

PERCUTANEOUS CORONARY INTERVENTIONS (PCI)

in New York State
2015-2017



**Department
of Health**

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INTRODUCTION

Heart disease is the leading cause of death in New York State (NYS), and the most common form of heart disease is atherosclerotic coronary artery disease. Various treatments are recommended for patients with coronary artery disease. For some people, changes in lifestyle, such as dietary changes, not smoking and regular exercise, can result in great improvements in health. In other cases, medication prescribed for high blood pressure or other conditions can make a significant difference.

Sometimes, however, an interventional procedure is recommended. The two most common procedures performed on patients with coronary artery disease are percutaneous coronary intervention (PCI), also known as percutaneous transluminal coronary angioplasty (PTCA), and coronary artery bypass graft surgery (CABG).

During a PCI procedure, a catheter is threaded up to the site of the blockage in a coronary artery. In conjunction with the catheter, devices are used to open the blockage. In some cases, PCI is used as an emergency treatment for patients who are experiencing a heart attack or who may be in shock. Most cases, however, are not done on an emergency basis.

Those who have a PCI procedure are not cured of coronary artery disease; the disease can still occur in the treated blood vessels or other coronary arteries. In order to minimize new blockages, patients should continue to reduce their risk factors for heart disease.

The analyses contained in this report are based on the information collected on 150,801 patients who underwent PCI in NYS hospitals and were discharged between December 1, 2014, and November 30, 2017. The analysis period for this report includes patients discharged in December 2014 but not those discharged in December 2017. This strategy allows for more timely report publication by eliminating the need to track patients for 30-day mortality into the following calendar year. Inclusion of cases from the previous December allows for meaningful comparison of 12-month volume as found in previous reports. The single year analysis for 2017 cases includes patients discharged from December 1, 2016 through November 30, 2017. Analyses of risk-adjusted mortality rates and associated risk factors for all cases, non-emergency cases (which represent the majority of procedures) and emergency cases are included.

DEPARTMENT OF HEALTH PROGRAM

The New York State Department of Health (Department of Health) has been studying the effects of patient and treatment characteristics on outcomes for patients with heart disease for over 25 years. Detailed statistical analyses of the information received from the study have been conducted under the guidance of the Cardiac Advisory Committee, a group of independent practicing cardiac surgeons, cardiologists and other professionals in related fields.

The results have been used to create a cardiac profile system that assesses the performance of hospitals and doctors over time, taking into account the severity of each individual patient's pre-operative conditions. Coronary artery

bypass surgery results have been assessed since 1989; PCI results were released in 1996 for the first time.

Designed to improve health in people with heart disease, this program is aimed at:

- understanding the health risks of patients that adversely affect how they will fare during and after PCI;
- improving the results of different treatments of heart disease;
- improving cardiac care; and
- providing information to help patients make better decisions about their own care.

PATIENT POPULATION

This report is based on data for patients discharged between December 1, 2014, and November 30, 2017, provided by all 66 non-federal hospitals in NYS where PCI was performed. In total there were 152,500 PCI procedures performed during this time period. The annual number of PCI discharges was: 49,546 in 2015, 50,975 in 2016 and 51,979 in 2017. For various reasons, some of these cases are excluded from analysis in this report. The reasons for exclusion and number of cases affected are described below.

There were 351 records excluded from the 2015–2017 data because they belong to patients residing outside the United States and these patients could not be followed after hospital discharge. There were an additional 40 cases excluded from analysis because each 30-day mortality can only be associated with a single PCI.

There were two additional groups of patients excluded based on clinical factors. There were 1,002 cases with pre-procedure refractory cardiogenic shock excluded from analysis. In addition, 306 patients with hypoxic brain injury who met certain NYS criteria were also excluded from analysis. The following two paragraphs provide further details on these clinical exclusion criteria.

Beginning with patients discharged in 2006, the Department of Health, with the advice of the Cardiac Advisory Committee, began a trial period of excluding any patients meeting the NYS Cardiac Data System definition of preoperative cardiogenic shock (now called refractory cardiogenic shock) from publicly released reports and analyses. Cardiogenic shock is a condition associated with severe hypotension (very low blood pressure); the technical definition used in this report can be found on Page 52. Patients in refractory cardiogenic shock are extremely high-risk, but for some, PCI may be their best chance for survival. Furthermore, the magnitude of the risk is not always easily determined using registry data. These cases were excluded after careful deliberation and input from NYS providers and others in an effort to ensure that physicians could accept these cases where appropriate without concern over a detrimental impact on their reported outcomes. These 1,002 cases account for 0.66 percent of all PCI cases in the three years.

Patients were also excluded from analysis when very specific NYS Cardiac Data System criteria for hypoxic brain injury were met. Cases excluded for this reason all involved a pre-PCI cardiac arrest and acute MI (myocardial

infarction, aka heart attack) with the patient in a coma-like neurological state prior to the PCI. In some cases, patients in this condition recover neurologically, although it may be days after the initial event before their neurological status improves. Treating the cardiac condition with PCI can be a lifesaving intervention. However, some patients will never regain consciousness because the injury to the brain caused by lack of oxygen at the time of their cardiac arrest is too severe. After consulting with physicians treating this condition, including the Cardiac Advisory Committee, the Department of Health determined that under certain circumstances these cases should be excluded from analyses. Beginning with cases discharged in 2016, the criteria were expanded so that patients who met the Pre-PCI conditions are excluded, even if the patient did not expire due to the hypoxic brain injury. The specific criteria for exclusion under this policy can be found on Page 55.

While there were 51,429 PCI cases included in the mortality analysis for 2017 discharges, some additional exclusions were required for the readmission analysis. The reasons for exclusion and number of cases affected are described below.

Records belonging to patients residing outside NYS were excluded because there is no reliable way to track out-of state readmissions. This accounted for 2,074 cases. Another 337 patients were excluded because they died in the same admission as their index PCI, so readmission was impossible. Three hundred and seventy-five patients were transferred to another hospital and were thus excluded from readmission analysis.

In some cases, patients were readmitted for PCI and then also had a third admission within 30 days of that procedure. No case was counted as both a readmission and an index PCI, resulting in an additional 2,132 exclusions. In addition, 216 patients were excluded due to being discharged Against Medical Advice and 34 patients were deleted due to overlapping dates between index and subsequent hospitalizations.

In total, the number of exclusions was 5,168, leaving 46,261 cases to be examined for 30-day readmission.

NOTE ON HOSPITALS PERFORMING PCI DURING 2015–2017 PERIOD

Several hospitals began performing PCI during the 2015-2017 time period. The hospital name and the month of the first PCI performed are as follows: Saratoga Hospital - January 2015; NYP Lawrence Hospital - May 2015; The Brooklyn Hospital Center – Downtown – March 2017; Niagara Falls Memorial Medical Center – April 2017; Southampton Hospital – September 2017; Peconic Bay Medical Center – October 2017.

The last PCI was performed at Faxton-St. Luke's in Utica in July of 2015.

RISK ADJUSTMENT FOR ASSESSING PROVIDER PERFORMANCE

Hospital or physician performance is an important factor that directly relates to patient outcomes. Whether patients recover quickly, experience complications, are readmitted to a hospital, or die following a procedure is in part a result of the kind of medical care they receive. It is difficult, however, to compare outcomes among hospitals when assessing performance because different hospitals treat different types of patients. Hospitals with sicker patients may have higher rates of readmission and death than other hospitals in the state. The following describes how the Department of Health adjusts for patient risk in assessing outcomes of care in different hospitals.

Data Collection, Data Validation and Identifying In-Hospital/30-Day Deaths and 30-Day Readmissions

As part of the risk-adjustment process, hospitals in NYS where PCI or TAVR is performed provide information to the Department of Health for each patient undergoing those procedures. Data concerning patients' demographic and clinical characteristics are collected by hospitals' cardiac catheterization laboratories and/or cardiac surgery departments. Approximately 40 of these characteristics (risk factors) are collected for each patient. Along with information about the hospital, physician and the patient's status at discharge, these data are entered into a computer and sent to the Department of Health for analysis.

Data are verified through review of unusual reporting frequencies, cross-matching of cardiac registry data with other Department of Health databases and a review of medical records for a selected sample of cases. These activities are extremely helpful in ensuring consistent interpretation of data elements across hospitals.

The analysis bases mortality on deaths occurring during the same hospital stay in which a patient underwent PCI or TAVR and on deaths that occur after hospital discharge but within 30 days of the procedure. In this report, an in-hospital death is defined as a patient who died

subsequent to PCI or TAVR during the same acute care admission or was discharged to hospice care and expired within 30 days. Data on deaths occurring after discharge from the hospital are made available by the Department of Health, the New York City Department of Health and Mental Hygiene Bureau of Vital Statistics, and the National Death Index.

Data on readmission are obtained from the Department of Health's acute care hospital dataset, the Statewide Planning and Research Cooperative System (SPARCS), which contains data pertaining to all acute care hospital discharges in the state. In addition, PCIRS is used to identify patients who underwent repeat PCI within 30 days but were not recorded in SPARCS because the procedure was technically considered an outpatient procedure.

Thirty-day readmission is defined as unplanned admission to a NYS non-federal hospital within 30 days of discharge from the index hospitalization. Unplanned readmissions are identified using criteria published by the Center for Medicare and Medicaid Services. Any non-staged PCI within 30 days of discharge is counted as a readmission, even if the second procedure is technically performed on an outpatient basis.

Admission for staged PCI, TAVR or CABG is not counted in this analysis as a readmission. Staged PCI, TAVR, or CABG occurs when the overall treatment plan at the time of the first procedure includes an expectation for the patient to return at a later date for an additional one of these procedures.

To classify a subsequent PCI as part of a staged procedure, the hospital must be able to demonstrate the following: 1) At the time of the first PCI there was a plan for the patient to return for another PCI as part of the overall treatment strategy, 2) At the time of the second PCI there is an indication that the procedure is in follow-up to an earlier PCI as part of a staged treatment strategy, 3) None of the lesions treated in the first PCI are treated again in the second PCI, 4) The second PCI is not performed on an emergency

basis due to a myocardial infarction (heart attack) or other cardiac emergency.

Staged procedures involving PCI followed by CABG or TAVR are much more rare, but the definition of staging is similar. There were 1,179 staged PCIs and 141 staged cardiac surgeries, including CABG and TAVR, that were not counted as readmissions. It should also be noted that if a patient is readmitted in 2017 but not discharged from that hospital stay until the following calendar year, this readmission would not be included in analysis due to data availability limitations.

Assessing Patient Risk

Each person who develops coronary artery disease has a unique health history. A cardiac profile system has been developed to evaluate the risk of treatment for each individual patient based on his or her history, weighing the important health facts for that person based on the experiences of thousands of patients who have undergone the same procedures in recent years. All important risk factors for each patient are combined to create his or her risk profile. For example, an 80-year-old patient with a heart attack in the past six hours has a very different risk profile than a 40-year-old who has never suffered a heart attack. The statistical analyses conducted by the Department of Health consist of determining which of the risk factors collected are significantly related to death or readmission and determining how to weight the significant risk factors to predict the chance each patient will have of dying or being readmitted given his or her specific characteristics.

Predicting Patient Mortality Rates for Providers

The statistical methods used to predict mortality on the basis of the significant risk factors are tested to determine whether they are sufficiently accurate in predicting mortality for patients who are extremely ill prior to undergoing the procedure as well as for patients who are relatively healthy. These tests have confirmed that the models are reasonably accurate in predicting how patients of all different risk levels will fare when undergoing PCI.

The mortality rate for each hospital and cardiologist is also predicted using the statistical

model. This is accomplished by adding the predicted probabilities of death for each of the provider's patients and dividing by the number of patients. The resulting rate is an estimate of what the provider's mortality rate would have been if the hospital's performance was identical to the state performance. The percentage is called the predicted or expected mortality rate (EMR). A hospital's EMR is contrasted with its observed mortality rate (OMR), which is the number of PCI patients who died divided by the total number of PCI patients.

Computing the Risk-Adjusted Mortality Rate

The risk-adjusted mortality rate (RAMR) represents the best estimate, based on the associated statistical model, of what the provider's mortality rate would have been if the provider had a mix of patients identical to the statewide mix. Thus, the RAMR has, to the extent possible, ironed out differences among providers in patient severity of illness, since it arrives at a mortality rate for each provider based on an identical group of patients.

To get the RAMR, the OMR is first divided by the provider's EMR. If the resulting ratio is larger than one, the provider has a higher mortality rate than expected on the basis of its patient mix; if it is smaller than one, the provider has a lower mortality rate than expected from its patient mix. The ratio is then multiplied by the overall statewide rate (1.13 percent in-hospital/30-day in 2017) to obtain the provider's RAMR. There is no Statewide EMR or RAMR, because the statewide data is not risk-adjusted since it comprises the entire population of interest. The Statewide OMR (number of total cases divided by number of total deaths) serves as the basis for comparison for each hospital's EMR and RAMR.

Interpreting the Risk-Adjusted Mortality Rate

If the RAMR is significantly lower than the statewide mortality rate, the hospital has a better performance than the state as a whole; if the RAMR is significantly higher than the statewide mortality rate, the hospital has a worse performance than the state as a whole.

The RAMR is used in this report as a measure of quality of care provided by hospitals and cardiologists. However, there are reasons that

a provider's RAMR may not be indicative of its true quality. For example, extreme outcome rates may occur due to chance alone. This is particularly true for low-volume providers, for whom very high or very low rates are more likely to occur than for high-volume providers. To prevent misinterpretation of differences caused by chance variation, expected ranges (confidence intervals) are included in the reported results.

Differences in hospital coding of risk factors could be an additional reason that a hospital's RAMR may not be reflective of quality of care.

The Department of Health monitors the quality of coded data by reviewing patients' medical records to ascertain the presence of key risk factors. When significant coding problems are discovered, hospitals are required to correct these data and are subject to subsequent monitoring.

Predicting Patient Readmission and Computing and Interpreting Risk-Adjusted Readmission Rates

Patient risk of 30-day readmission is assessed using the same methods used for assessing mortality risk as described above. All potential risk factors are considered and those that are independently related to readmission are identified and given weights so as to best predict the risk of 30-day readmission for each patient. Observed readmission rates (ORR), expected readmission rates (ERR) and risk-adjusted readmission rates (RARR) are calculated in the same way that OMR, EMR and RAMR are calculated. ERR and RARR are compared to the statewide observed readmission rate (8.95 percent in 2017).

This analysis is based on all-cause readmission, not just readmission directly related to the PCI procedure. Not all readmissions

represent a poor patient outcome or reflect poor patient care. However, by risk-adjusting and comparing the results across the many hospitals that perform this procedure we are able to look for meaningful differences from the overall statewide experience. If the RARR is significantly lower than the statewide readmission rate, the hospital has a better performance than the state as a whole; if the RARR is significantly higher than the statewide readmission rate, the hospital has a worse performance than the state as a whole.

As described above for mortality, there are reasons that a provider's RARR may not be indicative of its true quality. Confidence intervals and careful attention to data quality are used in the same way for readmission that they are for mortality.

How This Initiative Contributes to Quality Improvement

One goal of the Department of Health and the Cardiac Advisory Committee is to improve the quality of care in relation to cardiac surgery and angioplasty in NYS. Providing the hospitals, cardiac surgeons (who perform cardiac surgery) and cardiologists (who perform PCI) in NYS with data about their own outcomes for these procedures allows them to examine the quality of their own care and to identify opportunities to improve that care.

The data collected and analyzed in this program are reviewed by the Cardiac Advisory Committee, which assists with interpretation and advises the Department of Health regarding which hospitals and physicians may need special attention. Committee members have also conducted site visits to particular hospitals and have recommended that some hospitals obtain the expertise of outside consultants to design improvements for their programs.

DEFINITION OF KEY TERMS

Definitions of key terms are as follows:

The **observed mortality rate (OMR)** is the observed number of deaths divided by the total number of cases.

The **expected mortality rate (EMR)** is the sum of the predicted probabilities of death for all patients divided by the total number of patients.

The **risk-adjusted mortality rate (RAMR)** is the best estimate, based on the statistical model, of what the provider's mortality rate would have been if the provider had a mix of patients similar to the statewide mix. It is obtained by first dividing the OMR by the EMR, and then multiplying that quotient by the statewide mortality rate (1.13 percent in-hospital/30-day mortality for all PCI patients discharged in 2017).

The **observed readmission rate (ORR)** is the observed number of 30-day readmissions divided by the total number of analyzed cases.

The **expected readmission rate (ERR)** is the sum of the predicted probabilities of readmission for all patients divided by the total number of analyzed cases.

The **risk-adjusted readmission rate (RARR)** is the best estimate, based on the statistical model, of what the provider's readmission rate would have been if the provider had a mix of patients similar to the statewide mix. It is obtained by first dividing the ORR by the ERR, and then multiplying that quotient by the statewide readmission rate (8.95 percent 30-day readmission rate for all PCI patients discharged in 2017).

Confidence intervals indicate which hospitals had significantly more or fewer deaths or readmissions than expected given the risk factors of their patients. Hospitals with significantly higher rates than expected after adjusting for risk are those with confidence intervals entirely above the statewide rate. Hospitals with significantly lower rates than expected, given the severity of illness of their patients before the procedure, have confidence intervals entirely below the statewide rate.

2017 HOSPITAL OUTCOMES FOR PCI

Table 1 and Figures 1 and 2 present the PCI mortality results for the 65 non-federal hospitals performing PCI in NYS in 2017. The table contains, for each hospital, the number of PCIs resulting in 2017 discharges, the number of in-hospital/30-day deaths, the OMR, the EMR based on the statistical model presented in Appendix 1, the RAMR and a 95 percent confidence interval for the RAMR. It also contains each hospital's volume of cases and RAMR for non-emergency patients. Emergency patients are defined to be patients in a state of hemodynamic instability (typically associated with very low blood pressure), or patients who experienced a heart attack or cardiac arrest within 24 hours prior to undergoing PCI. The hospital RAMRs for non-emergency PCI patients are provided because many studies are confined to this group of patients and because these patients comprise the majority of all PCI patients (82.41 percent in 2017).

The overall in-hospital/30-day OMR for the 51,429 PCIs included in this 2017 analysis was 1.13 percent. Observed mortality rates ranged from 0.00 percent to 8.00 percent. The range in EMRs, which measure patient severity of illness, was between 0.56 percent and 3.45 percent. The RAMRs, which measure hospital performance, range from 0.00 percent to 7.12 percent. Based on confidence intervals for RAMRs, two hospitals (Albany Medical Center and University Hospital Upstate in Syracuse) had RAMRs that were significantly higher than the statewide average. Two hospitals (NYP-Queens and NYP-Weill Cornell in Manhattan) had RAMRs that were significantly lower than the statewide average.

The last column of Table 1 presents the hospital RAMRs for non-emergency cases (based on the statistical model presented in Appendix 2). As presented in the last row, the statewide in-hospital/30-day mortality rate for non-emergency cases is 0.78 percent. The range of RAMRs was from 0.00 percent to 13.58 percent. Three hospitals (Albany Medical Center, St. Elizabeth Medical Center in Utica and University Hospital Upstate in Syracuse) had RAMRs that were significantly higher than the statewide average. No hospitals had RAMRs that were significantly lower than the statewide rate.

Figures 1 and 2 provide a visual representation of the data displayed in Table 1. For each hospital, the black dot represents the RAMR and the gray bar represents the confidence interval, or potential statistical error, for the RAMR. The black vertical line is the NYS in-hospital/30-day mortality rate. For any hospital where the gray bar crosses the statewide average line, the RAMR is not statistically different from the state as a whole. A gray bar that extends far above and/or below the statewide average indicates that a hospital has a wide confidence interval. This is common when the hospital has a very small number of cases. It does not necessarily mean that the risk-adjusted mortality rate is very high or very low. Hospitals that are statistical outliers will have gray bars (confidence intervals) that are either entirely above or entirely below the line for the statewide rate.

Since the 2017 PCI analysis is based on in-hospital/30-day mortality and excludes cardiogenic refractory shock and hypoxic brain injury cases, the associated mortality rates cannot be compared directly to some previous NYS publications which are based on only in-hospital mortality and include all cases. The observed in-hospital mortality rate (not shown in Table 1) for 2017 PCI discharges was 0.67 percent for the 51,429 patients included in Table 1. For the non-emergency analysis, there were 42,385 patients with an in-hospital mortality rate of 0.40 percent.

Table 2 presents the PCI 30-day readmission results for the 65 non-federal hospitals performing PCI in NYS in 2017. The table contains, for each hospital, the number of PCIs resulting in 2017 discharges, the number of 30-day readmissions, the ORR, the ERR based on the statistical model presented in Appendix 3, the RARR and a 95 percent confidence interval for the RARR. The overall 30-day ORR for the 46,261 PCIs included in this 2017 analysis was 8.95 percent. Observed readmission rates ranged from 0.00 percent to 20.11 percent. The range in ERRs, which measure patient severity of illness, was between 7.25 percent and 12.28 percent. The RARRs, which measure hospital performance, range from 0.00 percent to 20.03 percent.

Based on confidence intervals for RARRs, ten hospitals (BronxCare Health System, Brookdale University Hospital Medical Center, Huntington Hospital, Long Island Community Hospital in Patchogue, NYU Winthrop Hospital in Mineola, North Shore University Hospital in Manhasset, Southside Hospital in Bayshore, St. Barnabas Hospital in the Bronx, University Hospital Stony Brook, and University Hospital Upstate in Syracuse) had RARRs that were significantly higher than the statewide average.

Six hospitals (Maimonides Medical Center in Brooklyn, Mount Sinai Hospital in Manhattan, NYU Hospitals Center in Manhattan, Orange Regional Medical Center in Middletown, St. Joseph's Hospital in Syracuse and Unity Hospital in Rochester) had RARRs that were significantly lower than the statewide average.

Figure 3 provides a visual representation of the data displayed in Table 2. It is interpreted in the same way as Figures 1 and 2 described above.

Table 1

In-Hospital / 30-Day Observed, Expected and Risk-Adjusted Mortality Rates for PCI in New York State, 2017 Discharges. (Listed Alphabetically by Hospital)

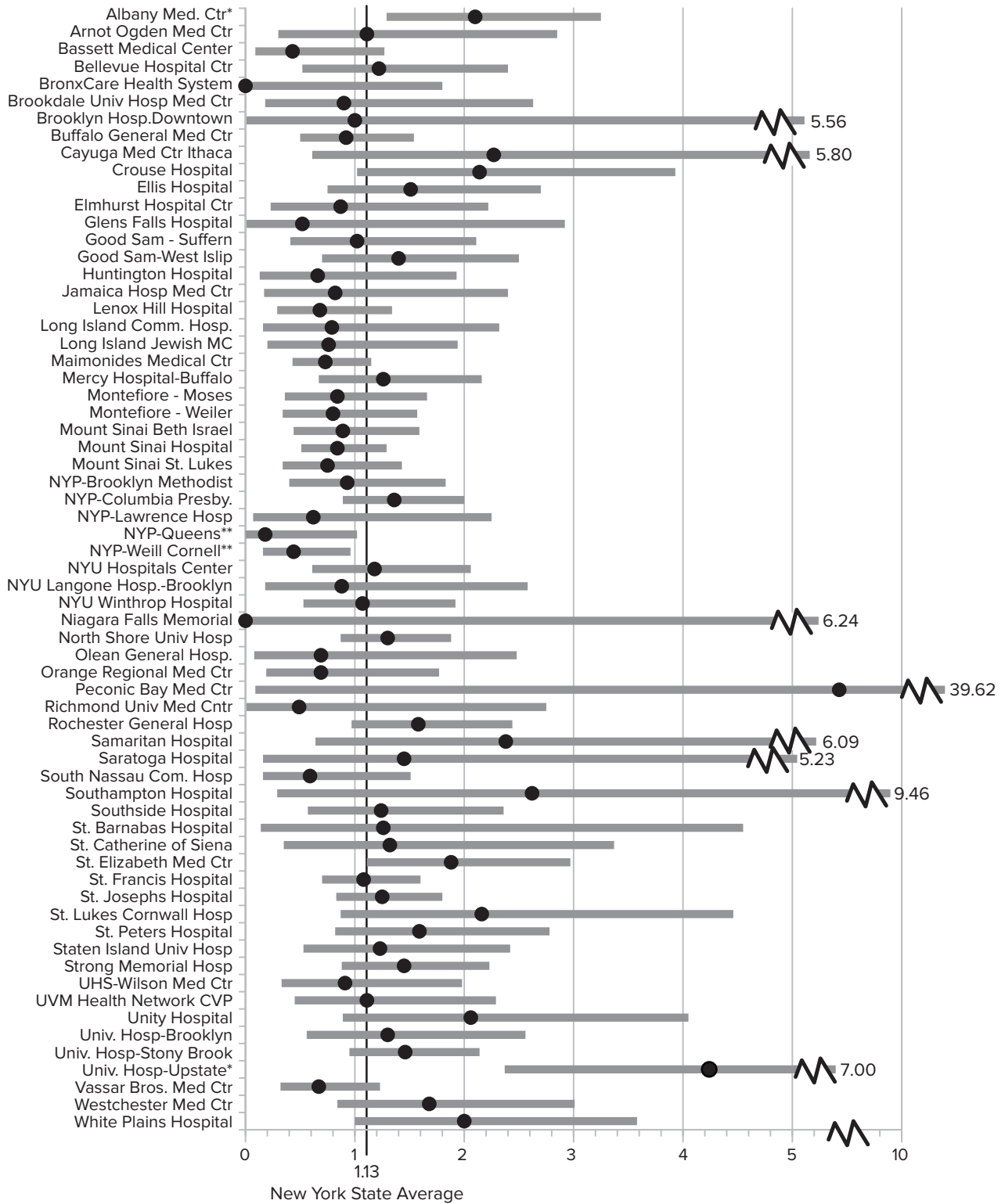
Hospital	Cases	Deaths	OMR	All Cases			95% CI for RAMR	Non-Emergency	
				EMR	RAMR	Cases		RAMR	
Albany Med. Ctr	733	20	2.73	1.46	2.10 *	(1.29, 3.25)	548	1.72 *	
Arnot Ogden Med Ctr	297	4	1.35	1.37	1.11	(0.30, 2.85)	202	0.00	
Bassett Medical Center	568	3	0.53	1.38	0.43	(0.09, 1.27)	454	0.42	
Bellevue Hospital Ctr	410	8	1.95	1.81	1.22	(0.52, 2.40)	325	1.03	
BronxCare Health System	202	0	0.00	1.14	0.00	(0.00, 1.80)	139	0.00	
Brookdale Univ Hosp Med Ctr	209	3	1.44	1.80	0.90	(0.18, 2.63)	136	0.36	
Brooklyn Hosp.Downtown	120	1	0.83	0.94	1.00	(0.01, 5.56)	99	0.00	
Buffalo General Med Ctr	1455	14	0.96	1.18	0.92	(0.50, 1.54)	1020	0.40	
Cayuga Med Ctr Ithaca	147	4	2.72	1.36	2.27	(0.61, 5.80)	74	1.53	
Crouse Hospital	415	10	2.41	1.27	2.14	(1.02, 3.93)	317	1.77	
Ellis Hospital	509	11	2.16	1.62	1.51	(0.75, 2.70)	335	0.58	
Elmhurst Hospital Ctr	447	4	0.89	1.16	0.87	(0.23, 2.22)	292	0.00	
Glens Falls Hospital	195	1	0.51	1.10	0.52	(0.01, 2.92)	126	1.42	
Good Sam - Suffern	539	7	1.30	1.43	1.02	(0.41, 2.11)	400	0.67	
Good Sam-West Islip	1232	11	0.89	0.72	1.40	(0.70, 2.50)	1139	1.23	
Huntington Hospital	537	3	0.56	0.96	0.66	(0.13, 1.93)	454	0.73	
Jamaica Hosp Med Ctr	280	3	1.07	1.47	0.82	(0.17, 2.40)	134	0.00	
Lenox Hill Hospital	1808	8	0.44	0.74	0.68	(0.29, 1.34)	1698	0.35	
Long Island Comm. Hosp.	449	3	0.67	0.95	0.79	(0.16, 2.32)	352	1.25	
Long Island Jewish MC	680	4	0.59	0.88	0.76	(0.20, 1.94)	561	0.89	
Maimonides Medical Ctr	1328	18	1.36	2.10	0.73	(0.43, 1.15)	1063	0.42	
Mercy Hospital-Buffalo	1118	13	1.16	1.04	1.26	(0.67, 2.16)	874	0.96	
Montefiore - Moses	1037	8	0.77	1.04	0.84	(0.36, 1.66)	894	0.61	
Montefiore - Weiler	669	8	1.20	1.69	0.80	(0.34, 1.57)	512	0.68	
Mount Sinai Beth Israel	1531	11	0.72	0.91	0.89	(0.44, 1.59)	1412	0.34	
Mount Sinai Hospital	3333	20	0.60	0.81	0.84	(0.51, 1.29)	3203	0.50	
Mount Sinai St. Lukes	807	9	1.12	1.67	0.75	(0.34, 1.43)	705	0.33	
NYP-Brooklyn Methodist	1108	8	0.72	0.88	0.93	(0.40, 1.83)	992	0.51	
NYP-Columbia Presby.	2198	26	1.18	0.98	1.36	(0.89, 2.00)	2093	0.87	
NYP-Lawrence Hosp	282	2	0.71	1.28	0.62	(0.07, 2.25)	216	0.00	
NYP-Queens	676	1	0.15	0.91	0.18 **	(0.00, 1.02)	529	0.00	
NYP-Weill Cornell	934	6	0.64	1.65	0.44 **	(0.16, 0.96)	790	0.33	
NYU Hospitals Center	2051	12	0.59	0.56	1.18	(0.61, 2.06)	1914	0.72	
NYU Langone Hosp.-Brooklyn	266	3	1.13	1.44	0.88	(0.18, 2.58)	178	1.51	
NYU Winthrop Hospital	1021	11	1.08	1.13	1.07	(0.53, 1.92)	865	0.71	
Niagara Falls Memorial	85	0	0.00	0.78	0.00	(0.00, 6.24)	65	0.00	
North Shore Univ Hosp	2452	28	1.14	0.99	1.30	(0.87, 1.88)	2105	0.92	
Olean General Hosp.	173	2	1.16	1.90	0.69	(0.08, 2.48)	96	1.22	
Orange Regional Med Ctr	646	4	0.62	1.01	0.69	(0.19, 1.77)	480	0.44	
Peconic Bay Med Ctr	20	1	5.00	0.79	7.12	(0.09,39.62)	13	13.58	
Richmond Univ Med Cntr	176	1	0.57	1.30	0.49	(0.01, 2.75)	134	0.87	
Rochester General Hosp	1281	20	1.56	1.11	1.58	(0.97, 2.44)	1061	0.81	
Samaritan Hospital	223	4	1.79	0.85	2.38	(0.64, 6.09)	141	0.00	
Saratoga Hospital	128	2	1.56	1.22	1.45	(0.16, 5.23)	83	2.22	
South Nassau Com. Hosp	519	4	0.77	1.48	0.59	(0.16, 1.51)	375	0.26	
Southampton Hospital	25	2	8.00	3.45	2.62	(0.29, 9.46)	15	0.00	
Southside Hospital	786	9	1.15	1.04	1.24	(0.57, 2.36)	685	1.37	
St. Barnabas Hospital	172	2	1.16	1.04	1.26	(0.14, 4.55)	138	0.84	
St. Catherine of Siena	278	4	1.44	1.24	1.32	(0.35, 3.37)	204	1.35	
St. Elizabeth Med Ctr	870	18	2.07	1.24	1.88	(1.11, 2.97)	688	1.61 *	
St. Francis Hospital	2849	25	0.88	0.92	1.08	(0.70, 1.60)	2683	0.69	
St. Josephs Hospital	2015	28	1.39	1.26	1.25	(0.83, 1.80)	1551	0.93	
St. Lukes Cornwall Hosp	334	7	2.10	1.09	2.16	(0.87, 4.46)	250	2.05	
St. Peters Hospital	787	12	1.52	1.08	1.59	(0.82, 2.78)	606	1.33	
Staten Island Univ Hosp	877	8	0.91	0.84	1.23	(0.53, 2.42)	740	1.21	
Strong Memorial Hosp	1277	20	1.57	1.22	1.45	(0.88, 2.23)	882	0.86	
UHS-Wilson Med Ctr	707	6	0.85	1.05	0.91	(0.33, 1.98)	555	1.06	
UVM Health Network CVP	674	7	1.04	1.05	1.11	(0.45, 2.29)	472	0.85	
Unity Hospital	294	8	2.72	1.50	2.06	(0.89, 4.05)	192	1.70	
Univ. Hosp-Brooklyn	401	8	2.00	1.73	1.30	(0.56, 2.56)	292	0.90	
Univ. Hosp-Stony Brook	1476	26	1.76	1.36	1.46	(0.95, 2.14)	1150	0.95	
Univ. Hosp-Upstate	248	15	6.05	1.61	4.24 *	(2.37, 7.00)	158	3.29 *	
Vassar Bros. Med Ctr	1088	10	0.92	1.56	0.67	(0.32, 1.23)	818	0.62	
Westchester Med Ctr	439	11	2.51	1.68	1.68	(0.84, 3.01)	268	1.51	
White Plains Hospital	538	11	2.04	1.16	2.00	(1.00, 3.58)	440	0.93	
Statewide Total	51429	581	1.13				42385	0.78	

*Risk-adjusted mortality rate significantly higher than statewide rate based on 95 percent confidence interval.

