



Patient Safety Indicators (PSI) Parameter Estimates, v2021

Prepared for:

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Table of Contents

Executive Summary.....	1
Acknowledgments	2
Parameter Estimates Tables.....	4
Composite Weights for PSI 90	85
Appendix Tables.....	86

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	8
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)	13
Table 4. Risk Adjustment Coefficients for PSI 04 – Death Rate Among Surgical Inpatients with Serious Treatable Complications Stratum: Pneumonia	17
Table 5. Risk Adjustment Coefficients for PSI 04 – Death Rate Among Surgical Inpatients with Serious Treatable Complications Stratum: Sepsis.....	22
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	30
Table 8. Risk Adjustment Coefficients for PSI 06 – Iatrogenic Pneumothorax Rate	34
Table 9. Risk Adjustment Coefficients for PSI 07 – Central Venous Catheter-Related Blood Stream Infection Rate.....	40
Table 10. Risk Adjustment Coefficients for PSI 08 – In-Hospital Fall with Hip Fracture Rate	43
Table 11. Risk Adjustment Coefficients for PSI 09 – Postoperative Hemorrhage or Hematoma Rate	49
Table 12. Risk Adjustment Coefficients for PSI 10 – Postoperative Acute Kidney Injury Requiring Dialysis Rate.....	55
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	64
Table 15. Risk Adjustment Coefficients for PSI 13 – Postoperative Sepsis Rate.....	70
Table 16. Risk Adjustment Coefficients for PSI 14 – Postoperative Wound Dehiscence Rate Stratum: Open Approach.....	76

Table 17. Risk Adjustment Coefficients for PSI 14 – Postoperative Wound Dehiscence Rate Stratum: Non-Open Approach.....	80
Table 18. Risk Adjustment Coefficients for PSI 15 – Abdominopelvic Accidental Puncture or Laceration Rate	81
Table 19. Composite Weights for PSI 90, v2021	85
Table 20. Population Age Categories	86
Table 21. Modified Diagnosis-Related Group (MDRG) Categories.....	87
Table 22. Categorical Variables Definitions: Transfer.....	122
Table 23. SEVDPEDX: Severe Pulmonary Embolism or Deep Vein Thrombosis (PE/DVT) Diagnosis Codes	123
Table 24. SEVPNEUDX: Severe Pneumonia Diagnosis Codes	123
Table 25. SEVSEPDX: Severe Sepsis Diagnosis Codes.....	124
Table 26. SEVSCKDX: Severe Shock or Cardiac Arrest Diagnosis Codes	124
Table 27. SEVGIHDX: Severe Gastrointestinal Hemorrhage or Acute Ulcer Diagnosis Codes.....	124
Table 28. Do Not Resuscitate (DNR) Status Diagnosis Codes	125

Executive Summary

This document provides statistical parameters associated with Version 2021 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 2018 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 2018, 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 2018, 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) 2018 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.
(<http://www.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** Office of Statewide Health Planning and Development, **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	-7.526823657	0.1912311704	-39.3598158805	<.0001
Age_LT30	Age < 30	1	-1.806977361	0.3145098229	-5.7453765502	<.0001
Age_30_34	30 <= Age <= 34	1	-1.515961520	0.3527628482	-4.2973956242	<.0001
Age_35_39	35 <= Age <= 39	1	-1.300582807	0.3087915716	-4.2118468481	<.0001
Age_40_44	40 <= Age <= 44	1	-1.005957797	0.2687933192	-3.7424955357	0.0002
Age_45_49	45 <= Age <= 49	1	-1.168287523	0.2773620444	-4.2121391381	<.0001
Age_50_54	50 <= Age <= 54	1	-0.7039075953	0.2403875397	-2.9282199742	0.0034
Age_55_59	55 <= Age <= 59	1	-0.8221060430	0.2442374887	-3.3660108747	0.0008
Age_60_64	60 <= Age <= 64	1	-0.2155553533	0.2154735543	-1.0003796242	0.3171
Age_70_74	70 <= Age <= 74	1	0.3370037975	0.1897019382	1.7764910610	0.0757
Age_75_79	75 <= Age <= 79	1	0.3372672054	0.1996152964	1.6895859760	0.0911
Age_80_84	80 <= Age <= 84	1	0.4517137476	0.1985607743	2.2749394949	0.0229
Age_85_89	85 <= Age <= 89	1	0.7387420054	0.1965163734	3.7591880644	0.0002
Age_90Plus	Age >= 90	1	0.9952340833	0.2071429287	4.8045766739	<.0001
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.2878684319	0.1937839307	1.4855123998	0.1374
Age_LT30_MALE	Age < 30 MALE	1	0.1218855647	0.4067586110	0.2996508528	0.7644
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.0857792746	0.4909744559	0.1747122963	0.8613
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.1333767278	0.4293732509	0.3106311991	0.7561
Age_40_44_MALE	40 <= Age <= 44 MALE	1	-0.3784125220	0.4353115600	-0.8692912311	0.3847
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.1320521819	0.3899760455	0.3386161365	0.7349
Age_50_54_MALE	50 <= Age <= 54 MALE	1	-0.2224843466	0.3468524267	-0.6414380570	0.5212
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.1041436390	0.3330106101	0.3127336962	0.7545

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Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.1279694059	0.2950229963	-0.4337607830	0.6645
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.4700123737	0.2723817482	-1.7255648619	0.0844
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.1757315562	0.2665621388	-0.6592517486	0.5097
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.2273433908	0.2530659317	0.8983563662	0.3690
Age_85_89_MALE	85 <= Age <= 89 MALE	1	-0.0534803483	0.2481143468	-0.2155471822	0.8293
Age_90Plus_MALE	Age >= 90 MALE	1	-0.1704239174	0.2589714463	-0.6580799535	0.5105
ALCOHOL	Alcohol abuse	1	-0.3045745288	0.1665241321	-1.8290113564	0.0674
ANEMDEF	Deficiency anemias	1	-0.0242467822	0.0895516127	-0.2707576274	0.7866
ARTH	Arthropathies	1	0.1238037204	0.1500238135	0.8252271259	0.4092
CBVD	Cerebrovascular disease	1	-0.2639917915	0.1583557140	-1.6670809331	0.0955
CHF	Congestive heart failure	1	0.9530895665	0.1075810822	8.8592673262	<.0001
COAG	Coagulopathy	1	0.5809711470	0.1357898479	4.2784578959	<.0001
DEMENTIA	Dementia	1	0.2243738173	0.0938424087	2.3909639619	0.0168
DEPRESS	Depression	1	-0.0736655076	0.0956573428	-0.7700977833	0.4412
DIAB_CX	Diabetes with chronic complications	1	0.0123936918	0.0952383758	0.1301333805	0.8965
DIAB_UNCX	Diabetes without chronic complications	1	-0.1148975991	0.1067848906	-1.0759724385	0.2819
DRUG_ABUSE	Drug abuse	1	-0.5501947045	0.1703111394	-3.2305268253	0.0012
HTN_CX	Hypertension, complicated	1	-0.2972592910	0.1340082219	-2.2182168135	0.0265
HTN_UNCX	Hypertension, uncomplicated	1	-0.2055893696	0.0942390973	-2.1815719315	0.0291
LIVER_SEV	Liver disease, moderate to severe	1	1.2599368030	0.2758525723	4.5674281461	<.0001
LUNG_CHRONIC	Chronic pulmonary disease	1	-0.0494989111	0.0838399813	-0.5903974489	0.5549
NEURO_OTH	Other neurological disorders	1	0.8715328240	0.1093104115	7.9730083569	<.0001
NEURO_SEIZ	Seizures and epilepsy	1	0.4495002247	0.1234797574	3.6402746011	0.0003
OBESE	Obesity	1	0.0872780246	0.0924277726	0.9442835430	0.3450
PARALYSIS	Paralysis	1	0.4938230918	0.1590822802	3.1041992307	0.0019

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Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
PERIVASC	Peripheral vascular disease	1	0.3379287439	0.1144784531	2.9518982358	0.0032
PSYCHOSES	Psychoses	1	0.2413834786	0.1233964080	1.9561629264	0.0504
PULMCIRC	Pulmonary circulation disease	1	0.4180884682	0.1354826015	3.0859199895	0.0020
RENFL_MOD	Renal failure, moderate	1	0.2358309046	0.1111921728	2.1209308044	0.0339
RENFL_SEV	Renal failure, severe	1	0.5991988502	0.1710895941	3.5022518663	0.0005
THYROID_HYPO	Hypothyroidism	1	-0.3242640278	0.0872215355	-3.7177060245	0.0002
VALVE	Valvular disease	1	0.0739279447	0.1007966615	0.7334364413	0.4633
WGHTLOSS	Weight loss	1	0.8785073556	0.1222863078	7.1840206102	<.0001
PS02_NonWt_1	PS02 Comorbidity count using non-weighted method, category 1	1	0.3126913586	0.1089131573	2.8710154628	0.0041
PS02_NonWt_2	PS02 Comorbidity count using non-weighted method, category 2	1	0.3669393665	0.1724435578	2.1278809779	0.0333
MDC_1	Nervous System	1	-0.4027389869	0.2435618942	-1.6535385727	0.0982
MDC_4	Respiratory System	1	-0.6029381113	0.1433674716	-4.2055433109	<.0001
MDC_5	Circulatory System	1	-0.4710863510	0.1478327523	-3.1866169272	0.0014
MDC_10	Endocrine Nutritional And Metabolic	1	1.2453378471	0.2610355609	4.7707593661	<.0001
MDC_12	Male Reproductive System	1	0.4768774676	0.2127323110	2.2416785927	0.0250
MDC_13	Female Reproductive System	1	0.5938436048	0.2314886681	2.5653247297	0.0103
MDRG_109	SPINAL DISORDERS & INJURIES	1	2.1303471416	0.3441322149	6.1904903088	<.0001
MDRG_116	TRANSIENT ISCHEMIA	1	-0.1925057020	0.2606362244	-0.7385991813	0.4602
MDRG_302	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES	1	1.1965647052	0.2689920606	4.4483272211	<.0001
MDRG_307	DYSEQUILIBRIUM	1	-1.879645821	0.3946835969	-4.7624118043	<.0001
MDRG_533	SYNCOPE & COLLAPSE	1	0.1482443970	0.1403500327	1.0562476840	0.2909
MDRG_812	MAJOR JOINT/LIMB REATTACHMENT PROCEDURE OF UPPER EXTREMITIES	1	-0.8433142567	0.2129976106	-3.9592662772	<.0001

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Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_814	KNEE PROCEDURES W/O PDX OF INFECTION	1	-0.0315399340	0.3835716413	-0.0822269703	0.9345
MDRG_815	BACK & NECK PROC EXC SPINAL FUSION OR DISC DEVICE/NEUROSTIM	1	0.5271278899	0.1737692140	3.0334941256	0.0024
MDRG_822	MAJOR SHOULDER OR ELBOW JOINT PROCEDURES	1	1.0446976558	0.5161547713	2.0240007725	0.0430
MDRG_1001	ADRENAL & PITUITARY PROCEDURES	1	0.5642824634	0.2870059205	1.9661004287	0.0493
MDRG_1201	MAJOR MALE PELVIC PROCEDURES	1	0.1096230047	0.5307691500	0.2065361272	0.8364
MDRG_1206	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXC MALIGNANCY	1	0.5111542424	0.3663279034	1.3953461849	0.1629
MDRG_1304	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY	1	-0.7086981210	0.2851976813	-2.4849364754	0.0130
MDRG_1306	VAGINA, CERVIX & VULVA PROCEDURES	1	-0.9350987773	0.7167107862	-1.3047086708	0.1920
MDRG_1308	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES	1	1.0985191488	0.4986584092	2.2029492102	0.0276
MDRG_1909	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	1	1.9155599885	0.3231393733	5.9279683838	<.0001
MDRG_1911	DEPRESSIVE NEUROSES	1	-1.045265879	0.3427618278	-3.0495399269	0.0023
MDRG_1912	NEUROSES EXCEPT DEPRESSIVE	1	-0.9901010360	0.5572486682	-1.7767669850	0.0756
MDRG_1915	PSYCHOSES	1	-0.3987393753	0.1435073589	-2.7785291183	0.0055
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.1974838887	0.1081559382	1.8259181329	0.0679
DNR	Do not resuscitate flag	1	1.4329126732	0.1012005680	14.1591366657	<.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	-6.941389022	0.0710090673	-97.7535586689	<.0001
Age_LT30	Age < 30	1	-0.5937738789	0.1212035361	-4.8989814830	<.0001
Age_30_34	30 <= Age <= 34	1	-0.4734694699	0.1352052097	-3.5018581828	0.0005
Age_35_39	35 <= Age <= 39	1	-0.5508527202	0.1227518922	-4.4875293583	<.0001
Age_40_44	40 <= Age <= 44	1	-0.4550208629	0.1063357284	-4.2790966832	<.0001
Age_45_49	45 <= Age <= 49	1	-0.4701986469	0.1005065620	-4.6782880416	<.0001
Age_50_54	50 <= Age <= 54	1	-0.1891567245	0.0775637449	-2.4387260390	0.0147
Age_55_59	55 <= Age <= 59	1	-0.1192648456	0.0696702291	-1.7118480469	0.0869
Age_60_64	60 <= Age <= 64	1	-0.0042311431	0.0662151172	-0.0638999561	0.9490
Age_70_74	70 <= Age <= 74	1	-0.0062435126	0.0562647787	-0.1109666244	0.9116
Age_75_79	75 <= Age <= 79	1	0.0788771291	0.0615955591	1.2805651933	0.2003
Age_80_84	80 <= Age <= 84	1	0.0525493027	0.0624401414	0.8415948705	0.4000
Age_85_89	85 <= Age <= 89	1	0.0460338828	0.0650113918	0.7080894833	0.4789
Age_90Plus	Age >= 90	1	0.0218378648	0.0861250864	0.2535598592	0.7998
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.1581213453	0.0550905228	2.8702095608	0.0041
Age_LT30_MALE	Age < 30 MALE	1	0.5240273652	0.1326507477	3.9504290341	<.0001
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.3375804664	0.1588543447	2.1250943256	0.0336
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.4206528971	0.1549302290	2.7151118264	0.0066
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.3112521348	0.1331848797	2.3369930232	0.0194
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.4597972485	0.1188516686	3.8686646464	0.0001
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.1577646222	0.0969602805	1.6271056691	0.1037
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.0101974597	0.0827640873	0.1232111666	0.9019
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.0141418241	0.0827930540	-0.1708093064	0.8644
Age_70_74_MALE	70 <= Age <= 74 MALE	1	0.0600803237	0.0746269931	0.8050749637	0.4208

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Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_75_79_MALE	75 <= Age <= 79 MALE	1	0.0107690884	0.0793359642	0.1357403108	0.8920
Age_80_84_MALE	80 <= Age <= 84 MALE	1	-0.0305228786	0.0845168144	-0.3611456353	0.7180
Age_85_89_MALE	85 <= Age <= 89 MALE	1	-0.0417743465	0.0930167239	-0.4491057602	0.6534
Age_90Plus_MALE	Age >= 90 MALE	1	0.0257507660	0.1031488549	0.2496466492	0.8029
AIDS	Acquired immune deficiency syndrome	1	0.1005256588	0.1257898400	0.7991556296	0.4242
ANEMDEF	Deficiency anemias	1	-0.0757874110	0.0294274866	-2.5753953107	0.0100
BLDLOSS	Chronic blood loss anemia	1	0.1264890216	0.0822013754	1.5387701355	0.1239
CANCER_LEUK	Leukemia	1	0.2395178505	0.0902993330	2.6524874817	0.0080
CANCER_METS	Metastatic cancer	1	0.2180472773	0.0492444225	4.4278573324	<.0001
CANCER_SOLID	Solid tumor without metastasis, malignant	1	-0.0228318896	0.0525011102	-0.4348839398	0.6636
CBVD	Cerebrovascular disease	1	-0.1341041846	0.0421317907	-3.1829690185	0.0015
CHF	Congestive heart failure	1	0.2975991513	0.0333270595	8.9296552277	<.0001
COAG	Coagulopathy	1	0.2701161758	0.0317103792	8.5182259792	<.0001
DEMENTIA	Dementia	1	0.2743081450	0.0357079975	7.6819806208	<.0001
DEPRESS	Depression	1	-0.0372521963	0.0344514144	-1.0812965727	0.2796
DIAB_CX	Diabetes with chronic complications	1	0.3278255211	0.0309760144	10.5832053597	<.0001
DIAB_UNCX	Diabetes without chronic complications	1	-0.1233989809	0.0406492565	-3.0357008073	0.0024
DRUG_ABUSE	Drug abuse	1	0.1237231108	0.0496779313	2.4905044844	0.0128
HTN_UNCX	Hypertension, uncomplicated	1	-0.4636377762	0.0364788411	-12.7097726244	<.0001
LIVER_SEV	Liver disease, moderate to severe	1	0.2805640928	0.0580947841	4.8294196676	<.0001
LUNG_CHRONIC	Chronic pulmonary disease	1	-0.0995385582	0.0276846857	-3.5954375432	0.0003
NEURO_OTH	Other neurological disorders	1	0.4479650677	0.0332281660	13.4814863777	<.0001
NEURO_SEIZ	Seizures and epilepsy	1	-0.0331028437	0.0449564108	-0.7363319973	0.4615
PARALYSIS	Paralysis	1	0.9109564375	0.0394687659	23.0804388437	<.0001
PERIVASC	Peripheral vascular disease	1	0.3209062088	0.0326038319	9.8425918146	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
PULMCIRC	Pulmonary circulation disease	1	0.2016171768	0.0416047625	4.8460119622	<.0001
RENFL_MOD	Renal failure, moderate	1	-0.1954023766	0.0382655143	-5.1064876554	<.0001
RENFL_SEV	Renal failure, severe	1	0.4336113089	0.0370204469	11.7127518687	<.0001
THYROID_HYPO	Hypothyroidism	1	-0.2352395429	0.0356423934	-6.599928943	<.0001
ULCER_PEPTIC	Peptic ulcer disease x bleeding	1	0.3167793672	0.0657477139	4.8181046656	<.0001
VALVE	Valvular disease	1	-0.0104878635	0.0368400813	-0.2846862205	0.7759
WGHTLOSS	Weight loss	1	1.0240083338	0.0338496174	30.2516959202	<.0001
PS03_NonWt_1	PS03 Comorbidity count using non-weighted method, category 1	1	0.1126309999	0.0349549478	3.2221761688	0.0013
PS03_NonWt_2	PS03 Comorbidity count using non-weighted method, category 2	1	-0.2104043691	0.0590672729	-3.5621141560	0.0004
MDC_1	Nervous System	1	0.7732059253	0.0676196860	11.4346275570	<.0001
MDC_4	Respiratory System	1	0.4792609892	0.0751576129	6.3767457602	<.0001
MDC_5	Circulatory System	1	0.0194573851	0.0529047862	0.3677811873	0.7130
MDC_6	Digestive System	1	-0.2214651686	0.0606371268	-3.6523031398	0.0003
MDC_7	Hepatobiliary System And Pancreas	1	-0.1150598068	0.0839167538	-1.3711184178	0.1703
MDC_8	Musculoskeletal And Connective	1	-0.3121408391	0.0571966351	-5.4573287144	<.0001
MDC_10	Endocrine Nutritional And Metabolic	1	-0.1234573726	0.0739133825	-1.6702979674	0.0949
MDC_13	Female Reproductive System	1	-0.7604317120	0.1736678900	-4.3786546382	<.0001
MDC_18	Infectious and Parasitic	1	1.2508340446	0.0585066907	21.3793333596	<.0001
MDC_19	Mental Diseases and Disorders	1	-0.8242562197	0.1523116696	-5.4116419437	<.0001
MDC_21	Injuries Poison And Toxic	1	0.1458270753	0.0989177349	1.4742257841	0.1404
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	-1.604085119	0.1533511608	-10.4602085256	<.0001
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	-2.080326795	0.1611410602	-12.9099733634	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_107	EXTRACRANIAL PROCEDURES	1	-3.065934514	0.4781040006	-6.4126937034	<.0001
MDRG_108	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC	1	-0.7579205991	0.1495174311	-5.0691119665	<.0001
MDRG_114	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION	1	-0.8313245115	0.0935620292	-8.8852766307	<.0001
MDRG_401	MAJOR CHEST PROCEDURES	1	-1.509795284	0.1847695936	-8.1712323709	<.0001
MDRG_402	OTHER RESP SYSTEM O.R. PROCEDURES	1	-0.9419911934	0.1196071338	-7.8757107843	<.0001
MDRG_404	RESPIRATORY INFECTIONS & INFLAMMATIONS	1	0.0438603998	0.1110979932	0.3947902081	0.6930
MDRG_409	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	1	-1.662288554	0.2359959594	-7.0437161622	<.0001
MDRG_416	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT	1	1.0264165478	0.0855797465	11.9936853093	<.0001
MDRG_510	PERMANENT CARDIAC PACEMAKER IMPLANT AND PROCEDURES	1	-1.759443256	0.2148596090	-8.1888041402	<.0001
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-2.272279909	0.1820823236	-12.4794096661	<.0001
MDRG_514	OTHER VASCULAR PROCEDURES	1	-0.9623404992	0.1120145678	-8.5912084274	<.0001
MDRG_524	HEART FAILURE & SHOCK	1	-0.2280004021	0.0811603187	-2.8092595714	0.0050
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	-0.2011507134	0.0964623273	-2.0852774236	0.0370
MDRG_543	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES	1	-1.357288565	0.2526431891	-5.3723536734	<.0001
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	-0.3308316501	0.0817382063	-4.0474542447	<.0001
MDRG_705	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E.	1	-1.895455254	0.2280458874	-8.3117274152	<.0001
MDRG_801	COMBINED ANTERIOR/POSTERIOR SPINAL	1	-0.7964373954	0.1971177819	-4.0404137449	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	FUSION					
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-0.8227901847	0.1103673425	-7.4550149169	<.0001
MDRG_838	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	1	2.0388032128	0.1264311484	16.1257984174	<.0001
MDRG_1002	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DIS	1	-1.168328162	0.2122317206	-5.5049648483	<.0001
MDRG_1104	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM	1	-1.040165913	0.2546776974	-4.0842442188	<.0001
MDRG_1118	OTHER KIDNEY & URINARY TRACT DIAGNOSES	1	1.0574802720	0.1672667375	6.3221193149	<.0001
MDRG_1711	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE	1	1.2919125356	0.2791127752	4.6286399268	<.0001
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	-0.9447047097	0.0589054360	-16.0376490606	<.0001
MDRG_1807	SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS	1	1.0551631637	0.0824992727	12.7899692798	<.0001
MDRG_1808	SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS	1	-0.4640446138	0.0647601972	-7.1655836994	<.0001
MDRG_2407	LIMB REATTACHMENT, HIP & FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	1	0.4290308630	0.1864603939	2.3009222173	0.0214
MDRG_7701	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	1	1.4302432536	0.1361172857	10.5074329574	<.0001
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.5723638806	0.0409879939	13.9641838195	<.0001
MEDICDR	Medical DRGs flag	1	-1.842336310	0.0550238707	-33.4824920160	<.0001

c-statistic=0.818

**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	-4.792133515	0.2251273393	-21.2863241316	<.0001
Age_LT30	Age < 30	1	-0.4227109826	0.3689036966	-1.1458572699	0.2519
Age_30_34	30 <= Age <= 34	1	-0.6144319630	0.4176363126	-1.4712129777	0.1412
Age_35_39	35 <= Age <= 39	1	-1.769855395	0.5340923760	-3.3137627012	0.0009
Age_40_44	40 <= Age <= 44	1	-0.8355147359	0.3962485529	-2.1085622391	0.0350
Age_45_49	45 <= Age <= 49	1	-0.0418343647	0.2475683060	-0.1689811001	0.8658
Age_50_54	50 <= Age <= 54	1	-0.1736882372	0.2571404061	-0.6754606941	0.4994
Age_55_59	55 <= Age <= 59	1	-0.1893251836	0.2205869768	-0.8582790622	0.3907
Age_60_64	60 <= Age <= 64	1	-0.0518652841	0.1932067353	-0.2684444930	0.7884
Age_70_74	70 <= Age <= 74	1	-0.0276837696	0.1934319801	-0.1431188866	0.8862
Age_75_79	75 <= Age <= 79	1	0.4028451832	0.1925066313	2.0926301625	0.0364
Age_80_84	80 <= Age <= 84	1	0.3125794544	0.2050210636	1.5246211731	0.1274
Age_85Plus	Age >= 85	1	0.6428489839	0.2083713321	3.0851124161	0.0020
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.1209456186	0.1897340511	0.6374481432	0.5238
Age_LT30_MALE	Age < 30 MALE	1	-0.5272824634	0.4778945863	-1.1033447093	0.2699
Age_30_34_MALE	30 <= Age <= 34 MALE	1	-0.3682949408	0.6299887030	-0.5846056272	0.5588
Age_35_39_MALE	35 <= Age <= 39 MALE	1	1.2345257974	0.5692082549	2.1688473185	0.0301
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.5587659033	0.4814373512	1.1606201761	0.2458
Age_45_49_MALE	45 <= Age <= 49 MALE	1	-0.9438840152	0.3915268032	-2.4107775192	0.0159
Age_50_54_MALE	50 <= Age <= 54 MALE	1	-0.2703475292	0.3400065752	-0.7951244151	0.4265
Age_55_59_MALE	55 <= Age <= 59 MALE	1	-0.0193711707	0.2874443040	-0.0673910405	0.9463
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.3475327898	0.2641127407	-1.3158501513	0.1882
Age_70_74_MALE	70 <= Age <= 74 MALE	1	0.1280700038	0.2564066388	0.4994800617	0.6174
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.2008785807	0.2640214234	-0.7608419730	0.4468

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_80_84_MALE	80 <= Age <= 84 MALE	1	-0.0042986915	0.2842501113	-0.0151229193	0.9879
Age_85Plus_MALE	Age >= 85 MALE	1	-0.3567330708	0.3241846324	-1.1004009295	0.2712
AIDS	Acquired immune deficiency syndrome	1	0.7448018958	0.3647297753	2.0420649647	0.0411
ANEMDEF	Deficiency anemias	1	-0.3324093222	0.1011105058	-3.2875844048	0.0010
ARTH	Arthropathies	1	-0.0925992001	0.1939876825	-0.4773457720	0.6331
CANCER_METS	Metastatic cancer	1	0.8110564289	0.1056903149	7.6738954716	<.0001
CBVD	Cerebrovascular disease	1	0.2791082886	0.1288209965	2.1666366215	0.0303
CHF	Congestive heart failure	1	0.5352503787	0.1209137848	4.4267109806	<.0001
COAG	Coagulopathy	1	0.5230815760	0.1089818863	4.7997111589	<.0001
DEMENTIA	Dementia	1	0.2171094897	0.1506008253	1.4416221775	0.1494
DEPRESS	Depression	1	-0.2352252215	0.1175176787	-2.0016156215	0.0453
DIAB_CX	Diabetes with chronic complications	1	-0.0709052032	0.0992339524	-0.7145256387	0.4749
DIAB_UNCX	Diabetes without chronic complications	1	-0.2071585607	0.1319290566	-1.5702269543	0.1164
HTN_CX	Hypertension, complicated	1	-0.1484470847	0.1273927665	-1.1652709081	0.2439
HTN_UNCX	Hypertension, uncomplicated	1	-0.1824052471	0.0903620923	-2.0186036255	0.0435
LIVER_MLD	Liver disease, mild	1	0.2872034988	0.1616860810	1.7763031734	0.0757
LIVER_SEV	Liver disease, moderate to severe	1	0.3897682378	0.3159955558	1.2334611378	0.2174
LUNG_CHRONIC	Chronic pulmonary disease	1	0.0856647976	0.0871796666	0.9826235965	0.3258
NEURO_MOVT	Neurological disorders affecting movement	1	0.2445682458	0.2296244799	1.0650791495	0.2868
NEURO_OTH	Other neurological disorders	1	0.4658644249	0.1202367609	3.8745590055	0.0001
NEURO_SEIZ	Seizures and epilepsy	1	0.2661318432	0.1707466962	1.5586353882	0.1191
OBESE	Obesity	1	-0.1348844492	0.0941619746	-1.4324726068	0.1520
PERIVASC	Peripheral vascular disease	1	0.1737822495	0.0977971781	1.7769658887	0.0756
RENFL_MOD	Renal failure, moderate	1	0.3184149226	0.1257193094	2.5327447642	0.0113
RENFL_SEV	Renal failure, severe	1	0.6568215083	0.1619383596	4.0559970456	<.0001
VALVE	Valvular disease	1	-0.1069005583	0.1279827816	-0.8352729715	0.4036
WGHTLOSS	Weight loss	1	0.1241229356	0.1076540654	1.1529795475	0.2489

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
PS04_DVT_PE_No nWt_1	PS04_DVT_PE Comorbidity count using non-weighted method, category 1	1	0.1078405805	0.1127024088	0.9568613628	0.3386
PS04_DVT_PE_No nWt_2	PS04_DVT_PE Comorbidity count using non-weighted method, category 2	1	0.0707514613	0.1808501029	0.3912160412	0.6956
MDC_1	Nervous System	1	0.9103146685	0.1979188398	4.5994341399	<.0001
MDC_4	Respiratory System	1	0.7680197384	0.2804966979	2.7380705163	0.0062
MDC_5	Circulatory System	1	1.0837563969	0.1884332858	5.7514063519	<.0001
MDC_6	Digestive System	1	0.2896017379	0.1867853953	1.5504517229	0.1210
MDC_8	Musculoskeletal And Connective	1	-0.1566348697	0.1689632958	-0.9270348864	0.3539
MDC_11	Kidney And Urinary Tract	1	-0.1898819705	0.3127505477	-0.6071355330	0.5438
MDC_13	Female Reproductive System	1	-0.3177143283	0.3547552798	-0.8955873144	0.3705
MDC_18	Infectious and Parasitic	1	0.5759039145	0.3160986782	1.8219118088	0.0685
MDRG_101	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE	1	0.9257202895	0.3544445225	2.6117494578	0.0090
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	0.9505594662	0.1812318475	5.2449913150	<.0001
MDRG_401	MAJOR CHEST PROCEDURES	1	0.3031131163	0.3097936430	0.9784355590	0.3279
MDRG_402	OTHER RESP SYSTEM O.R. PROCEDURES	1	0.3911417151	0.3138955884	1.2460886027	0.2127
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	1.6852811595	0.3598531588	4.6832468143	<.0001
MDRG_503	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC	1	0.1316646867	0.2607960018	0.5048569985	0.6137
MDRG_505	OTHER CARDIOTHORACIC PROCEDURES	1	-0.7609046322	0.4899375400	-1.5530645646	0.1204
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-0.9416535356	0.2575247701	-3.6565551940	0.0003
MDRG_514	OTHER VASCULAR PROCEDURES	1	-0.6631085350	0.2193494274	-3.0230693680	0.0025
MDRG_539	CARDIAC DEFIBRILLATOR IMPLANT W/OUT CARDIAC CATH	1	-1.169978701	0.4365657497	-2.6799598955	0.0074
MDRG_541	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON	1	0.6037786026	0.3531379506	1.7097528078	0.0873

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	-0.4367308572	0.1932678080	-2.2597185829	0.0238
MDRG_543	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES	1	-1.689823674	0.5493582927	-3.0759955688	0.0021
MDRG_611	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES	1	0.4513307619	0.3473194663	1.2994686613	0.1938
MDRG_803	SPINAL FUSION EXCEPT CERVICAL	1	-1.665042573	1.0071176727	-1.6532751020	0.0983
MDRG_811	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT	1	0.4749275166	0.1689894226	2.8103978902	0.0049
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	0.3591416855	0.2767429613	1.2977446066	0.1944
MDRG_2406	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	1	3.5660578358	0.4129311638	8.6359619910	<.0001
MDRG_2407	LIMB REATTACHMENT, HIP & FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	1	0.6643627008	0.3359436171	1.9776017971	0.0480
MDRG_2408	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA	1	1.1542322371	0.2854166368	4.0440257801	<.0001
MDRG_7701	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	1	0.8359859050	0.4426762566	1.8884814637	0.0590
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.3206794073	0.0879228176	3.6472831047	0.0003
RegVarPS04_DVT_PE_ANY	PSI04 DVT PE Regression variable: Any Triggering Complication POA	1	-0.4910989979	0.0752137152	-6.5293809333	<.0001
RegVarPS04_DVT_PE_SEVERE	PSI04 DVT PE Regression variable: Triggering Complication Severe	1	0.7892041725	0.0759915892	10.3854147700	<.0001
RegVarPS04_GIHEMORRHAGE_A	PSI04 GIHEMORRHAGE Regression variable: Any Triggering Complication POA	1	-0.0265461398	0.4574269856	-0.0580336111	0.9537
RegVarPS04_PNEUMONIA_ANY	PSI04 PNEUMONIA Regression variable: Any Triggering Complication POA	1	0.9946976852	0.2768107308	3.5934216941	0.0003
RegVarPS04_PNEUMONIA_SEVE	PSI04 PNEUMONIA Regression variable: Triggering Complication Severe	1	0.0297920662	0.3779575480	0.0788238425	0.9372

