

**PERCUTANEOUS
CORONARY
INTERVENTIONS
(PCI)**

in New York State

2013-2015

February 2018



**Department
of Health**

Members of the New York State Cardiac Advisory Committee

Chair

Spencer King III, M.D.

Professor of Medicine, Emeritus
Emory University School of Medicine
Atlanta, GA

Vice Chair

Gary Walford, M.D.

Associate Professor of Medicine
Johns Hopkins Medical Center
Baltimore, MD

Members

M. Hashmat Ashraf, M.D., FRCS

Chief, Department of Cardiothoracic Surgery
Kaleida Health
Buffalo, NY

Peter B. Berger, M.D.

Cardiology Consultant

Frederick Bierman, M.D.

Director of Graduate Medical Education
Westchester Medical Center
Valhalla, NY

Joanna Chikwe, M.D.

Chief, Division of Cardiothoracic Surgery
Co-Director, The Heart Institute
Stony Brook University Hospital
Stony Brook, NY

Jeptha Curtis, M.D.

Asst. Professor, Dept. of Internal Medicine (Cardiology)
Director, Cardiology Outcomes Research & Evaluation Data
Analytic Center
Yale University School of Medicine
New Haven, CT

Leonard Girardi, M.D., F.A.C.S.

Chairman, Department of Cardiothoracic Surgery
Cardiothoracic Surgeon-in-Chief
New York Presbyterian Hospital
Weill Cornell Medical College
New York, NY

Jeffrey P. Gold, M.D.

Chancellor
University of Nebraska Medical Center
Omaha, NE

Alice Jacobs, M.D.

Professor of Medicine
Vice Chair for Clinical Affairs, Department of Medicine
Boston University School of Medicine
Boston Medical Center
Boston, MA

Desmond Jordan, M.D.

Associate Professor of Clinical Anesthesiology in
Biomedical Informatics
NY Presbyterian Hospital – Columbia
New York, NY

Thomas Kulik, M.D.

Director, Pulmonary Hypertension Program
Children's Hospital Boston
Boston, MA

Stephen Lahey, M.D.

Chief, Division of Cardiothoracic Surgery
University of Connecticut Health Center
Farmington, CT

Frederick S. Ling, M.D.

Professor in Medicine (Cardiology)
University of Rochester Medical Center
Rochester, NY

Ralph Mosca, M.D.

Vice Chairman, Department of Cardiac Surgery
Director, Congenital Cardiac Surgery
NYU Medical Center
New York, NY

Robert H. Pass, MD, FSCAI

Director, Pediatric Electrophysiology
Director, Pediatric Cardiac Catheterization Laboratory
Montefiore Medical Center
Children's Hospital at Montefiore
New York, NY

Carlos E. Ruiz, M.D., Ph.D.

Professor of Cardiology in Pediatrics and Medicine
Director, Structural and Congenital Heart Disease
Hackensack University Medical Center
The Joseph M. Sanzari Children's Hospital
Hackensack, NJ

Craig Smith, M.D.

Johnson & Johnson Distinguished Professor
Valentine Mott Professor of Surgery
Columbia University Medical Center
New York Presbyterian Hospital
New York, NY

Thoralf Sundt, III, M.D.

Chief, Cardiac Surgical Division
Co-Director, Heart Center
Massachusetts General Hospital
Boston, MA

James Tweddell, M.D.

Co-Director, Heart Institute
Director of Surgery
Cincinnati Children's Hospital Medical Center
Cincinnati, OH

Ferdinand Venditti, Jr., M.D.

Executive VP for System Care Delivery
Hospital General Director
Albany Medical College
Albany, NY

Andrew S. Wechsler, M.D.

Emeritus Professor, Cardiothoracic Surgery
Drexel University College of Medicine
Philadelphia, PA

Consultant

Edward L. Hannan, Ph.D.

Distinguished Professor Emeritus
Department of Health Policy, Management & Behavior
Associate Dean Emeritus
University at Albany, School of Public Health
Rensselaer, NY

PCI Reporting System Analysis Workgroup

Members & Consultants

Gary Walford, M.D. (Chair)

Associate Professor of Medicine
Johns Hopkins Medical Center

Peter B. Berger, M.D.

Cardiology Consultant

Jeptha Curtis, M.D.

Asst. Professor, Dept. of Internal Medicine (Cardiology)
Director, Cardiology Outcomes Research & Evaluation
Data Analytic Center
Yale University School of Medicine

Edward L. Hannan, Ph.D.

Distinguished Professor Emeritus,
Department of Health Policy,
Management & Behavior
Associate Dean Emeritus
University at Albany, School of Public Health

Alice Jacobs, M.D.

Professor of Medicine
Vice Chair for Clinical Affairs, Department of Medicine
Boston University School of Medicine
Boston Medical Center

Frederick S. Ling, M.D.

Professor in Medicine (Cardiology)
University of Rochester Medical Center

Carlos Ruiz, M.D., Ph.D.

Professor of Cardiology in Pediatrics and Medicine
Director, Structural and Congenital Heart Disease
Hackensack University Medical Center
The Joseph M. Sanzari Children's Hospital

Ferdinand Venditti, Jr., M.D.

Executive VP for System Care Delivery
Albany Medical College

Staff to PCIRS Analysis Workgroup – New York State Department of Health

Office of Quality and Patient Safety

Marcus Friedrich, M.D., M.B.A., F.A.C.P.

Chief Medical Officer

Jeanne Alicandro, MD

Medical Director

Cardiac Services Program

Kimberly S. Cozzens, M.A.

Program Manager

Ashraf Al-Hamadani, M.D., MPH

Clinical Record Reviewer

Diane Fanuele, M.S.

Clinical Data Coordinator

Lori Frazier

Project Assistant

Jessica Kincaid

Quality Improvement Project Coordinator

Cynthia Johnson

PCI and Special Projects Coordinator

Feng (Johnson) Qian, MD, PhD

Associate Professor of Health Policy and Management

Ye Zhong, M.D., M.S.

Cardiac Analyst

TABLE OF CONTENTS

- MESSAGE FROM COMMISSIONER ZUCKER. 1
- INTRODUCTION 3
- DEPARTMENT OF HEALTH PROGRAM. 4
- PATIENT POPULATION. 4
- RISK ADJUSTMENT FOR ASSESSING PROVIDER PERFORMANCE 6
 - Data Collection, Data Validation and Identifying In-Hospital/30-Day Deaths and 30-Day Readmission . . . 6
 - Assessing Patient Risk 7
 - Predicting Patient Mortality Rates for Providers 7
 - Computing the Risk-Adjusted Mortality Rate 7
 - Interpreting the Risk-Adjusted Mortality Rate 7
 - Predicting Patient Readmission and Computing and Interpreting Risk-Adjusted Readmission Rates . . . 8
 - How this Initiative Contributes to Quality Improvement. 8
- DEFINITION OF KEY TERMS. 9
- 2015 HOSPITAL OUTCOMES FOR PCI 10
 - Table 1 In-Hospital/30-Day Observed, Expected and Risk-Adjusted Mortality Rates for PCI in New York State, 2015 Discharges 12
 - Figure 1 In-Hospital/30-Day Risk-Adjusted Mortality Rates for PCI in New York State, 2015 Discharges (All Cases) 13
 - Figure 2 In-Hospital/30-Day Risk-Adjusted Mortality Rates for PCI in New York State, 2015 Discharges (Non-Emergency Cases) 14
 - Table 2 Hospital Observed, Expected and Risk-Adjusted Readmission Rates for PCI in New York State, 2015 Discharges 15
 - Figure 3 30-Day Risk-Adjusted Readmission Rates for PCI in New York State, 2015 Discharges (All Cases) 16
- 2013–2015 HOSPITAL DATA FOR PCI AND TAVR. 17
 - Table 3 In-Hospital/30-Day Observed and Risk-Adjusted Mortality Rates for PCI in New York State, 2013-2015 Discharges 19
 - Table 4 In-hospital/30-Day Observed, Expected and Risk-Adjusted Mortality Rates for TAVR in New York State, 2013-2015 Discharges. 20
- 2013–2015 HOSPITAL AND CARDIOLOGIST DATA FOR PCI. 21
 - Table 5 Cardiologist In-Hospital/30-Day Observed, Expected and Risk-Adjusted Mortality Rates for PCI in New York State, 2013–2015 Discharges 22
 - Table 6 Summary Information for Cardiologists Practicing at More Than One Hospital, 2013–2015 Discharges 37
- CRITERIA USED IN REPORTING SIGNIFICANT RISK FACTORS (2015) 52
- MEDICAL TERMINOLOGY 56

Appendix 1 2015 Risk Factors For PCI In-Hospital/30-Day Mortality (ALL CASES) 57
Appendix 2 2015 Risk Factors For In-Hospital/30-Day Mortality for Non-Emergency PCI 59
Appendix 3 2015 Risk Factors for 30-Day Readmissions for PCI. 61
Appendix 4 2013-2015 Risk Factors for PCI In-Hospital/30-Day Mortality (ALL CASES) 63
Appendix 5 2013-2015 Risk Factors for In-Hospital/30-Day Mortality for Non-Emergency PCI 65
Appendix 6 2013-2015 Risk Factors for In-Hospital/30-Day Mortality for Emergency PCI 67
Appendix 7 2013-2015 Risk Factors for TAVR In-Hospital/30-Day Mortality 69
NEW YORK STATE PERCUTANEOUS CORONARY INTERVENTION CENTERS. 70

Message from Commissioner Zucker

December 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 (PCIRS, the primary 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 2015. 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 144,196 patients who underwent PCI in NYS hospitals and were discharged between December 1, 2012, and November 30, 2015. The analysis period for this report includes patients discharged in December 2012 but not those discharged in December 2015. 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 2015 cases includes patients discharged from December 1, 2014 through November 30, 2015. 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, 2012, and November 30, 2015, provided by all 63 non-federal hospitals in NYS where PCI was performed. In total there were 144,196 PCI procedures performed during this time period. The annual number of PCI discharges was: 48,495 in 2013; 47,644 in 2014; and 49,546 in 2015. 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 2013 cases was incomplete. Because the accuracy of risk factors, procedural information and outcomes for these cases cannot be verified, the 112 cases reported by this hospital with a discharge in the analysis time period are excluded from all analyses.