**Risk-adjusted mortality rate significantly lower than statewide rate based on 95 percent confidence interval.

Figure 1

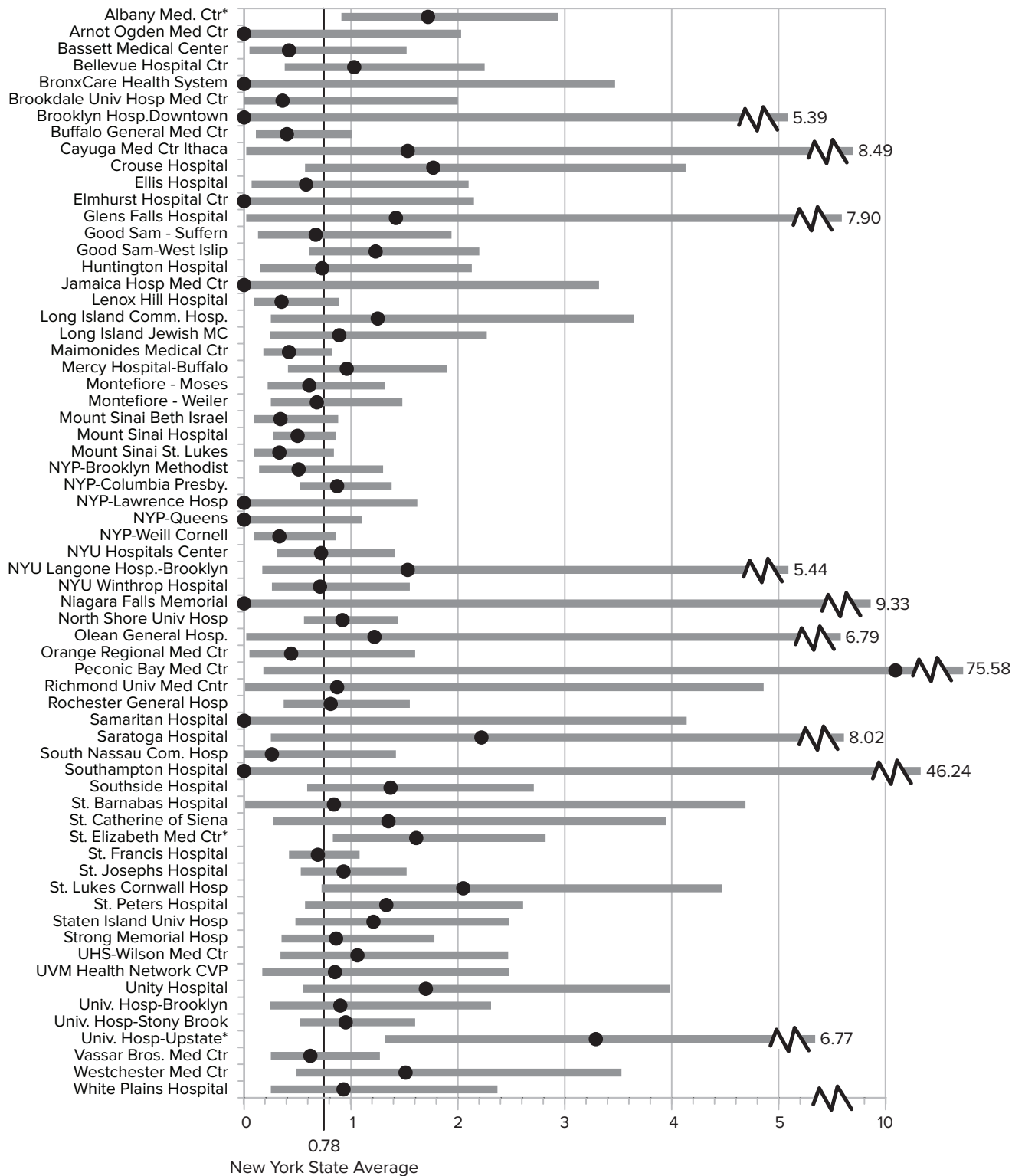
In-Hospital/30-Day Risk-Adjusted Mortality Rates for PCI in New York State, 2017 Discharges (All Cases)



Key
 ● RAMR ■ Potential margin of statistical error
 *RAMR significantly higher than statewide rate based on 95 percent confidence interval.
 **RAMR significantly lower than statewide rate based on 95 percent confidence interval.

Figure 2

In-Hospital/30-Day Risk-Adjusted Mortality Rates for PCI in New York State, 2017 Discharges (Non-Emergency Cases)



Key
 ● RAMR ■ Potential margin of statistical error
 *RAMR significantly higher than statewide rate based on 95 percent confidence interval.
 **RAMR significantly lower than statewide rate based on 95 percent confidence interval.

Table 2**Hospital Observed, Expected and Risk-Adjusted Readmission Rates for All PCI in New York State, 2017**

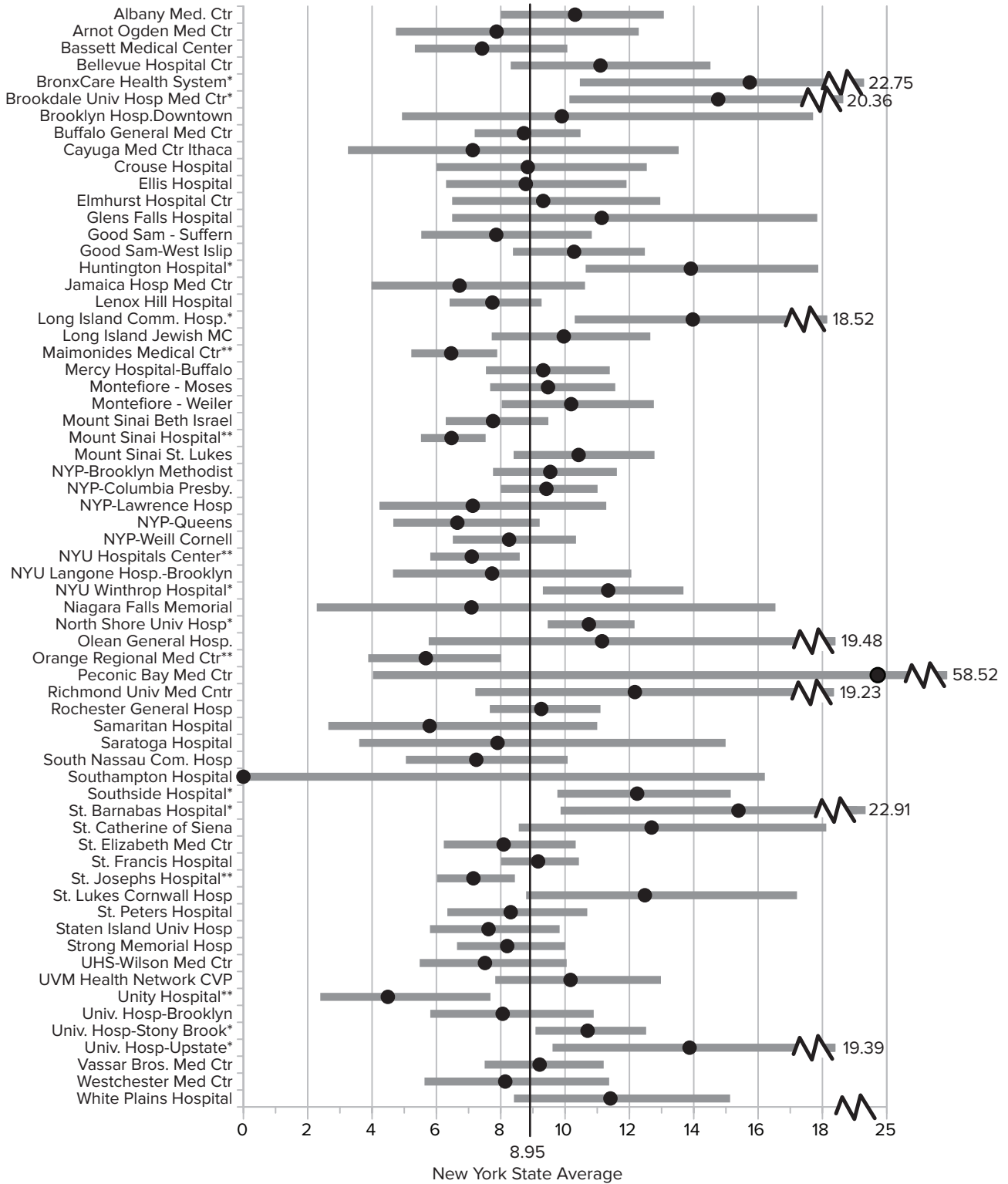
Hospital	Cases	Readmissions	ORR	All Cases		95% CI for RARR
				ERR	RARR	
Albany Med. Ctr	639	68	10.64	9.24	10.31	(8.00, 13.07)
Arnot Ogden Med Ctr	256	19	7.42	8.44	7.87	(4.74, 12.29)
Bassett Medical Center	524	41	7.82	9.44	7.42	(5.33, 10.07)
Bellevue Hospital Ctr	384	53	13.80	11.13	11.10	(8.31, 14.52)
BronxCare Health System	167	28	16.77	9.54	15.74 *	(10.46, 22.75)
Brookdale Univ Hosp Med Ctr	189	38	20.11	12.19	14.76 *	(10.45, 20.26)
Brooklyn Hosp.Downtown	107	11	10.28	9.30	9.90	(4.93, 17.71)
Buffalo General Med Ctr	1347	114	8.46	8.69	8.72	(7.19, 10.48)
Cayuga Med Ctr Ithaca	135	9	6.67	8.38	7.13	(3.25, 13.53)
Crouse Hospital	389	31	7.97	8.07	8.84	(6.00, 12.54)
Ellis Hospital	469	41	8.74	8.92	8.78	(6.30, 11.91)
Elmhurst Hospital Ctr	400	35	8.75	8.41	9.32	(6.49, 12.96)
Glens Falls Hospital	168	17	10.12	8.13	11.14	(6.49, 17.84)
Good Sam - Suffern	449	37	8.24	9.39	7.86	(5.53, 10.83)
Good Sam-West Islip	1137	102	8.97	7.81	10.28	(8.38, 12.48)
Huntington Hospital	476	61	12.82	8.25	13.91 *	(10.64, 17.87)
Jamaica Hosp Med Ctr	265	18	6.79	9.05	6.72	(3.98, 10.62)
Lenox Hill Hospital	1634	118	7.22	8.35	7.74	(6.41, 9.27)
Long Island Comm. Hosp.	396	48	12.12	7.77	13.97 *	(10.30, 18.52)
Long Island Jewish MC	653	67	10.26	9.22	9.96	(7.72, 12.65)
Maimonides Medical Ctr	1252	95	7.59	10.52	6.46 **	(5.22, 7.89)
Mercy Hospital-Buffalo	1033	95	9.20	8.83	9.32	(7.54, 11.39)
Montefiore - Moses	922	96	10.41	9.85	9.47	(7.67, 11.56)
Montefiore - Weiler	627	76	12.12	10.65	10.19	(8.03, 12.76)
Mount Sinai Beth Israel	1288	96	7.45	8.60	7.76	(6.29, 9.48)
Mount Sinai Hospital	2713	166	6.12	8.47	6.47 **	(5.52, 7.53)
Mount Sinai St. Lukes	703	92	13.09	11.24	10.42	(8.40, 12.78)
NYP-Brooklyn Methodist	1036	100	9.65	9.06	9.54	(7.76, 11.61)
NYP-Columbia Presby.	1647	157	9.53	9.06	9.42	(8.00, 11.01)
NYP-Lawrence Hosp	266	18	6.77	8.49	7.13	(4.23, 11.28)
NYP-Queens	648	36	5.56	7.48	6.65	(4.66, 9.21)
NYP-Weill Cornell	775	76	9.81	10.63	8.26	(6.51, 10.34)
NYU Hospitals Center	1845	106	5.75	7.25	7.10 **	(5.81, 8.59)
NYU Langone Hosp.-Brooklyn	247	19	7.69	8.92	7.73	(4.65, 12.06)
NYU Winthrop Hospital	966	109	11.28	8.91	11.34 *	(9.31, 13.68)
Niagara Falls Memorial	77	5	6.49	8.21	7.09	(2.28, 16.54)
North Shore Univ Hosp	2295	251	10.94	9.11	10.74 *	(9.46, 12.16)
Olean General Hosp.	100	12	12.00	9.63	11.15	(5.76, 19.48)
Orange Regional Med Ctr	572	32	5.59	8.83	5.67 **	(3.88, 8.01)
Peconic Bay Med Ctr	17	3	17.65	7.89	20.03	(4.03, 58.52)
Richmond Univ Med Cntr	162	18	11.11	8.18	12.17	(7.21, 19.23)
Rochester General Hosp	1210	117	9.67	9.35	9.26	(7.66, 11.10)
Samaritan Hospital	185	9	4.86	7.52	5.79	(2.64, 11.00)
Saratoga Hospital	120	9	7.50	8.50	7.90	(3.60, 14.99)
South Nassau Com. Hosp	476	35	7.35	9.09	7.24	(5.05, 10.08)
Southampton Hospital	24	0	0.00	8.44	0.00	(0.00, 16.21)
Southside Hospital	738	84	11.38	8.33	12.24 *	(9.76, 15.15)
St. Barnabas Hospital	145	24	16.55	9.63	15.39 *	(9.86, 22.91)
St. Catherine of Siena	240	30	12.50	8.82	12.69	(8.56, 18.12)
St. Elizabeth Med Ctr	789	64	8.11	8.98	8.09	(6.23, 10.33)
St. Francis Hospital	2559	228	8.91	8.71	9.16	(8.01, 10.43)
St. Josephs Hospital	1918	140	7.30	9.14	7.15 **	(6.02, 8.44)
St. Lukes Cornwall Hosp	298	37	12.42	8.91	12.48	(8.79, 17.21)
St. Peters Hospital	739	60	8.12	8.75	8.31	(6.34, 10.69)
Staten Island Univ Hosp	823	59	7.17	8.43	7.62	(5.80, 9.83)
Strong Memorial Hosp	1216	96	7.89	8.62	8.20	(6.64, 10.01)
UHS-Wilson Med Ctr	640	45	7.03	8.38	7.51	(5.48, 10.05)
UVM Health Network CVP	644	64	9.94	8.75	10.17	(7.83, 12.98)
Unity Hospital	266	13	4.89	9.74	4.49 **	(2.39, 7.68)
Univ. Hosp-Brooklyn	380	42	11.05	12.28	8.06	(5.81, 10.89)
Univ. Hosp-Stony Brook	1373	155	11.29	9.45	10.70 *	(9.08, 12.52)
Univ. Hosp-Upstate	226	34	15.04	9.71	13.87 *	(9.61, 19.39)
Vassar Bros. Med Ctr	1009	101	10.01	9.73	9.21	(7.50, 11.20)
Westchester Med Ctr	410	34	8.29	9.13	8.14	(5.63, 11.37)
White Plains Hospital	458	48	10.48	8.22	11.41	(8.41, 15.13)
Statewide Total	46261	4142	8.95			

*Risk-adjusted readmission rate significantly higher than statewide rate based on 95 percent confidence interval.

**Risk-adjusted readmission rate significantly lower than statewide rate based on 95 percent confidence interval.

Figure 3

30-Day Risk-Adjusted Readmission Rates for PCI in New York State, 2017 Discharges (All Cases)



Key
 ● RARR ■ Potential margin of statistical error
 *RARR significantly higher than statewide rate based on 95 percent confidence interval.
 **RARR significantly lower than statewide rate based on 95 percent confidence interval.

2015-2017 HOSPITAL DATA FOR PCI AND TAVR

Table 3 provides the number of PCIs, the in-hospital/30-day OMR and RAMR for 2015-2017 for each of three types of PCI patients in the 66 hospitals performing PCI during the time period. The three types of patients are: all patients, non-emergency patients and emergency patients (patients in a state of hemodynamic instability, typically associated with very low blood pressure, or patients who experienced a cardiac arrest or heart attack within 24 hours prior to undergoing PCI). The statistical models that are the basis for all patients, non-emergency patients and emergency patients in 2015-2017 are presented in Appendices 4-6, respectively.

As indicated in Table 3, the three-year observed in-hospital/30-day mortality rates for all PCI patients ranged from 0.00 percent to 8.00 percent, and the RAMRs ranged from 0.00 percent to 8.49 percent. Five hospitals (Albany Medical Center, Crouse Hospital in Syracuse, Mercy Hospital in Buffalo, Unity Hospital in Rochester, and University Hospital - Upstate in Syracuse) had RAMRs that were significantly higher than the statewide rate. Two hospitals (Maimonides Medical Center in Brooklyn and NYP-Weill Cornell in Manhattan) had RAMRs that were significantly lower than the statewide rate. It should be noted that hospitals are more likely to have results that show a statistically significant difference from the statewide rate when three years of data are used than when one year of data is used because the three-year volumes are higher.

Table 3 also presents the three-year in-hospital/30-day RAMRs for non-emergency cases based on the model in Appendix 5. Non-emergency cases comprise 82.54 percent of cases for the period 2015-2017. The statewide in-hospital/30-day mortality rate for the 124,469 non-emergency cases during the 3-year period was 0.79 percent. Observed mortality rates for this group of patients ranged from 0.00 percent to 7.69 percent and the RAMRs ranged from 0.00 to 16.21 percent. Four hospitals (Albany Medical Center, Mercy Hospital in Buffalo, Southside Hospital, and University Hospital - Upstate in Syracuse) had RAMRs that were significantly higher than the statewide rate. Three hospitals (Maimonides Medical Center in

Brooklyn, Mount Sinai Beth Israel in Manhattan, and NYP- Weill Cornell in Manhattan) had RAMRs that were significantly lower than the statewide average for non-emergency cases.

The last three columns in Table 3 present data on emergency cases based on the model in Appendix 6. Emergency cases represented 17.46 percent of cases for the period 2015-2017. The statewide in-hospital/30-day mortality rate for the 26,332 emergency PCI cases during the 3-year period was 2.97 percent. Observed mortality rates for this group ranged from 0.00 percent to 20.00 percent and the RAMRs ranged from 0.00 percent to 7.38 percent. One hospital (Crouse Hospital in Syracuse) had a RAMR that was significantly above the statewide average for emergency cases. One hospital (Maimonides Medical Center in Brooklyn) had a RAMR that was significantly below the statewide average for emergency cases.

The observed in-hospital mortality rate (not shown in Table 3) for all 150,801 cases included in Table 3 was 0.69 percent. The in-hospital mortality rate was 0.37 percent for the 124,469 non-emergency cases and 2.19 percent for the 26,332 emergency cases. As stated above, all cases with shock and hypoxic brain injury exclusion criteria discharged in 2015-2017 are excluded from these analyses. Therefore, volume and mortality rates for the all cases and emergency cases analyses are not directly comparable to some previously published by the Department of Health.

Table 4 presents the results for transcatheter aortic valve replacement (TAVR) procedures performed at the 27 hospitals performing TAVR during the 2015-2017 discharge period. The table contains, for each hospital, the number of TAVR procedures resulting in 2015-2017 discharges, the number of in-hospital/30-day deaths, the OMR, the EMR based on the statistical model presented in Appendix 7, the RAMR and a 95 percent confidence interval for the RAMR. Please note, some hospitals listed in Table 4 began performing the procedure during the 2015-2017 reporting period and the number of cases listed does not represent a full three year's program activity. Other hospitals have

begun performing the procedure more recently than the time period included in this report.

As indicated in Table 4, the overall in-hospital/30-day mortality rate for the 10,163 TAVR procedures performed at the 27 hospitals was 2.77 percent. The OMRs ranged from 0.00 percent to 6.06 percent. The range of EMRs, which measure patient severity of illness, was 1.68 percent to 4.38 percent.

The RAMRs, which are used to measure performance, ranged from 0.00 percent to 5.83 percent. Two hospitals (Strong Memorial Hospital in Rochester and Rochester General Hospital) had RAMRs that were statistically higher than the statewide rate. One hospital (NY Presbyterian at Columbia in Manhattan) had a RAMR that was statistically lower than the statewide rate.

Table 3

In-Hospital / 30-Day Observed and Risk-Adjusted Mortality Rates for PCI in New York State, 2015-2017 Discharges

Hospital	All Cases			Non-Emergency Cases			Emergency Cases		
	Cases	OMR	RAMR	Cases	OMR	RAMR	Cases	OMR	RAMR
Albany Med. Ctr	2108	2.61	2.18 *	1567	2.23	1.70 *	541	3.70	4.27
Arnot Ogden Med Ctr	939	0.85	0.69	661	0.30	0.33	278	2.16	2.07
Bassett Medical Center	1676	0.95	0.93	1356	0.59	0.60	320	2.50	2.56
Bellevue Hospital Ctr	1281	1.72	1.09	1004	1.00	0.70	277	4.33	3.30
BronxCare Health System	525	1.33	1.01	323	0.31	0.36	202	2.97	3.37
Brookdale Univ Hosp Med Ct	614	1.47	0.83	418	0.48	0.24	196	3.57	3.42
Brooklyn Hosp.Downtown	120	0.83	0.80	99	0.00	0.00	21	4.76	4.45
Buffalo General Med Ctr	4522	1.24	1.24	3250	0.71	0.74	1272	2.59	3.31
Cayuga Med Ctr Ithaca	449	2.00	1.38	223	0.90	0.99	226	3.10	3.31
Crouse Hospital	1115	2.33	2.11 *	822	1.22	1.53	293	5.46	5.27 *
Ellis Hospital	1500	1.93	1.67	941	0.96	1.01	559	3.58	4.22
Elmhurst Hospital Ctr	1262	0.79	0.92	859	0.00	0.00	403	2.48	3.31
Faxton - St. Lukes	157	1.91	1.82	131	0.76	0.90	26	7.69	4.62
Glens Falls Hospital	610	0.66	0.59	382	0.52	0.95	228	0.88	0.91
Good Sam - Suffern	1627	1.41	1.01	1161	0.69	0.58	466	3.22	2.76
Good Sam-West Islip	3336	0.75	1.21	3080	0.71	1.03	256	1.17	1.31
Huntington Hospital	1598	1.00	1.15	1308	0.69	0.84	290	2.41	2.67
Jamaica Hosp Med Ctr	883	0.79	0.68	439	0.23	0.27	444	1.35	2.02
Lenox Hill Hospital	5353	0.67	0.99	5019	0.50	0.68	334	3.29	2.33
Long Island Comm. Hosp.	1190	1.18	1.39	937	1.07	1.55	253	1.58	1.65
Long Island Jewish MC	2411	0.91	1.10	2028	0.84	0.94	383	1.31	1.61
Maimonides Medical Ctr	3674	1.14	0.69 **	2944	0.85	0.49 **	730	2.33	1.67 **
Mercy Hospital-Buffalo	3339	1.62	1.66 *	2580	1.12	1.20 *	759	3.29	3.88
Montefiore - Moses	2959	0.88	0.92	2552	0.51	0.51	407	3.19	2.89
Montefiore - Weiler	1892	1.06	0.83	1462	0.62	0.44	430	2.56	2.77
Mount Sinai Beth Israel	4895	0.72	0.90	4504	0.31	0.36 **	391	5.37	3.84
Mount Sinai Hospital	10422	0.67	0.93	10047	0.57	0.63	375	3.47	2.67
Mount Sinai St. Lukes	2004	1.40	0.95	1732	0.92	0.54	272	4.41	3.29
NYP-Brooklyn Methodist	3476	1.32	1.54	3114	0.83	0.96	362	5.52	4.34
NYP-Columbia Presby.	6722	0.89	1.03	6375	0.67	0.67	347	4.90	2.84
NYP-Lawrence Hosp	637	0.63	0.64	508	0.20	0.22	129	2.33	2.60
NYP-Queens	2114	0.61	0.90	1689	0.30	0.58	425	1.88	2.39
NYP-Weill Cornell	3066	0.82	0.65 **	2692	0.48	0.40 **	374	3.21	1.84
NYU Hospitals Center	5576	0.59	1.10	5235	0.50	0.79	341	2.05	2.36
NYU Langone Hosp.-Brooklyn	721	1.11	0.72	507	0.79	0.62	214	1.87	1.60
NYU Winthrop Hospital	3164	0.95	0.89	2694	0.67	0.61	470	2.55	2.20
Niagara Falls Memorial	85	0.00	0.00	65	0.00	0.00	20	0.00	0.00
North Shore Univ Hosp	7233	1.12	1.16	6207	0.92	0.87	1026	2.34	2.46
Olean General Hosp.	483	1.66	1.24	258	1.16	1.24	225	2.22	2.79
Orange Regional Med Ctr	1708	0.76	0.83	1240	0.73	0.72	468	0.85	1.44
Peconic Bay Med Ctr	20	5.00	8.49	13	7.69	16.21	7	0.00	0.00
Richmond Univ Med Cntr	467	0.64	0.59	342	0.58	0.81	125	0.80	0.73
Rochester General Hosp	4406	1.36	1.42	3594	0.81	0.81	812	3.82	4.14
Samaritan Hospital	634	1.74	1.77	382	0.79	1.44	252	3.17	4.01
Saratoga Hospital	291	2.06	1.94	220	2.27	2.10	71	1.41	1.90
South Nassau Com. Hosp	1403	1.35	1.24	1005	1.00	1.09	398	2.26	2.44
Southampton Hospital	25	8.00	2.63	15	0.00	0.00	10	20.00	7.38
Southside Hospital	2275	1.27	1.51	1973	1.27	1.49 *	302	1.32	1.38
St. Barnabas Hospital	509	1.77	1.78	411	0.97	1.05	98	5.10	4.84
St. Catherine of Siena	885	1.02	0.97	693	0.58	0.57	192	2.60	2.95
St. Elizabeth Med Ctr	2611	1.84	1.55	2070	1.30	1.19	541	3.88	3.55
St. Francis Hospital	8348	1.10	1.23	7835	0.83	0.79	513	5.26	3.58
St. Josephs Hospital	5908	1.49	1.21	4511	1.17	0.91	1397	2.51	2.64
St. Lukes Cornwall Hosp	958	1.46	1.34	707	1.27	1.18	251	1.99	2.19
St. Peters Hospital	2559	1.41	1.48	1994	1.00	1.06	565	2.83	3.53
Staten Island Univ Hosp	2337	0.81	1.15	1929	0.78	1.04	408	0.98	1.41
Strong Memorial Hosp	3384	1.60	1.48	2305	0.87	0.99	1079	3.15	3.71
UHS-Wilson Med Ctr	2190	1.14	1.05	1697	0.77	0.85	493	2.43	2.24
UVM Health Network CVP	1848	1.24	1.36	1340	0.97	1.05	508	1.97	2.93
Unity Hospital	920	2.72	1.95 *	621	1.45	1.25	299	5.35	4.87
Univ. Hosp-Brooklyn	1009	1.88	1.06	701	1.28	0.67	308	3.25	2.92
Univ. Hosp-Stony Brook	4389	1.57	1.29	3380	0.92	0.74	1009	3.77	3.75
Univ. Hosp-Upstate	701	3.99	2.76 *	428	3.27	2.76 *	273	5.13	5.17
Vassar Bros. Med Ctr	2589	1.27	0.97	1928	0.83	0.63	661	2.57	2.49
Westchester Med Ctr	1206	2.07	1.36	737	1.22	0.89	469	3.41	3.37
White Plains Hospital	1483	1.42	1.35	1225	0.65	0.78	258	5.04	3.83
Statewide Total	150801	1.17		124469	0.79		26332	2.97	

*Risk-adjusted mortality rate significantly higher than statewide rate based on 95 percent confidence interval.

**Risk-adjusted mortality rate significantly lower than statewide rate based on 95 percent confidence interval.

Table 4

In-hospital/30-Day Observed, Expected and Risk-Adjusted Mortality Rates for TAVR in New York State, 2015-2017 Discharges (Listed Alphabetically by Hospital)

Hospital	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR
Albany Med. Ctr	604	22	3.64	2.92	3.46	(2.17, 5.24)
Buffalo General Med Ctr	573	12	2.09	2.55	2.28	(1.18, 3.98)
Lenox Hill Hospital	239	1	0.42	2.32	0.50	(0.01, 2.79)
Long Island Jewish MC	12	0	0.00	4.38	0.00	(0.00,19.34)
Maimonides Medical Ctr	195	8	4.10	2.46	4.62	(1.99, 9.11)
Mercy Hospital-Buffalo	102	3	2.94	2.59	3.15	(0.63, 9.20)
Montefiore - Moses	103	4	3.88	3.43	3.14	(0.84, 8.04)
Montefiore - Weiler	152	4	2.63	2.42	3.02	(0.81, 7.73)
Mount Sinai Hospital	769	23	2.99	2.89	2.88	(1.82, 4.32)
NYP-Brooklyn Methodist	72	2	2.78	2.77	2.78	(0.31,10.05)
NYP-Columbia Presby.	1110	14	1.26	2.70	1.30 **	(0.71, 2.17)
NYP-Weill Cornell	494	10	2.02	2.68	2.10	(1.00, 3.86)
NYU Hospitals Center	876	15	1.71	2.19	2.17	(1.21, 3.57)
NYU Winthrop Hospital	764	20	2.62	3.02	2.40	(1.47, 3.71)
North Shore Univ Hosp	670	17	2.54	2.88	2.45	(1.43, 3.92)
Rochester General Hosp	259	13	5.02	2.61	5.33 *	(2.83, 9.11)
Southside Hospital	216	6	2.78	2.79	2.76	(1.01, 6.01)
St. Elizabeth Med Ctr	81	2	2.47	2.63	2.61	(0.29, 9.42)
St. Francis Hospital	1075	38	3.53	3.21	3.06	(2.16, 4.20)
St. Josephs Hospital	452	17	3.76	3.17	3.30	(1.92, 5.28)
St. Peters Hospital	174	3	1.72	2.85	1.68	(0.34, 4.90)
Staten Island Univ Hosp	47	0	0.00	1.68	0.00	(0.00,12.86)
Strong Memorial Hosp	297	18	6.06	2.89	5.83 *	(3.45, 9.21)
UHS-Wilson Med Ctr	162	3	1.85	2.45	2.10	(0.42, 6.13)
Univ. Hosp-Stony Brook	250	10	4.00	2.55	4.36	(2.09, 8.01)
Vassar Bros. Med Ctr	103	5	4.85	2.57	5.23	(1.69,12.21)
Westchester Med Ctr	312	12	3.85	2.88	3.70	(1.91, 6.47)
STATEWIDE TOTAL	10163	282	2.77			

*Risk-adjusted mortality rate significantly higher than statewide rate based on 95 percent confidence interval.

**Risk-adjusted mortality rate significantly lower than statewide rate based on 95 percent confidence interval.

2015-2017 HOSPITAL AND CARDIOLOGIST DATA FOR PCI

Table 5 provides the number of PCIs, number of PCI patients who died in the hospital or after discharge but within 30 days, OMR, EMR, RAMR and the 95 percent confidence interval for the RAMR for 2015-2017 for cardiologists in each of the 66 hospitals performing PCI during the time period and for each of the hospitals. Table 5 also contains the volume and RAMR for cardiologists and hospitals for non-emergency cases.

This information is presented for each cardiologist who (a) performed 200 or more PCIs during 2015-2017, and/or (b) performed at least one PCI in each of the years 2015-2017. The results for cardiologists not meeting the above criteria are grouped together and reported as “All Others” in the hospital in which the procedures were performed. Cardiologists who met criterion (a) or (b) above and performed procedures in more than one hospital are noted in the table and are listed in all hospitals in which they performed procedures during 2015-2017.

Also, cardiologists who met criterion (a) or (b) above and have performed PCI in two or more NYS hospitals are listed separately in Table 6.

For these cardiologists, the table presents the number of PCIs, the number of in-hospital/30-day deaths, OMR, EMR and RAMR with its 95 percent confidence interval for each hospital in which the cardiologist performed PCI, as well as the aggregate numbers (across all hospitals in which the cardiologist performed procedures). In addition, cardiologists and hospitals with RAMRs that are significantly lower or higher than the statewide mortality rate (as judged by a 95 percent confidence interval) are noted in Tables 5 and 6.

It should be noted that myocardial infarction (MI) less than 24 hours before the procedure and non-refractory cardiogenic shock are significant risk factors in the All Cases model. However, patients with these conditions are excluded from the non-emergency analysis. The outcomes models for the two groups can, therefore, yield substantially different RAMRs. It is important to compare providers' RAMRs to the statewide average mortality rate for the specific group of patients analyzed.