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
RegVarPS04_SEPSI S_ANY	PSI04 SEPSIS Regression variable: Any Triggering Complication POA	1	-0.6251859691	0.3841173965	-1.6275908740	0.1036
RegVarPS04_SEPSI S_SEVERE	PSI04 SEPSIS Regression variable: Triggering Complication Severe	1	2.1906758181	0.3773298437	5.8057316551	<.0001
RegVarPS04_SHOC K_ANY	PSI04 SHOCK Regression variable: Any Triggering Complication POA	1	-0.0500223913	0.2015404262	-0.2482002856	0.8040
RegVarPS04_SHOC K_SEVERE	PSI04 SHOCK Regression variable: Triggering Complication Severe	1	3.5592379605	0.1256386728	28.3291591814	<.0001
DNR	Do not resuscitate flag	1	1.0033737622	0.1276638938	7.8594952140	<.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	-3.532317582	0.0734107770	-48.1171528815	<.0001
Age_LT30	Age < 30	1	-1.236885707	0.1676931058	-7.3758888368	<.0001
Age_30_34	30 <= Age <= 34	1	-1.024899743	0.1799269675	-5.6961986155	<.0001
Age_35_39	35 <= Age <= 39	1	-1.183463954	0.1930941185	-6.1289487410	<.0001
Age_40_44	40 <= Age <= 44	1	-0.5700929438	0.1362260876	-4.1849028605	<.0001
Age_45_49	45 <= Age <= 49	1	-0.7142923294	0.1252265288	-5.7040016686	<.0001
Age_50_54	50 <= Age <= 54	1	-0.3127519655	0.0981687960	-3.1858592373	0.0014
Age_55_59	55 <= Age <= 59	1	-0.2515298125	0.0787638621	-3.1934672284	0.0014
Age_60_64	60 <= Age <= 64	1	-0.1326585770	0.0793609632	-1.6715847642	0.0946
Age_70_74	70 <= Age <= 74	1	0.0372904916	0.0734762618	0.5075175392	0.6118
Age_75_79	75 <= Age <= 79	1	0.2017567787	0.0715711656	2.8189673474	0.0048
Age_80_84	80 <= Age <= 84	1	0.3140789090	0.0757109244	4.1483961724	<.0001
Age_85Plus	Age >= 85	1	0.3694221978	0.0819334527	4.5088078864	<.0001

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Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MALE	Patient Sex Flag: 1=Male / 0=Female	1	-0.0317149069	0.0650648904	-0.4874350310	0.6260
Age_LT30_MALE	Age < 30 MALE	1	0.3074033260	0.1947280391	1.5786289818	0.1144
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.1478521284	0.2347159199	0.6299194722	0.5287
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.5202155326	0.2285613102	2.2760437105	0.0228
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.1213536320	0.1650527412	0.7352415426	0.4622
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.3455306658	0.1492457894	2.3151786536	0.0206
Age_50_54_MALE	50 <= Age <= 54 MALE	1	-0.1078147572	0.1225555995	-0.8797211848	0.3790
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.0067844325	0.1004153159	0.0675637221	0.9461
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.0875016425	0.0986798195	-0.8867227666	0.3752
Age_70_74_MALE	70 <= Age <= 74 MALE	1	0.0899083231	0.0929167947	0.9676218750	0.3332
Age_75_79_MALE	75 <= Age <= 79 MALE	1	0.0437431394	0.0904047904	0.4838586452	0.6285
Age_80_84_MALE	80 <= Age <= 84 MALE	1	-0.0158145257	0.0933155327	-0.1694736685	0.8654
Age_85Plus_MALE	Age >= 85 MALE	1	0.0806190749	0.1017739441	0.7921386525	0.4283
ANEMDEF	Deficiency anemias	1	-0.2277315892	0.0343787990	-6.6241868860	<.0001
ARTH	Arthropathies	1	0.1089988249	0.0634472097	1.7179451309	0.0858
BLDLOSS	Chronic blood loss anemia	1	-0.2780763859	0.1222098535	-2.2754006973	0.0229
CANCER_LEUK	Leukemia	1	0.4177714513	0.1194044799	3.4987921021	0.0005
CANCER_LYMPH	Lymphoma	1	0.4211220970	0.0986697998	4.2679938316	<.0001
CANCER_METS	Metastatic cancer	1	0.6902568429	0.0588249851	11.7340759594	<.0001
CANCER_SOLID	Solid tumor without metastasis, malignant	1	0.1671309864	0.0611743746	2.7320424177	0.0063
CBVD	Cerebrovascular disease	1	0.1934991198	0.0416656880	4.6440879506	<.0001
CHF	Congestive heart failure	1	0.2003893518	0.0362174704	5.5329472040	<.0001
COAG	Coagulopathy	1	0.4830637406	0.0347681255	13.8938678406	<.0001
DEMENTIA	Dementia	1	-0.0943860535	0.0496174857	-1.9022740106	0.0571

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
DEPRESS	Depression	1	-0.2859936035	0.0434430585	-6.5831829794	<.0001
DRUG_ABUSE	Drug abuse	1	-0.1658076244	0.0656324819	-2.5263043484	0.0115
HTN_CX	Hypertension, complicated	1	-0.2004694839	0.0384212445	-5.2176728447	<.0001
HTN_UNCX	Hypertension, uncomplicated	1	-0.3088516636	0.0351563681	-8.7850844769	<.0001
LIVER_MLD	Liver disease, mild	1	0.1821069308	0.0539088701	3.3780513382	0.0007
LIVER_SEV	Liver disease, moderate to severe	1	0.7663583143	0.0797159225	9.6136165818	<.0001
LUNG_CHRONIC	Chronic pulmonary disease	1	-0.0693913223	0.0307180068	-2.2589786739	0.0239
NEURO_OTH	Other neurological disorders	1	0.3490789281	0.0366228615	9.5317218296	<.0001
NEURO_SEIZ	Seizures and epilepsy	1	0.1201347900	0.0514758613	2.3338082530	0.0196
OBESE	Obesity	1	-0.1238065085	0.0346603178	-3.5719957634	0.0004
PARALYSIS	Paralysis	1	-0.2911827280	0.0476862220	-6.1062234703	<.0001
PERIVASC	Peripheral vascular disease	1	0.1974544175	0.0346418449	5.6998816856	<.0001
PSYCHOSES	Psychoses	1	-0.3777545792	0.0768170804	-4.9175857397	<.0001
PULMCIRC	Pulmonary circulation disease	1	0.0960109172	0.0520698200	1.8438880193	0.0652
RENFL_MOD	Renal failure, moderate	1	0.0877151829	0.0412821258	2.1247738865	0.0336
RENFL_SEV	Renal failure, severe	1	0.3913214587	0.0472843769	8.2759144552	<.0001
THYROID_HYPO	Hypothyroidism	1	-0.1553765049	0.0407225862	-3.8154871603	0.0001
THYROID_OTH	Other thyroid disorders	1	-0.5400703526	0.1356054064	-3.9826609186	<.0001
WGHTLOSS	Weight loss	1	0.2069383777	0.0346297021	5.9757481257	<.0001
PS04_PNEUMONI A_NonWt_1	PS04_PNEUMONIA Comorbidity count using non-weighted method, category 1	1	0.0860466168	0.0425625207	2.0216522767	0.0432
PS04_PNEUMONI A_NonWt_2	PS04_PNEUMONIA Comorbidity count using non-weighted method, category 2	1	0.0734197667	0.0711806298	1.0314571108	0.3023
MDC_1	Nervous System	1	0.3165724719	0.0729732510	4.3381988244	<.0001
MDC_3	Ear Nose Mouth And Throat	1	-1.003643400	0.1997543278	-5.0243887615	<.0001
MDC_5	Circulatory System	1	0.4738813840	0.0541263943	8.7550887161	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDC_7	Hepatobiliary System And Pancreas	1	-0.1866186904	0.1360938857	-1.3712496293	0.1703
MDC_8	Musculoskeletal And Connective	1	-0.1420579568	0.0723537837	-1.9633797931	0.0496
MDC_11	Kidney And Urinary Tract	1	-0.5723943257	0.1382237402	-4.1410710256	<.0001
MDC_18	Infectious and Parasitic	1	0.1148092954	0.0943544478	1.2167873178	0.2237
MDC_24	Multiple Significant Trauma	1	0.8752551543	0.0972106714	9.0036941586	<.0001
MDRG_101	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE	1	1.4550166261	0.1047625809	13.8887054326	<.0001
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	1.8025292133	0.0747218379	24.1231916203	<.0001
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	1.2704590881	0.0843624534	15.0595322563	<.0001
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	1.2180863331	0.0849158626	14.3446265109	<.0001
MDRG_507	CORONARY BYPASS W/O PTCA	1	-0.7189119194	0.1138490233	-6.3146077045	<.0001
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-0.2469949257	0.0622379868	-3.9685558366	<.0001
MDRG_537	CARDIAC DEFIBRILLATOR IMPLANT W AMI/HF/SHOCK	1	-2.181504109	0.4638711307	-4.7028236167	<.0001
MDRG_538	CARDIAC DEFIBRILLATOR IMPLANT W/OUT AMI/HF/SHOCK	1	-2.714749702	0.4848627308	-5.5990067494	<.0001
MDRG_539	CARDIAC DEFIBRILLATOR IMPLANT W/OUT CARDIAC CATH	1	-1.439058735	0.2932231862	-4.9077249102	<.0001
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	0.4006580536	0.0673724112	5.9469157565	<.0001
MDRG_705	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E.	1	-0.5963796385	0.2281151558	-2.6143797264	0.0089
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-0.1993512936	0.1058521024	-1.8833002754	0.0597
MDRG_811	HIP & FEMUR PROCEDURES	1	0.1772655895	0.0923489314	1.9195196602	0.0549

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	EXCEPT MAJOR JOINT					
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	0.0832096897	0.0768593216	1.0826232659	0.2790
MDRG_2406	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	1	2.1346190999	0.1429895639	14.9284957748	<.0001
MDRG_7701	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	1	0.7780899393	0.1669461781	4.6607232821	<.0001
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.2405667175	0.0324141333	7.4216612623	<.0001
RegVarPS04_DVT_PE_ANY	PSI04 DVT PE Regression variable: Any Triggering Complication POA	1	-0.0893366348	0.0952717293	-0.9377035082	0.3484
RegVarPS04_DVT_PE_SEVERE	PSI04 DVT PE Regression variable: Triggering Complication Severe	1	0.3429417810	0.0836659439	4.0989411581	<.0001
RegVarPS04_GIHE_MORRHAGE_A	PSI04 GIHEMORRHAGE Regression variable: Any Triggering Complication POA	1	0.2026551977	0.0633009354	3.2014566058	0.0014
RegVarPS04_GIHE_MORRHAGE_S	PSI04 GIHEMORRHAGE Regression variable: Triggering Complication Severe	1	0.4783262841	0.1454069955	3.2895685838	0.0010
RegVarPS04_PNEUMONIA_ANY	PSI04 PNEUMONIA Regression variable: Any Triggering Complication POA	1	-0.0962851856	0.0277822895	-3.4657037722	0.0005
RegVarPS04_PNEUMONIA_SEVE	PSI04 PNEUMONIA Regression variable: Triggering Complication Severe	1	0.4130210418	0.0272226704	15.1719517597	<.0001
RegVarPS04_SEPSIS_ANY	PSI04 SEPSIS Regression variable: Any Triggering Complication POA	1	-0.3913823537	0.1032862163	-3.7892989761	0.0002
RegVarPS04_SEPSIS_SEVERE	PSI04 SEPSIS Regression variable: Triggering Complication Severe	1	1.9198920818	0.0987548242	19.4409953953	<.0001
RegVarPS04_SHOCK_K_ANY	PSI04 SHOCK Regression variable: Any Triggering Complication POA	1	0.4032960463	0.0548470488	7.3531038562	<.0001
RegVarPS04_SHOCK_K_SEVERE	PSI04 SHOCK Regression variable: Triggering Complication Severe	1	1.7319159051	0.0548498275	31.5755943782	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
DNR	Do not resuscitate flag	1	0.9516020007	0.0459993923	20.6872733239	<.0001

c-statistic=0.826

**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	-2.535409884	0.0667173658	-38.0022480376	<.0001
Age_LT30	Age < 30	1	-1.232433553	0.1792026711	-6.8773168666	<.0001
Age_30_34	30 <= Age <= 34	1	-0.8849786676	0.1742388501	-5.0791121912	<.0001
Age_35_39	35 <= Age <= 39	1	-0.7265881414	0.1588714610	-4.5734339999	<.0001
Age_40_44	40 <= Age <= 44	1	-0.6694251558	0.1416479069	-4.7259798639	<.0001
Age_45_49	45 <= Age <= 49	1	-0.4874405984	0.1121794913	-4.3451846038	<.0001
Age_50_54	50 <= Age <= 54	1	-0.2895749987	0.0913795563	-3.1689254180	0.0015
Age_55_59	55 <= Age <= 59	1	-0.2823407712	0.0792842449	-3.5611207692	0.0004
Age_60_64	60 <= Age <= 64	1	-0.0469126949	0.0738202662	-0.6354988586	0.5251
Age_70_74	70 <= Age <= 74	1	0.1787973635	0.0677198762	2.6402494152	0.0083
Age_75_79	75 <= Age <= 79	1	0.3773920690	0.0674777214	5.5928395522	<.0001
Age_80_84	80 <= Age <= 84	1	0.5197361870	0.0752501809	6.9067765816	<.0001
Age_85Plus	Age >= 85	1	0.6995863784	0.0802518526	8.7173860236	<.0001
MALE	Patient Sex Flag: 1=Male / 0=Female	1	-0.1171470876	0.0677678367	-1.7286531969	0.0839
Age_LT30_MALE	Age < 30 MALE	1	0.3433368734	0.2079925850	1.6507168917	0.0988
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.5488102037	0.2156092769	2.5453923485	0.0109
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.0662981021	0.2115144718	0.3134447565	0.7539
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.1759192347	0.1876951272	0.9372605316	0.3486

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.1753200677	0.1468098436	1.1941983144	0.2324
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.0733909963	0.1189842413	0.6168127435	0.5374
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.0353376681	0.1066241714	0.3314226749	0.7403
Age_60_64_MALE	60 <= Age <= 64 MALE	1	0.0277021875	0.0980192939	0.2826197415	0.7775
Age_70_74_MALE	70 <= Age <= 74 MALE	1	0.1454749595	0.0893878819	1.6274572840	0.1036
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.0169785247	0.0925730697	-0.1834067381	0.8545
Age_80_84_MALE	80 <= Age <= 84 MALE	1	-0.0228712923	0.0993656736	-0.2301729711	0.8180
Age_85Plus_MALE	Age >= 85 MALE	1	-0.0197754473	0.1104086079	-0.1791114628	0.8579
ALCOHOL	Alcohol abuse	1	-0.1138376961	0.0547506320	-2.0792033239	0.0376
ANEMDEF	Deficiency anemias	1	-0.1876987494	0.0322589791	-5.8184962680	<.0001
CANCER_METS	Metastatic cancer	1	0.5018374860	0.0452423753	11.0922002268	<.0001
CANCER_SOLID	Solid tumor without metastasis, malignant	1	0.2054918153	0.0608887985	3.3748705902	0.0007
CHF	Congestive heart failure	1	0.2458768212	0.0362010435	6.7919816022	<.0001
COAG	Coagulopathy	1	0.4799584501	0.0369746766	12.9807342094	<.0001
DEMENTIA	Dementia	1	-0.1589845400	0.0603375833	-2.6349172644	0.0084
DEPRESS	Depression	1	-0.2369947758	0.0466807285	-5.0769296792	<.0001
DIAB_CX	Diabetes with chronic complications	1	-0.1033316742	0.0322610555	-3.2029849187	0.0014
DIAB_UNCX	Diabetes without chronic complications	1	-0.0938864479	0.0483810073	-1.9405641406	0.0523
DRUG_ABUSE	Drug abuse	1	-0.1945551359	0.0769211453	-2.5292802808	0.0114
HTN_CX	Hypertension, complicated	1	-0.1849398714	0.0379120415	-4.8781301140	<.0001
HTN_UNCX	Hypertension, uncomplicated	1	-0.2434964930	0.0337417216	-7.2164810091	<.0001
LIVER_MLD	Liver disease, mild	1	0.3116243200	0.0542112484	5.7483332173	<.0001
LIVER_SEV	Liver disease, moderate to severe	1	0.7978131892	0.0753198536	10.5923359043	<.0001
LUNG_CHRONIC	Chronic pulmonary disease	1	0.0329928009	0.0303703166	1.0863502457	0.2773
NEURO_OTH	Other neurological disorders	1	0.2261747750	0.0435713018	5.1909115764	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
OBESE	Obesity	1	-0.1290364115	0.0327246680	-3.9430930714	<.0001
PARALYSIS	Paralysis	1	-0.1286756129	0.0510226749	-2.5219299694	0.0117
PERIVASC	Peripheral vascular disease	1	0.3729675465	0.0321313106	11.6076045500	<.0001
PSYCHOSES	Psychoses	1	-0.2230027109	0.0774966931	-2.8775771208	0.0040
PULMCIRC	Pulmonary circulation disease	1	0.0773572077	0.0512055432	1.5107194031	0.1309
RENFL_MOD	Renal failure, moderate	1	0.1499585847	0.0411499652	3.6441971193	0.0003
RENFL_SEV	Renal failure, severe	1	0.3202577356	0.0447003275	7.1645500879	<.0001
THYROID_HYPO	Hypothyroidism	1	-0.1588978809	0.0392399238	-4.0493932098	<.0001
WGHTLOSS	Weight loss	1	0.0200141788	0.0318592469	0.6282062743	0.5299
MDC_4	Respiratory System	1	0.6475456104	0.0626445115	10.3368291194	<.0001
MDC_5	Circulatory System	1	0.3659561195	0.0531686562	6.8829296426	<.0001
MDC_8	Musculoskeletal And Connective	1	-0.1435947932	0.0669641094	-2.1443545582	0.0320
MDC_10	Endocrine Nutritional And Metabolic	1	-0.3561738645	0.1162788767	-3.0631003198	0.0022
MDC_11	Kidney And Urinary Tract	1	-0.2631313271	0.0848192915	-3.1022580159	0.0019
MDC_14	Pregnancy Childbirth And Puerperium	1	-1.167349023	0.2418938935	-4.8258722272	<.0001
MDC_17	Myeloproliferative DDs	1	0.6585327767	0.1113439758	5.9143996979	<.0001
MDC_21	Injuries Poison And Toxic	1	-0.0982930925	0.0765552960	-1.2839489575	0.1992
MDC_22	Burns	1	1.0600381913	0.1435215118	7.3859185161	<.0001
MDC_24	Multiple Significant Trauma	1	0.7407125976	0.0862455461	8.5884156506	<.0001
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	1.3573619309	0.0774162418	17.5332966210	<.0001
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	0.9407997281	0.0911342512	10.3232288124	<.0001
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	1.0238251183	0.0881291143	11.6173312972	<.0001
MDRG_503	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC	1	0.4059153172	0.0801738722	5.0629376649	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-0.1091078457	0.0738421892	-1.4775814064	0.1395
MDRG_541	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON	1	0.5352943095	0.1065206917	5.0252612990	<.0001
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	0.2499093478	0.0709168192	3.5239785259	0.0004
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL PROC	1	0.2064778952	0.0635255346	3.2503133835	0.0012
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	-0.0816488516	0.0472743157	-1.7271292093	0.0841
MDRG_611	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES	1	0.7083240386	0.1148225170	6.1688600577	<.0001
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-0.2215398176	0.1017260908	-2.1778072460	0.0294
MDRG_811	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT	1	0.2363402259	0.0850124909	2.7800647088	0.0054
MDRG_1104	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM	1	-1.018975636	0.2243717976	-4.5414604127	<.0001
MDRG_2406	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	1	1.6635969706	0.2480874451	6.7056878664	<.0001
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.2296030527	0.0354707788	6.4730197780	<.0001
RegVarPS04_DVT_PE_ANY	PSI04 DVT PE Regression variable: Any Triggering Complication POA	1	-0.0450143854	0.0853850429	-0.5271928652	0.5981
RegVarPS04_DVT_PE_SEVERE	PSI04 DVT PE Regression variable: Triggering Complication Severe	1	0.1742102294	0.0782093187	2.2274868565	0.0259
RegVarPS04_GIHE_MORRHAGE_A	PSI04 GIHEMORRHAGE Regression variable: Any Triggering Complication POA	1	-0.0413166437	0.0724116736	-0.5705798753	0.5683
RegVarPS04_GIHE	PSI04 GIHEMORRHAGE Regression	1	0.6426100014	0.1551645101	4.1414753987	<.0001

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Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MORRHAGE_S	variable: Triggering Complication Severe					
RegVarPS04_PNEUMONIA_ANY	PSI04 PNEUMONIA Regression variable: Any Triggering Complication POA	1	0.1587127011	0.0456901227	3.4736764045	0.0005
RegVarPS04_PNEUMONIA_SEVE	PSI04 PNEUMONIA Regression variable: Triggering Complication Severe	1	0.0603868335	0.0292703900	2.0630689751	0.0391
RegVarPS04_SEPSIS_ANY	PSI04 SEPSIS Regression variable: Any Triggering Complication POA	1	-0.4881205746	0.0329071396	-14.8332726941	<.0001
RegVarPS04_SEPSIS_SEVERE	PSI04 SEPSIS Regression variable: Triggering Complication Severe	1	1.3605019595	0.0279392337	48.6950347931	<.0001
RegVarPS04_SHOCK_ANY	PSI04 SHOCK Regression variable: Any Triggering Complication POA	1	0.0215884725	0.0525657569	0.4106946009	0.6813
RegVarPS04_SHOCK_SEVERE	PSI04 SHOCK Regression variable: Triggering Complication Severe	1	1.3247891540	0.0517276142	25.6108690418	<.0001
DNR	Do not resuscitate flag	1	0.8258111807	0.0604690729	13.6567527917	<.0001

c-statistic=0.804

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	-2.685702457	0.0783541347	-34.2764612090	<.0001
Age_LT30	Age < 30	1	-0.5097604692	0.1241253146	-4.1068211653	<.0001
Age_30_34	30 <= Age <= 34	1	-0.3274884247	0.1270323175	-2.5779929958	0.0099
Age_35_39	35 <= Age <= 39	1	-0.3596709505	0.1221724394	-2.9439614388	0.0032
Age_40_44	40 <= Age <= 44	1	-0.4813029772	0.1176509719	-4.0909392355	<.0001
Age_45_49	45 <= Age <= 49	1	-0.2200645788	0.1038680066	-2.1186945433	0.0341
Age_50_54	50 <= Age <= 54	1	-0.3238968109	0.0955110616	-3.3911968461	0.0007
Age_55_59	55 <= Age <= 59	1	-0.2137960334	0.0924939398	-2.3114599055	0.0208

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Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_60_64	60 <= Age <= 64	1	-0.0658579532	0.0778777900	-0.8456577064	0.3977
Age_70_74	70 <= Age <= 74	1	0.0980215941	0.0775389752	1.2641590101	0.2062
Age_75_79	75 <= Age <= 79	1	0.1817122678	0.0775364721	2.3435715187	0.0191
Age_80_84	80 <= Age <= 84	1	0.3277087432	0.0851904283	3.8467789124	0.0001
Age_85Plus	Age >= 85	1	0.3789523949	0.0991383762	3.8224591656	0.0001
MALE	Patient Sex Flag: 1=Male / 0=Female	1	-0.0561615120	0.0755001298	-0.7438598071	0.4570
Age_LT30_MALE	Age < 30 MALE	1	0.4188041515	0.1848105418	2.2661269618	0.0234
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.2460518231	0.1897623400	1.2966314767	0.1948
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.2077162588	0.1758073018	1.1814996119	0.2374
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.2967139789	0.1682602313	1.7634231014	0.0778
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.0428295902	0.1465333317	0.2922856510	0.7701
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.2734944110	0.1222868109	2.2364996593	0.0253
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.0542505263	0.1221830114	0.4440103879	0.6570
Age_60_64_MALE	60 <= Age <= 64 MALE	1	0.0905266740	0.1076070977	0.8412704731	0.4002
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.0086238854	0.1077469388	-0.0800383333	0.9362
Age_75_79_MALE	75 <= Age <= 79 MALE	1	0.1089466595	0.1057315859	1.0304078823	0.3028
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.1752437283	0.1187509269	1.4757251405	0.1400
Age_85Plus_MALE	Age >= 85 MALE	1	0.2142426932	0.1370767372	1.5629398355	0.1181
CANCER_METS	Metastatic cancer	1	0.4140956985	0.0527517197	7.8498995119	<.0001
CBVD	Cerebrovascular disease	1	0.1281044199	0.0613154863	2.0892669643	0.0367
CHF	Congestive heart failure	1	0.1110988289	0.0372885750	2.9794334812	0.0029
COAG	Coagulopathy	1	0.3752089708	0.0406533777	9.2294660859	<.0001
DEPRESS	Depression	1	-0.3120062899	0.0457091992	-6.8258970931	<.0001
DIAB_UNCX	Diabetes without chronic complications	1	0.0983887630	0.0485856594	2.0250576858	0.0429
LIVER_MLD	Liver disease, mild	1	0.2605554299	0.0568192767	4.5856871969	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
LIVER_SEV	Liver disease, moderate to severe	1	0.7284263104	0.0752439374	9.6808638088	<.0001
LUNG_CHRONIC	Chronic pulmonary disease	1	0.0795748943	0.0346734490	2.2949806420	0.0217
NEURO_OTH	Other neurological disorders	1	0.3636758847	0.0466319150	7.7988623206	<.0001
OBESE	Obesity	1	-0.1321539486	0.0371059876	-3.5615262437	0.0004
PARALYSIS	Paralysis	1	-0.2830909940	0.0653007261	-4.3351890685	<.0001
PERIVASC	Peripheral vascular disease	1	0.4215564022	0.0384539491	10.9626296385	<.0001
RENFL_MOD	Renal failure, moderate	1	0.0720831559	0.0439035983	1.6418507534	0.1006
THYROID_HYPO	Hypothyroidism	1	-0.1159111589	0.0426116173	-2.7201774140	0.0065
WGHTLOSS	Weight loss	1	-0.2887082741	0.0402837124	-7.1668735766	<.0001
PS04_SHOCK_Non Wt_1	PS04_SHOCK Comorbidity count using non-weighted method, category 1	1	0.1697498307	0.0480977518	3.5292674711	0.0004
PS04_SHOCK_Non Wt_2	PS04_SHOCK Comorbidity count using non-weighted method, category 2	1	0.1650590240	0.0557979890	2.9581536338	0.0031
MDC_1	Nervous System	1	-0.2778021206	0.0882493002	-3.1479243468	0.0016
MDC_6	Digestive System	1	0.4485727956	0.0537541923	8.3448895180	<.0001
MDC_7	Hepatobiliary System And Pancreas	1	0.6085818304	0.0633136232	9.6121782231	<.0001
MDC_8	Musculoskeletal And Connective	1	-0.1187620960	0.0502188091	-2.3648927198	0.0180
MDC_14	Pregnancy Childbirth And Puerperium	1	-0.4817891698	0.1178539116	-4.0880201883	<.0001
MDC_17	Myeloproliferative DDs	1	0.6501498937	0.1052684155	6.1761155086	<.0001
MDRG_101	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE	1	1.9609347045	0.1386097122	14.1471666992	<.0001
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	2.4815148315	0.1028687125	24.1231252178	<.0001
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	1.3551678376	0.1362077861	9.9492685139	<.0001
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	0.1560194889	0.0550916502	2.8319988311	0.0046

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Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	0.7074288372	0.0520493218	13.5915092136	<.0001
MDRG_7702	LIVER TRANSPLANT	1	-1.611283906	0.1255081850	-12.8380782941	<.0001
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.3035384506	0.0436312754	6.9569007071	<.0001
RegVarPS04_DVT_PE_ANY	PSI04 DVT PE Regression variable: Any Triggering Complication POA	1	-0.1336909156	0.1033618891	-1.2934256215	0.1959
RegVarPS04_DVT_PE_SEVERE	PSI04 DVT PE Regression variable: Triggering Complication Severe	1	0.5071149565	0.0764334730	6.6347234631	<.0001
RegVarPS04_GIHEMORRHAGE_A	PSI04 GIHEMORRHAGE Regression variable: Any Triggering Complication POA	1	0.0398587962	0.0614942845	0.6481707456	0.5169
RegVarPS04_GIHEMORRHAGE_S	PSI04 GIHEMORRHAGE Regression variable: Triggering Complication Severe	1	0.2180998319	0.1492785001	1.4610264161	0.1440
RegVarPS04_PNEUMONIA_ANY	PSI04 PNEUMONIA Regression variable: Any Triggering Complication POA	1	0.0338826864	0.0545111501	0.6215735002	0.5342
RegVarPS04_PNEUMONIA_SEVE	PSI04 PNEUMONIA Regression variable: Triggering Complication Severe	1	-0.2916909717	0.0454327845	-6.4202750226	<.0001
RegVarPS04_SEPSIS_ANY	PSI04 SEPSIS Regression variable: Any Triggering Complication POA	1	-0.2808852337	0.0614429651	-4.5714791485	<.0001
RegVarPS04_SEPSIS_SEVERE	PSI04 SEPSIS Regression variable: Triggering Complication Severe	1	1.0007379260	0.0486893661	20.5535213394	<.0001
RegVarPS04_SHOCK_ANY	PSI04 SHOCK Regression variable: Any Triggering Complication POA	1	-0.2397478040	0.0371455364	-6.4542829996	<.0001
RegVarPS04_SHOCK_SEVERE	PSI04 SHOCK Regression variable: Triggering Complication Severe	1	2.1815695106	0.0313052017	69.6871252652	<.0001
DNR	Do not resuscitate flag	1	1.0856223414	0.0661898038	16.4016552207	<.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	-4.248130831	0.2206445884	-19.2532745152	<.0001
Age_LT30	Age < 30	1	-1.126153549	0.4758089778	-2.3668186215	0.0179
Age_30_34	30 <= Age <= 34	1	0.0116434645	0.3619226303	0.0321711424	0.9743
Age_35_39	35 <= Age <= 39	1	-0.8244309046	0.4327477360	-1.9051073780	0.0568
Age_40_44	40 <= Age <= 44	1	-0.5909783574	0.3602668698	-1.6403905187	0.1009
Age_45_49	45 <= Age <= 49	1	-0.2206531984	0.2955057677	-0.7466967568	0.4552
Age_50_54	50 <= Age <= 54	1	-0.2594695934	0.2500962718	-1.0374788537	0.2995
Age_55_59	55 <= Age <= 59	1	0.0762338581	0.1991147908	0.3828638637	0.7018
Age_60_64	60 <= Age <= 64	1	0.1469736394	0.1828252736	0.8039021983	0.4215
Age_70_74	70 <= Age <= 74	1	0.1075076900	0.1670714926	0.6434831481	0.5199
Age_75_79	75 <= Age <= 79	1	0.4995422058	0.1615228299	3.0927034040	0.0020
Age_80_84	80 <= Age <= 84	1	0.3758569469	0.1756451134	2.1398656628	0.0324
Age_85Plus	Age >= 85	1	0.6585512907	0.1939287562	3.3958413581	0.0007
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.0032509110	0.1555934421	0.0208936250	0.9833
Age_LT30_MALE	Age < 30 MALE	1	0.5065831412	0.5678630608	0.8920868008	0.3723
Age_30_34_MALE	30 <= Age <= 34 MALE	1	-0.7056408296	0.6015355868	-1.1730658087	0.2408
Age_35_39_MALE	35 <= Age <= 39 MALE	1	-0.0409592702	0.5708052122	-0.0717570010	0.9428
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.3436592142	0.4465399801	0.7696045808	0.4415
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.1738512962	0.3433278667	0.5063710611	0.6126
Age_50_54_MALE	50 <= Age <= 54 MALE	1	-0.2994473832	0.3238149824	-0.9247483886	0.3551
Age_55_59_MALE	55 <= Age <= 59 MALE	1	-0.3006427186	0.2573227933	-1.1683485736	0.2427
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.2387865725	0.2277419979	-1.0484959943	0.2944
Age_70_74_MALE	70 <= Age <= 74 MALE	1	0.0763864328	0.2135029063	0.3577770164	0.7205

