

## Evidence Attachment (CBE ID 0531)

**Table 1 (1.18):** Calculation of Measure Score (Component weights)

Indicator abbreviation	Indicator name	Harm weight <sup>a</sup>	Volume weight	Component weight
PSI 03	Pressure Ulcer Rate	0.3080	0.1155	0.1809
PSI 06	Iatrogenic Pneumothorax Rate	0.1381	0.0464	0.0326
PSI 08	In-Hospital Fall-Associated Fracture Rate	0.1440	0.0669	0.0490
PSI 09	Postoperative Hemorrhage or Hematoma Rate	0.0570	0.1347	0.0390
PSI 10	Postoperative Acute Kidney Injury Requiring Dialysis Rate	0.3584	0.0281	0.0512
PSI 11	Postoperative Respiratory Failure Rate	0.2219	0.2097	0.2366
PSI 12	Perioperative Pulmonary Embolism or Deep Vein Thrombosis (PE/DVT) Rate	0.1557	0.2195	0.1738
PSI 13	Postoperative Sepsis Rate	0.3102	0.1244	0.1963
PSI 14	Postoperative Wound Dehiscence Rate	0.1441	0.0227	0.0166
PSI 15	Abdominopelvic Accidental Puncture or Laceration Rate	0.1474	0.0322	0.0241

<sup>a</sup> These harm weights are based on versions of PSI 08 from v2022 and earlier, in that they are specific to hip fractures. The corresponding harm weights for other types of hospital-associated fractures are likely to differ, because other types of fractures require different treatment from hip fractures. Revised harm weights will be estimated in the near future.

Source: AHRQ. Quality Indicator Empirical Methods v2023. September 2023. Last accessed October 7, 2024. Available at: [https://qualityindicators.ahrq.gov/Downloads/Resources/Publications/2023/Empirical\\_Methods\\_2023.pdf](https://qualityindicators.ahrq.gov/Downloads/Resources/Publications/2023/Empirical_Methods_2023.pdf)

## Scientific Acceptability

**Table 2 (4.1.3):** Distribution of hospital characteristics

Hospital characteristic	Count	Percent
Total	3,156	100.00%
<b>Size</b>		
Missing	60	1.90%
Large: >250 beds	841	26.65%
Medium: 100-250 beds	1,070	33.90%
Small: <100 beds	1,185	37.55%
<b>Location</b>		
Missing	60	1.90%
Urban (large)	1,126	35.68%
Urban (other)	1,253	39.70%
Rural	717	22.72%
<b>Type</b>		
Missing	47	1.49%
Acute Care Hospitals	3,109	98.51%

**Table 3 (4.1.4):** Distribution of discharge characteristics by PSI component

PSI	N	Male	Female	Mean age (SD)	White	Black	Other	Asian	Hispanic	North American Native
PSI03	10,411,068	4,897,282 (47%)	5,513,786 (53%)	74.35 (12.48)	8,423,990 (81%)	1,169,795 (11%)	149,456 (1.4%)	178,744 (1.7%)	238,935 (2.3%)	250,148 (2.4%)
PSI06	12,566,493	5,900,546 (47%)	6,665,947 (53%)	74.20 (12.46)	10,221,874 (81%)	1,371,602 (11%)	175,003 (1.4%)	207,795 (1.7%)	283,081 (2.3%)	307,138 (2.4%)
PSI08	12,870,521	6,232,355 (48%)	6,638,166 (52%)	73.88 (12.38)	10,423,854 (81%)	1,425,853 (11%)	183,337 (1.4%)	218,884 (1.7%)	295,589 (2.3%)	323,004 (2.5%)
PSI09	2,950,391	1,429,969 (48%)	1,520,422 (52%)	73.08 (10.76)	2,500,506 (85%)	231,880 (7.9%)	38,737 (1.3%)	40,214 (1.4%)	56,712 (1.9%)	82,342 (2.8%)
PSI10	1,301,348	621,248 (48%)	680,100 (52%)	72.38 (8.95)	1,143,667 (88%)	72,979 (5.6%)	15,377 (1.2%)	14,734 (1.1%)	16,199 (1.2%)	38,392 (3.0%)
PSI11	1,299,854	634,334 (49%)	665,520 (51%)	72.19 (9.34)	1,127,271 (87%)	83,323 (6.4%)	15,928 (1.2%)	15,403 (1.2%)	18,804 (1.4%)	39,125 (3.0%)
PSI12	3,206,680	1,586,261 (49%)	1,620,419 (51%)	73.08 (10.77)	2,715,946 (85%)	249,385 (7.8%)	43,376 (1.4%)	45,664 (1.4%)	62,214 (1.9%)	90,095 (2.8%)
PSI13	1,275,265	623,783 (49%)	651,482 (51%)	72.29 (9.17)	1,109,114 (87%)	78,777 (6.2%)	15,788 (1.2%)	15,694 (1.2%)	17,487 (1.4%)	38,405 (3.0%)
PSI14	702,451	332,931 (47%)	369,520 (53%)	71.25 (11.01)	579,264 (82%)	62,094 (8.8%)	10,599 (1.5%)	12,073 (1.7%)	16,461 (2.3%)	21,960 (3.1%)
PSI15	2,423,807	1,219,250 (50%)	1,204,557 (50%)	72.67 (11.52)	1,960,102 (81%)	252,734 (10%)	38,643 (1.6%)	45,610 (1.9%)	59,952 (2.5%)	66,766 (2.8%)
PSIALL	13,702,080	6,499,031 (47%)	7,203,049 (53%)	74.21 (12.36)	11,174,325 (82%)	1,459,441 (11%)	193,453 (1.4%)	230,265 (1.7%)	306,691 (2.2%)	337,905 (2.5%)

Note: N is the number of denominator-eligible discharges for a given PSI component. The row labeled PSIALL represents the set of unique discharges eligible for at least one PSI component.