Table 5

Cardiologist In-Hospital / 30-Day Observed, Expected, and Risk-Adjusted Mortality Rates for PCI in New York State, 2015 - 2017 Discharges

	Cases	Deaths	OMR	All Cases EMR	RAMR	95% CI for RAMR	Non-emergency Cases	RAMR
Statewide Total	150801	1762		1.17			124469	0.79
Albany Medical Center								
##Delago A	581	16	2.75	1.35	2.38 *	(1.36, 3.86)	491	2.03 *
El-Hajjar M	265	7	2.64	1.49	2.07	(0.83, 4.26)	167	2.26
##Esper D	247	3	1.21	1.07	1.33	(0.27, 3.89)	192	1.04
#Madiraju S	3	0	0.00	10.31	0.00	(0.00,13.86)	2	0.00
##Maroney J	376	8	2.13	1.08	2.30	(0.99, 4.53)	280	0.84
##Nappi A	475	18	3.79	1.57	2.83 *	(1.68, 4.47)	355	1.87 *
##Papaleo R	31	1	3.23	2.45	1.54	(0.02, 8.55)	5	0.00
##Winston B	80	1	1.25	1.80	0.81	(0.01, 4.53)	41	0.00
All Others	50	1	2.00	2.02	1.16	(0.02, 6.45)	34	1.26
TOTAL	2108	55	2.61	1.40	2.18 *	(1.64, 2.84)	1567	1.70 *
Arnot-Ogden Medical Center								
#Amin N	153	0	0.00	1.22	0.00	(0.00, 2.30)	103	0.00
#Grella R	289	2	0.69	1.03	0.78	(0.09, 2.82)	223	0.54
Lakhani M	322	3	0.93	1.53	0.71	(0.14, 2.08)	235	0.44
##Sharma A	3	0	0.00	2.41	0.00	(0.00,59.38)	.	.
##Yarkoni A	2	0	0.00	1.56	0.00	(0.00,100.0)	1	0.00
All Others	170	3	1.76	2.10	0.98	(0.20, 2.86)	99	0.00
TOTAL	939	8	0.85	1.43	0.69	(0.30, 1.37)	661	0.33
Bassett Medical Center								
#Kreps E	54	3	5.56	2.07	3.14	(0.63, 9.17)	30	2.64
#Malpeso J	1	0	0.00	0.96	0.00	(0.00,100.0)	.	.
#McNulty P	421	5	1.19	1.06	1.31	(0.42, 3.05)	316	1.68
Menzies D	905	5	0.55	1.14	0.57	(0.18, 1.32)	793	0.37
##Nappi A	1	0	0.00	1.83	0.00	(0.00,100.0)	.	.
##Sastry A	214	2	0.93	1.47	0.74	(0.08, 2.67)	159	0.00
##Sharma A	12	1	8.33	3.02	3.23	(0.04,17.96)	7	0.00
##Yarkoni A	7	0	0.00	1.06	0.00	(0.00,57.70)	6	0.00
All Others	61	0	0.00	1.12	0.00	(0.00, 6.29)	45	0.00
TOTAL	1676	16	0.95	1.20	0.93	(0.53, 1.50)	1356	0.60
Bellevue Hospital Center								
#Attubato M	7	0	0.00	2.72	0.00	(0.00,22.47)	1	0.00
#Babaev A	7	0	0.00	1.60	0.00	(0.00,38.18)	1	0.00
#Bangalore S	452	12	2.65	2.27	1.36	(0.70, 2.38)	372	0.80
#Coppola J	190	3	1.58	1.68	1.10	(0.22, 3.22)	147	0.48
#Hegde S	94	1	1.06	0.95	1.31	(0.02, 7.31)	93	0.94
#Iqbal S	284	1	0.35	1.49	0.28	(0.00, 1.53)	227	0.41
Kurian D	43	0	0.00	0.35	0.00	(0.00,28.53)	43	0.00
#Razzouk L	26	1	3.85	4.43	1.01	(0.01, 5.64)	5	0.00
#Serrano-Gomez C	21	1	4.76	3.82	1.46	(0.02, 8.11)	6	8.17
#Shah B	129	1	0.78	1.33	0.68	(0.01, 3.80)	104	0.56
#Slater J	4	0	0.00	1.08	0.00	(0.00,99.03)	.	.
#Staniloae C	2	1	50.00	14.61	4.00	(0.05,22.25)	.	.
##Vales L	1	0	0.00	2.17	0.00	(0.00,100.0)	.	.
All Others	21	1	4.76	2.31	2.41	(0.03,13.41)	5	0.00
TOTAL	1281	22	1.72	1.84	1.09	(0.68, 1.65)	1004	0.70

Table 5, continued

	Cases	Deaths	OMR	All Cases EMR	RAMR	95% CI for RAMR	Non-emergency Cases	RAMR
BronxCare Health System								
##Amsalem Y	43	0	0.00	1.25	0.00	(0.00, 7.99)	30	0.00
##Celaj S	37	3	8.11	2.95	3.21	(0.64, 9.37)	5	29.39
##Johnson M	2	0	0.00	0.85	0.00	(0.00,100.0)	1	0.00
##Krim N	416	4	0.96	1.47	0.76	(0.21, 1.95)	271	0.00
#Tamis-Holland J	14	0	0.00	1.56	0.00	(0.00,19.62)	8	0.00
All Others	13	0	0.00	0.59	0.00	(0.00,56.24)	8	0.00
TOTAL	525	7	1.33	1.54	1.01	(0.41, 2.09)	323	0.36
Brookdale Univ. Hospital Medical Ctr								
#Castillo R	310	5	1.61	1.93	0.97	(0.31, 2.27)	221	0.21
#Chadow H	225	3	1.33	2.36	0.66	(0.13, 1.93)	144	0.00
Khan A	79	1	1.27	1.78	0.83	(0.01, 4.62)	53	0.88
TOTAL	614	9	1.47	2.07	0.83	(0.38, 1.57)	418	0.24
Brooklyn Hospital Center - Downtown								
##Kesanakurthy S	120	1	0.83	1.22	0.80	(0.01, 4.44)	99	0.00
TOTAL	120	1	0.83	1.22	0.80	(0.01, 4.44)	99	0.00
Buffalo General Medical Center								
#Calandra S	1	0	0.00	1.06	0.00	(0.00,100.0)	1	0.00
##Conley J	556	6	1.08	1.00	1.26	(0.46, 2.75)	435	0.81
#Dashkoff N	441	7	1.59	1.06	1.74	(0.70, 3.59)	336	0.86
##Farhi E	755	10	1.32	1.10	1.41	(0.68, 2.60)	547	0.83
##Gelormini J	1	0	0.00	0.43	0.00	(0.00,100.0)	1	0.00
#Iyer V	612	6	0.98	1.31	0.87	(0.32, 1.90)	443	0.17
##Morris W	789	10	1.27	0.92	1.62	(0.77, 2.97)	654	0.78
##Phadke K	622	10	1.61	1.33	1.41	(0.68, 2.60)	430	1.60
#Sullivan P	176	1	0.57	1.58	0.42	(0.01, 2.33)	75	0.00
Zlotnick D	567	6	1.06	1.37	0.90	(0.33, 1.96)	326	0.50
All Others	2	0	0.00	0.14	0.00	(0.00,100.0)	2	0.00
TOTAL	4522	56	1.24	1.16	1.24	(0.94, 1.61)	3250	0.74
Cayuga Medical Center								
#Kreps E	11	0	0.00	1.11	0.00	(0.00,35.26)	5	0.00
##Ong L S	3	0	0.00	0.91	0.00	(0.00,100.0)	2	0.00
Sodums M	199	3	1.51	1.92	0.92	(0.18, 2.68)	100	1.05
Stefek P	236	6	2.54	1.55	1.91	(0.70, 4.16)	116	0.99
TOTAL	449	9	2.00	1.70	1.38	(0.63, 2.61)	223	0.99
Crouse Hospital								
Battaglia J	554	10	1.81	1.10	1.92	(0.92, 3.53)	418	0.87
George A	539	16	2.97	1.49	2.32 *	(1.33, 3.77)	388	2.34 *
All Others	22	0	0.00	1.10	0.00	(0.00,17.78)	16	0.00
TOTAL	1115	26	2.33	1.29	2.11 *	(1.38, 3.09)	822	1.53
Ellis Hospital								
Cospito P	366	10	2.73	1.02	3.12 *	(1.49, 5.74)	251	2.64 *
#Madiraju S	257	3	1.17	1.97	0.69	(0.14, 2.02)	153	0.00
Parkes R	458	6	1.31	1.19	1.29	(0.47, 2.81)	302	0.80
Weitz S	284	5	1.76	1.49	1.38	(0.44, 3.22)	167	0.66
All Others	135	5	3.70	1.34	3.24	(1.04, 7.55)	68	1.58
TOTAL	1500	29	1.93	1.35	1.67	(1.12, 2.40)	941	1.01
Elmhurst Hospital Center								
#Barman N	42	1	2.38	2.42	1.15	(0.02, 6.39)	3	0.00
Kamran M	729	2	0.27	0.86	0.37	(0.04, 1.34)	547	0.00
##Pyo R	48	2	4.17	2.23	2.19	(0.25, 7.90)	2	0.00
##Wiley J	24	2	8.33	3.21	3.03	(0.34,10.95)	1	0.00
Yatskar L	419	3	0.72	0.84	1.00	(0.20, 2.91)	306	0.00
TOTAL	1262	10	0.79	1.00	0.92	(0.44, 1.70)	859	0.00

Table 5, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
Faxton-St. Lukes Hlthcare- St.Lukes Div								
#Bhan R	10	0	0.00	2.23	0.00	(0.00,19.18)	6	0.00
#Kelberman M	4	0	0.00	2.34	0.00	(0.00,45.78)	2	0.00
##Kozman H	3	0	0.00	1.09	0.00	(0.00,100.0)	1	0.00
#Kudagi V	63	0	0.00	0.70	0.00	(0.00, 9.75)	60	0.00
##Kumar P	24	2	8.33	2.41	4.04	(0.45,14.57)	19	0.00
#Maclsaac H	14	1	7.14	1.12	7.42	(0.10,41.28)	11	6.28
#Mathew T C	26	0	0.00	0.90	0.00	(0.00,18.31)	22	0.00
#Patel A R	3	0	0.00	0.92	0.00	(0.00,100.0)	2	0.00
#Sassower M	7	0	0.00	1.63	0.00	(0.00,37.59)	5	0.00
#Varma P	3	0	0.00	0.84	0.00	(0.00,100.0)	3	0.00
TOTAL	157	3	1.91	1.23	1.82	(0.37, 5.32)	131	0.90
Glens Falls Hospital								
Bashir I	323	3	0.93	1.51	0.72	(0.14, 2.10)	202	0.88
##Delago A	1	0	0.00	0.20	0.00	(0.00,100.0)	1	0.00
Hogan R	263	1	0.38	0.99	0.45	(0.01, 2.49)	178	1.04
#Kaple R	3	0	0.00	1.37	0.00	(0.00,100.0)	1	0.00
##Papaleo R	18	0	0.00	1.73	0.00	(0.00,13.74)	.	.
##Sastry A	2	0	0.00	0.43	0.00	(0.00,100.0)	.	.
TOTAL	610	4	0.66	1.29	0.59	(0.16, 1.52)	382	0.95
Good Samaritan Hosp Med Ctr- West Islip								
##Arkonac B	17	0	0.00	0.51	0.00	(0.00,49.43)	17	0.00
##Caselnova R	434	2	0.46	0.97	0.55	(0.06, 2.00)	396	0.53
##Chengot T	201	3	1.49	1.08	1.61	(0.32, 4.70)	165	1.56
##Deutsch E	604	3	0.50	0.54	1.08	(0.22, 3.17)	574	0.67
##Franco J	64	0	0.00	1.07	0.00	(0.00, 6.24)	59	0.00
#Gandotra P	75	2	2.67	1.17	2.66	(0.30, 9.61)	74	1.89
##Happes M	112	1	0.89	0.79	1.31	(0.02, 7.30)	108	0.96
##Hormozi S	539	2	0.37	0.74	0.59	(0.07, 2.13)	495	0.57
#Lee P J	722	8	1.11	0.55	2.36	(1.01, 4.64)	681	2.11 *
##Patel R B	59	1	1.69	1.51	1.31	(0.02, 7.28)	28	0.00
#Reich D	509	3	0.59	0.61	1.14	(0.23, 3.32)	483	1.02
TOTAL	3336	25	0.75	0.72	1.21	(0.78, 1.79)	3080	1.03
Good Samaritan Hospital of Suffern								
#Agarwal A	166	1	0.60	1.24	0.57	(0.01, 3.17)	109	0.00
##Gotsis W	2	0	0.00	0.78	0.00	(0.00,100.0)	2	0.00
Hirsch C	289	4	1.38	1.61	1.01	(0.27, 2.58)	241	0.68
Innerfield M	158	3	1.90	2.13	1.04	(0.21, 3.05)	81	1.33
Kovar L	346	4	1.16	1.45	0.93	(0.25, 2.39)	282	0.45
Sahai A	162	1	0.62	1.38	0.52	(0.01, 2.92)	101	0.00
Shih A C	165	6	3.64	1.77	2.40	(0.88, 5.22)	112	2.46
Singh R	216	3	1.39	1.83	0.89	(0.18, 2.59)	141	0.57
All Others	123	1	0.81	1.89	0.50	(0.01, 2.80)	92	0.00
TOTAL	1627	23	1.41	1.63	1.01	(0.64, 1.52)	1161	0.58
Huntington Hospital								
##Bagga R	639	7	1.10	1.02	1.26	(0.50, 2.59)	554	0.80
##Ong L Y	135	0	0.00	0.64	0.00	(0.00, 4.99)	126	0.00
##Patcha R	211	1	0.47	1.01	0.55	(0.01, 3.06)	167	0.00
#Polena S	347	4	1.15	1.01	1.34	(0.36, 3.43)	292	1.30
##Strizik B	266	4	1.50	1.23	1.43	(0.39, 3.67)	169	1.63
TOTAL	1598	16	1.00	1.02	1.15	(0.66, 1.87)	1308	0.84
Jamaica Hospital Medical Center								
#Coven D	21	0	0.00	1.00	0.00	(0.00,20.33)	6	0.00
#Jain S	228	1	0.44	1.22	0.42	(0.01, 2.33)	120	1.12
#Lasic Z	237	3	1.27	1.64	0.90	(0.18, 2.63)	109	0.00
#Mangla A	204	0	0.00	1.22	0.00	(0.00, 1.72)	120	0.00
#Raza J	143	1	0.70	1.40	0.58	(0.01, 3.25)	69	0.00
#Suleman J	3	0	0.00	0.33	0.00	(0.00,100.0)	3	0.00
All Others	47	2	4.26	1.28	3.88	(0.44,14.02)	12	0.00
TOTAL	883	7	0.79	1.36	0.68	(0.27, 1.40)	439	0.27

Table 5, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
Lenox Hill Hospital								
#Coven D	106	1	0.94	1.78	0.62	(0.01, 3.44)	81	0.96
##Dominguez-Echeva	57	0	0.00	0.39	0.00	(0.00,19.28)	57	0.00
##Fernaine G	10	0	0.00	0.14	0.00	(0.00,100.0)	10	0.00
#Gujja K	6	0	0.00	0.61	0.00	(0.00,100.0)	6	0.00
Hassid B	458	5	1.09	1.08	1.18	(0.38, 2.76)	404	1.39
Iyer S	37	0	0.00	0.39	0.00	(0.00,29.55)	37	0.00
#Jain S	230	0	0.00	0.73	0.00	(0.00, 2.54)	227	0.00
##Kesanakurthy S	3	0	0.00	0.44	0.00	(0.00,100.0)	3	0.00
##Kim M	1038	7	0.67	0.95	0.83	(0.33, 1.71)	954	0.63
Kukar A	273	2	0.73	0.82	1.04	(0.12, 3.77)	240	0.00
#Lasic Z	215	0	0.00	0.54	0.00	(0.00, 3.69)	209	0.00
#Mangla A	204	2	0.98	0.41	2.80	(0.31,10.10)	202	1.91
#Mousa T	16	0	0.00	0.13	0.00	(0.00,100.0)	16	0.00
##Poupouridis K	1	0	0.00	0.28	0.00	(0.00,100.0)	1	0.00
Punukollu G	437	4	0.92	0.78	1.38	(0.37, 3.52)	425	0.79
#Raza J	303	3	0.99	0.73	1.58	(0.32, 4.61)	297	1.26
Reimers C	721	6	0.83	0.62	1.58	(0.58, 3.43)	671	0.46
#Rotatori F	1	0	0.00	0.94	0.00	(0.00,100.0)	1	0.00
##Shah A	202	1	0.50	0.45	1.28	(0.02, 7.11)	201	0.88
#Singh V	815	4	0.49	0.63	0.91	(0.24, 2.32)	785	0.64
##Snyder S	1	0	0.00	0.21	0.00	(0.00,100.0)	1	0.00
##Stathopoulos I	37	0	0.00	0.96	0.00	(0.00,12.03)	37	0.00
##Weinberg M	28	0	0.00	0.85	0.00	(0.00,18.06)	27	0.00
Zaric M	16	1	6.25	5.53	1.32	(0.02, 7.34)	9	0.00
All Others	138	0	0.00	1.30	0.00	(0.00, 2.39)	118	0.00
TOTAL	5353	36	0.67	0.79	0.99	(0.69, 1.37)	5019	0.68
Long Island Community Hospital								
##Bench T	149	0	0.00	0.99	0.00	(0.00, 2.92)	111	0.00
##Franco J	48	0	0.00	0.39	0.00	(0.00,23.14)	43	0.00
#Gambino A	31	0	0.00	0.51	0.00	(0.00,26.98)	27	0.00
##Joseph S	75	0	0.00	0.69	0.00	(0.00, 8.23)	68	0.00
#Khan W	644	10	1.55	1.02	1.78	(0.85, 3.27)	511	2.34 *
##Patel R B	3	0	0.00	1.30	0.00	(0.00,100.0)	1	0.00
#Pulipati B	144	3	2.08	1.46	1.67	(0.34, 4.88)	95	1.42
#Schwartz R	26	1	3.85	0.64	7.06	(0.09,39.30)	23	6.94
All Others	70	0	0.00	0.77	0.00	(0.00, 7.97)	58	0.00
TOTAL	1190	14	1.18	0.99	1.39	(0.76, 2.34)	937	1.55
Long Island Jewish Medical Center								
##Arkonac B	2	0	0.00	0.24	0.00	(0.00,100.0)	2	0.00
##Bagga R	1	0	0.00	2.39	0.00	(0.00,100.0)	1	0.00
#Boutis L	29	1	3.45	2.77	1.45	(0.02, 8.09)	6	18.20
#Dhama B	115	0	0.00	0.56	0.00	(0.00, 6.65)	110	0.00
##Friedman G H	2	0	0.00	0.29	0.00	(0.00,100.0)	2	0.00
##Fuschetto D	58	0	0.00	0.58	0.00	(0.00,12.79)	55	0.00
##Fuschetto O	17	0	0.00	1.05	0.00	(0.00,24.02)	16	0.00
##Grunwald A	46	2	4.35	0.40	12.80 *	(1.44,46.22)	45	8.92 *
#Gupta R	44	0	0.00	0.70	0.00	(0.00,13.90)	44	0.00
##Hameedi A	87	0	0.00	0.48	0.00	(0.00,10.22)	87	0.00
#Husain S I	54	1	1.85	1.15	1.89	(0.02,10.50)	54	1.35
#Jauhar R	131	0	0.00	1.39	0.00	(0.00, 2.35)	107	0.00
#Kaplan B	10	0	0.00	2.15	0.00	(0.00,19.93)	2	0.00
##Katz S	12	0	0.00	4.58	0.00	(0.00, 7.80)	.	.
##Kim M	1	0	0.00	0.40	0.00	(0.00,100.0)	1	0.00
##Koss J	175	2	1.14	0.52	2.56	(0.29, 9.24)	167	1.93
#Lee A	596	5	0.84	0.95	1.03	(0.33, 2.40)	502	0.63
#Marchant D	10	0	0.00	4.00	0.00	(0.00,10.71)	1	0.00
#Meraj P	103	1	0.97	1.32	0.86	(0.01, 4.78)	78	1.00
##Poupouridis K	5	0	0.00	0.45	0.00	(0.00,100.0)	5	0.00
#Rutkin B	14	0	0.00	2.25	0.00	(0.00,13.60)	2	0.00
##Selim S	58	0	0.00	0.81	0.00	(0.00, 9.11)	45	0.00
#Singh A	668	6	0.90	1.03	1.02	(0.37, 2.21)	541	0.56
#Srinivas G	151	3	1.99	0.64	3.64	(0.73,10.65)	147	2.59

Table 5, *continued*

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
Long Island Jewish Medical Center, <i>continued</i>								
##Strizik B	1	0	0.00	0.51	0.00	(0.00,100.0)	1	0.00
##Weinberg M	16	1	6.25	1.80	4.07	(0.05,22.62)	3	12.72
##Yadav S	5	0	0.00	0.67	0.00	(0.00,100.0)	4	0.00
TOTAL	2411	22	0.91	0.97	1.10	(0.69, 1.66)	2028	0.94
Maimonides Medical Center								
Ayzenberg S	747	10	1.34	2.19	0.71	(0.34, 1.31)	581	0.53
Borgen E	612	2	0.33	2.04	0.19 **	(0.02, 0.68)	443	0.00 **
#Chen O	44	0	0.00	0.39	0.00	(0.00,24.76)	42	0.00
Frankel R	300	2	0.67	1.82	0.43	(0.05, 1.55)	265	0.45
Friedman M	266	5	1.88	2.37	0.93	(0.30, 2.16)	170	0.67
##Fuschetto O	4	0	0.00	1.87	0.00	(0.00,57.42)	4	0.00
##Gala B	5	0	0.00	2.66	0.00	(0.00,32.26)	5	0.00
#Garyali S	18	0	0.00	0.14	0.00	(0.00,100.0)	18	0.00
#Kantrowitz N	5	0	0.00	0.74	0.00	(0.00,100.0)	4	0.00
##Lee P C	7	0	0.00	0.15	0.00	(0.00,100.0)	7	0.00
Malik B	998	15	1.50	1.80	0.98	(0.55, 1.61)	852	0.76
#Shaknovich A	85	0	0.00	0.87	0.00	(0.00, 5.78)	85	0.00
Shani J	228	1	0.44	1.00	0.51	(0.01, 2.86)	217	0.41
Topi B	334	7	2.10	2.74	0.89	(0.36, 1.84)	230	0.50
All Others	21	0	0.00	0.31	0.00	(0.00,65.50)	21	0.00
TOTAL	3674	42	1.14	1.94	0.69 **	(0.50, 0.93)	2944	0.49 **
Mercy Hospital of Buffalo								
#Calandra S	355	4	1.13	1.41	0.94	(0.25, 2.39)	245	0.53
Chaudhry E	32	1	3.13	0.84	4.37	(0.06,24.29)	26	11.10
##Conley J	163	1	0.61	0.64	1.12	(0.01, 6.23)	159	0.77
Emerson R	200	6	3.00	1.46	2.41	(0.88, 5.24)	104	3.15
##Gelormini J	693	10	1.44	1.29	1.31	(0.63, 2.41)	540	0.91
Haq N	500	7	1.40	1.22	1.35	(0.54, 2.77)	373	0.58
Masud ARZ	289	3	1.04	1.07	1.13	(0.23, 3.30)	259	0.69
#Meltser H	845	15	1.78	0.96	2.17 *	(1.21, 3.58)	659	1.58
##Morris W	10	0	0.00	0.65	0.00	(0.00,66.42)	10	0.00
##Phadke K	15	0	0.00	0.17	0.00	(0.00,100.0)	15	0.00
#Sullivan P	37	2	5.41	0.78	8.05	(0.90,29.07)	32	7.42 *
All Others	200	5	2.50	1.07	2.74	(0.88, 6.39)	158	1.59
TOTAL	3339	54	1.62	1.14	1.66 *	(1.25, 2.17)	2580	1.20 *
Montefiore Medical Center - Moses Div.								
##Amsalem Y	255	4	1.57	1.46	1.26	(0.34, 3.22)	185	1.27
##Bliagos D	182	1	0.55	1.36	0.47	(0.01, 2.63)	165	0.00
##Bortnick A	13	0	0.00	2.71	0.00	(0.00,12.17)	12	0.00
##Celaj S	299	0	0.00	1.13	0.00	(0.00, 1.27)	242	0.00
##Charney R	4	0	0.00	0.35	0.00	(0.00,100.0)	4	0.00
##Gotsis W	61	0	0.00	1.51	0.00	(0.00, 4.66)	58	0.00
##Greenberg M	313	1	0.32	0.69	0.54	(0.01, 3.00)	297	0.49
##Johnson M	446	3	0.67	1.08	0.73	(0.15, 2.12)	399	0.26
##Krim N	6	0	0.00	0.47	0.00	(0.00,100.0)	6	0.00
##Monrad E	1	0	0.00	0.05	0.00	(0.00,100.0)	1	0.00
##Pyo R	672	5	0.74	1.20	0.73	(0.23, 1.69)	581	0.60
Sehhat K	169	0	0.00	0.47	0.00	(0.00, 5.43)	166	0.00
##Shaqra H	69	1	1.45	1.76	0.96	(0.01, 5.35)	38	0.00
##Shih A T	33	2	6.06	1.76	4.02	(0.45,14.52)	24	0.00
#Slovut D	2	0	0.00	1.49	0.00	(0.00,100.0)	.	.
##Wiley J	154	6	3.90	1.09	4.19 *	(1.53, 9.11)	128	2.95
All Others	280	3	1.07	1.03	1.21	(0.24, 3.54)	246	0.46
TOTAL	2959	26	0.88	1.12	0.92	(0.60, 1.34)	2552	0.51

Table 5, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
Montefiore Medical Center - Weiler Hosp.								
##Bortnick A	326	7	2.15	1.68	1.49	(0.60, 3.07)	248	0.48
##Charney R	100	3	3.00	1.43	2.45	(0.49, 7.16)	100	1.58
##Greenberg M	1	0	0.00	0.15	0.00	(0.00,100.0)	1	0.00
##Menegus M	494	1	0.20	1.17	0.20 **	(0.00, 1.13)	385	0.25
##Messinger D	27	0	0.00	4.23	0.00	(0.00, 3.75)	26	0.00
##Monrad E	332	2	0.60	1.58	0.45	(0.05, 1.61)	251	0.00
##Pyo R	2	0	0.00	14.48	0.00	(0.00,14.80)	2	0.00
##Shaqra H	111	2	1.80	1.75	1.20	(0.13, 4.33)	90	1.13
#Slovut D	198	4	2.02	1.48	1.59	(0.43, 4.07)	119	0.75
Sokol S	236	1	0.42	1.42	0.35	(0.00, 1.95)	180	0.00
##Wiley J	5	0	0.00	0.31	0.00	(0.00,100.0)	5	0.00
All Others	60	0	0.00	1.06	0.00	(0.00, 6.72)	55	0.00
TOTAL	1892	20	1.06	1.49	0.83	(0.51, 1.28)	1462	0.44
Mount Sinai Beth Israel								
#Aslam A F	123	4	3.25	0.97	3.90	(1.05, 9.99)	103	0.00
#Aslam A K	185	0	0.00	0.20	0.00	(0.00,11.71)	184	0.00
#Fox J	1231	11	0.89	1.09	0.96	(0.48, 1.71)	1146	0.63
##Gowda R	642	5	0.78	1.24	0.73	(0.24, 1.71)	569	0.41
Huang Y	494	0	0.00	0.42	0.00	(0.00, 2.07)	491	0.00
#Kanei Y	482	9	1.87	2.12	1.03	(0.47, 1.95)	342	0.00
#Kwan T	524	1	0.19	0.54	0.41	(0.01, 2.28)	522	0.30
#Liou M	369	0	0.00	0.42	0.00	(0.00, 2.77)	367	0.00
##Puma J	213	1	0.47	0.54	1.02	(0.01, 5.65)	212	0.00
##Ratcliffe J	87	0	0.00	0.59	0.00	(0.00, 8.30)	86	0.00
#Rosero H	488	4	0.82	0.84	1.14	(0.31, 2.92)	425	0.56
##Vales L	4	0	0.00	0.10	0.00	(0.00,100.0)	4	0.00
#Wilentz J	27	0	0.00	0.30	0.00	(0.00,53.28)	27	0.00
All Others	26	0	0.00	0.49	0.00	(0.00,33.38)	26	0.00
TOTAL	4895	35	0.72	0.93	0.90	(0.62, 1.25)	4504	0.36 **
Mount Sinai Hospital								
Baber U	199	2	1.01	1.59	0.74	(0.08, 2.67)	165	0.40
Bander J	326	5	1.53	1.42	1.26	(0.41, 2.94)	287	0.63
#Barman N	246	3	1.22	1.37	1.04	(0.21, 3.04)	213	0.98
##Bliagos D	86	0	0.00	1.00	0.00	(0.00, 5.00)	85	0.00
Dangas G	436	8	1.83	1.30	1.65	(0.71, 3.24)	390	1.28
##Dominguez-Echeva	98	1	1.02	0.74	1.61	(0.02, 8.97)	98	1.13
##Duvvuri S	17	0	0.00	0.27	0.00	(0.00,91.78)	17	0.00
##Fernaine G	12	0	0.00	1.40	0.00	(0.00,25.46)	12	0.00
##Gowda R	4	0	0.00	0.24	0.00	(0.00,100.0)	4	0.00
#Gujja K	160	2	1.25	0.59	2.46	(0.28, 8.87)	159	1.68
##Hameedi A	158	0	0.00	0.23	0.00	(0.00,11.89)	158	0.00
Hasan C	159	1	0.63	0.23	3.21	(0.04,17.86)	159	2.17
#Jayasundera T	4	0	0.00	0.47	0.00	(0.00,100.0)	4	0.00
#Kapur V	109	1	0.92	1.29	0.83	(0.01, 4.62)	89	0.94
##Kesanakurthy S	501	3	0.60	0.77	0.91	(0.18, 2.66)	478	0.76
Kini A	2630	11	0.42	0.69	0.71	(0.35, 1.26)	2551	0.46
Kovacic J	79	0	0.00	3.24	0.00	(0.00, 1.68)	53	0.00
Krishnan P	186	2	1.08	0.67	1.86	(0.21, 6.72)	183	0.68
Lee J	6	0	0.00	0.22	0.00	(0.00,100.0)	6	0.00
##Lee P C	1	0	0.00	0.21	0.00	(0.00,100.0)	1	0.00
Mittal N	9	0	0.00	0.30	0.00	(0.00,100.0)	9	0.00
#Moreno P	204	0	0.00	0.72	0.00	(0.00, 2.92)	199	0.00
Nguyen T	22	0	0.00	0.73	0.00	(0.00,26.77)	22	0.00
#Palkhiwala S	408	0	0.00	0.36	0.00	(0.00, 2.93)	406	0.00
#Patel V	34	0	0.00	0.44	0.00	(0.00,28.66)	34	0.00
Sharma S	3401	22	0.65	0.86	0.88	(0.55, 1.33)	3384	0.61
#Suleman J	438	1	0.23	0.41	0.65	(0.01, 3.61)	436	0.48
Sweeny J	283	5	1.77	1.03	2.00	(0.64, 4.66)	263	1.68
Varughese C	15	0	0.00	0.47	0.00	(0.00,60.67)	15	0.00
##Wiley J	7	0	0.00	0.91	0.00	(0.00,67.03)	5	0.00
##Zgheib M	17	0	0.00	0.26	0.00	(0.00,98.50)	17	0.00
All Others	167	3	1.80	1.74	1.21	(0.24, 3.52)	145	0.43
TOTAL	10422	70	0.67	0.84	0.93	(0.72, 1.17)	10047	0.63

Table 5, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
Mount Sinai St. Lukes								
#Amsalem Y	81	0	0.00	1.22	0.00	(0.00, 4.33)	60	0.00
#Fox J	1	0	0.00	1.48	0.00	(0.00,100.0)	1	0.00
##Gotsis W	55	2	3.64	1.06	3.99	(0.45,14.42)	54	2.53
##Gowda R	79	4	5.06	2.62	2.26	(0.61, 5.78)	53	1.20
Husain S S	29	0	0.00	0.42	0.00	(0.00,35.45)	29	0.00
#Kanei Y	1	0	0.00	3.78	0.00	(0.00,100.0)	1	0.00
#Kapur V	2	0	0.00	0.47	0.00	(0.00,100.0)	2	0.00
##Krim N	26	1	3.85	1.37	3.27	(0.04,18.20)	26	2.29
Leber R	274	2	0.73	1.29	0.66	(0.07, 2.40)	228	0.40
#Moreno P	559	1	0.18	0.96	0.22	(0.00, 1.21)	542	0.15
Palazzo A	110	2	1.82	1.35	1.57	(0.18, 5.68)	92	0.00
##Puma J	37	0	0.00	1.72	0.00	(0.00, 6.72)	35	0.00
##Ratcliffe J	16	0	0.00	1.14	0.00	(0.00,23.44)	16	0.00
##Silverman G	7	0	0.00	2.57	0.00	(0.00,23.79)	7	0.00
Simon C	499	12	2.40	2.76	1.02	(0.53, 1.78)	426	0.69
##Stathopoulos I	25	0	0.00	1.20	0.00	(0.00,14.29)	25	0.00
#Tamis-Holland J	132	1	0.76	1.99	0.44	(0.01, 2.47)	83	0.00
All Others	71	3	4.23	2.79	1.77	(0.36, 5.16)	52	1.51
TOTAL	2004	28	1.40	1.71	0.95	(0.63, 1.38)	1732	0.54
NYP - Lawrence Hospital								
#Ali Z	16	0	0.00	3.24	0.00	(0.00, 8.27)	7	0.00
#Apfelbaum M	54	0	0.00	0.66	0.00	(0.00,12.07)	32	0.00
#Green P	14	0	0.00	5.00	0.00	(0.00, 6.12)	7	0.00
##Hjemdahl-Monsen	236	1	0.42	0.77	0.64	(0.01, 3.57)	202	0.00
#Irobunda C	8	0	0.00	4.55	0.00	(0.00,11.77)	.	.
##Kalapatapu K	251	1	0.40	1.01	0.46	(0.01, 2.57)	231	0.45
#Nazif T	4	0	0.00	1.05	0.00	(0.00,100.0)	2	0.00
##Shih A T	27	0	0.00	0.56	0.00	(0.00,28.51)	22	0.00
#Vahl T	25	2	8.00	3.17	2.95	(0.33,10.65)	5	0.00
All Others	2	0	0.00	0.81	0.00	(0.00,100.0)	.	.
TOTAL	637	4	0.63	1.14	0.64	(0.17, 1.64)	508	0.22
NYP Hospital - Brooklyn Methodist Hosp.								
#Aslam A F	157	1	0.64	0.39	1.90	(0.02,10.58)	153	0.00
#Aslam A K	99	0	0.00	0.36	0.00	(0.00,12.15)	97	0.00
#Badero O	130	0	0.00	0.31	0.00	(0.00,10.70)	130	0.00
Brener S	428	22	5.14	2.32	2.59 *	(1.62, 3.91)	277	2.21 *
Chokshi A	73	0	0.00	0.62	0.00	(0.00, 9.53)	71	0.00
##Dominguez-Echeva	5	0	0.00	1.06	0.00	(0.00,81.23)	5	0.00
#Garyali S	2	0	0.00	0.50	0.00	(0.00,100.0)	1	0.00
Haq S	171	6	3.51	2.07	1.98	(0.72, 4.31)	151	1.51
##Hoyek W	48	1	2.08	0.20	12.25	(0.16,68.14)	48	8.19
Jasty B	111	2	1.80	0.73	2.87	(0.32,10.35)	107	2.17
#Kantrowitz N	28	0	0.00	0.46	0.00	(0.00,33.19)	28	0.00
##Kesanakurthy S	10	0	0.00	0.16	0.00	(0.00,100.0)	10	0.00
#Kwan T	20	0	0.00	0.34	0.00	(0.00,63.39)	20	0.00
#Patel V	123	0	0.00	0.41	0.00	(0.00, 8.45)	119	0.00
#Rehman S	191	1	0.52	0.89	0.69	(0.01, 3.84)	172	0.57
#Rosero H	6	0	0.00	0.34	0.00	(0.00,100.0)	6	0.00
Rouvelas P	54	0	0.00	0.45	0.00	(0.00,17.76)	53	0.00
Sacchi T	1196	8	0.67	0.98	0.80	(0.34, 1.58)	1059	0.36
#Sanghi P	68	0	0.00	0.24	0.00	(0.00,26.42)	68	0.00
##Shah A	189	3	1.59	1.05	1.77	(0.36, 5.17)	185	0.91
#Shaknovich A	58	0	0.00	0.69	0.00	(0.00,10.69)	57	0.00
#Shohat E	75	0	0.00	0.28	0.00	(0.00,20.21)	75	0.00
#Singh T	170	0	0.00	0.25	0.00	(0.00,10.02)	170	0.00
##Slotwiner A	2	0	0.00	0.38	0.00	(0.00,100.0)	2	0.00
All Others	62	2	3.23	1.67	2.26	(0.25, 8.15)	50	1.07
TOTAL	3476	46	1.32	1.00	1.54	(1.13, 2.06)	3114	0.96