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Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.1746497568	0.2100103514	-0.8316245161	0.4056
Age_80_84_MALE	80 <= Age <= 84 MALE	1	-0.1709788420	0.2406710906	-0.7104253426	0.4774
Age_85Plus_MALE	Age >= 85 MALE	1	-0.1680201119	0.2549121667	-0.6591294329	0.5098
ALCOHOL	Alcohol abuse	1	-0.1347026817	0.1116425179	-1.2065535978	0.2276
ANEMDEF	Deficiency anemias	1	-0.5765028333	0.0801258332	-7.1949683466	<.0001
ARTH	Arthropathies	1	-0.1328955781	0.1561625448	-0.8510080204	0.3948
BLDLOSS	Chronic blood loss anemia	1	-0.6063395230	0.1909397540	-3.1755541221	0.0015
CANCER_LEUK	Leukemia	1	0.5022658727	0.2652502826	1.8935545245	0.0583
CANCER_METS	Metastatic cancer	1	0.3738562154	0.1380165511	2.7087781310	0.0068
CHF	Congestive heart failure	1	0.1505436588	0.0882777936	1.7053400707	0.0881
COAG	Coagulopathy	1	0.6155106050	0.0756515977	8.1361216937	<.0001
DEMENTIA	Dementia	1	-0.1378858150	0.1427509341	-0.9659188287	0.3341
DEPRESS	Depression	1	-0.3074973210	0.1103485494	-2.7866004818	0.0053
DIAB_CX	Diabetes with chronic complications	1	-0.1347696594	0.0734917387	-1.8338069258	0.0667
DRUG_ABUSE	Drug abuse	1	-0.3343403102	0.1832824941	-1.8241802737	0.0681
HTN_CX	Hypertension, complicated	1	-0.3974766038	0.0934266543	-4.2544240393	<.0001
HTN_UNCX	Hypertension, uncomplicated	1	-0.3998276904	0.0843468506	-4.7402800188	<.0001
LIVER_SEV	Liver disease, moderate to severe	1	0.2521922743	0.1189341809	2.1204356252	0.0340
NEURO_MOVT	Neurological disorders affecting movement	1	-0.3614677462	0.2214748798	-1.6320936557	0.1027
NEURO_OTH	Other neurological disorders	1	0.5697405611	0.0915810138	6.2211645987	<.0001
NEURO_SEIZ	Seizures and epilepsy	1	0.1300275290	0.1560186965	0.8334099172	0.4046
OBESE	Obesity	1	-0.2466554985	0.0868012111	-2.8416135609	0.0045
PARALYSIS	Paralysis	1	-0.2620516627	0.1474718065	-1.7769610945	0.0756
PERIVASC	Peripheral vascular disease	1	0.3693547992	0.0707590315	5.2198961932	<.0001
PULMCIRC	Pulmonary circulation disease	1	-0.1955658264	0.1241002543	-1.5758696667	0.1151

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
RENFLF_MOD	Renal failure, moderate	1	0.1467498285	0.0979723738	1.4978694798	0.1342
RENFLF_SEV	Renal failure, severe	1	0.3383990917	0.1103328505	3.0670746765	0.0022
THYROID_HYPO	Hypothyroidism	1	-0.2570030502	0.0934964582	-2.7487998495	0.0060
ULCER_PEPTIC	Peptic ulcer disease x bleeding	1	-0.4938686690	0.0997146287	-4.9528206182	<.0001
WGHTLOSS	Weight loss	1	-0.0752970847	0.0828105486	-0.9092692409	0.3632
PS04_GIHEMORRHAGE_NonWt_1	PS04_GIHEMORRHAGE Comorbidity count using non-weighted method, category 1	1	0.3638175341	0.1391591887	2.6143982122	0.0089
PS04_GIHEMORRHAGE_NonWt_2	PS04_GIHEMORRHAGE Comorbidity count using non-weighted method, category 2	1	0.5878112208	0.1843888113	3.1878898549	0.0014
MDC_1	Nervous System	1	0.9202419874	0.2685766759	3.4263659880	0.0006
MDC_4	Respiratory System	1	1.7052435612	0.2260158609	7.5447959916	<.0001
MDC_5	Circulatory System	1	1.2915480323	0.1873368226	6.8942561028	<.0001
MDC_11	Kidney And Urinary Tract	1	-0.5359876731	0.3517432953	-1.5238035244	0.1276
MDC_13	Female Reproductive System	1	-1.406706644	1.0027239286	-1.4028852842	0.1607
MDC_17	Myeloproliferative DDs	1	1.0031385796	0.3296850145	3.0427181567	0.0023
MDC_18	Infectious and Parasitic	1	0.9153346982	0.2644127497	3.4617646052	0.0005
MDC_21	Injuries Poison And Toxic	1	0.7497785344	0.2397144594	3.1277985332	0.0018
MDRG_101	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE	1	1.0580322795	0.4048685156	2.6132737884	0.0090
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	1.7982832647	0.2718353673	6.6153395799	<.0001
MDRG_401	MAJOR CHEST PROCEDURES	1	-0.5151322027	0.2608688591	-1.9746787887	0.0483
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	1.5762089310	0.1931602152	8.1601116969	<.0001
MDRG_502	PERC CARDIOVASC PROC W NON-DRUG-ELUTING STENT	1	-0.5678503305	0.3046072796	-1.8642047267	0.0623
MDRG_503	CARDIAC VALVE & OTH MAJ	1	0.1875648561	0.1713886456	1.0943832102	0.2738

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Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	CARDIOTHORACIC PROC					
MDRG_505	OTHER CARDIOTHORACIC PROCEDURES	1	-0.6757092162	0.4079569809	-1.6563246807	0.0977
MDRG_510	PERMANENT CARDIAC PACEMAKER IMPLANT AND PROCEDURES	1	-1.120743077	0.4687106822	-2.3911191266	0.0168
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-0.6046412760	0.1461952313	-4.1358481441	<.0001
MDRG_513	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT	1	0.5295455292	0.2511674412	2.1083366805	0.0350
MDRG_514	OTHER VASCULAR PROCEDURES	1	-0.3114392049	0.1775999956	-1.7535991705	0.0795
MDRG_540	ENDOVASCULAR CARDIAC VALVE REPLACEMENT	1	-0.8365874357	0.3261504382	-2.5650354487	0.0103
MDRG_541	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON	1	0.5585372575	0.1988757307	2.8084736908	0.0050
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	0.0316487744	0.1382271318	0.2289621002	0.8189
MDRG_543	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES	1	-0.7691107658	0.4315779093	-1.7820902072	0.0747
MDRG_805	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS	1	1.2689630845	0.3510734777	3.6145227848	0.0003
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-1.171837067	0.5998229377	-1.9536383044	0.0507
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	0.0405494828	0.1988569881	0.2039127876	0.8384
TRANSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.3286813270	0.0745680817	4.4078018320	<.0001
RegVarPS04_DVT_PE_ANY	PSI04 DVT PE Regression variable: Any Triggering Complication POA	1	-0.5382196016	0.2670334776	-2.0155510333	0.0438
RegVarPS04_DVT_	PSI04 DVT PE Regression variable:	1	0.4052787122	0.2685511726	1.5091303019	0.1313

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
PE_SEVERE	Triggering Complication Severe					
RegVarPS04_GIHE MORRHAGE_A	PSI04 GIHEMORRHAGE Regression variable: Any Triggering Complication POA	1	-0.4155928892	0.0642676536	-6.4665950273	<.0001
RegVarPS04_GIHE MORRHAGE_S	PSI04 GIHEMORRHAGE Regression variable: Triggering Complication Severe	1	0.5526387674	0.1319999079	4.1866602497	<.0001
RegVarPS04_PNEU MONIA_ANY	PSI04 PNEUMONIA Regression variable: Any Triggering Complication POA	1	0.0178705086	0.2747518029	0.0650423705	0.9481
RegVarPS04_PNEU MONIA_SEVE	PSI04 PNEUMONIA Regression variable: Triggering Complication Severe	1	0.6226108314	0.2740276801	2.2720727745	0.0231
RegVarPS04_SEPSIS_ANY	PSI04 SEPSIS Regression variable: Any Triggering Complication POA	1	-0.1887574316	0.2811857781	-0.6712908200	0.5020
RegVarPS04_SEPSIS_SEVERE	PSI04 SEPSIS Regression variable: Triggering Complication Severe	1	2.0297708326	0.2678952926	7.5767319874	<.0001
RegVarPS04_SHOCK_ANY	PSI04 SHOCK Regression variable: Any Triggering Complication POA	1	0.9710149242	0.0998584278	9.7239155990	<.0001
RegVarPS04_SHOCK_SEVERE	PSI04 SHOCK Regression variable: Triggering Complication Severe	1	2.5282419195	0.1109063505	22.7961871179	<.0001
DNR	Do not resuscitate flag	1	1.0776052023	0.1145864720	9.4042968936	<.0001

c-statistic=0.876

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	-7.547000548	0.0750421322	-100.5701774643	<.0001
Age_LT30	Age < 30	1	-0.5100887148	0.1387086883	-3.6774099798	0.0002
Age_30_34	30 <= Age <= 34	1	-0.6527178030	0.1834481430	-3.5580507516	0.0004

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_35_39	35 <= Age <= 39	1	-0.4874388284	0.1555396040	-3.1338566888	0.0017
Age_40_44	40 <= Age <= 44	1	-0.3945842932	0.1417217532	-2.7842182611	0.0054
Age_45_49	45 <= Age <= 49	1	-0.4680422686	0.1342836982	-3.4854734787	0.0005
Age_50_54	50 <= Age <= 54	1	-0.3688306964	0.1171396153	-3.1486418621	0.0016
Age_55_59	55 <= Age <= 59	1	-0.0345687160	0.0942556420	-0.3667548730	0.7138
Age_60_64	60 <= Age <= 64	1	-0.0802808475	0.0906623477	-0.8854927053	0.3759
Age_70_74	70 <= Age <= 74	1	-0.0244645275	0.0824397824	-0.2967563325	0.7667
Age_75_79	75 <= Age <= 79	1	0.0387868618	0.0829699791	0.4674806746	0.6402
Age_80_84	80 <= Age <= 84	1	0.2057591461	0.0829742235	2.4797959829	0.0131
Age_85_89	85 <= Age <= 89	1	0.1197108115	0.0921780776	1.2986906934	0.1941
Age_90Plus	Age >= 90	1	0.0970364467	0.0969280541	1.0011182787	0.3168
MALE	Patient Sex Flag: 1=Male / 0=Female	1	-0.5201713333	0.0893918203	-5.8190037037	<.0001
Age_LT30_MALE	Age < 30 MALE	1	0.4551799392	0.1898163787	2.3980013859	0.0165
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.5275271745	0.2466014735	2.1391890610	0.0324
Age_35_39_MALE	35 <= Age <= 39 MALE	1	-0.0282215624	0.2484380470	-0.1135959761	0.9096
Age_40_44_MALE	40 <= Age <= 44 MALE	1	-0.1127430065	0.2316349861	-0.4867270200	0.6265
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.0724922663	0.1978702546	0.3663626273	0.7141
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.2053365008	0.1748729996	1.1742035720	0.2403
Age_55_59_MALE	55 <= Age <= 59 MALE	1	-0.0855982039	0.1446597398	-0.5917209864	0.5540
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.0866481673	0.1389878949	-0.6234224022	0.5330
Age_70_74_MALE	70 <= Age <= 74 MALE	1	0.1174176201	0.1255801787	0.9350012187	0.3498
Age_75_79_MALE	75 <= Age <= 79 MALE	1	0.0429655870	0.1252981158	0.3429068881	0.7317
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.0366466132	0.1291913761	0.2836614511	0.7767
Age_85_89_MALE	85 <= Age <= 89 MALE	1	0.2622929803	0.1334903182	1.9648839239	0.0494
Age_90Plus_MALE	Age >= 90 MALE	1	0.0488682684	0.1637315820	0.2984657438	0.7653

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
AIDS	Acquired immune deficiency syndrome	1	-0.0922532012	0.2311650913	-0.3990792931	0.6898
ANEMDEF	Deficiency anemias	1	-0.0482939631	0.0401006023	-1.2043201418	0.2285
CANCER_LYMPH	Lymphoma	1	-0.1998416151	0.1646902781	-1.2134390529	0.2250
CANCER_METS	Metastatic cancer	1	0.3475513269	0.0781889453	4.4450187393	<.0001
CANCER_SOLID	Solid tumor without metastasis, malignant	1	0.2219295772	0.0774005950	2.8672851552	0.0041
COAG	Coagulopathy	1	0.1776573916	0.0587614892	3.0233643507	0.0025
DEMENTIA	Dementia	1	-0.0996697283	0.0600399440	-1.6600569820	0.0969
DEPRESS	Depression	1	-0.1907388607	0.0503345464	-3.7894224597	0.0002
DIAB_CX	Diabetes with chronic complications	1	-0.3125778199	0.0470769145	-6.6397261479	<.0001
DIAB_UNCX	Diabetes without chronic complications	1	-0.4532017783	0.0590771402	-7.6713560772	<.0001
DRUG_ABUSE	Drug abuse	1	0.0551091270	0.0867582595	0.6352032338	0.5253
HTN_CX	Hypertension, complicated	1	-0.0424656234	0.0450311518	-0.9430276970	0.3457
HTN_UNCX	Hypertension, uncomplicated	1	-0.2347027553	0.0392036263	-5.9867613586	<.0001
LIVER_SEV	Liver disease, moderate to severe	1	0.2793382294	0.1191813406	2.3438084189	0.0191
LUNG_CHRONIC	Chronic pulmonary disease	1	0.1937114250	0.0370412770	5.2296097912	<.0001
NEURO_MOVT	Neurological disorders affecting movement	1	-0.1369827899	0.0969009182	-1.4136376875	0.1575
NEURO_OTH	Other neurological disorders	1	0.4672040124	0.0527468657	8.8574743908	<.0001
OBESE	Obesity	1	-0.6471609704	0.0510770765	-12.6702821566	<.0001
PARALYSIS	Paralysis	1	0.3509221148	0.0638479594	5.4962150369	<.0001
PERIVASC	Peripheral vascular disease	1	0.1087026971	0.0532245188	2.0423425038	0.0411
PSYCHOSES	Psychoses	1	0.1033304375	0.0829452391	1.2457669490	0.2128
PULMCIRC	Pulmonary circulation disease	1	0.1148209804	0.0680814501	1.6865237193	0.0917
RENFL_MOD	Renal failure, moderate	1	-0.1128523439	0.0530630156	-2.1267608442	0.0334
THYROID_HYPO	Hypothyroidism	1	-0.0236519026	0.0437398537	-0.5407403214	0.5887
THYROID_OTH	Other thyroid disorders	1	0.0786884292	0.1278228858	0.6156051691	0.5382

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
ULCER_PEPTIC	Peptic ulcer disease x bleeding	1	0.1752926660	0.1331538152	1.3164674677	0.1880
VALVE	Valvular disease	1	-0.0604947395	0.0515028577	-1.1745899595	0.2402
WGHTLOSS	Weight loss	1	0.9826971458	0.0455846352	21.5576397893	<.0001
PS06_NonWt_1	PS06 Comorbidity count using non-weighted method, category 1	1	0.0731218796	0.0337384091	2.1673185429	0.0302
MDRG_101	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE	1	1.5265388601	0.2225776655	6.8584548071	<.0001
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	-0.2342934888	0.1508512911	-1.5531420856	0.1204
MDRG_107	EXTRACRANIAL PROCEDURES	1	-1.630863984	0.4495897267	-3.6274493983	0.0003
MDRG_108	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC	1	0.8481349877	0.1798983219	4.7145241758	<.0001
MDRG_402	OTHER RESP SYSTEM O.R. PROCEDURES	1	1.0717753709	0.2057585046	5.2088994969	<.0001
MDRG_410	SIMPLE PNEUMONIA & PLEURISY	1	-0.2540351197	0.1836553969	-1.3832161971	0.1666
MDRG_416	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT	1	2.6592319370	0.0914266014	29.0859760209	<.0001
MDRG_510	PERMANENT CARDIAC PACEMAKER IMPLANT AND PROCEDURES	1	3.1684242506	0.0541361580	58.5269506514	<.0001
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-2.016474911	0.2696905202	-7.4769958890	<.0001
MDRG_514	OTHER VASCULAR PROCEDURES	1	-0.5873556056	0.1948171471	-3.0149071280	0.0026
MDRG_524	HEART FAILURE & SHOCK	1	0.7604967902	0.1049220610	7.2482067468	<.0001
MDRG_531	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS	1	0.1571499153	0.1854625315	0.8473405061	0.3968
MDRG_538	CARDIAC DEFIBRILLATOR IMPLANT W/OUT AMI/HF/SHOCK	1	2.6247962058	0.1779862326	14.7471867187	<.0001
MDRG_539	CARDIAC DEFIBRILLATOR IMPLANT W/OUT CARDIAC CATH	1	3.0638864670	0.0997316915	30.7212925144	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_540	ENDOVASCULAR CARDIAC VALVE REPLACEMENT	1	0.6705647020	0.1687661234	3.9733371168	<.0001
MDRG_541	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON	1	-0.5392785344	0.3797609159	-1.4200474872	0.1556
MDRG_543	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES	1	-0.7278852486	0.3151158095	-2.3098975885	0.0209
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL PROC	1	0.6170728911	0.1750090659	3.5259481449	0.0004
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	-0.3988369834	0.1082993477	-3.6827274743	0.0002
MDRG_615	G.I. HEMORRHAGE	1	0.0605100897	0.1881838547	0.3215477218	0.7478
MDRG_620	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS	1	-0.2420730510	0.1977292068	-1.2242655245	0.2209
MDRG_701	PANCREAS, LIVER & SHUNT PROCEDURES	1	1.3194829022	0.1665996889	7.9200802302	<.0001
MDRG_703	CHOLECYSTECTOMY W C.D.E.	1	1.1482429699	0.7094162589	1.6185743637	0.1055
MDRG_705	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E.	1	-1.442815323	0.2515703780	-5.7352353405	<.0001
MDRG_712	DISORDERS OF THE BILIARY TRACT	1	0.1986546686	0.3564560689	0.5573047730	0.5773
MDRG_806	REVISION OF HIP OR KNEE REPLACEMENT	1	-2.754784892	0.6956930590	-3.9597705578	<.0001
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-3.088739106	0.2455480320	-12.5789609496	<.0001
MDRG_808	CERVICAL SPINAL FUSION	1	-1.128715208	0.3030483220	-3.7245387176	0.0002
MDRG_811	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT	1	-1.261946140	0.1870352721	-6.7471024347	<.0001
MDRG_822	MAJOR SHOULDER OR ELBOW JOINT PROCEDURES	1	1.1522894241	0.7074898384	1.6287010238	0.1034
MDRG_1005	THYROID, PARATHYROID & THYROGLOSSAL PROCEDURES	1	0.8703197832	0.2930957458	2.9694043521	0.0030

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_1103	KIDNEY & URETER PROCEDURES FOR NEOPLASM	1	2.1958683336	0.1048183616	20.9492716671	<.0001
MDRG_1113	KIDNEY & URINARY TRACT INFECTIONS	1	-1.772434694	0.4332694552	-4.0908369444	<.0001
MDRG_1304	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY	1	-2.426891607	0.4999585674	-4.8541854561	<.0001
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	0.0697192586	0.1048813263	0.6647442506	0.5062
MDRG_1807	SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS	1	3.0035073746	0.1130482560	26.5683654222	<.0001
MDRG_1808	SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS	1	0.9772054667	0.0704669293	13.8675755623	<.0001
MDRG_1915	PSYCHOSES	1	-3.727232552	0.9274243933	-4.0189071787	<.0001
MDRG_2018	ALCOHOL/DRUG ABUSE OR DEPENDENCE	1	-1.560565813	0.4889745283	-3.1915073741	0.0014
MDRG_2106	ALLERGIC REACTIONS	1	0.6018334856	0.7061320103	0.8522959968	0.3940
MDRG_2107	POISONING & TOXIC EFFECTS OF DRUGS	1	1.0953278174	0.1721363089	6.3631422352	<.0001
MDRG_7704	SIMULTANEOUS PANCREAS/KIDNEY TRANSPLANT	1	1.8423310612	1.0016171590	1.8393565292	0.0659
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.1259084312	0.0578096941	2.1779812732	0.0294
MEDICDR	Medical DRGs flag	1	-1.881668297	0.0539367114	-34.8865966923	<.0001

c-statistic=0.859

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	-10.74620254	0.2007052840	-53.5422004297	<.0001
Age_LT30	Age < 30	1	0.5561107268	0.1964997698	2.8300833504	0.0047
Age_30_34	30 <= Age <= 34	1	0.4184716637	0.1957911860	2.1373365790	0.0326
Age_35_39	35 <= Age <= 39	1	0.6540489445	0.1993151528	3.2814812896	0.0010
Age_40_44	40 <= Age <= 44	1	0.4096389319	0.1935972931	2.1159331591	0.0344
Age_45_49	45 <= Age <= 49	1	0.5177661278	0.1888535095	2.7416283083	0.0061
Age_50_54	50 <= Age <= 54	1	0.5069666518	0.1734076440	2.9235542335	0.0035
Age_55_59	55 <= Age <= 59	1	0.5049782567	0.1636722135	3.0853022995	0.0020
Age_60_64	60 <= Age <= 64	1	0.1933239810	0.1736453348	1.1133266619	0.2656
Age_70_74	70 <= Age <= 74	1	-0.2041598907	0.1920779104	-1.0629014566	0.2878
Age_75_79	75 <= Age <= 79	1	-0.2145529089	0.1914007429	-1.1209617353	0.2623
Age_80_84	80 <= Age <= 84	1	-0.6681097040	0.2169574314	-3.0794506538	0.0021
Age_85_89	85 <= Age <= 89	1	-1.243286103	0.2748387357	-4.5236931408	<.0001
Age_90Plus	Age >= 90	1	-1.231236788	0.3102197817	-3.9689177195	<.0001
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.1686796271	0.1635728110	1.0312204455	0.3024
Age_LT30_MALE	Age < 30 MALE	1	0.2658391648	0.2518467434	1.0555592707	0.2912
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.4248743062	0.2559026797	1.6602964325	0.0969
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.1664555026	0.2544429053	0.6541958891	0.5130
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.2598625306	0.2522975849	1.0299842178	0.3030
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.0566120738	0.2480209292	0.2282552283	0.8194
Age_50_54_MALE	50 <= Age <= 54 MALE	1	-0.2866201873	0.2359977598	-1.2145038473	0.2246
Age_55_59_MALE	55 <= Age <= 59 MALE	1	-0.2070908542	0.2222597773	-0.9317513796	0.3515
Age_60_64_MALE	60 <= Age <= 64 MALE	1	0.0891263691	0.2251269084	0.3958938970	0.6922
Age_70_74_MALE	70 <= Age <= 74 MALE	1	0.0232763449	0.2556066850	0.0910631303	0.9274

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.2096145825	0.2451341874	-0.8551013823	0.3925
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.0612747064	0.2883032582	0.2125356017	0.8317
Age_85_89_MALE	85 <= Age <= 89 MALE	1	0.6811197954	0.3479128014	1.9577313414	0.0503
Age_90Plus_MALE	Age >= 90 MALE	1	-0.1684780004	0.4745243893	-0.3550460297	0.7226
AIDS	Acquired immune deficiency syndrome	1	-0.2105745766	0.4074065606	-0.5168659440	0.6052
ALCOHOL	Alcohol abuse	1	-0.1452962287	0.1035458448	-1.4032067532	0.1606
ANEMDEF	Deficiency anemias	1	0.4694717707	0.0628053304	7.4750306592	<.0001
ARTH	Arthropathies	1	0.2696726744	0.1163457579	2.3178556672	0.0205
BLDLOSS	Chronic blood loss anemia	1	-0.3775675244	0.2218533672	-1.7018787191	0.0888
CBVD	Cerebrovascular disease	1	-0.0118930208	0.1062437548	-0.1119408934	0.9109
CHF	Congestive heart failure	1	0.6496962397	0.0843231025	7.7048426861	<.0001
COAG	Coagulopathy	1	0.3474088754	0.0903474529	3.8452536769	0.0001
DEMENTIA	Dementia	1	-0.0380355443	0.1303698262	-0.2917511313	0.7705
DEPRESS	Depression	1	0.0656778679	0.0706715699	0.9293393079	0.3527
DIAB_CX	Diabetes with chronic complications	1	0.0569266361	0.0749781738	0.7592427660	0.4477
DIAB_UNCX	Diabetes without chronic complications	1	-0.4001475696	0.1115896210	-3.5858851942	0.0003
DRUG_ABUSE	Drug abuse	1	0.6743854862	0.0895580056	7.5301530164	<.0001
HTN_CX	Hypertension, complicated	1	-0.2566178539	0.0815478307	-3.1468385086	0.0017
HTN_UNCX	Hypertension, uncomplicated	1	-0.3471668126	0.0757708175	-4.5818010713	<.0001
LIVER_MLD	Liver disease, mild	1	0.4517628921	0.0810011821	5.5772382598	<.0001
LIVER_SEV	Liver disease, moderate to severe	1	0.4248519325	0.1597311772	2.6597934106	0.0078
LUNG_CHRONIC	Chronic pulmonary disease	1	-0.0861985215	0.0642586939	-1.3414297161	0.1798
NEURO_MOVT	Neurological disorders affecting movement	1	-0.0002211719	0.1575398005	-0.0014039110	0.9989
NEURO_OTH	Other neurological disorders	1	0.7816253951	0.0786585465	9.9369417596	<.0001
NEURO_SEIZ	Seizures and epilepsy	1	0.2585700638	0.0968556351	2.6696439857	0.0076

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Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
OBESE	Obesity	1	0.1127095272	0.0670936593	1.6798834387	0.0930
PARALYSIS	Paralysis	1	0.6554520391	0.0981223673	6.6799452241	<.0001
PERIVASC	Peripheral vascular disease	1	0.1013390360	0.0989716085	1.0239202682	0.3059
PSYCHOSES	Psychoses	1	0.1886871132	0.1020925470	1.8481967472	0.0646
PULMCIRC	Pulmonary circulation disease	1	0.4405319862	0.0976687707	4.5104692407	<.0001
RENFL_MOD	Renal failure, moderate	1	0.2325792406	0.0894540247	2.5999863228	0.0093
RENFL_SEV	Renal failure, severe	1	0.3208044571	0.1608790823	1.9940718983	0.0461
THYROID_HYPO	Hypothyroidism	1	-0.1252149628	0.0859417312	-1.4569751039	0.1451
THYROID_OTH	Other thyroid disorders	1	0.1756670768	0.2054685821	0.8549583346	0.3926
ULCER_PEPTIC	Peptic ulcer disease x bleeding	1	0.6490758946	0.1469616144	4.4166355765	<.0001
VALVE	Valvular disease	1	0.2922855059	0.0844290704	3.4619060045	0.0005
WGHTLOSS	Weight loss	1	1.2178282051	0.0753773396	16.1564232863	<.0001
PS07_NonWt_1	PS07 Comorbidity count using non-weighted method, category 1	1	0.5343695866	0.0990464486	5.3951413103	<.0001
PS07_NonWt_2	PS07 Comorbidity count using non-weighted method, category 2	1	0.2261940373	0.1740899380	1.2992941454	0.1938
MDC_1	Nervous System	1	1.4147823920	0.1519503952	9.3108174570	<.0001
MDC_4	Respiratory System	1	1.5387589577	0.1623053354	9.4806430975	<.0001
MDC_5	Circulatory System	1	1.1487821631	0.1565568726	7.3377945300	<.0001
MDC_6	Digestive System	1	1.8452584770	0.1522024018	12.1237145710	<.0001
MDC_7	Hepatobiliary System And Pancreas	1	1.2384339775	0.1778344915	6.9639695165	<.0001
MDC_8	Musculoskeletal And Connective	1	0.2640274424	0.1838989343	1.4357203510	0.1511
MDC_9	Skin Subcutaneous And Breast	1	0.8570777022	0.2511683538	3.4123634179	0.0006
MDC_10	Endocrine Nutritional And Metabolic	1	0.6683120340	0.2180128194	3.0654712678	0.0022
MDC_16	Blood and Immunological	1	2.6299440293	0.2027009362	12.9745036154	<.0001
MDC_18	Infectious and Parasitic	1	2.0882962500	0.1503664228	13.8880490185	<.0001

