY WITHOUT COMPLICATING DIAGNOSES
M	1406	776	POSTPARTUM AND POST ABORTION DIAGNOSES WITHOUT O.R. PROCEDURE
M	1411	777	ECTOPIC PREGNANCY
M	1411	778	THREATENED ABORTION
M	1409	779	ABORTION WITHOUT D&C
M	1411	780	FALSE LABOR
M	1411	781	OTHER ANTEPARTUM DIAGNOSES WITH MEDICAL COMPLICATIONS
M	1411	782	OTHER ANTEPARTUM DIAGNOSES WITHOUT MEDICAL COMPLICATIONS
S	1401	783	CESAREAN SECTION W STERILIZATION W MCC
S	1401	784	CESAREAN SECTION W STERILIZATION W CC
S	1401	785	CESAREAN SECTION W STERILIZATION W/O CC/MCC
S	1401	786	CESAREAN SECTION W/O STERILIZATION W MCC
S	1401	787	CESAREAN SECTION W/O STERILIZATION W CC
S	1401	788	CESAREAN SECTION W/O STERILIZATION W/O CC/MCC
M	1501	789	NEONATES DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY
M	1502	790	EXTREME IMMATURITY OR RESPIRATORY DISTRESS SYNDROME NEONATE
M	1503	791	PREMATURITY WITH MAJOR PROBLEMS
M	1504	792	PREMATURITY WITHOUT MAJOR PROBLEMS
M	1505	793	FULL TERM NEONATE WITH MAJOR PROBLEMS
M	1506	794	NEONATE WITH OTHER SIGNIFICANT PROBLEMS
M	1507	795	NORMAL NEWBORN
S	1413	796	VAGINAL DELIVERY W STERILIZATION/D&C W MCC
S	1413	797	VAGINAL DELIVERY W STERILIZATION/D&C W CC
S	1413	798	VAGINAL DELIVERY W STERILIZATION/D&C WO CC/MCC
S	1601	799	SPLENECTOMY WITH MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	1601	800	SPLENECTOMY WITH CC
S	1601	801	SPLENECTOMY WITHOUT CC/MCC
S	1602	802	OTHER O.R. PROCEDURES OF THE BLOOD AND BLOOD FORMING ORGANS WITH MCC
S	1602	803	OTHER O.R. PROCEDURES OF THE BLOOD AND BLOOD FORMING ORGANS WITH CC
S	1602	804	OTHER O.R. PROCEDURES OF THE BLOOD AND BLOOD FORMING ORGANS WITHOUT CC/MCC
M	1405	805	VAGINAL DELIVERY W/O STERILIZATION/D&C W MCC
M	1405	806	VAGINAL DELIVERY W/O STERILIZATION/D&C W CC
M	1405	807	VAGINAL DELIVERY W/O STERILIZATION/D&C W/O CC/MCC
M	1603	808	MAJOR HEMATOLOGICAL AND IMMUNOLOGICAL DIAGNOSES EXCEPT SICKLE CELL CRISIS AND COAGULATION DISORDERS WITH MCC
M	1603	809	MAJOR HEMATOLOGICAL AND IMMUNOLOGICAL DIAGNOSES EXCEPT SICKLE CELL CRISIS AND COAGULATION DISORDERS WITH CC
M	1603	810	MAJOR HEMATOLOGICAL AND IMMUNOLOGICAL DIAGNOSES EXCEPT SICKLE CELL CRISIS AND COAGULATION DISORDERS WITHOUT CC/MCC
M	1604	811	RED BLOOD CELL DISORDERS WITH MCC
M	1604	812	RED BLOOD CELL DISORDERS WITHOUT MCC
M	1605	813	COAGULATION DISORDERS
M	1606	814	RETICULOENDOTHELIAL AND IMMUNITY DISORDERS WITH MCC
M	1606	815	RETICULOENDOTHELIAL AND IMMUNITY DISORDERS WITH CC
M	1606	816	RETICULOENDOTHELIAL AND IMMUNITY DISORDERS WITHOUT CC/MCC
S	1414	817	OTHER ANTEPARTUM DIAGNOSES W O.R. PROCEDURE W MCC
S	1414	818	OTHER ANTEPARTUM DIAGNOSES W O.R. PROCEDURE W CC
S	1414	819	OTHER ANTEPARTUM DIAGNOSES W O.R. PROCEDURE W/O CC/MCC
