PERCUTANEOUS CORONARY INTERVENTIONS (PCI)

in New York State

2012-2014

May 2017

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Message from Commissioner Zucker

January 2017

I am pleased to provide the information contained in this booklet for use by health care providers, patients and families of patients who are considering treatment options for cardiovascular disease. The report provides data on risk factors associated with in-hospital/30-day mortality following percutaneous coronary intervention (PCI, also known as angioplasty) and lists hospital and physician-specific mortality rates. It also includes information on hospital readmissions within 30-days of PCI. The analyses use a risk-adjustment process to account for pre-existing differences in patients' health statuses. We believe that in-hospital/30-day mortality and 30-day readmission are important quality indicators that will provide useful information to patients and providers. In addition, we are pleased to include in this report hospital risk-adjusted outcomes for Transcatheter Aortic Valve Replacement (TAVR, sometimes also called Transcatheter Aortic Valve Implantation or TAVI).

The Percutaneous Coronary Interventions Reporting System (the data set upon which these analyses are based) represents the largest collection of data available in which all patients undergoing PCI have been reported. Hospitals and doctors involved in cardiac care have worked cooperatively with the New York State Department of Health and the New York State Cardiac Advisory Committee to compile accurate and meaningful data that can and have been used to enhance quality of care.

As they develop treatment plans, I encourage doctors to discuss this information with their patients and colleagues. While these statistics are an important tool in making informed health care choices, doctors and patients must make individual treatment plans together after careful consideration of all pertinent factors. It is also important to keep in mind that the information in this booklet does not include data after 2014. Important changes may have taken place in some hospitals since that time.

I would also ask that patients and physicians alike give careful consideration to the importance of healthy lifestyles for all those affected by heart disease. Controllable risk factors that contribute to a higher likelihood of developing coronary artery disease are high cholesterol levels, cigarette smoking, high blood pressure, obesity and sedentary lifestyle. Careful attention to these risk factors will contribute to improved health for patients undergoing PCI and will help to minimize the development of new blockages in the coronary arteries.

I extend my appreciation to the providers in this State and to the Cardiac Advisory Committee for their efforts in developing and refining this remarkable system. The Department of Health will continue to work in partnership with hospitals and physicians to ensure high quality of care for patients with heart disease. We look forward to continuing to provide reports such as this and the Adult Cardiac Surgery Report on an annual basis. I applaud the continued high quality of care available from our New York State health care providers.

Howard A. Zucker, M.D., J.D.
Commissioner of Health

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 each of the 143,535 patients who underwent PCI in NYS hospitals and were discharged between December 1, 2011, and November 30, 2014. The analysis period for this report includes patients discharged in December 2011 but not those discharged in December 2014. 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 2014 cases includes patients discharged from December 1, 2013 through November 30, 2014. 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 20 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, 2011, and November 30, 2014, provided by all 62 non-federal hospitals in NYS where PCI was performed. In total there were 143,535 PCI procedures performed during this time period. The annual number of PCI discharges was: 47,396 in 2012; 48,495 in 2013; and 47,644 in 2014. 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.

At the time Long Island College Hospital closed in April of 2014, the cardiac data validation process for 2014 cases was incomplete. Because the accuracy of risk factors, procedural information and outcomes for these cases cannot be verified, the 349 cases reported by this hospital with a discharge in the analysis time period are excluded from all analyses.

In addition, 302 records were excluded from the 2012–2014 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 37 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 739 cases with pre-procedure cardiogenic shock excluded from analysis. Beginning with 2010 discharges, patients with hypoxic brain injury who expired under certain conditions were also excluded from analysis. This accounted for 137 cases 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 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 51. Patients in 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 739 cases account for 0.52 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 mortalities should be excluded from analyses. The specific criteria for exclusion under this policy can be found on Page 53.

While there were 47,196 PCI cases included in the mortality analysis for 2014 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 1,957 cases. Another 313 patients were excluded because they died in the same admission as their index PCI, so readmission was impossible. Two hundred and fifty-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 1,819 exclusions.

In total, the number of exclusions was 4,344, leaving 42,852 cases to be examined for 30-day readmission.

NOTE ON HOSPITALS PERFORMING PCI DURING 2012–2014 PERIOD

In the 2012-2014 time period there were 22 hospitals approved to perform PCI without cardiac surgery on-site. Bronx Lebanon - Concourse Division performed PCI only on patients with an ST segment elevation myocardial infarction (a specific kind of heart attack also known as STEMI) until June of 2013. The other 21 hospitals were approved to perform Primary or Elective PCI. Hospitals currently performing PCI without cardiac surgery on-site are noted on the final page of this report.

Several hospitals began performing PCI during the 2012-2014 time period. The hospital name and the month of the first PCI performed are as follows: Samaritan Hospital - January 2012; Brookhaven Memorial Hospital Medical Center - December 2013; Olean General Hospital - October 2014; Richmond University Medical Center - November 2014.

As previously mentioned, Long Island College Hospital closed in 2014 and data from this hospital is not included in this report due to incomplete validation. In addition, Millard Fillmore Hospital closed in 2012 and performed the last PCI in March of that year. The last PCI was performed at Erie County Medical Center in February of 2013.

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 admission to a NYS non-Federal hospital within 30 days of discharge from the index hospitalization when the second admission is not for the purpose of staged PCI or CABG. Also categorized as readmission is any non-staged PCI within 30 days of discharge, even if the second procedure is technically performed on an outpatient basis.

Admission for staged PCI or CABG is not counted in this analysis as a readmission. Staged PCI 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 PCI or to have bypass surgery. 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 are much more

rare, but the definition of staging is similar. There were 830 staged PCIs and 37 staged CABGs that were not counted as readmissions.

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 (1.18 percent in-hospital/30-day in 2014) 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 (9.85 percent in 2014).

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 (1.18 percent in-hospital/30-day mortality for all PCI patients discharged in 2014).

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 (9.85 percent 30-day readmission rate for all PCI patients discharged in 2014).

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.

2014 HOSPITAL OUTCOMES FOR PCI

Table 1 and Figures 1 and 2 present the PCI mortality results for the 60 hospitals performing PCI in NYS in 2014 for which data could be analyzed. The table contains, for each hospital, the number of PCIs resulting in 2014 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 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 (81.91 percent in 2014).

The overall in-hospital/30-day OMR for the 47,196 PCIs included in this 2014 analysis was 1.18 percent. Observed mortality rates ranged from 0.00 percent to 3.33 percent. The range in EMRs, which measure patient severity of illness, was between 0.24 percent and 3.17 percent. The RAMRs, which measure hospital performance, range from 0.00 percent to 2.33 percent. Based on confidence intervals for RAMRs, two hospitals (Buffalo General Hospital and NYU Hospital in Manhattan) had RAMRs that were significantly higher than the statewide average. Four hospitals (Maimonides Medical Center in Brooklyn, NY Presbyterian at Cornell in Manhattan, Southside Hospital in Bayshore, and Winthrop University Hospital in Mineola) 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 0.74 percent. The range of RAMRs was from 0.00 percent to 2.46 percent. No hospitals had RAMRs that were significantly higher than the statewide average. One hospital (Mt. Sinai Medical Center in Manhattan) had a RAMR that was 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 2014 PCI analysis is based on in-hospital/30-day mortality and excludes shock cases and hypoxic brain injury deaths, 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 2014 PCI discharges was 0.68 percent for the 47,196 patients included in Table 1. For the non-emergency analysis, there were 38,658 patients with an in-hospital mortality rate of 0.32 percent.

Table 2 presents the PCI 30-day readmission results for the 60 hospitals performing PCI in NYS in 2014 for which data could be analyzed. The table contains, for each hospital, the number of PCIs resulting in 2014 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 42,852 PCIs included in this 2014 analysis was 9.85 percent. Observed readmission rates ranged from 0.00 percent to 16.38 percent. The range in ERRs, which measure patient severity of illness, was between

6.31 percent and 12.15 percent. The RARRs, which measure hospital performance, range from 0.00 percent to 16.98 percent.

Based on confidence intervals for RARRs, ten hospitals (Good Samaritan Hospital Medical Center in West Islip, Huntington Hospital, Jamaica Hospital Medical Center, Lenox Hill Hospital in Manhattan, MI Bassett Hospital in Cooperstown, North Shore University Hospital in Manhasset, Southside Hospital in Bayshore, St. Barnabas Hospital in the Bronx, St. Catherine of Siena in Smithtown, and University Hospital-Stony Brook) had RARRs that were significantly higher than the statewide average. Seven hospitals (Glens Falls Hospital, Maimonides Medical Center in Brooklyn, NYU Hospitals Center in Manhattan, Orange Regional Medical Center in Middletown, St. Peter's Hospital in Albany, Strong Memorial Hospital in Rochester 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, 2014 Discharges. (Listed Alphabetically by Hospital)

(Listed Alphabetically by Hospital)

Hospital	All Cases						Non-Emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	Cases	RAMR
Albany Med. Ctr	649	11	1.69	1.28	1.56	(0.78, 2.79)	489	1.16
Arnot Ogden Med Ctr	393	10	2.54	1.31	2.29	(1.10, 4.21)	290	1.28
Bellevue Hospital Ctr	449	8	1.78	1.65	1.27	(0.55, 2.50)	320	0.22
Bronx-Lebanon-Concourse	96	2	2.08	3.17	0.77	(0.09, 2.79)	43	1.81
Brookdale Univ Hosp Med Ctr	179	1	0.56	1.49	0.44	(0.01, 2.45)	121	0.00
Brookhaven Memorial	285	6	2.11	1.22	2.03	(0.74, 4.41)	198	2.46
Buffalo General Hosp	1504	31	2.06	1.24	1.96 *	(1.33, 2.78)	1067	1.37
Cayuga Med Ctr Ithaca	150	1	0.67	1.76	0.45	(0.01, 2.48)	77	0.00
Champ.Valley Phys Hosp	561	9	1.60	1.03	1.83	(0.83, 3.47)	422	1.23
Crouse Hospital	265	4	1.51	1.01	1.75	(0.47, 4.49)	193	0.75
Ellis Hospital	439	3	0.68	1.35	0.60	(0.12, 1.75)	280	0.49
Elmhurst Hospital Ctr	457	2	0.44	0.96	0.54	(0.06, 1.94)	313	0.00
Faxton - St. Lukes	279	8	2.87	1.63	2.07	(0.89, 4.08)	229	1.70
Glens Falls Hospital	188	0	0.00	1.01	0.00	(0.00, 2.28)	107	0.00
Good Sam - Suffern	612	16	2.61	1.82	1.69	(0.96, 2.74)	462	0.76
Good Sam-West Islip	871	12	1.38	0.86	1.89	(0.98, 3.31)	776	0.82
Huntington Hospital	509	4	0.79	0.91	1.01	(0.27, 2.59)	411	0.92
Jamaica Hosp Med Ctr	295	6	2.03	2.05	1.17	(0.43, 2.54)	120	1.38
Lenox Hill Hospital	1497	13	0.87	0.68	1.51	(0.80, 2.58)	1405	0.77
Long Island Jewish MC	1630	13	0.80	1.08	0.87	(0.46, 1.49)	1411	0.67
Lutheran Medical Ctr	217	2	0.92	1.28	0.85	(0.10, 3.06)	161	0.53
M I Bassett Hospital	455	5	1.10	1.06	1.22	(0.39, 2.84)	362	0.91
Maimonides Medical Ctr	1097	13	1.19	2.18	0.64 **	(0.34, 1.09)	870	0.44
Mercy Hospital	1136	20	1.76	1.29	1.61	(0.98, 2.48)	848	0.89
Montefiore - Moses	805	8	0.99	1.01	1.15	(0.50, 2.27)	661	0.98
Montefiore - Weiler	518	3	0.58	1.37	0.50	(0.10, 1.45)	373	0.89
Mount Sinai Beth Israel	1629	15	0.92	0.88	1.23	(0.69, 2.03)	1501	0.94
Mount Sinai Hospital	3799	23	0.61	0.83	0.86	(0.54, 1.29)	3663	0.43 **
Mount Sinai St. Lukes	424	5	1.18	1.76	0.79	(0.25, 1.84)	352	0.36
NY Methodist Hospital	1268	21	1.66	1.07	1.83	(1.13, 2.79)	1137	1.19
NYP-Columbia Presby.	2454	32	1.30	1.22	1.26	(0.86, 1.78)	2275	0.90
NYP-Queens	541	5	0.92	0.99	1.10	(0.35, 2.56)	384	0.45
NYP-Weill Cornell	1196	4	0.33	1.14	0.34 **	(0.09, 0.88)	1070	0.26
NYU Hospitals Center	1460	17	1.16	0.59	2.33 *	(1.36, 3.73)	1393	1.30
North Shore Univ Hosp	1999	16	0.80	1.10	0.86	(0.49, 1.39)	1727	0.59
Olean General Hosp.	168	1	0.60	0.77	0.91	(0.01, 5.04)	81	0.00
Orange Regional Med Ctr	455	3	0.66	1.06	0.73	(0.15, 2.14)	332	0.52
Richmond Univ Med Cntr	1	0	0.00	0.24	0.00	(0.00, 100.0)	1	0.00
Rochester General Hosp	1543	19	1.23	1.02	1.42	(0.86, 2.22)	1223	0.99
Samaritan Hospital	195	3	1.54	1.08	1.67	(0.34, 4.88)	128	1.69
South Nassau Com. Hosp	506	4	0.79	0.97	0.96	(0.26, 2.45)	373	0.74
Southside Hospital	653	2	0.31	1.17	0.31 **	(0.03, 1.11)	556	0.16
St. Barnabas Hospital	137	1	0.73	0.90	0.95	(0.01, 5.28)	109	0.00
St. Catherine of Siena	280	4	1.43	0.94	1.78	(0.48, 4.56)	220	0.69
St. Elizabeth Med Ctr	650	11	1.69	1.37	1.46	(0.73, 2.61)	544	0.60
St. Francis Hospital	2536	18	0.71	1.08	0.77	(0.46, 1.22)	2378	0.50
St. Josephs Hospital	1884	26	1.38	1.31	1.24	(0.81, 1.82)	1390	0.82
St. Lukes Cornwall Hosp	268	6	2.24	1.76	1.50	(0.55, 3.26)	187	0.89
St. Peters Hospital	830	11	1.33	1.13	1.38	(0.69, 2.47)	637	1.04
Staten Island Univ Hosp	778	9	1.16	0.91	1.50	(0.69, 2.85)	650	0.89
Strong Memorial Hosp	902	6	0.67	1.36	0.58	(0.21, 1.25)	610	0.61
UHS-Wilson Med Ctr	670	13	1.94	1.48	1.54	(0.82, 2.63)	489	0.66
Unity Hospital	294	6	2.04	1.76	1.37	(0.50, 2.97)	202	0.92
Univ. Hosp-Brooklyn	300	10	3.33	2.34	1.68	(0.80, 3.09)	179	0.84
Univ. Hosp-Stony Brook	1246	21	1.69	1.69	1.18	(0.73, 1.80)	927	0.84
Univ. Hosp-Upstate	190	5	2.63	1.56	1.98	(0.64, 4.62)	115	2.44
Vassar Bros. Med Ctr	698	9	1.29	1.39	1.09	(0.50, 2.06)	490	0.54
Westchester Med Ctr	408	8	1.96	1.87	1.23	(0.53, 2.43)	248	1.24
White Plains Hospital	369	6	1.63	1.22	1.57	(0.57, 3.42)	298	1.14
Winthrop-Univ. Hosp	929	4	0.43	1.20	0.42 **	(0.11, 1.08)	780	0.28
Statewide Total	**47196**	**555**	**1.18**				**38658**	**0.74**

*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, 2014 Discharges (All Cases)

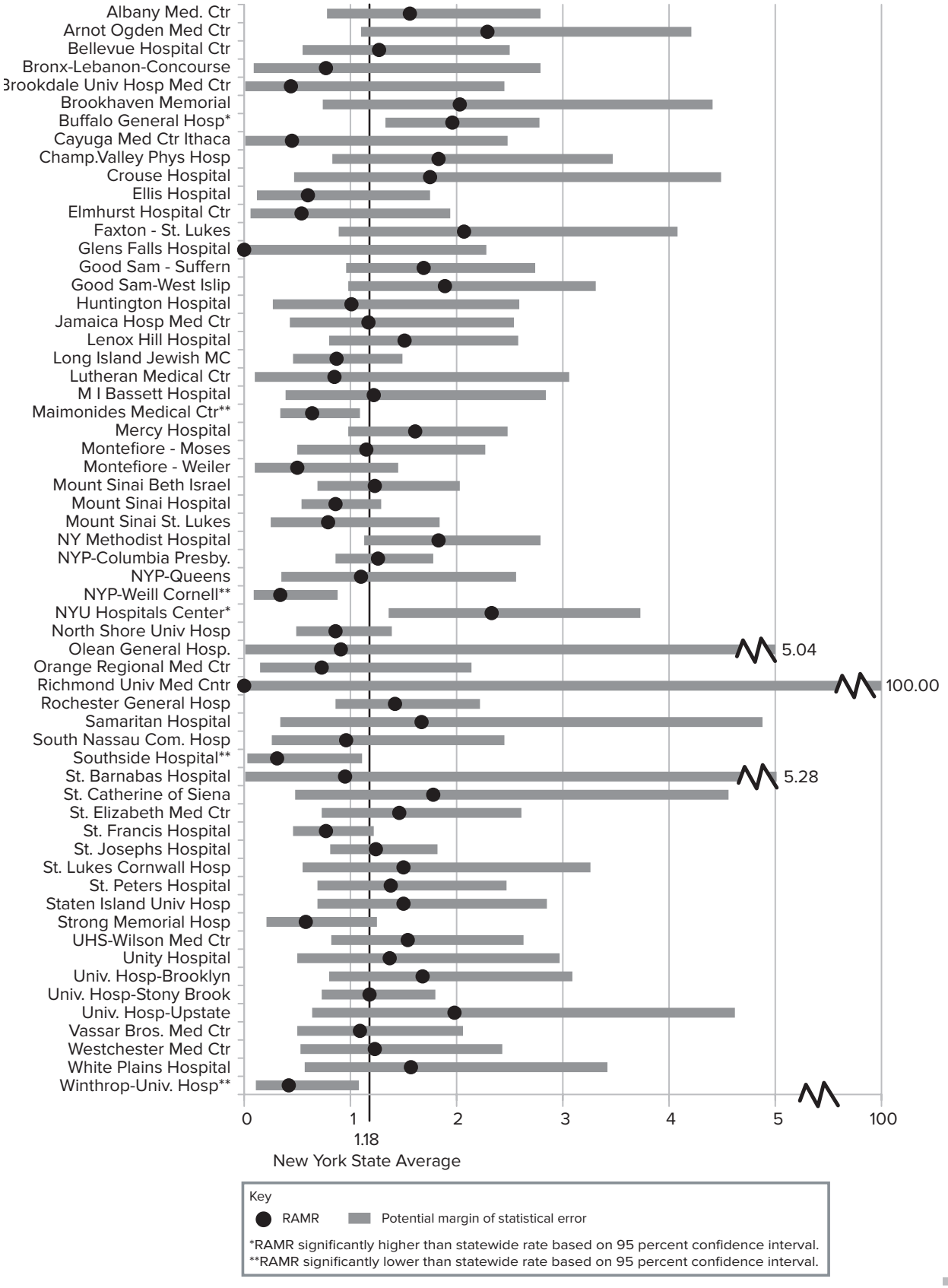


Figure 2

In-Hospital/30-Day Risk-Adjusted Mortality Rates for PCI in New York State, 2014 Discharges (Non-Emergency Cases)

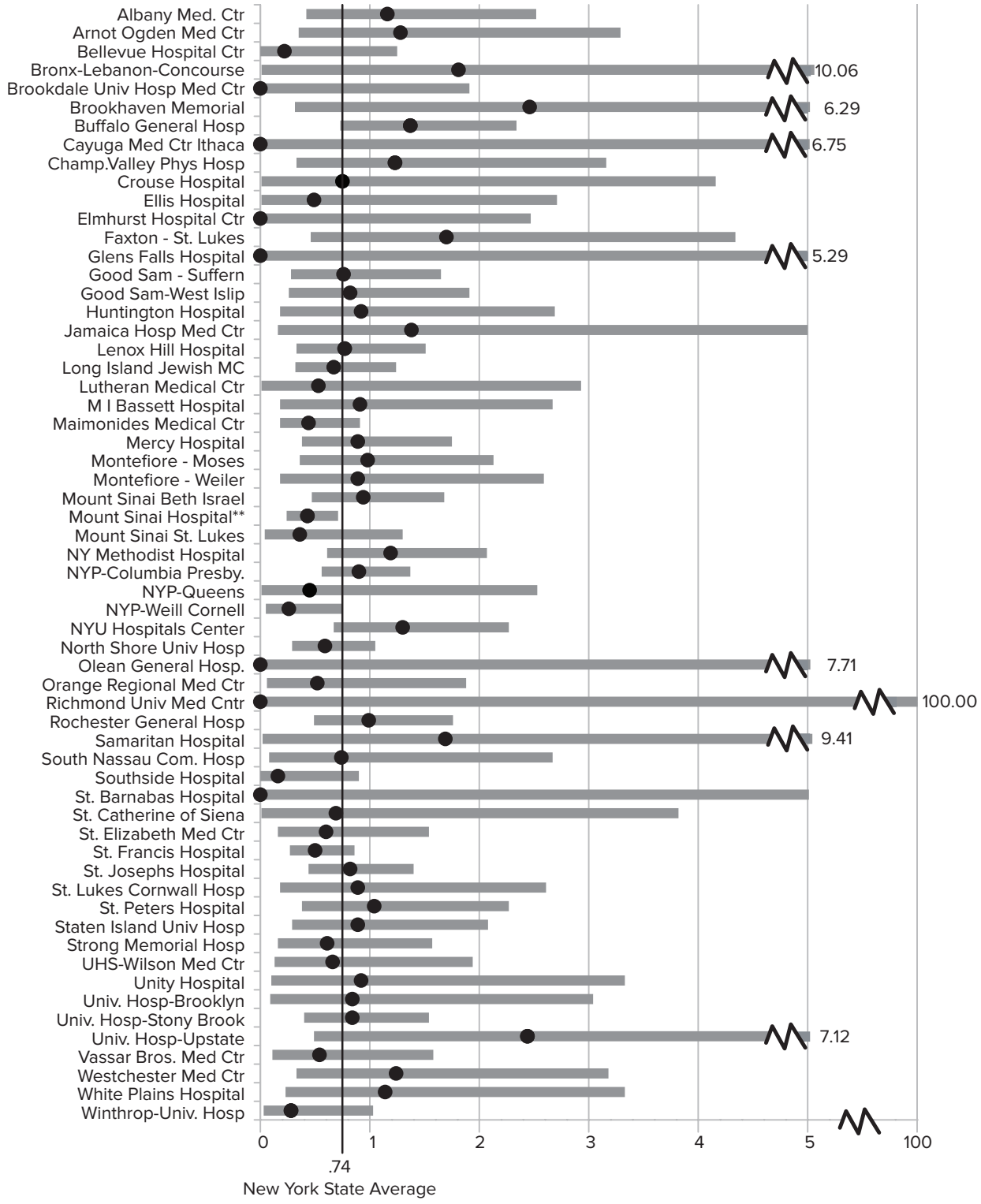


Table 2

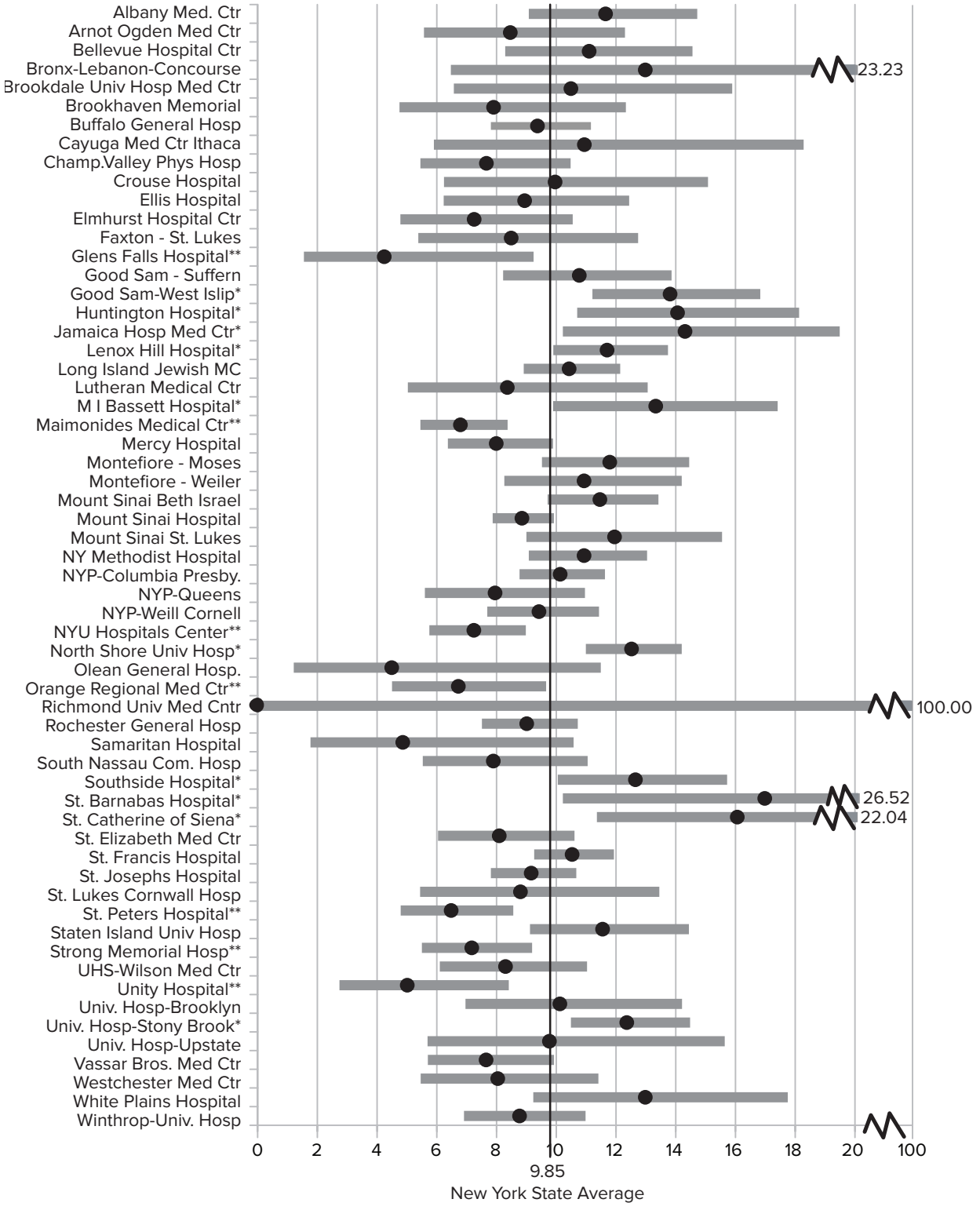
Hospital Observed, Expected and Risk-Adjusted Readmission Rates for All PCI in New York State, 2014