**Table 7 (4.4.3):** Distribution of prevalence of risk factors across hospitals

Risk factor	N	Mean	Min	Q1	Med	Q3	Max	PSI 03	PSI 06	PSI 08	PSI 09	PSI 10	PSI 11	PSI 12	PSI 13	PSI 14	PSI 15
Age_30_34	3156	0.67	0.00	0.23	0.46	0.79	37.93	1	1	1	1	1	1	1	1	1	1
Age_30_34_MALE	3156	0.32	0.00	0.07	0.20	0.38	15.79	1	0	0	0	0	0	0	0	0	0
Age_35_39	3156	0.92	0.00	0.36	0.66	1.05	66.67	1	1	1	1	1	1	1	1	1	1
Age_35_39_MALE	3156	0.46	0.00	0.15	0.31	0.55	15.79	0	0	0	0	0	0	1	1	0	0
Age_40_44	3156	1.21	0.00	0.59	0.96	1.42	100.00	1	1	1	1	1	1	1	1	1	1
Age_40_44_MALE	3156	0.61	0.00	0.26	0.47	0.74	12.50	0	0	0	0	0	1	0	1	0	0
Age_45_49	3156	1.51	0.00	0.82	1.25	1.80	100.00	1	1	1	1	1	1	1	1	1	1
Age_50_54	3156	2.21	0.00	1.37	1.97	2.69	33.33	1	1	1	1	1	1	1	1	1	1
Age_50_54_MALE	3156	1.17	0.00	0.65	1.02	1.46	33.33	1	0	0	0	0	0	0	0	0	0
Age_55_59	3156	3.43	0.00	2.31	3.18	4.15	33.33	1	1	1	1	1	1	1	1	1	1
Age_55_59_MALE	3156	1.83	0.00	1.11	1.64	2.25	20.83	0	0	0	0	0	1	0	1	0	0
Age_60_64	3156	4.97	0.00	3.60	4.70	5.94	50.00	1	1	1	1	1	1	1	1	1	1
Age_60_64_MALE	3156	2.62	0.00	1.78	2.43	3.15	50.00	1	0	0	0	0	0	1	0	1	0
Age_70Plus	3156	67.98	0.00	64.41	69.73	74.16	92.59	0	0	0	0	0	0	0	0	1	0
Age_70_74	3156	17.48	0.00	15.65	17.26	18.89	60.00	1	1	1	1	1	1	1	1	1	1
Age_70_74_MALE	3156	8.41	0.00	7.34	8.36	9.45	28.57	0	0	1	0	1	0	1	0	0	0
Age_75_79	3156	16.62	0.00	15.21	16.86	18.37	40.00	1	1	1	1	1	1	1	1	1	1
Age_80_84	3156	14.26	0.00	12.75	14.73	16.33	33.33	1	1	1	1	1	1	1	1	1	1
Age_80_84_MALE	3156	6.29	0.00	5.46	6.46	7.33	20.00	0	0	0	0	0	0	1	1	0	0
Age_85_89	3156	10.86	0.00	9.41	11.07	12.87	41.67	1	1	1	1	1	1	1	1	1	1
Age_85_89_MALE	3156	4.31	0.00	3.51	4.40	5.24	33.33	0	0	1	0	1	0	1	0	0	0
Age_90Plus	3156	8.76	0.00	6.75	8.66	10.81	33.33	1	1	1	1	1	1	1	1	1	1
Age_90Plus_MALE	3156	2.88	0.00	2.08	2.78	3.64	11.11	0	0	0	0	0	0	0	1	0	0
Age_LT30	3156	0.58	0.00	0.16	0.36	0.66	35.90	1	1	1	1	1	1	1	1	1	1
Age_LT60	3156	10.53	0.00	6.64	9.13	12.18	100.00	0	0	0	0	0	0	0	0	1	0
CMR_AIDS	3156	0.39	0.00	0.07	0.20	0.42	9.92	0	0	0	0	0	1	0	1	0	0
CMR_ALCOHOL	3156	3.22	0.00	2.10	2.86	3.94	68.86	0	0	0	1	0	1	0	1	1	0