S	1707	820	LYMPHOMA AND LEUKEMIA WITH MAJOR O.R. PROCEDURE WITH MCC
S	1707	821	LYMPHOMA AND LEUKEMIA WITH MAJOR O.R. PROCEDURE WITH CC
S	1707	822	LYMPHOMA AND LEUKEMIA WITH MAJOR O.R. PROCEDURE WITHOUT CC/MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	1708	823	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER PROC W MCC
S	1708	824	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER PROC W CC
S	1708	825	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER PROC W/O CC/MCC
S	1709	826	MYELOPROLIFERATIVE DISORDERS OR POORLY DIFFERENTIATED NEOPLASMS WITH MAJOR O.R. PROCEDURE WITH MCC
S	1709	827	MYELOPROLIFERATIVE DISORDERS OR POORLY DIFFERENTIATED NEOPLASMS WITH MAJOR O.R. PROCEDURE WITH CC
S	1709	828	MYELOPROLIFERATIVE DISORDERS OR POORLY DIFFERENTIATED NEOPLASMS WITH MAJOR O.R. PROCEDURE WITHOUT CC/MCC
S	1710	829	MYELOPROLIFERATIVE DISORDERS OR POORLY DIFFERENTIATED NEOPLASMS W OTHER PROCEDURE W CC/MCC
S	1710	830	MYELOPROLIFERATIVE DISORDERS OR POORLY DIFFERENTIATED NEOPLASMS W OTHER PROCEDURE W/O CC/MCC
M	1411	831	OTHER ANTEPARTUM DIAGNOSES W/O O.R. PROCEDURE W MCC
M	1411	832	OTHER ANTEPARTUM DIAGNOSES W/O O.R. PROCEDURE W CC
M	1411	833	OTHER ANTEPARTUM DIAGNOSES W/O O.R. PROCEDURE W/O CC/MCC
M	1711	834	ACUTE LEUKEMIA WITHOUT MAJOR O.R. PROCEDURE WITH MCC
M	1711	835	ACUTE LEUKEMIA WITHOUT MAJOR O.R. PROCEDURE WITH CC
M	1711	836	ACUTE LEUKEMIA WITHOUT MAJOR O.R. PROCEDURE WITHOUT CC/MCC
M	1712	837	CHEMOTHERAPY WITH ACUTE LEUKEMIA AS SDX OR WITH HIGH DOSE CHEMOTHERAPY AGENT WITH MCC
M	1712	838	CHEMOTHERPY WITH ACUTE LEUKEMIA AS SDX WITH CC OR HIGH DOSE CHEMOTHERAPY AGENT
M	1712	839	CHEMOTHERAPY WITH ACUTE LEUKEMIA AS SDX WITHOUT CC/MCC
M	1713	840	LYMPHOMA AND NON-ACUTE LEUKEMIA WITH MCC
M	1713	841	LYMPHOMA AND NON-ACUTE LEUKEMIA WITH CC
M	1713	842	LYMPHOMA AND NON-ACUTE LEUKEMIA WITHOUT CC/MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	1714	843	OTHER MYELOPROLIFERATIVE DISORDERS OR POORLY DIFFERENTIATED NEOPLASTIC DIAGNOSES WITH MCC
M	1714	844	OTHER MYELOPROLIFERATIVE DISORDERS OR POORLY DIFFERENTIATED NEOPLASTIC DIAGNOSES WITH CC
M	1714	845	OTHER MYELOPROLIFERATIVE DISORDERS OR POORLY DIFFERENTIATED NEOPLASTIC DIAGNOSES WITHOUT CC/MCC
M	1715	846	CHEMOTHERAPY WITHOUT ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS WITH MCC
M	1715	847	CHEMOTHERAPY WITHOUT ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS WITH CC
M	1715	848	CHEMOTHERAPY WITHOUT ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS WITHOUT CC/MCC
M	1716	849	RADIOTHERAPY
S	1801	853	INFECTIOUS AND PARASITIC DISEASES WITH O.R. PROCEDURE WITH MCC