In addition, 331 records were excluded from the 2013–2015 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 41 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 837 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 168 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 52. 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 837 cases account for 0.57 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 55.

While there were 49,035 PCI cases included in the mortality analysis for 2015 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 1,898 cases. Another 323 patients were excluded because they died in the same admission as their index PCI, so readmission was impossible. Three hundred and sixty-one 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 1,931 exclusions. In addition, 180 patients were excluded due to being discharged Against Medical Advice and 31 patients were deleted due to overlapping dates between index and subsequent hospitalizations.

In total, the number of exclusions was 4,724, leaving 44,311 cases to be examined for 30-day readmission.

NOTE ON HOSPITALS PERFORMING PCI DURING 2013–2015 PERIOD

In the 2013-2015 time period there were 23 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 22 hospitals were approved to perform Primary and 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 2013-2015 time period. The hospital name and the month of the first PCI performed are as follows: Olean General Hospital - October 2013; Brookhaven Memorial Hospital Medical Center - December 2013; Richmond University Medical Center - November 2014; Saratoga Hospital - January 2015; NYP Lawrence Hospital - May 2015.

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, Erie County Medical Center discontinued its PCI program in 2013 and performed the last PCI in February of that year. The last PCI was performed at Faxton-St. Luke's in Utica in July of 2015.

RISK ADJUSTMENT FOR ASSESSING PROVIDER PERFORMANCE

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

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

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

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

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

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

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

Thirty-day readmission is defined as 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, TAVR 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 one of these procedures.

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

Staged procedures involving PCI followed by CABG or TAVR are much more rare, but the

definition of staging is similar. There were 932 staged PCIs and 84 staged cardiac surgeries, including CABG and TAVR, 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 (1.14 percent in-hospital/30-day in 2015) 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 (9.44 percent in 2015).

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 (1.14 percent in-hospital/30-day mortality for all PCI patients discharged in 2015).

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 (9.44 percent 30-day readmission rate for all PCI patients discharged in 2015).

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.

2015 HOSPITAL OUTCOMES FOR PCI

Table 1 and Figures 1 and 2 present the PCI mortality results for the 62 hospitals performing PCI in NYS in 2015 for which data could be analyzed. The table contains, for each hospital, the number of PCIs resulting in 2015 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 (82.41 percent in 2015).

The overall in-hospital/30-day OMR for the 49,035 PCIs included in this 2015 analysis was 1.14 percent. Observed mortality rates ranged from 0.00 percent to 3.65 percent. The range in EMRs, which measure patient severity of illness, was between 0.74 percent and 2.52 percent. The RAMRs, which measure hospital performance, range from 0.00 percent to 2.78 percent. Based on confidence intervals for RAMRs, three hospitals (Albany Medical Center, NYP-Brooklyn Methodist and South Nassau Community Hospital) had RAMRs that were significantly higher than the statewide average. Two hospitals (Maimonides Medical Center in Brooklyn and Mount Sinai Hospital in Manhattan) had RAMRs that were significantly lower than the statewide average.

The last column of Table 1 presents the hospital RAMRs for non-emergency cases (based on the statistical model presented in Appendix 2). As presented in the last row, the statewide in-hospital/30-day mortality rate for non-emergency cases is 0.74 percent. The range of RAMRs was from 0.00 percent to 3.23 percent. One hospital (South Nassau Community Hospital) had a RAMR that was significantly higher than the statewide average. Two hospitals (Montefiore Medical Center - Weiler

Division in the Bronx and Mount Sinai Medical Center in Manhattan) had RAMRs that were significantly lower than the statewide rate.

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

Since the 2015 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 2015 PCI discharges was 0.68 percent for the 49,035 patients included in Table 1. For the non-emergency analysis, there were 40,412 patients with an in-hospital mortality rate of 0.36 percent.

Table 2 presents the PCI 30-day readmission results for the 62 hospitals performing PCI in NYS in 2015 for which data could be analyzed. The table contains, for each hospital, the number of PCIs resulting in 2015 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 44,311 PCIs included in this 2015 analysis was 9.44 percent. Observed readmission rates ranged from 3.33 percent to 21.05 percent. The range in ERRs, which measure patient severity of illness, was between

7.88 percent and 12.17 percent. The RARRs, which measure hospital performance, range from 3.59 percent to 19.18 percent.

Based on confidence intervals for RARRs, six hospitals (Good Samaritan Hospital Medical Center in West Islip, Montefiore-Weiler Hospital in the Bronx, Mount Sinai St. Luke's in Manhattan, Saratoga Hospital, Southside Hospital in Bayshore and University Hospital-Stony Brook) had RARRs that were significantly higher than the statewide average.

Seven hospitals (Arnot-Ogden Medical Center in Elmira, Maimonides Medical Center in Brooklyn, Mount Sinai Hospital in Manhattan, NYP-Queens, NYU Hospitals Center in Manhattan, St. Joseph's Hospital in Syracuse, and St. Peter's Hospital in Albany) 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, 2015 Discharges. (Listed Alphabetically by Hospital)
(Listed Alphabetically by Hospital)