Risk factor	N	Mean	Min	Q1	Med	Q3	Max	PSI 03	PSI 06	PSI 08	PSI 09	PSI 10	PSI 11	PSI 12	PSI 13	PSI 14	PSI 15
CMR_ANEMDEF	3156	23.46	0.00	18.20	23.79	29.09	100.00	1	1	0	1	1	1	1	1	1	1
CMR_AUTOIMMUNE	3156	4.64	0.00	3.60	4.65	5.63	17.79	0	0	0	0	0	1	1	1	0	0
CMR_BLDLOSS	3156	0.77	0.00	0.45	0.68	0.98	10.00	0	0	0	0	1	1	0	1	0	0
CMR_CANCER_LEUK	3156	0.87	0.00	0.56	0.84	1.14	8.08	0	0	1	0	1	1	0	0	0	0
CMR_CANCER_LYMPH	3156	1.15	0.00	0.71	1.12	1.50	12.83	0	0	0	0	0	0	1	0	0	0
CMR_CANCER_METS	3156	3.22	0.00	2.01	3.13	4.15	42.64	0	1	0	0	1	1	1	1	0	0
CMR_CANCER_NSITU	3156	0.03	0.00	0.00	0.01	0.05	3.45	0	0	0	0	0	1	0	0	0	0
CMR_CANCER_SOLID	3156	3.81	0.00	2.96	3.85	4.62	100.00	0	0	0	0	0	1	1	1	1	0
CMR_CBVD	3156	5.85	0.00	4.36	5.86	7.35	50.00	0	0	1	0	0	1	1	1	0	0
CMR_COAG	3156	7.36	0.00	5.29	7.46	9.31	48.35	1	0	0	0	1	1	1	1	0	0
CMR_DEMENTIA	3156	13.08	0.00	10.20	12.95	15.82	58.72	0	0	1	1	1	1	1	1	0	0
CMR_DEPRESS	3156	14.21	0.00	10.36	14.02	17.46	100.00	1	1	1	0	1	1	1	1	0	0
CMR_DIAB_CX	3156	23.70	0.00	19.80	24.47	28.45	100.00	1	1	0	0	1	1	1	1	1	0
CMR_DIAB_UNCX	3156	11.80	0.00	9.22	11.13	13.53	100.00	1	1	0	1	1	1	1	1	1	1
CMR_DRUG_ABUSE	3156	2.65	0.00	0.94	1.66	2.91	100.00	0	0	0	0	0	1	0	1	1	0
CMR_HF	3156	28.47	0.00	24.81	29.66	33.91	100.00	1	0	1	1	1	1	1	1	1	0
CMR_HTN_CX	3156	33.66	0.00	29.41	35.34	40.10	100.00	1	0	0	0	1	1	1	1	0	0
CMR_HTN_UNCX	3156	38.22	0.00	33.93	37.42	41.17	83.33	1	1	0	0	1	1	1	1	1	1
CMR_LIVER_MLD	3156	4.56	0.00	3.34	4.45	5.60	66.67	1	0	1	0	1	1	1	1	0	0
CMR_LIVER_SEV	3156	1.39	0.00	0.85	1.34	1.80	9.64	1	0	0	1	1	1	1	0	0	0
CMR_LUNG_CHRONIC	3156	26.25	0.00	22.09	26.21	30.42	81.82	1	0	0	0	0	1	1	1	1	0
CMR_NEURO_MOVT	3156	4.58	0.00	3.53	4.47	5.52	25.93	0	0	0	0	1	1	1	1	0	0
CMR_NEURO_OTH	3156	10.99	0.00	8.47	11.43	14.01	38.04	1	0	1	0	0	1	1	1	0	0
CMR_NEURO_SEIZ	3156	4.56	0.00	3.35	4.36	5.46	100.00	0	0	0	0	0	1	1	1	0	0
CMR_OBESE	3156	17.77	0.00	12.86	17.15	22.09	100.00	0	1	1	1	1	1	1	1	1	0
CMR_PARALYSIS	3156	5.66	0.00	4.08	5.45	7.03	50.00	1	0	0	1	1	1	1	1	0	0
CMR_PERIVASC	3156	7.97	0.00	5.78	7.81	9.86	43.32	0	0	0	1	1	1	1	1	0	0
CMR_PSYCHOSES	3156	5.05	0.00	3.09	4.29	5.94	100.00	0	0	0	0	1	1	0	0	0	0
CMR_PULMCIRC	3156	5.78	0.00	3.38	5.51	7.85	30.56	0	0	0	0	1	1	1	1	0	0

Risk factor	N	Mean	Min	Q1	Med	Q3	Max	PSI 03	PSI 06	PSI 08	PSI 09	PSI 10	PSI 11	PSI 12	PSI 13	PSI 14	PSI 15
CMR_RENLFL_MOD	3156	17.94	0.00	14.73	18.05	21.49	44.71	1	0	0	0	1	1	1	1	1	0
CMR_RENLFL_SEV	3156	8.62	0.00	5.43	8.54	11.20	77.19	1	0	0	1	1	1	1	1	0	0
CMR_THYROID_HYPO	3156	20.02	0.00	17.72	20.59	23.11	37.50	1	0	0	0	1	1	1	1	0	0
CMR_THYROID_OTH	3156	1.47	0.00	0.95	1.40	1.88	14.29	0	0	0	0	1	1	1	1	0	0
CMR_ULCER_PEPTIC	3156	1.06	0.00	0.67	1.03	1.34	23.08	0	0	0	0	1	1	1	1	0	0
CMR_VALVE	3156	10.23	0.00	6.82	10.18	13.40	42.56	1	0	0	0	1	1	1	1	0	0
CMR_WGHTLOSS	3156	9.27	0.00	5.85	8.58	11.94	56.23	1	1	1	1	1	1	1	1	1	1
COVIDDX	3156	7.90	0.00	5.98	7.58	9.52	62.64	1	1	1	0	1	1	1	1	1	0
COVIDDX_Q1	3156	1.30	0.00	0.46	0.98	1.71	41.76	0	1	0	0	1	1	0	1	0	0
COVIDDX_Q2	3156	1.26	0.00	0.51	0.99	1.71	11.48	0	0	0	0	1	1	1	1	0	0
COVIDDX_Q3	3156	1.94	0.00	1.32	1.78	2.37	16.67	1	1	1	0	1	1	1	1	1	0
COVIDDX_Q4	3156	0.50	0.00	0.27	0.45	0.67	4.69	0	0	0	0	0	1	1	1	0	0
COVIDDX_Q5	3156	1.03	0.00	0.72	0.98	1.29	8.33	0	0	0	0	0	0	1	1	0	0
COVIDDX_Q6	3156	0.84	0.00	0.51	0.78	1.09	10.00	1	0	0	0	0	0	1	0	0	0
COVIDDX_Q7	3156	0.76	0.00	0.50	0.71	0.97	33.33	1	0	0	0	1	0	1	1	0	0
HPPS13_1	3156	0.18	0.00	0.00	0.09	0.21	4.35	0	0	0	0	0	0	0	1	0	0
HPPS13_2	3156	0.40	0.00	0.06	0.23	0.50	8.70	0	0	0	0	0	0	0	1	0	0
HPPS13_3	3156	0.01	0.00	0.00	0.00	0.00	0.87	0	0	0	0	0	0	0	1	0	0
HPPS15_3	3156	2.00	0.00	1.30	1.87	2.46	51.06	0	0	0	0	0	0	0	0	0	1
HPPS15_4	3156	0.45	0.00	0.17	0.39	0.62	21.31	0	0	0	0	0	0	0	0	0	1
HPPS15_5	3156	0.23	0.00	0.10	0.19	0.30	7.97	0	0	0	0	0	0	0	0	0	1
HPPS15_6	3156	1.38	0.00	0.67	1.14	1.65	35.00	0	0	0	0	0	0	0	0	0	1
MALE	3156	46.06	0.00	43.75	46.11	48.70	100.00	1	1	1	1	1	1	1	1	1	1
MEDICDR	3156	75.90	0.00	71.03	78.89	86.33	100.00	1	1	1	0	0	0	0	0	0	1
PS03_NonWt_1	3156	35.48	0.00	33.68	35.78	37.72	100.00	1	0	0	0	0	0	0	0	0	0
PS08_NonWt_1	3156	41.44	0.00	39.94	43.99	46.63	100.00	0	0	1	0	0	0	0	0	0	0
PS10_NonWt_1	3156	31.45	0.00	30.90	32.99	34.47	100.00	0	0	0	0	1	0	0	0	0	0
PS11_NonWt_1	3156	35.48	0.00	33.68	35.78	37.72	100.00	0	0	0	0	0	1	0	0	0	0
PS11_NonWt_2	3156	35.51	0.00	29.55	37.66	43.93	100.00	0	0	0	0	0	1	0	0	0	0