S	1801	854	INFECTIOUS AND PARASITIC DISEASES WITH O.R. PROCEDURE WITH CC
S	1801	855	INFECTIOUS AND PARASITIC DISEASES WITH O.R. PROCEDURE WITHOUT CC/MCC
S	1802	856	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS WITH O.R. PROCEDURE WITH MCC
S	1802	857	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS WITH O.R. PROCEDURE WITH CC
S	1802	858	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS WITH O.R. PROCEDURE WITHOUT CC/MCC
M	1803	862	POSTOPERATIVE AND POST-TRAUMATIC INFECTIONS WITH MCC
M	1803	863	POSTOPERATIVE AND POST-TRAUMATIC INFECTIONS WITHOUT MCC
M	1804	864	FEVER AND INFLAMMATORY CONDITIONS
M	1805	865	VIRAL ILLNESS WITH MCC
M	1805	866	VIRAL ILLNESS WITHOUT MCC
M	1806	867	OTHER INFECTIOUS AND PARASITIC DISEASES DIAGNOSES WITH MCC
M	1806	868	OTHER INFECTIOUS AND PARASITIC DISEASES DIAGNOSES WITH CC
M	1806	869	OTHER INFECTIOUS AND PARASITIC DISEASES DIAGNOSES WITHOUT CC/MCC
M	1807	870	SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	1808	871	SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITH MCC
M	1808	872	SEPTICEMIA OR SEVERE SEPSIS WITHOUT MV >96 HOURS WITHOUT MCC
S	1909	876	O.R. PROCEDURE WITH PRINCIPAL DIAGNOSES OF MENTAL ILLNESS
M	1910	880	ACUTE ADJUSTMENT REACTION AND PSYCHOSOCIAL DYSFUNCTION
M	1911	881	DEPRESSIVE NEUROSES
M	1912	882	NEUROSES EXCEPT DEPRESSIVE
M	1913	883	DISORDERS OF PERSONALITY AND IMPULSE CONTROL
M	1914	884	ORGANIC DISTURBANCES AND INTELLECTUAL DISABILITY
M	1915	885	PSYCHOSES
M	1916	886	BEHAVIORAL AND DEVELOPMENTAL DISORDERS
M	1917	887	OTHER MENTAL DISORDER DIAGNOSES
M	2018	894	ALCOHOL DRUG ABUSE OR DEPENDENCE LEFT AMA
M	2018	895	ALCOHOL DRUG ABUSE OR DEPENDENCE WITH REHABILITATION THERAPY
M	2018	896	ALCOHOL DRUG ABUSE OR DEPENDENCE WITHOUT REHABILITATION THERAPY WITH MCC
M	2018	897	ALCOHOL DRUG ABUSE OR DEPENDENCE WITHOUT REHABILITATION THERAPY WITHOUT MCC
S	2101	901	WOUND DEBRIDEMENTS FOR INJURIES WITH MCC
S	2101	902	WOUND DEBRIDEMENTS FOR INJURIES WITH CC
S	2101	903	WOUND DEBRIDEMENTS FOR INJURIES WITHOUT CC/MCC
S	2102	904	SKIN GRAFTS FOR INJURIES WITH CC/MCC
S	2102	905	SKIN GRAFTS FOR INJURIES WITHOUT CC/MCC
S	2103	906	HAND PROCEDURES FOR INJURIES
S	2104	907	OTHER O.R. PROCEDURES FOR INJURIES WITH MCC
S	2104	908	OTHER O.R. PROCEDURES FOR INJURIES WITH CC
S	2104	909	OTHER O.R. PROCEDURES FOR INJURIES WITHOUT CC/MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	2105	913	TRAUMATIC INJURY WITH MCC
M	2105	914	TRAUMATIC INJURY WITHOUT MCC
M	2106	915	ALLERGIC REACTIONS WITH MCC
M	2106	916	ALLERGIC REACTIONS WITHOUT MCC
M	2107	917	POISONING AND TOXIC EFFECTS OF DRUGS WITH MCC
M	2107	918	POISONING AND TOXIC EFFECTS OF DRUGS WITHOUT MCC