Table 5, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
NYP Hospital - Columbia Presbyterian								
Aboufares A	97	0	0.00	0.76	0.00	(0.00, 5.79)	88	0.00
#Ali Z	491	6	1.22	1.46	0.98	(0.36, 2.12)	450	0.65
#Apfelbaum M	31	0	0.00	0.36	0.00	(0.00,38.86)	30	0.00
##Bliagos D	4	0	0.00	0.22	0.00	(0.00,100.0)	4	0.00
Brogno D	449	3	0.67	0.73	1.07	(0.22, 3.13)	444	0.80
Collins M	441	7	1.59	1.55	1.20	(0.48, 2.47)	407	0.82
##Dominguez-Echeva	4	0	0.00	0.28	0.00	(0.00,100.0)	4	0.00
George I	5	0	0.00	1.97	0.00	(0.00,43.54)	5	0.00
#Green P	289	3	1.04	1.19	1.02	(0.20, 2.98)	250	0.62
##Hjemdahl-Monsen	90	1	1.11	1.02	1.27	(0.02, 7.08)	89	0.87
#Irobunda C	135	1	0.74	1.06	0.81	(0.01, 4.53)	119	0.00
##Kalapatapu K	76	0	0.00	0.53	0.00	(0.00,10.55)	75	0.00
Karpaliotis D	441	4	0.91	0.86	1.23	(0.33, 3.16)	414	1.24
Kirtane A	503	4	0.80	1.20	0.78	(0.21, 1.99)	467	0.35
Kodali S	241	7	2.90	2.00	1.70	(0.68, 3.49)	230	0.85
Leon M	60	1	1.67	0.66	2.93	(0.04,16.32)	60	2.11
#Moses J	987	3	0.30	0.69	0.52	(0.10, 1.51)	984	0.39
#Motivala A	32	1	3.13	0.76	4.83	(0.06,26.89)	32	3.33
#Nazif T	181	0	0.00	1.57	0.00	(0.00, 1.51)	162	0.00
Parikh M	705	6	0.85	0.67	1.49	(0.54, 3.24)	681	0.85
Perry-Bottinger L	18	0	0.00	0.78	0.00	(0.00,30.69)	18	0.00
Pucillo A	138	0	0.00	0.79	0.00	(0.00, 3.92)	131	0.00
##Puma J	106	0	0.00	0.53	0.00	(0.00, 7.56)	106	0.00
Rabbani L	495	2	0.40	0.74	0.63	(0.07, 2.29)	471	0.56
##Ratcliffe J	33	0	0.00	0.41	0.00	(0.00,31.30)	33	0.00
Rentrop K	58	0	0.00	0.37	0.00	(0.00,20.06)	58	0.00
##Sastry A	1	0	0.00	0.53	0.00	(0.00,100.0)	1	0.00
##Shih A T	1	0	0.00	1.63	0.00	(0.00,100.0)	1	0.00
Smith S	46	0	0.00	0.45	0.00	(0.00,20.80)	46	0.00
##Stathopoulos I	201	0	0.00	0.65	0.00	(0.00, 3.26)	200	0.00
Stone G	3	0	0.00	1.21	0.00	(0.00,100.0)	3	0.00
#Vahl T	189	8	4.23	2.37	2.09	(0.90, 4.11)	161	2.23 *
#Warchol A	1	0	0.00	0.21	0.00	(0.00,100.0)	1	0.00
Weinberger J	27	0	0.00	0.45	0.00	(0.00,35.47)	27	0.00
All Others	143	3	2.10	1.46	1.67	(0.34, 4.89)	123	0.80
TOTAL	6722	60	0.89	1.01	1.03	(0.78, 1.32)	6375	0.67
NYP Hospital - New York Weill Cornell								
Bergman G	499	4	0.80	1.60	0.59	(0.16, 1.50)	436	0.00 **
##Charney R	25	0	0.00	1.04	0.00	(0.00,16.47)	25	0.00
Feldman D	505	2	0.40	1.58	0.29 **	(0.03, 1.05)	441	0.00 **
Gade C	20	0	0.00	0.22	0.00	(0.00,98.13)	20	0.00
##Kesanakurthy S	65	0	0.00	0.54	0.00	(0.00,12.22)	64	0.00
Kim L	428	2	0.47	1.67	0.33	(0.04, 1.18)	360	0.20
##Messinger D	10	0	0.00	1.13	0.00	(0.00,37.84)	10	0.00
Minutello R	383	5	1.31	1.63	0.94	(0.30, 2.19)	327	0.85
##Sharma A	123	1	0.81	1.31	0.73	(0.01, 4.03)	109	0.00
Singh H	190	4	2.11	2.13	1.16	(0.31, 2.96)	138	0.92
##Slotwiner A	128	1	0.78	1.66	0.55	(0.01, 3.05)	112	0.61
##Srivastava S	40	0	0.00	0.89	0.00	(0.00,12.08)	39	0.00
#Wilentz J	17	0	0.00	0.33	0.00	(0.00,75.79)	17	0.00
Wong S	504	3	0.60	0.70	0.99	(0.20, 2.91)	488	0.79
All Others	129	3	2.33	2.26	1.20	(0.24, 3.51)	106	1.89
TOTAL	3066	25	0.82	1.46	0.65 **	(0.42, 0.96)	2692	0.40 **
NYP Hospital - Queens								
Chiu Sungkin	51	0	0.00	0.18	0.00	(0.00,46.21)	51	0.00
Chiu Sungwai	57	1	1.75	0.21	9.97	(0.13,55.47)	57	6.76
#David M	23	0	0.00	0.20	0.00	(0.00,92.79)	23	0.00
##Grunwald A	84	0	0.00	1.13	0.00	(0.00, 4.51)	54	0.00
#Gupta R	56	0	0.00	0.97	0.00	(0.00, 7.93)	54	0.00
Gustafson G	396	1	0.25	0.77	0.38	(0.00, 2.12)	302	0.00
##Hameedi A	362	0	0.00	0.23	0.00	(0.00, 5.17)	361	0.00
##Koss J	41	1	2.44	1.20	2.37	(0.03,13.21)	11	0.00
Lee H	116	0	0.00	0.16	0.00	(0.00,23.40)	116	0.00

Table 5, *continued*

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
NYP Hospital - Queens, <i>continued</i>								
Moustakakis E	461	4	0.87	1.00	1.01	(0.27, 2.59)	328	1.35
##Papadakos S	152	1	0.66	2.30	0.33	(0.00, 1.86)	80	0.55
#Park C	303	4	1.32	0.60	2.56	(0.69, 6.55)	252	0.97
##Sharma A	4	1	25.00	0.95	30.91	(0.40,100.0)	.	.
##Slotwiner A	8	0	0.00	7.55	0.00	(0.00, 7.09)	.	.
TOTAL	2114	13	0.61	0.80	0.90	(0.48, 1.54)	1689	0.58
NYU Hospitals Center								
#Alhaddad B	1	0	0.00	0.10	0.00	(0.00,100.0)	1	0.00
#Attubato M	1402	10	0.71	0.74	1.13	(0.54, 2.08)	1322	0.79
#Babaev A	827	3	0.36	0.47	0.91	(0.18, 2.65)	810	0.68
#Bangalore S	32	0	0.00	0.76	0.00	(0.00,17.56)	22	0.00
#Coppola J	158	0	0.00	0.60	0.00	(0.00, 4.56)	151	0.00
#David M	219	1	0.46	0.28	1.93	(0.03,10.76)	219	1.25
##Farid A	172	0	0.00	0.24	0.00	(0.00,10.28)	171	0.00
Feit F	511	2	0.39	0.51	0.90	(0.10, 3.26)	496	0.68
##Fernaine G	29	1	3.45	0.31	12.95	(0.17,72.05)	29	9.03
##Grunwald A	2	0	0.00	0.21	0.00	(0.00,100.0)	2	0.00
#Iqbal S	20	0	0.00	1.37	0.00	(0.00,15.66)	12	0.00
#Jayasundera T	241	0	0.00	0.27	0.00	(0.00, 6.70)	240	0.00
Kokolis S	27	0	0.00	0.41	0.00	(0.00,38.29)	27	0.00
#Liou M	6	0	0.00	0.19	0.00	(0.00,100.0)	6	0.00
#Palkhiwala S	57	0	0.00	0.19	0.00	(0.00,38.73)	57	0.00
##Papadakos S	311	0	0.00	0.58	0.00	(0.00, 2.37)	309	0.00
#Razzouk L	379	3	0.79	0.85	1.09	(0.22, 3.18)	320	1.05
#Sanghi P	64	0	0.00	0.15	0.00	(0.00,44.37)	64	0.00
#Serrano-Gomez C	204	0	0.00	0.79	0.00	(0.00, 2.67)	181	0.00
##Shah A	2	0	0.00	0.23	0.00	(0.00,100.0)	2	0.00
#Shah B	31	1	3.23	1.40	2.69	(0.04,14.99)	16	0.00
#Singh T	71	0	0.00	0.17	0.00	(0.00,35.51)	71	0.00
#Slater J	492	6	1.22	0.83	1.73	(0.63, 3.76)	425	1.52
##Slotwiner A	2	0	0.00	0.52	0.00	(0.00,100.0)	2	0.00
##Srivastava S	41	0	0.00	0.21	0.00	(0.00,49.82)	41	0.00
#Staniloae C	126	2	1.59	0.77	2.41	(0.27, 8.71)	119	0.94
##Vales L	53	0	0.00	0.65	0.00	(0.00,12.38)	49	0.00
Williams M	50	3	6.00	1.49	4.72	(0.95,13.79)	50	3.37
All Others	46	1	2.17	2.61	0.97	(0.01, 5.41)	21	0.00
TOTAL	5576	33	0.59	0.63	1.10	(0.76, 1.55)	5235	0.79
NYU Langone Hospital-Brooklyn								
#Alhaddad B	57	1	1.75	1.97	1.04	(0.01, 5.80)	30	0.00
##Dominguez-Echeva	65	0	0.00	2.10	0.00	(0.00, 3.14)	61	0.00
##Fernaine G	278	3	1.08	1.27	0.99	(0.20, 2.90)	236	0.95
##Fuschetto D	31	1	3.23	2.49	1.51	(0.02, 8.41)	10	0.00
##Fuschetto O	43	0	0.00	1.95	0.00	(0.00, 5.11)	23	0.00
##Hoyek W	81	1	1.23	2.16	0.67	(0.01, 3.72)	55	0.00
#Kandov R	34	0	0.00	2.81	0.00	(0.00, 4.49)	9	0.00
##Lee P C	52	0	0.00	2.28	0.00	(0.00, 3.61)	35	0.00
#Royzman R	51	2	3.92	2.48	1.85	(0.21, 6.68)	20	4.57
##Sharma A	1	0	0.00	0.10	0.00	(0.00,100.0)	1	0.00
##Slotwiner A	6	0	0.00	2.32	0.00	(0.00,30.81)	5	0.00
##Srivastava S	22	0	0.00	0.45	0.00	(0.00,43.11)	22	0.00
TOTAL	721	8	1.11	1.81	0.72	(0.31, 1.41)	507	0.62
NYU Winthrop Hospital								
#Blumenthal S	1	0	0.00	0.48	0.00	(0.00,100.0)	1	0.00
##Caselnova R	39	1	2.56	0.86	3.48	(0.05,19.35)	36	2.74
##Chengot T	69	3	4.35	1.63	3.12	(0.63, 9.13)	58	1.61
Donohue D	253	2	0.79	1.13	0.82	(0.09, 2.95)	198	0.50
##Franco J	4	0	0.00	0.82	0.00	(0.00,100.0)	4	0.00
##Galler B	15	0	0.00	0.60	0.00	(0.00,47.72)	15	0.00
#Gambino A	764	7	0.92	1.05	1.02	(0.41, 2.09)	673	1.00
Green S	263	4	1.52	1.56	1.14	(0.31, 2.91)	169	0.43
##Hormozi S	2	0	0.00	0.19	0.00	(0.00,100.0)	2	0.00

Table 5, *continued*

	Cases	Deaths	OMR	All Cases EMR	RAMR	95% CI for RAMR	Non-emergency Cases	RAMR
NYU Winthrop Hospital, <i>continued</i>								
#Khan W	32	0	0.00	0.87	0.00	(0.00,15.33)	32	0.00
Marzo K	292	1	0.34	0.97	0.41	(0.01, 2.30)	231	0.00
#Mousa T	93	0	0.00	0.54	0.00	(0.00, 8.48)	93	0.00
#Naidu S	122	1	0.82	1.22	0.79	(0.01, 4.37)	104	0.00
#Schwartz R	1041	6	0.58	1.40	0.48 **	(0.18, 1.05)	942	0.34
##Yadav S	1	0	0.00	0.47	0.00	(0.00,100.0)	1	0.00
#Zisfein J	66	0	0.00	1.52	0.00	(0.00, 4.27)	64	0.00
All Others	107	5	4.67	2.15	2.54	(0.82, 5.93)	71	3.03
TOTAL	3164	30	0.95	1.25	0.89	(0.60, 1.26)	2694	0.61
Niagara Falls Memorial Medical Center								
##Conley J	41	0	0.00	0.59	0.00	(0.00,17.77)	35	0.00
#Dashkoff N	36	0	0.00	0.94	0.00	(0.00,12.70)	25	0.00
##Farhi E	1	0	0.00	4.02	0.00	(0.00,100.0)	.	.
##Gelormini J	3	0	0.00	0.86	0.00	(0.00,100.0)	2	0.00
#Meltser H	1	0	0.00	0.40	0.00	(0.00,100.0)	1	0.00
All Others	3	0	0.00	1.14	0.00	(0.00,100.0)	2	0.00
TOTAL	85	0	0.00	0.80	0.00	(0.00, 6.28)	65	0.00
North Shore University Hospital								
##Bagga R	2	0	0.00	1.66	0.00	(0.00,100.0)	2	0.00
#Blumenthal S	110	0	0.00	0.32	0.00	(0.00,12.03)	109	0.00
#Boutis L	1101	20	1.82	1.22	1.73	(1.06, 2.68)	923	1.48 *
#Dhama B	33	0	0.00	0.79	0.00	(0.00,16.39)	30	0.00
##Friedman G H	34	1	2.94	0.36	9.51	(0.12,52.91)	34	7.23
##Fuschetto D	39	0	0.00	0.67	0.00	(0.00,16.50)	35	0.00
##Fuschetto O	7	0	0.00	2.26	0.00	(0.00,27.06)	7	0.00
##Galler B	156	4	2.56	1.16	2.57	(0.69, 6.59)	155	1.94
##Grunwald A	32	2	6.25	1.20	6.10	(0.69,22.04)	30	4.18
##Hameedi A	3	0	0.00	0.39	0.00	(0.00,100.0)	3	0.00
##Happes M	1	0	0.00	0.23	0.00	(0.00,100.0)	1	0.00
##Hormozi S	4	0	0.00	1.65	0.00	(0.00,64.89)	4	0.00
#Husain S I	20	0	0.00	1.30	0.00	(0.00,16.45)	19	0.00
#Jauhar R	1325	14	1.06	0.99	1.25	(0.68, 2.10)	1117	1.07
##Joseph S	8	0	0.00	0.23	0.00	(0.00,100.0)	8	0.00
#Kaplan B	1684	8	0.48	0.82	0.67	(0.29, 1.33)	1539	0.33
##Katz S	147	1	0.68	1.22	0.65	(0.01, 3.62)	120	0.74
##Kim M	64	0	0.00	0.77	0.00	(0.00, 8.73)	58	0.00
##Koss J	187	1	0.53	1.05	0.59	(0.01, 3.31)	177	0.53
Kruger A	190	2	1.05	1.51	0.81	(0.09, 2.93)	184	0.61
#Lee A	73	0	0.00	3.68	0.00	(0.00, 1.60)	34	0.00
#Marchant D	95	0	0.00	1.08	0.00	(0.00, 4.17)	62	0.00
#Meraj P	1022	15	1.47	1.45	1.19	(0.66, 1.96)	849	0.80
##Ong L Y	46	0	0.00	0.92	0.00	(0.00,10.12)	46	0.00
##Papadakos S	4	0	0.00	4.68	0.00	(0.00,22.88)	4	0.00
##Patcha R	32	1	3.13	1.20	3.05	(0.04,16.96)	32	2.27
#Polena S	47	1	2.13	0.93	2.66	(0.03,14.82)	47	1.79
##Poumpouridis K	31	0	0.00	0.39	0.00	(0.00,35.63)	30	0.00
#Rutkin B	185	2	1.08	1.35	0.93	(0.10, 3.37)	131	0.00
##Selim S	56	1	1.79	2.01	1.04	(0.01, 5.78)	34	1.98
#Singh A	135	4	2.96	2.38	1.46	(0.39, 3.73)	89	0.47
#Singh V	1	0	0.00	1.56	0.00	(0.00,100.0)	.	.
#Srinivas G	37	0	0.00	0.43	0.00	(0.00,26.97)	36	0.00
##Strizik B	100	1	1.00	0.82	1.43	(0.02, 7.95)	100	0.97
##Weinberg M	145	1	0.69	1.21	0.67	(0.01, 3.70)	87	1.17
All Others	77	2	2.60	0.73	4.18	(0.47,15.09)	71	3.12
TOTAL	7233	81	1.12	1.13	1.16	(0.92, 1.44)	6207	0.87

Table 5, continued

	Cases	Deaths	OMR	All Cases EMR	RAMR	95% CI for RAMR	Non-emergency Cases	RAMR
Olean General Hospital								
##Chockalingam S	32	0	0.00	2.95	0.00	(0.00, 4.55)	17	0.00
##Farhi E	4	0	0.00	1.56	0.00	(0.00,68.59)	1	0.00
#Iyer V	17	0	0.00	2.23	0.00	(0.00,11.30)	11	0.00
Mallavarapu C	389	7	1.80	1.38	1.52	(0.61, 3.13)	206	1.54
##Morris W	13	0	0.00	3.11	0.00	(0.00,10.62)	7	0.00
##Phadke K	8	0	0.00	0.34	0.00	(0.00,100.0)	6	0.00
All Others	20	1	5.00	1.60	3.65	(0.05,20.32)	10	0.00
TOTAL	483	8	1.66	1.56	1.24	(0.54, 2.45)	258	1.24
Orange Regional Medical Center								
#Agarwal A	1	0	0.00	0.15	0.00	(0.00,100.0)	1	0.00
#Cuomo L	252	2	0.79	1.24	0.75	(0.08, 2.71)	138	0.62
##Gotsis W	595	7	1.18	0.90	1.53	(0.61, 3.15)	466	1.58
##Kalapatapu K	313	1	0.32	1.12	0.33	(0.00, 1.86)	306	0.23
#Motivala A	178	2	1.12	1.43	0.92	(0.10, 3.32)	103	1.07
##Silverman G	360	1	0.28	1.05	0.31	(0.00, 1.72)	218	0.00
All Others	9	0	0.00	0.50	0.00	(0.00,95.77)	8	0.00
TOTAL	1708	13	0.76	1.07	0.83	(0.44, 1.42)	1240	0.72
Peconic Bay Medical Center								
##Katz S	7	0	0.00	0.86	0.00	(0.00,71.49)	5	0.00
##Lederman S	10	1	10.00	0.73	15.98	(0.21,88.94)	5	43.39
All Others	3	0	0.00	0.15	0.00	(0.00,100.0)	3	0.00
TOTAL	20	1	5.00	0.69	8.49	(0.11,47.25)	13	16.21
Richmond University Medical Center								
##Duvvuri S	173	1	0.58	0.83	0.81	(0.01, 4.52)	143	0.98
##Farid A	2	0	0.00	0.11	0.00	(0.00,100.0)	2	0.00
##Fuschetto O	2	0	0.00	3.31	0.00	(0.00,64.79)	.	.
##Gala B	140	2	1.43	1.63	1.02	(0.11, 3.70)	101	1.40
#Rotatori F	62	0	0.00	2.60	0.00	(0.00, 2.66)	32	0.00
##Snyder S	5	0	0.00	1.00	0.00	(0.00,86.08)	.	.
#Swamy S	57	0	0.00	0.57	0.00	(0.00,13.28)	46	0.00
#Tamburrino F	4	0	0.00	0.53	0.00	(0.00,100.0)	4	0.00
##Zgheib M	22	0	0.00	0.45	0.00	(0.00,43.33)	14	0.00
TOTAL	467	3	0.64	1.26	0.59	(0.12, 1.74)	342	0.81
Rochester General Hospital								
#Abtahian F	323	5	1.55	1.31	1.38	(0.44, 3.21)	228	1.04
#Ahmed A	404	5	1.24	1.39	1.04	(0.33, 2.42)	289	0.57
##Chockalingam S	124	2	1.61	0.70	2.71	(0.30, 9.79)	111	0.00
#Depta J	208	5	2.40	1.31	2.14	(0.69, 5.00)	163	1.28
#Doling M	4	0	0.00	0.72	0.00	(0.00,100.0)	4	0.00
#Gacioch G	304	6	1.97	1.32	1.75	(0.64, 3.82)	198	0.00
#Hall C	240	7	2.92	1.37	2.49	(1.00, 5.13)	176	0.97
#Krishnamoorthy V	158	3	1.90	1.46	1.52	(0.31, 4.43)	107	1.47
##Ong L S	1541	12	0.78	0.90	1.02	(0.52, 1.77)	1380	0.67
#Patel T	279	10	3.58	1.71	2.45 *	(1.17, 4.50)	217	1.99
Scortichini D	134	1	0.75	0.39	2.22	(0.03,12.35)	127	1.73
#Singer G	354	2	0.56	0.87	0.76	(0.09, 2.74)	345	0.63
#Stuver T	294	2	0.68	1.18	0.67	(0.08, 2.43)	225	0.37
All Others	39	0	0.00	1.69	0.00	(0.00, 6.52)	24	0.00
TOTAL	4406	60	1.36	1.12	1.42	(1.08, 1.83)	3594	0.81
Samaritan Hospital								
#Ali-Hasan S	59	0	0.00	0.50	0.00	(0.00,14.50)	48	0.00
#Bishop G	33	1	3.03	1.51	2.34	(0.03,13.03)	11	9.69
##Delago A	24	0	0.00	2.79	0.00	(0.00, 6.41)	3	0.00
##Esper D	24	3	12.50	5.76	2.54	(0.51, 7.41)	2	0.00
##Maroney J	56	1	1.79	1.78	1.17	(0.02, 6.53)	20	0.00
#Martinelli M	10	0	0.00	1.58	0.00	(0.00,27.08)	3	0.00
##Papaleo R	371	4	1.08	0.70	1.79	(0.48, 4.59)	273	0.78
#Roccario E	5	0	0.00	3.88	0.00	(0.00,22.09)	2	0.00
##Winston B	52	2	3.85	0.89	5.07	(0.57,18.29)	20	7.59
TOTAL	634	11	1.74	1.14	1.77	(0.88, 3.17)	382	1.44

Table 5, *continued*

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
Saratoga Hospital								
#Grella R	16	2	12.50	2.03	7.21	(0.81,26.04)	10	5.60
Idelchik G	229	3	1.31	1.22	1.26	(0.25, 3.68)	190	1.58
#McNulty P	43	0	0.00	0.95	0.00	(0.00,10.49)	20	0.00
##Nappi A	1	0	0.00	2.33	0.00	(0.00,100.0)	.	.
##Papaleo R	1	0	0.00	1.05	0.00	(0.00,100.0)	.	.
All Others	1	1	100.00	5.63	20.75	(0.27,100.0)	.	.
TOTAL	291	6	2.06	1.24	1.94	(0.71, 4.23)	220	2.10
South Nassau Communities Hospital								
Freeman J	544	7	1.29	1.11	1.35	(0.54, 2.79)	413	1.10
##Hormozi S	9	1	11.11	4.81	2.70	(0.04,15.02)	2	0.00
#Patel M	4	1	25.00	1.77	16.47	(0.22,91.63)	2	15.92
#Petrossian G	40	0	0.00	1.52	0.00	(0.00, 7.07)	39	0.00
Rehman A	443	5	1.13	1.31	1.01	(0.33, 2.36)	277	0.95
#Zisfein J	209	3	1.44	0.76	2.21	(0.45, 6.47)	192	1.51
All Others	154	2	1.30	2.17	0.70	(0.08, 2.53)	80	0.72
TOTAL	1403	19	1.35	1.27	1.24	(0.75, 1.94)	1005	1.09
Southampton Hospital								
##Bench T	14	1	7.14	4.24	1.97	(0.03,10.96)	10	0.00
##Lederman S	7	0	0.00	1.83	0.00	(0.00,33.42)	5	0.00
All Others	4	1	25.00	4.20	6.96	(0.09,38.73)	.	.
TOTAL	25	2	8.00	3.56	2.63	(0.30, 9.49)	15	0.00
Southside Hospital								
##Arkonac B	325	6	1.85	1.09	1.98	(0.72, 4.31)	288	1.43
##Bagga R	7	0	0.00	0.17	0.00	(0.00,100.0)	7	0.00
##Bench T	4	0	0.00	0.10	0.00	(0.00,100.0)	4	0.00
##Caselnova R	35	1	2.86	2.36	1.41	(0.02, 7.87)	15	0.00
##Chengot T	2	0	0.00	0.63	0.00	(0.00,100.0)	1	0.00
##Deutsch E	83	0	0.00	1.11	0.00	(0.00, 4.63)	67	0.00
##Franco J	22	0	0.00	1.39	0.00	(0.00,13.97)	17	0.00
##Galler B	7	0	0.00	0.62	0.00	(0.00,99.04)	7	0.00
#Gandotra P	614	7	1.14	1.04	1.28	(0.51, 2.64)	546	1.22
#Gruberg L	4	0	0.00	0.26	0.00	(0.00,100.0)	2	0.00
##Happes M	37	0	0.00	1.44	0.00	(0.00, 8.07)	31	0.00
##Hormozi S	340	4	1.18	0.76	1.80	(0.48, 4.60)	298	2.48
##Katz S	2	0	0.00	0.16	0.00	(0.00,100.0)	2	0.00
#Korlipara G	1	0	0.00	0.19	0.00	(0.00,100.0)	1	0.00
##Lederman S	39	1	2.56	1.34	2.24	(0.03,12.48)	39	1.45
#Lee P J	252	4	1.59	0.63	2.94	(0.79, 7.53)	236	2.32
##Ong L Y	25	0	0.00	1.17	0.00	(0.00,14.69)	23	0.00
##Patel R B	65	0	0.00	1.27	0.00	(0.00, 5.18)	24	0.00
##Poumpouridis K	24	0	0.00	0.27	0.00	(0.00,65.57)	22	0.00
#Reich D	225	3	1.33	0.86	1.82	(0.37, 5.32)	198	2.18
##Selim S	154	3	1.95	1.28	1.78	(0.36, 5.20)	138	1.74
All Others	8	0	0.00	0.68	0.00	(0.00,79.12)	7	0.00
TOTAL	2275	29	1.27	0.99	1.51	(1.01, 2.17)	1973	1.49 *
St. Barnabas Hospital								
##Amsalem Y	15	0	0.00	2.38	0.00	(0.00,12.00)	2	0.00
##Bortnick A	7	0	0.00	1.83	0.00	(0.00,33.41)	5	0.00
##Celaj S	435	7	1.61	0.90	2.08	(0.83, 4.29)	389	0.86
##Greenberg M	4	0	0.00	1.37	0.00	(0.00,78.28)	2	0.00
##Johnson M	10	0	0.00	1.17	0.00	(0.00,36.56)	3	0.00
##Menegus M	1	0	0.00	0.08	0.00	(0.00,100.0)	1	0.00
##Monrad E	2	1	50.00	2.45	23.83	(0.31,100.0)	1	23.00
##Pyo R	22	1	4.55	3.79	1.40	(0.02, 7.80)	5	0.00
##Shaqra H	13	0	0.00	3.29	0.00	(0.00,10.03)	3	0.00
TOTAL	509	9	1.77	1.16	1.78	(0.81, 3.38)	411	1.05

Table 5, *continued*

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
St. Catherine of Siena Medical Center								
##Deutsch E	188	2	1.06	0.98	1.27	(0.14, 4.59)	154	0.77
##Franco J	66	0	0.00	1.71	0.00	(0.00, 3.80)	55	0.00
##Happes M	87	1	1.15	1.06	1.27	(0.02, 7.07)	68	0.00
##Hormozi S	172	3	1.74	0.97	2.10	(0.42, 6.14)	143	1.31
#Khan S	100	2	2.00	1.21	1.93	(0.22, 6.97)	83	1.03
##Patel N	21	0	0.00	1.74	0.00	(0.00,11.70)	12	0.00
##Patel R B	86	0	0.00	1.49	0.00	(0.00, 3.35)	51	0.00
##Rosenband M	140	0	0.00	1.37	0.00	(0.00, 2.24)	118	0.00
##Weinstein J	25	1	4.00	2.19	2.14	(0.03,11.89)	9	0.00
TOTAL	885	9	1.02	1.23	0.97	(0.44, 1.84)	693	0.57
St. Elizabeth Medical Center								
#Bhan R	549	10	1.82	1.24	1.72	(0.82, 3.16)	456	0.91
#Kelberman M	122	4	3.28	1.90	2.02	(0.54, 5.17)	90	2.39
##Kozman H	4	0	0.00	0.80	0.00	(0.00,100.0)	3	0.00
#Kudagi V	165	2	1.21	0.84	1.69	(0.19, 6.12)	143	1.05
##Kumar P	70	0	0.00	1.23	0.00	(0.00, 4.97)	58	0.00
#Maclsaac H	500	20	4.00	1.91	2.45 *	(1.49, 3.78)	397	1.87 *
#Mathew T C	163	3	1.84	1.37	1.57	(0.31, 4.58)	109	1.01
#Patel A R	125	0	0.00	1.38	0.00	(0.00, 2.48)	74	0.00
#Sassower M	675	7	1.04	1.26	0.96	(0.39, 1.99)	564	0.79
#Varma P	138	2	1.45	1.34	1.27	(0.14, 4.57)	89	2.01
All Others	100	0	0.00	0.97	0.00	(0.00, 4.43)	87	0.00
TOTAL	2611	48	1.84	1.39	1.55	(1.14, 2.05)	2070	1.19
St. Francis Hospital								
Abittan M	286	0	0.00	0.66	0.00	(0.00, 2.29)	281	0.00
Berke A	150	6	4.00	2.01	2.32	(0.85, 5.05)	135	2.07
Chung W	305	4	1.31	1.12	1.37	(0.37, 3.50)	269	0.99
Ezratty A	212	1	0.47	1.39	0.40	(0.01, 2.21)	173	0.45
##Friedman G H	332	5	1.51	1.19	1.47	(0.47, 3.44)	298	0.92
Goldman A B	39	2	5.13	2.17	2.76	(0.31, 9.96)	17	0.00
##Grunwald A	125	2	1.60	0.81	2.31	(0.26, 8.35)	101	1.87
##Hormozi S	2	0	0.00	0.10	0.00	(0.00,100.0)	2	0.00
#Jeremias A	111	1	0.90	1.75	0.60	(0.01, 3.34)	93	0.48
##Koss J	10	0	0.00	0.57	0.00	(0.00,75.80)	8	0.00
Lituchy A	457	6	1.31	1.36	1.13	(0.41, 2.45)	419	0.72
Madrid A	217	2	0.92	1.13	0.95	(0.11, 3.43)	191	0.00
Mezzafonte S	350	1	0.29	1.42	0.23	(0.00, 1.31)	308	0.26
Minadeo J	157	6	3.82	1.61	2.78	(1.01, 6.04)	123	2.02
#Moses J	418	4	0.96	1.12	1.00	(0.27, 2.57)	416	0.72
Oruci E	188	2	1.06	1.07	1.16	(0.13, 4.18)	179	0.00
Pappas T	323	4	1.24	0.76	1.90	(0.51, 4.87)	312	0.87
#Park C	33	0	0.00	0.51	0.00	(0.00,25.37)	30	0.00
##Patcha R	8	0	0.00	1.07	0.00	(0.00,49.94)	8	0.00
#Patel M	109	2	1.83	1.18	1.82	(0.20, 6.56)	107	1.74
##Patel N	2	0	0.00	0.12	0.00	(0.00,100.0)	2	0.00
#Petrossian G	784	11	1.40	1.15	1.43	(0.71, 2.56)	777	0.99
##Rosenband M	1	0	0.00	1.03	0.00	(0.00,100.0)	1	0.00
Shlofmitz R	2955	14	0.47	0.69	0.80	(0.44, 1.34)	2898	0.59
Tsiamtsiouris T	354	9	2.54	1.67	1.78	(0.81, 3.38)	325	1.34
##Weinstein J	38	0	0.00	0.71	0.00	(0.00,15.81)	36	0.00
##Yadav S	223	5	2.24	1.39	1.88	(0.61, 4.40)	185	0.96
All Others	159	5	3.14	1.88	1.96	(0.63, 4.57)	141	1.74
TOTAL	8348	92	1.10	1.05	1.23	(0.99, 1.50)	7835	0.79

Table 5, continued

	Cases	Deaths	OMR	All Cases EMR	RAMR	95% CI for RAMR	Non-emergency Cases	RAMR
St. Josephs Hospital Health Center								
#Amin N	153	3	1.96	1.72	1.33	(0.27, 3.89)	101	1.56
Caputo R	1292	29	2.24	1.59	1.65	(1.10, 2.37)	978	1.28
El-Khally Z	1322	12	0.91	1.44	0.74	(0.38, 1.29)	1109	0.41
Fischi M	578	7	1.21	1.49	0.95	(0.38, 1.96)	397	0.24
Iskander A	1124	23	2.05	1.34	1.78	(1.13, 2.68)	901	1.60 *
##Kumar P	8	0	0.00	0.19	0.00	(0.00,100.0)	8	0.00
O'Hern M	544	3	0.55	1.41	0.46	(0.09, 1.34)	414	0.50
Simons A	799	11	1.38	1.35	1.19	(0.59, 2.13)	528	0.77
All Others	88	0	0.00	0.86	0.00	(0.00, 5.66)	75	0.00
TOTAL	5908	88	1.49	1.44	1.21	(0.97, 1.49)	4511	0.91
St. Lukes Cornwall Hospital - Newburgh								
#Cuomo L	4	0	0.00	1.70	0.00	(0.00,62.88)	3	0.00
##Gotsis W	5	0	0.00	3.34	0.00	(0.00,25.63)	4	0.00
#Hadid A	294	8	2.72	1.41	2.25	(0.97, 4.43)	210	1.75
#Hadid A B	119	0	0.00	1.30	0.00	(0.00, 2.78)	72	0.00
#Jafar M	1	0	0.00	0.05	0.00	(0.00,100.0)	1	0.00
#Patrello A	226	2	0.88	0.98	1.05	(0.12, 3.79)	191	0.96
Shah N	250	4	1.60	1.44	1.30	(0.35, 3.33)	183	1.23
##Silverman G	3	0	0.00	0.73	0.00	(0.00,100.0)	1	0.00
All Others	56	0	0.00	0.72	0.00	(0.00,10.67)	42	0.00
TOTAL	958	14	1.46	1.27	1.34	(0.73, 2.25)	707	1.18
St. Peters Hospital								
#Ali-Hasan S	132	2	1.52	0.89	1.98	(0.22, 7.15)	81	0.00
#Bishop G	363	5	1.38	1.58	1.02	(0.33, 2.38)	234	0.34
##Delago A	11	1	9.09	4.38	2.42	(0.03,13.49)	1	0.00
##Esper D	262	4	1.53	0.96	1.86	(0.50, 4.75)	231	1.47
Khawaja H	25	0	0.00	0.20	0.00	(0.00,87.74)	25	0.00
##Maroney J	141	1	0.71	1.00	0.83	(0.01, 4.62)	121	1.08
#Martinelli M	607	7	1.15	0.99	1.37	(0.55, 2.81)	495	1.00
##Papaleo R	9	0	0.00	1.37	0.00	(0.00,34.67)	.	.
#Roccario E	575	10	1.74	1.26	1.61	(0.77, 2.96)	428	1.49
##Winston B	434	6	1.38	0.86	1.87	(0.68, 4.08)	378	1.20
TOTAL	2559	36	1.41	1.11	1.48	(1.03, 2.04)	1994	1.06
Staten Island University Hospital- North								
##Duvvuri S	107	2	1.87	0.76	2.87	(0.32,10.37)	101	2.22
##Farid A	23	0	0.00	0.16	0.00	(0.00,100.0)	23	0.00
##Gala B	26	1	3.85	1.10	4.07	(0.05,22.64)	24	0.00
##Hoyek W	163	1	0.61	0.76	0.94	(0.01, 5.22)	122	2.07
#Kandov R	584	5	0.86	0.76	1.31	(0.42, 3.07)	504	1.01
#Malpeso J	200	3	1.50	0.96	1.83	(0.37, 5.34)	141	1.88
#Royzman R	273	2	0.73	1.18	0.73	(0.08, 2.62)	191	0.54
##Snyder S	149	2	1.34	1.07	1.46	(0.16, 5.29)	115	1.81
#Swamy S	5	0	0.00	0.59	0.00	(0.00,100.0)	4	0.00
##Tamburrino F	378	1	0.26	0.65	0.48	(0.01, 2.65)	320	0.55
#Warchol A	48	0	0.00	0.39	0.00	(0.00,22.86)	46	0.00
##Zgheib M	299	2	0.67	0.77	1.02	(0.11, 3.69)	280	0.90
All Others	82	0	0.00	0.98	0.00	(0.00, 5.35)	58	0.00
TOTAL	2337	19	0.81	0.83	1.15	(0.69, 1.79)	1929	1.04
Strong Memorial Hospital								
Chaudhary I	200	6	3.00	2.88	1.22	(0.44, 2.65)	98	0.81
Cove C	431	10	2.32	1.01	2.69 *	(1.29, 4.95)	301	0.42
#Doling M	478	9	1.88	0.82	2.67 *	(1.22, 5.07)	370	2.38 *
Garringer J	305	5	1.64	0.87	2.21	(0.71, 5.15)	224	2.12
#Krishnamoorthy V	376	5	1.33	1.40	1.11	(0.36, 2.60)	241	0.42
Ling F	477	7	1.47	1.37	1.25	(0.50, 2.57)	312	1.10
Narins C	535	3	0.56	1.11	0.59	(0.12, 1.73)	343	0.58
#Stuver T	575	9	1.57	1.40	1.30	(0.59, 2.47)	414	0.54
All Others	7	0	0.00	1.87	0.00	(0.00,32.75)	2	0.00
TOTAL	3384	54	1.60	1.26	1.48	(1.11, 1.93)	2305	0.99