Risk factor	N	Mean	Min	Q1	Med	Q3	Max	PSI 03	PSI 06	PSI 08	PSI 09	PSI 10	PSI 11	PSI 12	PSI 13	PSI 14	PSI 15
PS12_NonWt_1	3156	33.94	0.00	29.19	33.01	37.57	75.00	0	0	0	0	0	0	1	0	0	0
PS12_NonWt_2	3156	52.80	0.00	47.76	56.07	61.93	100.00	0	0	0	0	0	0	1	0	0	0
PS13_NonWt_1	3156	35.48	0.00	33.68	35.78	37.72	100.00	0	0	0	0	0	0	0	1	0	0
PS13_NonWt_2	3156	35.51	0.00	29.55	37.66	43.93	100.00	0	0	0	0	0	0	0	1	0	0
Q1	3156	13.46	0.00	11.98	12.89	13.93	100.00	1	1	1	1	1	1	1	1	1	1
Q2	3156	13.17	0.00	12.21	12.96	13.83	100.00	1	1	1	1	1	1	1	1	1	1
Q3	3156	12.72	0.00	11.76	12.48	13.35	66.67	1	1	1	1	1	1	1	1	1	1
Q4	3156	12.18	0.00	11.65	12.34	12.90	53.85	1	1	1	1	1	1	1	1	1	1
Q5	3156	12.22	0.00	11.71	12.36	12.97	31.11	1	1	1	1	1	1	1	1	1	1
Q6	3156	12.55	0.00	12.03	12.72	13.35	100.00	1	1	1	1	1	1	1	1	1	1
Q7	3156	12.12	0.00	11.45	12.26	13.07	100.00	1	1	1	1	1	1	1	1	1	1
TRANSFER	3156	5.38	0.00	0.44	2.14	6.69	100.00	1	1	1	1	1	1	1	1	1	1
mdc_1	3156	6.62	0.00	4.36	6.35	8.54	53.71	1	0	1	0	1	1	1	1	0	0
mdc_10	3156	4.61	0.00	3.47	4.27	5.27	100.00	0	0	0	1	0	1	1	1	0	0
mdc_11	3156	8.07	0.00	6.61	8.03	9.46	35.35	0	0	0	0	1	0	0	0	0	0
mdc_12	3156	0.33	0.00	0.11	0.25	0.40	23.53	1	0	0	0	0	1	1	1	0	0
mdc_13	3156	0.40	0.00	0.07	0.17	0.33	80.00	0	0	1	0	0	1	0	1	0	1
mdc_16	3156	1.43	0.00	0.96	1.35	1.77	50.00	0	0	0	0	0	1	0	1	0	0
mdc_17	3156	0.45	0.00	0.11	0.27	0.50	18.38	1	0	0	0	1	0	1	0	0	0
mdc_18	3156	12.37	0.00	8.70	11.99	15.83	100.00	1	1	1	0	0	1	1	1	1	0
mdc_19	3156	1.45	0.00	0.19	0.41	0.84	100.00	0	0	1	0	0	1	1	1	0	0
mdc_2	3156	0.14	0.00	0.00	0.06	0.12	82.00	0	0	0	0	0	1	1	0	0	0
mdc_20	3156	1.14	0.00	0.16	0.32	0.55	100.00	0	0	1	0	0	1	1	1	0	0
mdc_22	3156	0.03	0.00	0.00	0.00	0.01	6.23	0	0	0	0	0	0	1	1	0	0
mdc_23	3156	0.73	0.00	0.27	0.44	0.69	100.00	0	0	0	0	0	0	1	0	0	0
mdc_24	3156	0.18	0.00	0.00	0.10	0.22	8.52	0	0	1	1	0	0	1	1	1	0
mdc_25	3156	0.00	0.00	0.00	0.00	0.00	0.00	1	0	0	0	0	0	1	1	0	0
mdc_3	3156	0.50	0.00	0.23	0.43	0.62	45.51	0	1	0	1	1	1	0	1	0	0
mdc_4	3156	16.36	0.00	11.81	15.15	19.45	96.97	1	1	1	0	0	0	1	1	0	0