M	2108	919	COMPLICATIONS OF TREATMENT WITH MCC
M	2108	920	COMPLICATIONS OF TREATMENT WITH CC
M	2108	921	COMPLICATIONS OF TREATMENT WITHOUT CC/MCC
M	2109	922	OTHER INJURY POISONING AND TOXIC EFFECT DIAGNOSES WITH MCC
M	2109	923	OTHER INJURY POISONING AND TOXIC EFFECT DIAGNOSES WITHOUT MCC
S	2210	927	EXTENSIVE BURNS OR FULL THICKNESS BURNS WITH MV >96 HOURS WITH SKIN GRAFT
S	2201	928	FULL THICKNESS BURN WITH SKIN GRAFT OR INHALATION INJURY WITH CC/MCC
S	2201	929	FULL THICKNESS BURN WITH SKIN GRAFT OR INHALATION INJURY WITHOUT CC/MCC
M	2212	933	EXTENSIVE BURNS OR FULL THICKNESS BURNS WITH MV >96 HOURS WITHOUT SKIN GRAFT
M	2213	934	FULL THICKNESS BURN WITHOUT SKIN GRFT OR INHALATION INJURY
M	2214	935	NON-EXTENSIVE BURNS
S	2301	939	O.R. PROCEDURES WITH DIAGNOSES OF OTHER CONTACT WITH HEALTH SERVICES WITH MCC
S	2301	940	O.R. PROCEDURES WITH DIAGNOSES OF OTHER CONTACT WITH HEALTH SERVICES WITH CC
S	2301	941	O.R. PROCEDURES WITH DIAGNOSES OF OTHER CONTACT WITH HEALTH SERVICES WITHOUT CC/MCC
M	2302	945	REHABILITATION WITH CC/MCC
M	2302	946	REHABILITATION WITHOUT CC/MCC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
M	2303	947	SIGNS AND SYMPTOMS WITH MCC
M	2303	948	SIGNS AND SYMPTOMS WITHOUT MCC
M	2304	949	AFTERCARE WITH CC/MCC
M	2304	950	AFTERCARE WITHOUT CC/MCC
M	2305	951	OTHER FACTORS INFLUENCING HEALTH STATUS
S	2406	955	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA
S	2407	956	LIMB REATTACHMENT HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA
S	2408	957	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA WITH MCC
S	2408	958	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA WITH CC
S	2408	959	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA WITHOUT CC/MCC
M	2409	963	OTHER MULTIPLE SIGNIFICANT TRAUMA WITH MCC
M	2409	964	OTHER MULTIPLE SIGNIFICANT TRAUMA WITH CC
M	2409	965	OTHER MULTIPLE SIGNIFICANT TRAUMA WITHOUT CC/MCC
S	2501	969	HIV WITH EXTENSIVE O.R. PROCEDURE WITH MCC
S	2501	970	HIV WITH EXTENSIVE O.R. PROCEDURE WITHOUT MCC
M	2502	974	HIV WITH MAJOR RELATED CONDITION WITH MCC
M	2502	975	HIV WITH MAJOR RELATED CONDITION WITH CC
M	2502	976	HIV WITH MAJOR RELATED CONDITION WITHOUT CC/MCC
M	2503	977	HIV WITH OR WITHOUT OTHER RELATED CONDITION
S	8899	981	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS WITH MCC
S	8899	982	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS WITH CC
S	8899	983	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS WITHOUT CC/MCC
S	8897	984	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS WITH MCC
S	8897	985	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS WITH CC

