Inpatient Quality Indicators

Technical Report

Hospital Performance Dashboard

A Supplement to the

Hospital Performance Report

2021 Data

Health Care Quality Assessment

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Executive Summary

The Office of Health Care Quality Assessment (HCQA) of the New Jersey Department of Health assesses health care quality using qualitative and quantitative data reported by hospitals to support performance monitoring related to patient care and safety. Specifically, HCQA produces consumer reports on cardiac surgery, hospital performance, and hospital quality indicators; reviews confidential reports and root-cause analyses of reportable medical errors; and maintains several databases to support licensure requirements. In order to enhance information that the Department provides to the public regarding quality of hospital care, HCQA staff apply statistical tools developed by the federal agency called Agency for Healthcare Research and Quality (AHRQ) to the New Jersey hospital discharge data commonly known as Uniform Billing (UB) data. This report presents findings resulting from the application of a statistical tool known as the Inpatient Quality Indicator (IQI) module to the 2021 New Jersey hospital discharge data.

Inpatient Quality Indicators (IQIs) are a set of measures developed at the national level by the [Agency for Health Care Research and Quality (AHRQ)](#) to provide a perspective on the quality of patient care given by hospitals. Quality of care is measured using: 1) in-hospital mortality for certain procedures and medical conditions; 2) utilization of procedures for which there are questions of overuse, underuse, or misuse; and 3) volume of procedures for which there is some evidence that a higher volume of procedures is associated with lower mortality. AHRQ spent years of research and analysis to define these indicators as measures of healthcare quality.

Since 2009, the Department has been reporting on **heart attack, heart failure, pneumonia and stroke** mortality levels as part of the '**Outcome of Care Measurers'**. These indicators were recommended by the "The Governor's Commission on Rationalizing Health Care Resources" to create the 'Hospital Performance Dashboard' as a supplement to the Hospital Performance Report.

The data in this report present mortality during hospitalization in each of the 71 licensed hospitals currently operating in the state. For each of the four selected IQIs, risk-adjusted rates are provided along with confidence intervals to help make a statistical assessment of patient care in the hospital. Statewide and national estimates are also provided to help compare hospital performance to the state or to the national rates.

Comparison of a hospital's rate to the statewide rate (presented in the top row of each of the IQIs tables) is one way to assess how well that hospital performed among its peers in the state. A hospital's peers could be defined at many levels (e.g., teaching hospitals, urban hospitals, suburban hospitals, etc.). It is suggested that a hospital's performance be assessed by looking at its performance across the four IQIs estimates presented in the tables.

The 2021 New Jersey data shows that there are substantial variations in risk-adjusted rates of outcome by hospital. Some hospitals exhibit significantly higher risk-adjusted rates than the corresponding statewide rates while others have significantly lower rates than the statewide rates.

Some Highlights

- Statewide, in 2021 there were a total of 788 in-hospital deaths due to ACUTE MYOCARDIAL INFARCTION – AMI for a risk-adjusted mortality rate of 5.6 per 100 discharges (for patients ages 18 years and older) with a principal ICD-10-CM diagnosis code for AMI. Table 1 shows the distribution of these heart attack (AMI) deaths by hospital.

- Statewide, there were 1,660 in-hospital deaths from PNEUMONIA in 2021, for a risk-adjusted rate of 5.3 per 100 discharges (for patients ages 18 years and older) with a principal ICD-10-CM diagnosis code for pneumonia. Hospital-specific rates for this indicator ranged from a low of 2.6 to a high of 14.5 per 100 discharges with pneumonia (see Table 2).

- Overall, there were 999 deaths from HEART FAILURE during hospitalization in 2021 for a risk-adjusted mortality rate of 3.0 per 100 discharges (for patients ages 18 years and older with a principal ICD-10-CM diagnosis code for heart failure). Table 3 shows the distribution of these Heart Failure deaths by hospital.

- Statewide, there were 1,104 ACUTE STROKE in-hospital deaths in 2021, for a risk-adjusted rate of 6.99 per 100 discharges (for patients ages 18 years and older and with a principal ICD-10-CM diagnosis code for subarachnoid hemorrhage or intracerebral hemorrhage or ischemic stroke). Hospital-specific rates for this indicator ranged from a low of 0.0 to a high of 19.6per 100 patients with stroke diagnosis. Table 4 shows the distribution of these total acute stroke deaths by hospital, while Tables 4.1, 4.2 and 4.3 present the breakdown of these deaths by SUBARACHNOID HEMORRHAGE STROKE, INTRACEREBRAL HEMORRHAGIC STROKE, and ISCHEMIC HEMORRHAGIC STROKE, by hospital.

- Compared to the national estimates, New Jersey appeared to have death rates that are higher than the national averages for AMI, Pneumonia, Heart Failure, and Stroke.

Essential Information about the IQIs Rates Calculations

The AHRQ Inpatient Quality Indicators (IQI) module software produces *observed rates*, *expected rates*, and *risk-adjusted rates* for mortality and utilization indicators. Explanation of these rates follows:

Observed Rates - An observed mortality rate is defined as the number of patient deaths for a specific condition or surgical procedure divided by the total number of patients admitted for the condition or surgical procedure being treated. Similarly, an observed utilization rate is defined as the number of patient cases for a specific procedure divided by the total number of patients admitted for the condition being treated. Consumers can consider observed rates as crude measures of performance. By comparing observed rates to risk-adjusted rates, consumers can see the impact of patient case-mix on that hospital's performance.

Expected Rates - Unlike observed rates, expected rates are derived from applying the average case-mix of a reference population file that reflects a large proportion of the U.S. hospitalized or residential population. The expected mortality rate for a hospital is the hospital's observed rate divided by the hospital's risk-adjusted rate, multiplied by the state average risk-adjusted rate. This adjustment is done to reflect an expectation of hospital performance if that hospital had performed at the level of the state average. While comparing a hospital's risk-adjusted mortality rate to its expected mortality rate provides a measure of the hospital's performance, this comparison will not show if a hospital's mortality rate is statistically significantly different from the state's average mortality rate.

Risk-adjusted rates - In order, for a provider's performance rate to present an accurate indicator of quality of care, the data must be adjusted to account for differences in patients' severity of illness and risk of mortality. "All Patient Refined Diagnosis Related Groups" ("APR-DRGs") is a proprietary tool of the 3M Health Information Systems Corporation designed to use UB data to adjust for these patient differences. The AHRQ quality indicators methodology requires use of APR-DRGs in the analysis of UB data. APR-DRG variables take advantage of available UB data on patient co-morbidities and non-operating room procedures and allow the interaction of the patient's secondary diagnoses, principal diagnoses, and age to influence the assignment of that patient to one of four classes of severity and risk of mortality classes: low, moderate, high and very high. This risk adjustment enables comparisons among hospitals, counties, and/or states with different mixes of patients.

AHRQ's risk-adjusted rates are derived from applying to the observed rates, the average case-mix of a baseline data file derived from the HCUP State Inpatient Data (SID) from all participating States (i.e. 49 States as of 2021). The risk-adjusted rate is the best estimate of what the hospital's rates would have been if the hospital had a mix of patients identical to a national-average patient mix for the year in question. The risk-adjusted rates

reflect the age and sex distribution as well as the APR-DRG distribution of the data in the baseline file. This risk adjustment procedure enables comparisons among hospitals, counties, and/or states with different mixes of patients. Now that hospitals report present on admission (POA) indicators, the 3M APR DRG Software calculates an "admission APR DRG" for each patient to enable quality improvement professionals use the POA and admission APR-DRG data to organize efforts to reduce hospital-acquired conditions and other complications. POA also makes it possible to measure risk of mortality at admission, helping hospitals adopt more meaningful mortality reduction strategies.

Comparing Observed Rates with Risk-adjusted Rates - The purpose of the analysis determines which rates the user should look at in evaluating the performance of a provider. If the user's primary interest is to focus on a particular provider without any comparisons to other providers, then he/she can simply examine the overall observed rate for the entire provider, as well as further breakdowns by age, sex, payer, and race/ethnicity. If the purpose of the analysis is to compare the performance of a particular provider with national, state, or regional averages or performances of other selected providers, then both the observed and risk-adjusted rates should be examined. Variation in observed rates across providers is attributable to a variety of factors including differences in patient case-mix or population demographics, disparity in access to and quality of care, and other provider characteristics. Comparing observed and risk-adjusted rates can reveal if there is any difference between the provider's patient population and the patient population of other providers.

Users can use this information to assess the quality of care inside a hospital, which is useful when making decisions about where to go for treatment. This information, however, is not intended to be used alone, when making these decisions. Consider the results of all the different data sources that measure quality of care within a hospital. Since IQIs use hospital inpatient discharge data, hospitals can use the IQIs to identify areas within the hospital that need improvement.

The footnote labels, "better than statewide average" and "worse than statewide average", shown at the bottom of each table describe the interpretation of the IQI mortality rates in a meaningful way. These labels help identify hospitals that have better than average, average, or worse than average performances compared to the statewide performance, which is shown on the top row of the table and labeled "Statewide Rate."

When a hospital's rate is marked by a single asterisk, it means the hospital's performance is better than the statewide average, meaning fewer deaths than the statewide average deaths for a given condition. Likewise, when a hospital's rate is marked by double asterisks, it means the hospital's performance is worse than the statewide average, meaning more deaths than the statewide average. When a hospital's rate is not marked by an asterisk, it means the hospital's performance is the same as or similar to the statewide rate.

Hospital rates are determined after adjusting for the risk factors of their patients. A hospital's rate is 'worse than average' if its 95% confidence interval falls completely above the statewide rate. By comparison, a hospital's rate is 'better than average' if its 95% confidence interval falls completely below the statewide rate.

Some rates that appear very large are not marked as 'worse than average' while others that appear very small are not marked as 'better than average'. The reason for such cases may be, that rates calculated from small numbers of events tend to have wider confidence intervals that make the statewide rate fall within the interval, giving the appearance of good performance by that hospital compared to a hospital whose rate is based on a higher volume.