Hospital	Cases	Readmissions	All Cases ORR	All Cases ERR	All Cases RARR	All Cases 95% CI for RARR
Albany Med. Ctr	571	70	12.26	10.36	11.65	(9.08,14.72)
Arnot Ogden Med Ctr	332	27	8.13	9.47	8.46	(5.57,12.30)
Bellevue Hospital Ctr	423	52	12.29	10.90	11.10	(8.29,14.56)
Bronx-Lebanon-Concourse	79	11	13.92	10.56	12.98	(6.47,23.23)
Brookdale Univ Hosp Med Ctr	170	22	12.94	12.15	10.49	(6.57,15.89)
Brookhaven Memorial	249	19	7.63	9.51	7.90	(4.75,12.33)
Buffalo General Hosp	1416	126	8.90	9.35	9.37	(7.81,11.16)
Cayuga Med Ctr Ithaca	139	14	10.07	9.07	10.94	(5.97,18.35)
Champ.Valley Phys Hosp	537	39	7.26	9.33	7.66	(5.45,10.48)
Crouse Hospital	248	22	8.87	8.77	9.96	(6.24,15.08)
Ellis Hospital	428	35	8.18	9.01	8.94	(6.23,12.44)
Elmhurst Hospital Ctr	427	27	6.32	8.59	7.25	(4.78,10.55)
Faxton - St. Lukes	259	23	8.88	10.30	8.49	(5.38,12.74)
Glens Falls Hospital	175	6	3.43	7.96	4.24 **	(1.55, 9.24)
Good Sam - Suffern	507	60	11.83	10.82	10.77	(8.22,13.86)
Good Sam-West Islip	800	98	12.25	8.73	13.81 *	(11.2,16.83)
Huntington Hospital	466	59	12.66	8.87	14.06 *	(10.7,18.13)
Jamaica Hosp Med Ctr	267	40	14.98	10.31	14.31 *	(10.2,19.49)
Lenox Hill Hospital	1361	149	10.95	9.21	11.70 *	(9.90,13.74)
Long Island Jewish MC	1528	167	10.93	10.32	10.43	(8.91,12.14)
Lutheran Medical Ctr	209	19	9.09	10.70	8.36	(5.03,13.06)
M I Bassett Hospital	429	52	12.12	8.95	13.33 *	(9.96,17.48)
Maimonides Medical Ctr	1059	88	8.31	12.05	6.79 **	(5.45, 8.37)
Mercy Hospital	1041	84	8.07	9.95	7.99	(6.37, 9.89)
Montefiore - Moses	725	93	12.83	10.71	11.79	(9.52,14.45)
Montefiore - Weiler	500	56	11.20	10.09	10.93	(8.26,14.20)
Mount Sinai Beth Israel	1405	153	10.89	9.36	11.46	(9.71,13.42)
Mount Sinai Hospital	3241	294	9.07	10.09	8.85	(7.87, 9.92)
Mount Sinai St. Lukes	382	55	14.40	11.87	11.95	(9.00,15.55)
NY Methodist Hospital	1169	123	10.52	9.48	10.93	(9.08,13.04)
NYP-Columbia Presby.	1870	200	10.70	10.40	10.13	(8.77,11.63)
NYP-Queens	526	37	7.03	8.71	7.95	(5.60,10.96)
NYP-Weill Cornell	1031	103	9.99	10.44	9.42	(7.69,11.43)
NYU Hospitals Center	1292	82	6.35	8.64	7.24 **	(5.75, 8.98)
North Shore Univ Hosp	1891	241	12.74	10.02	12.52 *	(11.0,14.20)
Olean General Hosp.	105	4	3.81	8.36	4.49	(1.21,11.49)
Orange Regional Med Ctr	418	29	6.94	10.16	6.72 **	(4.50, 9.66)
Richmond Univ Med Cntr	1	0	0.00	6.31	0.00	(0.00,100.0)
Rochester General Hosp	1484	127	8.56	9.36	9.01	(7.51,10.72)
Samaritan Hospital	154	6	3.90	7.90	4.86	(1.77,10.58)
South Nassau Com. Hosp	475	35	7.37	9.13	7.95	(5.53,11.05)
Southside Hospital	605	81	13.39	10.42	12.65 *	(10.0,15.72)
St. Barnabas Hospital	116	19	16.38	9.50	16.98 *	(10.2,26.52)
St. Catherine of Siena	264	38	14.39	8.83	16.06 *	(11.4,22.04)
St. Elizabeth Med Ctr	594	52	8.75	10.65	8.09	(6.04,10.61)
St. Francis Hospital	2348	247	10.52	9.84	10.53	(9.26,11.93)
St. Josephs Hospital	1757	165	9.39	10.10	9.16	(7.81,10.67)
St. Lukes Cornwall Hosp	236	21	8.90	9.96	8.80	(5.44,13.45)
St. Peters Hospital	789	49	6.21	9.44	6.48 **	(4.79, 8.56)
Staten Island Univ Hosp	736	77	10.46	8.92	11.55	(9.12,14.44)
Strong Memorial Hosp	879	62	7.05	9.69	7.17 **	(5.50, 9.19)
UHS-Wilson Med Ctr	592	47	7.94	9.42	8.30	(6.10,11.03)
Unity Hospital	284	14	4.93	9.69	5.01 **	(2.74, 8.41)
Univ. Hosp-Brooklyn	279	33	11.83	11.51	10.12	(6.96,14.21)
Univ. Hosp-Stony Brook	1179	154	13.06	10.41	12.36 *	(10.5,14.48)
Univ. Hosp-Upstate	180	17	9.44	9.52	9.77	(5.69,15.64)
Vassar Bros. Med Ctr	661	51	7.72	9.93	7.65	(5.70,10.06)
Westchester Med Ctr	373	31	8.31	10.18	8.04	(5.46,11.41)
White Plains Hospital	313	39	12.46	9.45	12.98	(9.23,17.75)
Winthrop-Univ. Hosp	878	76	8.66	9.72	8.77	(6.91,10.98)
Statewide Total	**42852**	**4220**	**9.85**			

*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, 2014 Discharges (All Cases)



2012-2014 HOSPITAL DATA FOR PCI AND TAVR

Table 3 provides the number of PCIs, the in-hospital/30-day OMR and RAMR for 2012-2014 for each of three types of PCI patients in the 62 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 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 2012-2014 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 2.62 percent, and the RAMRs ranged from 0.00 percent to 2.08 percent. Six hospitals (Albany Medical Center, Buffalo General Hospital, Champlain Valley Physicians Hospital in Plattsburgh, Good Samaritan Hospital in Suffern, New York Methodist Hospital in Brooklyn, and Unity Hospital in Rochester) had RAMRs that were significantly higher than the statewide rate. Four hospitals (Maimonides Medical Center in Brooklyn, Montefiore Medical Center - Weiler Division in the Bronx, Mount Sinai Hospital in Manhattan and North Shore University Hospital in Manhasset) 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 82.14 percent of cases for the period 2012-2014. The statewide in-hospital/30-day mortality rate for the 116,617 non-emergency cases during the 3-year period was 0.71 percent. Observed mortality rates for this group of patients ranged from 0.00 percent to 2.86 percent and the RAMRs ranged from 0.00 to 2.47 percent. Five hospitals (Albany Medical Center, Buffalo General Hospital, New York Methodist Hospital in Brooklyn, Unity Hospital in Rochester and University Hospital - Upstate in Syracuse) had RAMRs that were significantly higher than the statewide rate. Three hospitals (Bellevue Hospital in Manhattan, Maimonides Medical Center in Brooklyn, and Mount Sinai Hospital 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 17.86 percent of cases for the period 2012-2014. The statewide in-hospital/30-day mortality rate for the 25,354 emergency PCI cases during the 3-year period was 2.94 percent. Observed mortality rates for this group ranged from 0.00 percent to 7.38 percent and the RAMRs ranged from 0.00 percent to 5.85 percent. Four hospitals (Albany Medical Center, Good Samaritan Hospital in Suffern, Good Samaritan Hospital in West Islip, and University Hospital-Brooklyn) had RAMRs that were 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 141,971 cases included in Table 3 was 0.65 percent. The in-hospital mortality rate was 0.31 percent for the 116,617 non-emergency cases and 2.20 percent for the 25,354 emergency cases. As stated above, all cases with shock and hypoxic brain injury mortalities discharged in 2012-2014 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 20 hospitals performing TAVR during the 2012-2014 discharge period. The table contains, for each hospital, the number of TAVR procedures resulting in 2012-2014 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 2012-2014 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.

As indicated in Table 4, the overall in-hospital/30-day mortality rate for the 3836 TAVR procedures performed at the 20 hospitals was 5.71 percent. The OMRs ranged from 2.70 percent to 10.00 percent. The range of EMRs, which measure patient severity of illness, was 4.36 percent to 6.70 percent.

The RAMRs, which are used to measure performance, ranged from 2.89 percent to 9.38 percent. No hospitals had RAMRs that were statistically higher or lower than the statewide rate.

Table 3

In-Hospital / 30-Day Observed and Risk-Adjusted Mortality Rates for PCI in New York State, 2012-2014 Discharges

Hospital	All Cases			Non-Emergency Cases			Emergency Cases		
	Cases	OMR	RAMR	Cases	OMR	RAMR	Cases	OMR	RAMR
Albany Med. Ctr	2062	2.38	2.00 *	1544	1.62	1.53 *	518	4.63	4.77 *
Arnot Ogden Med Ctr	1289	1.24	1.14	980	0.61	0.61	309	3.24	3.42
Bellevue Hospital Ctr	1255	0.96	0.65	904	0.22	0.15 **	351	2.85	2.64
Bronx-Lebanon-Concourse	244	2.46	0.84	70	2.86	2.43	174	2.30	1.91
Brookdale Univ Hosp Med Ct	606	1.49	0.90	420	0.48	0.25	186	3.76	4.02
Brookhaven Memorial	285	2.11	2.08	198	2.02	2.47	87	2.30	2.71
Buffalo General Hosp	5020	1.65	1.60 *	3821	1.02	1.09 *	1199	3.67	3.99
Cayuga Med Ctr Ithaca	406	1.23	0.98	224	0.89	0.97	182	1.65	2.04
Champ.Valley Phys Hosp	1704	1.64	1.77 *	1285	1.01	1.08	419	3.58	4.29
Crouse Hospital	839	1.19	1.24	606	0.66	0.83	233	2.58	3.07
Ellis Hospital	1421	0.77	0.68	905	0.33	0.44	516	1.55	1.87
Elmhurst Hospital Ctr	1390	1.01	1.00	972	0.21	0.35	418	2.87	3.21
Erie County Med Ctr	181	0.00	0.00	93	0.00	0.00	88	0.00	0.00
Faxton - St. Lukes	786	2.16	1.85	637	0.94	0.93	149	7.38	5.85
Glens Falls Hospital	614	0.65	0.76	389	0.26	0.50	225	1.33	1.95
Good Sam - Suffern	1715	2.45	1.75 *	1276	1.65	1.11	439	4.78	4.85 *
Good Sam-West Islip	2118	1.13	1.68	1849	0.59	0.87	269	4.83	5.69 *
Huntington Hospital	1265	0.63	0.81	1010	0.50	0.62	255	1.18	1.59
Jamaica Hosp Med Ctr	842	2.38	1.48	342	1.75	1.52	500	2.80	3.60
Lenox Hill Hospital	4547	0.55	0.91	4279	0.40	0.50	268	2.99	3.03
Long Island Jewish MC	4940	0.81	0.95	4310	0.72	0.72	630	1.43	1.73
Lutheran Medical Ctr	735	0.95	0.57	547	0.18	0.16	188	3.19	2.15
M I Bassett Hospital	1253	1.04	1.20	991	0.81	1.01	262	1.91	2.41
Maimonides Medical Ctr	3212	0.90	0.56 **	2508	0.64	0.42 **	704	1.85	1.16 **
Mercy Hospital	2791	1.11	1.17	2071	0.68	0.76	720	2.36	3.14
Millard Fillmore Hosp	80	0.00	0.00	67	0.00	0.00	13	0.00	0.00
Montefiore - Moses	2193	1.05	1.17	1816	0.61	0.64	377	3.18	3.67
Montefiore - Weiler	1589	0.69	0.54 **	1183	0.42	0.37	406	1.48	1.48
Mount Sinai Beth Israel	4575	0.98	1.21	4113	0.71	0.82	462	3.46	2.94
Mount Sinai Hospital	13029	0.51	0.75 **	12594	0.40	0.44 **	435	3.68	2.82
Mount Sinai St. Lukes	1350	1.63	1.15	1103	1.09	0.81	247	4.05	3.29
NY Methodist Hospital	3874	1.37	1.78 *	3574	1.06	1.25 *	300	5.00	4.00
NYP-Columbia Presby.	7786	1.00	0.98	7234	0.71	0.68	552	4.89	2.27
NYP-Queens	1780	0.90	1.00	1288	0.62	0.85	492	1.63	2.06
NYP-Weill Cornell	3938	1.19	1.01	3524	0.85	0.69	414	4.11	2.35
NYU Hospitals Center	3924	0.79	1.45	3746	0.61	0.89	178	4.49	4.15
North Shore Univ Hosp	4914	0.79	0.80 **	4041	0.59	0.56	873	1.72	1.88
Olean General Hosp.	193	0.52	0.76	96	0.00	0.00	97	1.03	2.79
Orange Regional Med Ctr	1545	0.84	0.93	1173	0.51	0.47	372	1.88	2.78
Richmond Univ Med Cntr	1	0.00	0.00	1	0.00	0.00	.	.	.
Rochester General Hosp	4759	1.24	1.39	3789	0.77	0.77	970	3.09	4.12
Samaritan Hospital	606	1.16	1.79	424	0.71	1.52	182	2.20	3.89
South Nassau Com. Hosp	1654	0.73	0.92	1260	0.71	0.90	394	0.76	1.14
Southside Hospital	1938	0.93	0.93	1679	0.71	0.60	259	2.32	2.76
St. Barnabas Hospital	384	1.04	1.05	298	0.00	0.00	86	4.65	5.08
St. Catherine of Siena	829	0.84	0.87	636	0.31	0.35	193	2.59	3.24
St. Elizabeth Med Ctr	1992	1.71	1.30	1632	0.92	0.73	360	5.28	4.18
St. Francis Hospital	7125	0.77	0.89	6621	0.59	0.55	504	3.17	2.98
St. Josephs Hospital	5972	1.07	1.01	4517	0.80	0.72	1455	1.92	2.40
St. Lukes Cornwall Hosp	859	1.63	1.16	645	0.93	0.72	214	3.74	3.08
St. Peters Hospital	2200	1.36	1.35	1668	0.90	0.92	532	2.82	3.47
Staten Island Univ Hosp	2699	1.33	1.44	2240	0.67	0.73	459	4.58	4.44
Strong Memorial Hosp	2803	1.11	0.96	1884	0.74	0.77	919	1.85	2.18
UHS-Wilson Med Ctr	2044	1.61	1.13	1481	0.81	0.84	563	3.73	2.71
Unity Hospital	878	2.62	1.97 *	624	1.60	1.70 *	254	5.12	4.13
Univ. Hosp-Brooklyn	978	2.25	1.54	645	0.47	0.37	333	5.71	4.98 *
Univ. Hosp-Stony Brook	4006	1.55	1.15	2823	0.99	0.78	1183	2.87	2.81
Univ. Hosp-Upstate	737	2.58	1.59	465	1.94	1.67 *	272	3.68	3.24
Vassar Bros. Med Ctr	2019	1.34	1.23	1403	0.78	0.76	616	2.60	3.50
Westchester Med Ctr	1307	1.68	1.21	851	1.06	0.88	456	2.85	2.84
White Plains Hospital	980	1.33	1.03	785	0.89	0.88	195	3.08	2.00
Winthrop-Univ. Hosp	2911	0.89	0.81	2463	0.57	0.53	448	2.68	2.07
Statewide Total	**141971**	**1.11**		**116617**	**0.71**		**25354**	**2.94**	

*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, 2012-2014 Discharges (Listed Alphabetically by Hospital)

Hospital	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR
Albany Med. Ctr	230	10	4.35	5.05	4.92	(2.35, 9.04)
Buffalo General Hosp	142	9	6.34	6.39	5.66	(2.58,10.75)
Lenox Hill Hospital	99	9	9.09	5.53	9.38	(4.28,17.81)
Long Island Jewish MC	161	5	3.11	6.13	2.89	(0.93, 6.74)
Maimonides Medical Ctr	100	5	5.00	5.24	5.44	(1.75,12.70)
Montefiore - Moses	71	5	7.04	5.43	7.41	(2.39,17.28)
Mount Sinai Hospital	343	26	7.58	5.36	8.08	(5.28,11.84)
NY Methodist Hospital	23	1	4.35	6.70	3.71	(0.05,20.62)
NYP-Columbia Presby.	919	51	5.55	6.43	4.92	(3.67, 6.47)
NYP-Weill Cornell	277	17	6.14	5.22	6.71	(3.90,10.74)
NYU Hospitals Center	121	8	6.61	4.36	8.65	(3.73,17.05)
North Shore Univ Hosp	193	9	4.66	5.77	4.61	(2.10, 8.75)
Southside Hospital	74	2	2.70	4.72	3.27	(0.37,11.81)
St. Francis Hospital	313	19	6.07	5.78	5.99	(3.61, 9.36)
St. Josephs Hospital	143	9	6.29	5.77	6.23	(2.84,11.82)
St. Peters Hospital	30	3	10.00	6.31	9.05	(1.82,26.45)
Strong Memorial Hosp	104	7	6.73	6.35	6.05	(2.42,12.47)
Univ. Hosp-Stony Brook	60	3	5.00	4.98	5.73	(1.15,16.73)
Westchester Med Ctr	64	3	4.69	6.18	4.33	(0.87,12.64)
Winthrop-Univ. Hosp	369	18	4.88	5.05	5.51	(3.27, 8.71)
STATEWIDE TOTAL	**3836**	**219**	**5.71**			

2012-2014 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 2012-2014 for cardiologists in each of the 62 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 2012-2014, and/or (b) performed at least one PCI in each of the years 2012-2014. 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 2012-2014.

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 hemodynamic instability 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, 2012 – 2014 Discharges

	All Cases						Non-emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	Cases	RAMR
Statewide Total	**141971**	**1572**	**1.11**				**116617**	**0.71**
Albany Medical Center Hospital								
##Brady S	174	3	1.72	1.34	1.43	(0.29, 4.17)	118	1.19
##Delago A	777	23	2.96	1.12	2.92 *	(1.85, 4.38)	663	2.31 *
El-Hajjar M	257	2	0.78	1.46	0.59	(0.07, 2.13)	164	0.47
##Esper D	279	4	1.43	1.17	1.36	(0.36, 3.47)	192	1.39
##Khawaja H	12	1	8.33	1.24	7.45	(0.10,41.47)	4	0.00
Nappi A	390	8	2.05	1.33	1.71	(0.74, 3.37)	302	0.32
##Papaleo R	60	0	0.00	1.36	0.00	(0.00, 4.97)	30	0.00
##Winston B	22	1	4.55	2.56	1.97	(0.03,10.95)	5	0.00
All Others	91	7	7.69	2.53	3.37 *	(1.35, 6.94)	66	2.50
TOTAL	**2062**	**49**	**2.38**	**1.31**	**2.00** *	**(1.48, 2.65)**	**1544**	**1.53** *
Arnot-Ogden Medical Center								
Amin N	429	6	1.40	1.55	1.00	(0.36, 2.17)	321	0.48
Grella R	461	5	1.08	0.89	1.35	(0.43, 3.15)	365	0.61
#Yarkoni A	335	4	1.19	1.14	1.16	(0.31, 2.96)	250	0.95
All Others	64	1	1.56	1.44	1.20	(0.02, 6.67)	44	0.00
TOTAL	**1289**	**16**	**1.24**	**1.20**	**1.14**	**(0.65, 1.86)**	**980**	**0.61**
Bellevue Hospital Center								
##Attubato M	28	0	0.00	1.29	0.00	(0.00,11.22)	16	0.00
##Babaev A	13	0	0.00	3.66	0.00	(0.00, 8.54)	.	.
#Bangalore S	336	3	0.89	1.80	0.55	(0.11, 1.61)	251	0.38
##Coppola J	140	2	1.43	1.51	1.05	(0.12, 3.79)	98	0.00
##Feit F	23	0	0.00	2.31	0.00	(0.00, 7.63)	12	0.00
#Hegde S	112	0	0.00	1.32	0.00	(0.00, 2.75)	112	0.00
##Iqbal S	273	1	0.37	1.14	0.35	(0.00, 1.97)	194	0.00
Kurian D	58	0	0.00	0.66	0.00	(0.00,10.69)	58	0.00
#Miller L	106	3	2.83	2.11	1.49	(0.30, 4.35)	76	0.00
##Serrano-Gomez C	22	0	0.00	4.11	0.00	(0.00, 4.49)	1	0.00
#Shah B	114	1	0.88	1.70	0.57	(0.01, 3.17)	79	0.00
##Slater J	12	1	8.33	4.86	1.90	(0.02,10.57)	2	0.00
##Staniloae C	16	1	6.25	1.93	3.59	(0.05,19.97)	4	0.00
All Others	2	0	0.00	1.19	0.00	(0.00,100.0)	1	0.00
TOTAL	**1255**	**12**	**0.96**	**1.63**	**0.65**	**(0.33, 1.13)**	**904**	**0.15** **
Bronx-Lebanon Hospital Ctr Concourse Div								
##Amsalem Y	53	1	1.89	2.75	0.76	(0.01, 4.22)	24	2.03
##Celaj S	35	2	5.71	3.73	1.70	(0.19, 6.12)	2	0.00
##Johnson M	22	1	4.55	3.22	1.57	(0.02, 8.71)	4	28.06
##Krim N	134	2	1.49	3.29	0.50	(0.06, 1.81)	40	0.00
TOTAL	**244**	**6**	**2.46**	**3.23**	**0.84**	**(0.31, 1.84)**	**70**	**2.43**
Brookdale Univ. Hospital Medical Ctr								
#Castillo R	328	7	2.13	2.04	1.16	(0.46, 2.38)	226	0.40
#Chadow H	278	2	0.72	1.58	0.51	(0.06, 1.83)	194	0.00
TOTAL	**606**	**9**	**1.49**	**1.83**	**0.90**	**(0.41, 1.71)**	**420**	**0.25**
Brookhaven Mem. Hospital Medical Center								
##Caselnova R	3	0	0.00	2.54	0.00	(0.00,53.27)	.	.
#Gambino A	12	0	0.00	0.44	0.00	(0.00,77.57)	11	0.00
##Joseph S	7	0	0.00	1.24	0.00	(0.00,46.77)	7	0.00
#Patel D	7	0	0.00	0.37	0.00	(0.00,100.0)	6	0.00
##Patel R B	8	0	0.00	1.40	0.00	(0.00,36.27)	.	.
##Schwartz R	16	0	0.00	1.23	0.00	(0.00,20.71)	12	0.00
All Others	232	6	2.59	1.14	2.51	(0.92, 5.46)	162	3.22 *
TOTAL	**285**	**6**	**2.11**	**1.12**	**2.08**	**(0.76, 4.52)**	**198**	**2.47**

Table 5, *continued*

	All Cases						Non-emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	Cases	RAMR
Buffalo General Hospital								
#Calandra S	1	0	0.00	0.45	0.00	(0.00,100.0)	1	0.00
#Conley J	896	10	1.12	1.13	1.09	(0.52, 2.01)	715	0.68
##Dashkoff N	371	4	1.08	1.63	0.73	(0.20, 1.87)	253	0.00
##Emerson R	2	0	0.00	0.69	0.00	(0.00,100.0)	2	0.00
#Farhi E	777	12	1.54	0.95	1.80	(0.93, 3.14)	586	0.75
##Gelormini J	44	1	2.27	0.59	4.24	(0.06,23.58)	43	2.99
##Haq N	4	0	0.00	0.85	0.00	(0.00,100.0)	1	0.00
##Iyer V	508	8	1.57	1.22	1.43	(0.62, 2.82)	372	1.08
##Masud A	174	7	4.02	1.42	3.13 *	(1.25, 6.45)	154	2.39
#Morris W	915	12	1.31	1.24	1.17	(0.61, 2.05)	738	1.16
##Phadke K	673	15	2.23	1.23	2.01 *	(1.13, 3.32)	420	0.61
#Sullivan P	143	4	2.80	1.23	2.51	(0.68, 6.43)	98	0.99
Visco J	328	6	1.83	0.41	4.92 *	(1.80,10.72)	317	3.74 *
All Others	184	4	2.17	1.23	1.96	(0.53, 5.01)	121	2.22
TOTAL	**5020**	**83**	**1.65**	**1.15**	**1.60 ***	**(1.27, 1.98)**	**3821**	**1.09 ***
Cayuga Medical Center at Ithaca								
Goodwin S	126	2	1.59	1.18	1.48	(0.17, 5.36)	67	0.00
#Kreps E	30	1	3.33	3.08	1.20	(0.02, 6.67)	16	0.00
#Stefek P	243	2	0.82	1.28	0.71	(0.08, 2.57)	139	1.48
#Stuver T	2	0	0.00	3.74	0.00	(0.00,54.37)	.	.
All Others	5	0	0.00	0.82	0.00	(0.00,98.85)	2	0.00
TOTAL	**406**	**5**	**1.23**	**1.39**	**0.98**	**(0.32, 2.29)**	**224**	**0.97**
Champlain Valley Physicians Hospital								
Bradley W	523	6	1.15	0.95	1.34	(0.49, 2.91)	408	0.26
Garrand T	497	8	1.61	1.26	1.41	(0.61, 2.78)	358	1.10
Gauthier E	676	14	2.07	0.92	2.49 *	(1.36, 4.17)	511	1.79 *
All Others	8	0	0.00	0.24	0.00	(0.00,100.0)	8	0.00
TOTAL	**1704**	**28**	**1.64**	**1.03**	**1.77 ***	**(1.18, 2.56)**	**1285**	**1.08**
Crouse Hospital								
Battaglia J	473	4	0.85	0.92	1.02	(0.28, 2.62)	356	0.73
George A	366	6	1.64	1.25	1.45	(0.53, 3.15)	250	0.96
TOTAL	**839**	**10**	**1.19**	**1.06**	**1.24**	**(0.59, 2.28)**	**606**	**0.83**
Ellis Hospital								
Cospito P	331	2	0.60	1.29	0.52	(0.06, 1.87)	230	0.00
Jordan M	313	2	0.64	1.35	0.53	(0.06, 1.90)	170	1.33
Parkes R	498	5	1.00	1.21	0.92	(0.30, 2.15)	335	0.39
Weitz S	231	2	0.87	1.44	0.67	(0.07, 2.40)	122	0.00
All Others	48	0	0.00	0.32	0.00	(0.00,26.26)	48	0.00
TOTAL	**1421**	**11**	**0.77**	**1.27**	**0.68**	**(0.34, 1.21)**	**905**	**0.44**
Elmhurst Hospital Center								
#Kamran M	824	3	0.36	0.75	0.53	(0.11, 1.56)	606	0.28
##Kim M	12	0	0.00	2.74	0.00	(0.00,12.36)	1	0.00
##Pyo R	57	5	8.77	4.78	2.03	(0.65, 4.74)	4	0.00
#Yatskar L	496	6	1.21	1.25	1.07	(0.39, 2.34)	361	0.47
All Others	1	0	0.00	8.38	0.00	(0.00,48.49)	.	.
TOTAL	**1390**	**14**	**1.01**	**1.12**	**1.00**	**(0.54, 1.67)**	**972**	**0.35**
Erie County Medical Center								
##Dashkoff N	150	0	0.00	1.74	0.00	(0.00, 1.56)	88	0.00
##Emerson R	3	0	0.00	0.31	0.00	(0.00,100.0)	2	0.00
##Iyer V	15	0	0.00	3.13	0.00	(0.00, 8.66)	3	0.00
All Others	13	0	0.00	1.58	0.00	(0.00,19.75)	.	.
TOTAL	**181**	**0**	**0.00**	**1.82**	**0.00**	**(0.00, 1.23)**	**93**	**0.00**
Faxton-St. Lukes Hlthcare- St.Lukes Div								
##Bhan R	2	1	50.00	7.77	7.12	(0.09,39.63)	1	0.00
#ElGharib N	215	2	0.93	0.66	1.56	(0.17, 5.62)	196	1.21
#Kelberman M	12	1	8.33	1.05	8.78	(0.11,48.87)	7	0.00
##Kozman H	7	1	14.29	2.02	7.82	(0.10,43.50)	2	0.00
#MacIsaac H	52	3	5.77	3.92	1.63	(0.33, 4.77)	38	0.73

Table 5, *continued*

	All Cases						Non-emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	Cases	RAMR
#Mathew T C	211	5	2.37	0.94	2.80	(0.90, 6.54)	171	2.43
#Nassif R	116	1	0.86	0.84	1.13	(0.01, 6.31)	97	0.00
#Patel A	17	0	0.00	1.48	0.00	(0.00,16.15)	9	0.00
#Sassower M	54	2	3.70	2.75	1.49	(0.17, 5.39)	34	0.00
#Varma P	34	0	0.00	1.46	0.00	(0.00, 8.18)	21	0.00
All Others	66	1	1.52	1.72	0.98	(0.01, 5.43)	61	0.00
TOTAL	**786**	**17**	**2.16**	**1.30**	**1.85**	**(1.07, 2.96)**	**637**	**0.93**
Glens Falls Hospital								
Bashir I	311	1	0.32	0.93	0.38	(0.00, 2.12)	208	0.00
Hogan R	281	3	1.07	0.93	1.28	(0.26, 3.73)	180	0.86
##Papaleo R	22	0	0.00	1.59	0.00	(0.00,11.59)	1	0.00
TOTAL	**614**	**4**	**0.65**	**0.95**	**0.76**	**(0.20, 1.94)**	**389**	**0.50**
Good Samaritan Hosp Med Ctr- West Islip								
##Arkonac B	8	0	0.00	0.87	0.00	(0.00,58.53)	8	0.00
##Caselnova R	460	9	1.96	0.83	2.62 *	(1.19, 4.97)	419	1.82
##Deutsch E	249	2	0.80	0.64	1.39	(0.16, 5.02)	219	0.00
#Gandotra P	13	0	0.00	0.78	0.00	(0.00,39.90)	13	0.00
##Hormozi S	450	6	1.33	0.90	1.64	(0.60, 3.57)	389	1.00
##Lee P J	446	3	0.67	0.56	1.34	(0.27, 3.91)	401	0.49
##Patel R B	127	4	3.15	1.08	3.23	(0.87, 8.28)	84	1.85
##Reich D	322	0	0.00	0.62	0.00	(0.00, 2.04)	275	0.00
All Others	43	0	0.00	0.82	0.00	(0.00,11.51)	41	0.00
TOTAL	**2118**	**24**	**1.13**	**0.75**	**1.68**	**(1.08, 2.50)**	**1849**	**0.87**
Good Samaritan Hospital - Suffern								
#Agarwal A	57	2	3.51	1.03	3.76	(0.42,13.59)	46	0.00
#Bander J	4	0	0.00	0.79	0.00	(0.00,100.0)	1	0.00
#Brogno D	4	0	0.00	0.64	0.00	(0.00,100.0)	2	0.00
Hirsch C	316	3	0.95	0.97	1.08	(0.22, 3.17)	272	0.39
Innerfield M	180	4	2.22	1.91	1.29	(0.35, 3.30)	95	0.64
##Kandov R	19	1	5.26	3.09	1.89	(0.02,10.50)	4	0.00
Kovar L	256	6	2.34	1.65	1.58	(0.58, 3.43)	195	0.99
##Pyo R	84	2	2.38	1.26	2.10	(0.24, 7.58)	75	1.65
##Royzman R	14	3	21.43	6.77	3.50	(0.70,10.24)	2	0.00
#Shah A R	480	11	2.29	1.56	1.62	(0.81, 2.90)	388	1.34
#Shapira S	2	0	0.00	0.28	0.00	(0.00,100.0)	2	0.00
Shih A C	217	8	3.69	1.60	2.55	(1.10, 5.02)	136	2.16
All Others	82	2	2.44	1.96	1.38	(0.15, 4.97)	58	0.00
TOTAL	**1715**	**42**	**2.45**	**1.55**	**1.75** *	**(1.26, 2.37)**	**1276**	**1.11**
Huntington Hospital								
##Bagga R	408	2	0.49	0.98	0.55	(0.06, 2.00)	328	0.36
##Ong L Y	138	0	0.00	0.52	0.00	(0.00, 5.65)	115	0.00
##Patcha R	204	1	0.49	0.79	0.69	(0.01, 3.84)	156	0.00
##Polena S	344	5	1.45	0.71	2.27	(0.73, 5.30)	291	1.68
##Strizik B	171	0	0.00	1.28	0.00	(0.00, 1.85)	120	0.00
TOTAL	**1265**	**8**	**0.63**	**0.87**	**0.81**	**(0.35, 1.59)**	**1010**	**0.62**
Jamaica Hospital Medical Center								
#Jain S	226	5	2.21	2.20	1.11	(0.36, 2.59)	101	0.00
##John J	8	0	0.00	4.54	0.00	(0.00,11.18)	1	0.00
#Kukar A	11	0	0.00	1.63	0.00	(0.00,22.71)	.	.
#Lasic Z	212	4	1.89	1.94	1.07	(0.29, 2.75)	82	1.92
#Mangla A	170	6	3.53	1.61	2.43	(0.89, 5.29)	62	3.22
#Raza J	212	5	2.36	1.24	2.11	(0.68, 4.92)	93	1.14
#Suleman J	3	0	0.00	0.20	0.00	(0.00,100.0)	3	0.00
TOTAL	**842**	**20**	**2.38**	**1.78**	**1.48**	**(0.90, 2.28)**	**342**	**1.52**
Lenox Hill Hospital								
##Aboufares A	81	1	1.23	1.02	1.34	(0.02, 7.47)	74	0.00
##Amsalem Y	13	1	7.69	2.37	3.59	(0.05,19.98)	10	3.32
##Attubato M	21	0	0.00	0.92	0.00	(0.00,21.06)	21	0.00
##Babaev A	6	0	0.00	1.35	0.00	(0.00,50.01)	6	0.00