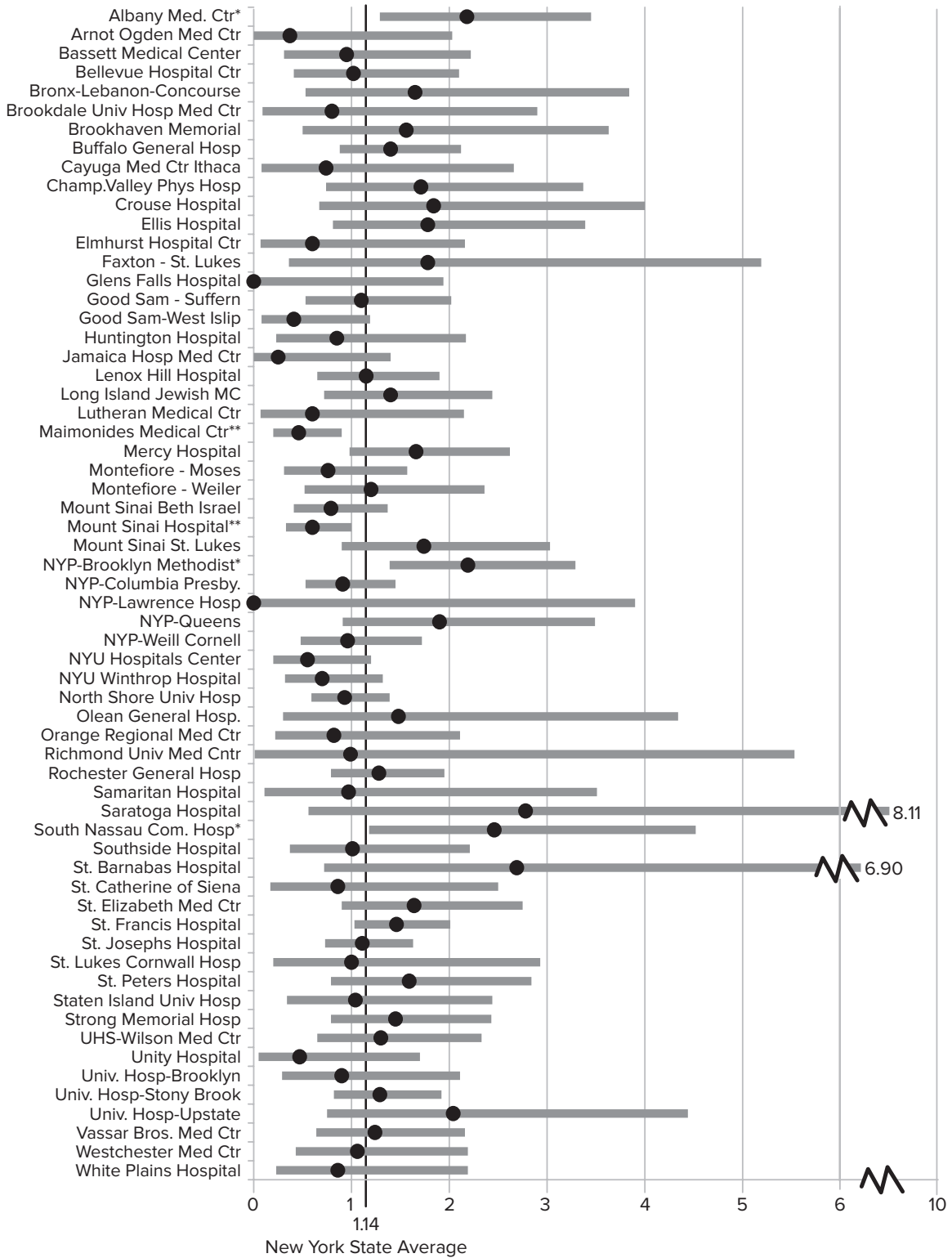
Hospital	Cases	Deaths	All Cases				95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR	Cases		RAMR	
Albany Med. Ctr	695	18	2.59	1.35	2.18 *	(1.29, 3.45)	516	1.52	
Arnot Ogden Med Ctr	336	1	0.30	0.93	0.37	(0.00, 2.03)	249	0.53	
Bassett Medical Center	538	5	0.93	1.11	0.95	(0.31, 2.22)	442	0.24	
Bellevue Hospital Ctr	415	7	1.69	1.88	1.02	(0.41, 2.10)	313	0.52	
Bronx-Lebanon-Concourse	137	5	3.65	2.52	1.65	(0.53, 3.84)	70	0.00	
Brookdale Univ Hosp Med Ctr	183	2	1.09	1.55	0.80	(0.09, 2.90)	112	0.55	
Brookhaven Memorial	352	5	1.42	1.04	1.56	(0.50, 3.63)	272	1.95	
Buffalo General Hosp	1522	22	1.45	1.17	1.40	(0.88, 2.12)	1087	0.82	
Cayuga Med Ctr Ithaca	160	2	1.25	1.93	0.74	(0.08, 2.66)	81	0.00	
Champ.Valley Phys Hosp	572	8	1.40	0.93	1.71	(0.74, 3.37)	437	1.37	
Crouse Hospital	311	6	1.93	1.20	1.84	(0.67, 4.00)	220	1.18	
Ellis Hospital	470	9	1.91	1.22	1.78	(0.81, 3.39)	278	1.85	
Elmhurst Hospital Ctr	427	2	0.47	0.89	0.60	(0.07, 2.16)	305	0.00	
Faxton - St. Lukes	157	3	1.91	1.22	1.78	(0.36, 5.19)	131	0.89	
Glens Falls Hospital	180	0	0.00	1.19	0.00	(0.00, 1.94)	108	0.00	
Good Sam - Suffern	575	10	1.74	1.80	1.10	(0.53, 2.02)	399	0.59	
Good Sam-West Islip	1059	3	0.28	0.79	0.41	(0.08, 1.19)	969	0.42	
Huntington Hospital	502	4	0.80	1.07	0.85	(0.23, 2.17)	395	0.24	
Jamaica Hosp Med Ctr	302	1	0.33	1.50	0.25	(0.00, 1.40)	157	0.00	
Lenox Hill Hospital	1856	15	0.81	0.80	1.15	(0.65, 1.90)	1741	0.81	
Long Island Jewish MC	1039	12	1.15	0.94	1.40	(0.72, 2.44)	903	1.28	
Lutheran Medical Ctr	187	2	1.07	2.04	0.60	(0.07, 2.15)	144	0.35	
Maimonides Medical Ctr	1056	8	0.76	1.89	0.46 **	(0.20, 0.90)	832	0.40	
Mercy Hospital	1108	18	1.62	1.11	1.66	(0.98, 2.62)	860	1.12	
Montefiore - Moses	944	7	0.74	1.10	0.76	(0.31, 1.57)	799	0.40	
Montefiore - Weiler	584	8	1.37	1.30	1.20	(0.52, 2.36)	442	0.00 **	
Mount Sinai Beth Israel	1721	12	0.70	1.01	0.79	(0.41, 1.37)	1591	0.43	
Mount Sinai Hospital	3610	14	0.39	0.74	0.60 **	(0.33, 1.00)	3483	0.37 **	
Mount Sinai St. Lukes	489	12	2.45	1.61	1.74	(0.90, 3.03)	413	1.15	
NYP-Brooklyn Methodist	1251	23	1.84	0.95	2.19 *	(1.39, 3.29)	1130	1.08	
NYP-Columbia Presby.	2360	17	0.72	0.90	0.91	(0.53, 1.45)	2227	0.65	
NYP-Lawrence Hosp	113	0	0.00	0.95	0.00	(0.00, 3.90)	93	0.00	
NYP-Queens	778	10	1.29	0.77	1.90	(0.91, 3.49)	623	1.17	
NYP-Weill Cornell	1056	11	1.04	1.23	0.96	(0.48, 1.72)	946	0.48	
NYU Hospitals Center	1643	6	0.37	0.75	0.55	(0.20, 1.20)	1539	0.42	
NYU Winthrop Hospital	1041	9	0.86	1.41	0.70	(0.32, 1.32)	887	0.49	
North Shore Univ Hosp	2370	23	0.97	1.19	0.93	(0.59, 1.39)	2034	0.72	
Olean General Hosp.	149	3	2.01	1.54	1.48	(0.30, 4.34)	71	0.00	
Orange Regional Med Ctr	508	4	0.79	1.09	0.82	(0.22, 2.11)	350	0.84	
Richmond Univ Med Cntr	119	1	0.84	0.96	0.99	(0.01, 5.53)	89	2.20	
Rochester General Hosp	1625	21	1.29	1.15	1.28	(0.79, 1.95)	1301	0.77	
Samaritan Hospital	215	2	0.93	1.09	0.97	(0.11, 3.51)	119	1.41	
Saratoga Hospital	87	3	3.45	1.41	2.78	(0.56, 8.11)	71	2.21	
South Nassau Com. Hosp	420	10	2.38	1.10	2.46 *	(1.18, 4.52)	300	2.28 *	
Southside Hospital	703	6	0.85	0.96	1.01	(0.37, 2.21)	604	0.99	
St. Barnabas Hospital	164	4	2.44	1.03	2.69	(0.72, 6.90)	129	0.96	
St. Catherine of Siena	299	3	1.00	1.33	0.86	(0.17, 2.50)	234	0.42	
St. Elizabeth Med Ctr	763	14	1.83	1.27	1.64	(0.90, 2.75)	616	1.14	
St. Francis Hospital	2768	37	1.34	1.04	1.46	(1.03, 2.01)	2592	0.94	
St. Josephs Hospital	1960	26	1.33	1.35	1.11	(0.73, 1.63)	1505	0.96	
St. Lukes Cornwall Hosp	259	3	1.16	1.31	1.00	(0.20, 2.93)	173	0.56	
St. Peters Hospital	856	11	1.29	0.92	1.59	(0.79, 2.84)	659	1.15	
Staten Island Univ Hosp	710	5	0.70	0.77	1.04	(0.34, 2.44)	583	0.84	
Strong Memorial Hosp	910	14	1.54	1.21	1.45	(0.79, 2.43)	612	1.21	
UHS-Wilson Med Ctr	747	11	1.47	1.29	1.30	(0.65, 2.33)	556	0.90	
Unity Hospital	282	2	0.71	1.71	0.47	(0.05, 1.70)	207	0.00	
Univ. Hosp-Brooklyn	280	5	1.79	2.25	0.90	(0.29, 2.11)	185	0.25	
Univ. Hosp-Stony Brook	1431	24	1.68	1.48	1.29	(0.82, 1.92)	1074	0.93	
Univ. Hosp-Upstate	186	6	3.23	1.80	2.04	(0.75, 4.44)	106	3.23	
Vassar Bros. Med Ctr	683	12	1.76	1.62	1.24	(0.64, 2.16)	478	0.62	
Westchester Med Ctr	393	7	1.78	1.91	1.06	(0.43, 2.19)	232	0.55	
White Plains Hospital	419	4	0.95	1.27	0.86	(0.23, 2.19)	338	0.34	
Statewide Total	49035	558	1.14				40412	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

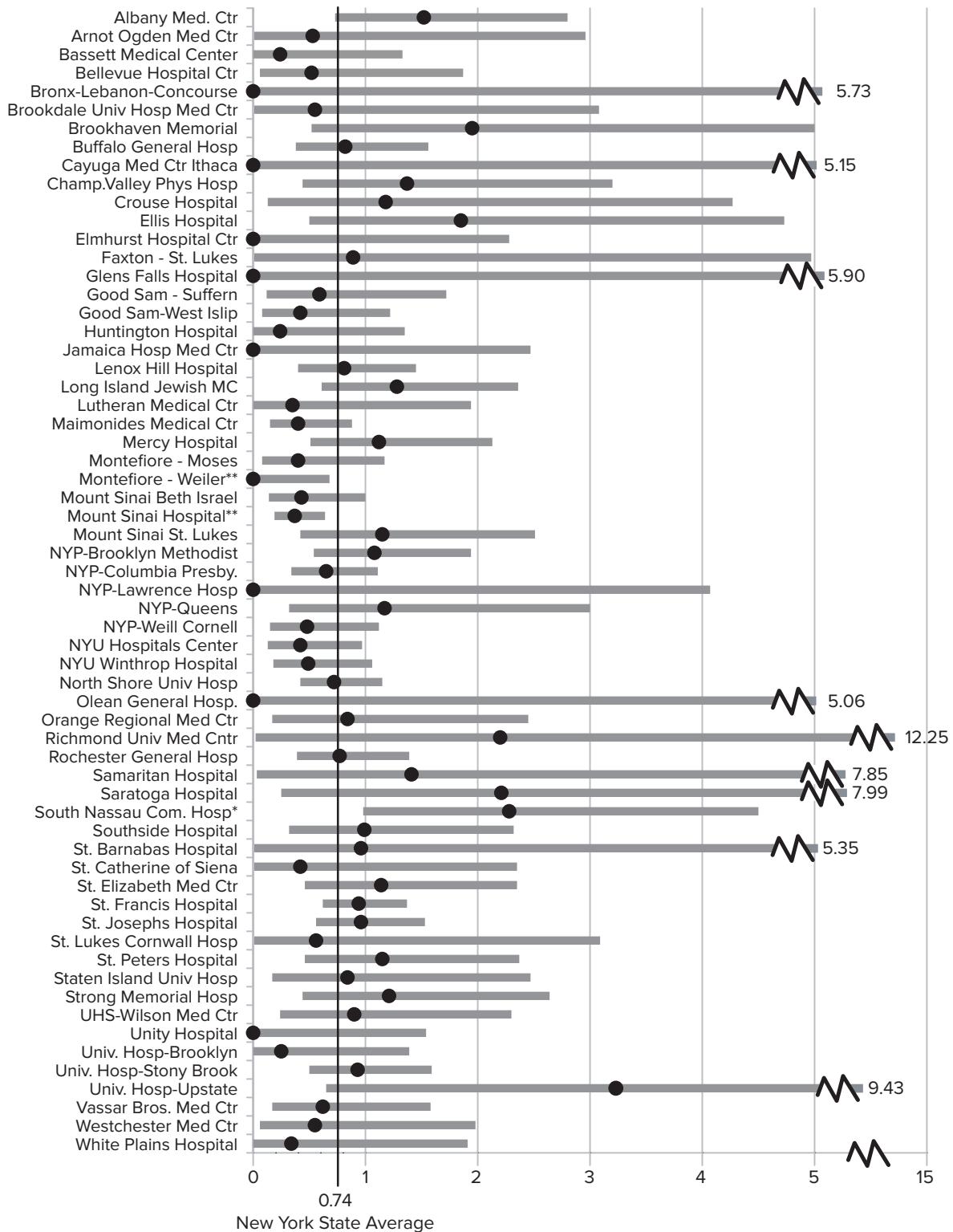
In-Hospital/30-Day Risk-Adjusted Mortality Rates for PCI in New York State, 2015 Discharges (All Cases)