Risk factor	N	Mean	Min	Q1	Med	Q3	Max	PSI 03	PSI 06	PSI 08	PSI 09	PSI 10	PSI 11	PSI 12	PSI 13	PSI 14	PSI 15
mdc_5	3156	17.15	0.00	13.28	17.55	21.39	96.89	0	0	1	0	1	1	1	1	0	0
mdc_6	3156	9.07	0.00	7.90	9.42	10.75	37.39	1	0	0	0	1	1	1	1	1	0
mdc_7	3156	2.51	0.00	1.97	2.53	3.08	13.40	0	0	0	0	1	1	0	1	0	1
mdc_8	3156	12.85	0.00	6.72	9.22	12.23	100.00	1	1	0	1	1	1	0	1	1	1
mdc_9	3156	2.28	0.00	1.53	2.01	2.60	93.59	0	0	0	1	1	1	1	1	0	0
mdrg_1002	3156	0.21	0.00	0.07	0.17	0.29	4.86	1	0	0	1	0	1	1	0	0	0
mdrg_1003	3156	0.23	0.00	0.00	0.00	0.13	77.27	0	0	0	0	1	1	1	1	0	0
mdrg_1004	3156	0.09	0.00	0.00	0.06	0.12	1.85	0	0	0	0	0	1	1	1	0	0
mdrg_1005	3156	0.03	0.00	0.00	0.00	0.03	10.55	0	0	0	1	0	1	0	1	0	0
mdrg_1006	3156	0.12	0.00	0.00	0.07	0.13	100.00	1	0	1	0	0	1	1	0	0	0
mdrg_101	3156	0.02	0.00	0.00	0.00	0.00	1.13	1	0	1	0	0	1	0	1	0	0
mdrg_102	3156	0.12	0.00	0.00	0.00	0.06	9.53	1	0	1	1	0	0	1	1	0	0
mdrg_103	3156	0.26	0.00	0.00	0.00	0.33	16.67	1	0	1	1	0	1	1	1	0	0
mdrg_104	3156	0.07	0.00	0.00	0.00	0.08	7.69	0	0	0	0	0	1	0	1	0	0
mdrg_105	3156	0.04	0.00	0.00	0.00	0.03	3.45	0	0	1	1	0	1	1	1	0	0
mdrg_106	3156	0.10	0.00	0.00	0.00	0.12	4.09	0	0	1	0	0	1	1	1	0	0
mdrg_107	3156	0.23	0.00	0.00	0.05	0.34	13.20	0	0	1	1	0	1	1	1	0	0
mdrg_108	3156	0.09	0.00	0.00	0.05	0.12	8.39	0	1	1	0	0	1	1	1	0	0
mdrg_1101	3156	0.06	0.00	0.00	0.00	0.00	5.14	1	0	1	1	0	1	1	1	0	0
mdrg_1102	3156	0.05	0.00	0.00	0.00	0.05	9.60	0	0	0	0	1	1	1	1	1	1
mdrg_1103	3156	0.14	0.00	0.00	0.03	0.17	15.30	1	1	1	0	0	1	1	1	0	0
mdrg_1104	3156	0.41	0.00	0.04	0.38	0.61	7.14	1	0	1	0	1	1	1	1	0	1
mdrg_1105	3156	0.04	0.00	0.00	0.01	0.05	4.37	1	0	0	1	0	1	1	1	0	0
mdrg_1106	3156	0.03	0.00	0.00	0.00	0.04	1.18	0	0	0	0	0	1	0	1	0	0
mdrg_1107	3156	0.08	0.00	0.00	0.06	0.11	2.35	1	0	1	1	0	1	1	0	0	0
mdrg_1109	3156	0.23	0.00	0.00	0.21	0.34	12.28	1	0	1	0	1	1	1	1	0	0
mdrg_111	3156	0.44	0.00	0.18	0.37	0.58	32.07	0	0	1	0	0	0	0	0	0	0
mdrg_1118	3156	1.29	0.00	0.82	1.29	1.70	7.41	1	0	0	0	0	0	0	0	0	0
mdrg_119	3156	0.01	0.00	0.00	0.00	0.00	0.43	0	1	0	0	0	0	0	0	0	0

Risk factor	N	Mean	Min	Q1	Med	Q3	Max	PSI 03	PSI 06	PSI 08	PSI 09	PSI 10	PSI 11	PSI 12	PSI 13	PSI 14	PSI 15
mdrg_1201	3156	0.07	0.00	0.00	0.00	0.06	13.27	0	0	0	0	0	0	0	1	0	0
mdrg_1202	3156	0.01	0.00	0.00	0.00	0.00	0.55	0	0	0	0	0	0	1	0	0	0
mdrg_1204	3156	0.08	0.00	0.00	0.02	0.07	16.47	0	0	0	1	0	1	1	0	0	0
mdrg_1206	3156	0.03	0.00	0.00	0.00	0.03	7.03	0	0	0	0	0	0	1	1	0	0
mdrg_1208	3156	0.04	0.00	0.00	0.02	0.06	1.15	0	0	1	0	0	0	0	0	0	0
mdrg_126	3156	0.03	0.00	0.00	0.01	0.05	0.51	1	0	0	0	0	0	0	0	0	0
mdrg_127	3156	0.03	0.00	0.00	0.02	0.06	0.62	1	0	0	0	0	0	0	0	0	0
mdrg_128	3156	0.58	0.00	0.26	0.54	0.80	25.00	1	0	0	0	0	0	0	0	0	0
mdrg_1301	3156	0.01	0.00	0.00	0.00	0.00	6.25	0	0	0	0	0	1	0	0	0	0
mdrg_1302	3156	0.04	0.00	0.00	0.00	0.00	23.75	0	0	0	0	0	0	1	0	0	0
mdrg_1303	3156	0.04	0.00	0.00	0.00	0.01	15.00	0	0	0	0	0	0	1	0	0	0
mdrg_1304	3156	0.10	0.00	0.00	0.03	0.09	14.29	0	0	0	0	1	1	1	1	0	1
mdrg_1305	3156	0.01	0.00	0.00	0.00	0.02	1.80	0	0	0	0	0	1	0	0	0	0
mdrg_1306	3156	0.05	0.00	0.00	0.00	0.02	55.00	0	0	0	0	0	1	1	1	0	0
mdrg_1307	3156	0.03	0.00	0.00	0.00	0.00	20.00	0	0	0	0	0	0	0	1	0	0
mdrg_1308	3156	0.01	0.00	0.00	0.00	0.00	3.53	0	0	0	0	0	1	1	0	0	0
mdrg_1601	3156	0.01	0.00	0.00	0.00	0.00	0.32	0	1	0	0	0	0	1	0	0	0
mdrg_1602	3156	0.01	0.00	0.00	0.00	0.02	0.65	0	0	0	0	0	1	1	1	0	0
mdrg_1707	3156	0.02	0.00	0.00	0.00	0.02	2.00	0	0	0	1	0	1	1	1	0	0
mdrg_1708	3156	0.04	0.00	0.00	0.02	0.07	0.69	1	0	1	0	0	1	1	1	0	0
mdrg_1709	3156	0.03	0.00	0.00	0.00	0.03	2.86	0	0	0	1	0	1	0	1	0	0
mdrg_1710	3156	0.02	0.00	0.00	0.00	0.02	1.25	0	0	0	0	0	1	0	1	0	0
mdrg_1711	3156	0.05	0.00	0.00	0.02	0.07	3.22	1	0	0	0	0	0	0	0	0	0
mdrg_1713	3156	0.14	0.00	0.00	0.11	0.20	3.45	1	0	0	0	0	0	0	0	0	0
mdrg_1714	3156	0.04	0.00	0.00	0.03	0.06	0.71	0	1	0	0	0	0	0	0	0	0
mdrg_1801	3156	1.24	0.00	0.72	1.27	1.71	4.58	1	0	0	0	1	0	1	0	0	1
mdrg_1802	3156	0.17	0.00	0.03	0.14	0.23	3.39	1	0	0	0	0	1	1	0	1	1
mdrg_1803	3156	0.22	0.00	0.09	0.20	0.29	8.33	1	0	0	0	0	0	0	0	0	0
mdrg_1806	3156	0.09	0.00	0.00	0.03	0.06	53.60	1	0	0	0	0	0	0	0	0	0