If observed rate > risk-adjusted rate then: the provider's patient population for the condition or procedure has a *higher* risk of mortality due to its case-mix (for example, older patients or a greater proportion of a higher-risk APR-DRG).

If observed rate < Risk-adjusted rate then: the provider's patient population for the condition or procedure has a *lower* risk of mortality due to its case-mix (for example, younger or a greater proportion of a lower-risk APR-DRG).

If observed rate = risk-adjusted rate then: the provider's patient case-mix for the condition or procedure is similar to other providers', suggesting that patient composition is not a contributing factor to the provider's performance for the mortality indicator.

The tables in this report present results of analysis made on the IQIs recommended for "Hospital Performance Dashboard" based on the 2021 UB data. The tables show the number of in-hospital deaths (numerator), the number of discharges (denominator), the observed, the expected, and the risk-adjusted mortality rates for each of the four indicators selected for the dashboard. Risk-adjusted rates are given along with their respective 95% confidence intervals.

Basic Descriptions of the IQIs - Heart Attack, Pneumonia, Heart Failure, and Stroke

This section presents brief descriptions of each of the 4 IQIs and why it is important to report them publicly. As stated earlier, these indicators of healthcare quality are recommended to be reported as part of the "Outcome of Care" measures alongside other indicators presented in the Hospital Performance Report. Evidence has shown that with good care, deaths from these conditions can be minimized considerably.

Acute Myocardial Infarction (AMI)

AMI is a heart attack and can occur if the arteries supplying blood to the heart are blocked, and the blood supply is slowed or stopped. When arteries are blocked, the heart can't get the oxygen and nutrients it needs to function properly. **Symptoms** of AMI can include chest pain (crushing, squeezing or burning pain in the center of the chest which may radiate to the arm or jaw), shortness of breath, dizziness, faintness, chills, sweating or

nausea. Skin may feel cold or clammy, and patients may appear gray and look ill. Sometimes there are no symptoms.

This indicator measures the chance or likelihood that a heart attack patient admitted in a given hospital will die from that condition during hospitalization. According to the American Heart Association, if a heart attack victim gets to an emergency room fast enough, prompt care dramatically reduces heart damage. Timely and effective treatments for acute myocardial infarction (AMI), which are essential for patient survival, include appropriate use of revascularization or thrombolytic therapy. The indicator is defined as the number of deaths per 100 patients with a principal diagnosis code (ICD-10-CM) of AMI (age 18 years and older). For inclusion and exclusion criteria in calculating this rate, visit: http://www.qualityindicators.ahrq.gov/Modules/IQI_TechSpec.aspx

This information is important because it tells you how well hospitals take care of their heart attack patients. This measure takes into consideration several factors such as how quickly hospital staff treats a heart attack patient once they are in the emergency room.

Table 1: IN-HOSPITAL MORTALITY RATES FOR ACUTE MYOCARDIAL INFARCTION - AMI (Deaths per 100 conditions)

(Indicator Recommended for Hospital Performance Dashboard)

Hospital	# of Deaths	# of Patients	Observed Rate	Expected Rate	Risk-Adjusted Rate	95% Confidence Interval LL - UL
National	**27,395**	**555,579**	**4.9**	**NA**	**NA**	**NA - NA**
Statewide	**788**	**12,928**	**6.1**	**5.4**	**5.6**	**5.3 - 5.9**
AtlantiCare Regional Medical Center-City	1	25	4.0	3.4	5.8	0.0 - 15.7
AtlantiCare Regional Medical Center-Mainland	17	559	3.0	5.7	2.6 *	1.2 - 4.0
Bayshore Medical Center	10	98	10.2	6.9	7.2	4.2 - 10.3
Bergen New Bridge Medical Center	1	7	14.3	7.9	9.0 ^	0.0 - 20.3
Cape Regional Medical Center	7	26	26.9	9.9	13.4 **^	8.4 - 18.4
Capital Health Medical Center-Hopewell	6	78	7.7	5.6	6.8	3.1 - 10.4
Capital Health Regional Medical Center	1	26	3.8	3.5	5.4 ^	0.0 - 15.1
CarePoint Health-Bayonne Medical Center	8	106	7.5	8.2	4.6	2.3 - 6.9
CarePoint Health-Christ Hospital	10	111	9.0	6.6	6.8	3.8 - 9.8
CarePoint Health-Hoboken University Medical Center	1	38	2.6	3.7	3.6	0.0 - 11.4
CentraState Medical Center	4	35	11.4	5.7	9.8	3.5 - 16.1
Chilton Memorial Hospital	1	91	1.1	4.6	1.2 *	0.0 - 5.4
Clara Maass Medical Center	12	209	5.7	3.3	8.5	5.1 - 11.8
Community Medical Center	23	409	5.6	5.5	5.0	3.3 - 6.7
Cooper Hospital University Medical Center	41	738	5.6	4.1	6.7	5.2 - 8.2
Cooperman Barnabas Medical Center	15	284	5.3	4.1	6.3	3.8 - 8.8
Deborah Heart and Lung Center	20	364	5.5	3.6	7.6	5.2 - 10.0
East Orange General Hospital	3	28	10.7	4.1	12.9	4.4 - 21.5
Englewood Hospital and Medical Center	16	278	5.8	4.5	6.4	3.9 - 8.8
Hackensack Meridian Health, Mountainside MC	7	79	8.9	11.3	3.9	1.6 - 6.1
Hackensack Meridian Health-Pascack Valley MC	1	4	25.0	7.6	16.3 ^	0.0 - 32.9
Hackensack University Medical Center	45	807	5.6	6.1	4.5	3.4 - 5.6
Hackettstown Medical Center	1	16	6.3	7.5	4.1 ^	0.0 - 11.1
Holy Name Medical Center	8	173	4.6	4.3	5.3	2.3 - 8.3
Hudson Regional Hospital	0	12	0.0	3.6	0.0 ^	0.0 - 14.3
Hunterdon Medical Center	4	75	5.3	7.1	3.7	0.3 - 7.1
Inspira Medical Center Elmer	0	17	0.0	4.5	0.0 ^	0.0 - 10.1
Inspira Medical Center Mullica Hill	7	157	4.5	6.1	3.6	1.1 - 6.1
Inspira Medical Center Vineland	12	188	6.4	7.6	4.2	2.1 - 6.2
Jefferson Cherry Hill Hospital	2	35	5.7	7.8	3.6	0.0 - 8.0
Jefferson Stratford Hospital	4	19	21.1	12.2	8.5 ^	4.4 - 12.6
Jefferson Washington Township Hospital	6	77	7.8	6.2	6.2	2.3 - 10.1
Jersey City Medical Center	21	318	6.6	4.0	8.1 **	5.8 - 10.5
Jersey Shore University Medical Center	41	861	4.8	4.9	4.7	3.5 - 6.0
JFK University Medical Center	21	335	6.3	3.9	7.9	5.5 - 10.2
Monmouth Medical Center	7	54	13.0	5.8	11.1 **	6.5 - 15.7
Monmouth Medical Center Southern Campus	2	12	16.7	9.2	8.9 ^	0.9 - 16.9
Morristown Medical Center	45	894	5.0	6.2	4.0 *	3.0 - 5.0
Newark Beth Israel Medical Center	18	252	7.1	5.0	7.0	4.8 - 9.3
Newton Medical Center	7	94	7.4	8.5	4.3	1.6 - 7.0
Ocean University Medical Center	13	172	7.6	6.2	6.1	3.5 - 8.6
Overlook Medical Center	14	251	5.6	7.5	3.7 *	2.0 - 5.3
Palisades Medical Center	4	41	9.8	5.9	8.1	3.3 - 13.0
Penn Medicine Princeton Medical Center	8	91	8.8	7.3	5.9	2.7 - 9.2
Raritan Bay Medical Center-Old Bridge	2	86	2.3	5.2	2.2	0.0 - 6.2

Table 1: IN-HOSPITAL MORTALITY RATES FOR ACUTE MYOCARDIAL INFARCTION - AMI (Deaths per 100 conditions)

(Indicator Recommended for Hospital Performance Dashboard)

Hospital	# of Deaths	# of Patients	Observed Rate	Expected Rate	Risk-Adjusted Rate	95% Confidence Interval LL - UL
National	**27,395**	**555,579**	**4.9**	**NA**	**NA**	**NA - NA**
Statewide	**788**	**12,928**	**6.1**	**5.4**	**5.6**	**5.3 - 5.9**
Raritan Bay Medical Center-Perth Amboy	3	84	3.6	5.0	3.5	0.0 - 7.3
Riverview Medical Center	5	182	2.7	4.5	3.0	0.2 - 5.9
Robert Wood Johnson University Hospital	57	800	7.1	5.0	7.1 **	5.8 - 8.4
Robert Wood Johnson University Hospital Hamilton	4	55	7.3	7.1	5.1	1.4 - 8.8
Robert Wood Johnson University Hospital Rahway	7	65	10.8	5.9	9.1	5.1 - 13.1
Robert Wood Johnson University Hospital Somerset	11	204	5.4	4.9	5.4	2.8 - 7.9
Saint Clare's Hospital-Denville	13	109	11.9	10.9	5.4	3.3 - 7.5
Saint Clare's Hospital-Dover	2	19	10.5	8.3	6.3 ^	0.0 - 13.4
Saint Michael's Medical Center	5	97	5.2	5.2	4.9	1.2 - 8.6
Saint Peter's University Hospital	9	66	13.6	5.1	13.3 **	8.7 - 17.9
Salem Medical Center	2	9	22.2	4.1	26.7 **^	11.2 - 42.1
Shore Medical Center	3	8	37.5	15.2	12.1 ^	5.0 - 19.3
Southern Ocean Medical Center	1	40	2.5	4.8	2.6	0.0 - 9.1
St. Francis Medical Center	8	266	3.0	3.4	4.4	1.7 - 7.2
St. Joseph's University Medical Center	35	452	7.7	5.9	6.5	5.0 - 8.0
St. Joseph's Wayne Medical Center	0	32	0.0	4.1	0.0	0.0 - 8.1
St. Luke's Warren Hospital	0	4	0.0	5.5	0.0 ^	0.0 - 20.0
St. Mary's General Hospital	13	132	9.8	6.9	7.0	4.3 - 9.7
Trinitas Regional Medical Center	8	91	8.8	5.8	7.5	4.2 - 10.8
University Hospital	5	120	4.2	4.3	4.8	0.9 - 8.6
Valley Hospital	29	349	8.3	6.7	6.2	4.5 - 7.8
Virtua Memorial Hospital of Burlington County	14	168	8.3	4.8	8.6	5.5 - 11.7
Virtua Our Lady of Lourdes Hospital-Camden	48	618	7.8	5.1	7.5	6.1 - 8.9
Virtua West Jersey Hospital-Marlton	7	236	3.0	4.3	3.4	0.7 - 6.1
Virtua West Jersey Hospital-Voorhees	1	64	1.6	2.8	2.7	0.0 - 9.5
Virtua Willingboro Hospital	1	28	3.6	4.1	4.3 ^	0.0 - 12.9