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

M/S	MDRG	MS DRG	MS-DRG DESCRIPTION
S	8897	986	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS WITHOUT CC/MCC
S	8897	987	NON-EXTENSIVE O.R. PROC UNRELATED TO PRINCIPAL DIAGNOSIS WITH MCC
S	8897	988	NON-EXTENSIVE O.R. PROC UNRELATED TO PRINCIPAL DIAGNOSIS WITH CC
S	8897	989	NON-EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS WITHOUT CC/MCC

* Refer to [All ICD-10-CM/PCS coding revisions in MS Excel format](#) for detailed code set values in this document

Table A.3. 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 & CONNECTIVE 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

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

MDC	Description
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, IMMUNOLOGIC DISORDERS
17	MYELOPROLIFERATIVE DISEASES & DISORDERS, POORLY DIFFERENTIATED NEOPLASMS
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 HEALTH STATUS & OTHER CONTACTS WITH HEALTH SERVICES
24	MULTIPLE SIGNIFICANT TRAUMA
25	HUMAN IMMUNODEFICIENCY VIRUS INFECTIONS

Table A.4. Comorbidity Categories (COMORB), Elixhauser Comorbidity Software Refined, Version 2022.1*

Comorbidity	Description	Uses POA?
CMR_AIDS	Acquired immune deficiency syndrome	No
CMR_ALCOHOL	Alcohol abuse	No
CMR_ANEMDEF	Deficiency anemias	Yes
CMR_AUTOIMMUNE	Autoimmune conditions	No
CMR_BLDLOSS	Chronic blood loss anemia	Yes

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Comorbidity	Description	Uses POA?
CMR_CANCER_LEUK	Leukemia	No
CMR_CANCER_LYMPH	Lymphoma	No
CMR_CANCER_METS	Metastatic cancer	No
CMR_CANCER_NSITU	Solid tumor without metastasis, in situ	No
CMR_CANCER_SOLID	Solid tumor without metastasis, malignant	No
CMR_CBVD	Cerebrovascular disease	Yes
CMR_HF	Congestive heart failure	Yes
CMR_COAG	Coagulopathy	Yes
CMR_DEMENTIA	Dementia	No
CMR_DEPRESS	Depression	No
CMR_DIAB_CX	Diabetes with chronic complications	No
CMR_DIAB_UNCX	Diabetes without chronic complications	No
CMR_DRUG_ABUSE	Drug abuse	No
CMR_HTN_CX	Hypertension, complicated	No
CMR_HTN_UNCX	Hypertension, uncomplicated	No
CMR_LIVER_MLD	Liver disease, mild	Yes
CMR_LIVER_SEV	Liver disease, moderate to severe	Yes
CMR_LUNG_CHRONIC	Chronic pulmonary disease	No
CMR_NEURO_MOVT	Neurological disorders affecting movement	Yes
CMR_NEURO_OTH	Other neurological disorders	Yes
CMR_NERUO_SEIZ	Seizures and epilepsy	Yes
CMR_OBESE	Obesity	No
CMR_PARALYSIS	Paralysis	Yes
CMR_PERIVASC	Peripheral vascular disease	No
CMR_PSYCHOSES	Psychoses	Yes
CMR_PULMCIRC	Pulmonary circulation disease	Yes

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Comorbidity	Description	Uses POA?
CMR_RENLFL_MOD	Renal failure, moderate	Yes
CMR_RENLFL_SEV	Renal failure, severe	Yes
CMR_THYROID_HYPO	Hypothyroidism	No
CMR_THYROID_OTH	Other thyroid disorders	No
CMR_ULCER_PEPTIC	Peptic ulcer with bleeding	Yes
CMR_VALVE	Valvular disease	Yes
CMR_WGHTLOSS	Weight loss	Yes

* Agency for Healthcare Research and Quality. Elixhauser Comorbidity Software Refined for ICD-10-CM. Healthcare Cost and Utilization Project (HCUP). October 2021. www.hcup-us.ahrq.gov/toolssoftware/comorbidityicd10/comorbidity_icd10.jsp.

Table A.5. Categorical Variables Definitions: Transfer, and HPPS

Category	Description	Definition
TRANSFER	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 TRANSFER=1
HPPS13***	HPPS13_0	Denominator Low Immune Risk Category: Discharges not meeting the inclusion rules for HPPS13_1, HPPS13_2, and HPPS13_3.
	HPPS13_1	Denominator Low-Intermediate Immune Risk Category: Discharges with any diagnosis code for intermediate-risk immunocompromised state (IMMUITD) present on admission, or any diagnosis code for cirrhosis (HEPFA2D) present on admission, and not meeting the inclusion rules for HPPS13_2, and HPPS13_3, then HPPS13_1 = 1.
	HPPS13_2	Denominator High-Intermediate Immune Risk Category: Discharges with any diagnosis code for high-risk immunocompromised state (IMMUNHD) present on admission, or any procedure code for high-risk immunocompromised state (TRANSPP), and not meeting the inclusion rules for HPPS13_3, then HPPS13_2 = 1.
	HPPS13_3	Denominator High Immune Risk Category:

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Category	Description	Definition
		Discharges with any diagnosis code for hepatic failure (HEPFA3D) present on admission, then HPPS13_3 = 1.
HPPS15***	HPPS15_1	Denominator PRCLASS Risk Category 1: Discharges otherwise qualifying for the denominator with no therapeutic procedures and with any or no diagnostic procedures (PRCLASS).
	HPPS15_2	Denominator PRCLASS Risk Category 2: Discharges otherwise qualifying for the denominator with one or more minor therapeutic procedures, with any or no diagnostic procedures (PRCLASS), and not meeting the inclusion rules for HPPS15_1.
	HPPS15_3	Denominator PRCLASS Risk Category 3: Discharges otherwise qualifying for the denominator with one major therapeutic procedure, without any diagnostic procedures (PRCLASS), and not meeting the inclusion rules for HPPS15_1 or HPPS15_2.
	HPPS15_4	Denominator PRCLASS Risk Category 4: Discharges otherwise qualifying for the denominator with one major therapeutic procedure, with one or more minor diagnostic procedure(s) but no major diagnostic procedure(s) (PRCLASS), and not meeting the inclusion rules for HPPS15_1 through HPPS15_3.
	HPPS15_5	Denominator PRCLASS Risk Category 5: Discharges otherwise qualifying for the denominator with one major therapeutic procedure, with one or more major diagnostic procedure(s) (PRCLASS), and not meeting the inclusion rules for HPPS15_1 through HPPS15_4.
	HPPS15_6	Denominator PRCLASS Risk Category 6: Discharges otherwise qualifying for the denominator with two major therapeutic procedures, with any or no diagnostic procedures (PRCLASS), and not meeting the inclusion rules for HPPS15_1 through HPPS15_5.
	HPPS15_7	Denominator PRCLASS Risk Category 7: Discharges otherwise qualifying for the denominator with three or more major therapeutic procedures, with any or no diagnostic procedures (PRCLASS), and not meeting the inclusion rules for HPPS15_1 through HPPS15_6.
	HPPS15_9	Denominator PRCLASS Risk Category 9: Discharges otherwise qualifying for the denominator and not meeting the inclusion rules for HPPS15_1 through HPPS15_7.

*** Refer to [All ICD-10-CM/PCS coding revisions in MS Excel format](#) for a full detailed list of codes in IMMUITD, IMMUNHD, HEPFA2D, HEPFA3D, TRANSP, PRCLASS and other code lists in this document.

Table A.6. SEVDPEDX: Severe Pulmonary Embolism or Deep Vein Thrombosis (PE/DVT) Diagnosis Codes

Diagnosis Code	Description
I2602	Saddle embolus of pulmonary artery with acute cor pulmonale
I2609	Other pulmonary embolism with acute cor pulmonale
I2692	Saddle embolus of pulmonary artery without acute cor pulmonale
I2694	Multiple subsegmental pulmonary emboli without acute cor pulmonale
I2699	Other pulmonary embolism without acute cor pulmonale

Note: Discharges with any-listed diagnosis for SEVDPEDX are factored into the risk-adjustment model for PSI 04 deep vein thrombosis/pulmonary embolism stratum.

Table A.7. SEVPNEUDX: Severe Pneumonia Diagnosis Codes

Diagnosis Code	Description
J150	Pneumonia due to Klebsiella pneumoniae
J151	Pneumonia due to Pseudomonas
J1520	Pneumonia due to staphylococcus, unspecified
J15211	Pneumonia due to Methicillin susceptible Staphylococcus aureus
J15212	Pneumonia due to Methicillin resistant Staphylococcus aureus
J1529	Pneumonia due to other staphylococcus
J155	Pneumonia due to Escherichia coli
J156	Pneumonia due to other Gram-negative bacteria
J158	Pneumonia due to other specified bacteria
J690	Pneumonitis due to inhalation of food and vomit

Note: Discharges with any-listed diagnosis for SEVPNEUDX are factored into the risk-adjustment model for PSI 04 pneumonia stratum.

Table A.8. SEVSEPDIX: Severe Sepsis Diagnosis Codes

Diagnosis Code	Description
R6520	Severe sepsis without septic shock
R6521	Severe sepsis with septic shock
T8112XA	Postprocedural septic shock, initial encounter

Note: Discharges with any-listed diagnosis for SEVSEPDIX are factored into the risk-adjustment model for PSI 04 sepsis stratum.

Table A.9. SEVSCKDX: Severe Shock or Cardiac Arrest Diagnosis Codes

Diagnosis Code	Description
I462	Cardiac arrest due to underlying cardiac condition
I468	Cardiac arrest due to other underlying condition
I469	Cardiac arrest, cause unspecified
R092	Respiratory arrest

Note: Discharges with any-listed diagnosis for SEVSCKDX are factored into the risk-adjustment model for PSI 04 shock/cardiac arrest stratum.