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Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDC_21	Injuries Poison And Toxic	1	1.9377739749	0.1812584415	10.6906688537	<.0001
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	0.2352326278	0.1481915705	1.5873549821	0.1124
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	-0.4540022066	0.1281077794	-3.5439081756	0.0004
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.6936424240	0.0849672448	8.1636450058	<.0001
MEDICDR	Medical DRGs flag	1	-1.591669023	0.0695628585	-22.8810180777	<.0001

c-statistic=0.853

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	-8.067806220	0.1087901857	-74.1593202191	<.0001
Age_LT30	Age < 30	1	-2.243003546	0.3861856552	-5.8080964835	<.0001
Age_30_34	30 <= Age <= 34	1	-2.133124157	0.4722614814	-4.5168285806	<.0001
Age_35_39	35 <= Age <= 39	1	-1.662837683	0.3518202445	-4.7263843080	<.0001
Age_40_44	40 <= Age <= 44	1	-1.399760541	0.2939857700	-4.7613207305	<.0001
Age_45_49	45 <= Age <= 49	1	-1.297868574	0.2431800990	-5.3370673810	<.0001
Age_50_54	50 <= Age <= 54	1	-0.7420347072	0.2002894768	-3.7048112524	0.0002
Age_55_59	55 <= Age <= 59	1	-0.7347966589	0.1685762332	-4.3588389950	<.0001
Age_60_64	60 <= Age <= 64	1	-0.3225088667	0.1400059105	-2.3035375128	0.0212
Age_70_74	70 <= Age <= 74	1	0.2094408125	0.1226577261	1.7075223803	0.0877
Age_75_79	75 <= Age <= 79	1	0.3668180028	0.1158331983	3.1667778153	0.0015
Age_80_84	80 <= Age <= 84	1	0.7578915968	0.1184272219	6.3996400880	<.0001
Age_85_89	85 <= Age <= 89	1	0.8288924105	0.1262304069	6.5665035129	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_90Plus	Age >= 90	1	0.8061903424	0.1434094328	5.6215991281	<.0001
MALE	Patient Sex Flag: 1=Male / 0=Female	1	-0.4931072757	0.1412493117	-3.4910419729	0.0005
Age_LT30_MALE	Age < 30 MALE	1	0.4372088455	0.5264649860	0.8304613926	0.4063
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.4443359142	0.6678418702	0.6653310222	0.5058
Age_35_39_MALE	35 <= Age <= 39 MALE	1	-0.1300868863	0.5879791573	-0.2212440435	0.8249
Age_40_44_MALE	40 <= Age <= 44 MALE	1	-0.2278344963	0.5111992322	-0.4456863038	0.6558
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.4995790539	0.3624567780	1.3783134549	0.1681
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.2917679535	0.2860324302	1.0200520033	0.3077
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.5024658536	0.2432974865	2.0652324068	0.0389
Age_60_64_MALE	60 <= Age <= 64 MALE	1	0.3106976978	0.2068460539	1.5020721546	0.1331
Age_70_74_MALE	70 <= Age <= 74 MALE	1	0.0815719078	0.1911424265	0.4267598216	0.6696
Age_75_79_MALE	75 <= Age <= 79 MALE	1	0.2333371855	0.1864056901	1.2517707235	0.2107
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.1007253842	0.1865939747	0.5398104862	0.5893
Age_85_89_MALE	85 <= Age <= 89 MALE	1	0.3065080279	0.1935963721	1.5832322920	0.1134
Age_90Plus_MALE	Age >= 90 MALE	1	0.5990274230	0.2166675310	2.7647309229	0.0057
AIDS	Acquired immune deficiency syndrome	1	0.2247153138	0.3196190913	0.7030722506	0.4820
ALCOHOL	Alcohol abuse	1	0.3469054816	0.1160425793	2.9894671730	0.0028
ANEMDEF	Deficiency anemias	1	0.1336053707	0.0615855217	2.1694282512	0.0301
BLDLOSS	Chronic blood loss anemia	1	-0.0331292840	0.2278530616	-0.1453975812	0.8844
CANCER_LEUK	Leukemia	1	0.6685712170	0.1919133486	3.4837139873	0.0005
CANCER_LYMPH	Lymphoma	1	0.4283426304	0.1849736260	2.3156957003	0.0206
CANCER_METS	Metastatic cancer	1	0.1707010443	0.1114791519	1.5312373783	0.1257
CANCER_SOLID	Solid tumor without metastasis, malignant	1	0.0530701266	0.1185509372	0.4476567442	0.6544
CHF	Congestive heart failure	1	0.2595378870	0.0772122204	3.3613576404	0.0008
COAG	Coagulopathy	1	0.4057544843	0.0835982988	4.8536213076	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
DEMENTIA	Dementia	1	0.9529845916	0.0717212592	13.2873377126	<.0001
DEPRESS	Depression	1	0.3978446873	0.0630141135	6.3135806411	<.0001
DIAB_CX	Diabetes with chronic complications	1	-0.0849629943	0.0684438409	-1.2413533962	0.2145
DIAB_UNCX	Diabetes without chronic complications	1	-0.2396739080	0.0852753406	-2.8105886915	0.0049
DRUG_ABUSE	Drug abuse	1	0.1142622993	0.1533149251	0.7452783817	0.4561
HTN_CX	Hypertension, complicated	1	-0.2273244064	0.0870617544	-2.6110708201	0.0090
HTN_UNCX	Hypertension, uncomplicated	1	-0.2042287147	0.0651734933	-3.1336162055	0.0017
LIVER_MLD	Liver disease, mild	1	0.0650385870	0.1191380935	0.5459092476	0.5851
LIVER_SEV	Liver disease, moderate to severe	1	0.5686414754	0.1557900957	3.6500489502	0.0003
LUNG_CHRONIC	Chronic pulmonary disease	1	0.3691832604	0.0583759470	6.3242359164	<.0001
NEURO_MOVT	Neurological disorders affecting movement	1	-0.2880132092	0.1346547662	-2.1389009632	0.0324
NEURO_OTH	Other neurological disorders	1	0.5457231557	0.0832070075	6.5586201439	<.0001
NEURO_SEIZ	Seizures and epilepsy	1	0.1995446873	0.1138177398	1.7531949563	0.0796
OBESE	Obesity	1	-0.7209651699	0.0807184491	-8.9318511196	<.0001
PARALYSIS	Paralysis	1	0.2531623473	0.1045642361	2.4211179346	0.0155
PSYCHOSES	Psychoses	1	0.2863378593	0.1178244036	2.4302084347	0.0151
PULMCIRC	Pulmonary circulation disease	1	0.2596459815	0.1009336393	2.5724424800	0.0101
RENFL_MOD	Renal failure, moderate	1	0.0575353066	0.0910946475	0.6315992015	0.5276
RENFL_SEV	Renal failure, severe	1	0.1948089189	0.1011572013	1.9258037641	0.0541
THYROID_HYPO	Hypothyroidism	1	-0.0457506805	0.0649773175	-0.7041023280	0.4814
VALVE	Valvular disease	1	0.0004445256	0.0831255208	0.0053476428	0.9957
WGHTLOSS	Weight loss	1	0.6298269058	0.0731842827	8.6060405626	<.0001
PS08_NonWt_1	PS08 Comorbidity count using non-weighted method, category 1	1	0.3075543599	0.0853053746	3.6053339121	0.0003
PS08_NonWt_2	PS08 Comorbidity count using non-weighted method, category 2	1	0.1454722998	0.1528648990	0.9516396554	0.3413

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX	1	-3.410867388	0.9003884018	-3.7882178198	0.0002
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	-2.504433251	0.4227208183	-5.9245562142	<.0001
MDRG_107	EXTRACRANIAL PROCEDURES	1	-2.714231784	0.6808921722	-3.9862872499	<.0001
MDRG_108	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC	1	-1.602767410	0.4846837075	-3.3068316215	0.0009
MDRG_114	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION	1	-0.9773952843	0.3907353062	-2.5014255653	0.0124
MDRG_117	NONSPECIFIC CEREBROVASCULAR DISORDERS	1	0.3705035483	0.4404013286	0.8412861729	0.4002
MDRG_128	SEIZURES	1	0.0011526337	0.4769031001	0.0024169138	0.9981
MDRG_401	MAJOR CHEST PROCEDURES	1	-1.971435537	0.4301566089	-4.5830646249	<.0001
MDRG_402	OTHER RESP SYSTEM O.R. PROCEDURES	1	-2.531220258	0.4331205520	-5.8441471916	<.0001
MDRG_409	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	1	-0.0451145356	0.3049158838	-0.1479573156	0.8824
MDRG_410	SIMPLE PNEUMONIA & PLEURISY	1	-0.0652293667	0.2272183442	-0.2870779071	0.7741
MDRG_413	BRONCHITIS & ASTHMA	1	-0.1444028315	0.6676008648	-0.2163011451	0.8288
MDRG_502	PERC CARDIOVASC PROC W NON-DRUG-ELUTING STENT	1	-2.085945293	0.9770287847	-2.1349885757	0.0328
MDRG_503	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC	1	-3.581334713	0.8484691563	-4.2209368327	<.0001
MDRG_505	OTHER CARDIOTHORACIC PROCEDURES	1	-2.652912184	0.9135016796	-2.9041130884	0.0037
MDRG_507	CORONARY BYPASS W/O PTCA	1	-1.960533211	0.3877645590	-5.0559886536	<.0001
MDRG_509	AMPUTATION FOR CIRC SYS DISORDERS EXC UPPER LIMB & TOE	1	-1.713994452	0.4952131392	-3.4611247485	0.0005
MDRG_510	PERMANENT CARDIAC PACEMAKER IMPLANT AND PROCEDURES	1	-2.579853590	0.3964903524	-6.5067247524	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-2.521822197	0.3062329934	-8.2349787600	<.0001
MDRG_514	OTHER VASCULAR PROCEDURES	1	-1.823585344	0.2814840800	-6.4784670737	<.0001
MDRG_520	ACUTE MYOCARDIAL INFARCTION	1	-1.040211698	0.4775383862	-2.1782787063	0.0294
MDRG_522	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH	1	-0.7816074285	0.6457543225	-1.2103789341	0.2261
MDRG_531	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS	1	-1.020173430	0.4764988373	-2.1409777954	0.0323
MDRG_539	CARDIAC DEFIBRILLATOR IMPLANT W/OUT CARDIAC CATH	1	-1.410836361	0.5622480212	-2.5092775930	0.0121
MDRG_540	ENDOVASCULAR CARDIAC VALVE REPLACEMENT	1	-2.674932825	0.5317400289	-5.0305274743	<.0001
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	-2.363146244	0.4798257026	-4.9250097097	<.0001
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL PROC	1	-2.779087628	0.6652358767	-4.1775973385	<.0001
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	-2.084437998	0.2423791734	-8.5999055456	<.0001
MDRG_604	PERITONEAL ADHESIOLYSIS	1	-1.954150054	0.5604215830	-3.4869286152	0.0005
MDRG_610	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL	1	-2.590295405	0.9313715070	-2.7811623882	0.0054
MDRG_611	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES	1	-1.948482983	0.5588584382	-3.4865412231	0.0005
MDRG_615	G.I. HEMORRHAGE	1	-0.3507811050	0.3252906940	-1.0783619433	0.2809
MDRG_617	UNCOMPLICATED PEPTIC ULCER	1	1.2021095171	0.9785236145	1.2284931087	0.2193
MDRG_705	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E.	1	-2.564499939	0.4739275230	-5.4111648171	<.0001
MDRG_801	COMBINED ANTERIOR/POSTERIOR SPINAL	1	-2.554671686	0.6474353330	-3.9458329756	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	FUSION					
MDRG_803	SPINAL FUSION EXCEPT CERVICAL	1	-2.867568418	0.8932695669	-3.2101937919	0.0013
MDRG_805	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS	1	0.0628996863	0.2363138653	0.2661701048	0.7901
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-0.2977042231	0.0815536922	-3.6504076643	0.0003
MDRG_808	CERVICAL SPINAL FUSION	1	-3.175862442	0.8768963774	-3.6217077907	0.0003
MDRG_811	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT	1	1.0441259455	0.1668245860	6.2588253378	<.0001
MDRG_815	BACK & NECK PROC EXC SPINAL FUSION OR DISC DEVICE/NEUROSTIM	1	-2.624153000	0.9058615828	-2.8968586926	0.0038
MDRG_826	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC	1	-3.490153413	0.9030864814	-3.8646945612	0.0001
MDRG_838	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	1	2.1408714016	0.2202127788	9.7218309200	<.0001
MDRG_903	OTHER SKIN, SUBCUT TISS & BREAST PROC	1	-1.846588646	0.4796670869	-3.8497297317	0.0001
MDRG_1002	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DIS	1	-2.012300109	0.6900238628	-2.9162761136	0.0035
MDRG_1006	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC	1	1.6050142044	0.1807192445	8.8812578237	<.0001
MDRG_1008	MISC DISORDERS OF NUTRITION, METABOLISM, FLUIDS/ELECTROLYTES	1	-0.4845526629	0.3653600921	-1.3262331421	0.1848
MDRG_1107	TRANSURETHRAL PROCEDURES	1	-2.274187348	0.6869856382	-3.3103855759	0.0009
MDRG_1109	OTHER KIDNEY & URINARY TRACT PROCEDURES	1	-1.618571615	0.4025324131	-4.0209721314	<.0001
MDRG_1110	RENAL FAILURE	1	-0.6528397820	0.3067395305	-2.1283196886	0.0333
MDRG_1113	KIDNEY & URINARY TRACT INFECTIONS	1	-1.131891536	0.3918759956	-2.8883921153	0.0039
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R.	1	-0.8650744200	0.1266548499	-6.8301720831	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	PROCEDURE					
MDRG_1808	SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS	1	-0.8110366816	0.2637206720	-3.0753625631	0.0021
MDRG_1914	ORGANIC DISTURBANCES & MENTAL RETARDATION	1	2.6314384333	0.2015788226	13.0541413030	<.0001
MDRG_1915	PSYCHOSES	1	2.1420194733	0.1845782944	11.6049369717	<.0001
MDRG_2018	ALCOHOL/DRUG ABUSE OR DEPENDENCE	1	0.6331483472	0.3643003041	1.7379846795	0.0822
MDRG_2104	OTHER O.R. PROCEDURES FOR INJURIES	1	-0.5061744493	0.2714257200	-1.8648728255	0.0622
MDRG_2302	REHABILITATION	1	2.0575156652	0.4022713678	5.1147454925	<.0001
MDRG_2303	SIGNS & SYMPTOMS	1	1.1456843561	0.3054103563	3.7512950444	0.0002
MDRG_2304	AFTERCARE	1	1.9591521901	0.3582667215	5.4684180045	<.0001
TRANSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.1700303878	0.0880959876	1.9300582501	0.0536
MEDICDR	Medical DRGs flag	1	-3.223597918	0.0892425625	-36.1217543351	<.0001

c-statistic=0.881

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	-6.007930281	0.0453290964	-132.5402613313	<.0001
Age_LT30	Age < 30	1	-0.3336753194	0.0810740355	-4.1156865744	<.0001
Age_30_34	30 <= Age <= 34	1	-0.1482669956	0.0813519872	-1.8225368627	0.0684
Age_35_39	35 <= Age <= 39	1	0.0455139789	0.0694067004	0.6557577090	0.5120
Age_40_44	40 <= Age <= 44	1	0.0813024984	0.0647920013	1.2548230763	0.2095
Age_45_49	45 <= Age <= 49	1	-0.0164009325	0.0606844339	-0.2702658898	0.7870
Age_50_54	50 <= Age <= 54	1	0.0745712317	0.0570586159	1.3069232496	0.1912

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_55_59	55 <= Age <= 59	1	0.0325093589	0.0532510015	0.6104929110	0.5415
Age_60_64	60 <= Age <= 64	1	-0.0505763126	0.0545724121	-0.9267743651	0.3540
Age_70_74	70 <= Age <= 74	1	-0.0028184014	0.0515452689	-0.0546781787	0.9564
Age_75_79	75 <= Age <= 79	1	0.0603202345	0.0522492996	1.1544697240	0.2483
Age_80_84	80 <= Age <= 84	1	-0.0087292818	0.0634559168	-0.1375645045	0.8906
Age_85_89	85 <= Age <= 89	1	-0.1352874492	0.0797805694	-1.6957443422	0.0899
Age_90Plus	Age >= 90	1	-0.2466600561	0.1057103014	-2.3333587441	0.0196
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.0783101408	0.0475643968	1.6464024807	0.0997
Age_LT30_MALE	Age < 30 MALE	1	0.2921339676	0.1014836077	2.8786320698	0.0040
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.1638954972	0.1174820428	1.3950685001	0.1630
Age_35_39_MALE	35 <= Age <= 39 MALE	1	-0.0246270322	0.1010473849	-0.2437176597	0.8074
Age_40_44_MALE	40 <= Age <= 44 MALE	1	-0.0656377061	0.0916368008	-0.7162810743	0.4738
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.0825078411	0.0852410893	0.9679350862	0.3331
Age_50_54_MALE	50 <= Age <= 54 MALE	1	-0.0549799680	0.0794491687	-0.6920143897	0.4889
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.0744426041	0.0676813143	1.0998989150	0.2714
Age_60_64_MALE	60 <= Age <= 64 MALE	1	0.0584822072	0.0684018786	0.8549795473	0.3926
Age_70_74_MALE	70 <= Age <= 74 MALE	1	0.0346328450	0.0659917646	0.5248055613	0.5997
Age_75_79_MALE	75 <= Age <= 79 MALE	1	0.0412750368	0.0698225211	0.5911421720	0.5544
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.0630015942	0.0844915517	0.7456555474	0.4559
Age_85_89_MALE	85 <= Age <= 89 MALE	1	0.1235052121	0.1058442655	1.1668578503	0.2433
Age_90Plus_MALE	Age >= 90 MALE	1	-0.0022926861	0.1649843500	-0.0138963854	0.9889
ANEMDEF	Deficiency anemias	1	-0.3262762079	0.0292927121	-11.1384772802	<.0001
ARTH	Arthropathies	1	0.0757654101	0.0481138581	1.5747107613	0.1153
CANCER_METS	Metastatic cancer	1	0.1121235038	0.0462560738	2.4239736434	0.0154
CHF	Congestive heart failure	1	0.1582940118	0.0328598979	4.8172399136	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
DEMENTIA	Dementia	1	-0.2925769104	0.0624464768	-4.6852428712	<.0001
DEPRESS	Depression	1	0.0316540389	0.0277344941	1.1413238242	0.2537
DIAB_CX	Diabetes with chronic complications	1	-0.1137561488	0.0285126333	-3.9896752927	<.0001
DIAB_UNCX	Diabetes without chronic complications	1	-0.1434820031	0.0314333494	-4.5646425229	<.0001
DRUG_ABUSE	Drug abuse	1	-0.0062770970	0.0540222176	-0.1161947301	0.9075
HTN_CX	Hypertension, complicated	1	0.0736747996	0.0354456817	2.0785268065	0.0377
HTN_UNCX	Hypertension, uncomplicated	1	0.0620016283	0.0232252473	2.6695788186	0.0076
LIVER_MLD	Liver disease, mild	1	0.1086419277	0.0432268635	2.5132965705	0.0120
LIVER_SEV	Liver disease, moderate to severe	1	0.2865567808	0.1079441285	2.6546768666	0.0079
LUNG_CHRONIC	Chronic pulmonary disease	1	-0.0517359715	0.0243480587	-2.1248499588	0.0336
NEURO_MOVT	Neurological disorders affecting movement	1	-0.0826943396	0.0646191362	-1.2797190487	0.2006
NEURO_OTH	Other neurological disorders	1	0.1344761837	0.0476418867	2.8226460561	0.0048
OBESE	Obesity	1	-0.1100190364	0.0249031569	-4.4178750895	<.0001
PARALYSIS	Paralysis	1	0.2249120176	0.0420583004	5.3476249697	<.0001
PERIVASC	Peripheral vascular disease	1	0.4800627014	0.0273915700	17.5259286697	<.0001
PULMCIRC	Pulmonary circulation disease	1	0.1007147864	0.0464039005	2.1703948448	0.0300
RENFL_SEV	Renal failure, severe	1	0.1348031222	0.0403867886	3.3378024602	0.0008
THYROID_HYPO	Hypothyroidism	1	0.0571400172	0.0280538485	2.0367978076	0.0417
ULCER_PEPTIC	Peptic ulcer disease x bleeding	1	0.4441089511	0.0768691637	5.7774656252	<.0001
VALVE	Valvular disease	1	0.2139907012	0.0332805437	6.4299039963	<.0001
WGHTLOSS	Weight loss	1	0.3515334258	0.0382706871	9.1854484989	<.0001
PS09_NonWt_1	PS09 Comorbidity count using non-weighted method, category 1	1	0.1455906244	0.0294991907	4.9354107962	<.0001
PS09_NonWt_2	PS09 Comorbidity count using non-weighted method, category 2	1	0.1304201412	0.0486773721	2.6792765427	0.0074
MDRG_102	CRANIO W MAJOR DEV IMPL/ACUTE	1	-0.7920379064	0.1425506718	-5.5561850149	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	COMPLEX CNS PDX					
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	0.2604637286	0.0635682158	4.0973893203	<.0001
MDRG_104	SPINAL PROCEDURES	1	0.2558543384	0.1112949367	2.2988856984	0.0215
MDRG_105	VENTRICULAR SHUNT PROCEDURES	1	-2.794466238	0.7104665322	-3.9332834295	<.0001
MDRG_107	EXTRACRANIAL PROCEDURES	1	0.9105623511	0.0497755229	18.2933758870	<.0001
MDRG_301	CRANIAL/FACIAL PROCEDURES	1	0.6461621211	0.0963881896	6.7037478742	<.0001
MDRG_302	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES	1	0.8300096292	0.1263715621	6.5680095680	<.0001
MDRG_401	MAJOR CHEST PROCEDURES	1	0.0689468655	0.0691759831	0.9966879015	0.3189
MDRG_402	OTHER RESP SYSTEM O.R. PROCEDURES	1	-1.388110165	0.1783397270	-7.7835162580	<.0001
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	0.9899185422	0.0920031214	10.7596190936	<.0001
MDRG_502	PERC CARDIOVASC PROC W NON-DRUG-ELUTING STENT	1	-1.277947500	0.2607084653	-4.9018258715	<.0001
MDRG_503	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC	1	1.0745147017	0.0550555601	19.5169152862	<.0001
MDRG_505	OTHER CARDIOTHORACIC PROCEDURES	1	0.3335331407	0.1126483071	2.9608358029	0.0031
MDRG_507	CORONARY BYPASS W/O PTCA	1	0.6085597263	0.0522685591	11.6429405586	<.0001
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-1.524492256	0.0749349619	-20.3442053963	<.0001
MDRG_513	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT	1	-1.381298609	0.2412724637	-5.7250570061	<.0001
MDRG_514	OTHER VASCULAR PROCEDURES	1	0.4538819036	0.0489072805	9.2804568023	<.0001
MDRG_515	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	1	-1.866466069	0.4569206483	-4.0848801134	<.0001
MDRG_517	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	1	0.4883053263	0.1817969444	2.6859930344	0.0072

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_540	ENDOVASCULAR CARDIAC VALVE REPLACEMENT	1	-0.2906309615	0.0978197328	-2.9710872571	0.0030
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	0.2705895068	0.0583538607	4.6370454920	<.0001
MDRG_543	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES	1	-0.8889828704	0.1381227027	-6.4361821261	<.0001
MDRG_604	PERITONEAL ADHESIOLYSIS	1	-0.3600258340	0.1084279002	-3.3204169157	0.0009
MDRG_605	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG	1	-1.064044534	0.1695608665	-6.2752954466	<.0001
MDRG_606	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG	1	-0.8693002099	0.1438441043	-6.0433495981	<.0001
MDRG_701	PANCREAS, LIVER & SHUNT PROCEDURES	1	0.3635152681	0.1014083103	3.5846694108	0.0003
MDRG_705	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E.	1	-0.9254637873	0.0691587200	-13.3817367745	<.0001
MDRG_801	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	1	-0.5626051108	0.0868763200	-6.4759316561	<.0001
MDRG_803	SPINAL FUSION EXCEPT CERVICAL	1	-0.5632108951	0.0742473853	-7.5855990474	<.0001
MDRG_804	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY	1	-2.960139517	0.5798727708	-5.1048086165	<.0001
MDRG_806	REVISION OF HIP OR KNEE REPLACEMENT	1	-1.186142028	0.1217208897	-9.7447696205	<.0001
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-3.118103014	0.1009921659	-30.8747018710	<.0001
MDRG_808	CERVICAL SPINAL FUSION	1	0.1550879626	0.0592420487	2.6178696700	0.0088
MDRG_809	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS	1	-0.5291773917	0.1735934017	-3.0483727290	0.0023
MDRG_810	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	1	-1.644227666	0.2704025582	-6.0806660893	<.0001
MDRG_811	HIP & FEMUR PROCEDURES EXCEPT	1	-1.923365590	0.1126795146	-17.0693457186	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	MAJOR JOINT					
MDRG_812	MAJOR JOINT/LIMB REATTACHMENT PROCEDURE OF UPPER EXTREMITIES	1	-2.787760533	0.2292281643	-12.1615096536	<.0001
MDRG_816	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR	1	-2.474808592	0.1918243369	-12.9014317592	<.0001
MDRG_820	FOOT PROCEDURES	1	-2.124446620	0.4224481518	-5.0288931572	<.0001
MDRG_824	SHOULDER,ELBOW OR FOREARM PROC,EXC MAJOR JOINT PROC	1	-2.973310921	0.6076655946	-4.8930052111	<.0001
MDRG_825	HAND OR WRIST PROC, EXCEPT MAJOR THUMB OR JOINT PROC	1	-2.937654364	0.7673674643	-3.8282237656	0.0001
MDRG_826	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC	1	-0.4295184840	0.0911212988	-4.7137001961	<.0001
MDRG_902	SKIN GRAFT EXC FOR SKIN ULCER OR CELLULITIS	1	1.0745831351	0.1303496047	8.2438541934	<.0001
MDRG_903	OTHER SKIN, SUBCUT TISS & BREAST PROC	1	1.5907826187	0.0444196709	35.8125710229	<.0001
MDRG_904	MASTECTOMY FOR MALIGNANCY	1	1.6617120339	0.1063233009	15.6288604715	<.0001
MDRG_905	BREAST BIOPSY, LOCAL EXCISION & OTHER BREAST PROCEDURES	1	1.4549809208	0.0981390911	14.8257020183	<.0001
MDRG_1002	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DIS	1	-0.8630379387	0.1315730473	-6.5593824626	<.0001
MDRG_1003	O.R. PROCEDURES FOR OBESITY	1	-0.4913328493	0.0740902955	-6.6315412278	<.0001
MDRG_1005	THYROID, PARATHYROID & THYROGLOSSAL PROCEDURES	1	1.8208352751	0.0711509120	25.5911726918	<.0001
MDRG_1006	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC	1	-0.6302037998	0.1717093020	-3.6701785652	0.0002
MDRG_1101	KIDNEY TRANSPLANT	1	1.0348017903	0.1090621356	9.4881856571	<.0001
MDRG_1102	MAJOR BLADDER PROCEDURES	1	-0.7265020389	0.2268867202	-3.2020474276	0.0014

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_1104	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM	1	-0.5636013998	0.1243497432	-4.5323889338	<.0001
MDRG_1105	MINOR BLADDER PROCEDURES	1	1.4445218088	0.1687977901	8.5577056906	<.0001
MDRG_1107	TRANSURETHRAL PROCEDURES	1	-2.788796873	0.3776153842	-7.3852840471	<.0001
MDRG_1109	OTHER KIDNEY & URINARY TRACT PROCEDURES	1	0.4296417507	0.1133007344	3.7920473607	0.0001
MDRG_1201	MAJOR MALE PELVIC PROCEDURES	1	-0.8378994371	0.1463434267	-5.7255693396	<.0001
MDRG_1304	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY	1	0.1024848318	0.0610109663	1.6797772270	0.0930
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	-0.4567770552	0.0536083906	-8.5206261639	<.0001
MDRG_1909	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	1	0.9325469311	0.2865055708	3.2548998211	0.0011
MDRG_7701	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	1	2.2068605408	0.1362392737	16.1984168041	<.0001
MDRG_7702	LIVER TRANSPLANT	1	2.0370328268	0.1536881452	13.2543263123	<.0001
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.0325917055	0.0344847374	0.9451052271	0.3446

c-statistic=0.774

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	-7.091944404	0.1003604518	-70.6647317688	<.0001
Age_LT30	Age < 30	1	-1.329605973	0.3261292058	-4.0769300909	<.0001
Age_30_34	30 <= Age <= 34	1	-1.144996348	0.3397289902	-3.3703227601	0.0008
Age_35_39	35 <= Age <= 39	1	-1.017677458	0.2812276815	-3.6186958983	0.0003

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_40_44	40 <= Age <= 44	1	-0.6102389425	0.2148828210	-2.8398684436	0.0045
Age_45_49	45 <= Age <= 49	1	-0.6104866478	0.1880626682	-3.2461873139	0.0012
Age_50_54	50 <= Age <= 54	1	-0.4283201525	0.1547646488	-2.7675580689	0.0056
Age_55_59	55 <= Age <= 59	1	-0.4163771706	0.1438766261	-2.8939875905	0.0038
Age_60_64	60 <= Age <= 64	1	-0.2108126543	0.1164352964	-1.8105562555	0.0702
Age_70_74	70 <= Age <= 74	1	0.1868486619	0.0959486299	1.9473822828	0.0515
Age_75_79	75 <= Age <= 79	1	0.1485630422	0.1055671093	1.4072853102	0.1593
Age_80_84	80 <= Age <= 84	1	0.2581107428	0.1212771049	2.1282726291	0.0333
Age_85_89	85 <= Age <= 89	1	-0.1137329627	0.1600865011	-0.7104469267	0.4774
Age_90Plus	Age >= 90	1	-0.2294324592	0.2571650905	-0.8921602026	0.3723
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.1515651535	0.0976409256	1.5522707563	0.1206
Age_LT30_MALE	Age < 30 MALE	1	0.7189324268	0.3937370530	1.8259201701	0.0679
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.4914230642	0.4556252981	1.0785684339	0.2808
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.9521613850	0.3256649807	2.9237450801	0.0035
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.0978240565	0.2994154264	0.3267168219	0.7439
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.3291248583	0.2252005131	1.4614747263	0.1439
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.0699063904	0.1909817617	0.3660369965	0.7143
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.1471658883	0.1719697950	0.8557659110	0.3921
Age_60_64_MALE	60 <= Age <= 64 MALE	1	0.0137386105	0.1421122580	0.0966743522	0.9230
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.1478181356	0.1226727449	-1.2049794409	0.2282
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.0096097149	0.1320272695	-0.0727858338	0.9420
Age_80_84_MALE	80 <= Age <= 84 MALE	1	-0.2739673092	0.1601721258	-1.7104555982	0.0872
Age_85_89_MALE	85 <= Age <= 89 MALE	1	-0.1474932679	0.2146819706	-0.6870314608	0.4921
Age_90Plus_MALE	Age >= 90 MALE	1	-1.275229097	0.4818263995	-2.6466567603	0.0081
ALCOHOL	Alcohol abuse	1	0.1739541317	0.1156221163	1.5045056884	0.1325