Table 5, *continued*

	All Cases						Non-emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	Cases	RAMR
##Coppola J	3	0	0.00	0.22	0.00	(0.00,100.0)	3	0.00
#Coven D	7	0	0.00	0.71	0.00	(0.00,81.69)	5	0.00
##Dominguez-Echeva	9	0	0.00	0.43	0.00	(0.00,100.0)	9	0.00
##Feit F	8	0	0.00	0.27	0.00	(0.00,100.0)	8	0.00
##Fernaine G	13	0	0.00	0.34	0.00	(0.00,92.40)	13	0.00
Garratt K	363	3	0.83	0.77	1.18	(0.24, 3.46)	319	0.39
##Hassid B	308	2	0.65	0.79	0.90	(0.10, 3.27)	288	0.70
Hernandez-Vila E	180	0	0.00	0.78	0.00	(0.00, 2.90)	171	0.00
##Iqbal S	2	0	0.00	0.48	0.00	(0.00,100.0)	2	0.00
Iyer S	157	1	0.64	0.84	0.84	(0.01, 4.65)	139	0.00
#Jain S	219	2	0.91	0.58	1.76	(0.20, 6.35)	213	0.52
##John J	82	3	3.66	1.48	2.73	(0.55, 7.99)	70	4.45
##Kesanakurthy S	259	0	0.00	0.61	0.00	(0.00, 2.58)	251	0.00
##Kim M	84	1	1.19	0.55	2.38	(0.03,13.26)	80	1.63
#Kukar A	257	0	0.00	0.62	0.00	(0.00, 2.53)	237	0.00
#Lasic Z	207	0	0.00	0.74	0.00	(0.00, 2.65)	200	0.00
#Mangla A	97	3	3.09	1.03	3.33	(0.67, 9.74)	92	1.99
##Papadakos S	58	0	0.00	0.49	0.00	(0.00,14.39)	57	0.00
##Poumpouridis K	15	0	0.00	0.62	0.00	(0.00,43.44)	9	0.00
##Puma A	89	0	0.00	0.45	0.00	(0.00,10.05)	89	0.00
#Punukollu G	76	2	2.63	0.56	5.22	(0.59,18.85)	76	3.12
#Raza J	289	2	0.69	0.51	1.51	(0.17, 5.44)	281	0.92
Reimers C	832	0	0.00	0.55	0.00 **	(0.00, 0.88)	783	0.00
#Rentrop K	2	0	0.00	0.18	0.00	(0.00,100.0)	2	0.00
#Seldon M	8	0	0.00	0.32	0.00	(0.00,100.0)	8	0.00
##Singh V	570	3	0.53	0.52	1.12	(0.23, 3.28)	556	0.61
##Slater J	10	0	0.00	0.39	0.00	(0.00,100.0)	10	0.00
#Soffer D	1	0	0.00	0.14	0.00	(0.00,100.0)	1	0.00
##Staniloae C	2	0	0.00	0.12	0.00	(0.00,100.0)	2	0.00
#Stathopoulos I	67	0	0.00	0.72	0.00	(0.00, 8.44)	66	0.00
Zaric M	46	1	2.17	2.18	1.11	(0.01, 6.15)	27	0.00
All Others	106	0	0.00	0.49	0.00	(0.00, 7.79)	101	0.00
TOTAL	**4547**	**25**	**0.55**	**0.67**	**0.91**	**(0.59, 1.34)**	**4279**	**0.50**
Long Island Jewish Medical Center								
##Arkonac B	178	6	3.37	1.65	2.26	(0.83, 4.93)	152	1.14
##Bagga R	53	0	0.00	0.85	0.00	(0.00, 8.99)	53	0.00
#Boutis L	38	1	2.63	3.68	0.79	(0.01, 4.40)	4	0.00
##Dhama B	323	4	1.24	0.92	1.49	(0.40, 3.81)	311	0.98
##Freeman J	11	0	0.00	1.53	0.00	(0.00,24.07)	11	0.00
##Friedman G H	36	0	0.00	0.52	0.00	(0.00,21.68)	33	0.00
##Fuschetto D	36	0	0.00	0.87	0.00	(0.00,12.91)	33	0.00
##Green S	2	0	0.00	0.45	0.00	(0.00,100.0)	1	0.00
##Grunwald A	155	0	0.00	0.68	0.00	(0.00, 3.88)	148	0.00
#Gupta R	65	0	0.00	0.96	0.00	(0.00, 6.53)	61	0.00
##Hameedi A	795	2	0.25	0.35	0.81	(0.09, 2.91)	790	0.53
#Jauhar R	1201	9	0.75	0.82	1.01	(0.46, 1.92)	1061	0.89
##Joseph S	1	0	0.00	0.37	0.00	(0.00,100.0)	1	0.00
#Kaplan B	627	4	0.64	0.99	0.71	(0.19, 1.83)	547	0.51
#Katz S	15	1	6.67	2.98	2.48	(0.03,13.78)	3	0.00
##Kim M	22	1	4.55	1.81	2.78	(0.04,15.47)	4	0.00
##Koss J	156	1	0.64	0.62	1.15	(0.01, 6.38)	142	1.32
#Lee A	268	4	1.49	1.41	1.17	(0.32, 3.00)	206	1.56
#Marchant D	33	0	0.00	2.87	0.00	(0.00, 4.29)	5	0.00
#Meraj P	676	7	1.04	1.35	0.85	(0.34, 1.75)	531	0.74
##Ong L Y	2	0	0.00	2.58	0.00	(0.00,78.60)	1	0.00
##Polena S	19	0	0.00	0.71	0.00	(0.00,30.05)	19	0.00
##Poumpouridis K	28	0	0.00	0.52	0.00	(0.00,27.67)	25	0.00
##Rehman S	62	0	0.00	0.72	0.00	(0.00, 9.13)	60	0.00
#Rutkin B	22	0	0.00	1.37	0.00	(0.00,13.44)	4	0.00
##Singh V	1	0	0.00	0.84	0.00	(0.00,100.0)	.	.
##Strizik B	3	0	0.00	0.70	0.00	(0.00,100.0)	2	0.00
##Yadav S	53	0	0.00	0.37	0.00	(0.00,20.98)	51	0.00
All Others	59	0	0.00	1.14	0.00	(0.00, 6.02)	51	0.00
TOTAL	**4940**	**40**	**0.81**	**0.94**	**0.95**	**(0.68, 1.30)**	**4310**	**0.72**

Table 5, *continued*

	All Cases						Non-emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	Cases	RAMR
Lutheran Medical Center								
##Dominguez-Echeva	75	0	0.00	1.35	0.00	(0.00, 4.01)	73	0.00
##Fernaine G	404	3	0.74	1.30	0.63	(0.13, 1.85)	334	0.29
##Hoyek W	71	1	1.41	2.20	0.71	(0.01, 3.95)	32	0.00
##Kandov R	58	1	1.72	3.10	0.62	(0.01, 3.43)	35	0.00
##Lee P C	73	2	2.74	2.80	1.08	(0.12, 3.91)	40	0.00
##Royzman R	54	0	0.00	3.69	0.00	(0.00, 2.04)	33	0.00
TOTAL	**735**	**7**	**0.95**	**1.86**	**0.57**	**(0.23, 1.17)**	**547**	**0.16**
M I Bassett Hospital								
Laifer L	216	4	1.85	1.03	2.00	(0.54, 5.11)	145	0.80
McNulty P	385	6	1.56	1.01	1.71	(0.62, 3.71)	317	2.44 *
Menzies D	646	2	0.31	0.89	0.39	(0.04, 1.39)	527	0.44
##Sherman W	6	1	16.67	2.06	8.98	(0.12,49.94)	2	0.00
TOTAL	**1253**	**13**	**1.04**	**0.96**	**1.20**	**(0.64, 2.06)**	**991**	**1.01**
Maimonides Medical Center								
#Ariyarajah V	14	0	0.00	0.20	0.00	(0.00,100.0)	14	0.00
Ayzenberg S	665	7	1.05	2.43	0.48 **	(0.19, 0.99)	473	0.45
Borgen E	694	7	1.01	1.83	0.61	(0.24, 1.25)	493	0.42
Frankel R	408	1	0.25	1.18	0.23	(0.00, 1.28)	370	0.22
Friedman M	305	2	0.66	2.69	0.27 **	(0.03, 0.97)	182	0.00
##Fuschetto D	8	0	0.00	0.60	0.00	(0.00,84.11)	8	0.00
##Hoyek W	6	0	0.00	1.19	0.00	(0.00,57.09)	6	0.00
#Kantrowitz N	7	0	0.00	0.23	0.00	(0.00,100.0)	7	0.00
##Lee P C	1	0	0.00	0.14	0.00	(0.00,100.0)	1	0.00
Malik B	843	12	1.42	1.47	1.07	(0.55, 1.87)	702	0.74
#Palta S	1	0	0.00	0.14	0.00	(0.00,100.0)	1	0.00
Shani J	251	0	0.00	1.14	0.00	(0.00, 1.42)	242	0.00
##Shohat E	9	0	0.00	0.27	0.00	(0.00,100.0)	9	0.00
TOTAL	**3212**	**29**	**0.90**	**1.79**	**0.56 ** **	**(0.37, 0.80)**	**2508**	**0.42 ** **
Mercy Hospital of Buffalo								
#Calandra S	454	4	0.88	0.75	1.29	(0.35, 3.31)	340	1.16
Chaudhry E	8	1	12.50	1.62	8.55	(0.11,47.55)	7	0.00
#Conley J	93	0	0.00	0.50	0.00	(0.00, 8.69)	90	0.00
##Dashkoff N	1	0	0.00	0.20	0.00	(0.00,100.0)	1	0.00
##Emerson R	231	3	1.30	1.30	1.10	(0.22, 3.23)	125	0.88
#Farhi E	3	0	0.00	1.69	0.00	(0.00,79.95)	2	0.00
##Gelormini J	553	6	1.08	1.49	0.81	(0.30, 1.76)	404	0.45
##Haq N	415	2	0.48	0.97	0.55	(0.06, 2.00)	288	0.00
##Masud A	295	6	2.03	1.10	2.04	(0.74, 4.44)	249	0.70
Meltser H	582	7	1.20	1.02	1.30	(0.52, 2.69)	425	1.06
#Morris W	37	0	0.00	0.41	0.00	(0.00,26.83)	37	0.00
##Phadke K	23	0	0.00	0.17	0.00	(0.00,100.0)	22	0.00
#Sullivan P	56	0	0.00	0.62	0.00	(0.00,11.74)	45	0.00
All Others	40	2	5.00	0.96	5.77	(0.65,20.82)	36	3.58
TOTAL	**2791**	**31**	**1.11**	**1.05**	**1.17**	**(0.79, 1.66)**	**2071**	**0.76**
Millard Fillmore Hospital								
##Gelormini J	2	0	0.00	0.25	0.00	(0.00,100.0)	2	0.00
##Haq N	2	0	0.00	0.60	0.00	(0.00,100.0)	1	0.00
##Iyer V	1	0	0.00	0.55	0.00	(0.00,100.0)	.	.
##Masud A	4	0	0.00	0.46	0.00	(0.00,100.0)	4	0.00
##Phadke K	41	0	0.00	0.69	0.00	(0.00,14.41)	32	0.00
All Others	30	0	0.00	0.77	0.00	(0.00,17.65)	28	0.00
TOTAL	**80**	**0**	**0.00**	**0.69**	**0.00**	**(0.00, 7.35)**	**67**	**0.00**
Montefiore Medical Center - Moses								
##Amsalem Y	256	2	0.78	1.46	0.59	(0.07, 2.14)	200	0.00
##Bliagos D	90	0	0.00	1.02	0.00	(0.00, 4.40)	78	0.00
#Bortnick A	18	1	5.56	0.61	10.06	(0.13,56.00)	18	6.54
##Celaj S	217	3	1.38	1.08	1.42	(0.29, 4.15)	170	1.69
##Greenberg M	479	5	1.04	0.82	1.40	(0.45, 3.28)	408	0.60
##Johnson M	281	5	1.78	0.89	2.20	(0.71, 5.15)	252	1.38
##Krim N	107	1	0.93	0.62	1.68	(0.02, 9.32)	103	0.00

Table 5, *continued*

	All Cases						Non-emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	Cases	RAMR
##Menegus M	299	3	1.00	1.16	0.96	(0.19, 2.81)	236	0.77
##Pyo R	75	0	0.00	0.97	0.00	(0.00, 5.58)	65	0.00
Rodriguez M	55	1	1.82	0.98	2.05	(0.03,11.43)	41	0.00
#Sehhat K	70	0	0.00	0.38	0.00	(0.00,15.11)	68	0.00
##Shih A T	130	2	1.54	1.30	1.31	(0.15, 4.74)	80	0.00
#Slovut D	1	0	0.00	0.10	0.00	(0.00,100.0)	1	0.00
##Srinivas V	46	0	0.00	0.81	0.00	(0.00,10.93)	41	0.00
All Others	69	0	0.00	0.71	0.00	(0.00, 8.32)	55	0.00
TOTAL	**2193**	**23**	**1.05**	**0.99**	**1.17**	**(0.74, 1.76)**	**1816**	**0.64**
Montefiore Medical Center - Weiler								
#Bortnick A	191	1	0.52	2.35	0.25	(0.00, 1.37)	125	0.54
##Celaj S	3	0	0.00	1.81	0.00	(0.00,74.61)	.	.
##Greenberg M	60	0	0.00	1.51	0.00	(0.00, 4.47)	58	0.00
##Johnson M	22	0	0.00	1.17	0.00	(0.00,15.84)	18	0.00
##Krim N	1	0	0.00	8.52	0.00	(0.00,47.70)	1	0.00
##Menegus M	205	2	0.98	1.08	1.00	(0.11, 3.62)	158	0.62
Monrad E	364	0	0.00	1.20	0.00 **	(0.00, 0.93)	285	0.00
#Slovut D	199	2	1.01	1.92	0.58	(0.07, 2.09)	108	0.00
Sokol S	231	1	0.43	0.94	0.51	(0.01, 2.84)	169	0.63
##Srinivas V	297	5	1.68	1.35	1.39	(0.45, 3.23)	247	0.68
All Others	16	0	0.00	0.84	0.00	(0.00,30.07)	14	0.00
TOTAL	**1589**	**11**	**0.69**	**1.41**	**0.54 ****	**(0.27, 0.97)**	**1183**	**0.37**
Mount Sinai Beth Israel								
#Aslam A K	135	1	0.74	0.25	3.24	(0.04,18.03)	130	0.00
Fox J	1129	10	0.89	1.00	0.98	(0.47, 1.81)	1041	0.53
#Gowda R	636	7	1.10	1.63	0.75	(0.30, 1.54)	521	0.81
Huang Y	327	5	1.53	0.45	3.78 *	(1.22, 8.82)	324	2.72 *
Kanei Y	429	8	1.86	1.47	1.41	(0.61, 2.77)	292	0.94
Kwan T	760	1	0.13	0.37	0.40	(0.01, 2.20)	758	0.27
##Lee P C	10	0	0.00	0.42	0.00	(0.00,97.72)	10	0.00
#Liou M	147	0	0.00	0.39	0.00	(0.00, 7.11)	144	0.00
Patel R H	38	0	0.00	0.40	0.00	(0.00,26.71)	38	0.00
##Puma A	114	2	1.75	0.43	4.54	(0.51,16.39)	114	2.77
#Punukollu G	209	1	0.48	0.54	0.98	(0.01, 5.47)	203	0.65
#Rosero H	426	6	1.41	0.93	1.68	(0.61, 3.66)	360	0.78
All Others	215	4	1.86	1.09	1.89	(0.51, 4.84)	178	1.58
TOTAL	**4575**	**45**	**0.98**	**0.90**	**1.21**	**(0.88, 1.62)**	**4113**	**0.82**
Mount Sinai Hospital								
Baber U	127	1	0.79	1.44	0.61	(0.01, 3.38)	112	0.00
#Bander J	312	4	1.28	1.03	1.38	(0.37, 3.54)	289	0.85
##Bliagos D	64	1	1.56	0.53	3.25	(0.04,18.09)	64	1.98
Dangas G	442	4	0.90	1.53	0.65	(0.18, 1.67)	386	0.53
##Dominguez-Echeva	93	0	0.00	0.77	0.00	(0.00, 5.68)	93	0.00
#Duvvuri S	4	0	0.00	1.67	0.00	(0.00,60.68)	4	0.00
##Fernaine G	77	2	2.60	0.77	3.72	(0.42,13.43)	76	3.56
##Hameedi A	215	0	0.00	0.24	0.00	(0.00, 7.97)	215	0.00
Hasan C	266	0	0.00	0.23	0.00	(0.00, 6.58)	266	0.00
#Jayasundera T	11	0	0.00	0.25	0.00	(0.00,100.0)	11	0.00
##John J	32	0	0.00	0.44	0.00	(0.00,28.86)	29	0.00
#Kamran M	1	0	0.00	0.39	0.00	(0.00,100.0)	1	0.00
##Kesanakurthy S	425	4	0.94	0.49	2.15	(0.58, 5.50)	418	1.42
##Kim M	650	1	0.15	0.74	0.23	(0.00, 1.27)	634	0.16
Kini A	2714	9	0.33	0.67	0.55 **	(0.25, 1.04)	2624	0.19 **
Kovacic J	146	1	0.68	1.96	0.39	(0.01, 2.15)	111	0.45
Krishnan P	336	3	0.89	0.61	1.63	(0.33, 4.77)	319	1.15
#Lee J	19	0	0.00	0.20	0.00	(0.00,100.0)	19	0.00
##Lee P C	10	0	0.00	0.65	0.00	(0.00,62.47)	9	0.00
Limaye A	279	5	1.79	1.58	1.26	(0.41, 2.93)	240	0.71
Mittal N	76	0	0.00	0.25	0.00	(0.00,21.27)	76	0.00
Moreno P	956	5	0.52	0.63	0.93	(0.30, 2.16)	938	0.44
Palkhiwala S	578	1	0.17	0.41	0.46	(0.01, 2.58)	574	0.31
#Patel V	25	0	0.00	0.24	0.00	(0.00,68.04)	25	0.00
##Pyo R	202	3	1.49	0.99	1.65	(0.33, 4.84)	187	0.89

Table 5, *continued*

	Cases	Deaths	All Cases OMR	EMR	RAMR	95% CI for RAMR	Non-emergency Cases	RAMR
##Shah A	34	1	2.94	1.05	3.11	(0.04,17.31)	33	2.51
#Shah A R	1	0	0.00	2.08	0.00	(0.00,100.0)	1	0.00
Sharma S	3566	15	0.42	0.76	0.62 **	(0.34, 1.02)	3542	0.36 **
##Shih A T	1	0	0.00	0.15	0.00	(0.00,100.0)	1	0.00
#Soffer D	103	0	0.00	0.60	0.00	(0.00, 6.59)	102	0.00
#Suleman J	615	0	0.00	0.36	0.00	(0.00, 1.82)	613	0.00
Sweeny J	436	4	0.92	0.98	1.04	(0.28, 2.67)	394	0.97
Wiley J	79	1	1.27	2.63	0.53	(0.01, 2.97)	56	0.00
##Yadav S	44	0	0.00	0.20	0.00	(0.00,45.86)	44	0.00
All Others	90	1	1.11	0.46	2.69	(0.04,14.97)	88	1.69
TOTAL	**13029**	**66**	**0.51**	**0.74**	**0.75** **	**(0.58, 0.96)**	**12594**	**0.44** **
Mount Sinai St. Lukes								
#Coven D	154	2	1.30	1.40	1.03	(0.12, 3.72)	118	0.86
##Gotsis W	6	0	0.00	0.69	0.00	(0.00,98.01)	6	0.00
#Gowda R	1	0	0.00	0.91	0.00	(0.00,100.0)	1	0.00
Hong M	227	5	2.20	1.33	1.84	(0.59, 4.29)	196	0.51
Husain S S	30	1	3.33	0.56	6.60	(0.09,36.74)	30	4.69
Leber R	249	5	2.01	1.35	1.65	(0.53, 3.85)	201	1.33
Palazzo A	102	1	0.98	1.22	0.89	(0.01, 4.96)	71	0.00
##Serrano-Gomez C	1	0	0.00	0.21	0.00	(0.00,100.0)	1	0.00
##Silverman G	1	0	0.00	1.22	0.00	(0.00,100.0)	.	.
Simon C	399	7	1.75	2.23	0.87	(0.35, 1.79)	352	0.88
##Slater J	2	0	0.00	0.16	0.00	(0.00,100.0)	2	0.00
Tamis-Holland J	160	1	0.63	1.41	0.49	(0.01, 2.74)	107	0.00
All Others	18	0	0.00	0.39	0.00	(0.00,57.52)	18	0.00
TOTAL	**1350**	**22**	**1.63**	**1.57**	**1.15**	**(0.72, 1.74)**	**1103**	**0.81**
NY Methodist Hospital								
#Ariyarajah V	3	0	0.00	0.15	0.00	(0.00,100.0)	3	0.00
#Aslam A K	273	0	0.00	0.23	0.00	(0.00, 6.60)	268	0.00
#Badero O	137	1	0.73	0.33	2.46	(0.03,13.69)	137	1.85
Brener S	421	17	4.04	2.29	1.95 *	(1.14, 3.12)	292	1.41
Chokshi A	68	0	0.00	0.53	0.00	(0.00,11.33)	68	0.00
##Dominguez-Echeva	14	0	0.00	0.19	0.00	(0.00,100.0)	14	0.00
Haq S	157	2	1.27	1.41	1.00	(0.11, 3.60)	145	0.38
##Hoyek W	119	2	1.68	0.35	5.30	(0.60,19.13)	119	3.57
#Jasty B	123	1	0.81	0.47	1.93	(0.03,10.72)	123	1.14
#John S	4	0	0.00	1.02	0.00	(0.00,99.35)	4	0.00
##Kesanakurthy S	2	0	0.00	0.24	0.00	(0.00,100.0)	2	0.00
#Palta S	71	0	0.00	0.18	0.00	(0.00,31.85)	71	0.00
#Patel V	164	3	1.83	0.70	2.88	(0.58, 8.43)	159	2.29
##Rehman S	32	2	6.25	1.78	3.89	(0.44,14.04)	31	2.84
#Rosero H	1	0	0.00	0.10	0.00	(0.00,100.0)	1	0.00
Rouvelas P	105	0	0.00	0.39	0.00	(0.00,10.05)	105	0.00
Sacchi T	1081	16	1.48	0.98	1.67	(0.96, 2.72)	954	1.23
##Shah A	430	2	0.47	0.50	1.03	(0.12, 3.72)	422	0.77
Shaknovich A	178	3	1.69	0.92	2.02	(0.41, 5.90)	175	1.50
##Shohat E	32	0	0.00	0.29	0.00	(0.00,44.19)	31	0.00
#Slotwiner A	2	0	0.00	0.51	0.00	(0.00,100.0)	2	0.00
##Srivastava S	7	0	0.00	0.79	0.00	(0.00,73.56)	7	0.00
##Yadav S	270	3	1.11	0.28	4.42	(0.89,12.91)	269	2.89
All Others	180	1	0.56	0.56	1.11	(0.01, 6.16)	172	0.88
TOTAL	**3874**	**53**	**1.37**	**0.85**	**1.78** *	**(1.34, 2.33)**	**3574**	**1.25** *
NY Presbyterian Queens								
Chiu Sungkin	62	0	0.00	0.21	0.00	(0.00,31.57)	62	0.00
Chiu Sungwai	61	0	0.00	0.35	0.00	(0.00,18.96)	61	0.00
#David M	68	1	1.47	0.26	6.36	(0.08,35.41)	68	4.40
##Dhama B	1	0	0.00	0.06	0.00	(0.00,100.0)	1	0.00
##Friedman G H	13	0	0.00	1.95	0.00	(0.00,16.01)	10	0.00
##Grunwald A	70	1	1.43	1.06	1.49	(0.02, 8.28)	42	2.49
#Gupta R	71	1	1.41	0.97	1.62	(0.02, 8.99)	66	1.24
Gustafson G	270	1	0.37	0.98	0.42	(0.01, 2.33)	186	1.00
##Hameedi A	45	0	0.00	0.19	0.00	(0.00,48.78)	45	0.00
##Koss J	42	2	4.76	1.98	2.67	(0.30, 9.63)	19	0.00