Source: National numbers are derived from 2019 National Inpatient Sample (NIS) Data using the AHRQ SAS Software, Version 2022 while New Jersey's are calculated from the **2021 NJ UB Data** using the same software version.

^ = Rate is based on a denominator less than 30 and should be taken with caution.

* = Statistically significantly below state average, ** = Statistically significantly above state average.

NA = National Rates are not risk-adjusted.

Expected rate is the rate the hospital would have if it had the same case-mix (e.g., age, gender, DRG, and comorbidity categories) as the reference or statewide population. If the observed rate is higher than the expected rate (i.e., the ratio of observed to expected is greater than 1.0), it suggests that the hospital performed worse than the reference population on that indicator.

Pneumonia

Pneumonia is an inflammation of the lungs caused by an infection. Many different organisms can cause pneumonia, including bacteria, viruses and fungi. Pneumonia can range from very mild to very severe, even fatal, depending on the type of organism causing it as well as the age and current health of the individual. **Symptoms** for pneumonia can include fever, fatigue, difficulty breathing, chills, "wet" cough and chest pain. Pneumonia typically is treated with antibiotics, sometimes in an outpatient setting. However, death may occur even when the patient is in the hospital, especially in patients with weakened respiratory systems or other chronic health problems. There is a significant impact on outcomes from patient co-morbid factors as well as physician admitting practices (since there is variation in the criteria physicians use to admit patients for inpatient treatment).

This indicator measures the chance or likelihood that a pneumonia patient admitted in a given hospital will die from that condition during hospitalization. In-hospital pneumonia mortality rate is defined as deaths per 100 discharges with principal (ICD-10-CM) diagnosis code of pneumonia (age 18 years and older). For inclusion and exclusion criteria in calculating this rate,

visit: http://www.qualityindicators.ahrq.gov/Modules/IQI_TechSpec.aspx

This information is important because it tells you how well hospitals take care of their pneumonia patients.

Table 2: IN-HOSPITAL MORTALITY RATES FOR PNEUMONIA (Deaths per 100 conditions)

(Indicator Recommended for Hospital Performance Dashboard)

Hospital	# of Deaths	# of Patients	Observed Rate	Expected Rate	Risk-Adjusted Rate	95% Confidence Interval LL - UL
National	53,730	1,257,551	4.3	NA	NA	NA - NA
Statewide	1,660	23,151	7.2	5.8	5.3	5.1 - 5.5
AtlantiCare Regional Medical Center-City	13	201	6.5	6.5	4.2	2.3 - 6.1
AtlantiCare Regional Medical Center-Mainland	32	428	7.5	5.6	5.7	4.2 - 7.2
Bayshore Medical Center	15	367	4.1	5.8	3.0 *	1.4 - 4.7
Bergen New Bridge Medical Center	3	53	5.7	7.0	3.5	0.0 - 7.3
Cape Regional Medical Center	14	335	4.2	3.8	4.8	2.6 - 6.9
Capital Health Medical Center-Hopewell	35	272	12.9	6.8	8.0 **	6.4 - 9.6
Capital Health Regional Medical Center	23	210	11.0	5.1	9.2 **	6.8 - 11.5
CarePoint Health-Bayonne Medical Center	19	173	11.0	5.7	8.2 **	5.9 - 10.4
CarePoint Health-Christ Hospital	6	110	5.5	4.2	5.6	2.1 - 9.1
CarePoint Health-Hoboken University Medical Center	9	107	8.4	4.4	8.2	4.7 - 11.8
CentraState Medical Center	32	464	6.9	4.2	7.0	5.3 - 8.6
Chilton Memorial Hospital	37	330	11.2	7.2	6.6	5.2 - 8.1
Clara Maass Medical Center	38	326	11.7	3.8	13.1 **	10.9 - 15.2
Community Medical Center	96	973	9.9	5.7	7.4 **	6.4 - 8.4
Cooper Hospital University Medical Center	24	465	5.2	4.6	4.8	3.2 - 6.4
Cooperman Barnabas Medical Center	62	559	11.1	4.9	9.6 **	8.2 - 11.1
Deborah Heart and Lung Center	3	61	4.9	6.0	3.5	0.0 - 7.6
East Orange General Hospital	17	176	9.7	6.4	6.4	4.2 - 8.6
Englewood Hospital and Medical Center	19	383	5.0	5.5	3.9	2.2 - 5.6
Hackensack Meridian Health, Mountainside MC	22	291	7.6	9.1	3.6 *	2.2 - 4.9
Hackensack Meridian Health-Pascack Valley MC	11	141	7.8	7.7	4.3	2.1 - 6.6
Hackensack University Medical Center	55	863	6.4	8.6	3.2 *	2.3 - 4.0
Hackettstown Medical Center	10	218	4.6	6.8	2.9 *	1.0 - 4.8
Holy Name Medical Center	31	412	7.5	7.0	4.6	3.3 - 5.9
Hudson Regional Hospital	5	48	10.4	3.1	14.5 **	7.8 - 21.2
Hunterdon Medical Center	23	314	7.3	5.9	5.3	3.5 - 7.1
Inspira Medical Center Elmer	4	59	6.8	4.4	6.5	1.8 - 11.3
Inspira Medical Center Mullica Hill	19	340	5.6	5.1	4.6	2.8 - 6.5
Inspira Medical Center Vineland	30	499	6.0	5.8	4.4	3.0 - 5.8
Jefferson Cherry Hill Hospital	8	198	4.0	4.1	4.2	1.4 - 6.9
Jefferson Stratford Hospital	4	133	3.0	3.1	4.2	0.2 - 8.1
Jefferson Washington Township Hospital	31	319	9.7	4.9	8.4 **	6.5 - 10.3
Jersey City Medical Center	24	257	9.3	4.6	8.7 **	6.7 - 10.8
Jersey Shore University Medical Center	21	574	3.7	6.0	2.6 *	1.3 - 3.9
JFK University Medical Center	64	895	7.2	7.0	4.4	3.4 - 5.3
Monmouth Medical Center	14	189	7.4	4.9	6.5	4.0 - 8.9

Monmouth Medical Center Southern Campus	32	328	9.8	4.9	8.5 **	6.6 - 10.4
Morristown Medical Center	43	780	5.5	7.4	3.2 *	2.2 - 4.1
Newark Beth Israel Medical Center	43	321	13.4	4.8	11.8 **	10.0 - 13.7
Newton Medical Center	21	382	5.5	7.9	3.0 *	1.7 - 4.3
Ocean University Medical Center	22	674	3.3	4.8	2.9 *	1.6 - 4.3
Overlook Medical Center	46	584	7.9	8.2	4.1 *	3.0 - 5.2
Palisades Medical Center	23	313	7.3	7.0	4.5	2.9 - 6.1
Penn Medicine Princeton Medical Center	16	287	5.6	5.6	4.2	2.4 - 6.1
Raritan Bay Medical Center-Old Bridge	16	258	6.2	5.5	4.9	2.9 - 6.8
Raritan Bay Medical Center-Perth Amboy	8	153	5.2	4.4	5.1	2.2 - 7.9
Riverview Medical Center	14	310	4.5	6.6	2.9 *	1.3 - 4.5
Robert Wood Johnson University Hospital	44	551	8.0	4.7	7.3 **	5.8 - 8.8
Robert Wood Johnson University Hospital Hamilton	15	309	4.9	3.9	5.3	3.0 - 7.6
Robert Wood Johnson University Hospital Rahway	41	352	11.6	5.5	9.0 **	7.3 - 10.7
Robert Wood Johnson University Hospital Somerset	56	536	10.4	5.8	7.7 **	6.4 - 9.1
Saint Clare's Hospital-Denville	10	183	5.5	6.4	3.7	1.6 - 5.7
Saint Clare's Hospital-Dover	14	178	7.9	7.1	4.8	2.6 - 6.9
Saint Michael's Medical Center	9	168	5.4	5.6	4.1	1.8 - 6.4
Saint Peter's University Hospital	13	293	4.4	5.6	3.4 *	1.5 - 5.2
Salem Medical Center	2	107	1.9	2.8	2.8	0.0 - 7.4
Shore Medical Center	17	295	5.8	3.9	6.4	4.1 - 8.7
Southern Ocean Medical Center	13	356	3.7	5.3	3.0 *	1.2 - 4.7
St. Francis Medical Center	7	86	8.1	5.1	6.8	3.1 - 10.4
St. Joseph's University Medical Center	36	502	7.2	6.5	4.7	3.4 - 5.9
St. Joseph's Wayne Medical Center	24	268	9.0	9.0	4.2	2.8 - 5.7
St. Luke's Warren Hospital	11	173	6.4	6.1	4.5	2.2 - 6.8
St. Mary's General Hospital	15	163	9.2	6.1	6.4	4.1 - 8.7
Trinitas Regional Medical Center	18	181	9.9	4.4	9.7 **	7.3 - 12.1
University Hospital	17	298	5.7	5.6	4.3	2.6 - 6.1
Valley Hospital	48	353	13.6	7.5	7.8 **	6.3 - 9.2
Virtua Memorial Hospital of Burlington County	17	426	4.0	3.7	4.6	2.6 - 6.5
Virtua Our Lady of Lourdes Hospital-Camden	23	202	11.4	5.9	8.2 **	6.1 - 10.2
Virtua West Jersey Hospital-Marlton	21	322	6.5	3.9	7.2	5.0 - 9.5
Virtua West Jersey Hospital-Voorhees	23	559	4.1	3.3	5.4	3.5 - 7.2
Virtua Willingboro Hospital	9	157	5.7	3.3	7.4	3.9 - 10.8

Source: National numbers are derived from 2019 National Inpatient Sample (NIS) Data using the AHRQ SAS Software, Version 2022 while New Jersey's are calculated from the **2021 NJ UB Data** using the same software version.