Risk factor	N	Mean	Min	Q1	Med	Q3	Max	PSI 03	PSI 06	PSI 08	PSI 09	PSI 10	PSI 11	PSI 12	PSI 13	PSI 14	PSI 15
mdrg_1807	3156	0.41	0.00	0.09	0.32	0.57	4.89	1	1	0	0	0	0	0	0	0	0
mdrg_1808	3156	10.04	0.00	6.72	9.61	13.06	100.00	1	0	0	0	0	0	0	0	0	0
mdrg_1909	3156	0.02	0.00	0.00	0.00	0.00	50.00	0	0	1	0	0	0	0	0	0	0
mdrg_1914	3156	0.27	0.00	0.07	0.20	0.36	22.80	1	0	1	0	0	0	0	0	0	0
mdrg_2101	3156	0.04	0.00	0.00	0.00	0.04	3.85	1	0	0	0	0	1	0	1	1	0
mdrg_2102	3156	0.01	0.00	0.00	0.00	0.00	3.85	0	0	0	1	0	1	1	1	0	0
mdrg_2104	3156	0.21	0.00	0.06	0.18	0.29	10.00	1	0	0	0	0	1	1	0	0	1
mdrg_2201	3156	0.01	0.00	0.00	0.00	0.00	2.54	0	0	0	0	0	1	1	0	0	0
mdrg_2210	3156	0.00	0.00	0.00	0.00	0.00	0.28	0	1	0	0	0	1	1	0	0	0
mdrg_2301	3156	0.03	0.00	0.00	0.00	0.03	6.38	0	0	0	0	0	1	0	1	0	0
mdrg_2406	3156	0.00	0.00	0.00	0.00	0.00	0.27	0	0	1	0	0	0	0	0	0	0
mdrg_2407	3156	0.07	0.00	0.00	0.05	0.10	2.16	0	0	0	0	0	1	0	0	0	0
mdrg_2408	3156	0.03	0.00	0.00	0.00	0.02	2.70	1	0	0	0	0	1	1	0	0	0
mdrg_2501	3156	0.00	0.00	0.00	0.00	0.00	0.60	1	0	0	0	0	0	0	0	0	0
mdrg_301	3156	0.04	0.00	0.00	0.00	0.02	19.54	1	0	0	0	0	0	1	1	0	0
mdrg_302	3156	0.03	0.00	0.00	0.00	0.03	17.78	1	1	0	0	0	1	1	1	0	0
mdrg_303	3156	0.00	0.00	0.00	0.00	0.00	2.22	0	0	0	1	0	0	0	0	0	0
mdrg_304	3156	0.01	0.00	0.00	0.00	0.00	3.45	0	0	0	1	0	0	1	1	0	0
mdrg_401	3156	0.25	0.00	0.00	0.07	0.39	8.89	1	1	1	0	0	0	1	1	0	0
mdrg_402	3156	0.14	0.00	0.00	0.10	0.21	4.35	1	0	1	1	0	0	1	1	1	0
mdrg_403	3156	0.66	0.00	0.43	0.64	0.86	10.00	0	1	0	0	0	0	0	0	0	0
mdrg_404	3156	5.80	0.00	3.63	5.20	7.07	66.67	1	1	0	0	0	0	0	0	0	0
mdrg_408	3156	1.56	0.00	0.75	1.28	2.04	22.22	0	1	0	0	0	0	0	0	0	0
mdrg_409	3156	1.76	0.00	0.76	1.39	2.25	75.76	1	1	0	0	0	0	0	0	0	0
mdrg_410	3156	3.65	0.00	1.81	2.88	4.32	50.00	1	1	0	0	0	0	0	0	0	0
mdrg_416	3156	0.83	0.00	0.46	0.75	1.09	21.74	1	0	0	0	0	0	0	0	0	0
mdrg_501	3156	0.04	0.00	0.00	0.00	0.05	1.06	0	0	0	1	1	1	1	1	0	0
mdrg_502	3156	0.01	0.00	0.00	0.00	0.01	1.07	0	0	1	0	0	1	1	1	0	0
mdrg_503	3156	0.21	0.00	0.00	0.00	0.22	14.93	0	0	0	1	1	1	1	1	0	0