Table 5, *continued*

	All Cases						Non-emergency	
	Cases	**Deaths**	**OMR**	**EMR**	**RAMR**	**95% CI for RAMR**	**Cases**	**RAMR**
Lee H	44	0	0.00	0.26	0.00	(0.00,35.67)	44	0.00
Moustakakis E	399	3	0.75	1.07	0.78	(0.16, 2.26)	242	0.63
##Papadakos S	161	2	1.24	1.95	0.71	(0.08, 2.55)	104	0.50
Park C	431	4	0.93	0.85	1.20	(0.32, 3.08)	316	0.95
#Perry-Bottinger L	2	0	0.00	0.90	0.00	(0.00,100.0)	2	0.00
All Others	40	1	2.50	1.72	1.61	(0.02, 8.96)	20	0.00
TOTAL	**1780**	**16**	**0.90**	**0.99**	**1.00**	**(0.57, 1.63)**	**1288**	**0.85**
NYP Hospital - Columbia Presbyterian								
##Aboufares A	191	5	2.62	1.58	1.83	(0.59, 4.27)	155	1.99
Ali Z	221	5	2.26	2.16	1.16	(0.37, 2.70)	179	0.33
#Apfelbaum M	27	0	0.00	0.34	0.00	(0.00,44.83)	27	0.00
##Bliagos D	178	0	0.00	1.29	0.00	(0.00, 1.77)	170	0.00
#Brogno D	387	4	1.03	0.62	1.85	(0.50, 4.73)	384	1.32
Collins M	467	8	1.71	1.85	1.02	(0.44, 2.02)	425	0.86
##Dominguez-Echeva	126	0	0.00	0.78	0.00	(0.00, 4.13)	126	0.00
Gray W	109	3	2.75	2.91	1.05	(0.21, 3.06)	77	1.51
##Hassid B	35	0	0.00	1.95	0.00	(0.00, 5.95)	32	0.00
#Hjemdahl-Monsen C	293	2	0.68	1.14	0.67	(0.07, 2.40)	281	0.52
#Irobunda C	150	1	0.67	1.58	0.47	(0.01, 2.59)	128	0.00
##Johnson M	32	0	0.00	0.74	0.00	(0.00,17.08)	32	0.00
##Kalapatapu K	384	6	1.56	1.26	1.38	(0.50, 2.99)	362	0.44
##Kesanakurthy S	6	0	0.00	0.39	0.00	(0.00,100.0)	6	0.00
Kirtane A	455	3	0.66	1.82	0.40	(0.08, 1.17)	392	0.21
#Kodali S	296	10	3.38	2.53	1.48	(0.71, 2.72)	260	1.22
#Kreps E	48	1	2.08	1.25	1.85	(0.02,10.31)	44	1.80
Leon M	132	1	0.76	0.63	1.34	(0.02, 7.45)	132	0.87
#Moses J	1107	5	0.45	0.50	1.00	(0.32, 2.34)	1104	0.66
##Motivala A	6	0	0.00	1.41	0.00	(0.00,48.09)	6	0.00
Parikh M	810	2	0.25	0.72	0.38	(0.04, 1.37)	776	0.33
#Perry-Bottinger L	36	0	0.00	0.37	0.00	(0.00,30.44)	36	0.00
Pucillo A	216	0	0.00	0.79	0.00	(0.00, 2.38)	200	0.00
##Puma A	81	0	0.00	0.42	0.00	(0.00,11.90)	81	0.00
Rabbani L	653	8	1.23	0.90	1.51	(0.65, 2.97)	597	0.93
#Rentrop K	72	0	0.00	0.23	0.00	(0.00,24.08)	72	0.00
#Sehhat K	60	0	0.00	0.37	0.00	(0.00,18.28)	60	0.00
##Sherman W	112	2	1.79	1.91	1.03	(0.12, 3.73)	84	0.00
##Shih A T	3	1	33.33	1.52	24.28	(0.32,100.0)	3	15.87
##Singh V	224	0	0.00	0.53	0.00	(0.00, 3.42)	216	0.00
#Stathopoulos I	254	1	0.39	0.54	0.81	(0.01, 4.48)	252	0.50
Stone G	18	0	0.00	1.60	0.00	(0.00,14.12)	18	0.00
Weinberger J	51	0	0.00	0.50	0.00	(0.00,15.89)	49	0.00
Weisz G	199	2	1.01	1.64	0.68	(0.08, 2.45)	167	0.43
Williams M	131	2	1.53	1.69	1.00	(0.11, 3.61)	113	1.00
All Others	216	6	2.78	1.74	1.77	(0.65, 3.85)	188	1.54
TOTAL	**7786**	**78**	**1.00**	**1.14**	**0.98**	**(0.77, 1.22)**	**7234**	**0.68**
NYP Hospital - Weill Cornell								
##Aboufares A	6	0	0.00	0.37	0.00	(0.00,100.0)	6	0.00
Bergman G	458	5	1.09	1.66	0.73	(0.23, 1.70)	404	0.19
##Charney R	264	2	0.76	0.95	0.88	(0.10, 3.18)	261	0.58
Feldman D	453	1	0.22	1.38	0.18 **	(0.00, 0.98)	384	0.00
Gade C	39	0	0.00	0.50	0.00	(0.00,20.96)	39	0.00
##Kesanakurthy S	202	6	2.97	0.73	4.49 *	(1.64, 9.77)	201	3.31 *
Kim L	359	6	1.67	1.85	1.00	(0.37, 2.18)	288	0.63
##Messinger D	129	2	1.55	1.54	1.12	(0.13, 4.03)	125	0.72
Minutello R	495	8	1.62	1.69	1.06	(0.46, 2.08)	417	0.83
Sharma A	226	2	0.88	1.15	0.85	(0.10, 3.06)	208	0.47
Singh H	127	3	2.36	1.92	1.36	(0.27, 3.97)	93	1.20
#Slotwiner A	157	0	0.00	1.67	0.00	(0.00, 1.55)	132	0.00
##Srivastava S	7	0	0.00	0.32	0.00	(0.00,100.0)	7	0.00
Swaminathan R	142	3	2.11	2.14	1.09	(0.22, 3.20)	113	0.44
Wilentz J	165	0	0.00	0.40	0.00	(0.00, 6.11)	164	0.00
Wong S	564	9	1.60	0.80	2.20	(1.00, 4.17)	537	1.58
Yang Y	126	0	0.00	0.30	0.00	(0.00,10.58)	126	0.00
All Others	19	0	0.00	0.40	0.00	(0.00,53.56)	19	0.00
TOTAL	**3938**	**47**	**1.19**	**1.31**	**1.01**	**(0.74, 1.34)**	**3524**	**0.69**

Table 5, *continued*

	All Cases						Non-emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	Cases	RAMR
NYU Hospitals Center								
##Attubato M	1192	10	0.84	0.78	1.19	(0.57, 2.19)	1140	0.70
##Babaev A	558	2	0.36	0.58	0.69	(0.08, 2.48)	550	0.55
#Bangalore S	28	0	0.00	1.26	0.00	(0.00,11.52)	22	0.00
##Coppola J	150	1	0.67	0.50	1.49	(0.02, 8.27)	140	1.21
#David M	6	0	0.00	0.40	0.00	(0.00,100.0)	6	0.00
#Farid A	46	0	0.00	0.27	0.00	(0.00,32.41)	46	0.00
##Feit F	587	2	0.34	0.47	0.81	(0.09, 2.92)	569	0.56
##Iqbal S	23	1	4.35	1.28	3.76	(0.05,20.92)	10	0.00
#Jayasundera T	199	0	0.00	0.24	0.00	(0.00, 8.42)	199	0.00
Kokolis S	17	0	0.00	1.42	0.00	(0.00,16.81)	16	0.00
#Lee J	1	0	0.00	0.21	0.00	(0.00,100.0)	1	0.00
#Liou M	80	0	0.00	0.35	0.00	(0.00,14.52)	80	0.00
#Miller L	19	1	5.26	1.82	3.20	(0.04,17.80)	9	8.15
##Papadakos S	134	2	1.49	0.46	3.58	(0.40,12.93)	134	2.17
#Seldon M	7	0	0.00	0.21	0.00	(0.00,100.0)	7	0.00
##Serrano-Gomez C	100	2	2.00	0.86	2.59	(0.29, 9.35)	90	2.01
##Shah A	41	0	0.00	0.26	0.00	(0.00,38.44)	41	0.00
#Shah B	13	0	0.00	1.74	0.00	(0.00,18.00)	7	0.00
##Slater J	415	7	1.69	0.58	3.23 *	(1.30, 6.66)	384	1.94
##Srivastava S	68	0	0.00	0.27	0.00	(0.00,22.53)	68	0.00
##Staniloae C	119	2	1.68	0.50	3.72	(0.42,13.42)	115	1.36
Tarkin H	14	1	7.14	0.64	12.43	(0.16,69.14)	14	6.65
##Yadav S	3	0	0.00	0.15	0.00	(0.00,100.0)	3	0.00
#Yatskar L	30	0	0.00	0.26	0.00	(0.00,51.96)	29	0.00
All Others	74	0	0.00	0.60	0.00	(0.00, 9.16)	66	0.00
TOTAL	**3924**	**31**	**0.79**	**0.61**	**1.45**	**(0.98, 2.05)**	**3746**	**0.89**
North Shore University Hospital								
##Arkonac B	13	1	7.69	2.59	3.29	(0.04,18.32)	.	.
##Bagga R	1	0	0.00	2.59	0.00	(0.00,100.0)	1	0.00
#Blumenthal S	55	0	0.00	0.28	0.00	(0.00,26.14)	55	0.00
#Boutis L	915	8	0.87	1.12	0.87	(0.37, 1.71)	722	0.49
##Dhama B	100	0	0.00	0.77	0.00	(0.00, 5.31)	93	0.00
##Freeman J	1	0	0.00	0.54	0.00	(0.00,100.0)	1	0.00
##Friedman G H	12	0	0.00	1.79	0.00	(0.00,18.88)	10	0.00
##Fuschetto D	47	1	2.13	1.18	2.00	(0.03,11.10)	43	1.37
#Galler B	202	2	0.99	0.88	1.25	(0.14, 4.50)	197	0.93
##Green S	182	0	0.00	1.24	0.00	(0.00, 1.80)	130	0.00
##Grunwald A	109	0	0.00	0.77	0.00	(0.00, 4.85)	98	0.00
##Hameedi A	4	0	0.00	0.40	0.00	(0.00,100.0)	4	0.00
##Hormozi S	12	0	0.00	1.13	0.00	(0.00,29.91)	12	0.00
#Jauhar R	38	0	0.00	2.39	0.00	(0.00, 4.47)	.	.
#Kaplan B	788	4	0.51	1.13	0.50	(0.13, 1.27)	695	0.38
#Katz S	238	2	0.84	0.86	1.09	(0.12, 3.92)	197	1.26
##Kim M	357	4	1.12	1.38	0.90	(0.24, 2.30)	269	0.73
##Koss J	115	0	0.00	0.59	0.00	(0.00, 5.96)	102	0.00
Kruger A	183	2	1.09	1.12	1.08	(0.12, 3.90)	169	0.48
#Lederman S	3	0	0.00	0.24	0.00	(0.00,100.0)	3	0.00
#Lee A	267	2	0.75	1.56	0.53	(0.06, 1.92)	187	0.47
#Marchant D	173	3	1.73	1.46	1.31	(0.26, 3.83)	119	1.26
#Meraj P	28	1	3.57	1.67	2.36	(0.03,13.14)	3	0.00
##Ong L Y	151	1	0.66	0.83	0.88	(0.01, 4.92)	134	0.74
##Papadakos S	164	0	0.00	0.48	0.00	(0.00, 5.14)	164	0.00
##Patcha R	22	0	0.00	0.71	0.00	(0.00,25.90)	21	0.00
##Polena S	18	0	0.00	0.98	0.00	(0.00,23.02)	18	0.00
##Poumpouridis K	62	0	0.00	0.60	0.00	(0.00,10.83)	56	0.00
#Rutkin B	249	5	2.01	1.48	1.51	(0.49, 3.52)	180	1.24
##Schwartz R	4	0	0.00	0.26	0.00	(0.00,100.0)	4	0.00
##Strizik B	174	1	0.57	0.89	0.71	(0.01, 3.96)	161	0.64
Vidyarthi V	14	0	0.00	0.22	0.00	(0.00,100.0)	14	0.00
#Witkes D	71	0	0.00	0.52	0.00	(0.00,10.96)	70	0.00
All Others	142	2	1.41	1.11	1.40	(0.16, 5.05)	109	0.78
TOTAL	**4914**	**39**	**0.79**	**1.10**	**0.80** **	**(0.57, 1.09)**	**4041**	**0.56**

Table 5, *continued*

	All Cases						Non-emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	Cases	RAMR
Olean General Hospital								
##Chockalingam S	4	0	0.00	0.29	0.00	(0.00,100.0)	2	0.00
#Giambartolomei A	3	0	0.00	0.70	0.00	(0.00,100.0)	1	0.00
#Malpeso J	11	0	0.00	0.58	0.00	(0.00,63.23)	6	0.00
All Others	175	1	0.57	0.78	0.81	(0.01, 4.52)	87	0.00
TOTAL	**193**	**1**	**0.52**	**0.76**	**0.76**	**(0.01, 4.22)**	**96**	**0.00**
Orange Regional Medical Center								
#Agarwal A	33	0	0.00	0.38	0.00	(0.00,32.00)	33	0.00
##Cuomo L	31	0	0.00	0.87	0.00	(0.00,15.14)	20	0.00
##Gotsis W	566	2	0.35	0.98	0.40	(0.04, 1.44)	421	0.46
##Kalapatapu K	250	1	0.40	0.78	0.56	(0.01, 3.14)	244	0.32
##Motivala A	90	0	0.00	1.13	0.00	(0.00, 3.99)	62	0.00
#Shapira S	284	6	2.11	1.31	1.78	(0.65, 3.87)	218	0.41
##Silverman G	289	4	1.38	0.99	1.54	(0.42, 3.95)	173	1.24
#Timmermans R	2	0	0.00	1.39	0.00	(0.00,100.0)	2	0.00
TOTAL	**1545**	**13**	**0.84**	**1.01**	**0.93**	**(0.49, 1.58)**	**1173**	**0.47**
Richmond University Medical Center								
#Swamy S	1	0	0.00	0.26	0.00	(0.00,100.0)	1	0.00
TOTAL	**1**	**0**	**0.00**	**0.26**	**0.00**	**(0.00, 1540)**	**1**	**0.00**
Rochester General Hospital								
##Chockalingam S	226	4	1.77	1.28	1.54	(0.41, 3.93)	193	0.41
#Doling M	6	0	0.00	0.25	0.00	(0.00,100.0)	6	0.00
Fitzpatrick P	256	2	0.78	1.07	0.81	(0.09, 2.91)	184	0.90
Gacioch G	594	5	0.84	1.12	0.83	(0.27, 1.94)	380	0.00
Krishnamoorthy V	286	8	2.80	1.45	2.13	(0.92, 4.20)	185	1.48
Mathew T M	79	0	0.00	0.45	0.00	(0.00,11.42)	72	0.00
#Ong L S	1480	22	1.49	0.99	1.67	(1.04, 2.52)	1270	0.86
#Patel T	183	3	1.64	0.99	1.84	(0.37, 5.37)	171	1.07
Scortichini D	168	0	0.00	0.39	0.00	(0.00, 6.14)	162	0.00
#Singer G	351	1	0.28	0.64	0.50	(0.01, 2.76)	332	0.35
#Stefek P	14	0	0.00	0.27	0.00	(0.00,100.0)	14	0.00
#Stuver T	1116	14	1.25	0.97	1.43	(0.78, 2.40)	820	1.10
TOTAL	**4759**	**59**	**1.24**	**0.99**	**1.39**	**(1.06, 1.79)**	**3789**	**0.77**
Samaritan Hospital								
#Bishop G	28	1	3.57	0.96	4.12	(0.05,22.90)	10	13.21
##Brady S	70	0	0.00	0.66	0.00	(0.00, 8.84)	52	0.00
##Delago A	29	0	0.00	1.16	0.00	(0.00,12.10)	12	0.00
##Esper D	20	0	0.00	1.55	0.00	(0.00,13.08)	3	0.00
##Khawaja H	8	1	12.50	1.53	9.07	(0.12,50.45)	6	0.00
#Martinelli M	12	0	0.00	0.93	0.00	(0.00,36.42)	3	0.00
##Papaleo R	406	3	0.74	0.48	1.70	(0.34, 4.97)	329	1.47
#Roccario E	12	2	16.67	3.61	5.11	(0.57,18.46)	3	0.00
##Winston B	19	0	0.00	1.73	0.00	(0.00,12.34)	4	0.00
All Others	2	0	0.00	0.15	0.00	(0.00,100.0)	2	0.00
TOTAL	**606**	**7**	**1.16**	**0.71**	**1.79**	**(0.72, 3.69)**	**424**	**1.52**
South Nassau Communities Hospital								
##Freeman J	778	6	0.77	0.91	0.94	(0.34, 2.05)	599	0.94
##Hormozi S	23	0	0.00	1.56	0.00	(0.00,11.34)	3	0.00
#Lituchy A	3	0	0.00	1.42	0.00	(0.00,95.30)	1	0.00
#Petrossian G	39	1	2.56	0.41	6.95	(0.09,38.67)	38	4.83
#Rehman A	438	5	1.14	0.98	1.29	(0.42, 3.01)	287	1.58
##Rehman S	62	0	0.00	0.59	0.00	(0.00,11.03)	59	0.00
##Zisfein J	303	0	0.00	0.70	0.00	(0.00, 1.91)	267	0.00
All Others	8	0	0.00	1.04	0.00	(0.00,48.86)	6	0.00
TOTAL	**1654**	**12**	**0.73**	**0.88**	**0.92**	**(0.47, 1.60)**	**1260**	**0.90**
Southside Hospital								
##Arkonac B	325	3	0.92	1.48	0.69	(0.14, 2.01)	301	0.40
##Caselnova R	47	0	0.00	1.92	0.00	(0.00, 4.50)	28	0.00
##Deutsch E	273	0	0.00	0.77	0.00	(0.00, 1.94)	246	0.00
#Gandotra P	219	1	0.46	1.17	0.43	(0.01, 2.40)	183	0.42

Table 5, *continued*

	All Cases						Non-emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	Cases	RAMR
##Hormozi S	323	5	1.55	0.94	1.82	(0.59, 4.24)	269	1.32
##Lee P J	305	1	0.33	0.88	0.41	(0.01, 2.29)	278	0.00
##Ong L Y	2	0	0.00	0.08	0.00	(0.00,100.0)	2	0.00
##Patel R B	145	5	3.45	1.09	3.52 *	(1.13, 8.21)	110	3.52 *
##Reich D	296	3	1.01	1.21	0.92	(0.19, 2.70)	259	0.00
All Others	3	0	0.00	2.40	0.00	(0.00,56.48)	3	0.00
TOTAL	**1938**	**18**	**0.93**	**1.10**	**0.93**	**(0.55, 1.47)**	**1679**	**0.60**
St. Barnabas Hospital								
##Amsalem Y	8	1	12.50	9.41	1.47	(0.02, 8.19)	2	0.00
##Celaj S	334	2	0.60	0.84	0.79	(0.09, 2.85)	289	0.00
##Greenberg M	19	1	5.26	1.32	4.42	(0.06,24.61)	4	0.00
##Johnson M	6	0	0.00	3.55	0.00	(0.00,19.09)	.	.
##Menegus M	12	0	0.00	1.25	0.00	(0.00,27.01)	.	.
##Srinivas V	2	0	0.00	0.17	0.00	(0.00,100.0)	2	0.00
All Others	3	0	0.00	1.52	0.00	(0.00,89.23)	1	0.00
TOTAL	**384**	**4**	**1.04**	**1.10**	**1.05**	**(0.28, 2.69)**	**298**	**0.00**
St. Catherine of Siena Hospital								
##Deutsch E	208	0	0.00	0.79	0.00	(0.00, 2.48)	175	0.00
##Hormozi S	184	0	0.00	1.22	0.00	(0.00, 1.81)	147	0.00
##Khan S	75	3	4.00	1.64	2.70	(0.54, 7.88)	49	0.00
#Madrid A	5	0	0.00	1.04	0.00	(0.00,78.31)	.	.
#Patel N	25	0	0.00	1.09	0.00	(0.00,14.90)	18	0.00
##Patel R B	139	3	2.16	0.80	2.99	(0.60, 8.72)	114	2.22
##Rosenband M	107	0	0.00	0.98	0.00	(0.00, 3.86)	82	0.00
#Tsiamtsiouris T	6	0	0.00	1.51	0.00	(0.00,44.90)	.	.
##Weinstein J	63	1	1.59	1.88	0.94	(0.01, 5.20)	36	0.00
All Others	17	0	0.00	0.31	0.00	(0.00,77.55)	15	0.00
TOTAL	**829**	**7**	**0.84**	**1.08**	**0.87**	**(0.35, 1.79)**	**636**	**0.35**
St. Elizabeth Medical Center								
##Bhan R	53	1	1.89	0.87	2.39	(0.03,13.30)	46	0.00
#ElGharib N	28	0	0.00	0.77	0.00	(0.00,18.77)	23	0.00
#Kelberman M	225	2	0.89	0.94	1.05	(0.12, 3.78)	183	0.51
##Kozman H	1	0	0.00	1.27	0.00	(0.00,100.0)	.	.
#MacIsaac H	530	15	2.83	2.06	1.52	(0.85, 2.51)	438	0.78
#Mathew T C	37	0	0.00	0.92	0.00	(0.00,11.93)	29	0.00
#Nassif R	11	0	0.00	0.92	0.00	(0.00,40.10)	9	0.00
#Patel A	180	2	1.11	1.31	0.94	(0.11, 3.39)	130	1.09
#Sassower M	692	11	1.59	1.18	1.49	(0.74, 2.66)	599	1.00
#Varma P	229	3	1.31	1.78	0.81	(0.16, 2.37)	170	0.00
All Others	6	0	0.00	0.76	0.00	(0.00,89.32)	5	0.00
TOTAL	**1992**	**34**	**1.71**	**1.45**	**1.30**	**(0.90, 1.82)**	**1632**	**0.73**
St. Francis Hospital								
Abittan M	272	4	1.47	0.71	2.28	(0.61, 5.84)	265	1.79
Berke A	202	5	2.48	1.84	1.49	(0.48, 3.48)	178	1.33
Chung W	149	3	2.01	1.66	1.35	(0.27, 3.93)	114	0.00
##Deutsch E	7	0	0.00	1.92	0.00	(0.00,30.29)	7	0.00
Ezratty A	182	3	1.65	1.00	1.83	(0.37, 5.34)	154	1.20
##Friedman G H	248	2	0.81	1.14	0.78	(0.09, 2.82)	211	0.44
Goldman A B	61	1	1.64	1.61	1.13	(0.01, 6.29)	40	0.00
##Grunwald A	66	1	1.52	1.17	1.44	(0.02, 8.00)	46	0.00
Gulotta R	108	1	0.93	0.79	1.29	(0.02, 7.18)	105	0.93
##Hormozi S	2	0	0.00	0.51	0.00	(0.00,100.0)	2	0.00
##Khan S	5	0	0.00	1.06	0.00	(0.00,76.76)	5	0.00
##Koss J	62	2	3.23	1.54	2.32	(0.26, 8.39)	38	3.17
##Lee P J	4	1	25.00	1.52	18.22	(0.24,100.0)	4	8.81
#Lituchy A	507	3	0.59	1.16	0.57	(0.11, 1.65)	475	0.31
#Madrid A	172	2	1.16	0.81	1.59	(0.18, 5.76)	154	0.70
Mezzafonte S	350	2	0.57	1.13	0.56	(0.06, 2.03)	303	0.50
Minadeo J	142	2	1.41	1.73	0.90	(0.10, 3.25)	104	0.61
#Moses J	47	0	0.00	1.41	0.00	(0.00, 6.15)	47	0.00
Oruci E	154	1	0.65	0.93	0.77	(0.01, 4.28)	142	0.00
Pappas T	301	0	0.00	0.94	0.00	(0.00, 1.44)	292	0.00

Table 5, *continued*

	All Cases						Non-emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	Cases	RAMR
##Patcha R	15	0	0.00	1.01	0.00	(0.00,26.88)	14	0.00
#Petrossian G	812	2	0.25	1.03	0.27 **	(0.03, 0.96)	792	0.19 **
#Rehman A	7	0	0.00	4.35	0.00	(0.00,13.34)	7	0.00
##Reich D	14	0	0.00	0.49	0.00	(0.00,59.47)	14	0.00
##Rosenband M	3	0	0.00	0.54	0.00	(0.00,100.0)	3	0.00
Shlofmitz R	2642	12	0.45	0.62	0.81	(0.42, 1.41)	2595	0.56
#Tsiamtsiouris T	312	3	0.96	1.31	0.82	(0.16, 2.38)	264	0.72
Venditto J	135	1	0.74	0.88	0.93	(0.01, 5.17)	127	0.74
##Weinstein J	12	0	0.00	1.95	0.00	(0.00,17.35)	12	0.00
##Yadav S	109	4	3.67	1.84	2.21	(0.59, 5.66)	84	1.31
##Zisfein J	17	0	0.00	0.92	0.00	(0.00,25.97)	17	0.00
All Others	6	0	0.00	3.24	0.00	(0.00,20.91)	6	0.00
TOTAL	**7125**	**55**	**0.77**	**0.96**	**0.89**	**(0.67, 1.16)**	**6621**	**0.55**
St. Josephs Hospital								
##Bhan R	170	3	1.76	0.61	3.18	(0.64, 9.30)	145	1.18
Caputo R	1314	18	1.37	1.17	1.30	(0.77, 2.05)	1010	1.00
El-Khally Z	1216	6	0.49	1.32	0.41 **	(0.15, 0.90)	980	0.30
Fischi M	1026	10	0.97	1.08	1.00	(0.48, 1.84)	772	0.86
#Giambartolomei A	144	2	1.39	1.39	1.10	(0.12, 3.98)	84	1.73
Iskander A	914	12	1.31	1.43	1.01	(0.52, 1.77)	678	0.75
O'Hern M	432	7	1.62	1.17	1.54	(0.62, 3.17)	315	0.77
Reger M	117	1	0.85	0.50	1.91	(0.02,10.63)	113	1.43
Simons A	639	5	0.78	0.90	0.96	(0.31, 2.24)	420	0.31
TOTAL	**5972**	**64**	**1.07**	**1.17**	**1.01**	**(0.78, 1.29)**	**4517**	**0.72**
St. Lukes Cornwall Hospital - Newburgh								
#Gosselin R	180	3	1.67	1.25	1.48	(0.30, 4.33)	133	1.07
#Hadid A	266	4	1.50	1.39	1.20	(0.32, 3.06)	204	0.93
Hadid A B	146	2	1.37	1.34	1.13	(0.13, 4.09)	98	0.00
#Jafar M	10	0	0.00	0.41	0.00	(0.00,99.73)	10	0.00
#Shah N	257	5	1.95	2.11	1.02	(0.33, 2.39)	200	0.57
TOTAL	**859**	**14**	**1.63**	**1.56**	**1.16**	**(0.63, 1.95)**	**645**	**0.72**
St. Peters Hospital								
#Bishop G	387	8	2.07	1.47	1.56	(0.67, 3.07)	246	0.97
##Brady S	76	3	3.95	0.49	8.83 *	(1.78,25.81)	68	4.56
##Delago A	16	1	6.25	2.76	2.51	(0.03,13.97)	8	0.00
##Esper D	314	2	0.64	0.95	0.74	(0.08, 2.67)	275	0.74
##Khawaja H	39	0	0.00	0.75	0.00	(0.00,13.82)	33	0.00
#Martinelli M	573	5	0.87	0.89	1.08	(0.35, 2.52)	444	0.84
##Papaleo R	9	0	0.00	1.23	0.00	(0.00,36.77)	2	0.00
#Roccario E	538	6	1.12	1.35	0.92	(0.33, 2.00)	387	0.76
##Winston B	184	5	2.72	1.09	2.76	(0.89, 6.44)	155	1.11
All Others	64	0	0.00	0.48	0.00	(0.00,13.17)	50	0.00
TOTAL	**2200**	**30**	**1.36**	**1.12**	**1.35**	**(0.91, 1.93)**	**1668**	**0.92**
Staten Island University Hospital- North								
#Duvvuri S	285	3	1.05	0.96	1.22	(0.24, 3.56)	232	0.41
#Farid A	132	2	1.52	0.52	3.20	(0.36,11.54)	116	0.00
Gala B	151	4	2.65	1.34	2.19	(0.59, 5.60)	137	1.78
##Hoyek W	141	0	0.00	0.65	0.00	(0.00, 4.45)	117	0.00
##Kandov R	397	4	1.01	1.21	0.92	(0.25, 2.36)	307	0.64
#Malpeso J	169	3	1.78	1.60	1.23	(0.25, 3.59)	106	0.96
McCord D	134	1	0.75	0.39	2.11	(0.03,11.71)	131	1.35
##Motivala A	99	0	0.00	0.52	0.00	(0.00, 7.88)	97	0.00
##Royzman R	224	5	2.23	1.58	1.57	(0.51, 3.66)	134	1.12
Snyder S	165	4	2.42	1.15	2.34	(0.63, 6.00)	133	1.55
#Swamy S	70	0	0.00	0.39	0.00	(0.00,14.73)	69	0.00
Tamburrino F	432	6	1.39	1.21	1.27	(0.46, 2.77)	375	0.00
Vazzana T	45	0	0.00	0.22	0.00	(0.00,40.49)	45	0.00
Warchol A	55	1	1.82	0.88	2.28	(0.03,12.71)	44	0.00
Zgheib M	197	3	1.52	0.60	2.82	(0.57, 8.24)	194	1.09
All Others	3	0	0.00	0.37	0.00	(0.00,100.0)	3	0.00
TOTAL	**2699**	**36**	**1.33**	**1.02**	**1.44**	**(1.01, 2.00)**	**2240**	**0.73**