Table A.10. SEVGIHDX: Severe Gastrointestinal Hemorrhage or Acute Ulcer Diagnosis Codes

Diagnosis Code	Description
I8501	Esophageal varices with bleeding
I8511	Secondary esophageal varices with bleeding
K251	Acute gastric ulcer with perforation
K252	Acute gastric ulcer with both hemorrhage and perforation
K261	Acute duodenal ulcer with perforation
K262	Acute duodenal ulcer with both hemorrhage and perforation
K271	Acute peptic ulcer, site unspecified, with perforation
K272	Acute peptic ulcer, site unspecified, with both hemorrhage and perforation
K281	Acute gastrojejunal ulcer with perforation

Diagnosis Code	Description
K282	Acute gastrojejunal ulcer with both hemorrhage and perforation

Note: Discharges with any-listed diagnosis for SEVGIHDX are factored into the risk-adjustment model for PSI 04 gastrointestinal hemorrhage stratum.

Table A.11. Do Not Resuscitate (DNR) Status Diagnosis Codes

Diagnosis Code	Description
Z66	Do not resuscitate

Table A.12. Categorical Variables Used for Comorbidity Counts, Elixhauser Comorbidity Software Refined, Version 2022.1*

Measure	Comorbidity count category	Description
PSI 02	PS02_NonWt_1	PS02 Comorbidity count using non-weighted method, category 1, count > 3 and count <= 4
PSI 02	PS02_NonWt_2	PS02 Comorbidity count using non-weighted method, category 2, count >= 5
PSI 03	PS03_NonWt_1	PS03 Comorbidity count using non-weighted method, category 1, count > 2 and count <= 5
PSI 04 PNEUMONIA	PS04_PNEUMONIA_NonWt_1	PS04_PNEUMONIA Comorbidity count using non-weighted method, category 1, count > 3 and count <= 5
PS04 SHOCK	PS04_SHOCK_NonWt_2	PS04_SHOCK Comorbidity count using non-weighted method, category 2, count >= 4
PSI 08	PS08_NonWt_1	PS08 Comorbidity count using non-weighted method, category 1, count > 3 and count <= 6
PSI 08	PS08_NonWt_2	PS08 Comorbidity count using non-weighted method, category 2, count >= 7
PSI 09	PS09_NonWt_1	PS09 Comorbidity count using non-weighted method, category 1, count > 2 and count <= 3

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2022

Measure	Comorbidity count category	Description
PSI 10	PS10_NonWt_1	PS10 Comorbidity count using non-weighted method, category 1, count > 2 and count <= 4
PSI 10	PS10_NonWt_2	PS10 Comorbidity count using non-weighted method, category 2, count >= 5
PSI 11	PS11_NonWt_1	PS11 Comorbidity count using non-weighted method, category 1, count > 3 and count <= 5
PSI 11	PS11_NonWt_2	PS11 Comorbidity count using non-weighted method, category 2, count >= 6
PSI 12	PS12_NonWt_1	PS12 Comorbidity count using non-weighted method, category 1, count > 1 and count <= 3
PSI 12	PS12_NonWt_2	PS12 Comorbidity count using non-weighted method, category 2, count >= 4
PSI 13	PS13_NonWt_1	PS13 Comorbidity count using non-weighted method, category 1, count > 2 and count <= 4
PSI 13	PS13_NonWt_2	PS13 Comorbidity count using non-weighted method, category 2, count >= 5
PSI 14	PS14_OPEN_NonWt_1	PS14_OPEN Comorbidity count using non-weighted method, category 1, count > 0 and count <= 3
PSI 14	PS14_OPEN_NonWt_2	PS14_OPEN Comorbidity count using non-weighted method, category 2, count >= 4
PSI 15	PS15_NonWt_1	PS15 Comorbidity count using non-weighted method, category 1, count > 0 and count <= 4

*Comorbidity counts are based on the number of comorbidity categories defined by the Elixhauser Comorbidity Software Refined for ICD-10-CM. Agency for Healthcare Research and Quality. Elixhauser Comorbidity Software Refined for ICD-10-CM. Healthcare Cost and Utilization Project (HCUP). October 2021. www.hcup-us.ahrq.gov/toolssoftware/comorbidityicd10/comorbidity_icd10.jsp.