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

Figure 2

In-Hospital/30-Day Risk-Adjusted Mortality Rates for PCI in New York State, 2015 Discharges (Non-Emergency Cases)



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

Table 2

Hospital Observed, Expected and Risk-Adjusted Readmission Rates for All PCI in New York State, 2015

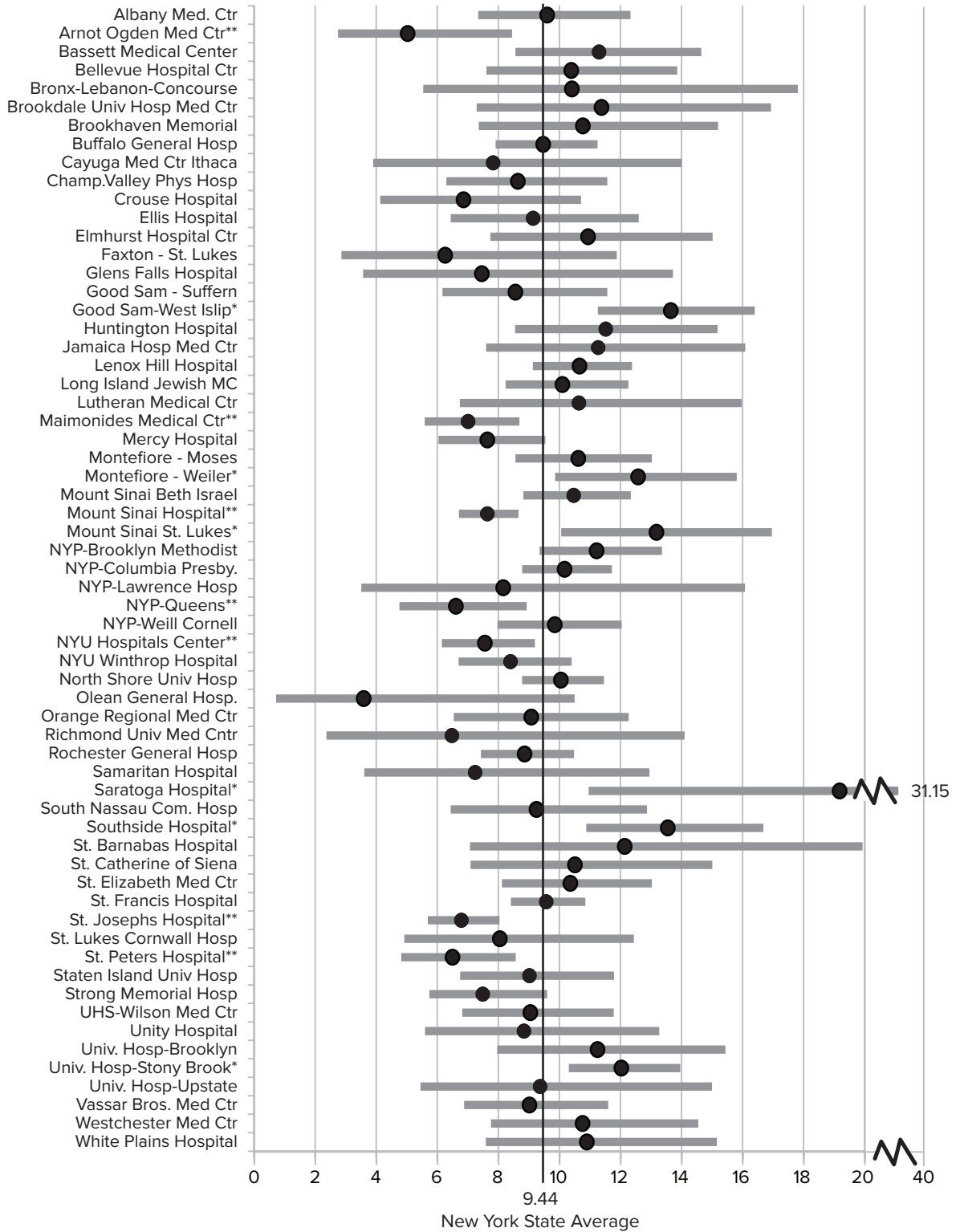
Hospital	Cases	Readmissions	ORR	All Cases		95% CI for RARR
				ERR	RARR	
Albany Med. Ctr	591	61	10.32	10.15	9.60	(7.34,12.33)
Arnot Ogden Med Ctr	296	14	4.73	8.87	5.03 **	(2.75, 8.45)
Bassett Medical Center	502	57	11.35	9.48	11.30	(8.56,14.65)
Bellevue Hospital Ctr	386	46	11.92	10.82	10.39	(7.61,13.86)
Bronx-Lebanon-Concourse	118	13	11.02	9.99	10.41	(5.54,17.81)
Brookdale Univ Hosp Med Ctr	170	24	14.12	11.72	11.38	(7.29,16.93)
Brookhaven Memorial	312	32	10.26	8.99	10.77	(7.36,15.20)
Buffalo General Hosp	1416	130	9.18	9.15	9.47	(7.91,11.25)
Cayuga Med Ctr Ithaca	145	11	7.59	9.14	7.83	(3.90,14.01)
Champ.Valley Phys Hosp	545	45	8.26	9.02	8.64	(6.30,11.57)
Crouse Hospital	295	19	6.44	8.86	6.86	(4.13,10.71)
Ellis Hospital	440	37	8.41	8.68	9.14	(6.44,12.60)
Elmhurst Hospital Ctr	394	38	9.64	8.32	10.94	(7.74,15.02)
Faxton - St. Lukes	145	9	6.21	9.36	6.26	(2.86,11.88)
Glens Falls Hospital	157	10	6.37	8.06	7.46	(3.57,13.72)
Good Sam - Suffern	462	42	9.09	10.02	8.56	(6.17,11.57)
Good Sam-West Islip	988	114	11.54	7.98	13.65 *	(11.3,16.40)
Huntington Hospital	462	50	10.82	8.87	11.52	(8.55,15.18)
Jamaica Hosp Med Ctr	278	30	10.79	9.04	11.27	(7.60,16.09)
Lenox Hill Hospital	1678	172	10.25	9.08	10.66	(9.13,12.38)
Long Island Jewish MC	989	102	10.31	9.64	10.10	(8.24,12.26)
Lutheran Medical Ctr	177	23	12.99	11.53	10.64	(6.74,15.97)
Maimonides Medical Ctr	1007	83	8.24	11.09	7.01 **	(5.59, 8.69)
Mercy Hospital	1017	78	7.67	9.47	7.64	(6.04, 9.54)
Montefiore - Moses	815	92	11.29	10.03	10.62	(8.56,13.03)
Montefiore - Weiler	537	73	13.59	10.20	12.58 *	(9.86,15.81)
Mount Sinai Beth Israel	1423	142	9.98	9.00	10.47	(8.82,12.34)
Mount Sinai Hospital	3064	242	7.90	9.76	7.64 **	(6.71, 8.66)
Mount Sinai St. Lukes	416	60	14.42	10.33	13.18 *	(10.1,16.96)
NYP-Brooklyn Methodist	1154	126	10.92	9.18	11.22	(9.35,13.36)
NYP-Columbia Presby.	1823	190	10.42	9.67	10.17	(8.78,11.72)
NYP-Lawrence Hosp	103	8	7.77	8.98	8.16	(3.51,16.08)
NYP-Queens	749	42	5.61	8.01	6.61 **	(4.76, 8.93)
NYP-Weill Cornell	900	95	10.56	10.12	9.85	(7.97,12.04)
NYU Hospitals Center	1472	100	6.79	8.48	7.56 **	(6.15, 9.20)
NYU Winthrop Hospital	982	84	8.55	9.61	8.40	(6.70,10.40)
North Shore Univ Hosp	2231	223	10.00	9.38	10.05	(8.78,11.46)
Olean General Hosp.	90	3	3.33	8.75	3.59	(0.72,10.50)
Orange Regional Med Ctr	458	42	9.17	9.53	9.08	(6.54,12.27)
Richmond Univ Med Cntr	111	6	5.41	7.88	6.48	(2.37,14.10)
Rochester General Hosp	1550	136	8.77	9.35	8.86	(7.43,10.48)
Samaritan Hospital	170	11	6.47	8.44	7.24	(3.61,12.95)
Saratoga Hospital	76	16	21.05	10.36	19.18 *	(11.0,31.15)
South Nassau Com. Hosp	398	35	8.79	8.97	9.25	(6.44,12.87)
Southside Hospital	673	89	13.22	9.21	13.55 *	(10.9,16.68)
St. Barnabas Hospital	128	17	13.28	10.33	12.14	(7.07,19.44)
St. Catherine of Siena	273	30	10.99	9.87	10.51	(7.09,15.01)
St. Elizabeth Med Ctr	692	73	10.55	9.61	10.36	(8.12,13.03)
St. Francis Hospital	2539	244	9.61	9.48	9.57	(8.41,10.85)
St. Josephs Hospital	1855	135	7.28	10.12	6.79 **	(5.69, 8.04)
St. Lukes Cornwall Hosp	238	20	8.40	9.85	8.05	(4.92,12.44)
St. Peters Hospital	803	50	6.23	9.04	6.50 **	(4.82, 8.57)
Staten Island Univ Hosp	672	53	7.89	8.26	9.02	(6.75,11.79)
Strong Memorial Hosp	869	62	7.13	9.00	7.49	(5.74, 9.60)
UHS-Wilson Med Ctr	665	55	8.27	8.63	9.05	(6.82,11.78)
Unity Hospital	271	23	8.49	9.06	8.84	(5.60,13.27)
Univ. Hosp-Brooklyn	262	38	14.50	12.17	11.25	(7.96,15.44)
Univ. Hosp-Stony Brook	1347	174	12.92	10.14	12.03 *	(10.3,13.96)
Univ. Hosp-Upstate	175	17	9.71	9.79	9.37	(5.45,15.00)
Vassar Bros. Med Ctr	644	60	9.32	9.76	9.02	(6.88,11.60)
Westchester Med Ctr	361	42	11.63	10.21	10.76	(7.76,14.55)
White Plains Hospital	352	35	9.94	8.61	10.90	(7.59,15.16)
Statewide Total	44311	4183	9.44			