Table 5, *continued*

	All Cases						Non-emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	Cases	RAMR
Strong Memorial Hospital								
Chaudhary I	222	3	1.35	1.77	0.85	(0.17, 2.47)	108	1.34
Cove C	442	8	1.81	1.58	1.27	(0.55, 2.51)	303	1.26
#Doling M	625	7	1.12	1.12	1.11	(0.44, 2.29)	478	0.84
Garringer J	219	1	0.46	0.95	0.53	(0.01, 2.95)	173	0.00
Gassler J	359	0	0.00	1.15	0.00 **	(0.00, 0.99)	219	0.00
Ling F	426	5	1.17	1.55	0.84	(0.27, 1.96)	286	0.29
Narins C	510	7	1.37	0.98	1.55	(0.62, 3.19)	317	1.43
TOTAL	**2803**	**31**	**1.11**	**1.27**	**0.96**	**(0.65, 1.37)**	**1884**	**0.77**
UHS - Wilson Medical Center								
Ahmed O	281	4	1.42	1.70	0.93	(0.25, 2.38)	180	0.54
Jamal N	402	7	1.74	2.76	0.70	(0.28, 1.44)	292	0.91
Kashou H	575	10	1.74	0.92	2.09	(1.00, 3.84)	447	1.21
Rehman A U	156	0	0.00	1.33	0.00	(0.00, 1.96)	95	0.00
Stamato N	161	4	2.48	1.97	1.40	(0.38, 3.58)	114	1.17
Traverse P	413	5	1.21	1.30	1.03	(0.33, 2.41)	305	0.40
#Yarkoni A	29	2	6.90	1.17	6.54	(0.73,23.62)	24	3.21
All Others	27	1	3.70	1.05	3.91	(0.05,21.74)	24	0.00
TOTAL	**2044**	**33**	**1.61**	**1.58**	**1.13**	**(0.78, 1.58)**	**1481**	**0.84**
Unity Hospital of Rochester								
##Chockalingam S	109	5	4.59	2.16	2.35	(0.76, 5.49)	62	4.92 *
#Ong L S	40	1	2.50	1.68	1.65	(0.02, 9.15)	16	0.00
#Patel T	684	14	2.05	1.31	1.74	(0.95, 2.91)	514	1.18
#Singer G	45	3	6.67	2.14	3.45	(0.69,10.07)	32	1.54
TOTAL	**878**	**23**	**2.62**	**1.47**	**1.97** *	**(1.25, 2.96)**	**624**	**1.70** *
University Hospital - Brooklyn								
#Badero O	22	0	0.00	0.39	0.00	(0.00,47.46)	21	0.00
#Castillo R	18	1	5.56	1.97	3.12	(0.04,17.37)	.	.
Cavusoglu E	222	6	2.70	1.50	2.00	(0.73, 4.35)	147	1.02
#Chadow H	17	0	0.00	1.66	0.00	(0.00,14.41)	.	.
Dogar M	62	0	0.00	1.79	0.00	(0.00, 3.67)	52	0.00
Feit A	167	3	1.80	1.23	1.62	(0.32, 4.72)	111	0.00
#Hegde S	56	3	5.36	2.28	2.60	(0.52, 7.59)	19	0.00
#Jasty B	2	0	0.00	0.12	0.00	(0.00,100.0)	2	0.00
#John S	111	3	2.70	1.65	1.82	(0.37, 5.31)	93	0.67
#Kantrowitz N	4	0	0.00	0.78	0.00	(0.00,100.0)	4	0.00
Marmur J	292	6	2.05	1.87	1.22	(0.44, 2.65)	191	0.00
##Shohat E	4	0	0.00	0.11	0.00	(0.00,100.0)	4	0.00
All Others	1	0	0.00	0.14	0.00	(0.00,100.0)	1	0.00
TOTAL	**978**	**22**	**2.25**	**1.62**	**1.54**	**(0.97, 2.33)**	**645**	**0.37**
University Hospital - SUNY Upstate								
##Bhan R	111	2	1.80	0.51	3.89	(0.44,14.06)	93	4.38
Ford T	123	3	2.44	1.38	1.96	(0.39, 5.72)	68	1.21
##Kozman H	273	8	2.93	1.86	1.74	(0.75, 3.43)	161	2.12
Siddiqui D	211	3	1.42	2.25	0.70	(0.14, 2.04)	138	0.47
All Others	19	3	15.79	5.91	2.96	(0.59, 8.64)	5	10.70
TOTAL	**737**	**19**	**2.58**	**1.80**	**1.59**	**(0.96, 2.48)**	**465**	**1.67** *
University Hospital - Stony Brook								
Dervan J	170	1	0.59	1.34	0.48	(0.01, 2.70)	154	0.48
Gruberg L	571	15	2.63	1.97	1.48	(0.83, 2.43)	328	1.34
Jeremias A	451	9	2.00	1.88	1.17	(0.54, 2.23)	223	1.44
##Joseph S	118	1	0.85	0.92	1.02	(0.01, 5.67)	114	0.71
##Khan S	118	1	0.85	0.81	1.16	(0.02, 6.48)	108	0.81
Korlipara G	178	0	0.00	0.79	0.00	(0.00, 2.90)	167	0.00
Lawson W	449	8	1.78	1.83	1.08	(0.46, 2.13)	237	0.87
#Lederman S	218	1	0.46	1.17	0.43	(0.01, 2.41)	200	0.00
Mani A	621	13	2.09	1.80	1.29	(0.69, 2.21)	395	0.77
Montellese D	122	1	0.82	0.92	0.98	(0.01, 5.46)	107	0.75
#Patel D	30	1	3.33	1.93	1.91	(0.02,10.64)	23	5.54
#Patel N	284	3	1.06	0.86	1.36	(0.27, 3.97)	238	0.39
##Rosenband M	125	1	0.80	1.28	0.69	(0.01, 3.84)	117	0.60

Table 5, *continued*

	All Cases						Non-emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	Cases	RAMR
##Weinstein J	312	2	0.64	0.95	0.74	(0.08, 2.69)	288	0.57
All Others	239	5	2.09	1.54	1.50	(0.48, 3.51)	124	1.64
TOTAL	**4006**	**62**	**1.55**	**1.49**	**1.15**	**(0.88, 1.47)**	**2823**	**0.78**
Vassar Brothers Medical Center								
Gorwara S	459	7	1.53	1.53	1.10	(0.44, 2.27)	310	0.51
#Gosselin R	28	0	0.00	0.69	0.00	(0.00,20.96)	20	0.00
#Jafar M	774	13	1.68	1.14	1.63	(0.87, 2.79)	575	0.87
Kantaros L	379	2	0.53	1.13	0.52	(0.06, 1.86)	246	0.51
#Shah N	7	0	0.00	0.41	0.00	(0.00,100.0)	7	0.00
Yen M	372	5	1.34	1.05	1.42	(0.46, 3.31)	245	1.17
TOTAL	**2019**	**27**	**1.34**	**1.20**	**1.23**	**(0.81, 1.79)**	**1403**	**0.76**
Westchester Medical Center								
Ahmad H	240	5	2.08	1.46	1.58	(0.51, 3.68)	141	1.17
##Charney R	36	1	2.78	0.34	9.05	(0.12,50.37)	35	4.99
#Cohen M B	170	5	2.94	1.78	1.83	(0.59, 4.26)	116	0.85
##Cuomo L	226	2	0.88	1.85	0.53	(0.06, 1.91)	151	0.50
##Gotsis W	182	1	0.55	1.19	0.51	(0.01, 2.85)	115	0.00
#Hadid A	4	0	0.00	2.65	0.00	(0.00,38.33)	4	0.00
##Messinger D	38	2	5.26	0.89	6.57	(0.74,23.70)	37	3.94
##Shih A T	52	0	0.00	1.41	0.00	(0.00, 5.53)	47	0.00
##Silverman G	85	2	2.35	1.20	2.17	(0.24, 7.83)	47	2.18
#Timmermans R	274	4	1.46	1.80	0.90	(0.24, 2.30)	158	0.46
TOTAL	**1307**	**22**	**1.68**	**1.54**	**1.21**	**(0.76, 1.83)**	**851**	**0.88**
White Plains Hospital								
#Apfelbaum M	97	2	2.06	2.75	0.83	(0.09, 3.00)	45	0.00
##Bliagos D	499	7	1.40	1.51	1.03	(0.41, 2.12)	430	0.91
##Charney R	43	1	2.33	1.14	2.25	(0.03,12.54)	28	0.00
#Cohen M B	13	0	0.00	0.22	0.00	(0.00,100.0)	11	0.00
##Cuomo L	1	0	0.00	0.21	0.00	(0.00,100.0)	1	0.00
##Greenberg M	38	0	0.00	1.01	0.00	(0.00,10.58)	26	0.00
##Hassid B	5	1	20.00	0.64	34.62	(0.45,100.0)	5	23.59
#Hjemdahl-Monsen C	88	1	1.14	0.84	1.50	(0.02, 8.35)	81	1.00
#Irobunda C	10	0	0.00	0.71	0.00	(0.00,57.50)	4	0.00
##Johnson M	11	0	0.00	1.78	0.00	(0.00,20.77)	4	0.00
##Kalapatapu K	118	1	0.85	0.95	0.99	(0.01, 5.52)	106	0.89
#Kodali S	1	0	0.00	1.28	0.00	(0.00,100.0)	.	.
##Messinger D	52	0	0.00	1.30	0.00	(0.00, 6.00)	41	0.00
##Sherman W	4	0	0.00	1.69	0.00	(0.00,60.13)	3	0.00
TOTAL	**980**	**13**	**1.33**	**1.43**	**1.03**	**(0.55, 1.76)**	**785**	**0.88**
Winthrop-University Hospital								
#Blumenthal S	3	0	0.00	0.51	0.00	(0.00,100.0)	3	0.00
##Caselnova R	136	2	1.47	1.22	1.34	(0.15, 4.83)	130	1.03
Donohue D	267	4	1.50	1.42	1.17	(0.31, 2.99)	205	0.47
#Galler B	12	0	0.00	4.29	0.00	(0.00, 7.89)	9	0.00
#Gambino A	757	6	0.79	0.91	0.97	(0.35, 2.10)	669	0.32
##Green S	94	0	0.00	1.88	0.00	(0.00, 2.30)	52	0.00
##Hormozi S	4	0	0.00	0.59	0.00	(0.00,100.0)	3	0.00
Marzo K	297	2	0.67	1.03	0.73	(0.08, 2.63)	228	0.69
Musso J	10	0	0.00	0.20	0.00	(0.00,100.0)	10	0.00
Naidu S	273	3	1.10	1.24	0.98	(0.20, 2.86)	217	0.76
##Schwartz R	908	7	0.77	1.40	0.61	(0.25, 1.26)	789	0.44
#Witkes D	18	0	0.00	1.06	0.00	(0.00,21.26)	18	0.00
##Zisfein J	67	1	1.49	0.72	2.28	(0.03,12.69)	67	1.34
All Others	65	1	1.54	1.59	1.07	(0.01, 5.95)	63	0.77
TOTAL	**2911**	**26**	**0.89**	**1.22**	**0.81**	**(0.53, 1.19)**	**2463**	**0.53**
Statewide Total	**141971**	**1572**	**1.11**				**116617**	**0.71**

* 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 Cardiologist Practicing at More Than One Hospital, 2012-2014 (Listed Alphabetically by Hospital)

	All Cases						Non-Emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	CASES	RAMR
Aboufares A	**278**	**6**	**2.16**	**1.39**	**1.72**	**(0.63, 3.73)**	**235**	**1.42**
Lenox Hill Hospital	81	1	1.23	1.02	1.34	(0.02, 7.47)	74	0.00
NYP-Columbia Presby.	191	5	2.62	1.58	1.83	(0.59, 4.27)	155	1.99
NYP-Weill Cornell	6	0	0.00	0.37	0.00	(0.00,100.0)	6	0.00
Agarwal A	**90**	**2**	**2.22**	**0.79**	**3.10**	**(0.35,11.18)**	**79**	**0.00**
Good Sam - Suffern	57	2	3.51	1.03	3.76	(0.42,13.59)	46	0.00
Orange Regional Med Ctr	33	0	0.00	0.38	0.00	(0.00,32.00)	33	0.00
Amsalem Y	**330**	**5**	**1.52**	**1.90**	**0.89**	**(0.29, 2.07)**	**236**	**0.63**
Bronx-Lebanon-Concourse	53	1	1.89	2.75	0.76	(0.01, 4.22)	24	2.03
Lenox Hill Hospital	13	1	7.69	2.37	3.59	(0.05,19.98)	10	3.32
Montefiore - Moses	256	2	0.78	1.46	0.59	(0.07, 2.14)	200	0.00
St. Barnabas Hospital	8	1	12.50	9.41	1.47	(0.02, 8.19)	2	0.00
Apfelbaum M	**124**	**2**	**1.61**	**2.23**	**0.80**	**(0.09, 2.90)**	**72**	**0.00**
NYP-Columbia Presby.	27	0	0.00	0.34	0.00	(0.00,44.83)	27	0.00
White Plains Hospital	97	2	2.06	2.75	0.83	(0.09, 3.00)	45	0.00
Ariyarajah V	**17**	**0**	**0.00**	**0.19**	**0.00**	**(0.00,100.0)**	**17**	**0.00**
Maimonides Medical Ctr	14	0	0.00	0.20	0.00	(0.00,100.0)	14	0.00
NY Methodist Hospital	3	0	0.00	0.15	0.00	(0.00,100.0)	3	0.00
Arkonac B	**524**	**10**	**1.91**	**1.56**	**1.36**	**(0.65, 2.49)**	**461**	**0.64**
Good Sam-West Islip	8	0	0.00	0.87	0.00	(0.00,58.53)	8	0.00
Long Island Jewish MC	178	6	3.37	1.65	2.26	(0.83, 4.93)	152	1.14
North Shore Univ Hosp	13	1	7.69	2.59	3.29	(0.04,18.32)	.	.
Southside Hospital	325	3	0.92	1.48	0.69	(0.14, 2.01)	301	0.40
Aslam A K	**408**	**1**	**0.25**	**0.23**	**1.16**	**(0.02, 6.44)**	**398**	**0.00**
Mount Sinai Beth Israel	135	1	0.74	0.25	3.24	(0.04,18.03)	130	0.00
NY Methodist Hospital	273	0	0.00	0.23	0.00	(0.00, 6.60)	268	0.00
Attubato M	**1241**	**10**	**0.81**	**0.79**	**1.13**	**(0.54, 2.07)**	**1177**	**0.67**
Bellevue Hospital Ctr	28	0	0.00	1.29	0.00	(0.00,11.22)	16	0.00
Lenox Hill Hospital	21	0	0.00	0.92	0.00	(0.00,21.06)	21	0.00
NYU Hospitals Center	1192	10	0.84	0.78	1.19	(0.57, 2.19)	1140	0.70
Babaev A	**577**	**2**	**0.35**	**0.65**	**0.59**	**(0.07, 2.12)**	**556**	**0.53**
Bellevue Hospital Ctr	13	0	0.00	3.66	0.00	(0.00, 8.54)	.	.
Lenox Hill Hospital	6	0	0.00	1.35	0.00	(0.00,50.01)	6	0.00
NYU Hospitals Center	558	2	0.36	0.58	0.69	(0.08, 2.48)	550	0.55
Badero O	**159**	**1**	**0.63**	**0.34**	**2.07**	**(0.03,11.50)**	**158**	**1.60**
NY Methodist Hospital	137	1	0.73	0.33	2.46	(0.03,13.69)	137	1.85
Univ. Hosp-Brooklyn	22	0	0.00	0.39	0.00	(0.00,47.46)	21	0.00
Bagga R	**462**	**2**	**0.43**	**0.97**	**0.49**	**(0.06, 1.78)**	**382**	**0.29**
Huntington Hospital	408	2	0.49	0.98	0.55	(0.06, 2.00)	328	0.36
Long Island Jewish MC	53	0	0.00	0.85	0.00	(0.00, 8.99)	53	0.00
North Shore Univ Hosp	1	0	0.00	2.59	0.00	(0.00,100.0)	1	0.00
Bander J	**316**	**4**	**1.27**	**1.02**	**1.37**	**(0.37, 3.51)**	**290**	**0.84**
Good Sam - Suffern	4	0	0.00	0.79	0.00	(0.00,100.0)	1	0.00
Mount Sinai Hospital	312	4	1.28	1.03	1.38	(0.37, 3.54)	289	0.85
Bangalore S	**364**	**3**	**0.82**	**1.76**	**0.52**	**(0.10, 1.52)**	**273**	**0.35**
Bellevue Hospital Ctr	336	3	0.89	1.80	0.55	(0.11, 1.61)	251	0.38
NYU Hospitals Center	28	0	0.00	1.26	0.00	(0.00,11.52)	22	0.00

Table 6, *continued*

	Cases	Deaths	All Cases OMR	EMR	RAMR	95% CI for RAMR	Non-Emergency CASES	RAMR
Bhan R	**336**	**7**	**2.08**	**0.66**	**3.47** *	**(1.39, 7.16)**	**285**	**1.71**
Faxton - St. Lukes	2	1	50.00	7.77	7.12	(0.09,39.63)	1	0.00
St. Elizabeth Med Ctr	53	1	1.89	0.87	2.39	(0.03,13.30)	46	0.00
St. Josephs Hospital	170	3	1.76	0.61	3.18	(0.64, 9.30)	145	1.18
Univ. Hosp-Upstate	111	2	1.80	0.51	3.89	(0.44,14.06)	93	4.38
Bishop G	**415**	**9**	**2.17**	**1.43**	**1.67**	**(0.76, 3.18)**	**256**	**1.26**
Samaritan Hospital	28	1	3.57	0.96	4.12	(0.05,22.90)	10	13.21
St. Peters Hospital	387	8	2.07	1.47	1.56	(0.67, 3.07)	246	0.97
Bliagos D	**831**	**8**	**0.96**	**1.33**	**0.80**	**(0.34, 1.58)**	**742**	**0.61**
Montefiore - Moses	90	0	0.00	1.02	0.00	(0.00, 4.40)	78	0.00
Mount Sinai Hospital	64	1	1.56	0.53	3.25	(0.04,18.09)	64	1.98
NYP-Columbia Presby.	178	0	0.00	1.29	0.00	(0.00, 1.77)	170	0.00
White Plains Hospital	499	7	1.40	1.51	1.03	(0.41, 2.12)	430	0.91
Blumenthal S	**58**	**0**	**0.00**	**0.29**	**0.00**	**(0.00,23.81)**	**58**	**0.00**
North Shore Univ Hosp	55	0	0.00	0.28	0.00	(0.00,26.14)	55	0.00
Winthrop-Univ. Hosp	3	0	0.00	0.51	0.00	(0.00,100.0)	3	0.00
Bortnick A	**209**	**2**	**0.96**	**2.20**	**0.48**	**(0.05, 1.74)**	**143**	**0.99**
Montefiore - Moses	18	1	5.56	0.61	10.06	(0.13,56.00)	18	6.54
Montefiore - Weiler	191	1	0.52	2.35	0.25	(0.00, 1.37)	125	0.54
Boutis L	**953**	**9**	**0.94**	**1.22**	**0.86**	**(0.39, 1.63)**	**726**	**0.49**
Long Island Jewish MC	38	1	2.63	3.68	0.79	(0.01, 4.40)	4	0.00
North Shore Univ Hosp	915	8	0.87	1.12	0.87	(0.37, 1.71)	722	0.49
Brady S	**320**	**6**	**1.88**	**0.99**	**2.10**	**(0.77, 4.57)**	**238**	**1.86**
Albany Med. Ctr	174	3	1.72	1.34	1.43	(0.29, 4.17)	118	1.19
Samaritan Hospital	70	0	0.00	0.66	0.00	(0.00, 8.84)	52	0.00
St. Peters Hospital	76	3	3.95	0.49	8.83 *	(1.78,25.81)	68	4.56
Brogno D	**391**	**4**	**1.02**	**0.62**	**1.83**	**(0.49, 4.68)**	**386**	**1.32**
Good Sam - Suffern	4	0	0.00	0.64	0.00	(0.00,100.0)	2	0.00
NYP-Columbia Presby.	387	4	1.03	0.62	1.85	(0.50, 4.73)	384	1.32
Calandra S	**455**	**4**	**0.88**	**0.75**	**1.29**	**(0.35, 3.31)**	**341**	**1.16**
Buffalo General Hosp	1	0	0.00	0.45	0.00	(0.00,100.0)	1	0.00
Mercy Hospital	454	4	0.88	0.75	1.29	(0.35, 3.31)	340	1.16
Caselnova R	**646**	**11**	**1.70**	**1.00**	**1.89**	**(0.94, 3.38)**	**577**	**1.47**
Brookhaven Memorial	3	0	0.00	2.54	0.00	(0.00,53.27)	.	.
Good Sam-West Islip	460	9	1.96	0.83	2.62 *	(1.19, 4.97)	419	1.82
Southside Hospital	47	0	0.00	1.92	0.00	(0.00, 4.50)	28	0.00
Winthrop-Univ. Hosp	136	2	1.47	1.22	1.34	(0.15, 4.83)	130	1.03
Castillo R	**346**	**8**	**2.31**	**2.04**	**1.26**	**(0.54, 2.47)**	**226**	**0.40**
Brookdale Univ Hosp Med Ctr	328	7	2.13	2.04	1.16	(0.46, 2.38)	226	0.40
Univ. Hosp-Brooklyn	18	1	5.56	1.97	3.12	(0.04,17.37)	.	.
Celaj S	**589**	**7**	**1.19**	**1.10**	**1.19**	**(0.48, 2.46)**	**461**	**0.66**
Bronx-Lebanon-Concourse	35	2	5.71	3.73	1.70	(0.19, 6.12)	2	0.00
Montefiore - Moses	217	3	1.38	1.08	1.42	(0.29, 4.15)	170	1.69
Montefiore - Weiler	3	0	0.00	1.81	0.00	(0.00,74.61)	.	.
St. Barnabas Hospital	334	2	0.60	0.84	0.79	(0.09, 2.85)	289	0.00
Chadow H	**295**	**2**	**0.68**	**1.58**	**0.48**	**(0.05, 1.72)**	**194**	**0.00**
Brookdale Univ Hosp Med Ctr	278	2	0.72	1.58	0.51	(0.06, 1.83)	194	0.00
Univ. Hosp-Brooklyn	17	0	0.00	1.66	0.00	(0.00,14.41)	.	.
Charney R	**343**	**4**	**1.17**	**0.91**	**1.42**	**(0.38, 3.62)**	**324**	**0.78**
NYP-Weill Cornell	264	2	0.76	0.95	0.88	(0.10, 3.18)	261	0.58
Westchester Med Ctr	36	1	2.78	0.34	9.05	(0.12,50.37)	35	4.99
White Plains Hospital	43	1	2.33	1.14	2.25	(0.03,12.54)	28	0.00

Table 6, *continued*

	All Cases						Non-Emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	CASES	RAMR
Chockalingam S	**339**	**9**	**2.65**	**1.55**	**1.90**	**(0.87, 3.60)**	**257**	**1.54**
Olean General Hosp.	4	0	0.00	0.29	0.00	(0.00,100.0)	2	0.00
Rochester General Hosp	226	4	1.77	1.28	1.54	(0.41, 3.93)	193	0.41
Unity Hospital	109	5	4.59	2.16	2.35	(0.76, 5.49)	62	4.92 *
Cohen M B	**183**	**5**	**2.73**	**1.67**	**1.81**	**(0.58, 4.22)**	**127**	**0.84**
Westchester Med Ctr	170	5	2.94	1.78	1.83	(0.59, 4.26)	116	0.85
White Plains Hospital	13	0	0.00	0.22	0.00	(0.00,100.0)	11	0.00
Conley J	**989**	**10**	**1.01**	**1.07**	**1.04**	**(0.50, 1.92)**	**805**	**0.63**
Buffalo General Hosp	896	10	1.12	1.13	1.09	(0.52, 2.01)	715	0.68
Mercy Hospital	93	0	0.00	0.50	0.00	(0.00, 8.69)	90	0.00
Coppola J	**293**	**3**	**1.02**	**0.98**	**1.16**	**(0.23, 3.39)**	**241**	**0.49**
Bellevue Hospital Ctr	140	2	1.43	1.51	1.05	(0.12, 3.79)	98	0.00
Lenox Hill Hospital	3	0	0.00	0.22	0.00	(0.00,100.0)	3	0.00
NYU Hospitals Center	150	1	0.67	0.50	1.49	(0.02, 8.27)	140	1.21
Coven D	**161**	**2**	**1.24**	**1.37**	**1.01**	**(0.11, 3.64)**	**123**	**0.84**
Lenox Hill Hospital	7	0	0.00	0.71	0.00	(0.00,81.69)	5	0.00
Mount Sinai St. Lukes	154	2	1.30	1.40	1.03	(0.12, 3.72)	118	0.86
Cuomo L	**258**	**2**	**0.78**	**1.73**	**0.50**	**(0.06, 1.80)**	**172**	**0.45**
Orange Regional Med Ctr	31	0	0.00	0.87	0.00	(0.00,15.14)	20	0.00
Westchester Med Ctr	226	2	0.88	1.85	0.53	(0.06, 1.91)	151	0.50
White Plains Hospital	1	0	0.00	0.21	0.00	(0.00,100.0)	1	0.00
Dashkoff N	**522**	**4**	**0.77**	**1.66**	**0.51**	**(0.14, 1.31)**	**342**	**0.00**
Buffalo General Hosp	371	4	1.08	1.63	0.73	(0.20, 1.87)	253	0.00
Erie County Med Ctr	150	0	0.00	1.74	0.00	(0.00, 1.56)	88	0.00
Mercy Hospital	1	0	0.00	0.20	0.00	(0.00,100.0)	1	0.00
David M	**74**	**1**	**1.35**	**0.27**	**5.59**	**(0.07,31.09)**	**74**	**3.85**
NYP-Queens	68	1	1.47	0.26	6.36	(0.08,35.41)	68	4.40
NYU Hospitals Center	6	0	0.00	0.40	0.00	(0.00,100.0)	6	0.00
Delago A	**822**	**24**	**2.92**	**1.16**	**2.80** *	**(1.79, 4.16)**	**683**	**2.22** *
Albany Med. Ctr	777	23	2.96	1.12	2.92 *	(1.85, 4.38)	663	2.31 *
Samaritan Hospital	29	0	0.00	1.16	0.00	(0.00,12.10)	12	0.00
St. Peters Hospital	16	1	6.25	2.76	2.51	(0.03,13.97)	8	0.00
Deutsch E	**737**	**2**	**0.27**	**0.74**	**0.41**	**(0.05, 1.46)**	**647**	**0.00**
Good Sam-West Islip	249	2	0.80	0.64	1.39	(0.16, 5.02)	219	0.00
Southside Hospital	273	0	0.00	0.77	0.00	(0.00, 1.94)	246	0.00
St. Catherine of Siena	208	0	0.00	0.79	0.00	(0.00, 2.48)	175	0.00
St. Francis Hospital	7	0	0.00	1.92	0.00	(0.00,30.29)	7	0.00
Dhama B	**424**	**4**	**0.94**	**0.88**	**1.18**	**(0.32, 3.03)**	**405**	**0.78**
Long Island Jewish MC	323	4	1.24	0.92	1.49	(0.40, 3.81)	311	0.98
NYP-Queens	1	0	0.00	0.06	0.00	(0.00,100.0)	1	0.00
North Shore Univ Hosp	100	0	0.00	0.77	0.00	(0.00, 5.31)	93	0.00
Doling M	**631**	**7**	**1.11**	**1.11**	**1.11**	**(0.44, 2.28)**	**484**	**0.84**
Rochester General Hosp	6	0	0.00	0.25	0.00	(0.00,100.0)	6	0.00
Strong Memorial Hosp	625	7	1.12	1.12	1.11	(0.44, 2.29)	478	0.84
Dominguez-Echevarria A	**317**	**0**	**0.00**	**0.88**	**0.00**	**(0.00, 1.46)**	**315**	**0.00**
Lenox Hill Hospital	9	0	0.00	0.43	0.00	(0.00,100.0)	9	0.00
Lutheran Medical Ctr	75	0	0.00	1.35	0.00	(0.00, 4.01)	73	0.00
Mount Sinai Hospital	93	0	0.00	0.77	0.00	(0.00, 5.68)	93	0.00
NY Methodist Hospital	14	0	0.00	0.19	0.00	(0.00,100.0)	14	0.00
NYP-Columbia Presby.	126	0	0.00	0.78	0.00	(0.00, 4.13)	126	0.00

Table 6, *continued*

	All Cases						Non-Emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	CASES	RAMR
Duvvuri S	**289**	**3**	**1.04**	**0.97**	**1.19**	**(0.24, 3.47)**	**236**	**0.40**
Mount Sinai Hospital	4	0	0.00	1.67	0.00	(0.00,60.68)	4	0.00
Staten Island Univ Hosp	285	3	1.05	0.96	1.22	(0.24, 3.56)	232	0.41
ElGharib N	**243**	**2**	**0.82**	**0.67**	**1.35**	**(0.15, 4.88)**	**219**	**1.04**
Faxton - St. Lukes	215	2	0.93	0.66	1.56	(0.17, 5.62)	196	1.21
St. Elizabeth Med Ctr	28	0	0.00	0.77	0.00	(0.00,18.77)	23	0.00
Emerson R	**236**	**3**	**1.27**	**1.28**	**1.10**	**(0.22, 3.20)**	**129**	**0.87**
Buffalo General Hosp	2	0	0.00	0.69	0.00	(0.00,100.0)	2	0.00
Erie County Med Ctr	3	0	0.00	0.31	0.00	(0.00,100.0)	2	0.00
Mercy Hospital	231	3	1.30	1.30	1.10	(0.22, 3.23)	125	0.88
Esper D	**613**	**6**	**0.98**	**1.07**	**1.01**	**(0.37, 2.20)**	**470**	**0.96**
Albany Med. Ctr	279	4	1.43	1.17	1.36	(0.36, 3.47)	192	1.39
Samaritan Hospital	20	0	0.00	1.55	0.00	(0.00,13.08)	3	0.00
St. Peters Hospital	314	2	0.64	0.95	0.74	(0.08, 2.67)	275	0.74
Farhi E	**780**	**12**	**1.54**	**0.96**	**1.78**	**(0.92, 3.11)**	**588**	**0.74**
Buffalo General Hosp	777	12	1.54	0.95	1.80	(0.93, 3.14)	586	0.75
Mercy Hospital	3	0	0.00	1.69	0.00	(0.00,79.95)	2	0.00
Farid A	**178**	**2**	**1.12**	**0.46**	**2.71**	**(0.30, 9.78)**	**162**	**0.00**
NYU Hospitals Center	46	0	0.00	0.27	0.00	(0.00,32.41)	46	0.00
Staten Island Univ Hosp	132	2	1.52	0.52	3.20	(0.36,11.54)	116	0.00
Feit F	**618**	**2**	**0.32**	**0.53**	**0.67**	**(0.08, 2.43)**	**589**	**0.54**
Bellevue Hospital Ctr	23	0	0.00	2.31	0.00	(0.00, 7.63)	12	0.00
Lenox Hill Hospital	8	0	0.00	0.27	0.00	(0.00,100.0)	8	0.00
NYU Hospitals Center	587	2	0.34	0.47	0.81	(0.09, 2.92)	569	0.56
Fernaine G	**494**	**5**	**1.01**	**1.19**	**0.94**	**(0.30, 2.20)**	**423**	**0.73**
Lenox Hill Hospital	13	0	0.00	0.34	0.00	(0.00,92.40)	13	0.00
Lutheran Medical Ctr	404	3	0.74	1.30	0.63	(0.13, 1.85)	334	0.29
Mount Sinai Hospital	77	2	2.60	0.77	3.72	(0.42,13.43)	76	3.56
Freeman J	**790**	**6**	**0.76**	**0.92**	**0.92**	**(0.34, 2.00)**	**611**	**0.89**
Long Island Jewish MC	11	0	0.00	1.53	0.00	(0.00,24.07)	11	0.00
North Shore Univ Hosp	1	0	0.00	0.54	0.00	(0.00,100.0)	1	0.00
South Nassau Com. Hosp	778	6	0.77	0.91	0.94	(0.34, 2.05)	599	0.94
Friedman G H	**309**	**2**	**0.65**	**1.13**	**0.63**	**(0.07, 2.29)**	**264**	**0.35**
Long Island Jewish MC	36	0	0.00	0.52	0.00	(0.00,21.68)	33	0.00
NYP-Queens	13	0	0.00	1.95	0.00	(0.00,16.01)	10	0.00
North Shore Univ Hosp	12	0	0.00	1.79	0.00	(0.00,18.88)	10	0.00
St. Francis Hospital	248	2	0.81	1.14	0.78	(0.09, 2.82)	211	0.44
Fuschetto D	**91**	**1**	**1.10**	**1.01**	**1.21**	**(0.02, 6.71)**	**84**	**0.85**
Long Island Jewish MC	36	0	0.00	0.87	0.00	(0.00,12.91)	33	0.00
Maimonides Medical Ctr	8	0	0.00	0.60	0.00	(0.00,84.11)	8	0.00
North Shore Univ Hosp	47	1	2.13	1.18	2.00	(0.03,11.10)	43	1.37
Galler B	**214**	**2**	**0.93**	**1.07**	**0.97**	**(0.11, 3.49)**	**206**	**0.80**
North Shore Univ Hosp	202	2	0.99	0.88	1.25	(0.14, 4.50)	197	0.93
Winthrop-Univ. Hosp	12	0	0.00	4.29	0.00	(0.00, 7.89)	9	0.00
Gambino A	**769**	**6**	**0.78**	**0.90**	**0.96**	**(0.35, 2.09)**	**680**	**0.32**
Brookhaven Memorial	12	0	0.00	0.44	0.00	(0.00,77.57)	11	0.00
Winthrop-Univ. Hosp	757	6	0.79	0.91	0.97	(0.35, 2.10)	669	0.32
Gandotra P	**232**	**1**	**0.43**	**1.15**	**0.41**	**(0.01, 2.31)**	**196**	**0.39**
Good Sam-West Islip	13	0	0.00	0.78	0.00	(0.00,39.90)	13	0.00
Southside Hospital	219	1	0.46	1.17	0.43	(0.01, 2.40)	183	0.42