^ = Rate is based on a denominator less than 30 and should be taken with caution.

* = Statistically significantly below state average, ** = Statistically significantly above state average.

NA = National Rates are not risk-adjusted.

Expected rate is the rate the hospital would have if it had the same case-mix (e.g., age, gender, DRG, and comorbidity categories) as the reference or statewide population. If the observed rate is higher than the expected rate (i.e., the ratio of observed to expected is greater than 1.0), it suggests that the hospital performed worse than the reference population on that indicator.

Heart Failure (HF)

HF is a weakening of the heart's muscle which reduces its pumping power. Your body doesn't get the oxygen and nutrients it needs when the heart muscles are weak to pump blood in a normal flow. Your heart tries to pump more blood, but over time the heart muscle walls weaken thereby causing heart failure. **Symptoms** for HF can include shortness of breath from fluid in the lungs, dizziness, fatigue, weakness, cold and clammy skin, or rapid and irregular heartbeat. HF can result from coronary artery disease, heart attack, cardiomyopathy (heart muscle damage from infection, alcohol or drugs), or an overworked heart bit caused by high blood pressure, kidney disease, diabetes, or a defect from birth. HF is one of the most common and severe heart diseases affecting Americans, and one of the most common reasons for hospitalization. Congestion is the presence of an abnormal amount of fluid in the tissues, usually because of limitations in the body's ability to return the flow of blood from the arms or legs to the heart and lungs. Though HF has many possible underlying causes, the end result is an inability of the heart muscle to function well enough to meet the demands of the rest of the body.

This indicator measures the chance or likelihood that a HF patient admitted in a given hospital will die from that condition during hospitalization. The mortality rate for this measure is defined as the number of deaths per 100 patients with principal (ICD-10-CM) diagnosis code of CHF (age 18 years and older). For inclusion and exclusion criteria in calculating this rate,

visit: http://www.qualityindicators.ahrq.gov/Modules/IQI_TechSpec.aspx

This information is important because it tells you how well hospitals take care of their heart failure (HF) patients. Since HF mortality is affected by other medical problems, including lung disease, high blood pressure, cancer and liver disease, the score measures how well the hospital can control these influences.

Table 3: IN-HOSPITAL MORTALITY RATES FOR HEART FAILURE (Deaths per 100 conditions)

(Indicator Recommended for Hospital Performance Dashboard)

Hospital	# of Deaths	# of Patients	Observed Rate	Expected Rate	Risk-Adjusted Rate	95% Confidence Interval LL - UL
National	**29,800**	**1,193,490**	**2.5**	**NA**	**NA**	**NA - NA**
Statewide	**999**	**30,842**	**3.2**	**2.7**	**3.0**	**2.9 - 3.2**
AtlantiCare Regional Medical Center-City	6	304	2.0	2.3	2.2	0.4 - 3.9
AtlantiCare Regional Medical Center-Mainland	18	665	2.7	2.7	2.5	1.4 - 3.5
Bayshore Medical Center	7	279	2.5	2.4	2.6	0.8 - 4.4
Bergen New Bridge Medical Center	0	21	0.0	1.8	0.0 ^	0.0 - 7.8
Cape Regional Medical Center	14	364	3.8	2.1	4.7	2.9 - 6.4
Capital Health Medical Center-Hopewell	12	457	2.6	2.1	3.1	1.6 - 4.6
Capital Health Regional Medical Center	8	288	2.8	2.1	3.4	1.4 - 5.3
CarePoint Health-Bayonne Medical Center	6	249	2.4	1.7	3.5	1.2 - 5.8
CarePoint Health-Christ Hospital	5	289	1.7	1.4	3.0	0.7 - 5.4
CarePoint Health-Hoboken University MC	2	127	1.6	1.4	2.8	0.0 - 6.4
CentraState Medical Center	31	509	6.1	2.5	6.1 **	4.7 - 7.4
Chilton Memorial Hospital	8	346	2.3	3.6	1.6 *	0.3 - 2.9
Clara Maass Medical Center	32	570	5.6	1.7	8.3 **	6.8 - 9.8
Community Medical Center	28	968	2.9	2.3	3.1	2.1 - 4.1
Cooper Hospital University Medical Center	18	852	2.1	1.8	2.9	1.7 - 4.0
Cooperman Barnabas Medical Center	34	789	4.3	2.2	4.8 **	3.7 - 5.9
Deborah Heart and Lung Center	16	666	2.4	2.3	2.6	1.4 - 3.8
East Orange General Hospital	4	172	2.3	1.3	4.3	1.2 - 7.5
Englewood Hospital and Medical Center	21	487	4.3	2.9	3.7	2.5 - 5.0
Hackensack Meridian Health, Mountainside MC	10	372	2.7	4.0	1.7 *	0.6 - 2.7
Hackensack Meridian Health-Pascack Valley MC	10	127	7.9	6.6	3.0	1.7 - 4.3
Hackensack University Medical Center	36	928	3.9	4.3	2.3	1.6 - 3.0
Hackettstown Medical Center	7	189	3.7	3.7	2.5	0.8 - 4.2
Holy Name Medical Center	20	426	4.7	2.7	4.3	2.9 - 5.7
Hudson Regional Hospital	1	37	2.7	1.2	5.6	0.0 - 12.9
Hunterdon Medical Center	10	284	3.5	4.0	2.2	0.8 - 3.5
Inspira Medical Center Elmer	0	122	0.0	2.2	0.0 *	0.0 - 2.9
Inspira Medical Center Mullica Hill	7	387	1.8	2.4	1.9	0.3 - 3.4
Inspira Medical Center Vineland	14	784	1.8	2.5	1.8 *	0.7 - 2.9
Jefferson Cherry Hill Hospital	5	246	2.0	2.3	2.2	0.2 - 4.2
Jefferson Stratford Hospital	8	239	3.3	2.0	4.2	2.0 - 6.4
Jefferson Washington Township Hospital	16	575	2.8	2.1	3.3	1.9 - 4.6
Jersey City Medical Center	25	524	4.8	1.7	7.0 **	5.5 - 8.5
Jersey Shore University Medical Center	36	1,257	2.9	3.3	2.2 *	1.5 - 2.9
JFK University Medical Center	14	729	1.9	2.6	1.9 *	0.8 - 2.9
Monmouth Medical Center	12	252	4.8	2.8	4.3	2.6 - 6.0
Monmouth Medical Center Southern Campus	13	196	6.6	1.7	9.6 **	7.0 - 12.2
Morristown Medical Center	44	1,289	3.4	4.5	1.9 *	1.3 - 2.5
Newark Beth Israel Medical Center	41	769	5.3	1.9	7.0 **	5.8 - 8.2

Newton Medical Center	9	375	2.4	3.8	1.6 *	0.4 - 2.8
Ocean University Medical Center	20	796	2.5	2.6	2.4	1.4 - 3.4
Overlook Medical Center	20	708	2.8	3.7	1.9 *	1.0 - 2.8
Palisades Medical Center	5	257	1.9	3.3	1.5	0.0 - 3.1
Penn Medicine Princeton Medical Center	21	453	4.6	3.6	3.2	2.1 - 4.3
Raritan Bay Medical Center-Old Bridge	13	270	4.8	2.5	4.9 **	3.1 - 6.7
Raritan Bay Medical Center-Perth Amboy	9	222	4.1	2.7	3.7	1.9 - 5.6
Riverview Medical Center	4	344	1.2	2.7	1.1 *	0.0 - 2.6
Robert Wood Johnson University Hospital	35	1,061	3.3	2.2	3.8	2.8 - 4.7
Robert Wood Johnson University Hospital Hamilton	10	370	2.7	2.6	2.6	1.1 - 4.2
Robert Wood Johnson University Hospital Rahway	14	352	4.0	1.9	5.3 **	3.5 - 7.0
Robert Wood Johnson University Hospital Somerset	24	636	3.8	2.4	3.9	2.7 - 5.1
Saint Clare's Hospital-Denville	4	195	2.1	2.6	1.9	0.0 - 4.0
Saint Clare's Hospital-Dover	1	126	0.8	2.5	0.8	0.0 - 3.5
Saint Michael's Medical Center	4	296	1.4	2.4	1.4	0.0 - 3.1
Saint Peter's University Hospital	7	345	2.0	2.0	2.5	0.7 - 4.3
Salem Medical Center	4	134	3.0	1.6	4.6	1.3 - 7.8
Shore Medical Center	10	333	3.0	2.1	3.6	1.8 - 5.4
Southern Ocean Medical Center	7	315	2.2	2.5	2.2	0.6 - 3.9
St. Francis Medical Center	5	165	3.0	1.4	5.3	2.1 - 8.4
St. Joseph's University Medical Center	18	567	3.2	3.2	2.5	1.4 - 3.5
St. Joseph's Wayne Medical Center	5	191	2.6	3.2	2.0	0.3 - 3.8
St. Luke's Warren Hospital	0	292	0.0	2.9	0.0 *	0.0 - 1.6
St. Mary's General Hospital	8	219	3.7	2.9	3.2	1.3 - 5.0
Trinitas Regional Medical Center	15	354	4.2	1.5	7.1 **	5.1 - 9.1
University Hospital	14	330	4.2	3.0	3.5	2.2 - 4.8
Valley Hospital	53	750	7.1	3.8	4.7 **	3.8 - 5.5
Virtua Memorial Hospital of Burlington County	11	532	2.1	1.9	2.8	1.3 - 4.3
Virtua Our Lady of Lourdes Hospital-Camden	23	579	4.0	2.2	4.6 **	3.3 - 5.9
Virtua West Jersey Hospital-Marlton	12	371	3.2	1.9	4.3	2.5 - 6.1
Virtua West Jersey Hospital-Voorhees	10	560	1.8	2.0	2.2	0.8 - 3.7
Virtua Willingboro Hospital	5	210	2.4	1.8	3.3	0.9 - 5.8

Source: National numbers are derived from 2019 National Inpatient Sample (NIS) Data using the AHRQ SAS Software, Version 2022 while New Jersey's are calculated from the **2021 NJ UB Data** using the same software version.