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
ANEMDEF	Deficiency anemias	1	0.2745246882	0.0581920388	4.7175643595	<.0001
ARTH	Arthropathies	1	-0.2190381964	0.1044085367	-2.0978954713	0.0359
CANCER_LEUK	Leukemia	1	0.7434277203	0.1936289804	3.8394444824	0.0001
CANCER_METS	Metastatic cancer	1	0.0984291193	0.1017338881	0.9675155557	0.3333
CHF	Congestive heart failure	1	0.5970151396	0.0652706992	9.1467556895	<.0001
COAG	Coagulopathy	1	0.6435067786	0.0721626858	8.9174449563	<.0001
DEMENTIA	Dementia	1	-0.5501214774	0.1673010130	-3.2882136673	0.0010
DEPRESS	Depression	1	-0.2756081230	0.0699507305	-3.9400320902	<.0001
DIAB_CX	Diabetes with chronic complications	1	0.2853944186	0.0493039045	5.7884750017	<.0001
DIAB_UNCX	Diabetes without chronic complications	1	-0.5190754750	0.0919990399	-5.6421836078	<.0001
HTN_CX	Hypertension, complicated	1	0.3470061945	0.0742377592	4.6742546955	<.0001
HTN_UNCX	Hypertension, uncomplicated	1	-0.4135006664	0.0628985227	-6.5740918613	<.0001
LIVER_MLD	Liver disease, mild	1	0.3532686417	0.0826881140	4.2723025654	<.0001
LIVER_SEV	Liver disease, moderate to severe	1	0.7406032659	0.1600888868	4.6262003599	<.0001
LUNG_CHRONIC	Chronic pulmonary disease	1	0.1239901275	0.0474656090	2.6122097680	0.0090
NEURO_OTH	Other neurological disorders	1	0.1660049984	0.1642516479	1.0106747818	0.3122
OBESE	Obesity	1	0.4589870530	0.0435952423	10.5283748703	<.0001
PARALYSIS	Paralysis	1	0.3153749676	0.1203779031	2.6198742422	0.0088
PERIVASC	Peripheral vascular disease	1	0.7033037690	0.0542099033	12.9737137761	<.0001
PULMCIRC	Pulmonary circulation disease	1	0.4148774522	0.0674927077	6.1469967092	<.0001
RENFL_MOD	Renal failure, moderate	1	0.7413319383	0.0678001393	10.9340769202	<.0001
RENFL_SEV	Renal failure, severe	1	2.0511005438	0.0789598004	25.9765163285	<.0001
THYROID_HYPO	Hypothyroidism	1	-0.2967489209	0.0595379872	-4.9841947110	<.0001
VALVE	Valvular disease	1	0.1415827633	0.0573449232	2.4689677018	0.0136
WGHTLOSS	Weight loss	1	1.0443123390	0.0730068668	14.3043029269	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
PS10_NonWt_1	PS10 Comorbidity count using non-weighted method, category 1	1	0.2805646512	0.0483306237	5.8051113255	<.0001
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	-2.740134526	0.5331491852	-5.1395267997	<.0001
MDRG_107	EXTRACRANIAL PROCEDURES	1	-1.917752632	0.2524023480	-7.5979983845	<.0001
MDRG_401	MAJOR CHEST PROCEDURES	1	-0.3994827696	0.1454828449	-2.7459098012	0.0060
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	1.6280880098	0.1631378262	9.9798314575	<.0001
MDRG_503	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC	1	1.0076574189	0.0777494471	12.9603162017	<.0001
MDRG_505	OTHER CARDIOTHORACIC PROCEDURES	1	-0.1783253733	0.1760564576	-1.0128874320	0.3111
MDRG_507	CORONARY BYPASS W/O PTCA	1	0.2328779152	0.0880817450	2.6438839866	0.0082
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-0.9517567108	0.2214602612	-4.2976410561	<.0001
MDRG_514	OTHER VASCULAR PROCEDURES	1	-1.200721781	0.1617912723	-7.4214249267	<.0001
MDRG_540	ENDOVASCULAR CARDIAC VALVE REPLACEMENT	1	-1.307552090	0.1497012257	-8.7344113809	<.0001
MDRG_541	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON	1	0.3623887610	0.1218164810	2.9748746474	0.0029
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	0.3900082693	0.1270883621	3.0687960939	0.0021
MDRG_543	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES	1	-1.620301090	0.3986823491	-4.0641405224	<.0001
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL PROC	1	0.2344769196	0.1286658088	1.8223716295	0.0684
MDRG_604	PERITONEAL ADHESIOLYSIS	1	0.2836781305	0.2064011103	1.3744021538	0.1693
MDRG_701	PANCREAS, LIVER & SHUNT PROCEDURES	1	0.8685639220	0.1164401632	7.4593155640	<.0001
MDRG_801	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	1	-1.379088308	0.2006649426	-6.8725921452	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_803	SPINAL FUSION EXCEPT CERVICAL	1	-1.571732759	0.2024076551	-7.7651843681	<.0001
MDRG_806	REVISION OF HIP OR KNEE REPLACEMENT	1	-2.042781409	0.3080954683	-6.6303520150	<.0001
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-2.490905998	0.1213327224	-20.5295483997	<.0001
MDRG_808	CERVICAL SPINAL FUSION	1	-3.517973038	0.5983027950	-5.8799207814	<.0001
MDRG_812	MAJOR JOINT/LIMB REATTACHMENT PROCEDURE OF UPPER EXTREMITIES	1	-2.647448875	0.3202631027	-8.2664810671	<.0001
MDRG_815	BACK & NECK PROC EXC SPINAL FUSION OR DISC DEVICE/NEUROSTIM	1	-2.236021466	0.4624134571	-4.8355458337	<.0001
MDRG_816	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR	1	-2.003728322	0.4793278734	-4.1802875083	<.0001
MDRG_826	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC	1	-2.105360077	0.4035282918	-5.2173791035	<.0001
MDRG_903	OTHER SKIN, SUBCUT TISS & BREAST PROC	1	-1.972200289	0.5254265442	-3.7535223721	0.0002
MDRG_1003	O.R. PROCEDURES FOR OBESITY	1	-1.725380125	0.2208184137	-7.8135699653	<.0001
MDRG_1102	MAJOR BLADDER PROCEDURES	1	0.5129273520	0.1603173905	3.1994492322	0.0014
MDRG_1103	KIDNEY & URETER PROCEDURES FOR NEOPLASM	1	0.3938429434	0.1193694919	3.2993601394	0.0010
MDRG_1304	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY	1	-1.839941265	0.3156497254	-5.8290602418	<.0001
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	0.5262673860	0.2347701335	2.2416283463	0.0250
MDRG_7701	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	1	2.3075798292	0.2024358506	11.3990670272	<.0001
MDRG_7702	LIVER TRANSPLANT	1	2.3722087988	0.2572359044	9.2219194856	<.0001
TRANSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.6108854385	0.1072872141	5.6939258177	<.0001

c-statistic=0.92

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

Parameter	Label	DF	Estimate	Standard Error	Wald Chi-Square	Prob Z-Statistics
Intercept	Intercept	1	-5.720276144	0.0356686464	25719.3939858143	<.0001
Age_LT30	Age < 30	1	-0.5357583244	0.0910892237	34.5942447133	<.0001
Age_30_34	30 <= Age <= 34	1	-0.9152130791	0.1179038210	60.2543875282	<.0001
Age_35_39	35 <= Age <= 39	1	-0.6915039901	0.0884356534	61.1412908135	<.0001
Age_40_44	40 <= Age <= 44	1	-0.5063505670	0.0721586880	49.2408277249	<.0001
Age_45_49	45 <= Age <= 49	1	-0.4131051967	0.0599435971	47.4936683572	<.0001
Age_50_54	50 <= Age <= 54	1	-0.2794672723	0.0509261535	30.1148123990	<.0001
Age_55_59	55 <= Age <= 59	1	-0.1636053085	0.0438618449	13.9130066762	0.0002
Age_60_64	60 <= Age <= 64	1	-0.0597580009	0.0401715372	2.2128665205	0.1369
Age_70_74	70 <= Age <= 74	1	0.1319680521	0.0373741496	12.4679477192	0.0004
Age_75_79	75 <= Age <= 79	1	0.1562134664	0.0399668116	15.2769948393	<.0001
Age_80_84	80 <= Age <= 84	1	0.1771187879	0.0476222495	13.8327793933	0.0002
Age_85_89	85 <= Age <= 89	1	0.2653996245	0.0622763235	18.1616238188	<.0001
Age_90Plus	Age >= 90	1	0.1399036349	0.1048736574	1.7796113577	0.1822
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.0027832021	0.0358318700	0.0060332389	0.9381
Age_LT30_MALE	Age < 30 MALE	1	0.4429802448	0.1209421338	13.4157038990	0.0002
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.7544775297	0.1533851048	24.1950344727	<.0001
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.5082203490	0.1199626313	17.9478377205	<.0001
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.3460014395	0.0995902249	12.0704200799	0.0005
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.1925878723	0.0819434688	5.5236885255	0.0188
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.0456223381	0.0686722436	0.4413596279	0.5065
Age_55_59_MALE	55 <= Age <= 59 MALE	1	-0.0038690057	0.0582268010	0.0044152253	0.9470
Age_60_64_MALE	60 <= Age <= 64 MALE	1	0.0014955489	0.0529541300	0.0007976301	0.9775

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.1103967071	0.0497961298	4.9149721232	0.0266
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.0442902441	0.0529461871	0.6997562201	0.4029
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.0210723445	0.0625635695	0.1134442998	0.7363
Age_85_89_MALE	85 <= Age <= 89 MALE	1	-0.1169603173	0.0847059144	1.9065561721	0.1673
Age_90Plus_MALE	Age >= 90 MALE	1	-0.0396470522	0.1514602495	0.0685211226	0.7935
ALCOHOL	Alcohol abuse	1	0.5980211537	0.0396895580	227.0285990144	<.0001
ARTH	Arthropathies	1	-0.0683928304	0.0384043220	3.1714724954	0.0749
CANCER_METS	Metastatic cancer	1	0.3140959175	0.0381192706	67.8946288455	<.0001
CANCER_SOLID	Solid tumor without metastasis, malignant	1	0.1035080300	0.0435741628	5.6427392623	0.0175
CHF	Congestive heart failure	1	0.4233826311	0.0246257865	295.5873569322	<.0001
COAG	Coagulopathy	1	0.5410271129	0.0277989568	378.7747857712	<.0001
DEPRESS	Depression	1	0.0144488443	0.0229816523	0.3952789837	0.5295
DIAB_CX	Diabetes with chronic complications	1	0.1880321263	0.0207518841	82.1011132842	<.0001
DIAB_UNCX	Diabetes without chronic complications	1	-0.1414009218	0.0257395062	30.1789455159	<.0001
DRUG_ABUSE	Drug abuse	1	0.2658769375	0.0551957350	23.2033287443	<.0001
HTN_CX	Hypertension, complicated	1	0.2243681512	0.0285810287	61.6263869997	<.0001
HTN_UNCX	Hypertension, uncomplicated	1	-0.0355423235	0.0216101976	2.7050428911	0.1000
LIVER_SEV	Liver disease, moderate to severe	1	0.4761791947	0.0646650214	54.2253021656	<.0001
LUNG_CHRONIC	Chronic pulmonary disease	1	0.4600275112	0.0176362459	680.3859224837	<.0001
NEURO_OTH	Other neurological disorders	1	0.7398775135	0.0452542307	267.3014304908	<.0001
NEURO_SEIZ	Seizures and epilepsy	1	0.2063829227	0.0465598094	19.6483067517	<.0001
OBESE	Obesity	1	0.3047778009	0.0180095432	286.3922540710	<.0001
PARALYSIS	Paralysis	1	0.5559261452	0.0399738469	193.4115069244	<.0001
PERIVASC	Peripheral vascular disease	1	0.2825350173	0.0218786036	166.7651757550	<.0001
PULMCIRC	Pulmonary circulation disease	1	0.2942443686	0.0294975324	99.5050095318	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
RENFLF_MOD	Renal failure, moderate	1	0.0790572497	0.0266068687	8.8286819126	0.0030
RENFLF_SEV	Renal failure, severe	1	0.4543779025	0.0324289487	196.3218630660	<.0001
THYROID_HYPO	Hypothyroidism	1	-0.0775729131	0.0222055410	12.2038674654	0.0005
ULCER_PEPTIC	Peptic ulcer disease x bleeding	1	0.5501805367	0.0706403941	60.6602532131	<.0001
VALVE	Valvular disease	1	0.0670013223	0.0233057209	8.2649773016	0.0040
WGHTLOSS	Weight loss	1	1.0242185743	0.0283459168	1305.5823762926	<.0001
PS11_NonWt_1	PS11 Comorbidity count using non-weighted method, category 1	1	0.4405856617	0.0246659146	319.0555260039	<.0001
PS11_NonWt_2	PS11 Comorbidity count using non-weighted method, category 2	1	0.3890547704	0.0396708257	96.1787236077	<.0001
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	0.3102496280	0.0506157815	37.5708175587	<.0001
MDRG_107	EXTRACRANIAL PROCEDURES	1	-0.3925304152	0.0638341790	37.8129076080	<.0001
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	1.6926801158	0.0826284227	419.6535097435	<.0001
MDRG_503	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC	1	1.6914903037	0.0265353032	4063.4125265538	<.0001
MDRG_505	OTHER CARDIOTHORACIC PROCEDURES	1	1.0486493582	0.0551761574	361.2082714543	<.0001
MDRG_507	CORONARY BYPASS W/O PTCA	1	1.5671758240	0.0277695332	3184.9182326375	<.0001
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-0.7322430248	0.0952754274	59.0675115827	<.0001
MDRG_514	OTHER VASCULAR PROCEDURES	1	-0.1582917458	0.0514271869	9.4739480748	0.0021
MDRG_540	ENDOVASCULAR CARDIAC VALVE REPLACEMENT	1	-0.3705153866	0.0530203309	48.8345991843	<.0001
MDRG_541	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON	1	0.5277413846	0.0557839730	89.5000792455	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	0.8223040377	0.0486001337	286.2792804731	<.0001
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL PROC	1	0.8806826654	0.0465485735	357.9531123182	<.0001
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	0.5216859977	0.0293372619	316.2126250871	<.0001
MDRG_604	PERITONEAL ADHESIOLYSIS	1	0.8017065926	0.0761674559	110.7878184497	<.0001
MDRG_701	PANCREAS, LIVER & SHUNT PROCEDURES	1	0.9185190500	0.0518895030	313.3410638696	<.0001
MDRG_705	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E.	1	0.5153386773	0.0899921481	32.7926293034	<.0001
MDRG_802	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR EXT FUS	1	0.9441440159	0.0859552772	120.6511315690	<.0001
MDRG_803	SPINAL FUSION EXCEPT CERVICAL	1	-0.5609680643	0.0556283433	101.6913525256	<.0001
MDRG_806	REVISION OF HIP OR KNEE REPLACEMENT	1	-1.183771133	0.0902509194	172.0411039247	<.0001
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-1.791393793	0.0404025410	1965.9151542576	<.0001
MDRG_808	CERVICAL SPINAL FUSION	1	-0.1841997265	0.0567860363	10.5219164879	0.0012
MDRG_812	MAJOR JOINT/LIMB REATTACHMENT PROCEDURE OF UPPER EXTREMITIES	1	-1.343897266	0.0821749981	267.4562402045	<.0001
MDRG_815	BACK & NECK PROC EXC SPINAL FUSION OR DISC DEVICE/NEUROSTIM	1	-0.7442053276	0.1070233256	48.3535835665	<.0001
MDRG_816	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR	1	-1.012638321	0.1386860414	53.3142387034	<.0001
MDRG_826	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC	1	-0.8025233305	0.1064641849	56.8209207025	<.0001
MDRG_903	OTHER SKIN, SUBCUT TISS & BREAST PROC	1	-0.7895210616	0.1364659503	33.4717818589	<.0001
MDRG_1003	O.R. PROCEDURES FOR OBESITY	1	-1.323466372	0.0745417820	315.2290843316	<.0001
MDRG_1102	MAJOR BLADDER PROCEDURES	1	0.8084043400	0.0725902953	124.0224043308	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_1103	KIDNEY & URETER PROCEDURES FOR NEOPLASM	1	0.2901839197	0.0582600805	24.8087295306	<.0001
MDRG_1201	MAJOR MALE PELVIC PROCEDURES	1	-1.076301893	0.1288056591	69.8229702478	<.0001
MDRG_1304	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY	1	-0.7427551798	0.0826800071	80.7031278544	<.0001
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	1.2483907858	0.0683784559	333.3208877701	<.0001
MDRG_2104	OTHER O.R. PROCEDURES FOR INJURIES	1	0.5517654336	0.0785982851	49.2813775303	<.0001
MDRG_7701	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	1	2.4801327209	0.0861554457	828.6752680250	<.0001
TRANSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.3825832493	0.0438300745	76.1916687425	<.0001

c-statistic=0.86

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	-5.992209928	0.0441664505	-135.6733416870	<.0001
Age_LT30	Age < 30	1	-0.5167899769	0.0780782883	-6.6188691924	<.0001
Age_30_34	30 <= Age <= 34	1	-0.5072759032	0.0885044273	-5.7316443815	<.0001
Age_35_39	35 <= Age <= 39	1	-0.4977947558	0.0700223241	-7.1090864505	<.0001
Age_40_44	40 <= Age <= 44	1	-0.3211635487	0.0659657009	-4.8686445281	<.0001
Age_45_49	45 <= Age <= 49	1	-0.3532736930	0.0526242919	-6.7131296283	<.0001
Age_50_54	50 <= Age <= 54	1	-0.3003996889	0.0501596294	-5.9888737725	<.0001
Age_55_59	55 <= Age <= 59	1	-0.1784254294	0.0427211599	-4.1765118232	<.0001
Age_60_64	60 <= Age <= 64	1	-0.0716127033	0.0381877987	-1.8752770694	0.0608

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_70_74	70 <= Age <= 74	1	0.0448297687	0.0374813240	1.1960561669	0.2317
Age_75_79	75 <= Age <= 79	1	0.1788139182	0.0402512906	4.4424393682	<.0001
Age_80_84	80 <= Age <= 84	1	0.0738260460	0.0457528390	1.6135839348	0.1066
Age_85_89	85 <= Age <= 89	1	0.0780723721	0.0503720211	1.5499154156	0.1212
Age_90Plus	Age >= 90	1	-0.0077042199	0.0601924919	-0.1279930379	0.8982
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.0670168853	0.0377954384	1.7731474517	0.0762
Age_LT30_MALE	Age < 30 MALE	1	0.2488437282	0.0923969063	2.6932041141	0.0071
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.2521029505	0.1131291238	2.2284531337	0.0259
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.3212166363	0.0960532629	3.3441512199	0.0008
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.1342962844	0.0850338616	1.5793271276	0.1143
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.2485589234	0.0713066137	3.4857765708	0.0005
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.2073914464	0.0668107387	3.1041633498	0.0019
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.1080734925	0.0577018581	1.8729638212	0.0611
Age_60_64_MALE	60 <= Age <= 64 MALE	1	0.0482584305	0.0500039750	0.9650918850	0.3345
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.0215222698	0.0510146540	-0.4218840693	0.6731
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.0791873744	0.0551019603	-1.4371063022	0.1507
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.0371384454	0.0610280719	0.6085469227	0.5428
Age_85_89_MALE	85 <= Age <= 89 MALE	1	-0.0389695475	0.0712125026	-0.5472290130	0.5842
Age_90Plus_MALE	Age >= 90 MALE	1	-0.1839339918	0.1003374138	-1.8331546020	0.0668
ANEMDEF	Deficiency anemias	1	-0.1030495005	0.0223569194	-4.6092888960	<.0001
BLDLOSS	Chronic blood loss anemia	1	0.1605522930	0.0596917805	2.6896884588	0.0072
CANCER_METS	Metastatic cancer	1	0.6551928720	0.0275962848	23.7420680398	<.0001
CANCER_SOLID	Solid tumor without metastasis, malignant	1	0.2877376254	0.0362326890	7.9413820258	<.0001
CBVD	Cerebrovascular disease	1	-0.2553721483	0.0415352187	-6.1483280022	<.0001
COAG	Coagulopathy	1	0.2463296715	0.0270010823	9.1229554828	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
DEMENTIA	Dementia	1	-0.1998359590	0.0366131523	-5.4580375147	<.0001
DEPRESS	Depression	1	-0.1700941461	0.0231290503	-7.3541344845	<.0001
DIAB_CX	Diabetes with chronic complications	1	-0.1537158237	0.0219602179	-6.9997403696	<.0001
DIAB_UNCX	Diabetes without chronic complications	1	-0.3269228792	0.0270495363	-12.0860806988	<.0001
HTN_CX	Hypertension, complicated	1	0.0019573103	0.0260942992	0.0750091162	0.9402
HTN_UNCX	Hypertension, uncomplicated	1	-0.3920143645	0.0206438018	-18.9894461968	<.0001
LUNG_CHRONIC	Chronic pulmonary disease	1	-0.0449293637	0.0197267112	-2.2775901843	0.0228
NEURO_MOVT	Neurological disorders affecting movement	1	-0.2229115961	0.0461983459	-4.8250990736	<.0001
NEURO_OTH	Other neurological disorders	1	0.4090113132	0.0287096423	14.2464788941	<.0001
OBESE	Obesity	1	0.2714775259	0.0190821165	14.2268037388	<.0001
PARALYSIS	Paralysis	1	0.3374048223	0.0362158725	9.3164902259	<.0001
PERIVASC	Peripheral vascular disease	1	0.2267195186	0.0255477695	8.8743370898	<.0001
PULMCIRC	Pulmonary circulation disease	1	0.4947727259	0.0356788268	13.8674045525	<.0001
RENFL_MOD	Renal failure, moderate	1	-0.3304420644	0.0288534077	-11.4524449722	<.0001
RENFL_SEV	Renal failure, severe	1	-0.3554858450	0.0375016283	-9.4792109417	<.0001
THYROID_HYPO	Hypothyroidism	1	-0.2408131727	0.0231311642	-10.4107675058	<.0001
ULCER_PEPTIC	Peptic ulcer disease x bleeding	1	0.4059556070	0.0515835129	7.8698712908	<.0001
VALVE	Valvular disease	1	-0.1330209454	0.0295246368	-4.5054219039	<.0001
WGHTLOSS	Weight loss	1	0.5489294932	0.0257659764	21.3044320614	<.0001
PS12_NonWt_1		1	0.6378491689	0.0265363351	24.0368222482	<.0001
PS12_NonWt_2		1	0.8068124505	0.0394524104	20.4502701661	<.0001
MDC_1	Nervous System	1	0.5453429591	0.0504218001	10.8156186065	<.0001
MDC_3	Ear Nose Mouth And Throat	1	-0.4054310874	0.1008153027	-4.0215232873	<.0001
MDC_4	Respiratory System	1	0.6323119908	0.0646417899	9.7817834557	<.0001
MDC_5	Circulatory System	1	-0.1583204844	0.0409491900	-3.8662665717	0.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDC_6	Digestive System	1	0.2054928130	0.0565101090	3.6363903168	0.0003
MDC_7	Hepatobiliary System And Pancreas	1	0.2174029073	0.0634181079	3.4280888308	0.0006
MDC_9	Skin Subcutaneous And Breast	1	-0.8925919229	0.0952891404	-9.3671946205	<.0001
MDC_10	Endocrine Nutritional And Metabolic	1	-0.9027492462	0.0807154880	-11.1843373362	<.0001
MDC_11	Kidney And Urinary Tract	1	-0.0483264486	0.0627940783	-0.7696020054	0.4415
MDC_12	Male Reproductive System	1	-0.3254887234	0.1312341262	-2.4802140484	0.0131
MDC_13	Female Reproductive System	1	0.3887246817	0.0749404735	5.1871127003	<.0001
MDC_17	Myeloproliferative DDs	1	0.3646509321	0.0701797444	5.1959569698	<.0001
MDC_18	Infectious and Parasitic	1	0.7965248550	0.0510255403	15.6103169115	<.0001
MDC_21	Injuries Poison And Toxic	1	0.1737934276	0.0858339588	2.0247630423	0.0429
MDC_22	Burns	1	2.0711817137	0.3032864943	6.8291260997	<.0001
MDC_24	Multiple Significant Trauma	1	1.7846288014	0.0651553058	27.3903833267	<.0001
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	-0.7006921095	0.0725398359	-9.6594112796	<.0001
MDRG_105	VENTRICULAR SHUNT PROCEDURES	1	-1.276633567	0.2067032252	-6.1761666534	<.0001
MDRG_106	CAROTID ARTERY STENT PROCEDURE	1	-2.617368421	0.3918650758	-6.6792592198	<.0001
MDRG_107	EXTRACRANIAL PROCEDURES	1	-2.385488476	0.1691641111	-14.1016227398	<.0001
MDRG_301	CRANIAL/FACIAL PROCEDURES	1	-1.145567288	0.2764083275	-4.1444745843	<.0001
MDRG_401	MAJOR CHEST PROCEDURES	1	-0.7755364806	0.0881597267	-8.7969474257	<.0001
MDRG_402	OTHER RESP SYSTEM O.R. PROCEDURES	1	-0.7293180067	0.0939096714	-7.7661650350	<.0001
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	0.2454358999	0.1073334358	2.2866676927	0.0222
MDRG_507	CORONARY BYPASS W/O PTCA	1	-0.0933023518	0.0612814556	-1.5225217936	0.1279
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-1.461166656	0.0687398523	-21.2564706825	<.0001
MDRG_514	OTHER VASCULAR PROCEDURES	1	-0.5417503105	0.0707111301	-7.6614573968	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_539	CARDIAC DEFIBRILLATOR IMPLANT W/OUT CARDIAC CATH	1	-1.147859474	0.1784812199	-6.4312619261	<.0001
MDRG_540	ENDOVASCULAR CARDIAC VALVE REPLACEMENT	1	-1.377984989	0.1346335859	-10.2350760422	<.0001
MDRG_541	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON	1	-0.4695340407	0.1133617817	-4.1419077373	<.0001
MDRG_543	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES	1	-0.9545639993	0.1467679121	-6.5039011958	<.0001
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL PROC	1	0.2425529316	0.0685985895	3.5358297222	0.0004
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	0.1205606179	0.0556741671	2.1654678328	0.0304
MDRG_604	PERITONEAL ADHESIOLYSIS	1	0.2044894264	0.0790407512	2.5871392090	0.0097
MDRG_605	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG	1	-1.005742401	0.1557550667	-6.4572050346	<.0001
MDRG_606	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG	1	-1.813013604	0.2115807369	-8.5688972928	<.0001
MDRG_608	ANAL & STOMAL PROCEDURES	1	-2.199943025	0.4086035026	-5.3840532707	<.0001
MDRG_611	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES	1	0.0247216731	0.0871879786	0.2835445153	0.7768
MDRG_701	PANCREAS, LIVER & SHUNT PROCEDURES	1	0.0976846436	0.0983088199	0.9936508611	0.3204
MDRG_705	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E.	1	-1.670858779	0.0989723843	-16.8820705936	<.0001
MDRG_801	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	1	0.4630711276	0.0621367565	7.4524509066	<.0001
MDRG_802	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR EXT FUS	1	1.0649678440	0.0840079591	12.6769874546	<.0001
MDRG_804	BILATERAL OR MULTIPLE MAJOR JOINT	1	0.6339855092	0.1052530207	6.0234424144	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	PROCS OF LOWER EXTREMITY					
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-0.4227776054	0.0378513913	-11.1694072647	<.0001
MDRG_808	CERVICAL SPINAL FUSION	1	-0.8007861792	0.0901839643	-8.8794741388	<.0001
MDRG_810	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	1	-0.2089618098	0.1000489774	-2.0885951585	0.0367
MDRG_811	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT	1	0.4150473311	0.0385638060	10.7626132919	<.0001
MDRG_812	MAJOR JOINT/LIMB REATTACHMENT PROCEDURE OF UPPER EXTREMITIES	1	-1.434821441	0.1075667670	-13.3388915739	<.0001
MDRG_816	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR	1	-0.2848429312	0.0675545182	-4.2164897129	<.0001
MDRG_820	FOOT PROCEDURES	1	-1.144589283	0.2401325918	-4.7664886919	<.0001
MDRG_824	SHOULDER,ELBOW OR FOREARM PROC,EXC MAJOR JOINT PROC	1	-1.121203031	0.2348312402	-4.7745054271	<.0001
MDRG_826	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC	1	-0.3438158891	0.0782883137	-4.3916629799	<.0001
MDRG_903	OTHER SKIN, SUBCUT TISS & BREAST PROC	1	-0.1426305505	0.1606157938	-0.8880231955	0.3745
MDRG_1003	O.R. PROCEDURES FOR OBESITY	1	-1.282609945	0.1650279917	-7.7720750985	<.0001
MDRG_1102	MAJOR BLADDER PROCEDURES	1	0.5729013703	0.1138423271	5.0324109236	<.0001
MDRG_1104	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM	1	-0.5816656771	0.1325408357	-4.3885771044	<.0001
MDRG_1107	TRANSURETHRAL PROCEDURES	1	-0.6746034470	0.1330862679	-5.0689185130	<.0001
MDRG_1201	MAJOR MALE PELVIC PROCEDURES	1	-0.7316404453	0.2003816683	-3.6512344247	0.0003
MDRG_1303	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG	1	0.0309003370	0.1380725676	0.2237978009	0.8229
MDRG_1304	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY	1	-1.156769285	0.1127769171	-10.2571458273	<.0001

**AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021**

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_1801	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE	1	-0.4870953213	0.0489309370	-9.9547515668	<.0001
MDRG_2104	OTHER O.R. PROCEDURES FOR INJURIES	1	0.0125548242	0.1009026519	0.1244251162	0.9010
MDRG_2201	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ	1	-2.172056507	0.2530037025	-8.5850779460	<.0001
MDRG_2407	LIMB REATTACHMENT, HIP & FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	1	0.0352721857	0.0848683790	0.4156104555	0.6777
TRANSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.4842014742	0.0250311444	19.3439607272	<.0001

c-statistic=0.75

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	-5.073781542	0.0485563094	-104.4927343619	<.0001
Age_LT30	Age < 30	1	-0.7634995693	0.1011086149	-7.5512810672	<.0001
Age_30_34	30 <= Age <= 34	1	-0.6161190864	0.1063325965	-5.7942635361	<.0001
Age_35_39	35 <= Age <= 39	1	-0.7240507678	0.0923002365	-7.8445169302	<.0001
Age_40_44	40 <= Age <= 44	1	-0.6013666041	0.0826145694	-7.2791834229	<.0001
Age_45_49	45 <= Age <= 49	1	-0.4811391634	0.0677892473	-7.0975734772	<.0001
Age_50_54	50 <= Age <= 54	1	-0.3265878814	0.0587828405	-5.5558370178	<.0001
Age_55_59	55 <= Age <= 59	1	-0.2074311374	0.0533398503	-3.888586380	0.0001
Age_60_64	60 <= Age <= 64	1	-0.1468027858	0.0482805032	-3.0406225293	0.0024
Age_70_74	70 <= Age <= 74	1	0.0665174669	0.0458743379	1.4499929574	0.1471
Age_75_79	75 <= Age <= 79	1	0.1950280139	0.0474612952	4.1092012606	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_80_84	80 <= Age <= 84	1	0.1524433649	0.0574696658	2.6525883298	0.0080
Age_85_89	85 <= Age <= 89	1	0.1283380494	0.0765057349	1.6774958060	0.0934
Age_90Plus	Age >= 90	1	0.0198271220	0.1166950372	0.1699054433	0.8651
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.1925953860	0.0440522660	4.3719745563	<.0001
Age_LT30_MALE	Age < 30 MALE	1	0.2059983333	0.1370724697	1.5028425014	0.1329
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.0403437739	0.1504220783	0.2682038059	0.7885
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.2435784611	0.1306005921	1.8650639871	0.0622
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.2068710837	0.1143758194	1.8086959707	0.0705
Age_45_49_MALE	45 <= Age <= 49 MALE	1	0.1027485324	0.0966951453	1.0626028028	0.2880
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.0470841771	0.0795583100	0.5918197239	0.5540
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.0373391585	0.0709967678	0.5259275838	0.5989
Age_60_64_MALE	60 <= Age <= 64 MALE	1	0.0771422029	0.0638534534	1.2081132470	0.2270
Age_70_74_MALE	70 <= Age <= 74 MALE	1	0.0366256177	0.0596707688	0.6137949686	0.5394
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.0147243866	0.0644280072	-0.2285401535	0.8192
Age_80_84_MALE	80 <= Age <= 84 MALE	1	0.0334097035	0.0728149118	0.4588305150	0.6464
Age_85_89_MALE	85 <= Age <= 89 MALE	1	-0.1581504868	0.1026333044	-1.5409275554	0.1233
Age_90Plus_MALE	Age >= 90 MALE	1	0.0529698084	0.1671257876	0.3169457516	0.7513
ALCOHOL	Alcohol abuse	1	0.5980376671	0.0497476503	12.0214253934	<.0001
ANEMDEF	Deficiency anemias	1	0.0905558784	0.0309099451	2.9296680447	0.0034
CANCER_LEUK	Leukemia	1	0.9168459459	0.0965789808	9.4932244933	<.0001
CANCER_LYMPH	Lymphoma	1	0.5069162951	0.1004466311	5.0466231624	<.0001
CANCER_METS	Metastatic cancer	1	0.3491324927	0.0388093882	8.9960834005	<.0001
CANCER_SOLID	Solid tumor without metastasis, malignant	1	0.1469969277	0.0413748522	3.5528085238	0.0004
CBVD	Cerebrovascular disease	1	-0.1623390498	0.0580908967	-2.7945695301	0.0052
CHF	Congestive heart failure	1	0.6247733048	0.0370072530	16.8824555774	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
COAG	Coagulopathy	1	0.6324588136	0.0407452184	15.5222830608	<.0001
DEMENTIA	Dementia	1	0.2469296876	0.0605157533	4.0804199554	<.0001
DIAB_CX	Diabetes with chronic complications	1	0.2581520379	0.0283306981	9.1120958904	<.0001
DIAB_UNCX	Diabetes without chronic complications	1	-0.3343612876	0.0351911762	-9.5012819507	<.0001
HTN_CX	Hypertension, complicated	1	0.0927744011	0.0362971050	2.5559724650	0.0106
HTN_UNCX	Hypertension, uncomplicated	1	-0.4159682159	0.0277641402	-14.9822113342	<.0001
LIVER_SEV	Liver disease, moderate to severe	1	0.3180259709	0.0786069335	4.0457750595	<.0001
LUNG_CHRONIC	Chronic pulmonary disease	1	0.1772182112	0.0243727503	7.2711618092	<.0001
NEURO_MOVT	Neurological disorders affecting movement	1	-0.0673789762	0.0607678719	-1.1087927571	0.2675
NEURO_OTH	Other neurological disorders	1	0.6458969135	0.0562468952	11.4832456332	<.0001
NEURO_SEIZ	Seizures and epilepsy	1	0.2498311648	0.0539694031	4.6291259584	<.0001
OBESE	Obesity	1	0.1539041072	0.0252705475	6.0902561477	<.0001
PARALYSIS	Paralysis	1	0.7527828677	0.0618973704	12.1617907739	<.0001
PERIVASC	Peripheral vascular disease	1	0.5132233796	0.0322496031	15.9140991175	<.0001
PSYCHOSES	Psychoses	1	0.2513248364	0.0558253013	4.5019879957	<.0001
PULMCIRC	Pulmonary circulation disease	1	0.2912120745	0.0466702718	6.2397767033	<.0001
RENFL_MOD	Renal failure, moderate	1	-0.0242234685	0.0379275062	-0.6386781247	0.5230
RENFL_SEV	Renal failure, severe	1	0.5029648416	0.0460594730	10.9199000471	<.0001
THYROID_HYPO	Hypothyroidism	1	-0.1711047103	0.0287864964	-5.9439227387	<.0001
ULCER_PEPTIC	Peptic ulcer disease x bleeding	1	0.6409303743	0.0762617197	8.4043524989	<.0001
VALVE	Valvular disease	1	-0.0651613607	0.0363439286	-1.7929091106	0.0730
WGHTLOSS	Weight loss	1	1.3996941447	0.0345467767	40.5159114783	<.0001
PS13_NonWt_1	PS13 Comorbidity count using non-weighted method, category 1	1	0.3826264561	0.0330488884	11.5775892948	<.0001
PS13_NonWt_2	PS13 Comorbidity count using non-weighted	1	0.1152056826	0.0576764989	1.9974458363	0.0458