Table 5, continued

	Cases	Deaths	OMR	All Cases EMR	RAMR	95% CI for RAMR	Non-emergency Cases	RAMR
UHS - Wilson Medical Center								
Ahmed O	357	2	0.56	1.08	0.61	(0.07, 2.19)	265	0.00
Kashou H	639	7	1.10	0.91	1.41	(0.56, 2.91)	512	0.91
Rehman A U	90	3	3.33	3.05	1.28	(0.26, 3.73)	50	2.15
Traverse P	362	1	0.28	1.14	0.28	(0.00, 1.58)	269	0.00
Vitellas M	393	8	2.04	1.43	1.66	(0.72, 3.27)	316	1.99
##Yarkoni A	349	4	1.15	1.59	0.84	(0.23, 2.16)	285	0.80
TOTAL	2190	25	1.14	1.26	1.05	(0.68, 1.56)	1697	0.85
Unity Hospital of Rochester								
#Abtahian F	27	0	0.00	1.35	0.00	(0.00,11.73)	14	0.00
#Ahmed A	44	3	6.82	1.45	5.50	(1.11,16.07)	24	4.31
##Chockalingam S	107	6	5.61	1.89	3.47 *	(1.27, 7.56)	56	2.38
#Depta J	13	0	0.00	2.16	0.00	(0.00,15.29)	2	0.00
#Gacioch G	21	1	4.76	1.87	2.97	(0.04,16.54)	12	0.00
#Hall C	24	0	0.00	1.22	0.00	(0.00,14.58)	14	0.00
##Ong L S	21	0	0.00	1.83	0.00	(0.00,11.14)	9	0.00
#Patel T	639	14	2.19	1.57	1.63	(0.89, 2.74)	474	0.96
#Singer G	24	1	4.17	2.52	1.93	(0.03,10.76)	16	2.09
TOTAL	920	25	2.72	1.63	1.95 *	(1.26, 2.88)	621	1.25
Univ. of Vermont Health Network CVP Hosp								
Bradley W	327	4	1.22	1.21	1.18	(0.32, 3.02)	246	1.18
Garrand T	280	3	1.07	1.02	1.22	(0.25, 3.58)	205	1.12
Gauthier E	570	9	1.58	0.88	2.09	(0.96, 3.97)	406	1.29
Ishac R	629	7	1.11	1.13	1.15	(0.46, 2.37)	450	0.99
Terrien E	24	0	0.00	1.84	0.00	(0.00, 9.72)	19	0.00
All Others	18	0	0.00	1.59	0.00	(0.00,14.98)	14	0.00
TOTAL	1848	23	1.24	1.07	1.36	(0.86, 2.05)	1340	1.05
University Hospital at Stony Brook								
##Bench T	62	0	0.00	1.16	0.00	(0.00, 5.97)	51	0.00
#Chen O	56	1	1.79	1.22	1.71	(0.02, 9.51)	33	0.00
Dervan J	160	0	0.00	0.80	0.00	(0.00, 3.35)	157	0.00
#Gruberg L	615	10	1.63	1.55	1.23	(0.59, 2.26)	407	0.88
#Jeremias A	351	8	2.28	2.12	1.26	(0.54, 2.48)	218	0.57
##Joseph S	68	2	2.94	1.43	2.41	(0.27, 8.70)	68	1.67
#Khan S	111	1	0.90	1.27	0.83	(0.01, 4.60)	108	0.00
#Korlipara G	270	4	1.48	0.69	2.50	(0.67, 6.40)	254	1.44
Lawson W	515	10	1.94	1.42	1.59	(0.76, 2.93)	330	1.03
##Lederman S	206	0	0.00	1.33	0.00	(0.00, 1.57)	191	0.00
Mani A	712	14	1.97	2.09	1.10	(0.60, 1.84)	496	0.87
Montellese D	126	0	0.00	0.78	0.00	(0.00, 4.36)	119	0.00
Parikh P	259	5	1.93	1.70	1.33	(0.43, 3.10)	133	0.00
##Patel N	335	3	0.90	0.76	1.38	(0.28, 4.02)	310	0.00
#Pulipati B	21	0	0.00	0.96	0.00	(0.00,21.24)	21	0.00
##Rosenband M	122	2	1.64	1.16	1.65	(0.19, 5.97)	118	1.18
##Weinstein J	375	6	1.60	1.01	1.86	(0.68, 4.04)	341	1.25
All Others	25	3	12.00	2.27	6.18 *	(1.24,18.07)	25	4.48 *
TOTAL	4389	69	1.57	1.43	1.29	(1.00, 1.63)	3380	0.74
University Hospital of Brooklyn								
#Badero O	5	0	0.00	1.70	0.00	(0.00,50.33)	5	0.00
#Castillo R	19	1	5.26	4.57	1.35	(0.02, 7.49)	1	0.00
Cavusoglu E	258	3	1.16	1.98	0.69	(0.14, 2.00)	181	0.46
#Chadow H	8	0	0.00	4.57	0.00	(0.00,11.72)	1	0.00
Dogar M	95	2	2.11	1.92	1.28	(0.14, 4.63)	83	1.56
Feit A	158	5	3.16	2.23	1.66	(0.53, 3.87)	116	1.29
#Hegde S	99	1	1.01	2.14	0.55	(0.01, 3.06)	60	0.00
John S	65	0	0.00	2.01	0.00	(0.00, 3.28)	57	0.00
Marmur J	285	7	2.46	1.95	1.48	(0.59, 3.04)	181	0.68

Table 5, *continued*

	Cases	Deaths	OMR	All Cases		95% CI for RAMR	Non-emergency	
				EMR	RAMR		Cases	RAMR
University Hospital of Brooklyn, <i>continued</i>								
#Rehman S	15	0	0.00	0.62	0.00	(0.00,46.04)	14	0.00
#Shohat E	1	0	0.00	0.05	0.00	(0.00,100.0)	1	0.00
All Others	1	0	0.00	2.11	0.00	(0.00,100.0)	1	0.00
TOTAL	1009	19	1.88	2.07	1.06	(0.64, 1.66)	701	0.67
Upstate University Hospital - SUNY								
Arasu P	43	2	4.65	3.50	1.55	(0.17, 5.60)	4	0.00
Chaudhuri D	306	13	4.25	1.59	3.13 *	(1.66, 5.35)	226	3.38 *
Ford T	128	4	3.13	2.23	1.64	(0.44, 4.19)	55	1.15
##Kozman H	213	8	3.76	1.22	3.60 *	(1.55, 7.10)	134	2.89
All Others	11	1	9.09	0.48	21.97	(0.29,100.0)	9	0.00
TOTAL	701	28	3.99	1.69	2.76 *	(1.83, 3.99)	428	2.76 *
Vassar Brothers Medical Center								
Gorwara S	423	5	1.18	1.79	0.77	(0.25, 1.80)	307	0.47
#Jafar M	959	9	0.94	1.30	0.84	(0.38, 1.60)	729	0.41
Kantaros L	377	7	1.86	1.48	1.47	(0.59, 3.03)	270	0.68
Narayan R	227	4	1.76	2.27	0.91	(0.24, 2.33)	169	0.92
#Patrello A	227	1	0.44	1.79	0.29	(0.00, 1.60)	187	0.00
Yen M	367	7	1.91	1.36	1.63	(0.65, 3.37)	258	1.60
All Others	9	0	0.00	1.00	0.00	(0.00,47.69)	8	0.00
TOTAL	2589	33	1.27	1.54	0.97	(0.66, 1.36)	1928	0.63
Westchester Medical Center								
Ahmad H	295	7	2.37	1.84	1.51	(0.61, 3.11)	173	0.37
##Charney R	20	0	0.00	0.27	0.00	(0.00,79.70)	19	0.00
Cohen M B	276	4	1.45	1.71	0.99	(0.27, 2.53)	175	1.09
#Hadid A	9	0	0.00	0.54	0.00	(0.00,87.57)	9	0.00
#Hadid A B	2	0	0.00	0.18	0.00	(0.00,100.0)	2	0.00
#Kaple R	226	6	2.65	2.08	1.49	(0.54, 3.24)	143	1.45
##Messinger D	7	0	0.00	0.41	0.00	(0.00,100.0)	7	0.00
#Naidu S	66	0	0.00	2.00	0.00	(0.00, 3.25)	40	0.00
##Shih A T	4	0	0.00	1.55	0.00	(0.00,69.28)	3	0.00
Timmermans R	285	8	2.81	1.75	1.87	(0.81, 3.69)	152	1.12
All Others	16	0	0.00	0.53	0.00	(0.00,51.01)	14	0.00
TOTAL	1206	25	2.07	1.78	1.36	(0.88, 2.01)	737	0.89
White Plains Hospital								
##Bliagos D	672	10	1.49	1.43	1.22	(0.58, 2.24)	578	0.69
##Charney R	183	2	1.09	1.02	1.26	(0.14, 4.54)	148	1.24
##Greenberg M	330	4	1.21	0.99	1.43	(0.38, 3.66)	246	0.49
##Hjemdahl-Monsen	36	0	0.00	1.02	0.00	(0.00,11.67)	32	0.00
##Johnson M	20	1	5.00	1.53	3.81	(0.05,21.18)	8	0.00
##Kalapatapu K	100	0	0.00	0.66	0.00	(0.00, 6.47)	97	0.00
##Menegus M	2	0	0.00	4.48	0.00	(0.00,47.80)	.	.
##Messinger D	140	4	2.86	1.47	2.27	(0.61, 5.80)	116	1.66
TOTAL	1483	21	1.42	1.23	1.35	(0.83, 2.06)	1225	0.78
Statewide Total	150801	1762	1.17				124469	0.79

* RAMR significantly higher than statewide rate based on 95 percent confidence interval.

** RAMR significantly lower than statewide rate based on 95 percent confidence interval.

Performed procedures in another NYS hospital.

Performed procedures in two or more other NYS hospitals.

Table 6**Summary Information for Cardiologists Practicing at More Than One Hospital, 2015-2017**

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Abtahian F	350	5	1.43	1.32	1.27	(0.41, 2.96)	242	1.00
Rochester General Hosp	323	5	1.55	1.31	1.38	(0.44, 3.21)	228	1.04
Unity Hospital	27	0	0.00	1.35	0.00	(0.00,11.73)	14	0.00
Agarwal A	167	1	0.60	1.23	0.57	(0.01, 3.17)	110	0.00
Good Sam - Suffern	166	1	0.60	1.24	0.57	(0.01, 3.17)	109	0.00
Orange Regional Med Ctr	1	0	0.00	0.15	0.00	(0.00,100.0)	1	0.00
Ahmed A	448	8	1.79	1.40	1.49	(0.64, 2.94)	313	0.80
Rochester General Hosp	404	5	1.24	1.39	1.04	(0.33, 2.42)	289	0.57
Unity Hospital	44	3	6.82	1.45	5.50	(1.11,16.07)	24	4.31
Alhaddad B	58	1	1.72	1.94	1.04	(0.01, 5.79)	31	0.00
NYU Hospitals Center	1	0	0.00	0.10	0.00	(0.00,100.0)	1	0.00
NYU Langone Hosp.-Brooklyn	57	1	1.75	1.97	1.04	(0.01, 5.80)	30	0.00
Ali Z	507	6	1.18	1.52	0.91	(0.33, 1.98)	457	0.62
NYP-Columbia Presby.	491	6	1.22	1.46	0.98	(0.36, 2.12)	450	0.65
NYP-Lawrence Hosp	16	0	0.00	3.24	0.00	(0.00, 8.27)	7	0.00
Ali-Hasan S	191	2	1.05	0.77	1.58	(0.18, 5.72)	129	0.00
Samaritan Hospital	59	0	0.00	0.50	0.00	(0.00,14.50)	48	0.00
St. Peters Hospital	132	2	1.52	0.89	1.98	(0.22, 7.15)	81	0.00
Amin N	306	3	0.98	1.47	0.78	(0.16, 2.28)	204	0.92
Arnot Ogden Med Ctr	153	0	0.00	1.22	0.00	(0.00, 2.30)	103	0.00
St. Josephs Hospital	153	3	1.96	1.72	1.33	(0.27, 3.89)	101	1.56
Amsalem Y	394	4	1.02	1.42	0.83	(0.22, 2.14)	277	0.90
BronxCare Health System	43	0	0.00	1.25	0.00	(0.00, 7.99)	30	0.00
Montefiore - Moses	255	4	1.57	1.46	1.26	(0.34, 3.22)	185	1.27
Mount Sinai St. Lukes	81	0	0.00	1.22	0.00	(0.00, 4.33)	60	0.00
St. Barnabas Hospital	15	0	0.00	2.38	0.00	(0.00,12.00)	2	0.00
Apfelbaum M	85	0	0.00	0.55	0.00	(0.00, 9.21)	62	0.00
NYP-Columbia Presby.	31	0	0.00	0.36	0.00	(0.00,38.86)	30	0.00
NYP-Lawrence Hosp	54	0	0.00	0.66	0.00	(0.00,12.07)	32	0.00
Arkonac B	344	6	1.74	1.06	1.93	(0.71, 4.20)	307	1.38
Good Sam-West Islip	17	0	0.00	0.51	0.00	(0.00,49.43)	17	0.00
Long Island Jewish MC	2	0	0.00	0.24	0.00	(0.00,100.0)	2	0.00
Southside Hospital	325	6	1.85	1.09	1.98	(0.72, 4.31)	288	1.43
Aslam A F	280	5	1.79	0.65	3.22	(1.04, 7.52)	256	0.00
Mount Sinai Beth Israel	123	4	3.25	0.97	3.90	(1.05, 9.99)	103	0.00
NYP-Brooklyn Methodist	157	1	0.64	0.39	1.90	(0.02,10.58)	153	0.00
Aslam A K	284	0	0.00	0.25	0.00	(0.00, 5.96)	281	0.00
Mount Sinai Beth Israel	185	0	0.00	0.20	0.00	(0.00,11.71)	184	0.00
NYP-Brooklyn Methodist	99	0	0.00	0.36	0.00	(0.00,12.15)	97	0.00
Attubato M	1409	10	0.71	0.75	1.11	(0.53, 2.04)	1323	0.79
Bellevue Hospital Ctr	7	0	0.00	2.72	0.00	(0.00,22.47)	1	0.00
NYU Hospitals Center	1402	10	0.71	0.74	1.13	(0.54, 2.08)	1322	0.79
Babaev A	834	3	0.36	0.48	0.88	(0.18, 2.57)	811	0.68
Bellevue Hospital Ctr	7	0	0.00	1.60	0.00	(0.00,38.18)	1	0.00
NYU Hospitals Center	827	3	0.36	0.47	0.91	(0.18, 2.65)	810	0.68

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Badero O	135	0	0.00	0.36	0.00	(0.00, 8.82)	135	0.00
NYP-Brooklyn Methodist	130	0	0.00	0.31	0.00	(0.00,10.70)	130	0.00
Univ. Hosp-Brooklyn	5	0	0.00	1.70	0.00	(0.00,50.33)	5	0.00
Bagga R	649	7	1.08	1.01	1.24	(0.50, 2.56)	564	0.79
Huntington Hospital	639	7	1.10	1.02	1.26	(0.50, 2.59)	554	0.80
Long Island Jewish MC	1	0	0.00	2.39	0.00	(0.00,100.0)	1	0.00
North Shore Univ Hosp	2	0	0.00	1.66	0.00	(0.00,100.0)	2	0.00
Southside Hospital	7	0	0.00	0.17	0.00	(0.00,100.0)	7	0.00
Bangalore S	484	12	2.48	2.17	1.33	(0.69, 2.33)	394	0.78
Bellevue Hospital Ctr	452	12	2.65	2.27	1.36	(0.70, 2.38)	372	0.80
NYU Hospitals Center	32	0	0.00	0.76	0.00	(0.00,17.56)	22	0.00
Barman N	288	4	1.39	1.52	1.06	(0.29, 2.73)	216	0.96
Elmhurst Hospital Ctr	42	1	2.38	2.42	1.15	(0.02, 6.39)	3	0.00
Mount Sinai Hospital	246	3	1.22	1.37	1.04	(0.21, 3.04)	213	0.98
Bench T	229	1	0.44	1.22	0.42	(0.01, 2.33)	176	0.00
Long Island Comm. Hosp.	149	0	0.00	0.99	0.00	(0.00, 2.92)	111	0.00
Southampton Hospital	14	1	7.14	4.24	1.97	(0.03,10.96)	10	0.00
Southside Hospital	4	0	0.00	0.10	0.00	(0.00,100.0)	4	0.00
Univ. Hosp-Stony Brook	62	0	0.00	1.16	0.00	(0.00, 5.97)	51	0.00
Bhan R	559	10	1.79	1.26	1.66	(0.80, 3.06)	462	0.90
Faxton - St. Lukes	10	0	0.00	2.23	0.00	(0.00,19.18)	6	0.00
St. Elizabeth Med Ctr	549	10	1.82	1.24	1.72	(0.82, 3.16)	456	0.91
Bishop G	396	6	1.52	1.57	1.13	(0.41, 2.45)	245	0.67
Samaritan Hospital	33	1	3.03	1.51	2.34	(0.03,13.03)	11	9.69
St. Peters Hospital	363	5	1.38	1.58	1.02	(0.33, 2.38)	234	0.34
Bliagos D	944	11	1.17	1.37	1.00	(0.50, 1.78)	832	0.43
Montefiore - Moses	182	1	0.55	1.36	0.47	(0.01, 2.63)	165	0.00
Mount Sinai Hospital	86	0	0.00	1.00	0.00	(0.00, 5.00)	85	0.00
NYP-Columbia Presby.	4	0	0.00	0.22	0.00	(0.00,100.0)	4	0.00
White Plains Hospital	672	10	1.49	1.43	1.22	(0.58, 2.24)	578	0.69
Blumenthal S	111	0	0.00	0.33	0.00	(0.00,11.87)	110	0.00
NYU Winthrop Hospital	1	0	0.00	0.48	0.00	(0.00,100.0)	1	0.00
North Shore Univ Hosp	110	0	0.00	0.32	0.00	(0.00,12.03)	109	0.00
Bortnick A	346	7	2.02	1.73	1.37	(0.55, 2.82)	265	0.44
Montefiore - Moses	13	0	0.00	2.71	0.00	(0.00,12.17)	12	0.00
Montefiore - Weiler	326	7	2.15	1.68	1.49	(0.60, 3.07)	248	0.48
St. Barnabas Hospital	7	0	0.00	1.83	0.00	(0.00,33.41)	5	0.00
Boutis L	1130	21	1.86	1.26	1.72	(1.06, 2.63)	929	1.57 *
Long Island Jewish MC	29	1	3.45	2.77	1.45	(0.02, 8.09)	6	18.20
North Shore Univ Hosp	1101	20	1.82	1.22	1.73	(1.06, 2.68)	923	1.48 *
Calandra S	356	4	1.12	1.41	0.93	(0.25, 2.39)	246	0.52
Buffalo General Med Ctr	1	0	0.00	1.06	0.00	(0.00,100.0)	1	0.00
Mercy Hospital-Buffalo	355	4	1.13	1.41	0.94	(0.25, 2.39)	245	0.53
Caselnova R	508	4	0.79	1.06	0.87	(0.23, 2.22)	447	0.71
Good Sam-West Islip	434	2	0.46	0.97	0.55	(0.06, 2.00)	396	0.53
NYU Winthrop Hospital	39	1	2.56	0.86	3.48	(0.05,19.35)	36	2.74
Southside Hospital	35	1	2.86	2.36	1.41	(0.02, 7.87)	15	0.00
Castillo R	329	6	1.82	2.09	1.02	(0.37, 2.22)	222	0.21
Brookdale Univ Hosp Med Ctr	310	5	1.61	1.93	0.97	(0.31, 2.27)	221	0.21
Univ. Hosp-Brooklyn	19	1	5.26	4.57	1.35	(0.02, 7.49)	1	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Celaj S	771	10	1.30	1.09	1.39	(0.67, 2.56)	636	0.66
BronxCare Health System	37	3	8.11	2.95	3.21	(0.64, 9.37)	5	29.39
Montefiore - Moses	299	0	0.00	1.13	0.00	(0.00, 1.27)	242	0.00
St. Barnabas Hospital	435	7	1.61	0.90	2.08	(0.83, 4.29)	389	0.86
Chadow H	233	3	1.29	2.43	0.62	(0.12, 1.81)	145	0.00
Brookdale Univ Hosp Med Ctr	225	3	1.33	2.36	0.66	(0.13, 1.93)	144	0.00
Univ. Hosp-Brooklyn	8	0	0.00	4.57	0.00	(0.00,11.72)	1	0.00
Charney R	332	5	1.51	1.09	1.62	(0.52, 3.77)	296	1.29
Montefiore - Moses	4	0	0.00	0.35	0.00	(0.00,100.0)	4	0.00
Montefiore - Weiler	100	3	3.00	1.43	2.45	(0.49, 7.16)	100	1.58
NYP-Weill Cornell	25	0	0.00	1.04	0.00	(0.00,16.47)	25	0.00
Westchester Med Ctr	20	0	0.00	0.27	0.00	(0.00,79.70)	19	0.00
White Plains Hospital	183	2	1.09	1.02	1.26	(0.14, 4.54)	148	1.24
Chen O	100	1	1.00	0.86	1.36	(0.02, 7.59)	75	0.00
Maimonides Medical Ctr	44	0	0.00	0.39	0.00	(0.00,24.76)	42	0.00
Univ. Hosp-Stony Brook	56	1	1.79	1.22	1.71	(0.02, 9.51)	33	0.00
Chengot T	272	6	2.21	1.22	2.12	(0.77, 4.61)	224	1.58
Good Sam-West Islip	201	3	1.49	1.08	1.61	(0.32, 4.70)	165	1.56
NYU Winthrop Hospital	69	3	4.35	1.63	3.12	(0.63, 9.13)	58	1.61
Southside Hospital	2	0	0.00	0.63	0.00	(0.00,100.0)	1	0.00
Chockalingam S	263	8	3.04	1.45	2.44	(1.05, 4.82)	184	1.10
Olean General Hosp.	32	0	0.00	2.95	0.00	(0.00, 4.55)	17	0.00
Rochester General Hosp	124	2	1.61	0.70	2.71	(0.30, 9.79)	111	0.00
Unity Hospital	107	6	5.61	1.89	3.47 *	(1.27, 7.56)	56	2.38
Conley J	760	7	0.92	0.90	1.20	(0.48, 2.46)	629	0.77
Buffalo General Med Ctr	556	6	1.08	1.00	1.26	(0.46, 2.75)	435	0.81
Mercy Hospital-Buffalo	163	1	0.61	0.64	1.12	(0.01, 6.23)	159	0.77
Niagara Falls Memorial	41	0	0.00	0.59	0.00	(0.00,17.77)	35	0.00
Coppola J	348	3	0.86	1.18	0.85	(0.17, 2.48)	298	0.33
Bellevue Hospital Ctr	190	3	1.58	1.68	1.10	(0.22, 3.22)	147	0.48
NYU Hospitals Center	158	0	0.00	0.60	0.00	(0.00, 4.56)	151	0.00
Coven D	127	1	0.79	1.66	0.56	(0.01, 3.09)	87	0.94
Jamaica Hosp Med Ctr	21	0	0.00	1.00	0.00	(0.00,20.33)	6	0.00
Lenox Hill Hospital	106	1	0.94	1.78	0.62	(0.01, 3.44)	81	0.96
Cuomo L	256	2	0.78	1.24	0.73	(0.08, 2.65)	141	0.61
Orange Regional Med Ctr	252	2	0.79	1.24	0.75	(0.08, 2.71)	138	0.62
St. Lukes Cornwall Hosp	4	0	0.00	1.70	0.00	(0.00,62.88)	3	0.00
Dashkoff N	477	7	1.47	1.05	1.63	(0.65, 3.35)	361	0.79
Buffalo General Med Ctr	441	7	1.59	1.06	1.74	(0.70, 3.59)	336	0.86
Niagara Falls Memorial	36	0	0.00	0.94	0.00	(0.00,12.70)	25	0.00
David M	242	1	0.41	0.27	1.80	(0.02, 9.99)	242	1.17
NYP-Queens	23	0	0.00	0.20	0.00	(0.00,92.79)	23	0.00
NYU Hospitals Center	219	1	0.46	0.28	1.93	(0.03,10.76)	219	1.25
Delago A	617	17	2.76	1.46	2.20 *	(1.28, 3.53)	496	2.02 *
Albany Med. Ctr	581	16	2.75	1.35	2.38 *	(1.36, 3.86)	491	2.03 *
Glens Falls Hospital	1	0	0.00	0.20	0.00	(0.00,100.0)	1	0.00
Samaritan Hospital	24	0	0.00	2.79	0.00	(0.00, 6.41)	3	0.00
St. Peters Hospital	11	1	9.09	4.38	2.42	(0.03,13.49)	1	0.00
Depta J	221	5	2.26	1.36	1.94	(0.63, 4.53)	165	1.28
Rochester General Hosp	208	5	2.40	1.31	2.14	(0.69, 5.00)	163	1.28
Unity Hospital	13	0	0.00	2.16	0.00	(0.00,15.29)	2	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Deutsch E	875	5	0.57	0.69	0.97	(0.31, 2.27)	795	0.61
Good Sam-West Islip	604	3	0.50	0.54	1.08	(0.22, 3.17)	574	0.67
Southside Hospital	83	0	0.00	1.11	0.00	(0.00, 4.63)	67	0.00
St. Catherine of Siena	188	2	1.06	0.98	1.27	(0.14, 4.59)	154	0.77
Dhama B	148	0	0.00	0.61	0.00	(0.00, 4.73)	140	0.00
Long Island Jewish MC	115	0	0.00	0.56	0.00	(0.00, 6.65)	110	0.00
North Shore Univ Hosp	33	0	0.00	0.79	0.00	(0.00,16.39)	30	0.00
Doling M	482	9	1.87	0.82	2.65 *	(1.21, 5.03)	374	2.35 *
Rochester General Hosp	4	0	0.00	0.72	0.00	(0.00,100.0)	4	0.00
Strong Memorial Hosp	478	9	1.88	0.82	2.67 *	(1.22, 5.07)	370	2.38 *
Dominguez-Echevarria A	229	1	0.44	1.04	0.49	(0.01, 2.74)	225	0.35
Lenox Hill Hospital	57	0	0.00	0.39	0.00	(0.00,19.28)	57	0.00
Mount Sinai Hospital	98	1	1.02	0.74	1.61	(0.02, 8.97)	98	1.13
NYP-Brooklyn Methodist	5	0	0.00	1.06	0.00	(0.00,81.23)	5	0.00
NYP-Columbia Presby.	4	0	0.00	0.28	0.00	(0.00,100.0)	4	0.00
NYU Langone Hosp.-Brooklyn	65	0	0.00	2.10	0.00	(0.00, 3.14)	61	0.00
Duvvuri S	297	3	1.01	0.77	1.53	(0.31, 4.46)	261	1.51
Mount Sinai Hospital	17	0	0.00	0.27	0.00	(0.00,91.78)	17	0.00
Richmond Univ Med Cntr	173	1	0.58	0.83	0.81	(0.01, 4.52)	143	0.98
Staten Island Univ Hosp	107	2	1.87	0.76	2.87	(0.32,10.37)	101	2.22
Esper D	533	10	1.88	1.23	1.79	(0.86, 3.29)	425	1.26
Albany Med. Ctr	247	3	1.21	1.07	1.33	(0.27, 3.89)	192	1.04
Samaritan Hospital	24	3	12.50	5.76	2.54	(0.51, 7.41)	2	0.00
St. Peters Hospital	262	4	1.53	0.96	1.86	(0.50, 4.75)	231	1.47
Farhi E	760	10	1.32	1.10	1.39	(0.67, 2.56)	548	0.82
Buffalo General Med Ctr	755	10	1.32	1.10	1.41	(0.68, 2.60)	547	0.83
Niagara Falls Memorial	1	0	0.00	4.02	0.00	(0.00,100.0)	.	.
Olean General Hosp.	4	0	0.00	1.56	0.00	(0.00,68.59)	1	0.00
Farid A	197	0	0.00	0.23	0.00	(0.00, 9.38)	196	0.00
NYU Hospitals Center	172	0	0.00	0.24	0.00	(0.00,10.28)	171	0.00
Richmond Univ Med Cntr	2	0	0.00	0.11	0.00	(0.00,100.0)	2	0.00
Staten Island Univ Hosp	23	0	0.00	0.16	0.00	(0.00,100.0)	23	0.00
Fernaine G	329	4	1.22	1.16	1.23	(0.33, 3.14)	287	1.16
Lenox Hill Hospital	10	0	0.00	0.14	0.00	(0.00,100.0)	10	0.00
Mount Sinai Hospital	12	0	0.00	1.40	0.00	(0.00,25.46)	12	0.00
NYU Hospitals Center	29	1	3.45	0.31	12.95	(0.17,72.05)	29	9.03
NYU Langone Hosp.-Brooklyn	278	3	1.08	1.27	0.99	(0.20, 2.90)	236	0.95
Fox J	1232	11	0.89	1.09	0.95	(0.48, 1.71)	1147	0.63
Mount Sinai Beth Israel	1231	11	0.89	1.09	0.96	(0.48, 1.71)	1146	0.63
Mount Sinai St. Lukes	1	0	0.00	1.48	0.00	(0.00,100.0)	1	0.00
Franco J	204	0	0.00	1.15	0.00	(0.00, 1.83)	178	0.00
Good Sam-West Islip	64	0	0.00	1.07	0.00	(0.00, 6.24)	59	0.00
Long Island Comm. Hosp.	48	0	0.00	0.39	0.00	(0.00,23.14)	43	0.00
NYU Winthrop Hospital	4	0	0.00	0.82	0.00	(0.00,100.0)	4	0.00
Southside Hospital	22	0	0.00	1.39	0.00	(0.00,13.97)	17	0.00
St. Catherine of Siena	66	0	0.00	1.71	0.00	(0.00, 3.80)	55	0.00
Friedman G H	368	6	1.63	1.11	1.71	(0.63, 3.73)	334	1.17
Long Island Jewish MC	2	0	0.00	0.29	0.00	(0.00,100.0)	2	0.00
North Shore Univ Hosp	34	1	2.94	0.36	9.51	(0.12,52.91)	34	7.23
St. Francis Hospital	332	5	1.51	1.19	1.47	(0.47, 3.44)	298	0.92