^ = Rate is based on a denominator less than 30 and should be taken with caution.

* = Statistically significantly below state average, ** = Statistically significantly above state average.

NA = National Rates are not risk-adjusted.
Expected rate is the rate the hospital would have if it had the same case-mix (e.g., age, gender, DRG, and comorbidity categories) as the reference or statewide population. If the observed rate is higher than the expected rate (i.e., the ratio of observed to expected is greater than 1.0), it suggests that the hospital performed worse than the reference population on that indicator.

Acute Stroke

Acute Stroke is a disruption in the blood supply to the brain. A stroke occurs when a blood vessel (artery) bringing oxygen and nutrients to the brain bursts or is blocked by a blood clot or some other particle. Within minutes, the nerve cells in that area of the brain are damaged and may die within a few hours. As a result, the part of the body controlled by the damaged section of the brain cannot function properly. There are different types of strokes (ischemic, subarachnoid, and hemorrhagic). Treatment for stroke must be timely and efficient to prevent brain tissue death and differs significantly based on, which of the three types of strokes a patient has suffered. For example, clot-busting drugs are appropriate for strokes caused by clots but could be fatal in the case of a burst blood vessel. **Symptoms** for acute stroke can include sudden numbness or weakness of the face, arm or leg, particularly on one side of the body, sudden confusion, trouble speaking or understanding, sudden trouble seeing in one or both eyes, sudden trouble walking, dizziness, loss of balance or coordination.

This indicator measures the chance or likelihood that an acute stroke patient admitted in a given hospital will die from that condition during hospitalization. Hospital specific stroke mortality rates will vary based on the cause of the stroke, the severity of the stroke, other patient illnesses, speed of arrival at the hospital, and speed of diagnosis of the type of stroke. Moreover, clinical factors, including use of mechanical ventilation on the first day, may vary by hospital and influence mortality. The mortality rate for Acute Stroke is defined as the number of deaths per 100 patients with principal (ICD-9-CM) diagnosis code of stroke (age 18 years and older). For inclusion and exclusion criteria in calculating this rate, visit: http://www.qualityindicators.ahrq.gov/Modules/IQI_TechSpec.aspx

This information is important because it tells you how well hospitals take care of their stroke patients. Treatment for stroke must be quick and efficient to prevent brain tissue death.

Table 4: IN-HOSPITAL MORTALITY RATES FOR ACUTE STROKE (Deaths per 100 conditions)

(Indicator Recommended for Hospital Performance Dashboard)

Hospital	# of Deaths	# of Patients	Observed Rate	Expected Rate	Risk-Adjusted Rate	95% Confidence Interval LL - UL
National, 2019	41,966	630,496	6.7	NA	NA	NA - NA
Statewide	1,104	16,450	6.7	6.4	6.9	6.6 - 7.3
AtlantiCare Regional Medical Center-City	39	446	8.7	6.5	9.0	7.0 - 11.1
AtlantiCare Regional Medical Center-Mainland	5	134	3.7	5.0	5.0	1.0 - 8.9
Bayshore Medical Center	2	114	1.8	3.6	3.2	0.0 - 9.1
Bergen New Bridge Medical Center	1	7	14.3	3.1	30.2 ^	3.0 - 57.4
Cape Regional Medical Center	5	146	3.4	2.9	7.9	1.9 - 13.9
Capital Health Medical Center-Hopewell	1	129	0.8	2.0	2.6	0.0 - 10.4
Capital Health Regional Medical Center	64	534	12.0	9.5	8.4	6.9 - 9.8
CarePoint Health-Bayonne Medical Center	9	91	9.9	4.9	13.5	8.3 - 18.6
CarePoint Health-Christ Hospital	12	111	10.8	9.3	7.7	4.9 - 10.6
CarePoint Health-Hoboken University MC	2	37	5.4	6.3	5.7 **	0.0 - 11.9
CentraState Medical Center	20	224	8.9	4.4	13.7	10.1 - 17.2
Chilton Memorial Hospital	5	158	3.2	5.1	4.1	0.3 - 7.9
Clara Maass Medical Center	6	234	2.6	3.3	5.1 **	0.8 - 9.4
Community Medical Center	39	477	8.2	5.4	10.1	7.9 - 12.3
Cooper Hospital University Medical Center	64	642	10.0	8.7	7.6 **	6.2 - 9.1
Cooperman Barnabas Medical Center	50	540	9.3	4.9	12.6 **	10.3 - 14.8
Deborah Heart and Lung Center Ω	0	2	0.0	.	.	. - .
East Orange General Hospital	0	44	0.0	2.4	0.0	0.0 - 12.3
Englewood Hospital and Medical Center	23	281	8.2	6.8	8.0	5.5 - 10.4
Hackensack Meridian Health, Mountainside MC	10	144	6.9	10.7	4.3 *	2.1 - 6.5
Hackensack Meridian Health-Pascack Valley MC	7	49	14.3	14.7	6.5	3.5 - 9.4
Hackensack University Medical Center	66	727	9.1	8.6	7.0	5.8 - 8.3
Hackettstown Medical Center	3	81	3.7	4.0	6.1	0.0 - 12.7
Holy Name Medical Center	5	211	2.4	4.1	3.8	0.0 - 7.7
Hudson Regional Hospital	0	8	0.0	1.6	0.0 ^	0.0 - 36.1
Hunterdon Medical Center	4	140	2.9	3.4	5.6	0.0 - 11.1
Inspira Medical Center Elmer	2	25	8.0	5.3	10.1	0.0 - 20.8
Inspira Medical Center Mullica Hill	5	173	2.9	4.5	4.2	0.5 - 8.0
Inspira Medical Center Vineland	11	278	4.0	6.6	4.0 *	1.5 - 6.5
Jefferson Cherry Hill Hospital	10	124	8.1	7.0	7.6	4.4 - 10.9
Jefferson Stratford Hospital	5	120	4.2	5.0	5.5	1.0 - 10.1
Jefferson Washington Township Hospital	32	413	7.7	5.6	9.3	6.9 - 11.6
Jersey City Medical Center	25	286	8.7	5.1	11.5 **	8.7 - 14.3
Jersey Shore University Medical Center	41	783	5.2	9.8	3.6 *	2.4 - 4.7
JFK University Medical Center	25	736	3.4	7.2	3.1 *	1.7 - 4.6
Monmouth Medical Center	6	120	5.0	4.8	6.9	2.1 - 11.7
Monmouth Medical Center Southern Campus	2	55	3.6	4.5	5.4	0.0 - 12.7
Morristown Medical Center	27	525	5.1	5.9	5.8	3.8 - 7.7
Newark Beth Israel Medical Center	9	219	4.1	3.0	9.1	4.4 - 13.9
Newton Medical Center	6	161	3.7	5.6	4.5	0.8 - 8.1
Ocean University Medical Center	4	307	1.3	3.5	2.5 *	0.0 - 6.0

Table 4: IN-HOSPITAL MORTALITY RATES FOR ACUTE STROKE (Deaths per 100 conditions)

(Indicator Recommended for Hospital Performance Dashboard)