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
	method, category 2					
MDRG_103	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES	1	-1.544488540	0.1002640415	-15.4042118815	<.0001
MDRG_106	CAROTID ARTERY STENT PROCEDURE	1	-3.114215972	0.3946155921	-7.8917712176	<.0001
MDRG_107	EXTRACRANIAL PROCEDURES	1	-2.468149048	0.1314237560	-18.7800830161	<.0001
MDRG_301	CRANIAL/FACIAL PROCEDURES	1	-1.006660133	0.1580268721	-6.3701832469	<.0001
MDRG_401	MAJOR CHEST PROCEDURES	1	-0.5885057302	0.0613627484	-9.5906025279	<.0001
MDRG_402	OTHER RESP SYSTEM O.R. PROCEDURES	1	-1.123173373	0.1383404341	-8.1189088391	<.0001
MDRG_501	OTHER HEART ASSIST SYSTEM IMPLANT	1	0.1481246321	0.1156973373	1.2802769331	0.2004
MDRG_503	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC	1	-0.5073315821	0.0522943133	-9.7014675239	<.0001
MDRG_505	OTHER CARDIOTHORACIC PROCEDURES	1	-1.189846529	0.1142285677	-10.4163656504	<.0001
MDRG_507	CORONARY BYPASS W/O PTCA	1	-0.8999171257	0.0604941017	-14.8761135336	<.0001
MDRG_511	PERC CARDIOVASC PROC W DRUG-ELUTING STENT	1	-1.823270452	0.1265951046	-14.4023772321	<.0001
MDRG_514	OTHER VASCULAR PROCEDURES	1	-1.551570596	0.0810308195	-19.1479069971	<.0001
MDRG_539	CARDIAC DEFIBRILLATOR IMPLANT W/OUT CARDIAC CATH	1	-1.906413531	0.2391100930	-7.9729529889	<.0001
MDRG_540	ENDOVASCULAR CARDIAC VALVE REPLACEMENT	1	-2.258666595	0.1022668563	-22.0860078875	<.0001
MDRG_541	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON	1	-1.120043118	0.0882597832	-12.6902999068	<.0001
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	-0.5728442632	0.0767342278	-7.4653030248	<.0001
MDRG_543	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES	1	-1.461452657	0.1450679206	-10.0742648784	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL PROC	1	0.6805462622	0.0447844994	15.1960225332	<.0001
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	0.3900597191	0.0342364731	11.3931046119	<.0001
MDRG_701	PANCREAS, LIVER & SHUNT PROCEDURES	1	0.6358237506	0.0533417276	11.9198192392	<.0001
MDRG_702	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E.	1	0.8773492020	0.1699485337	5.1624405518	<.0001
MDRG_801	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	1	-0.8466622022	0.0659490685	-12.8381222336	<.0001
MDRG_803	SPINAL FUSION EXCEPT CERVICAL	1	-1.190192539	0.0644766241	-18.4592874706	<.0001
MDRG_804	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY	1	-1.742354443	0.1947074532	-8.9485760024	<.0001
MDRG_806	REVISION OF HIP OR KNEE REPLACEMENT	1	-2.007334513	0.1132506389	-17.7247080685	<.0001
MDRG_807	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1	-2.442648575	0.0485479057	-50.3141904433	<.0001
MDRG_808	CERVICAL SPINAL FUSION	1	-1.590444163	0.0871396018	-18.2516804075	<.0001
MDRG_811	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT	1	-1.265449290	0.1536977831	-8.2333607210	<.0001
MDRG_812	MAJOR JOINT/LIMB REATTACHMENT PROCEDURE OF UPPER EXTREMITIES	1	-2.519923616	0.1208490076	-20.8518354072	<.0001
MDRG_815	BACK & NECK PROC EXC SPINAL FUSION OR DISC DEVICE/NEUROSTIM	1	-1.484738910	0.1250707351	-11.8711935961	<.0001
MDRG_816	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR	1	-1.590467387	0.1534207355	-10.3667042248	<.0001
MDRG_826	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC	1	-1.380083477	0.1164699331	-11.8492682202	<.0001
MDRG_903	OTHER SKIN, SUBCUT TISS & BREAST PROC	1	-1.867687737	0.1957906428	-9.5392083634	<.0001
MDRG_1003	O.R. PROCEDURES FOR OBESITY	1	-1.754036574	0.0913914768	-19.1925618896	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_1005	THYROID, PARATHYROID & THYROGLOSSAL PROCEDURES	1	-1.924973529	0.2664978856	-7.2232225204	<.0001
MDRG_1101	KIDNEY TRANSPLANT	1	-1.664813145	0.2156394294	-7.7203559156	<.0001
MDRG_1102	MAJOR BLADDER PROCEDURES	1	0.7955004254	0.0660632111	12.0415040728	<.0001
MDRG_1103	KIDNEY & URETER PROCEDURES FOR NEOPLASM	1	-0.6072482588	0.0724572462	-8.3807802601	<.0001
MDRG_1104	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM	1	0.0306631891	0.0784628012	0.3907990618	0.6959
MDRG_1201	MAJOR MALE PELVIC PROCEDURES	1	-1.534895601	0.1264397802	-12.1393409515	<.0001
MDRG_1302	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY	1	0.1991213626	0.1022008589	1.9483335548	0.0514
MDRG_1304	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY	1	-1.138286539	0.0883937002	-12.8774622659	<.0001
MDRG_1709	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC	1	0.4004337468	0.0987890544	4.0534222039	<.0001
MDRG_7701	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM	1	1.1804508772	0.1138038595	10.3726787718	<.0001
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.3721599489	0.0859669883	4.3291030226	<.0001

c-statistic=0.862

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	-7.468662265	0.2253898601	-33.1366382738	<.0001
Age_LT30	Age < 30	1	-0.7789471854	0.3246390209	-2.3994256240	0.0164
Age_30_34	30 <= Age <= 34	1	-0.4374059662	0.3134036131	-1.3956634447	0.1628
Age_35_39	35 <= Age <= 39	1	-0.8000165591	0.3490625612	-2.2919002152	0.0219
Age_40_44	40 <= Age <= 44	1	-0.1724905183	0.2358998879	-0.7312022053	0.4647
Age_45_49	45 <= Age <= 49	1	-0.4708230819	0.2358215749	-1.9965225069	0.0459
Age_50_54	50 <= Age <= 54	1	-0.4378197467	0.2084728179	-2.1001286935	0.0357
Age_55_59	55 <= Age <= 59	1	-0.2939343630	0.1870337526	-1.5715578549	0.1161
Age_60_64	60 <= Age <= 64	1	0.1953653986	0.1526144294	1.2801240310	0.2005
Age_70_74	70 <= Age <= 74	1	0.0441192873	0.1653731142	0.2667863366	0.7896
Age_75_79	75 <= Age <= 79	1	0.2499128832	0.1635545780	1.5280090978	0.1265
Age_80_84	80 <= Age <= 84	1	0.1181353139	0.1899683032	0.6218685534	0.5340
Age_85_89	85 <= Age <= 89	1	-0.0924138062	0.2460450664	-0.3755970709	0.7072
Age_90Plus	Age >= 90	1	-0.7223913687	0.4194839128	-1.7220955243	0.0851
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.6243510745	0.1452278091	4.2991151502	<.0001
Age_LT30_MALE	Age < 30 MALE	1	0.6461482980	0.3579576053	1.8050972755	0.0711
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.1577163364	0.3766208193	0.4187669091	0.6754
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.7860192928	0.4007035761	1.9615978985	0.0498
Age_40_44_MALE	40 <= Age <= 44 MALE	1	0.1716514183	0.2800713852	0.6128845264	0.5400
Age_45_49_MALE	45 <= Age <= 49 MALE	1	-0.1519369369	0.3074688661	-0.4941538922	0.6212
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.3530433600	0.2468233941	1.4303480479	0.1526
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.3335287228	0.2257634545	1.4773370809	0.1396
Age_60_64_MALE	60 <= Age <= 64 MALE	1	-0.2702427654	0.1950857694	-1.3852510423	0.1660

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.0531040364	0.2055755531	-0.2583188302	0.7962
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.0866238756	0.2085550435	-0.4153525811	0.6779
Age_80_84_MALE	80 <= Age <= 84 MALE	1	-0.0071617810	0.2379921753	-0.0300925060	0.9760
Age_85_89_MALE	85 <= Age <= 89 MALE	1	0.0920800215	0.3125033157	0.2946529426	0.7683
Age_90Plus_MALE	Age >= 90 MALE	1	0.9822258853	0.4841274210	2.0288581945	0.0425
AIDS	Acquired immune deficiency syndrome	1	0.3750580197	0.2962512638	1.2660132310	0.2055
ALCOHOL	Alcohol abuse	1	0.4837151072	0.0987291542	4.8994150856	<.0001
ANEMDEF	Deficiency anemias	1	-0.2222950775	0.0755344379	-2.9429632828	0.0033
ARTH	Arthropathies	1	0.2464351405	0.1262424165	1.9520787655	0.0509
BLDLOSS	Chronic blood loss anemia	1	-0.3268880668	0.2196463525	-1.4882471893	0.1367
CANCER_LYMPH	Lymphoma	1	-0.6405044941	0.3657187424	-1.7513581334	0.0799
CANCER_METS	Metastatic cancer	1	-0.2485758871	0.0993558938	-2.5018735941	0.0124
CANCER_SOLID	Solid tumor without metastasis, malignant	1	-0.1899822558	0.1204513473	-1.5772530565	0.1147
CHF	Congestive heart failure	1	0.0972935209	0.1060425005	0.9174955369	0.3589
COAG	Coagulopathy	1	0.0154858614	0.1018074779	0.1521092726	0.8791
DEMENTIA	Dementia	1	0.0390222413	0.1421486933	0.2745170596	0.7837
DEPRESS	Depression	1	0.0623205449	0.0805339948	0.7738414701	0.4390
DIAB_CX	Diabetes with chronic complications	1	-0.4522933917	0.0887086564	-5.0986387348	<.0001
DIAB_UNCX	Diabetes without chronic complications	1	-0.8854344126	0.1223493525	-7.2369358264	<.0001
DRUG_ABUSE	Drug abuse	1	0.2872311846	0.1330915991	2.1581466188	0.0309
HTN_CX	Hypertension, complicated	1	-0.0857990544	0.1129608587	-0.7595467614	0.4475
HTN_UNCX	Hypertension, uncomplicated	1	-0.2788439612	0.0655362316	-4.2548061477	<.0001
LIVER_MLD	Liver disease, mild	1	-0.2041454421	0.1171840305	-1.7420926822	0.0815
LUNG_CHRONIC	Chronic pulmonary disease	1	0.4919891232	0.0638332356	7.7074132036	<.0001
NEURO_SEIZ	Seizures and epilepsy	1	0.0842515694	0.1528472635	0.5512141173	0.5815

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
OBESE	Obesity	1	0.3616561723	0.0673794957	5.3674514593	<.0001
PARALYSIS	Paralysis	1	0.0565993034	0.1495684216	0.3784174682	0.7051
PERIVASC	Peripheral vascular disease	1	0.3443492893	0.0813413390	4.2333860452	<.0001
PSYCHOSES	Psychoses	1	0.1649539328	0.1371260210	1.2029367701	0.2290
RENFL_MOD	Renal failure, moderate	1	-0.1619669614	0.1155836094	-1.4012969684	0.1611
RENFL_SEV	Renal failure, severe	1	-0.1752955633	0.1474868146	-1.1885507442	0.2346
THYROID_HYPO	Hypothyroidism	1	-0.1901777920	0.0901066703	-2.1105850592	0.0348
THYROID_OTH	Other thyroid disorders	1	-1.238733223	0.4974326591	-2.4902531033	0.0128
ULCER_PEPTIC	Peptic ulcer disease x bleeding	1	0.1004169171	0.1345859555	0.7461173547	0.4556
VALVE	Valvular disease	1	-0.1093747508	0.1267420891	-0.8629710265	0.3882
WGHTLOSS	Weight loss	1	0.5671794294	0.0691915343	8.1972373572	<.0001
PS14_OPEN_NonWt_1	PS14_OPEN Comorbidity count using non-weighted method, category 1	1	0.5981117905	0.1144782798	5.2246748608	<.0001
PS14_OPEN_NonWt_2	PS14_OPEN Comorbidity count using non-weighted method, category 2	1	0.7906485067	0.1599933504	4.9417585469	<.0001
MDC_4	Respiratory System	1	1.4645259434	0.2288029533	6.4008174825	<.0001
MDC_5	Circulatory System	1	0.2649325461	0.2375130594	1.1154441222	0.2647
MDC_6	Digestive System	1	0.7013300323	0.1718593228	4.0808378664	<.0001
MDC_7	Hepatobiliary System And Pancreas	1	0.2443982483	0.2163156256	1.1298224417	0.2586
MDC_8	Musculoskeletal And Connective	1	-1.738610501	0.2939608229	-5.9144292884	<.0001
MDC_9	Skin Subcutaneous And Breast	1	-0.9034784943	0.5315850467	-1.6995935080	0.0892
MDC_11	Kidney And Urinary Tract	1	-0.4504727311	0.2517368808	-1.7894586192	0.0735
MDC_12	Male Reproductive System	1	-0.8171118177	0.4647647914	-1.7581190160	0.0787
MDC_13	Female Reproductive System	1	-0.3012100430	0.2951980617	-1.0203659239	0.3076
MDC_18	Infectious and Parasitic	1	0.8222269412	0.1802873785	4.5606461639	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDC_21	Injuries Poison And Toxic	1	0.3653864423	0.2238792232	1.6320694573	0.1027
MDC_24	Multiple Significant Trauma	1	1.0163450807	0.2394021895	4.2453458044	<.0001
MDRG_401	MAJOR CHEST PROCEDURES	1	-1.561337635	0.6374998984	-2.4491574644	0.0143
MDRG_507	CORONARY BYPASS W/O PTCA	1	1.0448669520	0.4725728912	2.2110175413	0.0270
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	-0.7337261808	0.2642090274	-2.7770670370	0.0055
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL PROC	1	-0.2363409604	0.1182164372	-1.9992224938	0.0456
MDRG_603	RECTAL RESECTION	1	-1.699631914	0.9474893090	-1.7938270098	0.0728
MDRG_604	PERITONEAL ADHESIOLYSIS	1	-0.8981136977	0.1730487780	-5.1899453327	<.0001
MDRG_605	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG	1	-0.8570061542	0.4404445790	-1.9457752350	0.0517
MDRG_606	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG	1	-1.032788563	0.5706028307	-1.8099955122	0.0703
MDRG_607	MINOR SMALL & LARGE BOWEL PROCEDURES	1	-1.076568943	0.3520229517	-3.0582350889	0.0022
MDRG_609	INGUINAL & FEMORAL HERNIA PROCEDURES	1	-2.913800013	0.6821699637	-4.2713695532	<.0001
MDRG_610	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL	1	-3.352484024	0.5695393132	-5.8863083653	<.0001
MDRG_611	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES	1	-1.460441992	0.3824488409	-3.8186597425	0.0001
MDRG_703	CHOLECYSTECTOMY W C.D.E.	1	1.1720508313	0.4704812656	2.4911742870	0.0127
MDRG_704	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E.	1	-1.158117120	0.3584564937	-3.2308443019	0.0012
MDRG_803	SPINAL FUSION EXCEPT CERVICAL	1	-0.2929553447	0.4235187128	-0.6917175933	0.4891
MDRG_805	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS	1	3.0044406929	0.5394682601	5.5692631340	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_1102	MAJOR BLADDER PROCEDURES	1	1.4622296591	0.2378015696	6.1489487292	<.0001
MDRG_1304	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY	1	-0.6439428037	0.3704454153	-1.7382933547	0.0822
TRANSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.3397496476	0.0962898801	3.5284045149	0.0004

c-statistic=0.801

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	-12.43117793	0.8471465698	-14.6741760796	<.0001
Age_LT60	Age<60	1	-0.3400386517	0.5257862416	-0.6467241338	0.5178
Age_70Plus	Age >= 70	1	-0.8179501390	0.6285280334	-1.3013741560	0.1931
MALE	Patient Sex Flag: 1=Male / 0=Female	1	0.4912964989	0.4889283419	1.0048435667	0.3150
Age_LT60_MALE	Age<=60 MALE	1	0.2242429794	0.6650668055	0.3371736156	0.7360
Age_70Plus_MALE	Age >= 70 MALE	1	0.8145547153	0.7598024531	1.0720611812	0.2837
HTN_CX	Hypertension, complicated	1	0.1179216974	0.4114969289	0.2865676245	0.7744
HTN_UNCX	Hypertension, uncomplicated	1	0.0621284748	0.3217578857	0.1930907604	0.8469
LUNG_CHRONIC	Chronic pulmonary disease	1	0.8576755251	0.2950134966	2.9072416514	0.0036
OBESE	Obesity	1	0.4014913938	0.3011490017	1.3331984885	0.1825
THYROID_HYPO	Hypothyroidism	1	0.6763709440	0.3554381074	1.9029218589	0.0571
PS14_NONOPEN_NonWt_1	PS14_NONOPEN Comorbidity count using non-weighted method, category 1	1	0.9400883123	0.8144328652	1.1542858257	0.2484
PS14_NONOPEN_NonWt_2	PS14_NONOPEN Comorbidity count using non-weighted method, category 2	1	1.1428591295	0.7809294267	1.4634601931	0.1433
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	2.7268210839	0.3372094072	8.0864324237	<.0001

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_1103	KIDNEY & URETER PROCEDURES FOR NEOPLASM	1	2.9021667080	0.4402512990	6.5920684718	<.0001
TRNSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.2487847709	0.6163215345	0.4036606820	0.6865

c-statistic=0.827

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	-7.275148166	0.0914085478	-79.5893637946	<.0001
Age_LT30	Age < 30	1	-0.6494834939	0.1446881224	-4.4888514893	<.0001
Age_30_34	30 <= Age <= 34	1	-0.4384849210	0.1437408246	-3.0505245979	0.0023
Age_35_39	35 <= Age <= 39	1	-0.2042482746	0.1143710938	-1.7858382554	0.0741
Age_40_44	40 <= Age <= 44	1	-0.2225570802	0.1096887885	-2.0289865836	0.0425
Age_45_49	45 <= Age <= 49	1	-0.1830661334	0.0966186323	-1.8947290906	0.0581
Age_50_54	50 <= Age <= 54	1	-0.1680921427	0.0937203747	-1.7935496232	0.0729
Age_55_59	55 <= Age <= 59	1	-0.1389365600	0.0888980057	-1.5628760054	0.1181
Age_60_64	60 <= Age <= 64	1	-0.0947392550	0.0884869598	-1.0706578142	0.2843
Age_70_74	70 <= Age <= 74	1	0.0635151707	0.0809277391	0.7848380715	0.4325
Age_75_79	75 <= Age <= 79	1	0.1179443615	0.0829911584	1.4211677947	0.1553
Age_80_84	80 <= Age <= 84	1	0.2443994329	0.0869652833	2.8103103178	0.0049
Age_85_89	85 <= Age <= 89	1	0.1466860643	0.1084779121	1.3522205714	0.1763
Age_90Plus	Age >= 90	1	-0.1077906487	0.1496327320	-0.7203681121	0.4713
MALE	Patient Sex Flag: 1=Male / 0=Female	1	-0.1206824251	0.0831507719	-1.4513686676	0.1467
Age_LT30_MALE	Age < 30 MALE	1	0.3343848799	0.2071058951	1.6145599322	0.1064
Age_30_34_MALE	30 <= Age <= 34 MALE	1	0.2628473968	0.2142240250	1.2269744103	0.2198

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
Age_35_39_MALE	35 <= Age <= 39 MALE	1	0.0445684626	0.1852396530	0.2405989314	0.8099
Age_40_44_MALE	40 <= Age <= 44 MALE	1	-0.0124136537	0.1725131570	-0.0719577217	0.9426
Age_45_49_MALE	45 <= Age <= 49 MALE	1	-0.0573747755	0.1516538279	-0.3783272490	0.7052
Age_50_54_MALE	50 <= Age <= 54 MALE	1	0.0195591248	0.1381210500	0.1416085733	0.8874
Age_55_59_MALE	55 <= Age <= 59 MALE	1	0.1483090833	0.1288160612	1.1513244690	0.2496
Age_60_64_MALE	60 <= Age <= 64 MALE	1	0.0260037458	0.1238737033	0.2099214372	0.8337
Age_70_74_MALE	70 <= Age <= 74 MALE	1	-0.0167128216	0.1161017769	-0.1439497486	0.8855
Age_75_79_MALE	75 <= Age <= 79 MALE	1	-0.1107841088	0.1250502847	-0.8859164859	0.3757
Age_80_84_MALE	80 <= Age <= 84 MALE	1	-0.2022608033	0.1336757141	-1.5130706772	0.1303
Age_85_89_MALE	85 <= Age <= 89 MALE	1	0.1606816284	0.1562678382	1.0282450326	0.3038
Age_90Plus_MALE	Age >= 90 MALE	1	0.2247757036	0.2357619307	0.9534011826	0.3404
ANEMDEF	Deficiency anemias	1	-0.3068321007	0.0436216041	-7.0339481304	<.0001
ARTH	Arthropathies	1	0.0992778071	0.0802779574	1.2366757990	0.2162
CHF	Congestive heart failure	1	0.0523360369	0.0585539538	0.8938087616	0.3714
COAG	Coagulopathy	1	0.1758138092	0.0595123606	2.9542402185	0.0031
DEPRESS	Depression	1	-0.0290975337	0.0473135916	-0.6149931284	0.5386
DIAB_CX	Diabetes with chronic complications	1	-0.1451971769	0.0535607205	-2.7108891666	0.0067
DIAB_UNCX	Diabetes without chronic complications	1	-0.4853029010	0.0596693561	-8.1332015754	<.0001
DRUG_ABUSE	Drug abuse	1	-0.0295993295	0.1010924876	-0.2927945512	0.7697
HTN_CX	Hypertension, complicated	1	0.0599523000	0.0603632795	0.9931915652	0.3206
HTN_UNCX	Hypertension, uncomplicated	1	-0.2758944387	0.0400624549	-6.8866084044	<.0001
LIVER_MLD	Liver disease, mild	1	-0.1459656783	0.0710672844	-2.0539082019	0.0400
LIVER_SEV	Liver disease, moderate to severe	1	-0.2657943606	0.1172692919	-2.2665299360	0.0234
LUNG_CHRONIC	Chronic pulmonary disease	1	-0.0351639356	0.0383612916	-0.9166515034	0.3593
NEURO_MOVT	Neurological disorders affecting movement	1	-0.1930774224	0.1168947119	-1.6517207604	0.0986

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
NEURO_OTH	Other neurological disorders	1	-0.0884806861	0.0827436845	-1.0693346159	0.2849
OBESE	Obesity	1	0.0536032781	0.0410801853	1.3048450890	0.1919
PERIVASC	Peripheral vascular disease	1	0.3340339041	0.0510622435	6.5417005049	<.0001
RENFL_MOD	Renal failure, moderate	1	-0.2888995359	0.0642529845	-4.4962819761	<.0001
THYROID_HYPO	Hypothyroidism	1	-0.1570692140	0.0492341429	-3.1902497873	0.0014
THYROID_OTH	Other thyroid disorders	1	-0.3686049409	0.1737617558	-2.1213237588	0.0339
ULCER_PEPTIC	Peptic ulcer disease x bleeding	1	0.1982049872	0.0867598668	2.2845238748	0.0223
WGHTLOSS	Weight loss	1	0.6370258518	0.0426288479	14.9435390054	<.0001
PS15_NonWt_1	PS15 Comorbidity count using non-weighted method, category 1	1	0.4401457136	0.0630733008	6.9783205870	<.0001
PS15_NonWt_2	PS15 Comorbidity count using non-weighted method, category 2	1	0.7692041938	0.0698221549	11.0166206595	<.0001
MDC_5	Circulatory System	1	0.2701885833	0.0928685196	2.9093667544	0.0036
MDC_7	Hepatobiliary System And Pancreas	1	1.3049467523	0.0820041975	15.9131702016	<.0001
MDC_10	Endocrine Nutritional And Metabolic	1	0.3201280438	0.1948806990	1.6426872715	0.1004
MDC_11	Kidney And Urinary Tract	1	0.2102776933	0.0881461860	2.3855563458	0.0171
MDC_12	Male Reproductive System	1	-0.1332444192	0.1552110406	-0.8584725590	0.3906
MDC_13	Female Reproductive System	1	0.7218693742	0.0790121065	9.1361869284	<.0001
MDC_16	Blood and Immunological	1	0.3902470768	0.2006031392	1.9453687432	0.0517
MDC_18	Infectious and Parasitic	1	0.6709482104	0.0680281210	9.8628067373	<.0001
MDC_24	Multiple Significant Trauma	1	0.4821509042	0.3978649302	1.2118456982	0.2256
MDRG_503	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC	1	0.8874338227	0.1859818849	4.7716143063	<.0001
MDRG_514	OTHER VASCULAR PROCEDURES	1	-0.8763331621	0.2275106520	-3.8518335493	0.0001
MDRG_542	OTHER MAJOR CARDIOVASCULAR PROCEDURES	1	-0.0004781900	0.1600052141	-0.0029885900	0.9976

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

Parameter	Label	DF	Estimate	Standard Error	Z-Statistics	Prob Z-Statistics
MDRG_601	STOMACH, ESOPHAGEAL & DUODENAL PROC	1	1.2449053640	0.0767264903	16.2252353667	<.0001
MDRG_602	MAJOR SMALL & LARGE BOWEL PROCEDURES	1	1.3613708602	0.0549894114	24.7569636659	<.0001
MDRG_604	PERITONEAL ADHESIOLYSIS	1	-0.4997830213	0.1857799247	-2.6901885233	0.0071
MDRG_605	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG	1	-1.998070826	0.5215811054	-3.8307960264	0.0001
MDRG_606	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG	1	-1.755335196	0.4192141577	-4.1872039962	<.0001
MDRG_610	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL	1	-2.737549889	0.5773406424	-4.7416545586	<.0001
MDRG_702	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E.	1	1.5314407723	0.1245562438	12.2951746590	<.0001
MDRG_705	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E.	1	-1.380032234	0.1089725408	-12.6640364963	<.0001
MDRG_815	BACK & NECK PROC EXC SPINAL FUSION OR DISC DEVICE/NEUROSTIM	1	-3.163894244	1.1382923295	-2.7795094128	0.0054
MDRG_1003	O.R. PROCEDURES FOR OBESITY	1	-1.712852822	0.2637804093	-6.4934800370	<.0001
MDRG_1102	MAJOR BLADDER PROCEDURES	1	1.3401955352	0.1395031525	9.6069193473	<.0001
MDRG_1107	TRANSURETHRAL PROCEDURES	1	-0.6970881642	0.2114717431	-3.2963655288	0.0010
MDRG_2408	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA	1	0.3323480703	0.4343118003	0.7652291972	0.4441
TRANSFER	TRANSFER FROM ANOTHER ACUTE CARE HOSPITAL	1	0.2452934614	0.0597469849	4.1055370720	<.0001
MEDICDR	Medical DRGs flag	1	-2.687823253	0.0772285464	-34.8034940153	<.0001

c-statistic=0.829

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 _Composite_Wt_v2021.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, v2021

Indicator	Harm Weight	Volume Weight	Component Weight
PSI 3 Pressure Ulcer Rate	0.3080	0.1048	0.1641
PSI 6 Iatrogenic Pneumothorax Rate	0.1381	0.0457	0.0321
PSI 8 In Hospital Fall With Hip Fracture Rate	0.1440	0.0194	0.0142
PSI 9 Perioperative Hemorrhage or Hematoma Rate	0.0570	0.1526	0.0442
PSI 10 Postoperative Acute Kidney Injury Requiring Dialysis Rate	0.3584	0.0310	0.0564
PSI 11 Postoperative Respiratory Failure Rate	0.2219	0.2125	0.2397
PSI 12 Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate	0.1557	0.2318	0.1835
PSI 13 Postoperative Sepsis Rate	0.3102	0.1384	0.2182
PSI 14 Postoperative Wound Dehiscence Rate	0.1441	0.0170	0.0125
PSI 15 Abdominopelvic Accidental Puncture or Laceration Rate	0.1474	0.0468	0.0351

Source: Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project, State Inpatient Databases (SID), 2018. 2012-2013 Medicare Fee-for-Service claims data.

Appendix Tables

Table 20. Population Age Categories⁴

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

⁴ To account for small cell sizes, Age_LT60 (Age less than 60), Age_70Plus (Age 70 plus), and Age_85_Plus (Age 85 plus) are also included in certain PSI measures.

Table 21. 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 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. Beginning with v2021 of the software, mappings in the software that have been retained to support backward compatibility have been assigned an expiration date with a 7-year support window. For example, codes that were retained for backward compatibility in v2021 (last valid year being fiscal 2020) will be removed from the software in v2028 (final support year 2027). The year in which these code pairs will be removed from the software has been added to the table below as Expiration Version.