*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, 2015 Discharges (All Cases)



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

2013-2015 HOSPITAL DATA FOR PCI AND TAVR

Table 3 provides the number of PCIs, the in-hospital/30-day OMR and RAMR for 2013-2015 for each of three types of PCI patients in the 63 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 2013-2015 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 3.45 percent, and the RAMRs ranged from 0.00 percent to 2.71 percent. Four hospitals (Albany Medical Center, Buffalo General Hospital, Good Samaritan Hospital in Suffern and NYP-Brooklyn Methodist Hospital) 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 NYU Winthrop Hospital in Mineola) 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 82.15 percent of cases for the period 2013-2015. The statewide in-hospital/30-day mortality rate for the 118,461 non-emergency cases during the 3-year period was 0.74 percent. Observed mortality rates for this group of patients ranged from 0.00 percent to 2.82 percent and the RAMRs ranged from 0.00 to 2.39 percent. Five hospitals (Albany Medical Center, Brookhaven Memorial in Patchogue, NYP-Brooklyn Methodist Hospital, South Nassau Community Hospital and University Hospital - Upstate in Syracuse) had

RAMRs that were significantly higher than the statewide rate. Three hospitals (Maimonides Medical Center in Brooklyn, Montefiore Medical Center-Weiler Division in the Bronx, 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 17.85 percent of cases for the period 2013-2015. The statewide in-hospital/30-day mortality rate for the 25,735 emergency PCI cases during the 3-year period was 3.04 percent. Observed mortality rates for this group ranged from 0.00 percent to 7.20 percent and the RAMRs ranged from 0.00 percent to 6.70 percent. Two hospitals (Buffalo General Hospital and NYP-Brooklyn Methodist Hospital) had RAMRs that were significantly above the statewide average for emergency cases. Two hospitals (Maimonides Medical Center in Brooklyn and NYU-Winthrop Hospital in Mineola) had RAMRs that were significantly below the statewide average for emergency cases.

The observed in-hospital mortality rate (not shown in Table 3) for all 144,196 cases included in Table 3 was 0.68 percent. The in-hospital mortality rate was 0.33 percent for the 118,461 non-emergency cases and 2.25 percent for the 25,735 emergency cases. As stated above, all cases with shock and hypoxic brain injury mortalities discharged in 2013-2015 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 24 hospitals performing TAVR during the 2013-2015 discharge period. The table contains, for each hospital, the number of TAVR procedures resulting in 2013-2015 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 2013-2015 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 5,554 TAVR procedures performed at the 24 hospitals was 4.75 percent. The OMRs ranged from 0.00 percent to 8.41 percent. The range of EMRs,

which measure patient severity of illness, was 3.44 percent to 7.45 percent.

The RAMRs, which are used to measure performance, ranged from 0.00 percent to 8.07 percent. One hospital (Mount Sinai Hospital in Manhattan) had a RAMR that was statistically higher than the statewide rate. One hospital (NY Presbyterian at Columbia in Manhattan) had a RAMR that was statistically lower than the statewide rate.

Table 3**In-Hospital / 30-Day Observed and Risk-Adjusted Mortality Rates for PCI in New York State, 2013-2015 Discharges**

Hospital	All Cases			Non-Emergency Cases			Emergency Cases		
	Cases	OMR	RAMR	Cases	OMR	RAMR	Cases	OMR	RAMR
Albany Med. Ctr	2037	2.16	1.81 *	1514	1.45	1.27 *	523	4.21	4.75
Arnot Ogden Med Ctr	1141	1.14	1.01	861	0.70	0.66	280	2.50	2.75
Bassett Medical Center	1425	1.05	1.18	1152	0.61	0.72	273	2.93	3.49
Bellevue Hospital Ctr	1228	1.30	0.86	895	0.45	0.33	333	3.60	3.12
Bronx-Lebanon-Concourse	323	2.79	1.12	135	1.48	1.32	188	3.72	2.77
Brookdale Univ Hosp Med Ctr	566	1.41	0.92	363	0.28	0.17	203	3.45	3.70
Brookhaven Memorial	637	1.73	1.81	470	1.70	2.14 *	167	1.80	1.98
Buffalo General Hosp	4761	1.72	1.62 *	3457	0.98	1.00	1304	3.68	4.19 *
Cayuga Med Ctr Ithaca	438	1.37	1.00	232	0.86	0.91	206	1.94	2.08
Champ.Valley Phys Hosp	1670	1.50	1.72	1261	0.95	1.08	409	3.18	4.44
Crouse Hospital	860	1.63	1.70	621	0.64	0.82	239	4.18	4.91
Ellis Hospital	1393	1.22	1.11	873	0.69	0.96	520	2.12	2.56
Elmhurst Hospital Ctr	1343	0.52	0.64	939	0.11	0.22	404	1.49	2.01
Erie County Med Ctr	29	0.00	0.00	18	0.00	0.00	11	0.00	0.00
Faxton - St. Lukes	712	2.25	1.91	587	1.19	1.10	125	7.20	5.50
Glens Falls Hospital	591	0.34	0.37	363	0.28	0.52	228	0.44	0.62
Good Sam - Suffern	1781	2.36	1.61 *	1302	1.38	0.95	479	5.01	4.60
Good Sam-West Islip	2557	0.82	1.23	2291	0.48	0.67	266	3.76	4.07
Huntington Hospital	1489	0.74	0.88	1192	0.50	0.61	297	1.68	2.04
Jamaica Hosp Med Ctr	894	1.45	1.00	413	1.21	1.21	481	1.66	2.19
Lenox Hill Hospital	4905	0.69	1.09	4608	0.50	0.65	297	3.70	3.34
Long Island Jewish MC	4364	0.89	1.04	3806	0.81	0.83	558	1.43	1.60
Lutheran Medical Ctr	674	1.34	0.77	506	0.40	0.28	168	4.17	2.66
Maimonides Medical Ctr	3287	0.91	0.55 **	2591	0.69	0.41 **	696	1.72	1.14 **
Mercy Hospital	3175	1.35	1.34	2408	0.79	0.81	767	3.13	3.80
Montefiore - Moses	2456	1.06	1.11	2041	0.64	0.67	415	3.13	3.18
Montefiore - Weiler	1629	0.80	0.65 **	1220	0.25	0.21 **	409	2.44	2.50
Mount Sinai Beth Israel	4960	0.95	1.16	4513	0.62	0.76	447	4.25	2.94
Mount Sinai Hospital	11931	0.54	0.76 **	11506	0.43	0.45 **	425	3.53	3.24
Mount Sinai St. Lukes	1340	1.94	1.37	1116	1.16	0.86	224	5.80	4.15
NYP-Brooklyn Methodist	3923	1.45	1.84 *	3572	0.95	1.13 *	351	6.55	5.33 *
NYP-Columbia Presby.	7355	1.06	1.06	6841	0.82	0.79	514	4.28	2.10
NYP-Lawrence Hosp	113	0.00	0.00	93	0.00	0.00	20	0.00	0.00
NYP-Queens	1916	1.15	1.49	1442	0.62	1.09	474	2.74	3.58
NYP-Weill Cornell	3550	1.07	0.98	3165	0.70	0.61	385	4.16	2.72
NYU Hospitals Center	4422	0.68	1.19	4200	0.55	0.76	222	3.15	3.23
NYU Winthrop Hospital	2971	0.81	0.75 **	2519	0.64	0.56	452	1.77	1.49 **
North Shore Univ Hosp	6052	0.88	0.89	5147	0.70	0.64	905	1.88	1.93
Olean General Hosp.	342	1.17	1.29	167	0.00	0.00	175	2.29	5.12
Orange Regional Med Ctr	1475	0.68	0.76	1075	0.56	0.54	400	1.00	1.70
Richmond Univ Med Cntr	120	0.83	0.99	90	1.11	2.26	30	0.00	0.00
Rochester General Hosp	4737	1.29	1.45	3787	0.84	0.90	950	3.05	3.80
Samaritan Hospital	620	1.29	1.58	390	0.77	1.61	230	2.17	3.44
Saratoga Hospital	87	3.45	2.71	71	2.82	2.39	16	6.25	6.70
South Nassau Com. Hosp	1548	1.23	1.44	1157	1.21	1.43 *	391	1.28	1.95
Southside Hospital	2061	0.92	0.98	1782	0.73	0.68	279	2.15	2.42
St. Barnabas Hospital	434	1.61	1.57	344	0.29	0.37	90	6.67	5.58
St. Catherine of Siena	880	1.02	0.98	680	0.29	0.32	200	3.50	3.74
St. Elizabeth Med Ctr	2047	1.91	1.60	1663	1.08	0.93	384	5.47	4.62
St. Francis Hospital	7593	0.96	1.03	7085	0.73	0.67	508	4.13	3.10
St. Josephs Hospital	5917	1.27	1.09	4462	0.96	0.82	1455	2.20	2.52
St. Lukes Cornwall Hosp	790	1.52	1.16	557	0.90	0.72	233	3.00	3.49
St. Peters Hospital	2393	1.38	1.43	1840	0.98	0.99	553	2.71	3.50
Staten Island Univ Hosp	2446	1.27	1.52	2020	0.74	0.92	426	3.76	4.06
Strong Memorial Hosp	2786	1.18	1.06	1875	0.91	0.99	911	1.76	2.05
UHS-Wilson Med Ctr	2089	1.72	1.37	1546	0.78	0.82	543	4.42	3.60
Unity Hospital	883	2.04	1.55	635	1.10	1.07	248	4.44	3.58
Univ. Hosp-Brooklyn	916	2.40	1.45	582	0.69	0.45	334	5.39	4.12
Univ. Hosp-Stony Brook	4090	1.52	1.13	2949	1.05	0.86	1141	2.72	2.54
Univ. Hosp-Upstate	663	2.56	1.90	414	1.93	2.12 *	249	3.61	3.70
Vassar Bros. Med Ctr	2024	1.43	1.20	1401	0.64	0.56	623	3.21	3.70
Westchester Med Ctr	1237	1.86	1.24	758	1.06	0.87	479	3.13	3.11
White Plains Hospital	1120	1.07	0.97	898	0.56	0.60	222	3.15	2.52
Statewide Total	144196	1.15		118461	0.74		25735	3.04	