Hospital	# of Deaths	# of Patients	Observed Rate	Expected Rate	Risk-Adjusted Rate	95% Confidence Interval LL - UL
National, 2019	**41,966**	**630,496**	**6.7**	**NA**	**NA**	**NA - NA**
Statewide	**1,104**	**16,450**	**6.7**	**6.4**	**6.9**	**6.6 - 7.3**
Overlook Medical Center	56	783	7.2	10.0	4.8 *	3.6 - 5.9
Palisades Medical Center	5	129	3.9	4.5	5.7	0.7 - 10.7
Penn Medicine Princeton Medical Center	18	251	7.2	7.4	6.5	3.9 - 9.0
Raritan Bay Medical Center-Old Bridge	1	95	1.1	3.2	2.2	0.0 - 8.4
Raritan Bay Medical Center-Perth Amboy	5	78	6.4	2.2	19.6 **	9.9 - 29.3
Riverview Medical Center	1	163	0.6	4.9	0.8 *	0.0 - 4.9
Robert Wood Johnson University Hospital	79	837	9.4	7.8	8.1	6.8 - 9.4
Robert Wood Johnson University Hospital Hamilton	1	122	0.8	3.1	1.8	0.0 - 8.1
Robert Wood Johnson University Hospital Rahway	1	109	0.9	2.5	2.4	0.0 - 8.8
Robert Wood Johnson University Hospital Somerset	10	227	4.4	5.4	5.5	2.4 - 8.5
Saint Clare's Hospital-Denville	4	103	3.9	3.5	7.3	1.2 - 13.4
Saint Clare's Hospital-Dover	1	74	1.4	6.6	1.4 *	0.0 - 6.3
Saint Michael's Medical Center	0	43	0.0	3.4	0.0	0.0 - 10.1
Saint Peter's University Hospital	1	108	0.9	2.9	2.2	0.0 - 9.3
Salem Medical Center	3	24	12.5	5.2	16.1 **^	8.3 - 23.9
Shore Medical Center	2	96	2.1	3.0	4.6	0.0 - 11.5
Southern Ocean Medical Center	5	201	2.5	4.2	3.9	0.1 - 7.8
St. Francis Medical Center	0	18	0.0	2.5	0.0 ^	0.0 - 18.8
St. Joseph's University Medical Center	57	480	11.9	8.9	8.9 **	7.4 - 10.5
St. Joseph's Wayne Medical Center	2	63	3.2	4.4	4.8 *	0.0 - 11.3
St. Luke's Warren Hospital	2	90	2.2	3.6	4.1	0.0 - 10.8
St. Mary's General Hospital	3	67	4.5	4.9	6.0	0.0 - 12.5
Trinitas Regional Medical Center	12	108	11.1	5.4	13.6 **	9.2 - 17.9
University Hospital	78	565	13.8	9.5	9.6 **	8.2 - 11.0
Valley Hospital	37	446	8.3	6.9	8.0	6.1 - 10.0
Virtua Memorial Hospital of Burlington County	2	221	0.9	1.9	3.2	0.0 - 9.4
Virtua Our Lady of Lourdes Hospital-Camden	62	534	11.6	6.2	12.4 **	10.4 - 14.4
Virtua West Jersey Hospital-Marlton	2	116	1.7	2.3	4.9	0.0 - 12.3
Virtua West Jersey Hospital-Voorhees	1	177	0.6	1.9	2.0	0.0 - 8.8
Virtua Willingboro Hospital	1	86	1.2	2.4	3.3	0.0 - 10.8

Source: National numbers are derived from 2019 National Inpatient Sample (NIS) Data using the AHRQ SAS Software, Version 2022 while New Jersey's are calculated from the **2021 NJ UB Data** using the same software version.

^ = Rate is based on a denominator less than 30 and should be taken with caution.   Ω = Could be Coding error.

* = Statistically significantly below state average, ** = Statistically significantly above state average.

NA = National Rates are not risk-adjusted.

Missing (.) = Hospital did not perform the procedure during the year in question; or it performed less than 3 procedures (rate is not computed when the denominator is less than 3).

Expected rate is the rate the hospital would have if it had the same case-mix (e.g., age, gender, DRG, and comorbidity categories) as the reference or statewide population. If the observed rate is higher than the expected rate (i.e., the ratio of observed to expected is greater than 1.0), it suggests that the hospital performed worse than the reference population on that indicator.

Stratification of Indicator

The indicator is stratified into three groups by the type of stroke. Cases are assigned to strata according to a hierarchy based on risk of mortality, with cases being assigned to the stratum with the highest mortality for which the case qualifies. In the case of Stroke Mortality, the hierarchy is as follows (Strata hierarchy (listed from highest mortality to lowest mortality):

1. Intracerebral hemorrhage
2. Subarachnoid hemorrhage
3. Ischemic stroke

Strata are mutually exclusive. Patients cannot qualify for more than one stratum. If a discharge qualifies for more than one stratum, it will be assigned to the stratum with the highest risk of mortality (Intracerebral Hemorrhage, Subarachnoid Hemorrhage, Ischemic Stroke).

Tables 4.1, 4.2, and 4.3 show the total stroke deaths in 2020 by the three strata stated above.

Table 4.1 IN-HOSPITAL MORTALITY RATES FOR INTRACEREBRAL HEMORRHAGIC STROKE (Deaths per 100)

(Indicator Recommended for Hospital Performance Dashboard)

Hospital	# of Deaths	# of Patients	Observed Rate	Expected Rate	Risk-Adjusted Rate	95% Confidence Interval LL - UL
National	17,976	96,860	18.6	NA	NA	NA - NA
Statewide	442	2,516	17.6	17.5	18.6	17.3 - 19.9
AtlantiCare Regional Medical Center-City	20	97	20.6	14.0	27.3	19.7 - 34.9
AtlantiCare Regional Medical Center-Mainland	3	4	75.0	34.6	40.3	17.0 - 63.5
Bayshore Medical Center	0	4	0.0	2.6	0.0 ^	0.0 - 100.0
Bergen New Bridge Medical Center	.	.	.	.	.	. - .
Cape Regional Medical Center	1	5	20.0	13.5	27.4 ^	0.0 - 65.7
Capital Health Medical Center-Hopewell	1	5	20.0	11.6	31.9 ^	0.0 - 75.7
Capital Health Regional Medical Center	29	122	23.8	22.0	20.1	15.0 - 25.2
CarePoint Health-Bayonne Medical Center	2	10	20.0	18.2	20.4 ^	0.8 - 40.0
CarePoint Health-Christ Hospital	5	19	26.3	21.1	23.2 ^	10.3 - 36.0
CarePoint Health-Hoboken University MC	0	4	0.0	9.4	0.0 ^	0.0 - 53.7
CentraState Medical Center	8	25	32.0	17.0	35.0 **	22.0 - 48.0
Chilton Memorial Hospital	1	8	12.5	22.1	10.5 ^	0.0 - 29.8
Clara Maass Medical Center	5	35	14.3	11.0	24.2 ^	8.0 - 40.3
Community Medical Center	16	44	36.4	20.5	32.9 **	24.2 - 41.6
Cooper Hospital University Medical Center	26	131	19.8	18.6	19.8	14.1 - 25.4
Cooperman Barnabas Medical Center	19	95	20.0	11.6	31.9 **	22.7 - 41.2
Deborah Heart and Lung Center	.	.	.	.	.	. - .
East Orange General Hospital	0	2	0.0	.	.	. - .
Englewood Hospital and Medical Center	7	36	19.4	17.1	21.1	9.7 - 32.5
Hackensack Meridian Health, Mountainside MC	3	26	11.5	24.0	8.9 ^	0.0 - 18.7
Hackensack Meridian Health-Pascack Valley MC	3	8	37.5	28.0	24.8 ^	8.8 - 40.9
Hackensack University Medical Center	19	130	14.6	17.0	15.9	10.3 - 21.6
Hackettstown Medical Center	1	2	50.0	.	.	. - .
Holy Name Medical Center	3	25	12.0	15.3	14.6 ^	0.0 - 29.4
Hudson Regional Hospital	.	.	.	.	.	. - .
Hunterdon Medical Center	0	6	0.0	13.5	0.0 ^	0.0 - 36.3
Inspira Medical Center Elmer	0	5	0.0	16.3	0.0 ^	0.0 - 36.6
Inspira Medical Center Mullica Hill	2	14	14.3	14.4	18.4 ^	0.0 - 38.3
Inspira Medical Center Vineland	5	23	21.7	21.8	18.5 ^	5.7 - 31.4
Jefferson Cherry Hill Hospital	4	19	21.1	23.3	16.8 ^	6.0 - 27.6
Jefferson Stratford Hospital	2	20	10.0	13.6	13.7 ^	0.0 - 32.3
Jefferson Washington Township Hospital	14	61	23.0	17.4	24.5	15.4 - 33.6
Jersey City Medical Center	9	36	25.0	17.3	26.9	15.0 - 38.7
Jersey Shore University Medical Center	17	181	9.4	19.6	8.9 *	4.6 - 13.2
JFK University Medical Center	15	161	9.3	19.4	8.9 *	4.2 - 13.6
Monmouth Medical Center	3	22	13.6	14.4	17.6 ^	1.0 - 34.3
Monmouth Medical Center Southern Campus	0	3	0.0	6.6	0.0 ^	0.0 - 78.6
Morristown Medical Center	7	63	11.1	15.4	13.4	4.5 - 22.3
Newark Beth Israel Medical Center	6	21	28.6	11.9	44.5 ^	24.2 - 64.8
Newton Medical Center	3	8	37.5	40.1	17.3 ^	5.2 - 29.5
Ocean University Medical Center	0	16	0.0	15.5	0.0 *^	0.0 - 17.4
Overlook Medical Center	29	196	14.8	20.4	13.4 *	9.3 - 17.6

Table 4.1 IN-HOSPITAL MORTALITY RATES FOR INTRACEREBRAL HEMORRHAGIC STROKE (Deaths per 100)

(Indicator Recommended for Hospital Performance Dashboard)