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Fuschetto D	128	1	0.78	1.07	0.85	(0.01, 4.75)	100	0.00
Long Island Jewish MC	58	0	0.00	0.58	0.00	(0.00,12.79)	55	0.00
NYU Langone Hosp.-Brooklyn	31	1	3.23	2.49	1.51	(0.02, 8.41)	10	0.00
North Shore Univ Hosp	39	0	0.00	0.67	0.00	(0.00,16.50)	35	0.00
Fuschetto O	73	0	0.00	1.80	0.00	(0.00, 3.26)	50	0.00
Long Island Jewish MC	17	0	0.00	1.05	0.00	(0.00,24.02)	16	0.00
Maimonides Medical Ctr	4	0	0.00	1.87	0.00	(0.00,57.42)	4	0.00
NYU Langone Hosp.-Brooklyn	43	0	0.00	1.95	0.00	(0.00, 5.11)	23	0.00
North Shore Univ Hosp	7	0	0.00	2.26	0.00	(0.00,27.06)	7	0.00
Richmond Univ Med Cntr	2	0	0.00	3.31	0.00	(0.00,64.79)	.	.
Gacioch G	325	7	2.15	1.35	1.86	(0.75, 3.84)	210	0.00
Rochester General Hosp	304	6	1.97	1.32	1.75	(0.64, 3.82)	198	0.00
Unity Hospital	21	1	4.76	1.87	2.97	(0.04,16.54)	12	0.00
Gala B	171	3	1.75	1.58	1.30	(0.26, 3.79)	130	0.87
Maimonides Medical Ctr	5	0	0.00	2.66	0.00	(0.00,32.26)	5	0.00
Richmond Univ Med Cntr	140	2	1.43	1.63	1.02	(0.11, 3.70)	101	1.40
Staten Island Univ Hosp	26	1	3.85	1.10	4.07	(0.05,22.64)	24	0.00
Galler B	178	4	2.25	1.10	2.40	(0.64, 6.14)	177	1.80
NYU Winthrop Hospital	15	0	0.00	0.60	0.00	(0.00,47.72)	15	0.00
North Shore Univ Hosp	156	4	2.56	1.16	2.57	(0.69, 6.59)	155	1.94
Southside Hospital	7	0	0.00	0.62	0.00	(0.00,99.04)	7	0.00
Gambino A	795	7	0.88	1.03	1.00	(0.40, 2.05)	700	0.98
Long Island Comm. Hosp.	31	0	0.00	0.51	0.00	(0.00,26.98)	27	0.00
NYU Winthrop Hospital	764	7	0.92	1.05	1.02	(0.41, 2.09)	673	1.00
Gandotra P	689	9	1.31	1.05	1.45	(0.66, 2.75)	620	1.34
Good Sam-West Islip	75	2	2.67	1.17	2.66	(0.30, 9.61)	74	1.89
Southside Hospital	614	7	1.14	1.04	1.28	(0.51, 2.64)	546	1.22
Garyali S	20	0	0.00	0.17	0.00	(0.00,100.0)	19	0.00
Maimonides Medical Ctr	18	0	0.00	0.14	0.00	(0.00,100.0)	18	0.00
NYP-Brooklyn Methodist	2	0	0.00	0.50	0.00	(0.00,100.0)	1	0.00
Gelormini J	697	10	1.43	1.28	1.31	(0.63, 2.40)	543	0.90
Buffalo General Med Ctr	1	0	0.00	0.43	0.00	(0.00,100.0)	1	0.00
Mercy Hospital-Buffalo	693	10	1.44	1.29	1.31	(0.63, 2.41)	540	0.91
Niagara Falls Memorial	3	0	0.00	0.86	0.00	(0.00,100.0)	2	0.00
Gotsis W	718	9	1.25	0.98	1.50	(0.68, 2.84)	584	1.40
Good Sam - Suffern	2	0	0.00	0.78	0.00	(0.00,100.0)	2	0.00
Montefiore - Moses	61	0	0.00	1.51	0.00	(0.00, 4.66)	58	0.00
Mount Sinai St. Lukes	55	2	3.64	1.06	3.99	(0.45,14.42)	54	2.53
Orange Regional Med Ctr	595	7	1.18	0.90	1.53	(0.61, 3.15)	466	1.58
St. Lukes Cornwall Hosp	5	0	0.00	3.34	0.00	(0.00,25.63)	4	0.00
Gowda R	725	9	1.24	1.38	1.05	(0.48, 1.99)	626	0.49
Mount Sinai Beth Israel	642	5	0.78	1.24	0.73	(0.24, 1.71)	569	0.41
Mount Sinai Hospital	4	0	0.00	0.24	0.00	(0.00,100.0)	4	0.00
Mount Sinai St. Lukes	79	4	5.06	2.62	2.26	(0.61, 5.78)	53	1.20
Green P	303	3	0.99	1.37	0.85	(0.17, 2.47)	257	0.59
NYP-Columbia Presby.	289	3	1.04	1.19	1.02	(0.20, 2.98)	250	0.62
NYP-Lawrence Hosp	14	0	0.00	5.00	0.00	(0.00, 6.12)	7	0.00
Greenberg M	648	5	0.77	0.85	1.06	(0.34, 2.48)	546	0.49
Montefiore - Moses	313	1	0.32	0.69	0.54	(0.01, 3.00)	297	0.49
Montefiore - Weiler	1	0	0.00	0.15	0.00	(0.00,100.0)	1	0.00
St. Barnabas Hospital	4	0	0.00	1.37	0.00	(0.00,78.28)	2	0.00
White Plains Hospital	330	4	1.21	0.99	1.43	(0.38, 3.66)	246	0.49

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Grella R	305	4	1.31	1.09	1.41	(0.38, 3.61)	233	1.36
Arnot Ogden Med Ctr	289	2	0.69	1.03	0.78	(0.09, 2.82)	223	0.54
Saratoga Hospital	16	2	12.50	2.03	7.21	(0.81,26.04)	10	5.60
Gruberg L	619	10	1.62	1.54	1.23	(0.59, 2.26)	409	0.88
Southside Hospital	4	0	0.00	0.26	0.00	(0.00,100.0)	2	0.00
Univ. Hosp-Stony Brook	615	10	1.63	1.55	1.23	(0.59, 2.26)	407	0.88
Grunwald A	289	6	2.08	0.88	2.77	(1.01, 6.03)	232	2.62
Long Island Jewish MC	46	2	4.35	0.40	12.80 *	(1.44,46.22)	45	8.92 *
NYP-Queens	84	0	0.00	1.13	0.00	(0.00, 4.51)	54	0.00
NYU Hospitals Center	2	0	0.00	0.21	0.00	(0.00,100.0)	2	0.00
North Shore Univ Hosp	32	2	6.25	1.20	6.10	(0.69,22.04)	30	4.18
St. Francis Hospital	125	2	1.60	0.81	2.31	(0.26, 8.35)	101	1.87
Gujja K	166	2	1.20	0.60	2.36	(0.27, 8.54)	165	1.62
Lenox Hill Hospital	6	0	0.00	0.61	0.00	(0.00,100.0)	6	0.00
Mount Sinai Hospital	160	2	1.25	0.59	2.46	(0.28, 8.87)	159	1.68
Gupta R	100	0	0.00	0.85	0.00	(0.00, 5.05)	98	0.00
Long Island Jewish MC	44	0	0.00	0.70	0.00	(0.00,13.90)	44	0.00
NYP-Queens	56	0	0.00	0.97	0.00	(0.00, 7.93)	54	0.00
Hadid A	303	8	2.64	1.39	2.22	(0.96, 4.38)	219	1.71
St. Lukes Cornwall Hosp	294	8	2.72	1.41	2.25	(0.97, 4.43)	210	1.75
Westchester Med Ctr	9	0	0.00	0.54	0.00	(0.00,87.57)	9	0.00
Hadid A B	121	0	0.00	1.28	0.00	(0.00, 2.77)	74	0.00
St. Lukes Cornwall Hosp	119	0	0.00	1.30	0.00	(0.00, 2.78)	72	0.00
Westchester Med Ctr	2	0	0.00	0.18	0.00	(0.00,100.0)	2	0.00
Hall C	264	7	2.65	1.36	2.28	(0.92, 4.71)	190	0.90
Rochester General Hosp	240	7	2.92	1.37	2.49	(1.00, 5.13)	176	0.97
Unity Hospital	24	0	0.00	1.22	0.00	(0.00,14.58)	14	0.00
Hameedi A	610	0	0.00	0.27	0.00	(0.00, 2.65)	609	0.00
Long Island Jewish MC	87	0	0.00	0.48	0.00	(0.00,10.22)	87	0.00
Mount Sinai Hospital	158	0	0.00	0.23	0.00	(0.00,11.89)	158	0.00
NYP-Queens	362	0	0.00	0.23	0.00	(0.00, 5.17)	361	0.00
North Shore Univ Hosp	3	0	0.00	0.39	0.00	(0.00,100.0)	3	0.00
Happes M	237	2	0.84	0.99	1.00	(0.11, 3.60)	208	0.44
Good Sam-West Islip	112	1	0.89	0.79	1.31	(0.02, 7.30)	108	0.96
North Shore Univ Hosp	1	0	0.00	0.23	0.00	(0.00,100.0)	1	0.00
Southside Hospital	37	0	0.00	1.44	0.00	(0.00, 8.07)	31	0.00
St. Catherine of Siena	87	1	1.15	1.06	1.27	(0.02, 7.07)	68	0.00
Hegde S	193	2	1.04	1.56	0.78	(0.09, 2.80)	153	0.49
Bellevue Hospital Ctr	94	1	1.06	0.95	1.31	(0.02, 7.31)	93	0.94
Univ. Hosp-Brooklyn	99	1	1.01	2.14	0.55	(0.01, 3.06)	60	0.00
Hjemdahl-Monsen C	362	2	0.55	0.86	0.75	(0.08, 2.71)	323	0.34
NYP-Columbia Presby.	90	1	1.11	1.02	1.27	(0.02, 7.08)	89	0.87
NYP-Lawrence Hosp	236	1	0.42	0.77	0.64	(0.01, 3.57)	202	0.00
White Plains Hospital	36	0	0.00	1.02	0.00	(0.00,11.67)	32	0.00
Hormozi S	1068	10	0.94	0.82	1.34	(0.64, 2.46)	946	1.19
Good Sam-West Islip	539	2	0.37	0.74	0.59	(0.07, 2.13)	495	0.57
NYU Winthrop Hospital	2	0	0.00	0.19	0.00	(0.00,100.0)	2	0.00
North Shore Univ Hosp	4	0	0.00	1.65	0.00	(0.00,64.89)	4	0.00
South Nassau Com. Hosp	9	1	11.11	4.81	2.70	(0.04,15.02)	2	0.00
Southside Hospital	340	4	1.18	0.76	1.80	(0.48, 4.60)	298	2.48
St. Catherine of Siena	172	3	1.74	0.97	2.10	(0.42, 6.14)	143	1.31
St. Francis Hospital	2	0	0.00	0.10	0.00	(0.00,100.0)	2	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Hoyek W	292	3	1.03	1.06	1.13	(0.23, 3.32)	225	1.62
NYP-Brooklyn Methodist	48	1	2.08	0.20	12.25	(0.16,68.14)	48	8.19
NYU Langone Hosp.-Brooklyn	81	1	1.23	2.16	0.67	(0.01, 3.72)	55	0.00
Staten Island Univ Hosp	163	1	0.61	0.76	0.94	(0.01, 5.22)	122	2.07
Husain S I	74	1	1.35	1.19	1.33	(0.02, 7.39)	73	0.94
Long Island Jewish MC	54	1	1.85	1.15	1.89	(0.02,10.50)	54	1.35
North Shore Univ Hosp	20	0	0.00	1.30	0.00	(0.00,16.45)	19	0.00
Iqbal S	304	1	0.33	1.48	0.26	(0.00, 1.44)	239	0.40
Bellevue Hospital Ctr	284	1	0.35	1.49	0.28	(0.00, 1.53)	227	0.41
NYU Hospitals Center	20	0	0.00	1.37	0.00	(0.00,15.66)	12	0.00
Irobunda C	143	1	0.70	1.26	0.65	(0.01, 3.62)	119	0.00
NYP-Columbia Presby.	135	1	0.74	1.06	0.81	(0.01, 4.53)	119	0.00
NYP-Lawrence Hosp	8	0	0.00	4.55	0.00	(0.00,11.77)	.	.
Iyer V	629	6	0.95	1.33	0.84	(0.30, 1.82)	454	0.17
Buffalo General Med Ctr	612	6	0.98	1.31	0.87	(0.32, 1.90)	443	0.17
Olean General Hosp.	17	0	0.00	2.23	0.00	(0.00,11.30)	11	0.00
Jafar M	960	9	0.94	1.30	0.84	(0.38, 1.60)	730	0.41
St. Lukes Cornwall Hosp	1	0	0.00	0.05	0.00	(0.00,100.0)	1	0.00
Vassar Bros. Med Ctr	959	9	0.94	1.30	0.84	(0.38, 1.60)	729	0.41
Jain S	458	1	0.22	0.98	0.26	(0.00, 1.45)	347	0.46
Jamaica Hosp Med Ctr	228	1	0.44	1.22	0.42	(0.01, 2.33)	120	1.12
Lenox Hill Hospital	230	0	0.00	0.73	0.00	(0.00, 2.54)	227	0.00
Jauhar R	1456	14	0.96	1.02	1.10	(0.60, 1.84)	1224	0.99
Long Island Jewish MC	131	0	0.00	1.39	0.00	(0.00, 2.35)	107	0.00
North Shore Univ Hosp	1325	14	1.06	0.99	1.25	(0.68, 2.10)	1117	1.07
Jayasundera T	245	0	0.00	0.27	0.00	(0.00, 6.51)	244	0.00
Mount Sinai Hospital	4	0	0.00	0.47	0.00	(0.00,100.0)	4	0.00
NYU Hospitals Center	241	0	0.00	0.27	0.00	(0.00, 6.70)	240	0.00
Jeremias A	462	9	1.95	2.03	1.12	(0.51, 2.13)	311	0.54
St. Francis Hospital	111	1	0.90	1.75	0.60	(0.01, 3.34)	93	0.48
Univ. Hosp-Stony Brook	351	8	2.28	2.12	1.26	(0.54, 2.48)	218	0.57
Johnson M	478	4	0.84	1.10	0.89	(0.24, 2.27)	411	0.25
BronxCare Health System	2	0	0.00	0.85	0.00	(0.00,100.0)	1	0.00
Montefiore - Moses	446	3	0.67	1.08	0.73	(0.15, 2.12)	399	0.26
St. Barnabas Hospital	10	0	0.00	1.17	0.00	(0.00,36.56)	3	0.00
White Plains Hospital	20	1	5.00	1.53	3.81	(0.05,21.18)	8	0.00
Joseph S	151	2	1.32	1.00	1.55	(0.17, 5.59)	144	1.14
Long Island Comm. Hosp.	75	0	0.00	0.69	0.00	(0.00, 8.23)	68	0.00
North Shore Univ Hosp	8	0	0.00	0.23	0.00	(0.00,100.0)	8	0.00
Univ. Hosp-Stony Brook	68	2	2.94	1.43	2.41	(0.27, 8.70)	68	1.67
Kalapatapu K	740	2	0.27	0.96	0.33	(0.04, 1.19)	709	0.25
NYP-Columbia Presby.	76	0	0.00	0.53	0.00	(0.00,10.55)	75	0.00
NYP-Lawrence Hosp	251	1	0.40	1.01	0.46	(0.01, 2.57)	231	0.45
Orange Regional Med Ctr	313	1	0.32	1.12	0.33	(0.00, 1.86)	306	0.23
White Plains Hospital	100	0	0.00	0.66	0.00	(0.00, 6.47)	97	0.00
Kandov R	618	5	0.81	0.87	1.08	(0.35, 2.52)	513	1.00
NYU Langone Hosp.-Brooklyn	34	0	0.00	2.81	0.00	(0.00, 4.49)	9	0.00
Staten Island Univ Hosp	584	5	0.86	0.76	1.31	(0.42, 3.07)	504	1.01
Kanei Y	483	9	1.86	2.13	1.02	(0.47, 1.94)	343	0.00
Mount Sinai Beth Israel	482	9	1.87	2.12	1.03	(0.47, 1.95)	342	0.00
Mount Sinai St. Lukes	1	0	0.00	3.78	0.00	(0.00,100.0)	1	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Kantrowitz N	33	0	0.00	0.50	0.00	(0.00,25.83)	32	0.00
Maimonides Medical Ctr	5	0	0.00	0.74	0.00	(0.00,100.0)	4	0.00
NYP-Brooklyn Methodist	28	0	0.00	0.46	0.00	(0.00,33.19)	28	0.00
Kaplan B	1694	8	0.47	0.83	0.66	(0.29, 1.31)	1541	0.33
Long Island Jewish MC	10	0	0.00	2.15	0.00	(0.00,19.93)	2	0.00
North Shore Univ Hosp	1684	8	0.48	0.82	0.67	(0.29, 1.33)	1539	0.33
Kaple R	229	6	2.62	2.07	1.48	(0.54, 3.21)	144	1.45
Glens Falls Hospital	3	0	0.00	1.37	0.00	(0.00,100.0)	1	0.00
Westchester Med Ctr	226	6	2.65	2.08	1.49	(0.54, 3.24)	143	1.45
Kapur V	111	1	0.90	1.28	0.82	(0.01, 4.59)	91	0.92
Mount Sinai Hospital	109	1	0.92	1.29	0.83	(0.01, 4.62)	89	0.94
Mount Sinai St. Lukes	2	0	0.00	0.47	0.00	(0.00,100.0)	2	0.00
Katz S	168	1	0.60	1.44	0.48	(0.01, 2.70)	127	0.72
Long Island Jewish MC	12	0	0.00	4.58	0.00	(0.00, 7.80)	.	.
North Shore Univ Hosp	147	1	0.68	1.22	0.65	(0.01, 3.62)	120	0.74
Peconic Bay Med Ctr	7	0	0.00	0.86	0.00	(0.00,71.49)	5	0.00
Southside Hospital	2	0	0.00	0.16	0.00	(0.00,100.0)	2	0.00
Kelberman M	126	4	3.17	1.91	1.94	(0.52, 4.97)	92	2.36
Faxton - St. Lukes	4	0	0.00	2.34	0.00	(0.00,45.78)	2	0.00
St. Elizabeth Med Ctr	122	4	3.28	1.90	2.02	(0.54, 5.17)	90	2.39
Kesanakurthy S	699	4	0.57	0.82	0.82	(0.22, 2.10)	654	0.57
Brooklyn Hosp.Downtown	120	1	0.83	1.22	0.80	(0.01, 4.44)	99	0.00
Lenox Hill Hospital	3	0	0.00	0.44	0.00	(0.00,100.0)	3	0.00
Mount Sinai Hospital	501	3	0.60	0.77	0.91	(0.18, 2.66)	478	0.76
NYP-Brooklyn Methodist	10	0	0.00	0.16	0.00	(0.00,100.0)	10	0.00
NYP-Weill Cornell	65	0	0.00	0.54	0.00	(0.00,12.22)	64	0.00
Khan S	211	3	1.42	1.24	1.34	(0.27, 3.90)	191	0.37
St. Catherine of Siena	100	2	2.00	1.21	1.93	(0.22, 6.97)	83	1.03
Univ. Hosp-Stony Brook	111	1	0.90	1.27	0.83	(0.01, 4.60)	108	0.00
Khan W	676	10	1.48	1.01	1.71	(0.82, 3.14)	543	2.12 *
Long Island Comm. Hosp.	644	10	1.55	1.02	1.78	(0.85, 3.27)	511	2.34 *
NYU Winthrop Hospital	32	0	0.00	0.87	0.00	(0.00,15.33)	32	0.00
Kim M	1103	7	0.63	0.94	0.79	(0.32, 1.63)	1013	0.61
Lenox Hill Hospital	1038	7	0.67	0.95	0.83	(0.33, 1.71)	954	0.63
Long Island Jewish MC	1	0	0.00	0.40	0.00	(0.00,100.0)	1	0.00
North Shore Univ Hosp	64	0	0.00	0.77	0.00	(0.00, 8.73)	58	0.00
Korlipara G	271	4	1.48	0.69	2.50	(0.67, 6.39)	255	1.44
Southside Hospital	1	0	0.00	0.19	0.00	(0.00,100.0)	1	0.00
Univ. Hosp-Stony Brook	270	4	1.48	0.69	2.50	(0.67, 6.40)	254	1.44
Koss J	413	4	0.97	0.83	1.36	(0.37, 3.49)	363	0.99
Long Island Jewish MC	175	2	1.14	0.52	2.56	(0.29, 9.24)	167	1.93
NYP-Queens	41	1	2.44	1.20	2.37	(0.03,13.21)	11	0.00
North Shore Univ Hosp	187	1	0.53	1.05	0.59	(0.01, 3.31)	177	0.53
St. Francis Hospital	10	0	0.00	0.57	0.00	(0.00,75.80)	8	0.00
Kozman H	220	8	3.64	1.21	3.51 *	(1.51, 6.93)	138	2.82
Faxton - St. Lukes	3	0	0.00	1.09	0.00	(0.00,100.0)	1	0.00
St. Elizabeth Med Ctr	4	0	0.00	0.80	0.00	(0.00,100.0)	3	0.00
Univ. Hosp-Upstate	213	8	3.76	1.22	3.60 *	(1.55, 7.10)	134	2.89
Kreps E	65	3	4.62	1.91	2.83	(0.57, 8.27)	35	2.43
Bassett Medical Center	54	3	5.56	2.07	3.14	(0.63, 9.17)	30	2.64
Cayuga Med Ctr Ithaca	11	0	0.00	1.11	0.00	(0.00,35.26)	5	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Krim N	448	5	1.12	1.45	0.90	(0.29, 2.09)	303	0.38
BronxCare Health System	416	4	0.96	1.47	0.76	(0.21, 1.95)	271	0.00
Montefiore - Moses	6	0	0.00	0.47	0.00	(0.00,100.0)	6	0.00
Mount Sinai St. Lukes	26	1	3.85	1.37	3.27	(0.04,18.20)	26	2.29
Krishnamoorthy V	534	8	1.50	1.41	1.24	(0.53, 2.44)	348	0.80
Rochester General Hosp	158	3	1.90	1.46	1.52	(0.31, 4.43)	107	1.47
Strong Memorial Hosp	376	5	1.33	1.40	1.11	(0.36, 2.60)	241	0.42
Kudagi V	228	2	0.88	0.80	1.28	(0.14, 4.64)	203	0.67
Faxton - St. Lukes	63	0	0.00	0.70	0.00	(0.00, 9.75)	60	0.00
St. Elizabeth Med Ctr	165	2	1.21	0.84	1.69	(0.19, 6.12)	143	1.05
Kumar P	102	2	1.96	1.43	1.61	(0.18, 5.80)	85	0.00
Faxton - St. Lukes	24	2	8.33	2.41	4.04	(0.45,14.57)	19	0.00
St. Elizabeth Med Ctr	70	0	0.00	1.23	0.00	(0.00, 4.97)	58	0.00
St. Josephs Hospital	8	0	0.00	0.19	0.00	(0.00,100.0)	8	0.00
Kwan T	544	1	0.18	0.54	0.40	(0.01, 2.23)	542	0.29
Mount Sinai Beth Israel	524	1	0.19	0.54	0.41	(0.01, 2.28)	522	0.30
NYP-Brooklyn Methodist	20	0	0.00	0.34	0.00	(0.00,63.39)	20	0.00
Lasic Z	452	3	0.66	1.12	0.69	(0.14, 2.03)	318	0.00
Jamaica Hosp Med Ctr	237	3	1.27	1.64	0.90	(0.18, 2.63)	109	0.00
Lenox Hill Hospital	215	0	0.00	0.54	0.00	(0.00, 3.69)	209	0.00
Lederman S	262	2	0.76	1.32	0.68	(0.08, 2.44)	240	0.53
Peconic Bay Med Ctr	10	1	10.00	0.73	15.98	(0.21,88.94)	5	43.39
Southampton Hospital	7	0	0.00	1.83	0.00	(0.00,33.42)	5	0.00
Southside Hospital	39	1	2.56	1.34	2.24	(0.03,12.48)	39	1.45
Univ. Hosp-Stony Brook	206	0	0.00	1.33	0.00	(0.00, 1.57)	191	0.00
Lee A	669	5	0.75	1.25	0.70	(0.23, 1.63)	536	0.51
Long Island Jewish MC	596	5	0.84	0.95	1.03	(0.33, 2.40)	502	0.63
North Shore Univ Hosp	73	0	0.00	3.68	0.00	(0.00, 1.60)	34	0.00
Lee P C	60	0	0.00	2.00	0.00	(0.00, 3.57)	43	0.00
Maimonides Medical Ctr	7	0	0.00	0.15	0.00	(0.00,100.0)	7	0.00
Mount Sinai Hospital	1	0	0.00	0.21	0.00	(0.00,100.0)	1	0.00
NYU Langone Hosp.-Brooklyn	52	0	0.00	2.28	0.00	(0.00, 3.61)	35	0.00
Lee P J	974	12	1.23	0.57	2.52 *	(1.30, 4.41)	917	2.17 *
Good Sam-West Islip	722	8	1.11	0.55	2.36	(1.01, 4.64)	681	2.11 *
Southside Hospital	252	4	1.59	0.63	2.94	(0.79, 7.53)	236	2.32
Liou M	375	0	0.00	0.42	0.00	(0.00, 2.75)	373	0.00
Mount Sinai Beth Israel	369	0	0.00	0.42	0.00	(0.00, 2.77)	367	0.00
NYU Hospitals Center	6	0	0.00	0.19	0.00	(0.00,100.0)	6	0.00
Maclsaac H	514	21	4.09	1.89	2.53 *	(1.56, 3.86)	408	1.98 *
Faxton - St. Lukes	14	1	7.14	1.12	7.42	(0.10,41.28)	11	6.28
St. Elizabeth Med Ctr	500	20	4.00	1.91	2.45 *	(1.49, 3.78)	397	1.87 *
Madiraju S	260	3	1.15	2.07	0.65	(0.13, 1.90)	155	0.00
Albany Med. Ctr	3	0	0.00	10.31	0.00	(0.00,13.86)	2	0.00
Ellis Hospital	257	3	1.17	1.97	0.69	(0.14, 2.02)	153	0.00
Malpeso J	201	3	1.49	0.96	1.82	(0.37, 5.31)	141	1.88
Bassett Medical Center	1	0	0.00	0.96	0.00	(0.00,100.0)	.	.
Staten Island Univ Hosp	200	3	1.50	0.96	1.83	(0.37, 5.34)	141	1.88
Mangla A	408	2	0.49	0.82	0.70	(0.08, 2.54)	322	1.07
Jamaica Hosp Med Ctr	204	0	0.00	1.22	0.00	(0.00, 1.72)	120	0.00
Lenox Hill Hospital	204	2	0.98	0.41	2.80	(0.31,10.10)	202	1.91

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Marchant D	105	0	0.00	1.36	0.00	(0.00, 3.00)	63	0.00
Long Island Jewish MC	10	0	0.00	4.00	0.00	(0.00,10.71)	1	0.00
North Shore Univ Hosp	95	0	0.00	1.08	0.00	(0.00, 4.17)	62	0.00
Maroney J	573	10	1.75	1.13	1.81	(0.87, 3.32)	421	0.83
Albany Med. Ctr	376	8	2.13	1.08	2.30	(0.99, 4.53)	280	0.84
Samaritan Hospital	56	1	1.79	1.78	1.17	(0.02, 6.53)	20	0.00
St. Peters Hospital	141	1	0.71	1.00	0.83	(0.01, 4.62)	121	1.08
Martinelli M	617	7	1.13	1.00	1.33	(0.53, 2.74)	498	0.99
Samaritan Hospital	10	0	0.00	1.58	0.00	(0.00,27.08)	3	0.00
St. Peters Hospital	607	7	1.15	0.99	1.37	(0.55, 2.81)	495	1.00
Mathew T C	189	3	1.59	1.31	1.42	(0.29, 4.14)	131	0.87
Faxton - St. Lukes	26	0	0.00	0.90	0.00	(0.00,18.31)	22	0.00
St. Elizabeth Med Ctr	163	3	1.84	1.37	1.57	(0.31, 4.58)	109	1.01
McNulty P	464	5	1.08	1.05	1.20	(0.39, 2.80)	336	1.59
Bassett Medical Center	421	5	1.19	1.06	1.31	(0.42, 3.05)	316	1.68
Saratoga Hospital	43	0	0.00	0.95	0.00	(0.00,10.49)	20	0.00
Meltser H	846	15	1.77	0.95	2.17 *	(1.21, 3.58)	660	1.58
Mercy Hospital-Buffalo	845	15	1.78	0.96	2.17 *	(1.21, 3.58)	659	1.58
Niagara Falls Memorial	1	0	0.00	0.40	0.00	(0.00,100.0)	1	0.00
Menegus M	497	1	0.20	1.18	0.20 **	(0.00, 1.11)	386	0.25
Montefiore - Weiler	494	1	0.20	1.17	0.20 **	(0.00, 1.13)	385	0.25
St. Barnabas Hospital	1	0	0.00	0.08	0.00	(0.00,100.0)	1	0.00
White Plains Hospital	2	0	0.00	4.48	0.00	(0.00,47.80)	.	.
Meraj P	1125	16	1.42	1.43	1.16	(0.66, 1.88)	927	0.81
Long Island Jewish MC	103	1	0.97	1.32	0.86	(0.01, 4.78)	78	1.00
North Shore Univ Hosp	1022	15	1.47	1.45	1.19	(0.66, 1.96)	849	0.80
Messinger D	184	4	2.17	1.82	1.40	(0.38, 3.58)	159	0.87
Montefiore - Weiler	27	0	0.00	4.23	0.00	(0.00, 3.75)	26	0.00
NYP-Weill Cornell	10	0	0.00	1.13	0.00	(0.00,37.84)	10	0.00
Westchester Med Ctr	7	0	0.00	0.41	0.00	(0.00,100.0)	7	0.00
White Plains Hospital	140	4	2.86	1.47	2.27	(0.61, 5.80)	116	1.66
Monrad E	335	3	0.90	1.58	0.66	(0.13, 1.94)	253	0.28
Montefiore - Moses	1	0	0.00	0.05	0.00	(0.00,100.0)	1	0.00
Montefiore - Weiler	332	2	0.60	1.58	0.45	(0.05, 1.61)	251	0.00
St. Barnabas Hospital	2	1	50.00	2.45	23.83	(0.31,100.0)	1	23.00
Moreno P	763	1	0.13	0.90	0.17 **	(0.00, 0.95)	741	0.12 **
Mount Sinai Hospital	204	0	0.00	0.72	0.00	(0.00, 2.92)	199	0.00
Mount Sinai St. Lukes	559	1	0.18	0.96	0.22	(0.00, 1.21)	542	0.15
Morris W	812	10	1.23	0.95	1.52	(0.73, 2.79)	671	0.76
Buffalo General Med Ctr	789	10	1.27	0.92	1.62	(0.77, 2.97)	654	0.78
Mercy Hospital-Buffalo	10	0	0.00	0.65	0.00	(0.00,66.42)	10	0.00
Olean General Hosp.	13	0	0.00	3.11	0.00	(0.00,10.62)	7	0.00
Moses J	1405	7	0.50	0.82	0.71	(0.29, 1.47)	1400	0.53
NYP-Columbia Presby.	987	3	0.30	0.69	0.52	(0.10, 1.51)	984	0.39
St. Francis Hospital	418	4	0.96	1.12	1.00	(0.27, 2.57)	416	0.72
Motivala A	210	3	1.43	1.33	1.26	(0.25, 3.68)	135	1.62
NYP-Columbia Presby.	32	1	3.13	0.76	4.83	(0.06,26.89)	32	3.33
Orange Regional Med Ctr	178	2	1.12	1.43	0.92	(0.10, 3.32)	103	1.07
Mousa T	109	0	0.00	0.48	0.00	(0.00, 8.16)	109	0.00
Lenox Hill Hospital	16	0	0.00	0.13	0.00	(0.00,100.0)	16	0.00
NYU Winthrop Hospital	93	0	0.00	0.54	0.00	(0.00, 8.48)	93	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Naidu S	188	1	0.53	1.49	0.42	(0.01, 2.32)	144	0.00
NYU Winthrop Hospital	122	1	0.82	1.22	0.79	(0.01, 4.37)	104	0.00
Westchester Med Ctr	66	0	0.00	2.00	0.00	(0.00, 3.25)	40	0.00
Nappi A	477	18	3.77	1.57	2.81 *	(1.67, 4.45)	355	1.87 *
Albany Med. Ctr	475	18	3.79	1.57	2.83 *	(1.68, 4.47)	355	1.87 *
Bassett Medical Center	1	0	0.00	1.83	0.00	(0.00,100.0)	.	.
Saratoga Hospital	1	0	0.00	2.33	0.00	(0.00,100.0)	.	.
Nazif T	185	0	0.00	1.56	0.00	(0.00, 1.49)	164	0.00
NYP-Columbia Presby.	181	0	0.00	1.57	0.00	(0.00, 1.51)	162	0.00
NYP-Lawrence Hosp	4	0	0.00	1.05	0.00	(0.00,100.0)	2	0.00
Ong L S	1565	12	0.77	0.91	0.99	(0.51, 1.72)	1391	0.66
Cayuga Med Ctr Ithaca	3	0	0.00	0.91	0.00	(0.00,100.0)	2	0.00
Rochester General Hosp	1541	12	0.78	0.90	1.02	(0.52, 1.77)	1380	0.67
Unity Hospital	21	0	0.00	1.83	0.00	(0.00,11.14)	9	0.00
Ong L Y	206	0	0.00	0.76	0.00	(0.00, 2.72)	195	0.00
Huntington Hospital	135	0	0.00	0.64	0.00	(0.00, 4.99)	126	0.00
North Shore Univ Hosp	46	0	0.00	0.92	0.00	(0.00,10.12)	46	0.00
Southside Hospital	25	0	0.00	1.17	0.00	(0.00,14.69)	23	0.00
Palkhiwala S	465	0	0.00	0.34	0.00	(0.00, 2.73)	463	0.00
Mount Sinai Hospital	408	0	0.00	0.36	0.00	(0.00, 2.93)	406	0.00
NYU Hospitals Center	57	0	0.00	0.19	0.00	(0.00,38.73)	57	0.00
Papadakos S	467	1	0.21	1.18	0.21	(0.00, 1.18)	393	0.27
NYP-Queens	152	1	0.66	2.30	0.33	(0.00, 1.86)	80	0.55
NYU Hospitals Center	311	0	0.00	0.58	0.00	(0.00, 2.37)	309	0.00
North Shore Univ Hosp	4	0	0.00	4.68	0.00	(0.00,22.88)	4	0.00
Papaleo R	430	5	1.16	0.89	1.53	(0.49, 3.58)	278	0.76
Albany Med. Ctr	31	1	3.23	2.45	1.54	(0.02, 8.55)	5	0.00
Glens Falls Hospital	18	0	0.00	1.73	0.00	(0.00,13.74)	.	.
Samaritan Hospital	371	4	1.08	0.70	1.79	(0.48, 4.59)	273	0.78
Saratoga Hospital	1	0	0.00	1.05	0.00	(0.00,100.0)	.	.
St. Peters Hospital	9	0	0.00	1.37	0.00	(0.00,34.67)	.	.
Park C	336	4	1.19	0.59	2.34	(0.63, 6.00)	282	0.85
NYP-Queens	303	4	1.32	0.60	2.56	(0.69, 6.55)	252	0.97
St. Francis Hospital	33	0	0.00	0.51	0.00	(0.00,25.37)	30	0.00
Patcha R	251	2	0.80	1.03	0.90	(0.10, 3.26)	207	0.59
Huntington Hospital	211	1	0.47	1.01	0.55	(0.01, 3.06)	167	0.00
North Shore Univ Hosp	32	1	3.13	1.20	3.05	(0.04,16.96)	32	2.27
St. Francis Hospital	8	0	0.00	1.07	0.00	(0.00,49.94)	8	0.00
Patel A R	128	0	0.00	1.37	0.00	(0.00, 2.44)	76	0.00
Faxton - St. Lukes	3	0	0.00	0.92	0.00	(0.00,100.0)	2	0.00
St. Elizabeth Med Ctr	125	0	0.00	1.38	0.00	(0.00, 2.48)	74	0.00
Patel M	113	3	2.65	1.20	2.58	(0.52, 7.54)	109	2.48
South Nassau Com. Hosp	4	1	25.00	1.77	16.47	(0.22,91.63)	2	15.92
St. Francis Hospital	109	2	1.83	1.18	1.82	(0.20, 6.56)	107	1.74
Patel N	358	3	0.84	0.82	1.20	(0.24, 3.51)	324	0.00
St. Catherine of Siena	21	0	0.00	1.74	0.00	(0.00,11.70)	12	0.00
St. Francis Hospital	2	0	0.00	0.12	0.00	(0.00,100.0)	2	0.00
Univ. Hosp-Stony Brook	335	3	0.90	0.76	1.38	(0.28, 4.02)	310	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Patel R B	213	1	0.47	1.43	0.38	(0.01, 2.14)	104	0.00
Good Sam-West Islip	59	1	1.69	1.51	1.31	(0.02, 7.28)	28	0.00
Long Island Comm. Hosp.	3	0	0.00	1.30	0.00	(0.00,100.0)	1	0.00
Southside Hospital	65	0	0.00	1.27	0.00	(0.00, 5.18)	24	0.00
St. Catherine of Siena	86	0	0.00	1.49	0.00	(0.00, 3.35)	51	0.00
Patel T	918	24	2.61	1.61	1.90 *	(1.21, 2.82)	691	1.29
Rochester General Hosp	279	10	3.58	1.71	2.45 *	(1.17, 4.50)	217	1.99
Unity Hospital	639	14	2.19	1.57	1.63	(0.89, 2.74)	474	0.96
Patel V	157	0	0.00	0.42	0.00	(0.00, 6.53)	153	0.00
Mount Sinai Hospital	34	0	0.00	0.44	0.00	(0.00,28.66)	34	0.00
NYP-Brooklyn Methodist	123	0	0.00	0.41	0.00	(0.00, 8.45)	119	0.00
Patrello A	453	3	0.66	1.39	0.56	(0.11, 1.63)	378	0.49
St. Lukes Cornwall Hosp	226	2	0.88	0.98	1.05	(0.12, 3.79)	191	0.96
Vassar Bros. Med Ctr	227	1	0.44	1.79	0.29	(0.00, 1.60)	187	0.00
Petrossian G	824	11	1.33	1.17	1.34	(0.67, 2.39)	816	0.92
South Nassau Com. Hosp	40	0	0.00	1.52	0.00	(0.00, 7.07)	39	0.00
St. Francis Hospital	784	11	1.40	1.15	1.43	(0.71, 2.56)	777	0.99
Phadke K	645	10	1.55	1.29	1.40	(0.67, 2.58)	451	1.58
Buffalo General Med Ctr	622	10	1.61	1.33	1.41	(0.68, 2.60)	430	1.60
Mercy Hospital-Buffalo	15	0	0.00	0.17	0.00	(0.00,100.0)	15	0.00
Olean General Hosp.	8	0	0.00	0.34	0.00	(0.00,100.0)	6	0.00
Polena S	394	5	1.27	1.00	1.49	(0.48, 3.47)	339	1.39
Huntington Hospital	347	4	1.15	1.01	1.34	(0.36, 3.43)	292	1.30
North Shore Univ Hosp	47	1	2.13	0.93	2.66	(0.03,14.82)	47	1.79
Poumpouridis K	61	0	0.00	0.35	0.00	(0.00,20.30)	58	0.00
Lenox Hill Hospital	1	0	0.00	0.28	0.00	(0.00,100.0)	1	0.00
Long Island Jewish MC	5	0	0.00	0.45	0.00	(0.00,100.0)	5	0.00
North Shore Univ Hosp	31	0	0.00	0.39	0.00	(0.00,35.63)	30	0.00
Southside Hospital	24	0	0.00	0.27	0.00	(0.00,65.57)	22	0.00
Pulipati B	165	3	1.82	1.39	1.52	(0.31, 4.45)	116	1.04
Long Island Comm. Hosp.	144	3	2.08	1.46	1.67	(0.34, 4.88)	95	1.42
Univ. Hosp-Stony Brook	21	0	0.00	0.96	0.00	(0.00,21.24)	21	0.00
Puma J	356	1	0.28	0.66	0.50	(0.01, 2.76)	353	0.00
Mount Sinai Beth Israel	213	1	0.47	0.54	1.02	(0.01, 5.65)	212	0.00
Mount Sinai St. Lukes	37	0	0.00	1.72	0.00	(0.00, 6.72)	35	0.00
NYP-Columbia Presby.	106	0	0.00	0.53	0.00	(0.00, 7.56)	106	0.00
Pyo R	744	8	1.08	1.38	0.91	(0.39, 1.80)	590	0.57
Elmhurst Hospital Ctr	48	2	4.17	2.23	2.19	(0.25, 7.90)	2	0.00
Montefiore - Moses	672	5	0.74	1.20	0.73	(0.23, 1.69)	581	0.60
Montefiore - Weiler	2	0	0.00	14.48	0.00	(0.00,14.80)	2	0.00
St. Barnabas Hospital	22	1	4.55	3.79	1.40	(0.02, 7.80)	5	0.00
Ratcliffe J	136	0	0.00	0.61	0.00	(0.00, 5.13)	135	0.00
Mount Sinai Beth Israel	87	0	0.00	0.59	0.00	(0.00, 8.30)	86	0.00
Mount Sinai St. Lukes	16	0	0.00	1.14	0.00	(0.00,23.44)	16	0.00
NYP-Columbia Presby.	33	0	0.00	0.41	0.00	(0.00,31.30)	33	0.00
Raza J	446	4	0.90	0.95	1.11	(0.30, 2.83)	366	0.92
Jamaica Hosp Med Ctr	143	1	0.70	1.40	0.58	(0.01, 3.25)	69	0.00
Lenox Hill Hospital	303	3	0.99	0.73	1.58	(0.32, 4.61)	297	1.26
Razzouk L	405	4	0.99	1.08	1.07	(0.29, 2.73)	325	1.01
Bellevue Hospital Ctr	26	1	3.85	4.43	1.01	(0.01, 5.64)	5	0.00
NYU Hospitals Center	379	3	0.79	0.85	1.09	(0.22, 3.18)	320	1.05