Table 6, *continued*

	All Cases						Non-Emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	CASES	RAMR
Gelormini J	**599**	**7**	**1.17**	**1.42**	**0.91**	**(0.37, 1.88)**	**449**	**0.63**
Buffalo General Hosp	44	1	2.27	0.59	4.24	(0.06,23.58)	43	2.99
Mercy Hospital	553	6	1.08	1.49	0.81	(0.30, 1.76)	404	0.45
Millard Fillmore Hosp	2	0	0.00	0.25	0.00	(0.00,100.0)	2	0.00
Giambartolomei A	**147**	**2**	**1.36**	**1.38**	**1.09**	**(0.12, 3.94)**	**85**	**1.72**
Olean General Hosp.	3	0	0.00	0.70	0.00	(0.00,100.0)	1	0.00
St. Josephs Hospital	144	2	1.39	1.39	1.10	(0.12, 3.98)	84	1.73
Gosselin R	**208**	**3**	**1.44**	**1.17**	**1.36**	**(0.27, 3.98)**	**153**	**0.98**
St. Lukes Cornwall Hosp	180	3	1.67	1.25	1.48	(0.30, 4.33)	133	1.07
Vassar Bros. Med Ctr	28	0	0.00	0.69	0.00	(0.00,20.96)	20	0.00
Gotsis W	**754**	**3**	**0.40**	**1.03**	**0.43**	**(0.09, 1.25)**	**542**	**0.36**
Mount Sinai St. Lukes	6	0	0.00	0.69	0.00	(0.00,98.01)	6	0.00
Orange Regional Med Ctr	566	2	0.35	0.98	0.40	(0.04, 1.44)	421	0.46
Westchester Med Ctr	182	1	0.55	1.19	0.51	(0.01, 2.85)	115	0.00
Gowda R	**637**	**7**	**1.10**	**1.63**	**0.75**	**(0.30, 1.54)**	**522**	**0.81**
Mount Sinai Beth Israel	636	7	1.10	1.63	0.75	(0.30, 1.54)	521	0.81
Mount Sinai St. Lukes	1	0	0.00	0.91	0.00	(0.00,100.0)	1	0.00
Green S	**278**	**0**	**0.00**	**1.45**	**0.00** **	**(0.00, 1.01)**	**183**	**0.00**
Long Island Jewish MC	2	0	0.00	0.45	0.00	(0.00,100.0)	1	0.00
North Shore Univ Hosp	182	0	0.00	1.24	0.00	(0.00, 1.80)	130	0.00
Winthrop-Univ. Hosp	94	0	0.00	1.88	0.00	(0.00, 2.30)	52	0.00
Greenberg M	**596**	**6**	**1.01**	**0.92**	**1.21**	**(0.44, 2.64)**	**496**	**0.46**
Montefiore - Moses	479	5	1.04	0.82	1.40	(0.45, 3.28)	408	0.60
Montefiore - Weiler	60	0	0.00	1.51	0.00	(0.00, 4.47)	58	0.00
St. Barnabas Hospital	19	1	5.26	1.32	4.42	(0.06,24.61)	4	0.00
White Plains Hospital	38	0	0.00	1.01	0.00	(0.00,10.58)	26	0.00
Grunwald A	**400**	**2**	**0.50**	**0.85**	**0.65**	**(0.07, 2.35)**	**334**	**0.34**
Long Island Jewish MC	155	0	0.00	0.68	0.00	(0.00, 3.88)	148	0.00
NYP-Queens	70	1	1.43	1.06	1.49	(0.02, 8.28)	42	2.49
North Shore Univ Hosp	109	0	0.00	0.77	0.00	(0.00, 4.85)	98	0.00
St. Francis Hospital	66	1	1.52	1.17	1.44	(0.02, 8.00)	46	0.00
Gupta R	**136**	**1**	**0.74**	**0.96**	**0.85**	**(0.01, 4.71)**	**127**	**0.61**
Long Island Jewish MC	65	0	0.00	0.96	0.00	(0.00, 6.53)	61	0.00
NYP-Queens	71	1	1.41	0.97	1.62	(0.02, 8.99)	66	1.24
Hadid A	**270**	**4**	**1.48**	**1.41**	**1.16**	**(0.31, 2.98)**	**208**	**0.89**
St. Lukes Cornwall Hosp	266	4	1.50	1.39	1.20	(0.32, 3.06)	204	0.93
Westchester Med Ctr	4	0	0.00	2.65	0.00	(0.00,38.33)	4	0.00
Hameedi A	**1059**	**2**	**0.19**	**0.32**	**0.66**	**(0.07, 2.38)**	**1054**	**0.43**
Long Island Jewish MC	795	2	0.25	0.35	0.81	(0.09, 2.91)	790	0.53
Mount Sinai Hospital	215	0	0.00	0.24	0.00	(0.00, 7.97)	215	0.00
NYP-Queens	45	0	0.00	0.19	0.00	(0.00,48.78)	45	0.00
North Shore Univ Hosp	4	0	0.00	0.40	0.00	(0.00,100.0)	4	0.00
Haq N	**421**	**2**	**0.48**	**0.96**	**0.55**	**(0.06, 1.97)**	**290**	**0.00**
Buffalo General Hosp	4	0	0.00	0.85	0.00	(0.00,100.0)	1	0.00
Mercy Hospital	415	2	0.48	0.97	0.55	(0.06, 2.00)	288	0.00
Millard Fillmore Hosp	2	0	0.00	0.60	0.00	(0.00,100.0)	1	0.00
Hassid B	**348**	**3**	**0.86**	**0.91**	**1.05**	**(0.21, 3.07)**	**325**	**0.87**
Lenox Hill Hospital	308	2	0.65	0.79	0.90	(0.10, 3.27)	288	0.70
NYP-Columbia Presby.	35	0	0.00	1.95	0.00	(0.00, 5.95)	32	0.00
White Plains Hospital	5	1	20.00	0.64	34.62	(0.45,100.0)	5	23.59

Table 6, *continued*

	All Cases						Non-Emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	CASES	RAMR
Hegde S	**168**	**3**	**1.79**	**1.64**	**1.21**	**(0.24, 3.53)**	**131**	**0.00**
Bellevue Hospital Ctr	112	0	0.00	1.32	0.00	(0.00, 2.75)	112	0.00
Univ. Hosp-Brooklyn	56	3	5.36	2.28	2.60	(0.52, 7.59)	19	0.00
Hjemdahl-Monsen C	**381**	**3**	**0.79**	**1.07**	**0.82**	**(0.16, 2.39)**	**362**	**0.62**
NYP-Columbia Presby.	293	2	0.68	1.14	0.67	(0.07, 2.40)	281	0.52
White Plains Hospital	88	1	1.14	0.84	1.50	(0.02, 8.35)	81	1.00
Hormozi S	**998**	**11**	**1.10**	**0.99**	**1.23**	**(0.62, 2.21)**	**825**	**0.90**
Good Sam-West Islip	450	6	1.33	0.90	1.64	(0.60, 3.57)	389	1.00
North Shore Univ Hosp	12	0	0.00	1.13	0.00	(0.00,29.91)	12	0.00
South Nassau Com. Hosp	23	0	0.00	1.56	0.00	(0.00,11.34)	3	0.00
Southside Hospital	323	5	1.55	0.94	1.82	(0.59, 4.24)	269	1.32
St. Catherine of Siena	184	0	0.00	1.22	0.00	(0.00, 1.81)	147	0.00
St. Francis Hospital	2	0	0.00	0.51	0.00	(0.00,100.0)	2	0.00
Winthrop-Univ. Hosp	4	0	0.00	0.59	0.00	(0.00,100.0)	3	0.00
Hoyek W	**337**	**3**	**0.89**	**0.88**	**1.12**	**(0.23, 3.28)**	**274**	**1.21**
Lutheran Medical Ctr	71	1	1.41	2.20	0.71	(0.01, 3.95)	32	0.00
Maimonides Medical Ctr	6	0	0.00	1.19	0.00	(0.00,57.09)	6	0.00
NY Methodist Hospital	119	2	1.68	0.35	5.30	(0.60,19.13)	119	3.57
Staten Island Univ Hosp	141	0	0.00	0.65	0.00	(0.00, 4.45)	117	0.00
Iqbal S	**298**	**2**	**0.67**	**1.15**	**0.65**	**(0.07, 2.33)**	**206**	**0.00**
Bellevue Hospital Ctr	273	1	0.37	1.14	0.35	(0.00, 1.97)	194	0.00
Lenox Hill Hospital	2	0	0.00	0.48	0.00	(0.00,100.0)	2	0.00
NYU Hospitals Center	23	1	4.35	1.28	3.76	(0.05,20.92)	10	0.00
Irobunda C	**160**	**1**	**0.63**	**1.53**	**0.45**	**(0.01, 2.52)**	**132**	**0.00**
NYP-Columbia Presby.	150	1	0.67	1.58	0.47	(0.01, 2.59)	128	0.00
White Plains Hospital	10	0	0.00	0.71	0.00	(0.00,57.50)	4	0.00
Iyer V	**524**	**8**	**1.53**	**1.27**	**1.33**	**(0.57, 2.62)**	**375**	**1.07**
Buffalo General Hosp	508	8	1.57	1.22	1.43	(0.62, 2.82)	372	1.08
Erie County Med Ctr	15	0	0.00	3.13	0.00	(0.00, 8.66)	3	0.00
Millard Fillmore Hosp	1	0	0.00	0.55	0.00	(0.00,100.0)	.	.
Jafar M	**784**	**13**	**1.66**	**1.13**	**1.62**	**(0.86, 2.78)**	**585**	**0.86**
St. Lukes Cornwall Hosp	10	0	0.00	0.41	0.00	(0.00,99.73)	10	0.00
Vassar Bros. Med Ctr	774	13	1.68	1.14	1.63	(0.87, 2.79)	575	0.87
Jain S	**445**	**7**	**1.57**	**1.40**	**1.24**	**(0.50, 2.56)**	**314**	**0.33**
Jamaica Hosp Med Ctr	226	5	2.21	2.20	1.11	(0.36, 2.59)	101	0.00
Lenox Hill Hospital	219	2	0.91	0.58	1.76	(0.20, 6.35)	213	0.52
Jasty B	**125**	**1**	**0.80**	**0.46**	**1.92**	**(0.03,10.67)**	**125**	**1.14**
NY Methodist Hospital	123	1	0.81	0.47	1.93	(0.03,10.72)	123	1.14
Univ. Hosp-Brooklyn	2	0	0.00	0.12	0.00	(0.00,100.0)	2	0.00
Jauhar R	**1239**	**9**	**0.73**	**0.87**	**0.93**	**(0.42, 1.76)**	**1061**	**0.89**
Long Island Jewish MC	1201	9	0.75	0.82	1.01	(0.46, 1.92)	1061	0.89
North Shore Univ Hosp	38	0	0.00	2.39	0.00	(0.00, 4.47)	.	.
Jayasundera T	**210**	**0**	**0.00**	**0.24**	**0.00**	**(0.00, 7.97)**	**210**	**0.00**
Mount Sinai Hospital	11	0	0.00	0.25	0.00	(0.00,100.0)	11	0.00
NYU Hospitals Center	199	0	0.00	0.24	0.00	(0.00, 8.42)	199	0.00
John J	**122**	**3**	**2.46**	**1.41**	**1.93**	**(0.39, 5.65)**	**100**	**3.30**
Jamaica Hosp Med Ctr	8	0	0.00	4.54	0.00	(0.00,11.18)	1	0.00
Lenox Hill Hospital	82	3	3.66	1.48	2.73	(0.55, 7.99)	70	4.45
Mount Sinai Hospital	32	0	0.00	0.44	0.00	(0.00,28.86)	29	0.00
John S	**115**	**3**	**2.61**	**1.63**	**1.78**	**(0.36, 5.19)**	**97**	**0.65**
NY Methodist Hospital	4	0	0.00	1.02	0.00	(0.00,99.35)	4	0.00
Univ. Hosp-Brooklyn	111	3	2.70	1.65	1.82	(0.37, 5.31)	93	0.67

Table 6, *continued*

	All Cases						Non-Emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	CASES	RAMR
Johnson M	**374**	**6**	**1.60**	**1.10**	**1.61**	**(0.59, 3.51)**	**310**	**1.49**
Bronx-Lebanon-Concourse	22	1	4.55	3.22	1.57	(0.02, 8.71)	4	28.06
Montefiore - Moses	281	5	1.78	0.89	2.20	(0.71, 5.15)	252	1.38
Montefiore - Weiler	22	0	0.00	1.17	0.00	(0.00,15.84)	18	0.00
NYP-Columbia Presby.	32	0	0.00	0.74	0.00	(0.00,17.08)	32	0.00
St. Barnabas Hospital	6	0	0.00	3.55	0.00	(0.00,19.09)	.	.
White Plains Hospital	11	0	0.00	1.78	0.00	(0.00,20.77)	4	0.00
Joseph S	**126**	**1**	**0.79**	**0.93**	**0.94**	**(0.01, 5.23)**	**122**	**0.64**
Brookhaven Memorial	7	0	0.00	1.24	0.00	(0.00,46.77)	7	0.00
Long Island Jewish MC	1	0	0.00	0.37	0.00	(0.00,100.0)	1	0.00
Univ. Hosp-Stony Brook	118	1	0.85	0.92	1.02	(0.01, 5.67)	114	0.71
Kalapatapu K	**752**	**8**	**1.06**	**1.05**	**1.12**	**(0.48, 2.21)**	**712**	**0.46**
NYP-Columbia Presby.	384	6	1.56	1.26	1.38	(0.50, 2.99)	362	0.44
Orange Regional Med Ctr	250	1	0.40	0.78	0.56	(0.01, 3.14)	244	0.32
White Plains Hospital	118	1	0.85	0.95	0.99	(0.01, 5.52)	106	0.89
Kamran M	**825**	**3**	**0.36**	**0.75**	**0.53**	**(0.11, 1.56)**	**607**	**0.28**
Elmhurst Hospital Ctr	824	3	0.36	0.75	0.53	(0.11, 1.56)	606	0.28
Mount Sinai Hospital	1	0	0.00	0.39	0.00	(0.00,100.0)	1	0.00
Kandov R	**474**	**6**	**1.27**	**1.52**	**0.92**	**(0.34, 2.01)**	**346**	**0.54**
Good Sam - Suffern	19	1	5.26	3.09	1.89	(0.02,10.50)	4	0.00
Lutheran Medical Ctr	58	1	1.72	3.10	0.62	(0.01, 3.43)	35	0.00
Staten Island Univ Hosp	397	4	1.01	1.21	0.92	(0.25, 2.36)	307	0.64
Kantrowitz N	**11**	**0**	**0.00**	**0.43**	**0.00**	**(0.00,85.65)**	**11**	**0.00**
Maimonides Medical Ctr	7	0	0.00	0.23	0.00	(0.00,100.0)	7	0.00
Univ. Hosp-Brooklyn	4	0	0.00	0.78	0.00	(0.00,100.0)	4	0.00
Kaplan B	**1415**	**8**	**0.57**	**1.07**	**0.59**	**(0.25, 1.15)**	**1242**	**0.43**
Long Island Jewish MC	627	4	0.64	0.99	0.71	(0.19, 1.83)	547	0.51
North Shore Univ Hosp	788	4	0.51	1.13	0.50	(0.13, 1.27)	695	0.38
Katz S	**253**	**3**	**1.19**	**0.98**	**1.34**	**(0.27, 3.90)**	**200**	**1.25**
Long Island Jewish MC	15	1	6.67	2.98	2.48	(0.03,13.78)	3	0.00
North Shore Univ Hosp	238	2	0.84	0.86	1.09	(0.12, 3.92)	197	1.26
Kelberman M	**237**	**3**	**1.27**	**0.95**	**1.48**	**(0.30, 4.33)**	**190**	**0.49**
Faxton - St. Lukes	12	1	8.33	1.05	8.78	(0.11,48.87)	7	0.00
St. Elizabeth Med Ctr	225	2	0.89	0.94	1.05	(0.12, 3.78)	183	0.51
Kesanakurthy S	**894**	**10**	**1.12**	**0.58**	**2.15**	**(1.03, 3.96)**	**878**	**1.55** *
Lenox Hill Hospital	259	0	0.00	0.61	0.00	(0.00, 2.58)	251	0.00
Mount Sinai Hospital	425	4	0.94	0.49	2.15	(0.58, 5.50)	418	1.42
NY Methodist Hospital	2	0	0.00	0.24	0.00	(0.00,100.0)	2	0.00
NYP-Columbia Presby.	6	0	0.00	0.39	0.00	(0.00,100.0)	6	0.00
NYP-Weill Cornell	202	6	2.97	0.73	4.49 *	(1.64, 9.77)	201	3.31 *
Khan S	**198**	**4**	**2.02**	**1.13**	**1.98**	**(0.53, 5.07)**	**162**	**0.52**
St. Catherine of Siena	75	3	4.00	1.64	2.70	(0.54, 7.88)	49	0.00
St. Francis Hospital	5	0	0.00	1.06	0.00	(0.00,76.76)	5	0.00
Univ. Hosp-Stony Brook	118	1	0.85	0.81	1.16	(0.02, 6.48)	108	0.81
Khawaja H	**59**	**2**	**3.39**	**0.96**	**3.92**	**(0.44,14.16)**	**43**	**0.00**
Albany Med. Ctr	12	1	8.33	1.24	7.45	(0.10,41.47)	4	0.00
Samaritan Hospital	8	1	12.50	1.53	9.07	(0.12,50.45)	6	0.00
St. Peters Hospital	39	0	0.00	0.75	0.00	(0.00,13.82)	33	0.00

Table 6, *continued*

	All Cases						Non-Emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	CASES	RAMR
Kim M	**1125**	**7**	**0.62**	**0.97**	**0.71**	**(0.28, 1.46)**	**988**	**0.41**
Elmhurst Hospital Ctr	12	0	0.00	2.74	0.00	(0.00,12.36)	1	0.00
Lenox Hill Hospital	84	1	1.19	0.55	2.38	(0.03,13.26)	80	1.63
Long Island Jewish MC	22	1	4.55	1.81	2.78	(0.04,15.47)	4	0.00
Mount Sinai Hospital	650	1	0.15	0.74	0.23	(0.00, 1.27)	634	0.16
North Shore Univ Hosp	357	4	1.12	1.38	0.90	(0.24, 2.30)	269	0.73
Kodali S	**297**	**10**	**3.37**	**2.53**	**1.47**	**(0.71, 2.71)**	**260**	**1.22**
NYP-Columbia Presby.	296	10	3.38	2.53	1.48	(0.71, 2.72)	260	1.22
White Plains Hospital	1	0	0.00	1.28	0.00	(0.00,100.0)	.	.
Koss J	**375**	**5**	**1.33**	**0.91**	**1.61**	**(0.52, 3.77)**	**301**	**1.02**
Long Island Jewish MC	156	1	0.64	0.62	1.15	(0.01, 6.38)	142	1.32
NYP-Queens	42	2	4.76	1.98	2.67	(0.30, 9.63)	19	0.00
North Shore Univ Hosp	115	0	0.00	0.59	0.00	(0.00, 5.96)	102	0.00
St. Francis Hospital	62	2	3.23	1.54	2.32	(0.26, 8.39)	38	3.17
Kozman H	**281**	**9**	**3.20**	**1.86**	**1.90**	**(0.87, 3.61)**	**163**	**2.12**
Faxton - St. Lukes	7	1	14.29	2.02	7.82	(0.10,43.50)	2	0.00
St. Elizabeth Med Ctr	1	0	0.00	1.27	0.00	(0.00,100.0)	.	.
Univ. Hosp-Upstate	273	8	2.93	1.86	1.74	(0.75, 3.43)	161	2.12
Kreps E	**78**	**2**	**2.56**	**1.95**	**1.46**	**(0.16, 5.25)**	**60**	**1.43**
Cayuga Med Ctr Ithaca	30	1	3.33	3.08	1.20	(0.02, 6.67)	16	0.00
NYP-Columbia Presby.	48	1	2.08	1.25	1.85	(0.02,10.31)	44	1.80
Krim N	**242**	**3**	**1.24**	**2.13**	**0.64**	**(0.13, 1.88)**	**144**	**0.00**
Bronx-Lebanon-Concourse	134	2	1.49	3.29	0.50	(0.06, 1.81)	40	0.00
Montefiore - Moses	107	1	0.93	0.62	1.68	(0.02, 9.32)	103	0.00
Montefiore - Weiler	1	0	0.00	8.52	0.00	(0.00,47.70)	1	0.00
Kukar A	**268**	**0**	**0.00**	**0.67**	**0.00**	**(0.00, 2.28)**	**237**	**0.00**
Jamaica Hosp Med Ctr	11	0	0.00	1.63	0.00	(0.00,22.71)	.	.
Lenox Hill Hospital	257	0	0.00	0.62	0.00	(0.00, 2.53)	237	0.00
Lasic Z	**419**	**4**	**0.95**	**1.35**	**0.78**	**(0.21, 2.01)**	**282**	**0.60**
Jamaica Hosp Med Ctr	212	4	1.89	1.94	1.07	(0.29, 2.75)	82	1.92
Lenox Hill Hospital	207	0	0.00	0.74	0.00	(0.00, 2.65)	200	0.00
Lederman S	**221**	**1**	**0.45**	**1.16**	**0.43**	**(0.01, 2.41)**	**203**	**0.00**
North Shore Univ Hosp	3	0	0.00	0.24	0.00	(0.00,100.0)	3	0.00
Univ. Hosp-Stony Brook	218	1	0.46	1.17	0.43	(0.01, 2.41)	200	0.00
Lee A	**535**	**6**	**1.12**	**1.49**	**0.84**	**(0.31, 1.82)**	**393**	**1.07**
Long Island Jewish MC	268	4	1.49	1.41	1.17	(0.32, 3.00)	206	1.56
North Shore Univ Hosp	267	2	0.75	1.56	0.53	(0.06, 1.92)	187	0.47
Lee J	**20**	**0**	**0.00**	**0.20**	**0.00**	**(0.00,100.0)**	**20**	**0.00**
Mount Sinai Hospital	19	0	0.00	0.20	0.00	(0.00,100.0)	19	0.00
NYU Hospitals Center	1	0	0.00	0.21	0.00	(0.00,100.0)	1	0.00
Lee P C	**94**	**2**	**2.13**	**2.29**	**1.03**	**(0.12, 3.72)**	**60**	**0.00**
Lutheran Medical Ctr	73	2	2.74	2.80	1.08	(0.12, 3.91)	40	0.00
Maimonides Medical Ctr	1	0	0.00	0.14	0.00	(0.00,100.0)	1	0.00
Mount Sinai Beth Israel	10	0	0.00	0.42	0.00	(0.00,97.72)	10	0.00
Mount Sinai Hospital	10	0	0.00	0.65	0.00	(0.00,62.47)	9	0.00
Lee P J	**755**	**5**	**0.66**	**0.69**	**1.06**	**(0.34, 2.47)**	**683**	**0.40**
Good Sam-West Islip	446	3	0.67	0.56	1.34	(0.27, 3.91)	401	0.49
Southside Hospital	305	1	0.33	0.88	0.41	(0.01, 2.29)	278	0.00
St. Francis Hospital	4	1	25.00	1.52	18.22	(0.24,100.0)	4	8.81

Table 6, *continued*

	All Cases						Non-Emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	CASES	RAMR
Liou M	**227**	**0**	**0.00**	**0.37**	**0.00**	**(0.00, 4.77)**	**224**	**0.00**
Mount Sinai Beth Israel	147	0	0.00	0.39	0.00	(0.00, 7.11)	144	0.00
NYU Hospitals Center	80	0	0.00	0.35	0.00	(0.00,14.52)	80	0.00
Lituchy A	**510**	**3**	**0.59**	**1.16**	**0.56**	**(0.11, 1.64)**	**476**	**0.31**
South Nassau Com. Hosp	3	0	0.00	1.42	0.00	(0.00,95.30)	1	0.00
St. Francis Hospital	507	3	0.59	1.16	0.57	(0.11, 1.65)	475	0.31
MacIsaac H	**582**	**18**	**3.09**	**2.23**	**1.54**	**(0.91, 2.43)**	**476**	**0.78**
Faxton - St. Lukes	52	3	5.77	3.92	1.63	(0.33, 4.77)	38	0.73
St. Elizabeth Med Ctr	530	15	2.83	2.06	1.52	(0.85, 2.51)	438	0.78
Madrid A	**177**	**2**	**1.13**	**0.81**	**1.54**	**(0.17, 5.55)**	**154**	**0.70**
St. Catherine of Siena	5	0	0.00	1.04	0.00	(0.00,78.31)	.	.
St. Francis Hospital	172	2	1.16	0.81	1.59	(0.18, 5.76)	154	0.70
Malpeso J	**180**	**3**	**1.67**	**1.54**	**1.20**	**(0.24, 3.50)**	**112**	**0.94**
Olean General Hosp.	11	0	0.00	0.58	0.00	(0.00,63.23)	6	0.00
Staten Island Univ Hosp	169	3	1.78	1.60	1.23	(0.25, 3.59)	106	0.96
Mangla A	**267**	**9**	**3.37**	**1.40**	**2.67** *	**(1.22, 5.07)**	**154**	**2.46** *
Jamaica Hosp Med Ctr	170	6	3.53	1.61	2.43	(0.89, 5.29)	62	3.22
Lenox Hill Hospital	97	3	3.09	1.03	3.33	(0.67, 9.74)	92	1.99
Marchant D	**206**	**3**	**1.46**	**1.69**	**0.95**	**(0.19, 2.79)**	**124**	**1.20**
Long Island Jewish MC	33	0	0.00	2.87	0.00	(0.00, 4.29)	5	0.00
North Shore Univ Hosp	173	3	1.73	1.46	1.31	(0.26, 3.83)	119	1.26
Martinelli M	**585**	**5**	**0.85**	**0.89**	**1.06**	**(0.34, 2.47)**	**447**	**0.84**
Samaritan Hospital	12	0	0.00	0.93	0.00	(0.00,36.42)	3	0.00
St. Peters Hospital	573	5	0.87	0.89	1.08	(0.35, 2.52)	444	0.84
Masud A	**473**	**13**	**2.75**	**1.22**	**2.50** *	**(1.33, 4.28)**	**407**	**1.32**
Buffalo General Hosp	174	7	4.02	1.42	3.13 *	(1.25, 6.45)	154	2.39
Mercy Hospital	295	6	2.03	1.10	2.04	(0.74, 4.44)	249	0.70
Millard Fillmore Hosp	4	0	0.00	0.46	0.00	(0.00,100.0)	4	0.00
Mathew T C	**248**	**5**	**2.02**	**0.93**	**2.39**	**(0.77, 5.58)**	**200**	**1.99**
Faxton - St. Lukes	211	5	2.37	0.94	2.80	(0.90, 6.54)	171	2.43
St. Elizabeth Med Ctr	37	0	0.00	0.92	0.00	(0.00,11.93)	29	0.00
Menegus M	**516**	**5**	**0.97**	**1.13**	**0.95**	**(0.31, 2.22)**	**394**	**0.71**
Montefiore - Moses	299	3	1.00	1.16	0.96	(0.19, 2.81)	236	0.77
Montefiore - Weiler	205	2	0.98	1.08	1.00	(0.11, 3.62)	158	0.62
St. Barnabas Hospital	12	0	0.00	1.25	0.00	(0.00,27.01)	.	.
Meraj P	**704**	**8**	**1.14**	**1.37**	**0.92**	**(0.40, 1.82)**	**534**	**0.73**
Long Island Jewish MC	676	7	1.04	1.35	0.85	(0.34, 1.75)	531	0.74
North Shore Univ Hosp	28	1	3.57	1.67	2.36	(0.03,13.14)	3	0.00
Messinger D	**219**	**4**	**1.83**	**1.37**	**1.48**	**(0.40, 3.79)**	**203**	**1.05**
NYP-Weill Cornell	129	2	1.55	1.54	1.12	(0.13, 4.03)	125	0.72
Westchester Med Ctr	38	2	5.26	0.89	6.57	(0.74,23.70)	37	3.94
White Plains Hospital	52	0	0.00	1.30	0.00	(0.00, 6.00)	41	0.00
Miller L	**125**	**4**	**3.20**	**2.06**	**1.72**	**(0.46, 4.40)**	**85**	**0.74**
Bellevue Hospital Ctr	106	3	2.83	2.11	1.49	(0.30, 4.35)	76	0.00
NYU Hospitals Center	19	1	5.26	1.82	3.20	(0.04,17.80)	9	8.15
Morris W	**952**	**12**	**1.26**	**1.21**	**1.16**	**(0.60, 2.02)**	**775**	**1.13**
Buffalo General Hosp	915	12	1.31	1.24	1.17	(0.61, 2.05)	738	1.16
Mercy Hospital	37	0	0.00	0.41	0.00	(0.00,26.83)	37	0.00