Hospital	# of Deaths	# of Patients	Observed Rate	Expected Rate	Risk-Adjusted Rate	95% Confidence Interval LL - UL
National	17,976	96,860	18.6	NA	NA	NA - NA
Statewide	442	2,516	17.6	17.5	18.6	17.3 - 19.9
Palisades Medical Center	1	23	4.3	8.9	9.1 ^	0.0 - 31.8
Penn Medicine Princeton Medical Center	4	32	12.5	17.0	13.6	1.7 - 25.5
Raritan Bay Medical Center-Old Bridge	1	4	25.0	31.6	14.7 ^	0.0 - 33.1
Raritan Bay Medical Center-Perth Amboy	0	3	0.0	4.7	0.0 ^	0.0 - 95.1
Riverview Medical Center	0	21	0.0	16.7	0.0 *^	0.0 - 14.7
Robert Wood Johnson University Hospital	42	171	24.6	17.3	26.4 **	21.3 - 31.5
Robert Wood Johnson University Hospital Hamilton	1	14	7.1	11.0	12.1 ^	0.0 - 37.8
Robert Wood Johnson University Hospital Rahway	0	2	0.0	.	.	. - .
Robert Wood Johnson University Hospital Somerset	4	35	11.4	16.0	13.3	1.2 - 25.4
Saint Clare's Hospital-Denville	1	11	9.1	9.3	18.1 ^	0.0 - 50.0
Saint Clare's Hospital-Dover	1	4	25.0	16.3	28.4 ^	0.0 - 66.7
Saint Michael's Medical Center	.	.	.	.	.	. - .
Saint Peter's University Hospital	0	13	0.0	6.8	0.0 ^	0.0 - 37.0
Salem Medical Center	1	1	100.0	.	.	. - .
Shore Medical Center	0	3	0.0	6.8	0.0 ^	0.0 - 76.8
Southern Ocean Medical Center	2	10	20.0	25.2	14.7 ^	0.0 - 31.5
St. Francis Medical Center	0	2	0.0	.	.	. - .
St. Joseph's University Medical Center	23	91	25.3	21.3	22.1	16.4 - 27.7
St. Joseph's Wayne Medical Center	1	3	33.3	41.8	14.8 ^	0.0 - 34.0
St. Luke's Warren Hospital	1	1	100.0	.	.	. - .
St. Mary's General Hospital	1	5	20.0	17.4	21.3 ^	0.0 - 54.2
Trinitas Regional Medical Center	4	17	23.5	19.6	22.3 ^	8.4 - 36.1
University Hospital	31	142	21.8	18.5	21.9	16.7 - 27.1
Valley Hospital	8	48	16.7	17.4	17.8	8.1 - 27.5
Virtua Memorial Hospital of Burlington County	0	2	0.0	.	.	. - .
Virtua Our Lady of Lourdes Hospital-Camden	25	162	15.4	11.2	25.5	18.2 - 32.8
Virtua West Jersey Hospital-Marlton	0	1	0.0	.	.	. .
Virtua West Jersey Hospital-Voorhees	1	2	50.0	.	.	. .
Virtua Willingboro Hospital	1	1	100.0	.	.	. - .

Source: National numbers are derived from 2019 National Inpatient Sample (NIS) Data using the AHRQ SAS Software, Version 2022 while New Jersey's are calculated from the **2021 NJ UB Data** using the same software version.

^ = Rate is based on a denominator less than 30 and should be taken with caution.

* = Statistically significantly below state average, ** = Statistically significantly above state average.

NA = National Rates are not risk-adjusted.

Missing (.) = Hospital did not perform the procedure during the year in question; or it performed less than 3 procedures (rate is not computed when the denominator is less than 3).

Expected rate is the rate the hospital would have if it had the same case-mix (e.g., age, gender, DRG, and comorbidity categories) as the reference or statewide population. If the observed rate is higher than the expected rate (i.e., the ratio of observed to expected is greater than 1.0), it suggests that the hospital performed worse than the reference population on that indicator.

Table 4.2 IN-HOSPITAL MORTALITY RATES FOR SUBARACHNOID HEMORRHAGIC STROKE (Deaths per 100)

(Indicator Recommended for Hospital Performance Dashboard)

Hospital	# of Deaths	# of Patients	Observed Rate	Expected Rate	Risk-Adjusted Rate	95% Confidence Interval LL - UL
National	4,520	23,095	19.6	NA	NA	NA - NA
Statewide	120	609	19.7	18.5	20.8	18.2 - 23.4
AtlantiCare Regional Medical Center-City	3	36	8.3	11.5	14.2	0.0 - 30.0
AtlantiCare Regional Medical Center-Mainland	1	2	50.0	.	.	. - .
Bayshore Medical Center	0	1	0.0	.	.	. - .
Bergen New Bridge Medical Center	0	1	0.0	.	.	. - .
Cape Regional Medical Center	.	.	.	.	.	. - .
Capital Health Medical Center-Hopewell	.	.	.	.	.	. - .
Capital Health Regional Medical Center	11	29	37.9	20.3	36.5 **^	24.5 - 48.5
CarePoint Health-Bayonne Medical Center	1	2	50.0	.	.	. - .
CarePoint Health-Christ Hospital	3	3	100.0	71.4	27.4	13.6 - 41.2
CarePoint Health-Hoboken University MC	1	1	100.0	.	.	. - .
CentraState Medical Center	2	6	33.3	13.9	47.0 ^	8.7 - 85.2
Chilton Memorial Hospital	.	.	.	.	.	. - .
Clara Maass Medical Center	0	3	0.0	8.5	0.0 ^	0.0 - 71.3
Community Medical Center	2	9	22.2	19.3	22.6 **^	2.1 - 43.1
Cooper Hospital University Medical Center	10	44	22.7	20.9	21.2	11.5 - 31.0
Cooperman Barnabas Medical Center	4	36	11.1	6.9	31.4	10.2 - 52.7
Deborah Heart and Lung Center	.	.	.	.	.	. - .
East Orange General Hospital	0	1	0.0	.	.	. - .
Englewood Hospital and Medical Center	2	7	28.6	39.9	14.0 ^	0.9 - 27.1
Hackensack Meridian Health, Mountainside MC	1	4	25.0	27.3	17.9 ^	1.8 - 34.1
Hackensack Meridian Health-Pascack Valley MC	3	3	100.0	82.1	23.8 ^	15.4 - 32.2
Hackensack University Medical Center	5	50	10.0	15.3	12.8	3.3 - 22.3
Hackettstown Medical Center	.	.	.	.	.	. - .
Holy Name Medical Center	0	4	0.0	4.6	0.0 ^	0.0 - 86.2
Hudson Regional Hospital	.	.	.	.	.	. - .
Hunterdon Medical Center	1	1	100.0	.	.	. - .
Inspira Medical Center Elmer	.	.	.	.	.	. - .
Inspira Medical Center Mullica Hill	1	2	50.0	.	.	. - .
Inspira Medical Center Vineland	0	4	0.0	22.3	0.0 ^	0.0 - 33.0
Jefferson Cherry Hill Hospital	1	2	50.0	.	.	. - .
Jefferson Stratford Hospital	1	1	100.0	.	.	. - .
Jefferson Washington Township Hospital	1	13	7.7	10.3	14.6 ^	0.0 - 44.6
Jersey City Medical Center	3	4	75.0	31.2	47.0 ^	27.3 - 66.8
Jersey Shore University Medical Center	6	48	12.5	21.7	11.3	2.9 - 19.6
JFK University Medical Center	4	31	12.9	17.5	14.4	1.4 - 27.4
Monmouth Medical Center	.	.	.	.	.	. - .
Monmouth Medical Center Southern Campus	1	1	100.0	.	.	. - .
Morristown Medical Center	2	9	22.2	23.8	18.3 ^	0.3 - 36.4
Newark Beth Israel Medical Center	0	2	0.0	.	.	. - .
Newton Medical Center	1	1	100.0	.	.	. - .
Ocean University Medical Center	1	2	50.0	.	.	. - .
Overlook Medical Center	7	66	10.6	16.6	12.5	3.7 - 21.4

Table 4.2 IN-HOSPITAL MORTALITY RATES FOR SUBARACHNOID HEMORRHAGIC STROKE (Deaths per 100)

(Indicator Recommended for Hospital Performance Dashboard)

Hospital	# of Deaths	# of Patients	Observed Rate	Expected Rate	Risk-Adjusted Rate	95% Confidence Interval LL - UL
National	4,520	23,095	19.6	NA	NA	NA - NA
Statewide	120	609	19.7	18.5	20.8	18.2 - 23.4
Palisades Medical Center	.	.	.	.	.	. - .
Penn Medicine Princeton Medical Center	0	4	0.0	9.3	0.0 ^	0.0 - 58.5
Raritan Bay Medical Center-Old Bridge	.	.	.	.	.	. - .
Raritan Bay Medical Center-Perth Amboy	.	.	.	.	.	. - .
Riverview Medical Center	0	3	0.0	10.1	0.0 ^	0.0 - 65.0
Robert Wood Johnson University Hospital	7	64	10.9	14.8	14.4 ^	4.8 - 24.0
Robert Wood Johnson University Hospital Hamilton	.	.	.	.	.	. - .
Robert Wood Johnson University Hospital Rahway	1	2	50.0	.	.	. - .
Robert Wood Johnson University Hospital Somerset	2	3	66.7	40.7	32.1 ^	17.7 - 46.5
Saint Clare's Hospital-Denville	.	.	.	.	.	. - .
Saint Clare's Hospital-Dover	.	.	.	.	.	. - .
Saint Michael's Medical Center	0	1	0.0	.	.	. - .
Saint Peter's University Hospital	0	3	0.0	4.8	0.0 ^	0.0 - 98.6
Salem Medical Center	.	.	.	.	.	. - .
Shore Medical Center	.	.	.	.	.	. - .
Southern Ocean Medical Center	0	1	0.0	.	.	. - .
St. Francis Medical Center	0	1	0.0	.	.	. - .
St. Joseph's University Medical Center	11	29	37.9	23.3	31.9 **^	22.1 - 41.7
St. Joseph's Wayne Medical Center	.	.	.	.	.	. - .
St. Luke's Warren Hospital	.	.	.	.	.	. - .
St. Mary's General Hospital	.	.	.	.	.	. - .
Trinitas Regional Medical Center	.	.	.	.	.	. - .
University Hospital	11	32	34.4	21.8	30.9 **	20.7 - 41.1
Valley Hospital	4	18	22.2	21.2	20.5 ^	8.2 - 32.8
Virtua Memorial Hospital of Burlington County	.	.	.	.	.	. - .
Virtua Our Lady of Lourdes Hospital-Camden	5	16	31.3	19.2	31.9 ^	15.2 - 48.5
Virtua West Jersey Hospital-Marlton	0	2	0.0	.	.	. - .
Virtua West Jersey Hospital-Voorhees	.	.	.	.	.	. - .
Virtua Willingboro Hospital	0	1	0.0	.	.	. - .

Source: National numbers are derived from 2019 National Inpatient Sample (NIS) Data using the AHRQ SAS Software, Version 2022 while New Jersey's are calculated from the **2021 NJ UB Data** using the same software version.

^ = Rate is based on a denominator less than 30 and should be taken with caution.