Risk factor	N	Mean	Min	Q1	Med	Q3	Max	PSI 03	PSI 06	PSI 08	PSI 09	PSI 10	PSI 11	PSI 12	PSI 13	PSI 14	PSI 15
mdrg_505	3156	0.07	0.00	0.00	0.00	0.09	4.18	1	0	0	0	1	1	1	1	0	0
mdrg_506	3156	0.01	0.00	0.00	0.00	0.00	0.86	0	0	0	1	1	1	1	1	0	0
mdrg_507	3156	0.15	0.00	0.00	0.00	0.25	7.44	1	0	0	1	1	1	0	1	0	0
mdrg_508	3156	0.20	0.00	0.00	0.00	0.25	22.57	1	0	0	1	1	1	1	1	0	0
mdrg_509	3156	0.15	0.00	0.00	0.11	0.23	4.76	1	0	0	0	1	1	1	1	0	0
mdrg_510	3156	0.43	0.00	0.00	0.36	0.71	5.78	1	1	1	0	1	1	1	1	0	0
mdrg_511	3156	1.00	0.00	0.00	0.82	1.68	15.22	1	1	1	1	1	1	1	1	0	0
mdrg_512	3156	0.01	0.00	0.00	0.00	0.01	0.43	0	1	0	0	0	1	1	1	0	0
mdrg_513	3156	0.07	0.00	0.00	0.03	0.11	8.70	1	0	0	1	0	1	1	1	0	0
mdrg_514	3156	0.44	0.00	0.00	0.27	0.71	29.82	1	0	1	1	1	1	1	1	0	0
mdrg_515	3156	0.04	0.00	0.00	0.02	0.05	1.21	1	0	0	0	0	1	1	0	0	0
mdrg_517	3156	0.05	0.00	0.00	0.02	0.08	1.49	1	1	0	0	0	1	1	1	0	0
mdrg_518	3156	0.00	0.00	0.00	0.00	0.00	1.75	0	0	0	0	0	0	1	0	0	0
mdrg_519	3156	0.08	0.00	0.00	0.06	0.12	3.51	1	0	1	0	1	1	1	1	1	1
mdrg_536	3156	0.01	0.00	0.00	0.00	0.00	0.60	0	0	0	0	1	1	0	1	0	0
mdrg_537	3156	0.01	0.00	0.00	0.00	0.02	0.32	1	1	0	0	0	1	1	1	0	0
mdrg_538	3156	0.02	0.00	0.00	0.00	0.04	0.60	1	1	0	0	1	1	1	1	0	0
mdrg_539	3156	0.05	0.00	0.00	0.00	0.08	1.71	1	1	1	0	0	1	1	1	0	0
mdrg_540	3156	0.36	0.00	0.00	0.00	0.12	14.09	1	0	1	1	1	1	1	1	0	0
mdrg_541	3156	0.11	0.00	0.00	0.00	0.18	3.83	0	0	1	0	1	1	1	1	0	0
mdrg_542	3156	0.30	0.00	0.00	0.21	0.50	4.13	1	0	1	1	1	1	0	1	0	0
mdrg_543	3156	0.36	0.00	0.00	0.00	0.28	15.80	1	0	1	1	1	1	1	1	0	0
mdrg_601	3156	0.27	0.00	0.05	0.17	0.32	27.66	1	0	1	0	0	1	1	1	0	1
mdrg_602	3156	1.17	0.00	0.58	1.07	1.54	26.96	1	0	1	0	0	1	0	1	1	1
mdrg_603	3156	0.01	0.00	0.00	0.00	0.01	3.48	0	0	0	0	0	1	1	1	0	0
mdrg_604	3156	0.20	0.00	0.08	0.18	0.28	2.13	0	0	1	1	0	1	1	1	0	0
mdrg_605	3156	0.07	0.00	0.00	0.05	0.09	1.02	0	0	0	1	0	1	1	1	0	0
mdrg_606	3156	0.06	0.00	0.00	0.04	0.08	1.92	0	0	0	0	0	1	1	1	0	0
mdrg_607	3156	0.05	0.00	0.00	0.03	0.07	1.14	0	0	1	0	0	1	1	1	0	0

Risk factor	N	Mean	Min	Q1	Med	Q3	Max	PSI 03	PSI 06	PSI 08	PSI 09	PSI 10	PSI 11	PSI 12	PSI 13	PSI 14	PSI 15
mdrg_608	3156	0.04	0.00	0.00	0.02	0.06	1.72	1	0	0	0	0	1	1	1	0	0
mdrg_609	3156	0.08	0.00	0.00	0.07	0.12	0.91	1	0	1	0	0	1	1	1	0	0
mdrg_610	3156	0.14	0.00	0.04	0.11	0.19	7.91	1	0	0	0	0	1	1	1	0	0
mdrg_611	3156	0.12	0.00	0.00	0.10	0.18	7.14	0	0	1	0	0	1	1	1	1	0
mdrg_614	3156	0.24	0.00	0.10	0.23	0.34	3.70	0	1	0	0	0	0	0	0	0	0
mdrg_701	3156	0.06	0.00	0.00	0.00	0.03	1.92	1	1	0	1	0	1	1	1	0	1
mdrg_702	3156	0.02	0.00	0.00	0.00	0.02	2.17	0	0	0	0	1	1	0	1	0	1
mdrg_703	3156	0.00	0.00	0.00	0.00	0.00	0.27	0	0	0	0	0	1	0	0	0	0
mdrg_704	3156	0.05	0.00	0.00	0.02	0.06	2.48	0	0	0	0	1	1	1	1	0	1
mdrg_705	3156	0.50	0.00	0.26	0.48	0.69	4.58	1	0	1	1	1	1	1	1	0	0
mdrg_706	3156	0.01	0.00	0.00	0.00	0.01	0.49	0	0	0	0	0	1	1	1	0	1
mdrg_707	3156	0.02	0.00	0.00	0.00	0.03	0.35	0	1	0	0	0	1	1	1	0	1
mdrg_7701	3156	0.01	0.00	0.00	0.00	0.00	1.11	1	0	0	1	1	1	1	1	0	1
mdrg_7702	3156	0.01	0.00	0.00	0.00	0.00	0.78	1	1	0	1	1	1	0	1	0	0
mdrg_7703	3156	0.00	0.00	0.00	0.00	0.00	0.87	0	0	0	1	1	0	1	1	0	0
mdrg_7704	3156	0.00	0.00	0.00	0.00	0.00	0.41	0	0	0	1	0	0	0	0	0	0
mdrg_7706	3156	0.00	0.00	0.00	0.00	0.00	0.06	0	0	0	1	0	0	0	0	0	0
mdrg_7707	3156	0.00	0.00	0.00	0.00	0.00	0.00	1	0	1	0	0	0	0	0	0	0
mdrg_801	3156	1.03	0.00	0.00	0.06	0.54	74.32	1	0	1	0	0	1	1	0	0	0
mdrg_802	3156	0.08	0.00	0.00	0.00	0.06	14.36	0	0	0	0	0	1	1	1	0	0
mdrg_803	3156	0.74	0.00	0.00	0.12	0.48	52.00	0	0	1	1	0	1	0	0	0	0
mdrg_804	3156	0.06	0.00	0.00	0.00	0.01	11.24	0	0	0	0	0	1	1	1	0	0
mdrg_805	3156	0.17	0.00	0.03	0.11	0.20	7.08	0	0	0	1	1	0	0	1	1	0
mdrg_806	3156	0.66	0.00	0.04	0.24	0.57	50.00	1	0	0	0	0	1	1	1	0	0
mdrg_807	3156	2.54	0.00	0.16	0.58	1.54	100.00	1	1	0	1	1	1	1	1	0	0
mdrg_808	3156	0.47	0.00	0.00	0.08	0.34	33.33	0	0	1	1	0	1	1	1	0	0
mdrg_809	3156	0.07	0.00	0.00	0.05	0.11	2.38	1	0	0	0	0	1	1	0	0	0
mdrg_810	3156	0.10	0.00	0.00	0.06	0.14	4.35	0	0	0	0	0	1	1	0	0	0
mdrg_811	3156	1.54	0.00	0.86	1.52	2.10	16.67	1	0	0	1	0	0	1	0	0	0