Column headers are abbreviated as follows:

- MDC – Major Diagnostic Category
- M/S – Medical / Surgical DRG Indicator (MEDICDR* / SURGIDR*)
- MDRG – Modified DRG
- MS-DRG – Diagnosis-Related Group (DRG) Version 38.1
- EXPIRE – Expiration version

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
01	S	0101	020	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE W MCC	
01	S	0101	021	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE W CC	
01	S	0101	022	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE W/O CC/MCC	
01	S	0102	023	CRANIOTOMY W MAJOR DEVICE IMPLANT OR ACUTE COMPLEX CNS PDX W MCC OR CHEMOTHERAPY IMPLANT OR EPILEPSY W NEUROSTIMULATOR	
01	S	0102	024	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX W/O MCC	
01	S	0103	025	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES W MCC	
01	S	0103	026	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES W CC	
01	S	0103	027	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES W/O CC/MCC	
01	S	0104	028	SPINAL PROCEDURES W MCC	
01	S	0104	029	SPINAL PROCEDURES W CC OR SPINAL NEUROSTIMULATORS	
01	S	0104	030	SPINAL PROCEDURES W/O CC/MCC	

**AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021**

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
01	S	0105	031	VENTRICULAR SHUNT PROCEDURES W MCC	
01	S	0105	032	VENTRICULAR SHUNT PROCEDURES W CC	
01	S	0105	033	VENTRICULAR SHUNT PROCEDURES W/O CC/MCC	
01	S	0106	034	CAROTID ARTERY STENT PROCEDURE W MCC	
01	S	0106	035	CAROTID ARTERY STENT PROCEDURE W CC	
01	S	0106	036	CAROTID ARTERY STENT PROCEDURE W/O CC/MCC	
01	S	0107	037	EXTRACRANIAL PROCEDURES W MCC	
01	S	0107	038	EXTRACRANIAL PROCEDURES W CC	
01	S	0107	039	EXTRACRANIAL PROCEDURES W/O CC/MCC	
01	S	0108	040	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC W MCC	
01	S	0108	041	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC W CC OR PERIPH NEUROSTIM	
01	S	0108	042	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC W/O CC/MCC	
01	M	0109	052	SPINAL DISORDERS & INJURIES W CC/MCC	
01	M	0109	053	SPINAL DISORDERS & INJURIES W/O CC/MCC	
01	M	0110	054	NERVOUS SYSTEM NEOPLASMS W MCC	
01	M	0110	055	NERVOUS SYSTEM NEOPLASMS W/O MCC	
01	M	0111	056	DEGENERATIVE NERVOUS SYSTEM DISORDERS W MCC	
01	M	0111	057	DEGENERATIVE NERVOUS SYSTEM DISORDERS W/O MCC	
01	M	0112	058	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA W MCC	
01	M	0112	059	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA W CC	
01	M	0112	060	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA W/O CC/MCC	
01	M	0113	061	ISCHEMIC STROKE, PRECEREBRAL OCCLUSION OR TRANSIENT ISCHEMIA W THROMBOLYTIC AGENT W MCC	
01	M	0113	062	ISCHEMIC STROKE, PRECEREBRAL OCCLUSION OR TRANSIENT ISCHEMIA W THROMBOLYTIC AGENT W CC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
01	M	0113	063	ISCHEMIC STROKE, PRECEREBRAL OCCLUSION OR TRANSIENT ISCHEMIA W THROMBOLYTIC AGENT W/O CC/MCC	
01	M	0114	064	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W MCC	
01	M	0114	065	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W CC OR TPA IN 24 HRS	
01	M	0114	066	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W/O CC/MCC	
01	M	0115	067	NONSPECIFIC CVA & PRECEREBRAL OCCLUSION W/O INFARCT W MCC	
01	M	0115	068	NONSPECIFIC CVA & PRECEREBRAL OCCLUSION W/O INFARCT W/O MCC	
01	M	0116	069	TRANSIENT ISCHEMIA W/O THROMBOLYTIC	
01	M	0117	070	NONSPECIFIC CEREBROVASCULAR DISORDERS W MCC	
01	M	0117	071	NONSPECIFIC CEREBROVASCULAR DISORDERS W CC	
01	M	0117	072	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O CC/MCC	
01	M	0118	073	CRANIAL & PERIPHERAL NERVE DISORDERS W MCC	
01	M	0118	074	CRANIAL & PERIPHERAL NERVE DISORDERS W/O MCC	
01	M	0119	075	VIRAL MENINGITIS W CC/MCC	
01	M	0119	076	VIRAL MENINGITIS W/O CC/MCC	
01	M	0120	077	HYPERTENSIVE ENCEPHALOPATHY W MCC	
01	M	0120	078	HYPERTENSIVE ENCEPHALOPATHY W CC	
01	M	0120	079	HYPERTENSIVE ENCEPHALOPATHY W/O CC/MCC	
01	M	0121	080	NONTRAUMATIC STUPOR & COMA W MCC	
01	M	0121	081	NONTRAUMATIC STUPOR & COMA W/O MCC	
01	M	0122	082	TRAUMATIC STUPOR & COMA, COMA >1 HR W MCC	
01	M	0122	083	TRAUMATIC STUPOR & COMA, COMA >1 HR W CC	
01	M	0122	084	TRAUMATIC STUPOR & COMA, COMA >1 HR W/O CC/MCC	
01	M	0123	085	TRAUMATIC STUPOR & COMA, COMA <1 HR W MCC	
01	M	0123	086	TRAUMATIC STUPOR & COMA, COMA <1 HR W CC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
01	M	0123	087	TRAUMATIC STUPOR & COMA, COMA <1 HR W/O CC/MCC	
01	M	0124	088	CONCUSSION W MCC	
01	M	0124	089	CONCUSSION W CC	
01	M	0124	090	CONCUSSION W/O CC/MCC	
01	M	0125	091	OTHER DISORDERS OF NERVOUS SYSTEM W MCC	
01	M	0125	092	OTHER DISORDERS OF NERVOUS SYSTEM W CC	
01	M	0125	093	OTHER DISORDERS OF NERVOUS SYSTEM W/O CC/MCC	
01	M	0126	094	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM W MCC	
01	M	0126	095	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM W CC	
01	M	0126	096	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM W/O CC/MCC	
01	M	0127	097	NON-BACTERIAL INFECT OF NERVOUS SYS EXC VIRAL MENINGITIS W MCC	
01	M	0127	098	NON-BACTERIAL INFECT OF NERVOUS SYS EXC VIRAL MENINGITIS W CC	
01	M	0127	099	NON-BACTERIAL INFECT OF NERVOUS SYS EXC VIRAL MENINGITIS W/O CC/MCC	
01	M	0128	100	SEIZURES W MCC	
01	M	0128	101	SEIZURES W/O MCC	
01	M	0129	102	HEADACHES W MCC	
01	M	0129	103	HEADACHES W/O MCC	
03	S	0301	140	MAJOR HEAD AND NECK PROCEDURES WITH MCC	
03	S	0301	141	MAJOR HEAD AND NECK PROCEDURES WITH CC	
03	S	0301	142	MAJOR HEAD AND NECK PROCEDURES WITHOUT CC/MCC	
03	S	0302	143	OTHER EAR, NOSE, MOUTH AND THROAT O.R. PROCEDURES WITH MCC	
03	S	0302	144	OTHER EAR, NOSE, MOUTH AND THROAT O.R. PROCEDURES WITH CC	
03	S	0302	145	OTHER EAR, NOSE, MOUTH AND THROAT O.R. PROCEDURES WITHOUT CC/MCC	
02	S	0201	113	ORBITAL PROCEDURES W CC/MCC	
02	S	0201	114	ORBITAL PROCEDURES W/O CC/MCC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
02	S	0202	115	EXTRAOCULAR PROCEDURES EXCEPT ORBIT	
02	S	0203	116	INTRAOCULAR PROCEDURES W CC/MCC	
02	S	0203	117	INTRAOCULAR PROCEDURES W/O CC/MCC	
02	M	0204	121	ACUTE MAJOR EYE INFECTIONS W CC/MCC	
02	M	0204	122	ACUTE MAJOR EYE INFECTIONS W/O CC/MCC	
02	M	0205	123	NEUROLOGICAL EYE DISORDERS	
02	M	0206	124	OTHER DISORDERS OF THE EYE W MCC	
02	M	0206	125	OTHER DISORDERS OF THE EYE W/O MCC	
03	S	0301	129	MAJOR HEAD & NECK PROCEDURES W CC/MCC OR MAJOR DEVICE	2028
03	S	0301	130	MAJOR HEAD & NECK PROCEDURES W/O CC/MCC	2028
03	S	0301	131	CRANIAL/FACIAL PROCEDURES W CC/MCC	2028
03	S	0301	132	CRANIAL/FACIAL PROCEDURES W/O CC/MCC	2028
03	S	0302	133	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES W CC/MCC	2028
03	S	0302	134	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES W/O CC/MCC	2028
03	S	0303	135	SINUS & MASTOID PROCEDURES W CC/MCC	
03	S	0303	136	SINUS & MASTOID PROCEDURES W/O CC/MCC	
03	S	0304	137	MOUTH PROCEDURES W CC/MCC	
03	S	0304	138	MOUTH PROCEDURES W/O CC/MCC	
03	S	0305	139	SALIVARY GLAND PROCEDURES	
03	M	0306	146	EAR, NOSE, MOUTH & THROAT MALIGNANCY W MCC	
03	M	0306	147	EAR, NOSE, MOUTH & THROAT MALIGNANCY W CC	
03	M	0306	148	EAR, NOSE, MOUTH & THROAT MALIGNANCY W/O CC/MCC	
03	M	0307	149	DYSEQUILIBRIUM	
03	M	0308	150	EPISTAXIS W MCC	
03	M	0308	151	EPISTAXIS W/O MCC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
03	M	0309	152	OTITIS MEDIA & URI W MCC	
03	M	0309	153	OTITIS MEDIA & URI W/O MCC	
03	M	0310	154	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES W MCC	
03	M	0310	155	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES W CC	
03	M	0310	156	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES W/O CC/MCC	
03	M	0311	157	DENTAL & ORAL DISEASES W MCC	
03	M	0311	158	DENTAL & ORAL DISEASES W CC	
03	M	0311	159	DENTAL & ORAL DISEASES W/O CC/MCC	
04	S	0401	163	MAJOR CHEST PROCEDURES W MCC	
04	S	0401	164	MAJOR CHEST PROCEDURES W CC	
04	S	0401	165	MAJOR CHEST PROCEDURES W/O CC/MCC	
04	S	0402	166	OTHER RESP SYSTEM O.R. PROCEDURES W MCC	
04	S	0402	167	OTHER RESP SYSTEM O.R. PROCEDURES W CC	
04	S	0402	168	OTHER RESP SYSTEM O.R. PROCEDURES W/O CC/MCC	
04	M	0403	175	PULMONARY EMBOLISM W MCC OR ACUTE COR PULMONALE	
04	M	0403	176	PULMONARY EMBOLISM W/O MCC	
04	M	0404	177	RESPIRATORY INFECTIONS & INFLAMMATIONS W MCC	
04	M	0404	178	RESPIRATORY INFECTIONS & INFLAMMATIONS W CC	
04	M	0404	179	RESPIRATORY INFECTIONS & INFLAMMATIONS W/O CC/MCC	
04	M	0405	180	RESPIRATORY NEOPLASMS W MCC	
04	M	0405	181	RESPIRATORY NEOPLASMS W CC	
04	M	0405	182	RESPIRATORY NEOPLASMS W/O CC/MCC	
04	M	0406	183	MAJOR CHEST TRAUMA W MCC	
04	M	0406	184	MAJOR CHEST TRAUMA W CC	
04	M	0406	185	MAJOR CHEST TRAUMA W/O CC/MCC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
04	M	0407	186	PLEURAL EFFUSION W MCC	
04	M	0407	187	PLEURAL EFFUSION W CC	
04	M	0407	188	PLEURAL EFFUSION W/O CC/MCC	
04	M	0408	189	PULMONARY EDEMA & RESPIRATORY FAILURE	
04	M	0409	190	CHRONIC OBSTRUCTIVE PULMONARY DISEASE W MCC	
04	M	0409	191	CHRONIC OBSTRUCTIVE PULMONARY DISEASE W CC	
04	M	0409	192	CHRONIC OBSTRUCTIVE PULMONARY DISEASE W/O CC/MCC	
04	M	0410	193	SIMPLE PNEUMONIA & PLEURISY W MCC	
04	M	0410	194	SIMPLE PNEUMONIA & PLEURISY W CC	
04	M	0410	195	SIMPLE PNEUMONIA & PLEURISY W/O CC/MCC	
04	M	0411	196	INTERSTITIAL LUNG DISEASE W MCC	
04	M	0411	197	INTERSTITIAL LUNG DISEASE W CC	
04	M	0411	198	INTERSTITIAL LUNG DISEASE W/O CC/MCC	
04	M	0412	199	PNEUMOTHORAX W MCC	
04	M	0412	200	PNEUMOTHORAX W CC	
04	M	0412	201	PNEUMOTHORAX W/O CC/MCC	
04	M	0413	202	BRONCHITIS & ASTHMA W CC/MCC	
04	M	0413	203	BRONCHITIS & ASTHMA W/O CC/MCC	
04	M	0414	204	RESPIRATORY SIGNS & SYMPTOMS	
04	M	0415	205	OTHER RESPIRATORY SYSTEM DIAGNOSES W MCC	
04	M	0415	206	OTHER RESPIRATORY SYSTEM DIAGNOSES W/O MCC	
04	M	0416	207	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT >96 HOURS	
04	M	0416	208	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT <=96 HOURS	
05	S	0501	215	OTHER HEART ASSIST SYSTEM IMPLANT	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
05	S	0502	248	PERCUTANEOUS CARDIOVASCULAR PROCEDURES W NON-DRUG-ELUTING STENT W MCC OR 4+ ARTERIES OR STENTS	
05	S	0502	249	PERC CARDIOVASC PROC W NON-DRUG-ELUTING STENT W/O MCC	
05	S	0503	216	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC W CARD CATH W MCC	
05	S	0503	217	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC W CARD CATH W CC	
05	S	0503	218	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC W CARD CATH W/O CC/MCC	
05	S	0503	219	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC W/O CARD CATH W MCC	
05	S	0503	220	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC W/O CARD CATH W CC	
05	S	0503	221	CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC W/O CARD CATH W/O CC/MCC	
05	S	0537	222	CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK W MCC	
05	S	0537	223	CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK W/O MCC	
05	S	0538	224	CARDIAC DEFIB IMPLANT W CARDIAC CATH W/O AMI/HF/SHOCK W MCC	
05	S	0538	225	CARDIAC DEFIB IMPLANT W CARDIAC CATH W/O AMI/HF/SHOCK W/O MCC	
05	S	0539	226	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH W MCC	
05	S	0539	227	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH W/O MCC	
05	S	0505	228	OTHER CARDIOTHORACIC PROCEDURES W MCC	
05	S	0505	229	OTHER CARDIOTHORACIC PROCEDURES W/O MCC	
05	S	0506	231	CORONARY BYPASS W PTCA W MCC	
05	S	0506	232	CORONARY BYPASS W PTCA W/O MCC	
05	S	0507	233	CORONARY BYPASS W CARDIAC CATH W MCC	
05	S	0507	234	CORONARY BYPASS W CARDIAC CATH W/O MCC	
05	S	0507	235	CORONARY BYPASS W/O CARDIAC CATH W MCC	
05	S	0507	236	CORONARY BYPASS W/O CARDIAC CATH W/O MCC	
05	S	0509	239	AMPUTATION FOR CIRC SYS DISORDERS EXC UPPER LIMB & TOE W MCC	
05	S	0509	240	AMPUTATION FOR CIRC SYS DISORDERS EXC UPPER LIMB & TOE W CC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
05	S	0509	241	AMPUTATION FOR CIRC SYS DISORDERS EXC UPPER LIMB & TOE W/O CC/MCC	
05	S	0510	242	PERMANENT CARDIAC PACEMAKER IMPLANT W MCC	
05	S	0510	243	PERMANENT CARDIAC PACEMAKER IMPLANT W CC	
05	S	0510	244	PERMANENT CARDIAC PACEMAKER IMPLANT W/O CC/MCC	
05	S	0512	245	AICD GENERATOR PROCEDURES	
05	S	0512	265	AICD LEAD PROCEDURES	
05	S	0511	246	PERCUTANEOUS CARDIOVASCULAR PROCEDURES W DRUG-ELUTING STENT W MCC OR 4+ ARTERIES OR STENTS	
05	S	0511	247	PERC CARDIOVASC PROC W DRUG-ELUTING STENT W/O MCC	
05	S	0513	250	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT W MCC	
05	S	0513	251	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT W/O MCC	
05	S	0514	252	OTHER VASCULAR PROCEDURES W MCC	
05	S	0514	253	OTHER VASCULAR PROCEDURES W CC	
05	S	0514	254	OTHER VASCULAR PROCEDURES W/O CC/MCC	
05	S	0515	255	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS W MCC	
05	S	0515	256	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS W CC	
05	S	0515	257	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS W/O CC/MCC	
05	S	0516	258	CARDIAC PACEMAKER DEVICE REPLACEMENT W MCC	
05	S	0516	259	CARDIAC PACEMAKER DEVICE REPLACEMENT W/O MCC	
05	S	0517	260	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT W MCC	
05	S	0517	261	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT W CC	
05	S	0517	262	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT W/O CC/MCC	
05	S	0518	263	VEIN LIGATION & STRIPPING	
05	S	0519	264	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	
05	S	0512	265	AICD LEAD PROCEDURES	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
05	M	0520	280	ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W MCC	
05	M	0520	281	ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W CC	
05	M	0520	282	ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W/O CC/MCC	
05	M	0520	283	ACUTE MYOCARDIAL INFARCTION, EXPIRED W MCC	
05	M	0520	284	ACUTE MYOCARDIAL INFARCTION, EXPIRED W CC	
05	M	0520	285	ACUTE MYOCARDIAL INFARCTION, EXPIRED W/O CC/MCC	
05	M	0522	286	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W MCC	
05	M	0522	287	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O MCC	
05	M	0523	288	ACUTE & SUBACUTE ENDOCARDITIS W MCC	
05	M	0523	289	ACUTE & SUBACUTE ENDOCARDITIS W CC	
05	M	0523	290	ACUTE & SUBACUTE ENDOCARDITIS W/O CC/MCC	
05	M	0524	291	HEART FAILURE & SHOCK W MCC	
05	M	0524	292	HEART FAILURE & SHOCK W CC	
05	M	0524	293	HEART FAILURE & SHOCK W/O CC/MCC	
05	M	0525	294	DEEP VEIN THROMBOPHLEBITIS W CC/MCC	
05	M	0525	295	DEEP VEIN THROMBOPHLEBITIS W/O CC/MCC	
05	M	0526	296	CARDIAC ARREST, UNEXPLAINED W MCC	
05	M	0526	297	CARDIAC ARREST, UNEXPLAINED W CC	
05	M	0526	298	CARDIAC ARREST, UNEXPLAINED W/O CC/MCC	
05	M	0527	299	PERIPHERAL VASCULAR DISORDERS W MCC	
05	M	0527	300	PERIPHERAL VASCULAR DISORDERS W CC	
05	M	0527	301	PERIPHERAL VASCULAR DISORDERS W/O CC/MCC	
05	M	0528	302	ATHEROSCLEROSIS W MCC	
05	M	0528	303	ATHEROSCLEROSIS W/O MCC	
05	M	0529	304	HYPERTENSION W MCC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
05	M	0529	305	HYPERTENSION W/O MCC	
05	M	0530	306	CARDIAC CONGENITAL & VALVULAR DISORDERS W MCC	
05	M	0530	307	CARDIAC CONGENITAL & VALVULAR DISORDERS W/O MCC	
05	M	0531	308	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W MCC	
05	M	0531	309	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC	
05	M	0531	310	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC/MCC	
05	M	0532	311	ANGINA PECTORIS	
05	M	0533	312	SYNCOPE & COLLAPSE	
05	M	0534	313	CHEST PAIN	
05	M	0535	314	OTHER CIRCULATORY SYSTEM DIAGNOSES W MCC	
05	M	0535	315	OTHER CIRCULATORY SYSTEM DIAGNOSES W CC	
05	M	0535	316	OTHER CIRCULATORY SYSTEM DIAGNOSES W/O CC/MCC	
05	S	0536	319	OTHER ENDOVASCULAR CARDIAC VALVE PROCEDURES W MCC	
05	S	0536	320	OTHER ENDOVASCULAR CARDIAC VALVE PROCEDURES W/O MCC	
05	S	0540	266	ENDOVASCULAR CARDIAC VALVE REPLACEMENT & SUPPLEMENT PROCEDURES W MCC	
05	S	0540	267	ENDOVASCULAR CARDIAC VALVE REPLACEMENT & SUPPLEMENT PROCEDURES W/O MCC	
05	S	0541	268	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON W MCC	
05	S	0541	269	AORTIC AND HEART ASSIST PROCEDURES EXCEPT PULSATION BALLOON W/O MCC	
05	S	0542	270	OTHER MAJOR CARDIOVASCULAR PROCEDURES W MCC	
05	S	0542	271	OTHER MAJOR CARDIOVASCULAR PROCEDURES W CC	
05	S	0542	272	OTHER MAJOR CARDIOVASCULAR PROCEDURES W/O CC/MCC	
05	S	0543	273	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES WITH MCC	
05	S	0543	274	PERCUTANEOUS AND OTHER INTRACARDIAC PROCEDURES WITHOUT MCC	
06	S	0601	326	STOMACH, ESOPHAGEAL & DUODENAL PROC W MCC	
06	S	0601	327	STOMACH, ESOPHAGEAL & DUODENAL PROC W CC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
06	S	0601	328	STOMACH, ESOPHAGEAL & DUODENAL PROC W/O CC/MCC	
06	S	0602	329	MAJOR SMALL & LARGE BOWEL PROCEDURES W MCC	
06	S	0602	330	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC	
06	S	0602	331	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC/MCC	
06	S	0603	332	RECTAL RESECTION W MCC	
06	S	0603	333	RECTAL RESECTION W CC	
06	S	0603	334	RECTAL RESECTION W/O CC/MCC	
06	S	0604	335	PERITONEAL ADHESIOLYSIS W MCC	
06	S	0604	336	PERITONEAL ADHESIOLYSIS W CC	
06	S	0604	337	PERITONEAL ADHESIOLYSIS W/O CC/MCC	
06	S	0605	338	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W MCC	
06	S	0605	339	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W CC	
06	S	0605	340	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC/MCC	
06	S	0606	341	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W MCC	
06	S	0606	342	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC	
06	S	0606	343	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC/MCC	
06	S	0607	344	MINOR SMALL & LARGE BOWEL PROCEDURES W MCC	
06	S	0607	345	MINOR SMALL & LARGE BOWEL PROCEDURES W CC	
06	S	0607	346	MINOR SMALL & LARGE BOWEL PROCEDURES W/O CC/MCC	
06	S	0608	347	ANAL & STOMAL PROCEDURES W MCC	
06	S	0608	348	ANAL & STOMAL PROCEDURES W CC	
06	S	0608	349	ANAL & STOMAL PROCEDURES W/O CC/MCC	
06	S	0609	350	INGUINAL & FEMORAL HERNIA PROCEDURES W MCC	
06	S	0609	351	INGUINAL & FEMORAL HERNIA PROCEDURES W CC	
06	S	0609	352	INGUINAL & FEMORAL HERNIA PROCEDURES W/O CC/MCC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
06	S	0610	353	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL W MCC	
06	S	0610	354	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL W CC	
06	S	0610	355	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL W/O CC/MCC	
06	S	0611	356	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W MCC	
06	S	0611	357	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W CC	
06	S	0611	358	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W/O CC/MCC	
06	M	0612	368	MAJOR ESOPHAGEAL DISORDERS W MCC	
06	M	0612	369	MAJOR ESOPHAGEAL DISORDERS W CC	
06	M	0612	370	MAJOR ESOPHAGEAL DISORDERS W/O CC/MCC	
06	M	0613	371	MAJOR GASTROINTESTINAL DISORDERS & PERITONEAL INFECTIONS W MCC	
06	M	0613	372	MAJOR GASTROINTESTINAL DISORDERS & PERITONEAL INFECTIONS W CC	
06	M	0613	373	MAJOR GASTROINTESTINAL DISORDERS & PERITONEAL INFECTIONS W/O CC/MCC	
06	M	0614	374	DIGESTIVE MALIGNANCY W MCC	
06	M	0614	375	DIGESTIVE MALIGNANCY W CC	
06	M	0614	376	DIGESTIVE MALIGNANCY W/O CC/MCC	
06	M	0615	377	G.I. HEMORRHAGE W MCC	
06	M	0615	378	G.I. HEMORRHAGE W CC	
06	M	0615	379	G.I. HEMORRHAGE W/O CC/MCC	
06	M	0616	380	COMPLICATED PEPTIC ULCER W MCC	
06	M	0616	381	COMPLICATED PEPTIC ULCER W CC	
06	M	0616	382	COMPLICATED PEPTIC ULCER W/O CC/MCC	
06	M	0617	383	UNCOMPLICATED PEPTIC ULCER W MCC	
06	M	0617	384	UNCOMPLICATED PEPTIC ULCER W/O MCC	
06	M	0618	385	INFLAMMATORY BOWEL DISEASE W MCC	
06	M	0618	386	INFLAMMATORY BOWEL DISEASE W CC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
06	M	0618	387	INFLAMMATORY BOWEL DISEASE W/O CC/MCC	
06	M	0619	388	G.I. OBSTRUCTION W MCC	
06	M	0619	389	G.I. OBSTRUCTION W CC	
06	M	0619	390	G.I. OBSTRUCTION W/O CC/MCC	
06	M	0620	391	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS W MCC	
06	M	0620	392	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS W/O MCC	
06	M	0621	393	OTHER DIGESTIVE SYSTEM DIAGNOSES W MCC	
06	M	0621	394	OTHER DIGESTIVE SYSTEM DIAGNOSES W CC	
06	M	0621	395	OTHER DIGESTIVE SYSTEM DIAGNOSES W/O CC/MCC	
07	S	0701	405	PANCREAS, LIVER & SHUNT PROCEDURES W MCC	
07	S	0701	406	PANCREAS, LIVER & SHUNT PROCEDURES W CC	
07	S	0701	407	PANCREAS, LIVER & SHUNT PROCEDURES W/O CC/MCC	
07	S	0702	408	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W MCC	
07	S	0702	409	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W CC	
07	S	0702	410	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W/O CC/MCC	
07	S	0703	411	CHOLECYSTECTOMY W C.D.E. W MCC	
07	S	0703	412	CHOLECYSTECTOMY W C.D.E. W CC	
07	S	0703	413	CHOLECYSTECTOMY W C.D.E. W/O CC/MCC	
07	S	0704	414	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W MCC	
07	S	0704	415	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W CC	
07	S	0704	416	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W/O CC/MCC	
07	S	0705	417	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W MCC	
07	S	0705	418	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W CC	
07	S	0705	419	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC/MCC	
07	S	0706	420	HEPATOBIILIARY DIAGNOSTIC PROCEDURES W MCC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
07	S	0706	421	HEPATOBIILIARY DIAGNOSTIC PROCEDURES W CC	
07	S	0706	422	HEPATOBIILIARY DIAGNOSTIC PROCEDURES W/O CC/MCC	
07	S	0707	423	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES W MCC	
07	S	0707	424	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES W CC	
07	S	0707	425	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES W/O CC/MCC	
07	M	0708	432	CIRRHOSIS & ALCOHOLIC HEPATITIS W MCC	
07	M	0708	433	CIRRHOSIS & ALCOHOLIC HEPATITIS W CC	
07	M	0708	434	CIRRHOSIS & ALCOHOLIC HEPATITIS W/O CC/MCC	
07	M	0709	435	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS W MCC	
07	M	0709	436	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS W CC	
07	M	0709	437	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS W/O CC/MCC	
07	M	0710	438	DISORDERS OF PANCREAS EXCEPT MALIGNANCY W MCC	
07	M	0710	439	DISORDERS OF PANCREAS EXCEPT MALIGNANCY W CC	
07	M	0710	440	DISORDERS OF PANCREAS EXCEPT MALIGNANCY W/O CC/MCC	
07	M	0711	441	DISORDERS OF LIVER EXCEPT MALIG, CIRR, ALC HEPA W MCC	
07	M	0711	442	DISORDERS OF LIVER EXCEPT MALIG, CIRR, ALC HEPA W CC	
07	M	0711	443	DISORDERS OF LIVER EXCEPT MALIG, CIRR, ALC HEPA W/O CC/MCC	
07	M	0712	444	DISORDERS OF THE BILIARY TRACT W MCC	
07	M	0712	445	DISORDERS OF THE BILIARY TRACT W CC	
07	M	0712	446	DISORDERS OF THE BILIARY TRACT W/O CC/MCC	
08	S	0801	453	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION W MCC	
08	S	0801	454	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION W CC	
08	S	0801	455	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION W/O CC/MCC	
08	S	0802	456	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR EXT FUS W MCC	
08	S	0802	457	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR EXT FUS W CC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
08	S	0802	458	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR EXT FUS W/O CC/MCC	
08	S	0803	459	SPINAL FUSION EXCEPT CERVICAL W MCC	
08	S	0803	460	SPINAL FUSION EXCEPT CERVICAL W/O MCC	
08	S	0804	461	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY W MCC	
08	S	0804	462	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY W/O MCC	
08	S	0805	463	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS W MCC	
08	S	0805	464	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS W CC	
08	S	0805	465	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS W/O CC/MCC	
08	S	0806	466	REVISION OF HIP OR KNEE REPLACEMENT W MCC	
08	S	0806	467	REVISION OF HIP OR KNEE REPLACEMENT W CC	
08	S	0806	468	REVISION OF HIP OR KNEE REPLACEMENT W/O CC/MCC	
08	S	0807	469	MAJOR HIP AND KNEE JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W MCC OR TOTAL ANKLE REPLACEMENT	
08	S	0807	470	MAJOR HIP AND KNEE JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MCC	
08	S	0808	471	CERVICAL SPINAL FUSION W MCC	
08	S	0808	472	CERVICAL SPINAL FUSION W CC	
08	S	0808	473	CERVICAL SPINAL FUSION W/O CC/MCC	
08	S	0809	474	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS W MCC	
08	S	0809	475	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS W CC	
08	S	0809	476	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS W/O CC/MCC	
08	S	0810	477	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W MCC	
08	S	0810	478	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W CC	
08	S	0810	479	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W/O CC/MCC	
08	S	0811	480	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT W MCC	
08	S	0811	481	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT W CC	

**AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021**

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
08	S	0811	482	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT W/O CC/MCC	
08	S	0812	483	MAJOR JOINT/LIMB REATTACHMENT PROCEDURE OF UPPER EXTREMITIES	
08	S	0813	485	KNEE PROCEDURES W PDX OF INFECTION W MCC	
08	S	0813	486	KNEE PROCEDURES W PDX OF INFECTION W CC	
08	S	0813	487	KNEE PROCEDURES W PDX OF INFECTION W/O CC/MCC	
08	S	0814	488	KNEE PROCEDURES W/O PDX OF INFECTION W CC/MCC	
08	S	0814	489	KNEE PROCEDURES W/O PDX OF INFECTION W/O CC/MCC	
08	S	0815	518	BACK & NECK PROC EXC SPINAL FUSION W MCC OR DISC DEVICE/NEUROSTIM	
08	S	0815	519	BACK & NECK PROC EXC SPINAL FUSION W CC	
08	S	0815	520	BACK & NECK PROC EXC SPINAL FUSION W/O CC/MCC	
08	S	0816	492	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR W MCC	
08	S	0816	493	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR W CC	
08	S	0816	494	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR W/O CC/MCC	
08	S	0817	495	LOCAL EXCISION & REMOVAL INT FIX DEVICES EXC HIP & FEMUR W MCC	
08	S	0817	496	LOCAL EXCISION & REMOVAL INT FIX DEVICES EXC HIP & FEMUR W CC	
08	S	0817	497	LOCAL EXCISION & REMOVAL INT FIX DEVICES EXC HIP & FEMUR W/O CC/MCC	
08	S	0818	498	LOCAL EXCISION & REMOVAL INT FIX DEVICES OF HIP & FEMUR W CC/MCC	
08	S	0818	499	LOCAL EXCISION & REMOVAL INT FIX DEVICES OF HIP & FEMUR W/O CC/MCC	
08	S	0819	500	SOFT TISSUE PROCEDURES W MCC	
08	S	0819	501	SOFT TISSUE PROCEDURES W CC	
08	S	0819	502	SOFT TISSUE PROCEDURES W/O CC/MCC	
08	S	0820	503	FOOT PROCEDURES W MCC	
08	S	0820	504	FOOT PROCEDURES W CC	
08	S	0820	505	FOOT PROCEDURES W/O CC/MCC	
08	S	0821	506	MAJOR THUMB OR JOINT PROCEDURES	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
08	S	0822	507	MAJOR SHOULDER OR ELBOW JOINT PROCEDURES W CC/MCC	
08	S	0822	508	MAJOR SHOULDER OR ELBOW JOINT PROCEDURES W/O CC/MCC	
08	S	0823	509	ARTHROSCOPY	
08	S	0824	510	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC W MCC	
08	S	0824	511	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC W CC	
08	S	0824	512	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC W/O CC/MCC	
08	S	0825	513	HAND OR WRIST PROC, EXCEPT MAJOR THUMB OR JOINT PROC W CC/MCC	
08	S	0825	514	HAND OR WRIST PROC, EXCEPT MAJOR THUMB OR JOINT PROC W/O CC/MCC	
08	S	0826	515	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W MCC	
08	S	0826	516	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W CC	
08	S	0826	517	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W/O CC/MCC	
08	S	0841	521	HIP REPLACEMENT WITH PRINCIPAL DIAGNOSIS OF HIP FRACTURE WITH MCC	
08	S	0841	522	HIP REPLACEMENT WITH PRINCIPAL DIAGNOSIS OF HIP FRACTURE WITHOUT MCC	
08	M	0827	533	FRACTURES OF FEMUR W MCC	
08	M	0827	534	FRACTURES OF FEMUR W/O MCC	
08	M	0828	535	FRACTURES OF HIP & PELVIS W MCC	
08	M	0828	536	FRACTURES OF HIP & PELVIS W/O MCC	
08	M	0829	537	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS & THIGH W CC/MCC	
08	M	0829	538	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS & THIGH W/O CC/MCC	
08	M	0830	539	OSTEOMYELITIS W MCC	
08	M	0830	540	OSTEOMYELITIS W CC	
08	M	0830	541	OSTEOMYELITIS W/O CC/MCC	
08	M	0831	542	PATHOLOGICAL FRACTURES & MUSCULOSKELET & CONN TISS MALIG W MCC	
08	M	0831	543	PATHOLOGICAL FRACTURES & MUSCULOSKELET & CONN TISS MALIG W CC	
08	M	0831	544	PATHOLOGICAL FRACTURES & MUSCULOSKELET & CONN TISS MALIG W/O CC/MCC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
08	M	0832	545	CONNECTIVE TISSUE DISORDERS W MCC	
08	M	0832	546	CONNECTIVE TISSUE DISORDERS W CC	
08	M	0832	547	CONNECTIVE TISSUE DISORDERS W/O CC/MCC	
08	M	0833	548	SEPTIC ARTHRITIS W MCC	
08	M	0833	549	SEPTIC ARTHRITIS W CC	
08	M	0833	550	SEPTIC ARTHRITIS W/O CC/MCC	
08	M	0834	551	MEDICAL BACK PROBLEMS W MCC	
08	M	0834	552	MEDICAL BACK PROBLEMS W/O MCC	
08	M	0835	553	BONE DISEASES & ARTHROPATHIES W MCC	
08	M	0835	554	BONE DISEASES & ARTHROPATHIES W/O MCC	
08	M	0836	555	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE W MCC	
08	M	0836	556	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE W/O MCC	
08	M	0837	557	TENDONITIS, MYOSITIS & BURSITIS W MCC	
08	M	0837	558	TENDONITIS, MYOSITIS & BURSITIS W/O MCC	
08	M	0838	559	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W MCC	
08	M	0838	560	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W CC	
08	M	0838	561	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W/O CC/MCC	
08	M	0839	562	FX, SPRN, STRN & DISL EXCEPT FEMUR, HIP, PELVIS & THIGH W MCC	
08	M	0839	563	FX, SPRN, STRN & DISL EXCEPT FEMUR, HIP, PELVIS & THIGH W/O MCC	
08	M	0840	564	OTHER MUSCULOSKELETAL SYS & CONNECTIVE TISSUE DIAGNOSES W MCC	
08	M	0840	565	OTHER MUSCULOSKELETAL SYS & CONNECTIVE TISSUE DIAGNOSES W CC	
08	M	0840	566	OTHER MUSCULOSKELETAL SYS & CONNECTIVE TISSUE DIAGNOSES W/O CC/MCC	
09	S	0913	570	SKIN DEBRIDEMENT W MCC	
09	S	0913	571	SKIN DEBRIDEMENT W CC	
09	S	0913	572	SKIN DEBRIDEMENT W/O CC/MCC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
09	S	0901	573	SKIN GRAFT FOR SKIN ULCER OR CELLULITIS W MCC	
09	S	0901	574	SKIN GRAFT FOR SKIN ULCER OR CELLULITIS W CC	
09	S	0901	575	SKIN GRAFT FOR SKIN ULCER OR CELLULITIS W/O CC/MCC	
09	S	0902	576	SKIN GRAFT EXC FOR SKIN ULCER OR CELLULITIS W MCC	
09	S	0902	577	SKIN GRAFT EXC FOR SKIN ULCER OR CELLULITIS W CC	
09	S	0902	578	SKIN GRAFT EXC FOR SKIN ULCER OR CELLULITIS W/O CC/MCC	
09	S	0903	579	OTHER SKIN, SUBCUT TISS & BREAST PROC W MCC	
09	S	0903	580	OTHER SKIN, SUBCUT TISS & BREAST PROC W CC	
09	S	0903	581	OTHER SKIN, SUBCUT TISS & BREAST PROC W/O CC/MCC	
09	S	0904	582	MASTECTOMY FOR MALIGNANCY W CC/MCC	
09	S	0904	583	MASTECTOMY FOR MALIGNANCY W/O CC/MCC	
09	S	0905	584	BREAST BIOPSY, LOCAL EXCISION & OTHER BREAST PROCEDURES W CC/MCC	
09	S	0905	585	BREAST BIOPSY, LOCAL EXCISION & OTHER BREAST PROCEDURES W/O CC/MCC	
09	M	0906	592	SKIN ULCERS W MCC	
09	M	0906	593	SKIN ULCERS W CC	
09	M	0906	594	SKIN ULCERS W/O CC/MCC	
09	M	0907	595	MAJOR SKIN DISORDERS W MCC	
09	M	0907	596	MAJOR SKIN DISORDERS W/O MCC	
09	M	0908	597	MALIGNANT BREAST DISORDERS W MCC	
09	M	0908	598	MALIGNANT BREAST DISORDERS W CC	
09	M	0908	599	MALIGNANT BREAST DISORDERS W/O CC/MCC	
09	M	0909	600	NON-MALIGNANT BREAST DISORDERS W CC/MCC	
09	M	0909	601	NON-MALIGNANT BREAST DISORDERS W/O CC/MCC	
09	M	0910	602	CELLULITIS W MCC	
09	M	0910	603	CELLULITIS W/O MCC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
09	M	0911	604	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST W MCC	
09	M	0911	605	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST W/O MCC	
09	M	0912	606	MINOR SKIN DISORDERS W MCC	
09	M	0912	607	MINOR SKIN DISORDERS W/O MCC	
10	S	1001	614	ADRENAL & PITUITARY PROCEDURES W CC/MCC	
10	S	1001	615	ADRENAL & PITUITARY PROCEDURES W/O CC/MCC	
10	S	1002	616	AMPUTAT OF LOWER LIMB FOR ENDOCRINE, NUTRIT, & METABOL DIS W MCC	
10	S	1002	617	AMPUTAT OF LOWER LIMB FOR ENDOCRINE, NUTRIT, & METABOL DIS W CC	
10	S	1002	618	AMPUTAT OF LOWER LIMB FOR ENDOCRINE, NUTRIT, & METABOL DIS W/O CC/MCC	
10	S	1003	619	O.R. PROCEDURES FOR OBESITY W MCC	
10	S	1003	620	O.R. PROCEDURES FOR OBESITY W CC	
10	S	1003	621	O.R. PROCEDURES FOR OBESITY W/O CC/MCC	
10	S	1004	622	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DIS W MCC	
10	S	1004	623	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DIS W CC	
10	S	1004	624	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DIS W/O CC/MCC	
10	S	1005	625	THYROID, PARATHYROID & THYROGLOSSAL PROCEDURES W MCC	
10	S	1005	626	THYROID, PARATHYROID & THYROGLOSSAL PROCEDURES W CC	
10	S	1005	627	THYROID, PARATHYROID & THYROGLOSSAL PROCEDURES W/O CC/MCC	
10	S	1006	628	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W MCC	
10	S	1006	629	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W CC	
10	S	1006	630	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W/O CC/MCC	
10	M	1007	637	DIABETES W MCC	
10	M	1007	638	DIABETES W CC	
10	M	1007	639	DIABETES W/O CC/MCC	
10	M	1008	640	MISC DISORDERS OF NUTRITION, METABOLISM, FLUIDS/ELECTROLYTES W MCC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
10	M	1008	641	MISC DISORDERS OF NUTRITION, METABOLISM, FLUIDS/ELECTROLYTES W/O MCC	
10	M	1009	642	INBORN AND OTHER DISORDERS OF METABOLISM	
10	M	1010	643	ENDOCRINE DISORDERS W MCC	
10	M	1010	644	ENDOCRINE DISORDERS W CC	
10	M	1010	645	ENDOCRINE DISORDERS W/O CC/MCC	
11	S	1101	650	KIDNEY TRANSPLANT WITH HEMODIALYSIS WITH MCC	
11	S	1101	651	KIDNEY TRANSPLANT WITH HEMODIALYSIS WITHOUT MCC	
11	S	1101	652	KIDNEY TRANSPLANT	
11	S	1102	653	MAJOR BLADDER PROCEDURES W MCC	
11	S	1102	654	MAJOR BLADDER PROCEDURES W CC	
11	S	1102	655	MAJOR BLADDER PROCEDURES W/O CC/MCC	
11	S	1103	656	KIDNEY & URETER PROCEDURES FOR NEOPLASM W MCC	
11	S	1103	657	KIDNEY & URETER PROCEDURES FOR NEOPLASM W CC	
11	S	1103	658	KIDNEY & URETER PROCEDURES FOR NEOPLASM W/O CC/MCC	
11	S	1104	659	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM W MCC	
11	S	1104	660	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM W CC	
11	S	1104	661	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM W/O CC/MCC	
11	S	1105	662	MINOR BLADDER PROCEDURES W MCC	
11	S	1105	663	MINOR BLADDER PROCEDURES W CC	
11	S	1105	664	MINOR BLADDER PROCEDURES W/O CC/MCC	
11	S	1106	665	PROSTATECTOMY W MCC	
11	S	1106	666	PROSTATECTOMY W CC	
11	S	1106	667	PROSTATECTOMY W/O CC/MCC	
11	S	1107	668	TRANSURETHRAL PROCEDURES W MCC	
11	S	1107	669	TRANSURETHRAL PROCEDURES W CC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
11	S	1107	670	TRANSURETHRAL PROCEDURES W/O CC/MCC	
11	S	1108	671	URETHRAL PROCEDURES W CC/MCC	
11	S	1108	672	URETHRAL PROCEDURES W/O CC/MCC	
11	S	1109	673	OTHER KIDNEY & URINARY TRACT PROCEDURES W MCC	
11	S	1109	674	OTHER KIDNEY & URINARY TRACT PROCEDURES W CC	
11	S	1109	675	OTHER KIDNEY & URINARY TRACT PROCEDURES W/O CC/MCC	
11	M	1110	682	RENAL FAILURE W MCC	
11	M	1110	683	RENAL FAILURE W CC	
11	M	1110	684	RENAL FAILURE W/O CC/MCC	
11	M	1118	685	ADMIT FOR RENAL DIALYSIS	2026
11	M	1112	686	KIDNEY & URINARY TRACT NEOPLASMS W MCC	
11	M	1112	687	KIDNEY & URINARY TRACT NEOPLASMS W CC	
11	M	1112	688	KIDNEY & URINARY TRACT NEOPLASMS W/O CC/MCC	
11	M	1113	689	KIDNEY & URINARY TRACT INFECTIONS W MCC	
11	M	1113	690	KIDNEY & URINARY TRACT INFECTIONS W/O MCC	
11	M	1115	693	URINARY STONES W MCC	
11	M	1115	694	URINARY STONES W/O MCC	
11	M	1116	695	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS W MCC	
11	M	1116	696	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS W/O MCC	
11	M	1117	697	URETHRAL STRICTURE	
11	M	1118	698	OTHER KIDNEY & URINARY TRACT DIAGNOSES W MCC	
11	M	1118	699	OTHER KIDNEY & URINARY TRACT DIAGNOSES W CC	
11	M	1118	700	OTHER KIDNEY & URINARY TRACT DIAGNOSES W/O CC/MCC	
12	S	1201	707	MAJOR MALE PELVIC PROCEDURES W CC/MCC	
12	S	1201	708	MAJOR MALE PELVIC PROCEDURES W/O CC/MCC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
12	S	1202	709	PENIS PROCEDURES W CC/MCC	
12	S	1202	710	PENIS PROCEDURES W/O CC/MCC	
12	S	1203	711	TESTES PROCEDURES W CC/MCC	
12	S	1203	712	TESTES PROCEDURES W/O CC/MCC	
12	S	1204	713	TRANSURETHRAL PROSTATECTOMY W CC/MCC	
12	S	1204	714	TRANSURETHRAL PROSTATECTOMY W/O CC/MCC	
12	S	1205	715	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC FOR MALIGNANCY W CC/MCC	
12	S	1205	716	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC FOR MALIGNANCY W/O CC/MCC	
12	S	1206	717	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXC MALIGNANCY W CC/MCC	
12	S	1206	718	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXC MALIGNANCY W/O CC/MCC	
12	M	1207	722	MALIGNANCY, MALE REPRODUCTIVE SYSTEM W MCC	
12	M	1207	723	MALIGNANCY, MALE REPRODUCTIVE SYSTEM W CC	
12	M	1207	724	MALIGNANCY, MALE REPRODUCTIVE SYSTEM W/O CC/MCC	
12	M	1208	725	BENIGN PROSTATIC HYPERTROPHY W MCC	
12	M	1208	726	BENIGN PROSTATIC HYPERTROPHY W/O MCC	
12	M	1209	727	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM W MCC	
12	M	1209	728	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM W/O MCC	
12	M	1210	729	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES W CC/MCC	
12	M	1210	730	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES W/O CC/MCC	
13	S	1301	734	PELVIC EVISCERATION, RAD HYSTERECTOMY & RAD VULVECTOMY W CC/MCC	
13	S	1301	735	PELVIC EVISCERATION, RAD HYSTERECTOMY & RAD VULVECTOMY W/O CC/MCC	
13	S	1302	736	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY W MCC	
13	S	1302	737	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY W CC	
13	S	1302	738	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY W/O CC/MCC	
13	S	1303	739	UTERINE, ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W MCC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
13	S	1303	740	UTERINE, ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W CC	
13	S	1303	741	UTERINE, ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W/O CC/MCC	
13	S	1304	742	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W CC/MCC	
13	S	1304	743	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC/MCC	
13	S	1305	744	D&C, CONIZATION, LAPAROSCOPY & TUBAL INTERRUPTION W CC/MCC	
13	S	1305	745	D&C, CONIZATION, LAPAROSCOPY & TUBAL INTERRUPTION W/O CC/MCC	
13	S	1306	746	VAGINA, CERVIX & VULVA PROCEDURES W CC/MCC	
13	S	1306	747	VAGINA, CERVIX & VULVA PROCEDURES W/O CC/MCC	
13	S	1307	748	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	
13	S	1308	749	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES W CC/MCC	
13	S	1308	750	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES W/O CC/MCC	
13	M	1309	754	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W MCC	
13	M	1309	755	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W CC	
13	M	1309	756	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/O CC/MCC	
13	M	1310	757	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM W MCC	
13	M	1310	758	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM W CC	
13	M	1310	759	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM W/O CC/MCC	
13	M	1311	760	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS W CC/MCC	
13	M	1311	761	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS W/O CC/MCC	
14	S	1401	765	CESAREAN SECTION W CC/MCC	2026
14	S	1401	766	CESAREAN SECTION W/O CC/MCC	2026
14	S	1413	767	VAGINAL DELIVERY W STERILIZATION &/OR D&C	2026
14	M	1405	774	VAGINAL DELIVERY W COMPLICATING DIAGNOSES	2026
14	M	1405	775	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	2026
14	M	1411	777	ECTOPIC PREGNANCY	2026

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
14	M	1411	778	THREATENED ABORTION	2026
14	M	1411	780	FALSE LABOR	2026
14	M	1411	781	OTHER ANTEPARTUM DIAGNOSES W MEDICAL COMPLICATIONS	2026
14	M	1411	782	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	2026
14	S	1401	783	CESAREAN SECTION W STERILIZATION W MCC	
14	S	1401	784	CESAREAN SECTION W STERILIZATION W CC	
14	S	1401	785	CESAREAN SECTION W STERILIZATION W/O CC/MCC	
14	S	1401	786	CESAREAN SECTION W/O STERILIZATION W MCC	
14	S	1401	787	CESAREAN SECTION W/O STERILIZATION W CC	
14	S	1401	788	CESAREAN SECTION W/O STERILIZATION W/O CC/MCC	
14	S	1402	768	VAGINAL DELIVERY W O.R. PROC EXCEPT STERIL &/OR D&C	
14	S	1403	769	POSTPARTUM & POST ABORTION DIAGNOSES W O.R. PROCEDURE	
14	S	1404	770	ABORTION W D&C, ASPIRATION CURETTAGE OR HYSTEROTOMY	
14	M	1405	805	VAGINAL DELIVERY W/O STERILIZATION/D&C W MCC	
14	M	1405	806	VAGINAL DELIVERY W/O STERILIZATION/D&C W CC	
14	M	1405	807	VAGINAL DELIVERY W/O STERILIZATION/D&C W/O CC/MCC	
14	M	1406	776	POSTPARTUM & POST ABORTION DIAGNOSES W/O O.R. PROCEDURE	
14	M	1409	779	ABORTION W/O D&C	
14	M	1411	831	OTHER ANTEPARTUM DIAGNOSES W/O O.R. PROCEDURE W MCC	
14	M	1411	832	OTHER ANTEPARTUM DIAGNOSES W/O O.R. PROCEDURE W CC	
14	M	1411	833	OTHER ANTEPARTUM DIAGNOSES W/O O.R. PROCEDURE W/O CC/MCC	
14	S	1413	796	VAGINAL DELIVERY W STERILIZATION/D&C W MCC	
14	S	1413	797	VAGINAL DELIVERY W STERILIZATION/D&C W CC	
14	S	1413	798	VAGINAL DELIVERY W STERILIZATION/D&C W/O CC/MCC	
14	S	1414	817	OTHER ANTEPARTUM DIAGNOSES W O.R. PROCEDURE W MCC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
14	S	1414	818	OTHER ANTEPARTUM DIAGNOSES W O.R. PROCEDURE W CC	
14	S	1414	819	OTHER ANTEPARTUM DIAGNOSES W O.R. PROCEDURE W/O CC/MCC	
15	M	1501	789	NEONATES, DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY	
15	M	1502	790	EXTREME IMMATURITY OR RESPIRATORY DISTRESS SYNDROME, NEONATE	
15	M	1503	791	PREMATURITY W MAJOR PROBLEMS	
15	M	1504	792	PREMATURITY W/O MAJOR PROBLEMS	
15	M	1505	793	FULL TERM NEONATE W MAJOR PROBLEMS	
15	M	1506	794	NEONATE W OTHER SIGNIFICANT PROBLEMS	
15	M	1507	795	NORMAL NEWBORN	
16	S	1601	799	SPLENECTOMY W MCC	
16	S	1601	800	SPLENECTOMY W CC	
16	S	1601	801	SPLENECTOMY W/O CC/MCC	
16	S	1602	802	OTHER O.R. PROC OF THE BLOOD & BLOOD FORMING ORGANS W MCC	
16	S	1602	803	OTHER O.R. PROC OF THE BLOOD & BLOOD FORMING ORGANS W CC	
16	S	1602	804	OTHER O.R. PROC OF THE BLOOD & BLOOD FORMING ORGANS W/O CC/MCC	
16	M	1603	808	MAJOR HEMATOL/IMMUN DIAG EXC SICKLE CELL CRISIS & COAGUL W MCC	
16	M	1603	809	MAJOR HEMATOL/IMMUN DIAG EXC SICKLE CELL CRISIS & COAGUL W CC	
16	M	1603	810	MAJOR HEMATOL/IMMUN DIAG EXC SICKLE CELL CRISIS & COAGUL W/O CC/MCC	
16	M	1604	811	RED BLOOD CELL DISORDERS W MCC	
16	M	1604	812	RED BLOOD CELL DISORDERS W/O MCC	
16	M	1605	813	COAGULATION DISORDERS	
16	M	1606	814	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W MCC	
16	M	1606	815	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W CC	
16	M	1606	816	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC/MCC	
17	S	1707	820	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE W MCC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
17	S	1707	821	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE W CC	
17	S	1707	822	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE W/O CC/MCC	
17	S	1708	823	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER PROC W MCC	
17	S	1708	824	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER PROC W CC	
17	S	1708	825	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER PROC W/O CC/MCC	
17	S	1709	826	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W MCC	
17	S	1709	827	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W CC	
17	S	1709	828	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W/O CC/MCC	
17	S	1710	829	MYELOPROLIFERATIVE DISORDERS OR POORLY DIFFERENTIATED NEOPLASMS W OTHER PROCEDURE W CC/MCC	
17	S	1710	830	MYELOPROLIFERATIVE DISORDERS OR POORLY DIFFERENTIATED NEOPLASMS W OTHER PROCEDURE W/O CC/MCC	
17	M	1711	834	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE W MCC	
17	M	1711	835	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE W CC	
17	M	1711	836	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE W/O CC/MCC	
17	M	1712	837	CHEMO W ACUTE LEUKEMIA AS SDX OR W HIGH DOSE CHEMO AGENT W MCC	
17	M	1712	838	CHEMO W ACUTE LEUKEMIA AS SDX W CC OR HIGH DOSE CHEMO AGENT	
17	M	1712	839	CHEMO W ACUTE LEUKEMIA AS SDX W/O CC/MCC	
17	M	1713	840	LYMPHOMA & NON-ACUTE LEUKEMIA W MCC	
17	M	1713	841	LYMPHOMA & NON-ACUTE LEUKEMIA W CC	
17	M	1713	842	LYMPHOMA & NON-ACUTE LEUKEMIA W/O CC/MCC	
17	M	1714	843	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W MCC	
17	M	1714	844	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W CC	
17	M	1714	845	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W/O CC/MCC	
17	M	1715	846	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS W MCC	
17	M	1715	847	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS W CC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
17	M	1715	848	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS W/O CC/MCC	
17	M	1716	849	RADIOTHERAPY	
18	S	1801	853	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W MCC	
18	S	1801	854	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W CC	
18	S	1801	855	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W/O CC/MCC	
18	S	1802	856	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS W O.R. PROC W MCC	
18	S	1802	857	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS W O.R. PROC W CC	
18	S	1802	858	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS W O.R. PROC W/O CC/MCC	
18	M	1803	862	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS W MCC	
18	M	1803	863	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS W/O MCC	
18	M	1804	864	FEVER AND INFLAMMATORY CONDITIONS	
18	M	1805	865	VIRAL ILLNESS W MCC	
18	M	1805	866	VIRAL ILLNESS W/O MCC	
18	M	1806	867	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES W MCC	
18	M	1806	868	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES W CC	
18	M	1806	869	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES W/O CC/MCC	
18	M	1807	870	SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS	
18	M	1808	871	SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W MCC	
18	M	1808	872	SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W/O MCC	
19	S	1909	876	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	
19	M	1910	880	ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION	
19	M	1911	881	DEPRESSIVE NEUROSES	
19	M	1912	882	NEUROSES EXCEPT DEPRESSIVE	
19	M	1913	883	DISORDERS OF PERSONALITY & IMPULSE CONTROL	
19	M	1914	884	ORGANIC DISTURBANCES & INTELLECTUAL DISABILITY	

**AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021**

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
19	M	1915	885	PSYCHOSES	
19	M	1916	886	BEHAVIORAL & DEVELOPMENTAL DISORDERS	
19	M	1917	887	OTHER MENTAL DISORDER DIAGNOSES	
20	M	2018	894	ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA	
20	M	2018	895	ALCOHOL/DRUG ABUSE OR DEPENDENCE W REHABILITATION THERAPY	
20	M	2018	896	ALCOHOL/DRUG ABUSE OR DEPENDENCE W/O REHABILITATION THERAPY W MCC	
20	M	2018	897	ALCOHOL/DRUG ABUSE OR DEPENDENCE W/O REHABILITATION THERAPY W/O MCC	
21	S	2101	901	WOUND DEBRIDEMENTS FOR INJURIES W MCC	
21	S	2101	902	WOUND DEBRIDEMENTS FOR INJURIES W CC	
21	S	2101	903	WOUND DEBRIDEMENTS FOR INJURIES W/O CC/MCC	
21	S	2102	904	SKIN GRAFTS FOR INJURIES W CC/MCC	
21	S	2102	905	SKIN GRAFTS FOR INJURIES W/O CC/MCC	
21	S	2103	906	HAND PROCEDURES FOR INJURIES	
21	S	2104	907	OTHER O.R. PROCEDURES FOR INJURIES W MCC	
21	S	2104	908	OTHER O.R. PROCEDURES FOR INJURIES W CC	
21	S	2104	909	OTHER O.R. PROCEDURES FOR INJURIES W/O CC/MCC	
21	M	2105	913	TRAUMATIC INJURY W MCC	
21	M	2105	914	TRAUMATIC INJURY W/O MCC	
21	M	2106	915	ALLERGIC REACTIONS W MCC	
21	M	2106	916	ALLERGIC REACTIONS W/O MCC	
21	M	2107	917	POISONING & TOXIC EFFECTS OF DRUGS W MCC	
21	M	2107	918	POISONING & TOXIC EFFECTS OF DRUGS W/O MCC	
21	M	2108	919	COMPLICATIONS OF TREATMENT W MCC	
21	M	2108	920	COMPLICATIONS OF TREATMENT W CC	
21	M	2108	921	COMPLICATIONS OF TREATMENT W/O CC/MCC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
21	M	2109	922	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W MCC	
21	M	2109	923	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W/O MCC	
22	S	2201	928	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ W CC/MCC	
22	S	2201	929	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ W/O CC/MCC	
22	S	2210	927	EXTENSIVE BURNS OR FULL THICKNESS BURNS W MV >96 HRS W SKIN GRAFT	
22	M	2212	933	EXTENSIVE BURNS OR FULL THICKNESS BURNS W MV >96 HRS W/O SKIN GRAFT	
22	M	2213	934	FULL THICKNESS BURN W/O SKIN GRAFT OR INHAL INJ	
22	M	2214	935	NON-EXTENSIVE BURNS	
23	S	2301	939	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES W MCC	
23	S	2301	940	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES W CC	
23	S	2301	941	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES W/O CC/MCC	
23	M	2302	945	REHABILITATION W CC/MCC	
23	M	2302	946	REHABILITATION W/O CC/MCC	
23	M	2303	947	SIGNS & SYMPTOMS W MCC	
23	M	2303	948	SIGNS & SYMPTOMS W/O MCC	
23	M	2304	949	AFTERCARE W CC/MCC	
23	M	2304	950	AFTERCARE W/O CC/MCC	
23	M	2305	951	OTHER FACTORS INFLUENCING HEALTH STATUS	
24	S	2406	955	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	
24	S	2407	956	LIMB REATTACHMENT, HIP & FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	
24	S	2408	957	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA W MCC	
24	S	2408	958	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA W CC	
24	S	2408	959	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA W/O CC/MCC	
24	M	2409	963	OTHER MULTIPLE SIGNIFICANT TRAUMA W MCC	
24	M	2409	964	OTHER MULTIPLE SIGNIFICANT TRAUMA W CC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
24	M	2409	965	OTHER MULTIPLE SIGNIFICANT TRAUMA W/O CC/MCC	
25	S	2501	969	HIV W EXTENSIVE O.R. PROCEDURE W MCC	
25	S	2501	970	HIV W EXTENSIVE O.R. PROCEDURE W/O MCC	
25	M	2502	974	HIV W MAJOR RELATED CONDITION W MCC	
25	M	2502	975	HIV W MAJOR RELATED CONDITION W CC	
25	M	2502	976	HIV W MAJOR RELATED CONDITION W/O CC/MCC	
25	M	2503	977	HIV W OR W/O OTHER RELATED CONDITION	
PR	S	7701	001	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM W MCC	
PR	S	7701	002	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM W/O MCC	
PR	S	7702	005	LIVER TRANSPLANT W MCC OR INTESTINAL TRANSPLANT	
PR	S	7702	006	LIVER TRANSPLANT W/O MCC	
PR	S	7703	007	LUNG TRANSPLANT	
PR	S	7704	008	SIMULTANEOUS PANCREAS/KIDNEY TRANSPLANT	
PR	M	7705	014	ALLOGENEIC BONE MARROW TRANSPLANT	
PR	M	7705	016	AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC	
PR	M	7705	017	AUTOLOGOUS BONE MARROW TRANSPLANT W/O CC/MCC	
PR	M	7707	018	CHIMERIC ANTIGEN RECEPTOR (CAR) T-CELL IMMUNOTHERAPY	
PR	S	7704	019	SIMULTANEOUS PANCREAS/KIDNEY TRANSPLANT WITH HEMODIALYSIS	
PR	S	7706	010	PANCREAS TRANSPLANT	
PR	S	7799	003	ECMO OR TRACH W MV >96 HRS OR PDX EXC FACE, MOUTH & NECK W MAJ O.R.	
PR	S	7799	004	TRACH W MV >96 HRS OR PDX EXC FACE, MOUTH & NECK W/O MAJ O.R.	
PR	S	7799	011	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES OR LARYNGECTOMY W MCC	
PR	S	7799	012	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES OR LARYNGECTOMY W CC	
PR	S	7799	013	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES OR LARYNGECTOMY W/O CC/MCC	
*1	S	8897	987	NON-EXTENSIVE O.R. PROC UNRELATED TO PRINCIPAL DIAGNOSIS W MCC	

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	M/S	MDRG	MS DRG	MS-DRG Description	EXPIRE
*1	S	8897	988	NON-EXTENSIVE O.R. PROC UNRELATED TO PRINCIPAL DIAGNOSIS W CC	
*1	S	8897	989	NON-EXTENSIVE O.R. PROC UNRELATED TO PRINCIPAL DIAGNOSIS W/O CC/MCC	
*1	*	8898	998	PRINCIPAL DIAGNOSIS INVALID AS DISCHARGE DIAGNOSIS	
*1	*	8898	999	UNGROUPABLE	
*1	S	8899	981	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W MCC	
*1	S	8899	982	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W CC	
*1	S	8899	983	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W/O CC/MCC	
*1	S	8897	984	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W MCC	2025
*1	S	8897	985	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W CC	2025
*1	S	8897	986	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W/O CC/MCC	2025

¹ These DRG and MS-DRG codes are not assigned to an MDC.

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

AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021

MDC	Description
9	DISEASES & DISORDERS OF THE SKIN, SUBCUTANEOUS TISSUE & BREAST
10	ENDOCRINE, NUTRITIONAL & METABOLIC DISEASES & DISORDERS
11	DISEASES & DISORDERS OF THE KIDNEY & URINARY TRACT
12	DISEASES & DISORDERS OF THE MALE REPRODUCTIVE SYSTEM
13	DISEASES & DISORDERS OF THE FEMALE REPRODUCTIVE SYSTEM
14	PREGNANCY, CHILDBIRTH & THE PUERPERIUM
15	NEWBORNS & OTHER NEONATES WITH CONDTN ORIG IN PERINATAL PERIOD
16	DISEASES & DISORDERS OF BLOOD, BLOOD FORMING ORGANS, 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 2021.1*

Comorbidity	Description	Uses POA?
AIDS	Acquired immune deficiency syndrome	No
ALCOHOL	Alcohol abuse	No
ANEMDEF	Deficiency anemias	Yes
ARTH	Arthropathies	No
BLDLOSS	Chronic blood loss anemia	Yes
CANCER_LEUK	Leukemia	No
CANCER_LYMPH	Lymphoma	No
CANCER_METS	Metastatic cancer	No
CANCER_NSITU	Solid tumor without metastasis, in situ	No
CANCER_SOLID	Solid tumor without metastasis, malignant	No
CBVD	Cerebrovascular disease	Yes
CHF	Congestive heart failure	Yes
COAG	Coagulopathy	Yes
DEMENTIA	Dementia	No
DEPRESS	Depression	No
DIAB_CX	Diabetes with chronic complications	No
DIAB_UNCX	Diabetes without chronic complications	No
DRUG_ABUSE	Drug abuse	No
HTN_CX	Hypertension, complicated	No
HTN_UNCX	Hy[ertension, uncomplicated	No
LIVER_MLD	Liver disease, mild	Yes
LIVER_SEV	Liver disease, moderate to severe	Yes
LUNG_CHRONIC	Chronic pulmonary disease	No
NEURO_MOVT	Neurological disorders affecting movement	Yes
NEURO_OTH	Other neurological disorders	Yes

**AHRQ Quality Indicators™
Patient Safety Indicators (PSI) Parameter Estimates, v2021**

Comorbidity	Description	Uses POA?
NERUO_SEIZ	Seizures and epilepsy	Yes
OBESE	Obesity	No
PARALYSIS	Paralysis	Yes
PERIVASC	Peripheral vascular disease	No
PSYCHOSES	Psychoses	Yes
PULMCIRC	Pulmonary circulation disease	Yes
RENFL_MOD	Renal failure, moderate	Yes
RENFL_SEV	Renal failure, severe	Yes
THYROID_HYPO	Hypothyroidism	No
THYROID_OTH	Other thyroid disorders	No
ULCER_PEPTIC	Peptic ulcer with bleeding	Yes
VALVE	Valvular disease	Yes
WGHTLOSS	Weight loss	Yes

*Elixhauser Comorbidity Software Refined for ICD-10-CM Healthcare Cost and Utilization Project (HCUP), October 2020. Agency for Healthcare Research and Quality, Rockville, MD. www.hcup-us.ahrq.gov/toolssoftware/comorbidityicd10/comorbidity_icd10.jsp.

Table 22. Categorical Variables Definitions: Transfer

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

Table 23. 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: The SEVDPEDX setname is used in the risk-adjustment model for PSI 04 deep vein thrombosis/pulmonary embolism stratum.

Table 24. 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: The SEVPNEUDX setname is used in the risk-adjustment model for PSI 04 pneumonia stratum.

Table 25. SEVSEPDY: 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: The SEVSEPDY setname is used in the risk-adjustment model for PSI 04 sepsis stratum.

Table 26. 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: The SEVSCKDX setname is used in the risk-adjustment model for PSI 04 shock/cardiac arrest stratum.

Table 27. 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: The SEVGIHDX setname is used in the risk-adjustment model for PSI 04 gastrointestinal hemorrhage stratum.

Table 28. Do Not Resuscitate (DNR) Status Diagnosis Codes

Diagnosis Code	Description
Z66	Do not resuscitate