Table 6, *continued*

	All Cases						Non-Emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	CASES	RAMR
Moses J	**1154**	**5**	**0.43**	**0.54**	**0.89**	**(0.29, 2.09)**	**1151**	**0.60**
NYP-Columbia Presby.	1107	5	0.45	0.50	1.00	(0.32, 2.34)	1104	0.66
St. Francis Hospital	47	0	0.00	1.41	0.00	(0.00, 6.15)	47	0.00
Motivala A	**195**	**0**	**0.00**	**0.83**	**0.00**	**(0.00, 2.51)**	**165**	**0.00**
NYP-Columbia Presby.	6	0	0.00	1.41	0.00	(0.00,48.09)	6	0.00
Orange Regional Med Ctr	90	0	0.00	1.13	0.00	(0.00, 3.99)	62	0.00
Staten Island Univ Hosp	99	0	0.00	0.52	0.00	(0.00, 7.88)	97	0.00
Nassif R	**127**	**1**	**0.79**	**0.85**	**1.03**	**(0.01, 5.72)**	**106**	**0.00**
Faxton - St. Lukes	116	1	0.86	0.84	1.13	(0.01, 6.31)	97	0.00
St. Elizabeth Med Ctr	11	0	0.00	0.92	0.00	(0.00,40.10)	9	0.00
Ong L S	**1520**	**23**	**1.51**	**1.01**	**1.66**	**(1.05, 2.50)**	**1286**	**0.84**
Rochester General Hosp	1480	22	1.49	0.99	1.67	(1.04, 2.52)	1270	0.86
Unity Hospital	40	1	2.50	1.68	1.65	(0.02, 9.15)	16	0.00
Ong L Y	**293**	**1**	**0.34**	**0.69**	**0.55**	**(0.01, 3.05)**	**252**	**0.49**
Huntington Hospital	138	0	0.00	0.52	0.00	(0.00, 5.65)	115	0.00
Long Island Jewish MC	2	0	0.00	2.58	0.00	(0.00,78.60)	1	0.00
North Shore Univ Hosp	151	1	0.66	0.83	0.88	(0.01, 4.92)	134	0.74
Southside Hospital	2	0	0.00	0.08	0.00	(0.00,100.0)	2	0.00
Palta S	**72**	**0**	**0.00**	**0.18**	**0.00**	**(0.00,31.51)**	**72**	**0.00**
Maimonides Medical Ctr	1	0	0.00	0.14	0.00	(0.00,100.0)	1	0.00
NY Methodist Hospital	71	0	0.00	0.18	0.00	(0.00,31.85)	71	0.00
Papadakos S	**517**	**4**	**0.77**	**0.93**	**0.92**	**(0.25, 2.35)**	**459**	**0.67**
Lenox Hill Hospital	58	0	0.00	0.49	0.00	(0.00,14.39)	57	0.00
NYP-Queens	161	2	1.24	1.95	0.71	(0.08, 2.55)	104	0.50
NYU Hospitals Center	134	2	1.49	0.46	3.58	(0.40,12.93)	134	2.17
North Shore Univ Hosp	164	0	0.00	0.48	0.00	(0.00, 5.14)	164	0.00
Papaleo R	**497**	**3**	**0.60**	**0.65**	**1.03**	**(0.21, 3.00)**	**362**	**1.32**
Albany Med. Ctr	60	0	0.00	1.36	0.00	(0.00, 4.97)	30	0.00
Glens Falls Hospital	22	0	0.00	1.59	0.00	(0.00,11.59)	1	0.00
Samaritan Hospital	406	3	0.74	0.48	1.70	(0.34, 4.97)	329	1.47
St. Peters Hospital	9	0	0.00	1.23	0.00	(0.00,36.77)	2	0.00
Patcha R	**241**	**1**	**0.41**	**0.79**	**0.58**	**(0.01, 3.22)**	**191**	**0.00**
Huntington Hospital	204	1	0.49	0.79	0.69	(0.01, 3.84)	156	0.00
North Shore Univ Hosp	22	0	0.00	0.71	0.00	(0.00,25.90)	21	0.00
St. Francis Hospital	15	0	0.00	1.01	0.00	(0.00,26.88)	14	0.00
Patel A	**197**	**2**	**1.02**	**1.33**	**0.85**	**(0.10, 3.06)**	**139**	**1.01**
Faxton - St. Lukes	17	0	0.00	1.48	0.00	(0.00,16.15)	9	0.00
St. Elizabeth Med Ctr	180	2	1.11	1.31	0.94	(0.11, 3.39)	130	1.09
Patel D	**37**	**1**	**2.70**	**1.64**	**1.83**	**(0.02,10.18)**	**29**	**4.83**
Brookhaven Memorial	7	0	0.00	0.37	0.00	(0.00,100.0)	6	0.00
Univ. Hosp-Stony Brook	30	1	3.33	1.93	1.91	(0.02,10.64)	23	5.54
Patel N	**309**	**3**	**0.97**	**0.88**	**1.22**	**(0.25, 3.57)**	**256**	**0.36**
St. Catherine of Siena	25	0	0.00	1.09	0.00	(0.00,14.90)	18	0.00
Univ. Hosp-Stony Brook	284	3	1.06	0.86	1.36	(0.27, 3.97)	238	0.39
Patel R B	**419**	**12**	**2.86**	**0.99**	**3.19** *	**(1.65, 5.57)**	**308**	**2.79** *
Brookhaven Memorial	8	0	0.00	1.40	0.00	(0.00,36.27)	.	.
Good Sam-West Islip	127	4	3.15	1.08	3.23	(0.87, 8.28)	84	1.85
Southside Hospital	145	5	3.45	1.09	3.52 *	(1.13, 8.21)	110	3.52 *
St. Catherine of Siena	139	3	2.16	0.80	2.99	(0.60, 8.72)	114	2.22

Table 6, *continued*

	All Cases						Non-Emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	CASES	RAMR
Patel T	**867**	**17**	**1.96**	**1.24**	**1.75**	**(1.02, 2.81)**	**685**	**1.15**
Rochester General Hosp	183	3	1.64	0.99	1.84	(0.37, 5.37)	171	1.07
Unity Hospital	684	14	2.05	1.31	1.74	(0.95, 2.91)	514	1.18
Patel V	**189**	**3**	**1.59**	**0.64**	**2.74**	**(0.55, 8.01)**	**184**	**2.14**
Mount Sinai Hospital	25	0	0.00	0.24	0.00	(0.00,68.04)	25	0.00
NY Methodist Hospital	164	3	1.83	0.70	2.88	(0.58, 8.43)	159	2.29
Perry-Bottinger L	**38**	**0**	**0.00**	**0.40**	**0.00**	**(0.00,26.84)**	**38**	**0.00**
NYP-Columbia Presby.	36	0	0.00	0.37	0.00	(0.00,30.44)	36	0.00
NYP-Queens	2	0	0.00	0.90	0.00	(0.00,100.0)	2	0.00
Petrossian G	**851**	**3**	**0.35**	**1.00**	**0.39**	**(0.08, 1.14)**	**830**	**0.28**
South Nassau Com. Hosp	39	1	2.56	0.41	6.95	(0.09,38.67)	38	4.83
St. Francis Hospital	812	2	0.25	1.03	0.27 **	(0.03, 0.96)	792	0.19 **
Phadke K	**737**	**15**	**2.04**	**1.16**	**1.94**	**(1.08, 3.20)**	**474**	**0.56**
Buffalo General Hosp	673	15	2.23	1.23	2.01 *	(1.13, 3.32)	420	0.61
Mercy Hospital	23	0	0.00	0.17	0.00	(0.00,100.0)	22	0.00
Millard Fillmore Hosp	41	0	0.00	0.69	0.00	(0.00,14.41)	32	0.00
Polena S	**381**	**5**	**1.31**	**0.72**	**2.01**	**(0.65, 4.70)**	**328**	**1.40**
Huntington Hospital	344	5	1.45	0.71	2.27	(0.73, 5.30)	291	1.68
Long Island Jewish MC	19	0	0.00	0.71	0.00	(0.00,30.05)	19	0.00
North Shore Univ Hosp	18	0	0.00	0.98	0.00	(0.00,23.02)	18	0.00
Poumpouridis K	**105**	**0**	**0.00**	**0.59**	**0.00**	**(0.00, 6.60)**	**90**	**0.00**
Lenox Hill Hospital	15	0	0.00	0.62	0.00	(0.00,43.44)	9	0.00
Long Island Jewish MC	28	0	0.00	0.52	0.00	(0.00,27.67)	25	0.00
North Shore Univ Hosp	62	0	0.00	0.60	0.00	(0.00,10.83)	56	0.00
Puma A	**284**	**2**	**0.70**	**0.43**	**1.80**	**(0.20, 6.48)**	**284**	**1.09**
Lenox Hill Hospital	89	0	0.00	0.45	0.00	(0.00,10.05)	89	0.00
Mount Sinai Beth Israel	114	2	1.75	0.43	4.54	(0.51,16.39)	114	2.77
NYP-Columbia Presby.	81	0	0.00	0.42	0.00	(0.00,11.90)	81	0.00
Punukollu G	**285**	**3**	**1.05**	**0.54**	**2.14**	**(0.43, 6.26)**	**279**	**1.38**
Lenox Hill Hospital	76	2	2.63	0.56	5.22	(0.59,18.85)	76	3.12
Mount Sinai Beth Israel	209	1	0.48	0.54	0.98	(0.01, 5.47)	203	0.65
Pyo R	**418**	**10**	**2.39**	**1.56**	**1.70**	**(0.81, 3.13)**	**331**	**0.93**
Elmhurst Hospital Ctr	57	5	8.77	4.78	2.03	(0.65, 4.74)	4	0.00
Good Sam - Suffern	84	2	2.38	1.26	2.10	(0.24, 7.58)	75	1.65
Montefiore - Moses	75	0	0.00	0.97	0.00	(0.00, 5.58)	65	0.00
Mount Sinai Hospital	202	3	1.49	0.99	1.65	(0.33, 4.84)	187	0.89
Raza J	**501**	**7**	**1.40**	**0.82**	**1.89**	**(0.76, 3.90)**	**374**	**0.99**
Jamaica Hosp Med Ctr	212	5	2.36	1.24	2.11	(0.68, 4.92)	93	1.14
Lenox Hill Hospital	289	2	0.69	0.51	1.51	(0.17, 5.44)	281	0.92
Rehman A	**445**	**5**	**1.12**	**1.03**	**1.21**	**(0.39, 2.81)**	**294**	**1.35**
South Nassau Com. Hosp	438	5	1.14	0.98	1.29	(0.42, 3.01)	287	1.58
St. Francis Hospital	7	0	0.00	4.35	0.00	(0.00,13.34)	7	0.00
Rehman S	**156**	**2**	**1.28**	**0.89**	**1.60**	**(0.18, 5.78)**	**150**	**1.24**
Long Island Jewish MC	62	0	0.00	0.72	0.00	(0.00, 9.13)	60	0.00
NY Methodist Hospital	32	2	6.25	1.78	3.89	(0.44,14.04)	31	2.84
South Nassau Com. Hosp	62	0	0.00	0.59	0.00	(0.00,11.03)	59	0.00
Reich D	**632**	**3**	**0.47**	**0.89**	**0.59**	**(0.12, 1.72)**	**548**	**0.00**
Good Sam-West Islip	322	0	0.00	0.62	0.00	(0.00, 2.04)	275	0.00
Southside Hospital	296	3	1.01	1.21	0.92	(0.19, 2.70)	259	0.00
St. Francis Hospital	14	0	0.00	0.49	0.00	(0.00,59.47)	14	0.00

Table 6, *continued*

	All Cases						Non-Emergency	
	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR	CASES	RAMR
Rentrop K	**74**	**0**	**0.00**	**0.23**	**0.00**	**(0.00,23.57)**	**74**	**0.00**
Lenox Hill Hospital	2	0	0.00	0.18	0.00	(0.00,100.0)	2	0.00
NYP-Columbia Presby.	72	0	0.00	0.23	0.00	(0.00,24.08)	72	0.00
Roccario E	**550**	**8**	**1.45**	**1.40**	**1.15**	**(0.50, 2.27)**	**390**	**0.76**
Samaritan Hospital	12	2	16.67	3.61	5.11	(0.57,18.46)	3	0.00
St. Peters Hospital	538	6	1.12	1.35	0.92	(0.33, 2.00)	387	0.76
Rosenband M	**235**	**1**	**0.43**	**1.14**	**0.41**	**(0.01, 2.30)**	**202**	**0.38**
St. Catherine of Siena	107	0	0.00	0.98	0.00	(0.00, 3.86)	82	0.00
St. Francis Hospital	3	0	0.00	0.54	0.00	(0.00,100.0)	3	0.00
Univ. Hosp-Stony Brook	125	1	0.80	1.28	0.69	(0.01, 3.84)	117	0.60
Rosero H	**427**	**6**	**1.41**	**0.92**	**1.68**	**(0.61, 3.66)**	**361**	**0.78**
Mount Sinai Beth Israel	426	6	1.41	0.93	1.68	(0.61, 3.66)	360	0.78
NY Methodist Hospital	1	0	0.00	0.10	0.00	(0.00,100.0)	1	0.00
Royzman R	**292**	**8**	**2.74**	**2.22**	**1.37**	**(0.59, 2.70)**	**169**	**0.92**
Good Sam - Suffern	14	3	21.43	6.77	3.50	(0.70,10.24)	2	0.00
Lutheran Medical Ctr	54	0	0.00	3.69	0.00	(0.00, 2.04)	33	0.00
Staten Island Univ Hosp	224	5	2.23	1.58	1.57	(0.51, 3.66)	134	1.12
Rutkin B	**271**	**5**	**1.85**	**1.47**	**1.39**	**(0.45, 3.25)**	**184**	**1.23**
Long Island Jewish MC	22	0	0.00	1.37	0.00	(0.00,13.44)	4	0.00
North Shore Univ Hosp	249	5	2.01	1.48	1.51	(0.49, 3.52)	180	1.24
Sassower M	**746**	**13**	**1.74**	**1.30**	**1.49**	**(0.79, 2.55)**	**633**	**0.93**
Faxton - St. Lukes	54	2	3.70	2.75	1.49	(0.17, 5.39)	34	0.00
St. Elizabeth Med Ctr	692	11	1.59	1.18	1.49	(0.74, 2.66)	599	1.00
Schwartz R	**928**	**7**	**0.75**	**1.39**	**0.60**	**(0.24, 1.24)**	**805**	**0.43**
Brookhaven Memorial	16	0	0.00	1.23	0.00	(0.00,20.71)	12	0.00
North Shore Univ Hosp	4	0	0.00	0.26	0.00	(0.00,100.0)	4	0.00
Winthrop-Univ. Hosp	908	7	0.77	1.40	0.61	(0.25, 1.26)	789	0.44
Sehhat K	**130**	**0**	**0.00**	**0.38**	**0.00**	**(0.00, 8.27)**	**128**	**0.00**
Montefiore - Moses	70	0	0.00	0.38	0.00	(0.00,15.11)	68	0.00
NYP-Columbia Presby.	60	0	0.00	0.37	0.00	(0.00,18.28)	60	0.00
Seldon M	**15**	**0**	**0.00**	**0.27**	**0.00**	**(0.00,100.0)**	**15**	**0.00**
Lenox Hill Hospital	8	0	0.00	0.32	0.00	(0.00,100.0)	8	0.00
NYU Hospitals Center	7	0	0.00	0.21	0.00	(0.00,100.0)	7	0.00
Serrano-Gomez C	**123**	**2**	**1.63**	**1.43**	**1.26**	**(0.14, 4.54)**	**92**	**1.95**
Bellevue Hospital Ctr	22	0	0.00	4.11	0.00	(0.00, 4.49)	1	0.00
Mount Sinai St. Lukes	1	0	0.00	0.21	0.00	(0.00,100.0)	1	0.00
NYU Hospitals Center	100	2	2.00	0.86	2.59	(0.29, 9.35)	90	2.01
Shah A	**505**	**3**	**0.59**	**0.52**	**1.27**	**(0.26, 3.72)**	**496**	**0.96**
Mount Sinai Hospital	34	1	2.94	1.05	3.11	(0.04,17.31)	33	2.51
NY Methodist Hospital	430	2	0.47	0.50	1.03	(0.12, 3.72)	422	0.77
NYU Hospitals Center	41	0	0.00	0.26	0.00	(0.00,38.44)	41	0.00
Shah A R	**481**	**11**	**2.29**	**1.57**	**1.62**	**(0.81, 2.89)**	**389**	**1.34**
Good Sam - Suffern	480	11	2.29	1.56	1.62	(0.81, 2.90)	388	1.34
Mount Sinai Hospital	1	0	0.00	2.08	0.00	(0.00,100.0)	1	0.00
Shah B	**127**	**1**	**0.79**	**1.71**	**0.51**	**(0.01, 2.84)**	**86**	**0.00**
Bellevue Hospital Ctr	114	1	0.88	1.70	0.57	(0.01, 3.17)	79	0.00
NYU Hospitals Center	13	0	0.00	1.74	0.00	(0.00,18.00)	7	0.00
Shah N	**264**	**5**	**1.89**	**2.06**	**1.02**	**(0.33, 2.37)**	**207**	**0.56**
St. Lukes Cornwall Hosp	257	5	1.95	2.11	1.02	(0.33, 2.39)	200	0.57
Vassar Bros. Med Ctr	7	0	0.00	0.41	0.00	(0.00,100.0)	7	0.00

Table 6, *continued*

	Cases	Deaths	All Cases OMR	EMR	RAMR	95% CI for RAMR	Non-Emergency CASES	RAMR
Shapira S	**286**	**6**	**2.10**	**1.31**	**1.78**	**(0.65, 3.87)**	**220**	**0.41**
Good Sam - Suffern	2	0	0.00	0.28	0.00	(0.00,100.0)	2	0.00
Orange Regional Med Ctr	284	6	2.11	1.31	1.78	(0.65, 3.87)	218	0.41
Sherman W	**122**	**3**	**2.46**	**1.91**	**1.42**	**(0.29, 4.16)**	**89**	**0.00**
M I Bassett Hospital	6	1	16.67	2.06	8.98	(0.12,49.94)	2	0.00
NYP-Columbia Presby.	112	2	1.79	1.91	1.03	(0.12, 3.73)	84	0.00
White Plains Hospital	4	0	0.00	1.69	0.00	(0.00,60.13)	3	0.00
Shih A T	**186**	**3**	**1.61**	**1.33**	**1.35**	**(0.27, 3.93)**	**131**	**0.62**
Montefiore - Moses	130	2	1.54	1.30	1.31	(0.15, 4.74)	80	0.00
Mount Sinai Hospital	1	0	0.00	0.15	0.00	(0.00,100.0)	1	0.00
NYP-Columbia Presby.	3	1	33.33	1.52	24.28	(0.32,100.0)	3	15.87
Westchester Med Ctr	52	0	0.00	1.41	0.00	(0.00, 5.53)	47	0.00
Shohat E	**45**	**0**	**0.00**	**0.27**	**0.00**	**(0.00,33.65)**	**44**	**0.00**
Maimonides Medical Ctr	9	0	0.00	0.27	0.00	(0.00,100.0)	9	0.00
NY Methodist Hospital	32	0	0.00	0.29	0.00	(0.00,44.19)	31	0.00
Univ. Hosp-Brooklyn	4	0	0.00	0.11	0.00	(0.00,100.0)	4	0.00
Silverman G	**375**	**6**	**1.60**	**1.04**	**1.70**	**(0.62, 3.71)**	**220**	**1.45**
Mount Sinai St. Lukes	1	0	0.00	1.22	0.00	(0.00,100.0)	.	.
Orange Regional Med Ctr	289	4	1.38	0.99	1.54	(0.42, 3.95)	173	1.24
Westchester Med Ctr	85	2	2.35	1.20	2.17	(0.24, 7.83)	47	2.18
Singer G	**396**	**4**	**1.01**	**0.81**	**1.39**	**(0.37, 3.55)**	**364**	**0.58**
Rochester General Hosp	351	1	0.28	0.64	0.50	(0.01, 2.76)	332	0.35
Unity Hospital	45	3	6.67	2.14	3.45	(0.69,10.07)	32	1.54
Singh V	**795**	**3**	**0.38**	**0.52**	**0.80**	**(0.16, 2.34)**	**772**	**0.46**
Lenox Hill Hospital	570	3	0.53	0.52	1.12	(0.23, 3.28)	556	0.61
Long Island Jewish MC	1	0	0.00	0.84	0.00	(0.00,100.0)	.	.
NYP-Columbia Presby.	224	0	0.00	0.53	0.00	(0.00, 3.42)	216	0.00
Slater J	**439**	**8**	**1.82**	**0.69**	**2.93** *	**(1.26, 5.78)**	**398**	**1.89**
Bellevue Hospital Ctr	12	1	8.33	4.86	1.90	(0.02,10.57)	2	0.00
Lenox Hill Hospital	10	0	0.00	0.39	0.00	(0.00,100.0)	10	0.00
Mount Sinai St. Lukes	2	0	0.00	0.16	0.00	(0.00,100.0)	2	0.00
NYU Hospitals Center	415	7	1.69	0.58	3.23 *	(1.30, 6.66)	384	1.94
Slotwiner A	**159**	**0**	**0.00**	**1.65**	**0.00**	**(0.00, 1.54)**	**134**	**0.00**
NY Methodist Hospital	2	0	0.00	0.51	0.00	(0.00,100.0)	2	0.00
NYP-Weill Cornell	157	0	0.00	1.67	0.00	(0.00, 1.55)	132	0.00
Slovut D	**200**	**2**	**1.00**	**1.91**	**0.58**	**(0.07, 2.09)**	**109**	**0.00**
Montefiore - Moses	1	0	0.00	0.10	0.00	(0.00,100.0)	1	0.00
Montefiore - Weiler	199	2	1.01	1.92	0.58	(0.07, 2.09)	108	0.00
Soffer D	**104**	**0**	**0.00**	**0.59**	**0.00**	**(0.00, 6.58)**	**103**	**0.00**
Lenox Hill Hospital	1	0	0.00	0.14	0.00	(0.00,100.0)	1	0.00
Mount Sinai Hospital	103	0	0.00	0.60	0.00	(0.00, 6.59)	102	0.00
Srinivas V	**345**	**5**	**1.45**	**1.27**	**1.27**	**(0.41, 2.96)**	**290**	**0.58**
Montefiore - Moses	46	0	0.00	0.81	0.00	(0.00,10.93)	41	0.00
Montefiore - Weiler	297	5	1.68	1.35	1.39	(0.45, 3.23)	247	0.68
St. Barnabas Hospital	2	0	0.00	0.17	0.00	(0.00,100.0)	2	0.00
Srivastava S	**82**	**0**	**0.00**	**0.31**	**0.00**	**(0.00,15.76)**	**82**	**0.00**
NY Methodist Hospital	7	0	0.00	0.79	0.00	(0.00,73.56)	7	0.00
NYP-Weill Cornell	7	0	0.00	0.32	0.00	(0.00,100.0)	7	0.00
NYU Hospitals Center	68	0	0.00	0.27	0.00	(0.00,22.53)	68	0.00
Staniloae C	**137**	**3**	**2.19**	**0.66**	**3.66**	**(0.74,10.71)**	**121**	**1.27**
Bellevue Hospital Ctr	16	1	6.25	1.93	3.59	(0.05,19.97)	4	0.00
Lenox Hill Hospital	2	0	0.00	0.12	0.00	(0.00,100.0)	2	0.00
NYU Hospitals Center	119	2	1.68	0.50	3.72	(0.42,13.42)	115	1.36

Table 6, *continued*

	Cases	Deaths	All Cases OMR	All Cases EMR	All Cases RAMR	95% CI for RAMR	Non-Emergency CASES	Non-Emergency RAMR
Stathopoulos I	**321**	**1**	**0.31**	**0.58**	**0.60**	**(0.01, 3.32)**	**318**	**0.35**
Lenox Hill Hospital	67	0	0.00	0.72	0.00	(0.00, 8.44)	66	0.00
NYP-Columbia Presby.	254	1	0.39	0.54	0.81	(0.01, 4.48)	252	0.50
Stefek P	**257**	**2**	**0.78**	**1.22**	**0.70**	**(0.08, 2.54)**	**153**	**1.42**
Cayuga Med Ctr Ithaca	243	2	0.82	1.28	0.71	(0.08, 2.57)	139	1.48
Rochester General Hosp	14	0	0.00	0.27	0.00	(0.00,100.0)	14	0.00
Strizik B	**348**	**1**	**0.29**	**1.08**	**0.29**	**(0.00, 1.63)**	**283**	**0.35**
Huntington Hospital	171	0	0.00	1.28	0.00	(0.00, 1.85)	120	0.00
Long Island Jewish MC	3	0	0.00	0.70	0.00	(0.00,100.0)	2	0.00
North Shore Univ Hosp	174	1	0.57	0.89	0.71	(0.01, 3.96)	161	0.64
Stuver T	**1118**	**14**	**1.25**	**0.98**	**1.42**	**(0.78, 2.38)**	**820**	**1.10**
Cayuga Med Ctr Ithaca	2	0	0.00	3.74	0.00	(0.00,54.37)	.	.
Rochester General Hosp	1116	14	1.25	0.97	1.43	(0.78, 2.40)	820	1.10
Suleman J	**618**	**0**	**0.00**	**0.36**	**0.00**	**(0.00, 1.82)**	**616**	**0.00**
Jamaica Hosp Med Ctr	3	0	0.00	0.20	0.00	(0.00,100.0)	3	0.00
Mount Sinai Hospital	615	0	0.00	0.36	0.00	(0.00, 1.82)	613	0.00
Sullivan P	**199**	**4**	**2.01**	**1.06**	**2.10**	**(0.57, 5.38)**	**143**	**0.83**
Buffalo General Hosp	143	4	2.80	1.23	2.51	(0.68, 6.43)	98	0.99
Mercy Hospital	56	0	0.00	0.62	0.00	(0.00,11.74)	45	0.00
Swamy S	**71**	**0**	**0.00**	**0.39**	**0.00**	**(0.00,14.59)**	**70**	**0.00**
Richmond Univ Med Cntr	1	0	0.00	0.26	0.00	(0.00,100.0)	1	0.00
Staten Island Univ Hosp	70	0	0.00	0.39	0.00	(0.00,14.73)	69	0.00
Timmermans R	**276**	**4**	**1.45**	**1.80**	**0.89**	**(0.24, 2.28)**	**160**	**0.45**
Orange Regional Med Ctr	2	0	0.00	1.39	0.00	(0.00,100.0)	2	0.00
Westchester Med Ctr	274	4	1.46	1.80	0.90	(0.24, 2.30)	158	0.46
Tsiamtsiouris T	**318**	**3**	**0.94**	**1.31**	**0.80**	**(0.16, 2.33)**	**264**	**0.72**
St. Catherine of Siena	6	0	0.00	1.51	0.00	(0.00,44.90)	.	.
St. Francis Hospital	312	3	0.96	1.31	0.82	(0.16, 2.38)	264	0.72
Varma P	**263**	**3**	**1.14**	**1.74**	**0.72**	**(0.15, 2.12)**	**191**	**0.00**
Faxton - St. Lukes	34	0	0.00	1.46	0.00	(0.00, 8.18)	21	0.00
St. Elizabeth Med Ctr	229	3	1.31	1.78	0.81	(0.16, 2.37)	170	0.00
Weinstein J	**387**	**3**	**0.78**	**1.13**	**0.76**	**(0.15, 2.21)**	**336**	**0.50**
St. Catherine of Siena	63	1	1.59	1.88	0.94	(0.01, 5.20)	36	0.00
St. Francis Hospital	12	0	0.00	1.95	0.00	(0.00,17.35)	12	0.00
Univ. Hosp-Stony Brook	312	2	0.64	0.95	0.74	(0.08, 2.69)	288	0.57
Winston B	**225**	**6**	**2.67**	**1.29**	**2.29**	**(0.84, 4.99)**	**164**	**1.06**
Albany Med. Ctr	22	1	4.55	2.56	1.97	(0.03,10.95)	5	0.00
Samaritan Hospital	19	0	0.00	1.73	0.00	(0.00,12.34)	4	0.00
St. Peters Hospital	184	5	2.72	1.09	2.76	(0.89, 6.44)	155	1.11
Witkes D	**89**	**0**	**0.00**	**0.63**	**0.00**	**(0.00, 7.23)**	**88**	**0.00**
North Shore Univ Hosp	71	0	0.00	0.52	0.00	(0.00,10.96)	70	0.00
Winthrop-Univ. Hosp	18	0	0.00	1.06	0.00	(0.00,21.26)	18	0.00
Yadav S	**479**	**7**	**1.46**	**0.64**	**2.55**	**(1.02, 5.25)**	**451**	**1.69**
Long Island Jewish MC	53	0	0.00	0.37	0.00	(0.00,20.98)	51	0.00
Mount Sinai Hospital	44	0	0.00	0.20	0.00	(0.00,45.86)	44	0.00
NY Methodist Hospital	270	3	1.11	0.28	4.42	(0.89,12.91)	269	2.89
NYU Hospitals Center	3	0	0.00	0.15	0.00	(0.00,100.0)	3	0.00
St. Francis Hospital	109	4	3.67	1.84	2.21	(0.59, 5.66)	84	1.31
Yarkoni A	**364**	**6**	**1.65**	**1.14**	**1.60**	**(0.58, 3.47)**	**274**	**1.24**
Arnot Ogden Med Ctr	335	4	1.19	1.14	1.16	(0.31, 2.96)	250	0.95
UHS-Wilson Med Ctr	29	2	6.90	1.17	6.54	(0.73,23.62)	24	3.21

Table 6, *continued*

	All Cases						Non-Emergency	
	Cases	**Deaths**	**OMR**	**EMR**	**RAMR**	**95% CI for RAMR**	**CASES**	**RAMR**
Yatskar L	**526**	**6**	**1.14**	**1.19**	**1.06**	**(0.39, 2.31)**	**390**	**0.45**
Elmhurst Hospital Ctr	496	6	1.21	1.25	1.07	(0.39, 2.34)	361	0.47
NYU Hospitals Center	30	0	0.00	0.26	0.00	(0.00,51.96)	29	0.00
Zisfein J	**387**	**1**	**0.26**	**0.72**	**0.40**	**(0.01, 2.22)**	**351**	**0.33**
South Nassau Com. Hosp	303	0	0.00	0.70	0.00	(0.00, 1.91)	267	0.00
St. Francis Hospital	17	0	0.00	0.92	0.00	(0.00,25.97)	17	0.00
Winthrop-Univ. Hosp	67	1	1.49	0.72	2.28	(0.03,12.69)	67	1.34

* 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 (2014)

Based on Documentation in Medical Record

Patient Risk Factor	Definitions
Demographic	
Body Surface Area	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: $BSA\ (m^2) = 0.0003207 \times H^{0.3} \times W^{(0.7285 - (0.0188 \times LOG))}$ Where H is Height in centimeters and W is Weight in grams.
Body Mass Index	Body Mass Index (BMI) is a measure of body fat 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. The formula for BMI is: $BMI = Weight/Height^2$ where Height is height in meters (m) and Weight is weight in kilograms (kg).
Hemodynamic State	Determined just prior to the intervention.
Unstable	Patient requires pharmacologic or mechanical support to maintain blood pressure or cardiac output.
Shock	Acute hypotension (systolic blood pressure < 80 mmHg) or low cardiac index (< 2.0 liters/min/m2), despite pharmacologic or mechanical support. All cases with this risk factor are excluded from this report.
Comorbidities	
Cerebrovascular Disease	The patient has cerebrovascular disease, documented by any one of the following: • CVA (symptoms > 24 hrs after onset, presumed to be from vascular etiology); • TIA (recovery within 24 hrs); • Non-invasive carotid test with > 79% diameter occlusion.; or • Prior carotid surgery or stenting or prior cerebral aneurysm clipping or coil.
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: • 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.