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Rehman S	206	1	0.49	0.87	0.65	(0.01, 3.64)	186	0.55
NYP-Brooklyn Methodist	191	1	0.52	0.89	0.69	(0.01, 3.84)	172	0.57
Univ. Hosp-Brooklyn	15	0	0.00	0.62	0.00	(0.00,46.04)	14	0.00
Reich D	734	6	0.82	0.68	1.40	(0.51, 3.04)	681	1.39
Good Sam-West Islip	509	3	0.59	0.61	1.14	(0.23, 3.32)	483	1.02
Southside Hospital	225	3	1.33	0.86	1.82	(0.37, 5.32)	198	2.18
Roccario E	580	10	1.72	1.29	1.57	(0.75, 2.88)	430	1.48
Samaritan Hospital	5	0	0.00	3.88	0.00	(0.00,22.09)	2	0.00
St. Peters Hospital	575	10	1.74	1.26	1.61	(0.77, 2.96)	428	1.49
Rosenband M	263	2	0.76	1.27	0.70	(0.08, 2.53)	237	0.67
St. Catherine of Siena	140	0	0.00	1.37	0.00	(0.00, 2.24)	118	0.00
St. Francis Hospital	1	0	0.00	1.03	0.00	(0.00,100.0)	1	0.00
Univ. Hosp-Stony Brook	122	2	1.64	1.16	1.65	(0.19, 5.97)	118	1.18
Rosero H	494	4	0.81	0.83	1.14	(0.31, 2.91)	431	0.56
Mount Sinai Beth Israel	488	4	0.82	0.84	1.14	(0.31, 2.92)	425	0.56
NYP-Brooklyn Methodist	6	0	0.00	0.34	0.00	(0.00,100.0)	6	0.00
Rotatori F	63	0	0.00	2.57	0.00	(0.00, 2.65)	33	0.00
Lenox Hill Hospital	1	0	0.00	0.94	0.00	(0.00,100.0)	1	0.00
Richmond Univ Med Cntr	62	0	0.00	2.60	0.00	(0.00, 2.66)	32	0.00
Royzman R	324	4	1.23	1.38	1.04	(0.28, 2.67)	211	0.96
NYU Langone Hosp.-Brooklyn	51	2	3.92	2.48	1.85	(0.21, 6.68)	20	4.57
Staten Island Univ Hosp	273	2	0.73	1.18	0.73	(0.08, 2.62)	191	0.54
Rutkin B	199	2	1.01	1.41	0.83	(0.09, 3.00)	133	0.00
Long Island Jewish MC	14	0	0.00	2.25	0.00	(0.00,13.60)	2	0.00
North Shore Univ Hosp	185	2	1.08	1.35	0.93	(0.10, 3.37)	131	0.00
Sanghi P	132	0	0.00	0.20	0.00	(0.00,16.56)	132	0.00
NYP-Brooklyn Methodist	68	0	0.00	0.24	0.00	(0.00,26.42)	68	0.00
NYU Hospitals Center	64	0	0.00	0.15	0.00	(0.00,44.37)	64	0.00
Sassower M	682	7	1.03	1.26	0.95	(0.38, 1.96)	569	0.79
Faxton - St. Lukes	7	0	0.00	1.63	0.00	(0.00,37.59)	5	0.00
St. Elizabeth Med Ctr	675	7	1.04	1.26	0.96	(0.39, 1.99)	564	0.79
Sastry A	217	2	0.92	1.46	0.74	(0.08, 2.66)	160	0.00
Bassett Medical Center	214	2	0.93	1.47	0.74	(0.08, 2.67)	159	0.00
Glens Falls Hospital	2	0	0.00	0.43	0.00	(0.00,100.0)	.	.
NYP-Columbia Presby.	1	0	0.00	0.53	0.00	(0.00,100.0)	1	0.00
Schwartz R	1067	7	0.66	1.38	0.56 **	(0.22, 1.14)	965	0.42
Long Island Comm. Hosp.	26	1	3.85	0.64	7.06	(0.09,39.30)	23	6.94
NYU Winthrop Hospital	1041	6	0.58	1.40	0.48 **	(0.18, 1.05)	942	0.34
Selim S	268	4	1.49	1.33	1.31	(0.35, 3.36)	217	1.56
Long Island Jewish MC	58	0	0.00	0.81	0.00	(0.00, 9.11)	45	0.00
North Shore Univ Hosp	56	1	1.79	2.01	1.04	(0.01, 5.78)	34	1.98
Southside Hospital	154	3	1.95	1.28	1.78	(0.36, 5.20)	138	1.74
Serrano-Gomez C	225	1	0.44	1.07	0.49	(0.01, 2.70)	187	0.67
Bellevue Hospital Ctr	21	1	4.76	3.82	1.46	(0.02, 8.11)	6	8.17
NYU Hospitals Center	204	0	0.00	0.79	0.00	(0.00, 2.67)	181	0.00
Shah A	393	4	1.02	0.74	1.61	(0.43, 4.12)	388	0.90
Lenox Hill Hospital	202	1	0.50	0.45	1.28	(0.02, 7.11)	201	0.88
NYP-Brooklyn Methodist	189	3	1.59	1.05	1.77	(0.36, 5.17)	185	0.91
NYU Hospitals Center	2	0	0.00	0.23	0.00	(0.00,100.0)	2	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Shah B	160	2	1.25	1.34	1.09	(0.12, 3.93)	120	0.50
Bellevue Hospital Ctr	129	1	0.78	1.33	0.68	(0.01, 3.80)	104	0.56
NYU Hospitals Center	31	1	3.23	1.40	2.69	(0.04,14.99)	16	0.00
Shaknovich A	143	0	0.00	0.80	0.00	(0.00, 3.75)	142	0.00
Maimonides Medical Ctr	85	0	0.00	0.87	0.00	(0.00, 5.78)	85	0.00
NYP-Brooklyn Methodist	58	0	0.00	0.69	0.00	(0.00,10.69)	57	0.00
Shaqra H	193	3	1.55	1.86	0.98	(0.20, 2.85)	131	0.77
Montefiore - Moses	69	1	1.45	1.76	0.96	(0.01, 5.35)	38	0.00
Montefiore - Weiler	111	2	1.80	1.75	1.20	(0.13, 4.33)	90	1.13
St. Barnabas Hospital	13	0	0.00	3.29	0.00	(0.00,10.03)	3	0.00
Sharma A	143	3	2.10	1.46	1.68	(0.34, 4.91)	117	0.00
Arnot Ogden Med Ctr	3	0	0.00	2.41	0.00	(0.00,59.38)	.	.
Bassett Medical Center	12	1	8.33	3.02	3.23	(0.04,17.96)	7	0.00
NYP-Queens	4	1	25.00	0.95	30.91	(0.40,100.0)	.	.
NYP-Weill Cornell	123	1	0.81	1.31	0.73	(0.01, 4.03)	109	0.00
NYU Langone Hosp.-Brooklyn	1	0	0.00	0.10	0.00	(0.00,100.0)	1	0.00
Shih A T	65	2	3.08	1.25	2.89	(0.32,10.42)	50	0.00
Montefiore - Moses	33	2	6.06	1.76	4.02	(0.45,14.52)	24	0.00
NYP-Columbia Presby.	1	0	0.00	1.63	0.00	(0.00,100.0)	1	0.00
NYP-Lawrence Hosp	27	0	0.00	0.56	0.00	(0.00,28.51)	22	0.00
Westchester Med Ctr	4	0	0.00	1.55	0.00	(0.00,69.28)	3	0.00
Shohat E	76	0	0.00	0.28	0.00	(0.00,20.16)	76	0.00
NYP-Brooklyn Methodist	75	0	0.00	0.28	0.00	(0.00,20.21)	75	0.00
Univ. Hosp-Brooklyn	1	0	0.00	0.05	0.00	(0.00,100.0)	1	0.00
Silverman G	370	1	0.27	1.07	0.29	(0.00, 1.64)	226	0.00
Mount Sinai St. Lukes	7	0	0.00	2.57	0.00	(0.00,23.79)	7	0.00
Orange Regional Med Ctr	360	1	0.28	1.05	0.31	(0.00, 1.72)	218	0.00
St. Lukes Cornwall Hosp	3	0	0.00	0.73	0.00	(0.00,100.0)	1	0.00
Singer G	378	3	0.79	0.97	0.95	(0.19, 2.78)	361	0.82
Rochester General Hosp	354	2	0.56	0.87	0.76	(0.09, 2.74)	345	0.63
Unity Hospital	24	1	4.17	2.52	1.93	(0.03,10.76)	16	2.09
Singh A	803	10	1.25	1.26	1.16	(0.55, 2.13)	630	0.53
Long Island Jewish MC	668	6	0.90	1.03	1.02	(0.37, 2.21)	541	0.56
North Shore Univ Hosp	135	4	2.96	2.38	1.46	(0.39, 3.73)	89	0.47
Singh T	241	0	0.00	0.23	0.00	(0.00, 7.81)	241	0.00
NYP-Brooklyn Methodist	170	0	0.00	0.25	0.00	(0.00,10.02)	170	0.00
NYU Hospitals Center	71	0	0.00	0.17	0.00	(0.00,35.51)	71	0.00
Singh V	816	4	0.49	0.63	0.90	(0.24, 2.31)	785	0.64
Lenox Hill Hospital	815	4	0.49	0.63	0.91	(0.24, 2.32)	785	0.64
North Shore Univ Hosp	1	0	0.00	1.56	0.00	(0.00,100.0)	.	.
Slater J	496	6	1.21	0.83	1.71	(0.62, 3.72)	425	1.52
Bellevue Hospital Ctr	4	0	0.00	1.08	0.00	(0.00,99.03)	.	.
NYU Hospitals Center	492	6	1.22	0.83	1.73	(0.63, 3.76)	425	1.52
Slotwiner A	146	1	0.68	1.98	0.40	(0.01, 2.25)	121	0.59
NYP-Brooklyn Methodist	2	0	0.00	0.38	0.00	(0.00,100.0)	2	0.00
NYP-Queens	8	0	0.00	7.55	0.00	(0.00, 7.09)	.	.
NYP-Weill Cornell	128	1	0.78	1.66	0.55	(0.01, 3.05)	112	0.61
NYU Hospitals Center	2	0	0.00	0.52	0.00	(0.00,100.0)	2	0.00
NYU Langone Hosp.-Brooklyn	6	0	0.00	2.32	0.00	(0.00,30.81)	5	0.00
Slovut D	200	4	2.00	1.48	1.57	(0.42, 4.03)	119	0.75
Montefiore - Moses	2	0	0.00	1.49	0.00	(0.00,100.0)	.	.
Montefiore - Weiler	198	4	2.02	1.48	1.59	(0.43, 4.07)	119	0.75

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Snyder S	155	2	1.29	1.06	1.42	(0.16, 5.12)	116	1.81
Lenox Hill Hospital	1	0	0.00	0.21	0.00	(0.00,100.0)	1	0.00
Richmond Univ Med Cntr	5	0	0.00	1.00	0.00	(0.00,86.08)	.	.
Staten Island Univ Hosp	149	2	1.34	1.07	1.46	(0.16, 5.29)	115	1.81
Srinivas G	188	3	1.60	0.60	3.13	(0.63, 9.14)	183	2.22
Long Island Jewish MC	151	3	1.99	0.64	3.64	(0.73,10.65)	147	2.59
North Shore Univ Hosp	37	0	0.00	0.43	0.00	(0.00,26.97)	36	0.00
Srivastava S	103	0	0.00	0.52	0.00	(0.00, 7.93)	102	0.00
NYP-Weill Cornell	40	0	0.00	0.89	0.00	(0.00,12.08)	39	0.00
NYU Hospitals Center	41	0	0.00	0.21	0.00	(0.00,49.82)	41	0.00
NYU Langone Hosp.-Brooklyn	22	0	0.00	0.45	0.00	(0.00,43.11)	22	0.00
Staniloae C	128	3	2.34	0.98	2.78	(0.56, 8.13)	119	0.94
Bellevue Hospital Ctr	2	1	50.00	14.61	4.00	(0.05,22.25)	.	.
NYU Hospitals Center	126	2	1.59	0.77	2.41	(0.27, 8.71)	119	0.94
Stathopoulos I	263	0	0.00	0.75	0.00	(0.00, 2.18)	262	0.00
Lenox Hill Hospital	37	0	0.00	0.96	0.00	(0.00,12.03)	37	0.00
Mount Sinai St. Lukes	25	0	0.00	1.20	0.00	(0.00,14.29)	25	0.00
NYP-Columbia Presby.	201	0	0.00	0.65	0.00	(0.00, 3.26)	200	0.00
Strizik B	367	5	1.36	1.11	1.43	(0.46, 3.34)	270	1.32
Huntington Hospital	266	4	1.50	1.23	1.43	(0.39, 3.67)	169	1.63
Long Island Jewish MC	1	0	0.00	0.51	0.00	(0.00,100.0)	1	0.00
North Shore Univ Hosp	100	1	1.00	0.82	1.43	(0.02, 7.95)	100	0.97
Stuver T	869	11	1.27	1.33	1.11	(0.55, 1.99)	639	0.47
Rochester General Hosp	294	2	0.68	1.18	0.67	(0.08, 2.43)	225	0.37
Strong Memorial Hosp	575	9	1.57	1.40	1.30	(0.59, 2.47)	414	0.54
Suleman J	441	1	0.23	0.41	0.65	(0.01, 3.59)	439	0.48
Jamaica Hosp Med Ctr	3	0	0.00	0.33	0.00	(0.00,100.0)	3	0.00
Mount Sinai Hospital	438	1	0.23	0.41	0.65	(0.01, 3.61)	436	0.48
Sullivan P	213	3	1.41	1.45	1.14	(0.23, 3.33)	107	2.00
Buffalo General Med Ctr	176	1	0.57	1.58	0.42	(0.01, 2.33)	75	0.00
Mercy Hospital-Buffalo	37	2	5.41	0.78	8.05	(0.90,29.07)	32	7.42 *
Swamy S	62	0	0.00	0.57	0.00	(0.00,12.16)	50	0.00
Richmond Univ Med Cntr	57	0	0.00	0.57	0.00	(0.00,13.28)	46	0.00
Staten Island Univ Hosp	5	0	0.00	0.59	0.00	(0.00,100.0)	4	0.00
Tamburrino F	382	1	0.26	0.65	0.47	(0.01, 2.62)	324	0.54
Richmond Univ Med Cntr	4	0	0.00	0.53	0.00	(0.00,100.0)	4	0.00
Staten Island Univ Hosp	378	1	0.26	0.65	0.48	(0.01, 2.65)	320	0.55
Tamis-Holland J	146	1	0.68	1.95	0.41	(0.01, 2.28)	91	0.00
BronxCare Health System	14	0	0.00	1.56	0.00	(0.00,19.62)	8	0.00
Mount Sinai St. Lukes	132	1	0.76	1.99	0.44	(0.01, 2.47)	83	0.00
Vahl T	214	10	4.67	2.46	2.22	(1.06, 4.07)	166	2.10
NYP-Columbia Presby.	189	8	4.23	2.37	2.09	(0.90, 4.11)	161	2.23 *
NYP-Lawrence Hosp	25	2	8.00	3.17	2.95	(0.33,10.65)	5	0.00
Vales L	58	0	0.00	0.64	0.00	(0.00,11.53)	53	0.00
Bellevue Hospital Ctr	1	0	0.00	2.17	0.00	(0.00,100.0)	.	.
Mount Sinai Beth Israel	4	0	0.00	0.10	0.00	(0.00,100.0)	4	0.00
NYU Hospitals Center	53	0	0.00	0.65	0.00	(0.00,12.38)	49	0.00
Varma P	141	2	1.42	1.33	1.25	(0.14, 4.51)	92	1.95
Faxton - St. Lukes	3	0	0.00	0.84	0.00	(0.00,100.0)	3	0.00
St. Elizabeth Med Ctr	138	2	1.45	1.34	1.27	(0.14, 4.57)	89	2.01

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Warchol A	49	0	0.00	0.39	0.00	(0.00,22.60)	47	0.00
NYP-Columbia Presby.	1	0	0.00	0.21	0.00	(0.00,100.0)	1	0.00
Staten Island Univ Hosp	48	0	0.00	0.39	0.00	(0.00,22.86)	46	0.00
Weinberg M	189	2	1.06	1.21	1.03	(0.12, 3.70)	117	1.73
Lenox Hill Hospital	28	0	0.00	0.85	0.00	(0.00,18.06)	27	0.00
Long Island Jewish MC	16	1	6.25	1.80	4.07	(0.05,22.62)	3	12.72
North Shore Univ Hosp	145	1	0.69	1.21	0.67	(0.01, 3.70)	87	1.17
Weinstein J	438	7	1.60	1.05	1.78	(0.71, 3.67)	386	1.12
St. Catherine of Siena	25	1	4.00	2.19	2.14	(0.03,11.89)	9	0.00
St. Francis Hospital	38	0	0.00	0.71	0.00	(0.00,15.81)	36	0.00
Univ. Hosp-Stony Brook	375	6	1.60	1.01	1.86	(0.68, 4.04)	341	1.25
Wilentz J	44	0	0.00	0.31	0.00	(0.00,31.29)	44	0.00
Mount Sinai Beth Israel	27	0	0.00	0.30	0.00	(0.00,53.28)	27	0.00
NYP-Weill Cornell	17	0	0.00	0.33	0.00	(0.00,75.79)	17	0.00
Wiley J	190	8	4.21	1.33	3.70 *	(1.59, 7.30)	139	2.73
Elmhurst Hospital Ctr	24	2	8.33	3.21	3.03	(0.34,10.95)	1	0.00
Montefiore - Moses	154	6	3.90	1.09	4.19 *	(1.53, 9.11)	128	2.95
Montefiore - Weiler	5	0	0.00	0.31	0.00	(0.00,100.0)	5	0.00
Mount Sinai Hospital	7	0	0.00	0.91	0.00	(0.00,67.03)	5	0.00
Winston B	566	9	1.59	1.00	1.86	(0.85, 3.54)	439	1.28
Albany Med. Ctr	80	1	1.25	1.80	0.81	(0.01, 4.53)	41	0.00
Samaritan Hospital	52	2	3.85	0.89	5.07	(0.57,18.29)	20	7.59
St. Peters Hospital	434	6	1.38	0.86	1.87	(0.68, 4.08)	378	1.20
Yadav S	229	5	2.18	1.37	1.86	(0.60, 4.34)	190	0.95
Long Island Jewish MC	5	0	0.00	0.67	0.00	(0.00,100.0)	4	0.00
NYU Winthrop Hospital	1	0	0.00	0.47	0.00	(0.00,100.0)	1	0.00
St. Francis Hospital	223	5	2.24	1.39	1.88	(0.61, 4.40)	185	0.96
Yarkoni A	358	4	1.12	1.58	0.83	(0.22, 2.12)	292	0.78
Arnot Ogden Med Ctr	2	0	0.00	1.56	0.00	(0.00,100.0)	1	0.00
Bassett Medical Center	7	0	0.00	1.06	0.00	(0.00,57.70)	6	0.00
UHS-Wilson Med Ctr	349	4	1.15	1.59	0.84	(0.23, 2.16)	285	0.80
Zgheib M	338	2	0.59	0.72	0.96	(0.11, 3.47)	311	0.86
Mount Sinai Hospital	17	0	0.00	0.26	0.00	(0.00,98.50)	17	0.00
Richmond Univ Med Cntr	22	0	0.00	0.45	0.00	(0.00,43.33)	14	0.00
Staten Island Univ Hosp	299	2	0.67	0.77	1.02	(0.11, 3.69)	280	0.90
Zisfein J	275	3	1.09	0.94	1.35	(0.27, 3.96)	256	0.90
NYU Winthrop Hospital	66	0	0.00	1.52	0.00	(0.00, 4.27)	64	0.00
South Nassau Com. Hosp	209	3	1.44	0.76	2.21	(0.45, 6.47)	192	1.51

* RAMR significantly higher than statewide rate based on 95 percent confidence interval.

** RAMR significantly lower than statewide rate based on 95 percent confidence interval

CRITERIA USED IN REPORTING SIGNIFICANT RISK FACTORS (2017)

Based on Documentation in Medical Record

Patient Risk Factor	Definitions
Demographic	
Body Surface Area	<p>Body surface area (BSA) is a function of height and weight and increases for larger heights and weights. The statistical formula used to calculate BSA in this report is:</p> $BSA (m^2) = 0.0003207 \times H^{0.3} \times W^{(0.7285 - (0.0188 \times \text{LOG}))}$ <p>Where H is Height in centimeters and W is Weight in grams.</p>
Body Mass Index	<p>Body Mass Index (BMI) is a measure of body size that is the ratio of the weight of the body in kilograms to the square of its height in meters and is considered an indication of nutritional status of the body.</p> <p>The formula for BMI is: $BMI = \text{Weight} / \text{Height}^2$ where Height is height in meters (m) and Weight is weight in kilograms (kg).</p>
Hemodynamic State	
Non-Refractory Cardiogenic Shock	<p>Determined just prior to the intervention.</p> <p>Non-Refractory Cardiogenic Shock is defined as an episode of systolic blood pressure <90 mmHg and/or cardiac index < 2.2 L/min/m² determined to be secondary to cardiac dysfunction and the requirement for parenteral inotropic or vasopressor agents or mechanical support (e.g., IABP, extracorporeal circulation, VAD) to maintain blood pressure and cardiac index above those specified levels. (Definition adopted in 2015).</p>
Refractory Cardiogenic Shock	<p>Refractory Cardiogenic Shock is defined as an episode of systolic blood pressure <80 mm Hg and/or cardiac index <2.0 L/min /m² determined to be secondary to cardiac dysfunction despite the use of parenteral inotropic or vasopressor agents or mechanical support (e.g., IABP, extracorporeal circulation, VADs). (Definition adopted in 2015.)</p>
Comorbidities	
Cerebrovascular Disease	<p>The patient has cerebrovascular disease, documented by any one of the following:</p> <ul style="list-style-type: none"> • CVA/Stroke (symptoms > 24 hrs after onset, presumed to be from vascular etiology); • TIA (recovery within 24 hrs); • Non-invasive or invasive arterial imaging test demonstrating >=50% stenosis of any of the major extracranial or intracranial vessels to the brain.; or • Previous cervical or cerebral artery revascularization surgery or percutaneous intervention.

Comorbidities, *continued*

Congestive Heart Failure (CHF), Current	Within 2 weeks prior to the procedure, the patient has a clinical diagnosis of CHF and symptoms requiring treatment for CHF. Note: Physician diagnosis of CHF may be based on one of the following: <ul style="list-style-type: none">• Paroxysmal nocturnal dyspnea (PND)• Dyspnea on exertion (DOE) due to heart failure• Chest X-Ray showing pulmonary congestion Documentation must include the presence of a diagnosis of CHF, evidence of symptoms, and treatment for CHF.
Congestive Heart Failure (CHF), Past	Between 2 weeks and 6 months prior to the procedure, the patient has a clinical diagnosis / past medical history of CHF and ongoing treatment for CHF. Note: Physician diagnosis of CHF may be based on one of the following: <ul style="list-style-type: none">• Paroxysmal nocturnal dyspnea (PND)• Dyspnea on exertion (DOE) due to heart failure• Chest X-Ray showing pulmonary congestion Documentation must include a diagnosis of CHF and evidence of treatment for CHF. Patient's clinical status may be compensated.
Chronic Lung Disease	The patient has chronic lung disease, and the severity level according to the following classification: <ul style="list-style-type: none">• Mild - FEV₁ 60% to 75% of predicted, and/or on chronic inhaled or oral bronchodilator therapy.• Moderate - FEV₁ 50% to 59% of predicted, and/or on chronic steroid therapy aimed at lung disease.• Severe - FEV₁ <50% predicted, and/or Room Air pO₂ < 60 or Room Air pCO₂ > 50.
Diabetes	The patient has a history of diabetes diagnosed and/or treated by a healthcare provider.
Malignant Ventricular Arrhythmia	Recent (within the past 14 days) sustained ventricular tachycardia requiring electrical defibrillation or conversion with intravenous antiarrhythmic agents or ventricular fibrillation requiring electrical defibrillation. Excludes V-Tach or V-Fib occurring within 6 hours of the diagnosis of a myocardial infarction and responding well to treatment.
Peripheral Vascular Disease	Angiographic demonstration of at least 50% narrowing in a major aortoiliac or femoral/popliteal vessel, previous surgery for such disease, absent femoral or pedal pulses, or the inability to insert a catheter or intra-aortic balloon due to iliac aneurysm or obstruction of the aortoiliac or femoral arteries. Ankle-Brachial Index <0.9 is also acceptable documentation.
Renal Failure, Creatinine	The last Pre-PCI creatinine before the procedure was within the indicated range.
Renal Failure, Dialysis	The patient is on chronic peritoneal or hemodialysis.

Comorbidities, *continued***Ventricular Function**

Previous MI	Most recent myocardial infarction (MI) occurred in the specified time period before the intervention.
ST Elevation	EKG evidence of STEMI and cardiac biomarkers exceeding the upper limit of normal.
Ejection Fraction	The percentage of blood in the heart's left ventricle that is expelled when it contracts, with more denoting a healthier heart. Report the value of the ejection fraction taken closest to, but before, the procedure. When a calculated measure is unavailable the ejection fraction should be estimated visually from the ventriculogram or by echocardiography.

Vessels Diseased

Left Main Disease	The patient has at least a 50 percent blockage in the Left Main Coronary Artery.
Three Vessels Diseased	The patient has at least a 70 percent blockage in each of the three native coronary arteries including the Left Anterior Descending (LAD), the Right Coronary Artery (RCA) and the Left Circumflex (LCX) or their major branches.
Two Vessels Diseased	The patient has at least a 70 percent blockage in two of the native coronary arteries including the Left Anterior Descending (LAD), the Right Coronary Artery (RCA), and the Left Circumflex (LCX) or their major branches.

Anoxic Brain Injury

Criteria for Anoxic Brain Injury Mortality Exclusion

Pre-PCI Criteria

1. AMI: PCI is done for Acute Myocardial Infarction;
2. Cardiac Arrest: Documented cardiac arrest has occurred as part of initial presentation for the AMI and before the patient is brought to the cardiac catheterization laboratory (typically out-of-hospital cardiac arrest);
3. Coma: The patient had normal consciousness before the cardiac arrest, but becomes comatose, broadly defined as the failure to exhibit adequate responsiveness to external stimuli with the understanding that early after cardiac arrest this can be due to multiple factors and not just prolonged hypoxia. There is no need to “prove” anoxic/hypoxic encephalopathy at this time and indeed it cannot be “proven”;

Procedural Criteria

1. No In-lab Death: The patient survives the procedure, even if emergency surgery is done.

Post-PCI Criteria

1. The patient has persistent, severe hypoxic encephalopathy which is present at the time of death or at the time of a decision to withdraw or withhold care. (The withdrawal of care or withholding of care may refer to cardiac or non-cardiac care.)
2. There is medical record documentation of a post-PCI consultation by Neurology or Critical Care (not a PCI physician) documenting the presence and severity of anoxic/hypoxic encephalopathy. There should be medical record documentation of at least one of the following: the consulting physician is involved in the treatment plan and supports withdrawing or withholding care around the same time that the decisions are made; the consulting physician agrees with the diagnosis of severe brain injury and notes a poor prognosis for recovery; the family requests that care be withdrawn or withheld.

NOTE: Beginning with discharges in 2016, cases were excluded if they met the criteria listed under Pre-PCI. All criteria were required in prior years.

Variables in TAVR model not used in PCI models

Extensive Aortic Atherosclerosis

Ascending, transverse, and/or descending aortic atherosclerosis marked by either extensive calcification or luminal atheroma such that the intended surgical procedure is altered.

Mitral Valve Incompetence, Severe

The patient has evidence of acute or chronic severe mitral valve incompetence as demonstrated by left ventriculography or by pre-op or intraoperative echocardiography.

MEDICAL TERMINOLOGY

angina pectoris – The pain or discomfort felt when blood flow to the heart muscle is impeded by blockages in the coronary arteries. This can also be caused by an arterial spasm.

arteriosclerosis – The group of diseases characterized by thickening and loss of elasticity of the arterial walls, popularly called “hardening of the arteries.” Also called *atherosclerotic coronary artery disease* or *coronary artery disease*.

atherosclerosis – One form of arteriosclerosis in which plaques or fatty deposits form in the inner layer of the arteries.

cardiac catheterization – Also known as *coronary angiography*, a procedure for diagnosing the condition of the heart and the arteries connecting to it. A thin tube threaded through an artery to the heart releases a dye, which allows doctors to observe blockages with an X-ray camera. This procedure is required before PCI is performed.

cardiovascular disease – Disease of the heart and blood vessels, the most common form is coronary artery disease.

coronary arteries – The arteries that supply the heart muscle with blood. When they are narrowed or blocked, oxygen-rich blood cannot flow freely to the heart muscle or myocardium.

coronary artery bypass graft surgery (CABG) – A procedure in which a vein or artery from another part of the body is used to create an alternate path for blood to flow to the heart, bypassing the arterial blockage. Typically, a section of one of the large saphenous veins in the leg, the radial artery in the arm or the mammary artery in the chest is used to construct the bypass. One or more bypasses may be performed during a single operation. When no other major heart surgery (such as valve replacement) is included, the operation is referred to as an isolated CABG.

ischemic heart disease (ischemia) – Heart disease that occurs as a result of inadequate blood supply to the heart muscle or myocardium.

lesion – An irregular growth of fiber and tissue.

myocardial infarction – Partial destruction of the heart muscle due to interrupted blood supply, also called a *heart attack*.

percutaneous coronary intervention (PCI) (angioplasty or percutaneous transluminal coronary angioplasty) – Typically in this procedure, a balloon catheter is threaded up to the site of blockage in an artery in the heart, and is then inflated to push arterial plaque against the wall of the artery to create a wider channel in the artery. Other procedures or devices are frequently used in conjunction with the catheter to remove plaque. In particular, stents are used for most patients and procedures such as atherectomies and thrombectomy are sometimes used.

plaque – Also called *atheroma*, this is the fatty deposit in the coronary artery that can block blood flow.

risk factors for heart disease – Certain risk factors have been found to increase the likelihood of developing heart disease. Some are controllable or avoidable and some cannot be controlled. The biggest heart disease risk factors are heredity, gender and age, all of which cannot be controlled. Men are much more likely to develop heart disease than women before the age of 55, although it is the number one killer of both men and women. Some controllable risk factors that contribute to a higher likelihood of developing coronary artery disease are high cholesterol levels, cigarette smoking, high blood pressure (hypertension), obesity, a sedentary lifestyle or lack of exercise, diabetes and poor stress management.