*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, 2013-2015 Discharges (Listed Alphabetically by Hospital)

Hospital	Cases	Deaths	OMR	EMR	RAMR	95% CI for RAMR
Albany Med. Ctr	339	13	3.83	4.19	4.35	(2.31, 7.44)
Buffalo General Hosp	238	9	3.78	4.52	3.97	(1.81, 7.55)
Lenox Hill Hospital	128	8	6.25	4.91	6.05	(2.60,11.92)
Long Island Jewish MC	141	5	3.55	4.94	3.41	(1.10, 7.96)
Maimonides Medical Ctr	151	7	4.64	4.16	5.29	(2.12,10.90)
Mercy Hospital	7	0	0.00	5.40	0.00	(0.00,46.14)
Montefiore - Moses	115	7	6.09	5.24	5.52	(2.21,11.38)
Montefiore - Weiler	17	1	5.88	3.47	8.07	(0.11,44.88)
Mount Sinai Hospital	452	33	7.30	4.78	7.26 *	(4.99,10.19)
NYP-Brooklyn Methodist	40	3	7.50	4.73	7.54	(1.52,22.04)
NYP-Columbia Presby.	959	34	3.55	5.63	2.99 **	(2.07, 4.18)
NYP-Weill Cornell	329	16	4.86	4.31	5.37	(3.06, 8.71)
NYU Hospitals Center	322	12	3.73	3.44	5.15	(2.66, 8.99)
NYU Winthrop Hospital	537	20	3.72	4.45	3.97	(2.43, 6.14)
North Shore Univ Hosp	323	16	4.95	4.77	4.94	(2.82, 8.02)
Rochester General Hosp	4	0	0.00	7.45	0.00	(0.00,58.52)
Southside Hospital	116	4	3.45	3.79	4.33	(1.16,11.08)
St. Francis Hospital	542	26	4.80	4.87	4.68	(3.06, 6.86)
St. Josephs Hospital	278	18	6.47	4.74	6.50	(3.85,10.27)
St. Peters Hospital	68	5	7.35	4.33	8.07	(2.60,18.84)
Strong Memorial Hosp	159	13	8.18	5.20	7.47	(3.97,12.78)
UHS-Wilson Med Ctr	38	0	0.00	4.19	0.00	(0.00,10.94)
Univ. Hosp-Stony Brook	107	9	8.41	4.99	8.01	(3.66,15.21)
Westchester Med Ctr	144	5	3.47	5.55	2.97	(0.96, 6.94)
STATEWIDE TOTAL	5554	264	4.75			

*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.

2013-2015 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 2013-2015 for cardiologists in each of the 63 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 2013-2015, and/or (b) performed at least one PCI in each of the years 2013-2015. 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 2013-2015.

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, 2013 – 2015 Discharges

	Cases	Deaths	OMR	All Cases EMR	RAMR	95% CI for RAMR	Non-emergency Cases	RAMR
Statewide Total	144196	1661	1.15				118461	0.74
Albany Medical Center Hospital								
##Delago A	706	20	2.83	1.21	2.70 *	(1.65, 4.17)	608	1.83 *
El-Hajjar M	260	3	1.15	1.52	0.88	(0.18, 2.56)	157	0.53
##Esper D	299	2	0.67	1.25	0.62	(0.07, 2.23)	207	0.58
##Khawaja H	5	0	0.00	0.94	0.00	(0.00,90.23)	2	0.00
##Maroney J	139	6	4.32	1.74	2.86	(1.04, 6.23)	102	1.02
Nappi A	464	11	2.37	1.49	1.83	(0.91, 3.28)	358	1.09
##Papaleo R	34	0	0.00	1.31	0.00	(0.00, 9.46)	11	0.00
##Winston B	51	1	1.96	1.79	1.26	(0.02, 7.02)	19	0.00
All Others	79	1	1.27	1.29	1.13	(0.01, 6.28)	50	0.00
TOTAL	2037	44	2.16	1.37	1.81 *	(1.32, 2.43)	1514	1.27 *
Arnot-Ogden Medical Center								
Amin N	382	4	1.05	1.58	0.76	(0.21, 1.96)	281	0.51
Grella R	437	4	0.92	0.85	1.24	(0.33, 3.18)	344	0.68
#Yarkoni A	153	3	1.96	1.77	1.28	(0.26, 3.73)	112	1.00
All Others	169	2	1.18	1.39	0.98	(0.11, 3.54)	124	0.87
TOTAL	1141	13	1.14	1.30	1.01	(0.54, 1.73)	861	0.66
Bassett Medical Center								
##Kreps E	12	2	16.67	5.72	3.36	(0.38,12.12)	5	0.00
##Malpeso J	1	0	0.00	1.43	0.00	(0.00,100.0)	.	.
McNulty P	493	6	1.22	0.98	1.43	(0.52, 3.11)	390	1.47
Menzies D	771	3	0.39	0.94	0.48	(0.10, 1.39)	660	0.33
All Others	148	4	2.70	1.26	2.47	(0.67, 6.33)	97	1.12
TOTAL	1425	15	1.05	1.03	1.18	(0.66, 1.95)	1152	0.72
Bellevue Hospital Center								
##Attubato M	14	0	0.00	1.28	0.00	(0.00,23.50)	5	0.00
##Babaev A	9	0	0.00	3.27	0.00	(0.00,14.34)	.	.
#Bangalore S	355	6	1.69	2.10	0.93	(0.34, 2.01)	262	0.43
##Coppola J	164	3	1.83	1.68	1.26	(0.25, 3.67)	112	0.77
##Feit F	7	0	0.00	0.77	0.00	(0.00,78.44)	3	0.00
#Hegde S	102	0	0.00	1.33	0.00	(0.00, 3.11)	102	0.00
##Iqbal S	267	1	0.37	1.20	0.36	(0.00, 1.99)	204	0.00
Kurian D	57	0	0.00	0.54	0.00	(0.00,13.80)	57	0.00
#Miller L	64	2	3.13	2.35	1.53	(0.17, 5.53)	40	0.00
#Serrano-Gomez C	19	1	5.26	3.60	1.68	(0.02, 9.37)	4	21.73
#Shah B	138	1	0.72	1.44	0.58	(0.01, 3.22)	99	0.00
##Slater J	4	1	25.00	10.80	2.67	(0.03,14.84)	1	0.00
##Staniloae C	11	1	9.09	2.86	3.66	(0.05,20.39)	2	0.00
All Others	17	0	0.00	4.54	0.00	(0.00, 5.48)	4	0.00
TOTAL	1228	16	1.30	1.74	0.86	(0.49, 1.40)	895	0.33
Bronx-Lebanon Hospital Ctr Concourse Div								
##Amsalem Y	68	1	1.47	2.26	0.75	(0.01, 4.17)	41	1.38
##Celaj S	34	3	8.82	4.13	2.46	(0.49, 7.19)	3	0.00
##Johnson M	18	1	5.56	2.93	2.18	(0.03,12.14)	5	23.75
##Krim N	194	4	2.06	2.97	0.80	(0.21, 2.05)	80	0.00
#Limaye A	9	0	0.00	0.62	0.00	(0.00,75.45)	6	0.00
TOTAL	323	9	2.79	2.88	1.12	(0.51, 2.12)	135	1.32
Brookdale Univ. Hospital Medical Ctr								
#Castillo R	325	5	1.54	1.74	1.02	(0.33, 2.37)	213	0.29
#Chadow H	238	3	1.26	1.78	0.82	(0.16, 2.39)	148	0.00
All Others	3	0	0.00	2.57	0.00	(0.00,54.73)	2	0.00
TOTAL	566	8	1.41	1.76	0.92	(0.40, 1.82)	363	0.17