* = Statistically significantly below state average, ** = Statistically significantly above state average.

NA = National Rates are not risk-adjusted.

Missing (.) = Hospital did not perform the procedure during the year in question; or it performed less than 3 procedures (rate is not computed when the denominator is less than 3).

Expected rate is the rate the hospital would have if it had the same case-mix (e.g., age, gender, DRG, and comorbidity categories) as the reference or statewide population. If the observed rate is higher than the expected rate (i.e., the ratio of observed to expected is greater than 1.0), it suggests that the hospital performed worse than the reference population on that indicator.

Table 4.3 IN-HOSPITAL MORTALITY RATES FOR ISCHEMIC STROKE (Deaths per 100)
(Indicator Recommended for Hospital Performance Dashboard)

Hospital	# of Deaths	# of Patients	Observed Rate	Expected Rate	Risk-Adjusted Rate	95% Confidence LL - UL
National	19,470	510,541	3.8	NA	NA	NA - NA
Statewide	542	13,325	4.1	3.8	4.1	3.8 - 4.4
AtlantiCare Regional Medical Center-City	16	313	5.1	3.5	5.5	3.4 - 7.6
AtlantiCare Regional Medical Center-Mainland	1	128	0.8	3.4	0.9	0.0 - 4.0
Bayshore Medical Center	2	109	1.8	3.5	2.0 ^	0.0 - 5.5
Bergen New Bridge Medical Center	1	6	16.7	3.3	19.1	2.8 - 35.4
Cape Regional Medical Center	4	141	2.8	2.5	4.3 **^	0.5 - 8.2
Capital Health Medical Center-Hopewell	0	124	0.0	1.6	0.0 ^	0.0 - 5.2
Capital Health Regional Medical Center	24	383	6.3	4.8	5.0	3.5 - 6.5
CarePoint Health-Bayonne Medical Center	6	79	7.6	3.2	9.0 ^	4.8 - 13.2
CarePoint Health-Christ Hospital	4	89	4.5	4.7	3.7 ^	0.8 - 6.5
CarePoint Health-Hoboken University MC	1	32	3.1	3.1	3.9 ^	0.0 - 11.1
CentraState Medical Center	10	193	5.2	2.4	8.2 **	4.9 - 11.5
Chilton Memorial Hospital	4	150	2.7	4.2	2.4 ^	0.0 - 4.9
Clara Maass Medical Center	1	196	0.5	1.9	1.0 ^	0.0 - 4.8
Community Medical Center	21	424	5.0	3.5	5.4 **	3.6 - 7.2
Cooper Hospital University Medical Center	28	467	6.0	4.7	4.8 *	3.4 - 6.2
Cooperman Barnabas Medical Center	27	409	6.6	3.2	7.9	6.1 - 9.8
Deborah Heart and Lung Center	0	2	0.0	.	.	. - .
East Orange General Hospital	0	41	0.0	1.7	0.0	0.0 - 8.7
Englewood Hospital and Medical Center	14	238	5.9	4.3	5.2	3.1 - 7.3
Hackensack Meridian Health, Mountainside MC	6	114	5.3	7.1	2.8 ^	1.0 - 4.7
Hackensack Meridian Health-Pascack Valley MC	1	38	2.6	6.6	1.5	0.0 - 5.1
Hackensack University Medical Center	42	547	7.7	6.0	4.9 ^	3.8 - 6.0
Hackettstown Medical Center	2	79	2.5	3.5	2.7 ^	0.0 - 6.8
Holy Name Medical Center	2	182	1.1	2.6	1.6 ^	0.0 - 4.8
Hudson Regional Hospital	0	8	0.0	1.6	0.0	0.0 - 20.7
Hunterdon Medical Center	3	133	2.3	2.9	3.0 ^	0.0 - 6.6
Inspira Medical Center Elmer	2	20	10.0	2.5	15.3 ^	5.0 - 25.7
Inspira Medical Center Mullica Hill	2	157	1.3	2.9	1.7 ^	0.0 - 4.7
Inspira Medical Center Vineland	6	251	2.4	4.9	1.8 ^	0.1 - 3.6
Jefferson Cherry Hill Hospital	5	103	4.9	3.7	5.1 **^	1.8 - 8.4
Jefferson Stratford Hospital	2	99	2.0	3.0	2.6 ^	0.0 - 6.4
Jefferson Washington Township Hospital	17	339	5.0	3.3	5.9	3.8 - 7.9
Jersey City Medical Center	13	246	5.3	2.9	7.1	4.6 - 9.5
Jersey Shore University Medical Center	18	554	3.2	5.5	2.2 *	1.1 - 3.4
JFK University Medical Center	6	544	1.1	3.0	1.4 *	0.0 - 3.1
Monmouth Medical Center	3	98	3.1	2.7	4.4 ^	0.0 - 8.8
Monmouth Medical Center Southern Campus	1	51	2.0	3.7	2.0 ^	0.0 - 6.8
Morristown Medical Center	18	453	4.0	4.2	3.6	2.1 - 5.1
Newark Beth Israel Medical Center	3	196	1.5	2.0	2.9 ^	0.0 - 6.5
Newton Medical Center	2	152	1.3	3.7	1.4 ^	0.0 - 4.3
Ocean University Medical Center	3	289	1.0	2.8	1.4 ^	0.0 - 3.9

Table 4.3 IN-HOSPITAL MORTALITY RATES FOR ISCHEMIC STROKE (Deaths per 100)
(Indicator Recommended for Hospital Performance Dashboard)

Hospital	# of Deaths	# of Patients	Observed Rate	Expected Rate	Risk-Adjusted Rate	95% Confidence LL - UL
National	19,470	510,541	3.8	NA	NA	NA - NA
Statewide	542	13,325	4.1	3.8	4.1	3.8 - 4.4
Overlook Medical Center	20	521	3.8	5.2	2.8	1.5 - 4.1
Palisades Medical Center	4	106	3.8	3.6	4.0 *^	0.4 - 7.7
Penn Medicine Princeton Medical Center	14	215	6.5	5.9	4.2	2.4 - 6.0
Raritan Bay Medical Center-Old Bridge	0	91	0.0	2.0	0.0	0.0 - 5.5
Raritan Bay Medical Center-Perth Amboy	5	75	6.7	2.1	12.2 ^	6.4 - 18.1
Riverview Medical Center	1	139	0.7	3.0	0.9	0.0 - 4.4
Robert Wood Johnson University Hospital	30	602	5.0	4.3	4.4	3.1 - 5.8
Robert Wood Johnson University Hospital Hamilton	0	108	0.0	2.0	0.0 ^	0.0 - 4.9
Robert Wood Johnson University Hospital Rahway	0	105	0.0	1.6	0.0 ^	0.0 - 5.6
Robert Wood Johnson University Hospital Somerset	4	189	2.1	2.8	2.8 ^	0.0 - 5.8
Saint Clare's Hospital-Denville	3	92	3.3	2.8	4.4 ^	0.3 - 8.5
Saint Clare's Hospital-Dover	0	70	0.0	6.0	0.0 ^	0.0 - 3.0
Saint Michael's Medical Center	0	42	0.0	3.4	0.0 ^	0.0 - 5.8
Saint Peter's University Hospital	1	92	1.1	2.2	1.9 ^	0.0 - 6.9
Salem Medical Center	2	23	8.7	1.8	18.0	6.8 - 29.1
Shore Medical Center	2	93	2.2	2.9	2.8 ^	0.0 - 6.9
Southern Ocean Medical Center	3	190	1.6	2.8	2.1 ^	0.0 - 5.1
St. Francis Medical Center	0	15	0.0	1.4	0.0	0.0 - 16.2
St. Joseph's University Medical Center	23	360	6.4	4.6	5.3	3.7 - 7.0
St. Joseph's Wayne Medical Center	1	60	1.7	2.5	2.5 ^	0.0 - 8.4
St. Luke's Warren Hospital	1	89	1.1	3.2	1.4 ^	0.0 - 5.6
St. Mary's General Hospital	2	62	3.2	3.9	3.1 ^	0.0 - 7.5
Trinitas Regional Medical Center	8	91	8.8	2.8	12.0 ^	7.6 - 16.3
University Hospital	36	391	9.2	5.3	6.6	5.2 - 8.1
Valley Hospital	25	380	6.6	4.9	5.2	3.6 - 6.7
Virtua Memorial Hospital of Burlington County	2	219	0.9	1.8	1.9 ^	0.0 - 5.6
Virtua Our Lady of Lourdes Hospital-Camden	32	356	9.0	3.4	10.1	8.2 - 12.1
Virtua West Jersey Hospital-Marlton	2	113	1.8	1.8	3.7	0.0 - 8.6
Virtua West Jersey Hospital-Voorhees	0	175	0.0	1.7	0.0 ^	0.0 - 4.2
Virtua Willingboro Hospital	0	84	0.0	1.5	0.0	0.0 - 6.6

Source: National numbers are derived from 2019 National Inpatient Sample (NIS) Data using the AHRQ SAS Software, Version 2022 while New Jersey's are calculated from the **2021 NJ UB Data** using the same software version.

^ = Rate is based on a denominator less than 30 and should be taken with caution.

* = Statistically significantly below state average, ** = Statistically significantly above state average.

NA = National Rates are not risk-adjusted.

Missing (.) = Hospital did not perform the procedure during the year in question; or it performed less than 3 procedures (rate is not computed when the denominator is less than 3).

Expected rate is the rate the hospital would have if it had the same case-mix (e.g., age, gender, DRG, and comorbidity categories) as the reference or statewide population. If the observed rate is higher than the expected rate (i.e., the ratio of observed to expected is greater than 1.0), it suggests that the hospital performed worse than the reference population on that indicator.

References:

Updated Technical Specifications for each of the 4 IQIs presented in this report can be accessed on the AHRQ site below:
https://www.qualityindicators.ahrq.gov/Modules/IQI_TechSpec_ICD10_v2020.aspx