ST segment elevation myocardial infarction (STEMI) – This heart attack, or MI, is caused by a prolonged period of blocked blood supply and affects a large area of the heart muscle, and so causes changes on the EKG as well as in blood levels of key chemical markers.

stenosis – The narrowing of an artery due to blockage. *Restenosis* is when the narrowing recurs after PCI or surgery.

Appendix 1

2017 Risk Factors For PCI In-Hospital/30-Day Mortality (ALL CASES)

The significant pre-procedural risk factors for in-hospital/30-day mortality following PCI in 2017 are presented in the table that follows. Roughly speaking, the odds ratio for a risk factor represents the number of times more likely to die in the hospital during or after PCI or after hospital discharge but within 30 days of the PCI a patient with that risk factor is than a patient without the risk factor, all other risk factors being the same. For example, the odds ratio for the risk factor “CHF-Current” is 2.270. This means that a patient with CHF within two weeks is approximately 2.270 times as likely to die in the hospital during the same admission as PCI or after hospital discharge but within 30 days of the PCI as a patient without CHF who has the same other significant risk factors. The risk factors Non-Refractory Shock, Peripheral Vascular Disease, and Three Vessels Diseased are also interpreted in the same way.

With regard to age, the odds ratio roughly represents the number of times more likely to die a patient who is over age 65 is than another patient who is one year younger, all other significant risk factors being the same. Thus, a patient undergoing PCI who is 66 years old has approximately 1.066 times the chance of dying in the hospital or within 30 days that a 65 year-old patient has, all other risk factors being the same. All patients aged sixty-five years or younger have roughly the same odds of dying in the hospital or after discharge but within 30 days, if their other risk factors are identical.

Body Mass Index (BMI) is a relationship of weight to height. It is a measure of body size that is the ratio of the weight of the body in kilograms to the square of its height in meters and is considered an indication of nutritional status of the body. In this model, BMI is divided into five groups representing various levels of BMI. The reference group is patients with BMI of at least 25 kg/m² but less than or equal to 40 kg/m². This means that odds of death are higher

for patients with higher and lower BMI, when all other significant risk factors are the same.

Ejection Fraction, which is the percentage of blood in the heart’s left ventricle that is expelled when it contracts (with more denoting a healthier heart), is subdivided into five ranges (less than 20 percent, 20 percent to 29 percent, 30 percent to 39 percent, 40 percent to 49 percent, and 50 percent or more). The last range is referred to as the reference category. This means that the odds ratio that appears for the other Ejection Fraction categories in the table is relative to patients with an ejection fraction of 50 percent or more. Thus, a PCI patient with an ejection fraction of less than 20 percent is about 3.355 times as likely to die in the hospital or within 30 days as a patient with an ejection fraction of 50 percent or higher, all other significant risk factors being the same.

Previous MI is subdivided into eight ranges. Six categories separate cases with MI within 24 hours by type of MI (STEMI or NSTEMI) and number of hours between the MI and the PCI. There are also groups for any MI (STEMI or NSTEMI) from 1 - 20 days; and no MI within twenty days prior to the procedure. The last range is referred to as the reference category. The odds ratio for the Previous MI ranges are relative to patients who have not had an MI within twenty days prior to PCI.

In this model Chronic Lung Disease is divided into three categories: Moderate, Severe, and None. The odds ratios for patients with each of the first two levels are compared to patients with no chronic lung disease.

Renal Failure is subdivided into six groups. Four categories represent patients with various levels of elevated creatinine, but no dialysis. The fifth category includes patients with renal failure on dialysis. These groups are relative to patients who are not on dialysis and whose last pre-PCI creatinine value was not greater than 1.5 mg/dL.

Appendix 1

Multivariate Risk-Factor Equation for In-Hospital/30-Day Deaths During or Following PCI, 2017 (All Cases)

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	Odds Ratio
Demographic				
Age: number of years > 65	--	0.0642	<.0001	1.066
Body Mass Index (BMI)				
< 16.5 kg/m ²	0.20	1.4095	0.0007	4.094
≥ 16.5 and < 18.5 kg/m ²	0.65	1.0904	0.0002	2.976
≥ 18.5 and < 25 kg/m ²	20.89	0.3504	0.0003	1.420
≥ 25 and ≤ 40 kg/m ²	72.54	– Reference –		1.000
> 40 kg/m ²	5.73	0.4440	0.0196	1.559
Hemodynamic Status				
Non-Refractory Shock	0.49	1.9070	<.0001	6.733
Ventricular Function				
Ejection Fraction				
Ejection Fraction 50% or greater	72.53	-- Reference --		1.000
Ejection Fraction less than 20%				
Ejection Fraction 20-29%	0.84	1.2104	<.0001	3.355
Ejection Fraction 30-39%	4.10	0.8872	<.0001	2.428
Ejection Fraction 40-49%	8.07	0.6264	<.0001	1.871
Pre-Procedural MI				
No MI within 20 Days	14.47	0.2996	0.0143	1.349
MI with ST Elevation	65.29	– Reference –		1.000
MI < 6 hrs				
MI 6-11 hrs	9.25	1.7802	<.0001	5.931
MI 12 – 23 hrs	1.53	2.1415	<.0001	8.512
MI without ST Elevation				
MI < 6 hrs	0.89	2.0365	<.0001	7.664
MI 6-11 hrs	0.83	1.5769	<.0001	4.840
MI 12 – 23 hrs	1.45	1.1790	0.0002	3.251
MI with or without ST Elevation 1-20 days	3.48	0.9741	<.0001	2.649
MI without ST Elevation 1-20 days	17.29	1.0859	<.0001	2.962
Comorbidities				
Peripheral Vascular Disease	9.22	0.5613	<.0001	1.753
Chronic Lung Disease				
None	93.83	– Reference –		1.000
Mild or Moderate	5.81	0.4011	0.0048	1.494
Severe	0.36	1.2401	0.0004	3.456
Congestive Heart Failure, Current (within 2 weeks)	7.89	0.8200	<.0001	2.270
Renal Failure				
No Renal Dialysis and Creatinine ≤ 1.5 mg/dL	89.77	– Reference –		1.000
No Renal Dialysis				
Creatinine > 1.5 and ≤ 2.0 mg/dL	4.96	0.6809	<.0001	1.976
Creatinine > 2.0 and ≤ 2.5 mg/dL	1.09	0.6898	0.0068	1.993
Creatinine > 2.6 and ≤ 3.0 mg/dL	0.46	1.1245	0.0003	3.079
Creatinine > 3.0 mg/dL	0.65	1.5102	<.0001	4.528
Renal Dialysis	3.07	0.9952	<.0001	2.705
Vessels Diseased				
Three Vessels Diseased	13.02	0.4320	<.0001	1.540
Intercept = -6.6901				
C Statistic = 0.862				

Appendix 2

2017 Risk Factors For In-Hospital/30-Day Mortality For Non-Emergency PCI

Appendix 2 contains the significant pre-procedural risk factors for 2017 New York State PCI patients who were not emergency patients (were not hemodynamically unstable and who did not suffer a heart attack within 24 hours prior to the PCI being performed).

The interpretation for Age, Ejection Fraction, CHF-Current, Peripheral Vascular Disease, Renal Failure, and Three Vessels Diseased are

the same as presented in Appendix 1. Chronic Lung Disease - Severe and Previous PCI are interpreted in the same way as CHF-Current in Appendix 1; the patient either has the risk factor or does not.

Body Mass Index and Previous MI are also interpreted in the same way as Appendix 1, although there are only three categories for each of these risks in this model.

Appendix 2

Multivariate Risk-Factor Equation for In-Hospital/30-Day Deaths During or Following PCI, 2017 (Non-Emergency Cases)

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	Odds Ratio
Demographic				
Age: Number of Years > 65	—	0.0624	<.0001	1.064
Body Mass Index (BMI)				
< 18.5 kg/m ²	0.81	1.1714	0.0002	3.226
≥ 18.5 and < 25.0 kg/m ²	20.61	0.3729	0.0025	1.452
≥ 25.0 kg/m ²	78.57	— Reference —		1.000
Ventricular Function				
Ejection Fraction				
Ejection Fraction 50% or greater	76.91	— Reference —		1.000
Ejection Fraction less than 20%	0.70	1.0891	0.0014	2.972
Ejection Fraction 20-29%	3.51	0.7178	0.0003	2.050
Ejection Fraction 30-39%	6.71	0.7646	<.0001	2.148
Ejection Fraction 40-49%	12.17	0.3178	0.0500	1.374
Pre-Procedural MI				
No MI	57.53	— Reference —		1.000
MI 1-20 Days	20.85	1.2125	<.0001	3.362
MI 21 Days or More	21.62	0.3837	0.0350	1.468
Comorbidities				
Chronic Lung Disease, Severe	0.40	1.1878	0.0015	3.280
Congestive Heart Failure, Current (within 2 weeks)	8.26	0.7686	<.0001	2.157
Peripheral Vascular Disease	10.10	0.5303	0.0001	1.699
Renal Failure				
No Renal Dialysis				
Creatinine ≤ 1.5 mg/dL	89.27	— Reference —		1.000
Creatinine > 1.5 and ≤ 2.0 mg/dL	5.05	0.6617	0.0002	1.938
Creatinine > 2.0 and ≤ 2.5 mg/dL	1.10	0.7334	0.0299	2.082
Creatinine > 2.6 and ≤ 3.0 mg/dL	0.46	1.0662	0.0089	2.904
Creatinine > 3.0 mg/dL	0.67	1.5987	<.0001	4.947
Renal Dialysis	3.44	0.9062	<.0001	2.475
Previous Procedures				
Previous PCI	48.92	-0.3749	0.0020	0.687
Vessels Diseased				
Three Vessels Diseased	12.95	0.4383	0.0008	1.550

Intercept = -6.5678

C Statistic = 0.846

Appendix 3

2017 Risk Factors For 30-Day Readmission For PCI

The significant pre-procedural risk factors for 30-day readmissions following PCI in 2017 are presented in the table that follows. The interpretation for some of the variables in this model was described in Appendix 1 or 2. This includes Age, Non-Refractory Shock, Ejection Fraction and Peripheral Vascular Disease. For Previous MI, and Renal Failure, the interpretation is generally the same as Appendix 1 or 2, but the groups are constructed differently in this model.

The interpretation for Female and Cranial Vessel Stenosis are similar to that described for CHF-Current in Appendix 1.

Body surface area (BSA) is a function of height and weight and increases for larger heights and weights. This model includes terms for both BSA and BSA-squared, reflecting the complex relationship between BSA and readmission. The quadratic function of BSA (BSA-squared) used in the statistical model reflects the fact that patients with very high and very low BSAs tend to have higher risks of readmission than patients with intermediate levels of BSA. This functional form is used to improve the model's ability to predict

mortality, but it means that the odds ratios for these terms do not have a straightforward interpretation.

Chronic Lung Disease is divided into four groups for this model. The first three groups are for Mild, Moderate, and Severe Chronic Lung Disease. The odds ratios in these three groups are compared to the last group which is No Chronic Lung Disease.

Congestive Heart Failure (CHF) is divided into three groups (patients with CHF in the past two weeks, patients with CHF within six months but not within the past two weeks, and patients with no CHF within 6 months). The odds ratios for CHF-Current and CHF-Past are relative to patients with no CHF within the past 6 months.

In this model, Diabetes is represented by three groups: patients with oral treatment but not insulin, patients treated with insulin, and patients with no diabetes or diabetes that is not treated by oral medications or insulin. Patients in the first two groups are compared to those in the third.

Appendix 3

Multivariate Risk-Factor Equation for 30-Day Readmission Following PCI, 2017

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	Odds Ratio
Demographic				
Age: Number of years > 65	--	0.0218	<.0001	1.022
Female	29.63	0.1935	<.0001	1.214
Body Surface Area	--	-2.4781	<.0001	--
Body Surface Area – squared	--	0.5219	0.0002	--
Hemodynamic Status				
Non-Refractory Shock	0.36	0.6618	0.0005	1.938
Ventricular Function				
Ejection Fraction				
Ejection Fraction 50% or greater	72.88	— Reference —		1.000
Ejection Fraction less than 20%	0.78	0.5771	<.0001	1.781
Ejection Fraction 20-29%	3.98	0.3832	<.0001	1.467
Ejection Fraction 30-39%	7.99	0.2835	<.0001	1.328
Ejection Fraction 40-49%	14.37	0.1953	<.0001	1.216
Pre-Procedural				
No MI within 20 Days	65.21	— Reference —		1.000
STEMI within 24 Hours	11.59	0.4275	<.0001	1.533
NSTEMI within 24 Hours	5.88	0.1491	0.0462	1.161
MI 1-20 Days	17.31	0.4481	<.0001	1.565
Comorbidities				
Chronic Lung Disease				
None	93.79	— Reference —		1.000
Mild	5.01	0.2732	<.0001	1.314
Moderate	0.83	0.5603	<.0001	1.751
Severe	0.37	0.6359	0.0014	1.889
Congestive Heart Failure (CHF)				
No CHF within 6 months	87.07	— Reference —		1.000
CHF, Current (within 2 weeks)	7.78	0.4679	<.0001	1.597
CHF, Past but not Current (2 wks - 6 months)	5.15	0.3816	<.0001	1.465
Cranial Vessel Stenosis ≥ 50%	8.27	0.3942	<.0001	1.483
Diabetes				
None or Not Oral or Insulin Treatment	62.28	— Reference —		1.000
Diabetes with Oral Agent Treatment	21.96	0.1578	0.0002	1.171
Diabetes with Insulin Treatment	15.76	0.3389	<.0001	1.403
Peripheral Vascular Disease	9.05	0.2330	<.0001	1.262
Renal Failure				
No Renal Dialysis				
Creatinine < 1.2 mg/dL	71.00	— Reference —		1.000
Creatinine ≥ 1.2 and ≤ 1.5 mg/dL	18.90	0.0932	0.0346	1.098
Creatinine > 1.5 and ≤ 2.0 mg/dL	4.91	0.2761	<.0001	1.318
Creatinine > 2.0 and ≤ 3.0 mg/dL	1.51	0.3719	0.0007	1.451
Creatinine >3.0 mg/dL	0.62	0.7202	<.0001	2.055
Renal Dialysis	3.06	0.7840	<.0001	2.190

Intercept = -0.2782

C Statistic = 0.670

Appendix 4

2015-2017 Risk Factors for PCI In-Hospital/30-Day Mortality (ALL CASES)

The significant pre-procedural risk factors for in-hospital/30-day mortality following PCI in the 2015-2017 time period are presented in the table that follows. The interpretation of this table is similar to the interpretation of Appendices 1-3. Most variables are interpreted in the same way as previously described although in some cases the levels of the variable are divided differently.

Cerebrovascular Disease (not TIA only), Diabetes with Insulin Therapy, Malignant Ventricular Arrhythmia, female sex, peripheral vascular disease and Left Main Disease are interpreted in the same way as CHF-Current in

Appendix 1; the patient either had the risk factor or does not.

In this model, Number of Vessels Diseased is divided into three ranges; Two Vessels Diseased, Three Vessels Diseased and Fewer than Two Vessels Diseased (the reference category).

The Sum of Risk Factors Squared term is merely the square of the number of risk factors in Appendix 4 that a patient has (not counting age) and is used to improve the ability of the model to predict mortality.

Appendix 4

Multivariate Risk-Factor Equation for In-Hospital/30-Day Deaths During or Following PCI, 2015-2017 (All Cases)

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	OR
Demographic				
Age: Number of years > 65	—	0.0634	<.0001	1.065
Female	29.38	0.6673	<.0001	1.949
Body Mass Index (BMI)				
< 16.5 kg/m ²	0.20	1.5240	<.0001	4.591
≥ 16.5 and < 18.5 kg/m ²	0.68	1.2433	<.0001	3.467
≥ 18.5 and < 25.0 kg/m ²	20.65	0.5915	<.0001	1.807
≥ 25.0 and ≤ 40.0 kg/m ²	72.76	— Reference —		1.000
> 40.0 kg/m ²	5.71	0.6462	<.0001	1.908
Hemodynamic Status				
Non-Refractory Shock	0.45	2.3597	<.0001	10.588
Ventricular Function				
Ejection Fraction				
Ejection Fraction 50% or greater	72.25	— Reference —		1.000
Ejection Fraction less than 20%	0.87	1.7399	<.0001	5.697
Ejection Fraction 20-29%	4.02	1.3309	<.0001	3.784
Ejection Fraction 30-39%	7.93	0.9762	<.0001	2.654
Ejection Fraction 40-49%	14.95	0.5983	<.0001	1.819
Pre-Procedural MI				
No MI within 20 Days	65.54	— Reference —		1.000
ST Elevation MI (STEMI)				
MI < 6 Hours	9.51	2.1061	<.0001	8.216
MI 6-11 Hours	1.58	2.5024	<.0001	12.211
MI 12 – 23 Hours	0.83	2.5943	<.0001	13.387
Non-ST Elevation MI (NSTEMI)				
MI < 6 Hours	0.78	1.8872	<.0001	6.601
MI 6-11 Hours	1.43	1.1220	<.0001	3.071
MI 12 –23 Hours	3.20	1.4089	<.0001	4.092
MI with or without ST Elevation within 1-20 Days	17.14	1.2984	<.0001	3.664
Comorbidities				
Cerebrovascular Disease (not TIA only)	7.95	0.7863	<.0001	2.195
Chronic Lung Disease				
None	93.68	— Reference —		1.000
Mild	4.71	0.7141	<.0001	2.042
Moderate	1.23	0.8533	<.0001	2.347
Severe	0.37	1.5629	<.0001	4.773
Congestive Heart Failure (CHF)				
No CHF within 6 months	87.37	— Reference —		1.000
CHF, Current (within 2 weeks)	7.63	1.0689	<.0001	2.912
CHF, Past but not current (2 weeks - 6 months)	4.99	0.3896	0.0008	1.476
Diabetes with Insulin Therapy	15.45	0.5945	<.0001	1.812
Malignant Ventricular Arrhythmia	0.70	1.0327	<.0001	2.809
Peripheral Vascular Disease	9.12	0.8087	<.0001	2.245
Renal Failure				
No Renal Dialysis and Creatinine < 1.2 mg/dL	71.00	— Reference —		1.000
No Renal Dialysis				
Creatinine ≥ 1.2 and ≤ 1.5 mg/dL	19.02	0.6456	<.0001	1.907
Creatinine > 1.5 and ≤ 2.0 mg/dL	4.88	0.9641	<.0001	2.622
Creatinine > 2.0 and ≤ 2.5 mg/dL	1.13	1.2464	<.0001	3.478
Creatinine >2.5 mg/dL	0.98	1.5599	<.0001	4.758
Renal Dialysis	2.98	1.4319	<.0001	4.187
Vessels Diseased				
Left Main Disease	4.37	0.8972	<.0001	2.453
Number of Vessels Diseased				
Fewer than Two Vessels Diseased	54.83	— Reference —		1.000
Two Vessels Diseased	31.87	0.4862	<.0001	1.626
Three Vessels Diseased	13.31	0.6567	<.0001	1.928
Sum of Risk Factors Squared	—	-0.0369	<.0001	—

Intercept = -7.5612

C Statistic = 0.870

Appendix 5

2015-2017 Risk Factors for In-Hospital/30-Day Mortality for Non-Emergency PCI

The significant pre-procedural risk factors for in-hospital/30-day mortality following Non-Emergency PCI in the 2015-2017 time period are presented in the Appendix 5 table below. The interpretation for this appendix is similar to the interpretation of Appendices 1-4 described previously.

Appendix 5

Multivariate Risk-Factor Equation for In-Hospital/30-Day Deaths During or Following PCI, 2015-2017 (Non-Emergency Cases)

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	Odds Ratio
Demographic				
Age: Number of years > 65	—	0.0621	<.0001	—
Female	29.76	0.6390	<.0001	1.895
Body Mass Index (BMI)				
< 16.5 kg/m ²	0.19	1.6960	<.0001	5.452
≥ 16.5 and < 18.5 kg/m ²	0.66	1.3964	<.0001	4.041
≥ 18.5 and < 25.0 kg/m ²	20.47	0.6699	<.0001	1.954
≥ 25.0 and ≤ 40.0 kg/m ²	72.84	— Reference —		1.000
> 40.0 kg/m ²	5.84	0.6890	<.0001	1.992
Ventricular Function				
Ejection Fraction				
Ejection Fraction 50% or greater	76.77	— Reference —		1.000
Ejection Fraction less than 20%	0.74	1.8032	<.0001	6.069
Ejection Fraction 20-29%	3.43	1.4146	<.0001	4.115
Ejection Fraction 30-39%	6.56	1.1293	<.0001	3.093
Ejection Fraction 40-49%	12.50	0.7071	<.0001	2.028
Pre-Procedural MI 1-20 Days	20.95	1.3460	<.0001	3.842
Comorbidities				
Cerebrovascular Disease (not TIA only)	8.57	0.7655	<.0001	2.150
Chronic Lung Disease				
None	93.34	— Reference —		1.000
Mild	4.97	0.7581	<.0001	2.134
Moderate	1.28	1.0650	<.0001	2.901
Severe	0.41	1.6235	<.0001	5.071
Congestive Heart Failure, Current (within 2 weeks)	8.01	1.1470	<.0001	3.149
Diabetes with Insulin Therapy	16.72	0.7751	<.0001	2.171
Malignant Ventricular Arrhythmia	0.48	1.3796	<.0001	3.973
Peripheral Vascular Disease	10.02	0.8095	<.0001	2.247
Renal Failure				
No Renal Dialysis and Creatinine < 1.2 mg/dL	70.59	— Reference —		1.000
No Renal Dialysis				
Creatinine ≥ 1.2 and ≤ 1.5 mg/dL	18.98	0.5958	<.0001	1.814
Creatinine > 1.5 and ≤ 2.0 mg/dL	4.95	0.7567	<.0001	2.131
Creatinine > 2.0 and ≤ 2.5 mg/dL	1.14	0.9640	<.0001	2.622
Creatinine >2.5 mg/dL	1.00	1.3780	<.0001	3.967
Renal Dialysis	3.35	1.2854	<.0001	3.616
Vessels				
Left Main Disease	4.64	0.9501	<.0001	2.586
Number of Vessels Diseased				
Fewer than Two Vessels Diseased	54.77	— Reference —		1.000
Two Vessels Diseased	31.96	0.5244	<.0001	1.689
Three Vessels Diseased	13.27	0.6697	<.0001	1.954
Sum of Risk Factors Squared	—	-0.0434	<.0001	0.958

Intercept = -7.5664

C Statistic = 0.856

Appendix 6

2015-2017 Risk Factors for In-Hospital/30-Day Mortality for Emergency PCI

The significant pre-procedural risk factors for in-hospital/30-day mortality following Emergency PCI in the 2015-2017 time period are presented in the Appendix 6 table below. The interpretation of this table is similar to the interpretation of Appendices 1-5.

Appendix 6

Multivariate Risk-Factor Equation for In-Hospital/30-Day Deaths During or Following PCI, 2015-2017 (Emergency Cases)

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	OR
Demographic				
Age: Number of years > 50	—	0.0499	<.0001	—
Female	27.62	0.4344	<.0001	1.544
Body Mass Index (BMI)				
< 16.5 kg/m ²	0.22	0.9689	0.0223	2.635
≥ 16.5 and < 18.5 kg/m ²	0.77	0.6892	0.0114	1.992
≥ 18.5 and < 25.0 kg/m ²	21.53	0.1969	0.0239	1.218
≥ 25.0 kg/m ²	77.48	— Reference —	—	1.000
Hemodynamic Status				
Non-Refractory Shock	2.57	1.8436	<.0001	6.319
Ventricular Function				
Ejection Fraction				
Ejection Fraction 40% or greater	77.36	— Reference —	—	1.000
Ejection Fraction less than 20%	1.44	1.3996	<.0001	4.054
Ejection Fraction 20-29%	6.81	0.8982	<.0001	2.455
Ejection Fraction 30-39%	14.39	0.4803	<.0001	1.617
Pre-Procedural MI				
No STEMI within 24 Hours	31.78	— Reference —	—	1.000
STEMI within 24 Hours	68.22	0.8099	<.0001	2.248
Comorbidities				
Cerebrovascular Disease (not TIA only)	5.00	0.5614	<.0001	1.753
Congestive Heart Failure (CHF) (within 2 weeks)	5.82	0.6955	<.0001	2.005
Malignant Ventricular Arrhythmia	1.78	0.3974	0.0424	1.488
Peripheral Vascular Disease	4.90	0.5544	<.0001	1.741
Renal Failure				
No Renal Dialysis and Creatinine < 1.2 mg/dL	72.95	— Reference —	—	1.000
No Renal Dialysis				
Creatinine ≥ 1.2 and ≤ 1.5 mg/dL	19.23	0.4192	<.0001	1.521
Creatinine > 1.5 and ≤ 2.0 mg/dL	4.55	0.9760	<.0001	2.654
Creatinine > 2.0 and ≤ 2.5 mg/dL	1.10	1.3897	<.0001	4.014
Creatinine >2.5 mg/dL	0.92	1.4390	<.0001	4.216
Renal Dialysis	1.25	1.4743	<.0001	4.368
Vessels Diseased				
Left Main Disease	3.07	0.5183	0.0004	1.679
Three Vessels Diseased	13.46	0.2566	0.0077	1.293

Intercept = -6.1387

C Statistic = 0.847

Appendix 7

Risk Factors for TAVR In-Hospital/30-Day Mortality in New York State 2015-2017

Most of the significant pre-procedural risk factors for in-hospital/30-day mortality following TAVR in the 2015-2017 time period presented in the table that follows have been previously described.

Extensive Aortic Atherosclerosis and Mitral Valve Incompetence (Severe) are interpreted in the same way as CHF-Current in Appendix 1. The other risk factors in this model are interpreted as described in Appendices 1 – 6.

Appendix 7

Multivariable Risk Factor Equation for TAVR In-Hospital / 30-Day Deaths in New York State in 2015-2017.

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	Odds Ratio
Demographic				
Age: Number of years > 75	—	0.0322	0.0035	1.033
Body Surface Area (0.1 m ²)	—	-0.7287	<.0001	—
Body Surface Area Squared (0.1 m ⁴)	—	0.0161	0.0004	—
Ventricular Function				
Ejection Fraction				
Ejection Fraction 30% or greater	94.01	— Reference —		1.000
Ejection Fraction 00-29%	5.99	0.5396	0.0066	1.715
Comorbidities				
Chronic Lung Disease				
None or Mild	85.12	— Reference —		1.000
Moderate	6.33	0.5954	0.0042	1.814
Severe	8.55	0.8091	<.0001	2.246
Extensive Aortic Atherosclerosis	1.79	0.9636	0.0008	2.621
Renal Failure				
No Renal Dialysis and Creatinine ≤ 1.2 mg/dL	66.30	— Reference —		1.000
Creatinine 1.3-2.0 mg/dL and no Renal Dialysis	24.51	0.4253	0.0040	1.530
Creatinine ≥2.1 mg/dL or Renal Dialysis	9.19	1.1873	<.0001	3.278
Valve Disease				
Mitral Valve Incompetence, Severe	4.91	0.5536	0.0059	1.740
Vessels Diseased				
Left Main Disease	2.39	0.9359	0.0005	2.549

Intercept = 3.4134
C Statistic = 0.703

NEW YORK STATE

PERCUTANEOUS CORONARY INTERVENTION CENTERS

Albany Medical Center

43 New Scotland Avenue
Albany, New York 12208

Arnot Ogden Medical Center

600 Roe Avenue
Elmira, New York 14905

Bassett Medical Center

1 Atwell Road
Cooperstown, New York 13326

Bellevue Hospital Center

462 1st Avenue
New York, New York 10016

BronxCare Health System

1650 Grand Concourse
Bronx, New York 10456

Brookdale University Hospital and Medical Center*

1 Brookdale Plaza
Brooklyn, New York 11212

Brooklyn Hospital Center - Downtown

121 DeKalb Avenue
Brooklyn, New York 11201

Buffalo General Medical Center

100 High Street
Buffalo, New York 14203

Cayuga Medical Center at Ithaca*

101 Dates Drive
Ithaca, New York 14850

Crouse Hospital*

736 Irving Avenue
Syracuse, New York 13210

Ellis Hospital

1101 Nott Street
Schenectady, New York 12308

Elmhurst Hospital Center*

78-02 41st Avenue
Elmhurst, New York 11373

Faxton-St. Luke's Healthcare (St. Luke's Division)**

1636 Champlin Avenue
Utica, New York 13503

Glens Falls Hospital*

100 Park Street
Glens Falls, New York 12801

Good Samaritan Hospital Medical Center

1000 Montauk Highway
West Islip, New York 11795

Good Samaritan Hospital of Suffern

255 Lafayette Avenue
Suffern, New York 10901

Huntington Hospital*

270 Park Avenue
Huntington, New York 11743

Jamaica Hospital Medical Center*

89th Avenue and Van Wyck Expressway
Jamaica, New York 11418

Lenox Hill Hospital

100 East 77th Street
New York, New York 10075

Long Island Community Hospital

(previously Brookhaven Memorial Hospital)
101 Hospital Road
Patchogue, New York 11772

Long Island Jewish Medical Center

270-05 76th Avenue
New Hyde Park, New York 11040

Maimonides Medical Center

4802 10th Avenue
Brooklyn, New York 11219

Mercy Hospital of Buffalo

565 Abbott Road
Buffalo, New York 14220

Montefiore Medical Center @ Henry & Lucy Moses Division

111 East 210th Street
Bronx, New York 10467

Montefiore Medical Center @ Jack D. Weiler Hospital of A. Einstein College

1825 Eastchester Road
Bronx, New York 10461

Mount Sinai Beth Israel

281 1st Avenue
New York, New York 10003

Mount Sinai Hospital

1468 Madison Avenue
New York, New York 10029

Mount Sinai St. Luke's

1111 Amsterdam Avenue
New York, New York 10025

NY Presbyterian Brooklyn**Methodist Hospital**

506 6th Street
Brooklyn, New York 11215

NY Presbyterian Columbia**Presbyterian Center**

622 W 168th Street
New York, New York 10032

NY Presbyterian Lawrence Hospital*

55 Palmer Avenue
Bronxville, New York 10708

NY Presbyterian Queens

56-45 Main Street
Flushing, New York 11355

NY Presbyterian Weill Cornell College

525 East 68th Street
New York, New York 10065

NYU Hospitals Center

550 1st Avenue
New York, New York 10016

NYU Langone Hospital - Brooklyn

(previously Lutheran Medical Center)
150 55th Street
Brooklyn, New York 11220

NYU Winthrop University Hospital

259 First Street
Mineola, New York 11501

Niagara Falls Memorial Medical Center*

621 10th Street
Niagara Falls, New York 14301

North Shore University Hospital

300 Community Drive
Manhasset, New York 11030

Olean General Hospital*

515 Main Street
Olean, New York 14760

Orange Regional Medical Center*

707 East Main Street
Middletown, New York 10940

Peconic Bay Medical Center*

1300 Roanoke Avenue
Riverhead, New York 11901

Richmond University Medical Center*

355 Bard Avenue
Staten Island, New York 10310

Rochester General Hospital

1425 Portland Avenue
Rochester, New York 14621

Samaritan Hospital*

2215 Burdett Avenue
Troy, New York 12180

Saratoga Hospital*

211 Church Street
Saratoga Springs, New York 12866

Mount Sinai South Nassau (formerly South Nassau Communities Hospital)*

One Healthy Way
Oceanside, New York 11572

Southampton Hospital*

240 Meeting House Lane
Southampton, New York 11968

Southside Hospital

301 East Main Street
Bayshore, New York 11706

St. Barnabas Hospital*

4487 3rd Avenue
Bronx, New York 10457

St. Catherine of Siena Medical Center*

50 Route 25A
Smithtown, New York 11787

St. Elizabeth Medical Center

2209 Genesee Street
Utica, New York 13501

St. Francis Hospital

100 Port Washington Boulevard
Roslyn, New York 11576

St. Joseph's Hospital Health Center

301 Prospect Avenue
Syracuse, New York 13203

Montefiore St. Luke's (formerly St. Luke's Cornwall Hospital/Newburgh)*

70 Dubois Street
Newburgh, New York 12550

St. Peter's Hospital

315 South Manning Boulevard
Albany, New York 12208

Staten Island University Hospital – North

475 Seaview Avenue
Staten Island, New York 10305

Strong Memorial Hospital

601 Elmwood Avenue
Rochester, New York 14642

The Unity Hospital of Rochester*

1555 Long Pond Road
Rochester, New York 14626

UHS Wilson Medical Center

33-57 Harrison Street
Johnson City, New York 13790

University Hospital at Stony Brook

33 Research Way
Stony Brook, New York 11794-8410

University Hospital of Brooklyn

450 Clarkson Road
Brooklyn, New York 11203

University Hospital (Upstate)

SUNY Health Science Center

750 East Adams Street
Syracuse, New York 13210

**UVM Health Network – Champlain Valley
Physicians Hospital***

75 Beekman Street
Plattsburgh, New York 12901

Vassar Brothers Medical Center

45 Reade Place
Poughkeepsie, New York 12601

Westchester Medical Center

100 Woods Rd.
Valhalla, New York 10595

White Plains Hospital*

41 East Post Road
White Plains, New York 10601

* Hospital performs PCI without cardiac surgery on-site

** Hospital Closed or No Longer Performs PCI

Additional copies of this report may be obtained through the Department of Health web site at
<http://www.nyhealth.gov>

or by writing to:

Cardiac
Box 2000
New York State Department of Health
Albany, New York 12220