Table 5, continued

	Cases	Deaths	OMR	All Cases EMR	RAMR	95% CI for RAMR	Non-emergency Cases	RAMR
Brookhaven Mem. Hospital Medical Center								
##Bench T	124	0	0.00	1.44	0.00	(0.00, 2.37)	76	0.00
##Caselnova R	3	0	0.00	2.27	0.00	(0.00,62.04)	.	.
#Gambino A	27	0	0.00	0.53	0.00	(0.00,29.79)	24	0.00
##Joseph S	13	0	0.00	1.06	0.00	(0.00,30.71)	13	0.00
#Khan W	340	6	1.76	0.99	2.05	(0.75, 4.45)	271	2.04
#Patel D	10	0	0.00	0.43	0.00	(0.00,99.33)	8	0.00
##Patel R B	11	0	0.00	1.48	0.00	(0.00,25.97)	1	0.00
#Pulipati B	84	4	4.76	1.26	4.36 *	(1.17,11.16)	57	4.81 *
#Schwartz R	25	1	4.00	0.98	4.72	(0.06,26.29)	20	5.28
TOTAL	637	11	1.73	1.10	1.81	(0.90, 3.23)	470	2.14 *
Buffalo General Hospital								
#Calandra S	2	0	0.00	0.65	0.00	(0.00,100.0)	2	0.00
#Conley J	748	9	1.20	1.14	1.22	(0.56, 2.31)	588	0.86
##Dashkoff N	543	7	1.29	1.59	0.93	(0.37, 1.92)	389	0.37
##Emerson R	2	0	0.00	0.59	0.00	(0.00,100.0)	2	0.00
#Farhi E	781	13	1.66	0.95	2.03	(1.08, 3.46)	575	0.79
#Gelormini J	33	0	0.00	0.67	0.00	(0.00,18.98)	32	0.00
#Haq N	1	0	0.00	0.30	0.00	(0.00,100.0)	1	0.00
#Iyer V	514	11	2.14	1.45	1.70	(0.85, 3.04)	355	1.04
#Mallavarapu C	1	0	0.00	0.40	0.00	(0.00,100.0)	.	.
#Masud ARZ	55	1	1.82	0.71	2.96	(0.04,16.48)	51	1.86
#Morris W	799	13	1.63	1.23	1.52	(0.81, 2.60)	624	1.09
#Phadke K	684	17	2.49	1.36	2.11 *	(1.23, 3.37)	420	0.92
#Sullivan P	193	3	1.55	1.35	1.33	(0.27, 3.89)	124	0.79
Visco J	169	4	2.37	0.52	5.28 *	(1.42,13.52)	160	4.12 *
Zlotnick D	236	4	1.69	1.25	1.57	(0.42, 4.01)	134	1.63
TOTAL	4761	82	1.72	1.22	1.62 *	(1.29, 2.01)	3457	1.00
Cayuga Medical Center at Ithaca								
##Kreps E	41	1	2.44	2.47	1.14	(0.01, 6.33)	21	0.00
##Ong L S	1	0	0.00	1.35	0.00	(0.00,100.0)	.	.
#Stefek P	263	3	1.14	1.35	0.97	(0.20, 2.84)	144	1.54
##Stuver T	2	0	0.00	3.43	0.00	(0.00,61.68)	.	.
All Others	131	2	1.53	1.76	1.00	(0.11, 3.61)	67	0.00
TOTAL	438	6	1.37	1.59	1.00	(0.36, 2.17)	232	0.91
Champlain Valley Physicians Hospital								
Bradley W	512	7	1.37	1.07	1.47	(0.59, 3.02)	390	0.79
Garrand T	439	5	1.14	1.11	1.18	(0.38, 2.76)	322	0.69
Gauthier E	626	11	1.76	0.86	2.35 *	(1.17, 4.21)	478	1.38
All Others	93	2	2.15	1.01	2.46	(0.28, 8.90)	71	2.59
TOTAL	1670	25	1.50	1.00	1.72	(1.12, 2.55)	1261	1.08
Crouse Hospital								
Battaglia J	468	3	0.64	0.89	0.83	(0.17, 2.42)	356	0.00
George A	392	11	2.81	1.36	2.37 *	(1.18, 4.25)	265	1.76
TOTAL	860	14	1.63	1.11	1.70	(0.93, 2.84)	621	0.82
Ellis Hospital								
Cospito P	349	5	1.43	1.15	1.43	(0.46, 3.34)	242	1.11
Jordan M	302	4	1.32	1.37	1.11	(0.30, 2.85)	164	0.83
Parkes R	472	6	1.27	1.19	1.23	(0.45, 2.68)	317	1.26
Weitz S	244	2	0.82	1.57	0.60	(0.07, 2.17)	128	0.00
All Others	26	0	0.00	0.38	0.00	(0.00,42.78)	22	0.00
TOTAL	1393	17	1.22	1.27	1.11	(0.64, 1.77)	873	0.96
Elmhurst Hospital Center								
Kamran M	777	1	0.13	0.73	0.20 **	(0.00, 1.14)	579	0.36
##Kim M	2	0	0.00	1.53	0.00	(0.00,100.0)	.	.
##Pyo R	60	4	6.67	4.23	1.82	(0.49, 4.65)	2	0.00
#Yatskar L	491	1	0.20	0.81	0.29	(0.00, 1.61)	357	0.00
All Others	13	1	7.69	2.47	3.58	(0.05,19.94)	1	0.00
TOTAL	1343	7	0.52	0.93	0.64	(0.26, 1.33)	939	0.22

Table 5, continued

	Cases	Deaths	OMR	All Cases EMR	RAMR	95% CI for RAMR	Non-emergency Cases	RAMR
Erie County Medical Center								
##Dashkoff N	22	0	0.00	1.13	0.00	(0.00,16.97)	16	0.00
##Emerson R	3	0	0.00	0.36	0.00	(0.00,100.0)	2	0.00
#Iyer V	1	0	0.00	7.81	0.00	(0.00,54.11)	.	.
All Others	3	0	0.00	2.24	0.00	(0.00,62.96)	.	.
TOTAL	29	0	0.00	1.40	0.00	(0.00,10.43)	18	0.00
Faxton-St. Lukes Hlthcare- St.Lukes Div								
##Bhan R	12	1	8.33	3.10	3.10	(0.04,17.25)	7	0.00
#ElGharib N	186	2	1.08	0.65	1.90	(0.21, 6.85)	169	1.39
#Kelberman M	13	1	7.69	1.41	6.28	(0.08,34.96)	7	0.00
##Kozman H	7	1	14.29	2.12	7.77	(0.10,43.25)	3	0.00
#Maclsaac H	49	3	6.12	2.90	2.43	(0.49, 7.10)	35	1.48
#Mathew T C	142	3	2.11	0.83	2.94	(0.59, 8.59)	122	3.08
#Patel A	16	0	0.00	1.45	0.00	(0.00,18.17)	9	0.00
#Sassower M	45	1	2.22	3.05	0.84	(0.01, 4.67)	27	0.00
#Varma P	29	0	0.00	1.72	0.00	(0.00, 8.47)	17	0.00
All Others	213	4	1.88	1.41	1.53	(0.41, 3.92)	191	0.00
TOTAL	712	16	2.25	1.35	1.91	(1.09, 3.11)	587	1.10
Glens Falls Hospital								
Bashir I	290	0	0.00	1.05	0.00	(0.00, 1.38)	181	0.00
##Delago A	1	0	0.00	0.15	0.00	(0.00,100.0)	1	0.00
Hogan R	289	2	0.69	1.07	0.74	(0.08, 2.68)	180	0.83
##Papaleo R	9	0	0.00	1.14	0.00	(0.00,41.27)	1	0.00
All Others	2	0	0.00	0.54	0.00	(0.00,100.0)	.	.
TOTAL	591	2	0.34	1.06	0.37	(0.04, 1.33)	363	0.52
Good Samaritan Hosp Med Ctr- West Islip								
##Arkonac B	20	0	0.00	0.58	0.00	(0.00,36.66)	20	0.00
##Caselnova R	429	7	1.63	0.83	2.26	(0.91, 4.67)	387	1.33
##Deutsch E	330	2	0.61	0.61	1.14	(0.13, 4.13)	309	0.51
#Gandotra P	33	1	3.03	1.29	2.70	(0.04,15.05)	33	1.73
##Hormozi S	543	5	0.92	0.88	1.21	(0.39, 2.82)	481	0.59
##Lee P J	504	2	0.40	0.61	0.76	(0.08, 2.73)	458	0.79
##Patel R B	121	4	3.31	1.23	3.10	(0.83, 7.95)	77	2.06
#Reich D	392	0	0.00	0.65	0.00	(0.00, 1.66)	361	0.00
All Others	185	0	0.00	0.89	0.00	(0.00, 2.58)	165	0.00
TOTAL	2557	21	0.82	0.77	1.23	(0.76, 1.89)	2291	0.67
Good Samaritan Hospital - Suffern								
#Agarwal A	101	2	1.98	1.14	2.00	(0.22, 7.21)	72	0.00
##Gotsis W	1	0	0.00	0.60	0.00	(0.00,100.0)	1	0.00
Hirsch C	316	2	0.63	1.46	0.50	(0.06, 1.80)	260	0.00
Innerfield M	159	5	3.14	1.98	1.83	(0.59, 4.26)	86	1.46
##Kandov R	2	0	0.00	3.23	0.00	(0.00,65.49)	.	.
Kovar L	279	6	2.15	1.65	1.50	(0.55, 3.27)	212	0.76
##Royzman R	5	3	60.00	8.76	7.89 *	(1.59,23.06)	.	.
#Shah A R	551	11	2.00	1.66	1.39	(0.69, 2.48)	439	1.22
Shih A C	186	8	4.30	1.97	2.51	(1.08, 4.95)	112	1.98
Singh R	161	5	3.11	1.85	1.94	(0.62, 4.52)	107	1.05
All Others	20	0	0.00	0.85	0.00	(0.00,25.00)	13	0.00
TOTAL	1781	42	2.36	1.68	1.61 *	(1.16, 2.18)	1302	0.95
Huntington Hospital								
##Bagga R	507	4	0.79	1.08	0.84	(0.23, 2.16)	409	0.26
##Ong L Y	166	0	0.00	0.56	0.00	(0.00, 4.57)	141	0.00
##Pacha R	220	1	0.45	0.87	0.60	(0.01, 3.34)	178	0.00
##Polena S	366	4	1.09	0.78	1.62	(0.43, 4.14)	308	1.62
##Strizik B	230	2	0.87	1.41	0.71	(0.08, 2.57)	156	0.65
TOTAL	1489	11	0.74	0.97	0.88	(0.44, 1.57)	1192	0.61