Comorbidities, *continued*	
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: • 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: • 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 with Insulin therapy	The patient has a diagnosis of Diabetes Mellitus and is taking insulin prior to admission.
Diabetes requiring medication	The patient has a diagnosis of Diabetes Mellitus and is taking either Insulin or Oral medication.
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	Pre-PCI creatinine during the hospital admission was within the indicated range. Note: For December 2011 discharges, creatinine values were for the highest pre-PCI value in the admission. For 2012-2013, the pre-PCI value closest to the procedure is reported.
Renal Failure, Dialysis	The patient is on chronic peritoneal or hemodialysis.

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.
Previous PCI	The patient has had one or more previous PCIs.
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.

2014 Hypoxic Brain Injury	
Criteria for Hypoxic 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
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.

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

2014 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 2014 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 "Peripheral Vascular Disease" is 1.867. This means that a patient with Peripheral Vascular Disease is approximately 1.867 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 Peripheral Vascular Disease who has the same other significant risk factors. The risk factors Female, Hemodynamically Unstable, Congestive Heart Failure (Current), Left Main Disease and Three Vessels Diseased are also interpreted in the same way.

Age is represented by both a linear and a quadratic (squared) term. This represents the fact that as patients age, their risk of 30-day mortality increases at an increasing rate. 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. Therefore these odds ratios are not contained in the table.

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 6.723 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 nine ranges (with ST Elevation present, occurring less than six hours prior, six to eleven hours prior, twelve to twenty-three hours prior; without ST Elevation, less than six hours prior, six to eleven hours prior, twelve to twenty-three hours prior; with or without ST Elevation, one to seven days prior, eight to fourteen days prior; and no MI within fourteen 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 fourteen days prior to PCI.

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

Renal Failure is subdivided into four groups. Two categories represent patients with various levels of elevated creatinine, but no dialysis. The third category includes patients with renal failure on dialysis. These groups are relative to patients who are not on dialysis and had no pre-PCI creatinine values greater than 1.5 mg/dL.

Appendix 1

Multivariate Risk-Factor Equation for In-Hospital/30-Day Deaths During or Following PCI, 2014 (All Cases)

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	Odds Ratio
Demographic				
Age	--	-0.0418	0.2103	--
Age squared	--	0.0620	0.0096	--
Female	29.58	0.5024	<.0001	1.653
Hemodynamic Status				
Unstable	0.46	2.0753	<.0001	7.967
Ventricular Function				
Ejection Fraction				
Ejection Fraction 50% or greater	71.46	– Reference –		1.000
Ejection Fraction less than 20%	0.81	1.9055	<.0001	6.723
Ejection Fraction 20-29%	4.09	1.1912	<.0001	3.291
Ejection Fraction 30-39%	7.90	0.8812	<.0001	2.414
Ejection Fraction 40-49%	15.74	0.3872	0.0022	1.473
Pre-Procedural MI				
No MI within 14 Days	65.61	– Reference –		1.000
MI with ST Elevation				
MI < 6 hrs	10.08	2.0382	<.0001	7.676
MI 6-11 hrs	1.58	2.0832	<.0001	8.030
MI 12-23 hrs	0.85	1.6817	<.0001	5.375
MI without ST Elevation				
MI < 6 hrs	0.83	1.7428	<.0001	5.713
MI 6-11 hrs	1.46	1.1959	0.0004	3.306
MI 12-23 hrs	3.18	1.2587	<.0001	3.521
MI with or without ST Elevation				
MI 1-7 days	15.30	1.1006	<.0001	3.006
MI 8-14 days	1.10	0.9133	0.0008	2.493
Comorbidities				
Chronic Lung Disease				
None or Mild	96.53	– Reference –		1.000
Moderate	3.12	0.7136	<.0001	2.041
Severe	0.35	1.0547	0.0060	2.871
Congestive Heart Failure (CHF), Current (within 2 weeks)	6.99	0.6283	<.0001	1.874
Peripheral Vascular Disease	9.53	0.6245	<.0001	1.867
Renal Failure				
No Renal Dialysis and Creatinine 1.5 mg/dL or less	90.41	– Reference –		1.000
Creatinine 1.6 – 2.0 mg/dL	4.96	0.7337	<.0001	2.083
Creatinine > 2.0 mg/dL	2.02	0.8049	<.0001	2.236
Renal Dialysis	2.61	1.4840	<.0001	4.411
Vessels Diseased				
Left Main Disease	4.38	0.3447	0.0289	1.412
Three Vessels Diseased	13.28	0.3858	0.0003	1.471

Intercept = -6.5488

C Statistic = 0.867

Appendix 2

2014 Risk Factors For In-Hospital/30-Day Mortality For Non-Emergency PCI

Appendix 2 contains the significant pre-procedural risk factors for 2014 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 Ejection Fraction, Chronic Lung Disease, Peripheral Vascular Disease and Three Vessels Diseased are the same as presented in Appendix 1.

With regard to age, the odds ratio roughly represents the number of times more likely a patient who is over age 65 is to die than another patient who is one year younger, all other significant risk factors being the same. Thus, a patient undergoing PCI who is 67 years old has approximately 1.050 times the chance of dying in the hospital or within 30 days that a 67 year-old patient has, all other risk factors being the same. All patients aged 65 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.

In this model, there are three categories for Previous MI, one to seven days prior to PCI, eight to fourteen days prior to MI and no MI within fourteen days prior to the PCI. The odds ratio for the first two groups are relative to patients who have not had an MI within fourteen days prior to PCI.

Renal Failure is interpreted in the same way as Appendix 1, although there are only three categories in this model.

Appendix 2

Multivariate Risk-Factor Equation for In-Hospital/30-Day Deaths During or Following PCI, 2014 (Non-Emergency Cases)

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	Odds Ratio
Demographic				
Age: number of years > 65	–	0.0491	<.0001	1.050
Ventricular Function				
Ejection Fraction				
Ejection Fraction 50% or greater	76.25	– Reference –		1.000
Ejection Fraction less than 20%	0.71	1.4061	<.0001	4.080
Ejection Fraction 20-29%	3.43	1.0736	<.0001	2.926
Ejection Fraction 30-39%	6.55	0.9780	<.0001	2.659
Ejection Fraction 40-49%	13.07	0.3968	0.0215	1.487
Pre-Procedural MI				
No MI within 1-14 days	80.05	– Reference –		1.000
MI 1-7 days	18.61	1.1849	<.0001	3.270
MI 8-14 days	1.34	1.0720	0.0001	2.921
Comorbidities				
Peripheral Vascular Disease	10.47	0.7182	<.0001	2.051
Chronic Lung Disease				
None or Mild	96.37			
Moderate	3.23	0.7351	0.0006	2.086
Severe	0.39	1.5076	0.0001	4.516
Congestive Heart Failure (CHF), Current (within 2 weeks)	7.36	0.7976	<.0001	2.220
Renal Failure				
No Renal Dialysis and Creatinine < 1.5 mg/dL	89.89	– Reference –		1.000
Creatinine 1.5 mg/dL or greater	7.21	0.4981	0.0027	1.646
Renal Dialysis	2.90	1.1427	<.0001	3.135
Vessels Diseased				
Three Vessels Diseased	13.33	0.3824	0.0068	1.466

Intercept = -6.5242

C Statistic = 0.837

Appendix 3

2014 Risk Factors For 30-Day Readmission For PCI

The significant pre-procedural risk factors for 30-day readmissions following PCI in 2014 are presented in the table that follows. The interpretation for many of the variables in this model was described in Appendix 1 or 2. This includes Age, Female, Unstable, Ejection Fraction, Pre-Procedural MI, Congestive Heart Failure (Current), Peripheral Vascular Disease, Renal Failure, and Number of Vessels Diseased.

The interpretation for Cerebrovascular Disease, is similar to that described for Peripheral Vascular Disease in Appendix 1.

Body Mass Index (BMI) is a relationship of weight to height. It is a measure of body fat 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.

This model shows that patient with a BMI of 30 kg/m^2 or less have odds of readmission that are 1.144 times that of otherwise identical patients with a BMI greater than 30 kg/m^2.

Chronic Lung Disease is represented by four groups in this model: Mild, Moderate, Severe, and None. The interpretation is similar to that presented in Appendix 1 except in this case the reference group is patients who do not have Chronic Lung Disease.

In this model, Diabetes is represented by three categories: Diabetes with Oral Treatment, Diabetes with Insulin Treatment, and No Diabetes with Oral or Insulin Treatment. The last group includes patients without diabetes as well as those with diabetes not treated with oral medication or insulin. This is the reference group and the odds ratios for the other two categories are relative to patients in this group.

Number of vessels diseased is comprised of three categories in this model (fewer than two vessels diseased, two vessels diseased and three vessels diseased). Two and three vessels diseased refers to patients with at least a 70 percent blockage in two or three 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, respectively. The reference category for this group includes patients who have fewer than two vessels diseased.

Appendix 3

Multivariate Risk-Factor Equation for 30-Day Readmission Following PCI, 2014

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	Odds Ratio
Demographic				
Age	–	-0.0727	<.0001	–
Age squared	–	0.0629	<.0001	–
Female	30.05	0.2265	<.0001	1.254
Body Mass Index 30 kg/m^2 or less	59.05	0.1346	0.0002	1.144
Hemodynamic Status				
Unstable	0.32	0.5263	0.0125	1.693
Ventricular Function				
Ejection Fraction				
Ejection Fraction 50% or greater	71.77	– Reference –		1.000
Ejection Fraction less than 20%	0.73	0.6638	<.0001	1.942
Ejection Fraction 20-29%	3.92	0.5154	<.0001	1.674
Ejection Fraction 30-39%	7.80	0.3111	<.0001	1.365
Ejection Fraction 40-49%	15.78	0.1283	0.0055	1.137
Pre-Procedural MI				
No MI within 20 Days	65.21	– Reference –		1.000
MI within 24 hours	18.06	0.2385	<.0001	1.269
MI 1-20 days	16.73	0.3305	<.0001	1.392
Comorbidities				
Cerebrovascular Disease	10.52	0.2613	<.0001	1.299
Congestive Heart Failure (CHF), Current (within 2 weeks)	6.98	0.4035	<.0001	1.497
Chronic Lung Disease				
None	93.60	– Reference –		1.000
Mild	2.86	0.3507	<.0001	1.420
Moderate	3.20	0.5660	<.0001	1.761
Severe	0.34	0.8296	<.0001	2.292
Diabetes				
No Diabetes or Diabetes without Oral or Insulin Treatment	63.09	– Reference –		1.000
Oral Treatment	21.75	0.1162	0.0064	1.123
Insulin Treatment	15.15	0.3864	<.0001	1.472
Peripheral Vascular Disease	9.33	0.2915	<.0001	1.338
Renal Failure				
No Renal Dialysis and Creatinine < 1.5 mg/dL	90.60	– Reference –		1.000
Creatinine 1.6 – 2.0 mg/dL	4.85	0.2196	0.0013	1.246
Creatinine > 2.0 mg/dL	1.97	0.5352	<.0001	1.708
Renal Dialysis	2.58	0.9392	<.0001	2.558
Vessels Diseased				
Fewer than two Vessels Diseased	54.50	– Reference –		1.000
Two Vessels Diseased	32.34	0.1676	<.0001	1.182
Three Vessels Diseased	13.16	0.2701	<.0001	1.310

Intercept = -2.8765

C Statistic = 0.643

Appendix 4

2012-2014 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 2012-2014 time period are presented in the table that follows. The interpretation of this table is similar to the interpretation of Appendices 1-3 that are described previously. Female, Unstable, Ejection Fraction, Pre-Procedural MI, Left Main Disease, Renal Failure and Number of Vessels Diseased are interpreted in the same way as previously described.

Chronic Lung Disease, Diabetes requiring medication, Malignant Ventricular Arrhythmia, and One or More Previous PCIs are interpreted in the same way as Peripheral Vascular Disease therapy in Appendix 1.

Body Mass Index is divided into four groups representing various levels of BMI. The reference group is patients with BMI of at least 25 kg/m^2 but less than 34 kg/m^2.

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.

Appendix 4

Multivariate Risk-Factor Equation for In-Hospital/30-Day Deaths During or Following PCI, 2012-2014 (All Cases)

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	Odds Ratio
Demographic				
Age: Number of years greater than 60	–	0.0526	<.0001	1.054
Female Gender	29.90	0.3170	<.0001	1.373
Body Mass Index (kg/m^2)				
Less than 18.5 kg/m^2	0.80	0.7130	<.0001	2.040
18.5 kg/m^2 to < 25 kg/m^2	20.85	0.2611	<.0001	1.298
25 kg/m^2 to < 35 kg/m^2	62.68	– Reference –		1.000
35 kg/m^2 or greater	15.67	0.2355	0.0045	1.266
Hemodynamic Status				
Unstable	0.53	1.8223	<.0001	6.186
Ventricular Function				
Ejection Fraction				
Ejection Fraction 50% or greater	71.63	– Reference –		1.000
Ejection Fraction less than 20%	0.83	1.7748	<.0001	5.899
Ejection Fraction 20-29%	4.03	1.2554	<.0001	3.509
Ejection Fraction 30-39%	7.81	0.8169	<.0001	2.263
Ejection Fraction 40-49%	15.70	0.3194	<.0001	1.376
Pre-Procedural MI				
No MI within 14 days	66.13	– Reference –		1.000
MI with ST Elevation				
MI < 6 hrs	10.01	1.9621	<.0001	7.114
MI 6-11 hrs	1.69	1.9734	<.0001	7.195
MI 12-23 hrs	0.89	1.7882	<.0001	5.979
MI without ST Elevation				
MI < 6 hrs	0.82	1.2824	<.0001	3.605
MI 6-11 hrs	1.37	1.3177	<.0001	3.735
MI 12-23 hrs	2.97	1.1156	<.0001	3.052
MI with or without ST Elevation				
MI 1-14 days	16.12	1.0318	<.0001	2.806
Comorbidities				
Peripheral Vascular Disease	9.42	0.3575	<.0001	1.430
Malignant Ventricular Arrhythmia	0.69	0.4449	0.0049	1.560
Chronic Lung Disease	6.11	0.6679	<.0001	1.950
Diabetes Requiring Medication	36.12	0.2191	0.0002	1.245
Congestive Heart Failure (CHF)				
No CHF within 6 months	89.68	– Reference –		1.000
CHF, Current (within 2 weeks)	6.49	0.6104	<.0001	1.841
CHF, Past but not current (2 weeks - 6 months)	3.83	0.2397	0.0325	1.271
Renal Failure				
No Renal Dialysis and Creatinine ≤ 1.5 mg/dL	70.58	– Reference –		1.000
Creatinine ≥ 1.2 and ≤ 1.5 mg/dL	19.76	0.2153	0.0021	1.240
Creatinine > 1.5 and ≤ 2.0 mg/dL	4.93	0.6811	<.0001	1.976
Creatinine > 2.0 and ≤ 3.0 mg/dL	1.13	0.8876	<.0001	2.429
Creatinine > 3.0 mg/dL	0.96	1.0455	<.0001	2.845
Renal Dialysis	2.63	1.4497	<.0001	4.262
Vessels Diseased				
Left Main Disease	4.38	0.5388	<.0001	1.714
Number of Vessels Diseased				
Fewer than Two Vessels Diseased	54.31	– Reference –		1.000
Two Vessels Diseased	32.20	0.1735	0.0053	1.190
Three Vessels Diseased	13.49	0.4619	<.0001	1.587
Previous Procedures				
One or More Previous PCIs	43.79	-0.2177	0.0002	0.804

Intercept = -7.1278
C Statistic = 0.867

Appendix 5

2012-2014 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 2012-2014 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, 2012-2014 (Non-Emergency Cases)

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	Odds Ratio
Demographic				
Age: Number of years greater than 60	--	0.0433	<.0001	1.044
Ventricular Function				
Ejection Fraction				
Ejection Fraction 50% or greater	76.45	– Reference –		1.000
Ejection Fraction less than 20%	0.71	1.5886	<.0001	4.897
Ejection Fraction 20-29%	3.42	1.3363	<.0001	3.805
Ejection Fraction 30-39%	6.32	1.1370	<.0001	3.117
Ejection Fraction 40-49%	13.09	0.7299	<.0001	2.075
Pre-Procedural MI				
No MI within 14 days	80.47	– Reference –		1.000
MI 1-14 days	19.53	1.3947	<.0001	4.034
Comorbidities				
Chronic Lung Disease	6.44	1.1595	<.0001	3.188
Congestive Heart Failure (CHF)				
No CHF within 6 months	88.95	– Reference –		1.000
CHF, Current (within 2 weeks)	6.76	1.1239	<.0001	3.077
CHF, Past but not current (2 wks - 6 mon)	4.29	0.6299	<.0001	1.877
Diabetes requiring medication	39.04	0.4921	<.0001	1.636
Malignant Ventricular Arrhythmia	0.47	1.0471	<.0001	2.849
Peripheral Vascular Disease	10.37	0.7524	<.0001	2.122
Renal Failure				
No Renal Dialysis and Creatinine 1.5mg/dL or less	89.86	– Reference –		1.000
Creatinine 1.6-2.5 mg/dL	6.23	0.7632	<.0001	2.145
Creatinine greater than 2.5 mg/dL	0.95	0.9321	<.0001	2.540
Renal Dialysis	2.95	1.5678	<.0001	4.796
Vessels Diseased				
Left Main Disease	4.66	0.8191	<.0001	2.269
Number of Vessels Diseased				
Fewer than Two Vessels Diseased	54.04	– Reference –		1.000
Two Vessels Diseased	32.42	0.4622	<.0001	1.588
Three Vessels Diseased	13.53	0.7327	<.0001	2.081
Sum of Risk Factors Squared	–	-0.0435	<.0001	–

Intercept = -7.2294

C Statistic = 0.840

Appendix 6

2012-2014 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 2012-2014 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, 2012-2014 (Emergency Cases)

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	Odds Ratio
Demographic				
Age: number of years > 50	--	0.0612	<.0001	1.063
Body Mass Index (kg/m^2)				
Less than 18.5 kg/m^2	0.86	1.0004	0.0002	2.719
18.5 kg/m^2 to < 25 kg/m^2	21.74	0.2715	0.0035	1.312
25 kg/m^2 to < 35 kg/m^2	63.35	— Reference —		1.000
35 kg/m^2 or greater	14.05	0.5819	<.0001	1.790
Hemodynamic Status				
Unstable	2.94	1.7656	<.0001	5.845
Ventricular Function				
Ejection Fraction				
Ejection Fraction 40% or greater	77.16	— Reference —		1.000
Ejection Fraction less than 20%	1.34	2.0203	<.0001	7.540
Ejection Fraction 20-29%	6.82	1.3249	<.0001	3.762
Ejection Fraction 30-39%	14.68	0.6844	<.0001	1.983
Pre-Procedural MI				
No STEMI within 24 hrs	29.52	— Reference —		1.000
STEMI within 24 hrs	70.48	0.7926	<.0001	2.209
Comorbidities				
Congestive Heart Failure (CHF), Current (within 2 weeks)	5.25	0.5064	<.0001	1.659
Renal Failure				
No Renal Dialysis and Creatinine 1.2 mg/d L or less	73.10	— Reference —		1.000
Creatinine 1.3-1.5 mg/dL	19.46	0.3323	0.0009	1.394
Creatinine 1.6-2.0 mg/dL	4.24	0.8301	<.0001	2.294
Creatinine > 2.0 mg/dL	2.03	1.3896	<.0001	4.013
Renal Dialysis	1.17	1.7538	<.0001	5.777
Vessels Diseased				
Left Main Disease	3.07	0.6829	<.0001	1.980
Three Vessels Diseased	13.30	0.3792	<.0001	1.461

Intercept = -6.3202

C Statistic = 0.857

Appendix 7

Risk Factors for TAVR In-Hospital/30-Day Mortality in New York State 2012-2014

Most of the significant pre-procedural risk factors for in-hospital/30-day mortality following TAVR in the 2012-2014 time period are presented in the table that follows. The risk factors in this model are interpreted as described in Appendices 1 – 6.

Appendix Table 7

Multivariable Risk Factor Equation for TAVR In-Hospital/30-Day Deaths in New York State in 2012-2014.

		Logistic Regression		
Patient Risk Factor	**Prevalence (%)**	**Coefficient**	**P-Value**	**Odds Ratio**
Demographic				
Age: Number of years greater than 85	—	0.0490	0.0336	1.050
Body Surface Area (10 m^2)	—	-0.6510	0.0017	—
Body Surface Area – squared (100 m^4)	—	0.0157	0.0033	—
Comorbidities				
Congestive Heart Failure, within 2 weeks	57.40	0.4430	0.0037	1.557
Chronic Lung Disease	36.13	0.4607	0.0014	1.585
Renal Failure				
No Renal Failure	79.11	— Reference —		1.000
Renal Failure, Creatinine >1.5 mg/dL	16.48	0.6165	0.0003	1.852
Renal Failure Requiring Dialysis	4.41	1.0467	<.0001	2.848

Intercept = 2.9838

C Statistic = 0.634

NEW YORK STATE
PERCUTANEOUS CORONARY INTERVENTION CENTERS

Albany Medical Center
New Scotland Avenue
Albany, New York 12208

Arnot Ogden Medical Center
600 Roe Avenue
Elmira, New York 14905

Bassett Medical Center
Atwell Road
Cooperstown, New York 13326

Bellevue Hospital Center
First Avenue and 27th Street
New York, New York 10016

Bronx-Lebanon Hospital Center*
1650 Grand Concourse
Bronx, New York 10456

Brookdale University Hospital*
and Medical Center
Linden Boulevard @ Brookdale Plaza
Brooklyn, New York 11212

Brookhaven Memorial Hospital Medical Center*
101 Hospital Road
Patchogue, New York 11772

Buffalo General Medical Center
100 High Street
Buffalo, New York 14203

Cayuga Medical Center at Ithaca*
101 Dates Drive
Ithaca, New York 14850

Champlain Valley Physicians Hospital*
75 Beekman Street
Plattsburgh, New York 12901

Crouse Hospital
736 Irving Avenue
Syracuse, New York 13210

Ellis Hospital
1101 Nott Street
Schenectady, New York 12308

Elmhurst Hospital Center*
79-01 Broadway
Elmhurst, New York 11373

Erie County Medical Center**
462 Grider Street
Buffalo, New York 14215

Faxton-St. Luke's Healthcare
(St. Luke's Division) **
Box 479
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 10021

Long Island Jewish Medical Center
270-05 76th Avenue
New Hyde Park, New York 11040

Lutheran Medical Center*
150 55th Street
Brooklyn, New York 11220

Maimonides Medical Center
4802 Tenth Avenue
Brooklyn, New York 11219

Mercy Hospital of Buffalo
565 Abbott Road
Buffalo, New York 14220

Millard Fillmore Hospital**
3 Gates Circle
Buffalo, New York 14209

Montefiore Medical Center @ Henry & Lucy
Moses Division
111 East 210th Street
Bronx, New York 11219

Montefiore Medical Center @ Jack D. Weiler Hospital of A. Einstein College
1825 Eastchester Road
Bronx, New York 10461

Mount Sinai Beth Israel
10 Nathan D. Perlman Place
New York, New York 10003

Mount Sinai Hospital
One Gustave L. Levy Place
New York, New York 10019

Mount Sinai St. Luke's
11-11 Amsterdam Avenue at 114th Street
New York, New York 10025

New York Methodist Hospital
506 Sixth Street
Brooklyn, New York 11215

NY Presbyterian Hospital @ Columbia Presbyterian Center
161 Fort Washington Avenue
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 Hospital @ New York Weill Cornell College
525 East 68th Street
New York, New York 10021

NYU Hospitals Center
550 First Avenue
New York, New York 10016

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

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, NY 12180

Saratoga Hospital*†††
211 Church Street
Saratoga Springs, New York 12866

South Nassau Communities Hospital*
One Healthy Way
Oceanside, New York 11572

Southside Hospital
301 East Main Street
Bayshore, New York 11706

St. Barnabas Hospital*
4422 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 13413

St. Francis Hospital
Port Washington Boulevard
Roslyn, New York 11576

St. Joseph's Hospital Health Center
301 Prospect Avenue
Syracuse, New York 13203

St. Luke's Cornwall Hospital*
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

SUNY Downstate Medical Center at Long Island College Hospital**
340 Henry Street
Brooklyn, New York 11201

UHS Wilson Medical Center
33-57 Harrison Street
Johnson City, New York 13790

The Unity Hospital of Rochester*
1555 Long Pond Road
Rochester, New York 14626

University Hospital at Stony Brook
Stony Brook, New York 11794-8410

University Hospital of Brooklyn
450 Lenox Road
Brooklyn, New York 11203

Upstate University Hospital –
State University of New York
750 East Adams Street
Syracuse, New York 13210

Vassar Brothers Medical Center
45 Reade Place
Poughkeepsie, New York 12601

Westchester Medical Center
Grasslands Road
Valhalla, New York 10595

White Plains Hospital*
41 East Post Road
White Plains, NY 10601

Winthrop University Hospital
259 First Street
Mineola, New York 11501

* Hospital performs PCI without cardiac surgery on-site
** Hospital Closed or No Longer Performs PCI
†† Hospital started PCI after November 2014

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