Risk factor	N	Mean	Min	Q1	Med	Q3	Max	PSI 03	PSI 06	PSI 08	PSI 09	PSI 10	PSI 11	PSI 12	PSI 13	PSI 14	PSI 15
mdrg_812	3156	0.45	0.00	0.00	0.10	0.26	29.25	0	0	1	1	0	1	1	1	0	0
mdrg_813	3156	0.08	0.00	0.00	0.04	0.09	2.48	0	0	1	0	1	1	1	0	0	0
mdrg_814	3156	0.09	0.00	0.00	0.02	0.07	10.39	0	0	0	0	0	1	1	1	0	0
mdrg_815	3156	0.20	0.00	0.00	0.04	0.19	25.53	0	0	1	1	0	1	1	0	0	0
mdrg_816	3156	0.39	0.00	0.16	0.33	0.52	8.70	1	0	1	1	0	1	1	1	0	0
mdrg_817	3156	0.05	0.00	0.00	0.00	0.05	4.91	0	0	0	0	0	1	1	0	0	0
mdrg_819	3156	0.11	0.00	0.00	0.08	0.14	4.35	0	0	0	0	0	0	1	0	0	0
mdrg_820	3156	0.06	0.00	0.00	0.03	0.08	2.83	0	0	0	0	0	1	1	0	0	0
mdrg_821	3156	0.00	0.00	0.00	0.00	0.00	0.43	1	0	0	0	0	0	0	0	0	0
mdrg_824	3156	0.06	0.00	0.00	0.04	0.09	1.60	0	0	0	0	0	1	1	0	0	0
mdrg_825	3156	0.02	0.00	0.00	0.00	0.03	1.69	0	0	0	0	0	0	1	0	0	0
mdrg_826	3156	0.28	0.00	0.00	0.15	0.32	54.76	0	0	0	0	0	1	1	1	0	0
mdrg_832	3156	0.08	0.00	0.00	0.05	0.11	25.00	1	0	0	0	0	0	0	0	0	0
mdrg_841	3156	0.84	0.00	0.42	0.79	1.13	16.67	0	1	0	1	0	1	1	1	0	0
mdrg_901	3156	0.03	0.00	0.00	0.00	0.02	12.50	0	0	0	0	0	1	0	0	0	0
mdrg_902	3156	0.03	0.00	0.00	0.00	0.02	5.13	0	0	0	1	0	0	0	0	0	0
mdrg_903	3156	0.20	0.00	0.07	0.15	0.23	33.33	1	0	1	1	0	1	1	1	0	0
mdrg_904	3156	0.02	0.00	0.00	0.00	0.00	11.54	0	0	0	1	0	0	0	1	0	0
mdrg_905	3156	0.03	0.00	0.00	0.00	0.01	47.44	0	0	0	1	0	0	0	1	0	0
mdrg_906	3156	0.11	0.00	0.00	0.07	0.13	7.14	1	0	0	0	0	0	0	0	0	0
mdrg_913	3156	0.11	0.00	0.02	0.08	0.14	4.35	0	0	0	0	0	1	0	1	0	0

Example interpretation of distributions: for the risk factor Age\_30\_34 (indicator for whether a patient is 30-34 years old), the mean of 0.67 indicates that on average (across hospitals), 0.67% of discharges in a hospital were associated with 30–34-year-old patients.

The PSI columns of this table indicate whether the risk factor was included in the final risk adjustment model for that PSI component (1 = included; 0 = not included).

**Table 9 (6.2.4): Progress on Improvement**

Year	# Providers Reporting	Provider 10th Percentile	Provider 25th Percentile	Provider 50th Percentile	Provider 75th Percentile	Provider 90th Percentile
2013	3410	0.7	0.7	0.8	0.9	1.1
2014	3404	0.6	0.7	0.8	0.9	1.0
2015	3422	0.7	0.8	0.9	1.0	1.1
2016	3383	0.9	0.9	1.0	1.0	1.2
2017	3338	0.8	0.9	1.0	1.1	1.2
2018	3313	0.8	0.9	1.0	1.1	1.2
2019	3293	0.8	0.9	1.0	1.1	1.2
2020	3255	0.8	0.9	1.0	1.0	1.2
2021	3106	0.8	0.9	1.0	1.0	1.2

Source: Centers for Medicare & Medicaid Services. 2024 National Impact Assessment of the Centers for Medicare & Medicaid Services (CMS) Quality Measures Report. Baltimore, MD: U.S. Department of Health and Human Services; 2024. Available at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures/National-Impact-Assessment-of-the-Centers-for-Medicare-and-Medicaid-Services-CMS-Quality-Measures-Reports>