Table 5, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
Jamaica Hospital Medical Center								
#Jain S	231	3	1.30	2.14	0.70	(0.14, 2.05)	114	0.00
#Kukar A	7	0	0.00	1.23	0.00	(0.00,49.18)	.	.
#Lasic Z	231	4	1.73	1.99	1.00	(0.27, 2.57)	98	1.90
#Mangla A	207	5	2.42	1.53	1.82	(0.59, 4.24)	94	2.67
#Raza J	213	1	0.47	1.06	0.51	(0.01, 2.85)	102	0.00
#Suleman J	5	0	0.00	0.27	0.00	(0.00,100.0)	5	0.00
TOTAL	894	13	1.45	1.68	1.00	(0.53, 1.70)	413	1.21
Lenox Hill Hospital								
#Aboufares A	4	0	0.00	0.39	0.00	(0.00,100.0)	4	0.00
##Amsalem Y	2	0	0.00	3.49	0.00	(0.00,60.46)	2	0.00
##Attubato M	9	0	0.00	0.37	0.00	(0.00,100.0)	9	0.00
##Babaev A	3	0	0.00	0.43	0.00	(0.00,100.0)	3	0.00
##Coppola J	1	0	0.00	0.21	0.00	(0.00,100.0)	1	0.00
#Coven D	54	1	1.85	2.17	0.98	(0.01, 5.48)	42	1.11
##Dominguez-Echeva	6	0	0.00	0.55	0.00	(0.00,100.0)	6	0.00
##Feit F	6	0	0.00	0.34	0.00	(0.00,100.0)	6	0.00
##Fernaine G	15	0	0.00	0.33	0.00	(0.00,85.74)	15	0.00
Garratt K	323	2	0.62	0.82	0.87	(0.10, 3.13)	287	0.00
Hassid B	421	1	0.24	0.76	0.36	(0.00, 2.01)	386	0.29
##Iqbal S	1	0	0.00	0.35	0.00	(0.00,100.0)	1	0.00
Iyer S	110	1	0.91	0.88	1.19	(0.02, 6.62)	100	0.00
#Jain S	211	2	0.95	0.58	1.89	(0.21, 6.81)	209	0.63
##Kesanakurthy S	141	0	0.00	0.63	0.00	(0.00, 4.75)	133	0.00
##Kim M	400	3	0.75	0.88	0.99	(0.20, 2.88)	364	0.95
#Kukar A	283	0	0.00	0.59	0.00	(0.00, 2.54)	258	0.00
#Lasic Z	224	0	0.00	0.69	0.00	(0.00, 2.73)	217	0.00
#Mangla A	175	4	2.29	0.78	3.37	(0.91, 8.63)	169	2.09
##Papadakos S	21	0	0.00	0.47	0.00	(0.00,42.62)	21	0.00
##Poumpouridis K	16	0	0.00	0.68	0.00	(0.00,38.93)	10	0.00
##Puma A	19	0	0.00	0.61	0.00	(0.00,36.34)	19	0.00
#Punukollu G	248	3	1.21	0.61	2.29	(0.46, 6.70)	243	1.53
#Raza J	350	5	1.43	0.64	2.58	(0.83, 6.02)	340	1.84
Reimers C	814	4	0.49	0.56	1.01	(0.27, 2.59)	773	0.41
##Shah A	41	0	0.00	0.63	0.00	(0.00,16.33)	41	0.00
##Singh V	746	4	0.54	0.61	1.01	(0.27, 2.59)	723	0.48
##Slater J	3	0	0.00	0.76	0.00	(0.00,100.0)	3	0.00
##Snyder S	1	0	0.00	0.22	0.00	(0.00,100.0)	1	0.00
##Staniloae C	2	0	0.00	0.13	0.00	(0.00,100.0)	2	0.00
#Stathopoulos I	56	0	0.00	0.69	0.00	(0.00,10.95)	55	0.00
##Weinberg M	14	0	0.00	0.62	0.00	(0.00,48.83)	13	0.00
Zaric M	37	2	5.41	3.97	1.57	(0.18, 5.66)	20	0.00
All Others	148	2	1.35	1.40	1.11	(0.12, 4.00)	132	1.01
TOTAL	4905	34	0.69	0.73	1.09	(0.76, 1.53)	4608	0.65
Long Island Jewish Medical Center								
##Arkonac B	10	0	0.00	0.66	0.00	(0.00,64.45)	9	0.00
##Bagga R	22	0	0.00	1.12	0.00	(0.00,17.20)	22	0.00
#Boutis L	37	2	5.41	4.70	1.33	(0.15, 4.79)	4	26.63
#Dhama B	244	3	1.23	0.90	1.57	(0.32, 4.59)	235	1.07
#Freeman J	11	0	0.00	1.58	0.00	(0.00,24.38)	11	0.00
##Friedman G H	16	0	0.00	0.29	0.00	(0.00,90.70)	15	0.00
##Fuschetto D	47	0	0.00	0.90	0.00	(0.00,10.00)	44	0.00
##Grunwald A	156	2	1.28	0.65	2.26	(0.25, 8.16)	149	1.62
#Gupta R	68	0	0.00	1.08	0.00	(0.00, 5.76)	65	0.00
##Hameedi A	663	2	0.30	0.35	0.98	(0.11, 3.55)	659	0.64
#Jauhar R	919	7	0.76	0.92	0.95	(0.38, 1.97)	820	0.88
##Joseph S	1	0	0.00	0.45	0.00	(0.00,100.0)	1	0.00
#Kaplan B	290	2	0.69	1.21	0.66	(0.07, 2.37)	244	0.33
#Katz S	10	1	10.00	4.01	2.87	(0.04,15.97)	1	0.00
##Kim M	23	1	4.35	1.97	2.55	(0.03,14.18)	5	0.00
##Koss J	172	2	1.16	0.59	2.25	(0.25, 8.13)	162	1.97
#Lee A	476	5	1.05	1.22	0.99	(0.32, 2.32)	394	0.95
#Marchant D	23	0	0.00	2.46	0.00	(0.00, 7.47)	5	0.00

Table 5, *continued*

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
Long Island Jewish Medical Center, <i>continued</i>								
#Meraj P	657	6	0.91	1.38	0.76	(0.28, 1.66)	525	0.62
##Polena S	10	0	0.00	0.41	0.00	(0.00,100.0)	10	0.00
##Poumpouridis K	29	0	0.00	0.52	0.00	(0.00,28.08)	26	0.00
##Rehman S	62	0	0.00	0.73	0.00	(0.00, 9.34)	60	0.00
#Rutkin B	18	0	0.00	1.49	0.00	(0.00,15.74)	5	0.00
#Singh A	214	2	0.93	1.11	0.97	(0.11, 3.52)	174	0.44
##Singh V	1	0	0.00	0.73	0.00	(0.00,100.0)	.	.
##Strizik B	3	0	0.00	0.65	0.00	(0.00,100.0)	2	0.00
##Weinberg M	17	1	5.88	1.99	3.40	(0.04,18.91)	5	8.26
##Yadav S	32	0	0.00	0.48	0.00	(0.00,27.36)	30	0.00
All Others	133	3	2.26	0.85	3.04	(0.61, 8.89)	124	2.43
TOTAL	4364	39	0.89	0.99	1.04	(0.74, 1.42)	3806	0.83
Lutheran Medical Center								
##Dominguez-Echeva	83	0	0.00	1.62	0.00	(0.00, 3.13)	79	0.00
##Fernaine G	338	3	0.89	1.36	0.75	(0.15, 2.20)	276	0.29
##Fuschetto D	10	0	0.00	1.16	0.00	(0.00,36.35)	6	0.00
##Hoyek W	69	2	2.90	3.07	1.09	(0.12, 3.93)	41	0.00
##Kandov R	48	1	2.08	2.85	0.84	(0.01, 4.69)	28	0.00
##Lee P C	65	2	3.08	3.08	1.15	(0.13, 4.15)	39	0.00
##Royzman R	52	1	1.92	3.32	0.67	(0.01, 3.71)	31	2.78
All Others	9	0	0.00	1.77	0.00	(0.00,26.50)	6	0.00
TOTAL	674	9	1.34	1.99	0.77	(0.35, 1.47)	506	0.28
Maimonides Medical Center								
#Ariyarajah V	15	0	0.00	0.18	0.00	(0.00,100.0)	15	0.00
Ayzenberg S	679	8	1.18	2.40	0.56 **	(0.24, 1.11)	502	0.62
Borgen E	745	5	0.67	1.91	0.40 **	(0.13, 0.94)	546	0.33
Frankel R	362	1	0.28	1.78	0.18 **	(0.00, 0.99)	323	0.19
Friedman M	308	3	0.97	2.65	0.42	(0.09, 1.24)	187	0.00
##Fuschetto D	8	0	0.00	0.70	0.00	(0.00,75.67)	8	0.00
##Gala B	4	0	0.00	1.90	0.00	(0.00,55.72)	4	0.00
##Hoyek W	6	0	0.00	1.88	0.00	(0.00,37.55)	6	0.00
##Kantrowitz N	12	0	0.00	0.48	0.00	(0.00,72.80)	11	0.00
##Lee P C	8	0	0.00	0.19	0.00	(0.00,100.0)	8	0.00
Malik B	902	12	1.33	1.70	0.90	(0.46, 1.57)	750	0.53
Shani J	221	1	0.45	1.09	0.48	(0.01, 2.66)	214	0.31
All Others	17	0	0.00	0.66	0.00	(0.00,37.47)	17	0.00
TOTAL	3287	30	0.91	1.93	0.55 **	(0.37, 0.78)	2591	0.41 **
Mercy Hospital of Buffalo								
#Calandra S	468	3	0.64	0.91	0.81	(0.16, 2.37)	342	0.81
Chaudhry E	6	0	0.00	0.54	0.00	(0.00,100.0)	6	0.00
#Conley J	130	0	0.00	0.64	0.00	(0.00, 5.09)	126	0.00
##Dashkoff N	1	0	0.00	0.17	0.00	(0.00,100.0)	1	0.00
##Emerson R	230	6	2.61	1.53	1.96	(0.72, 4.27)	132	1.61
#Farhi E	3	0	0.00	3.27	0.00	(0.00,43.04)	2	0.00
#Gelormini J	590	6	1.02	1.69	0.69	(0.25, 1.51)	436	0.17
#Haq N	434	7	1.61	1.14	1.62	(0.65, 3.35)	305	0.80
#Masud ARZ	453	8	1.77	1.21	1.68	(0.72, 3.31)	388	0.67
Meltser H	723	11	1.52	1.00	1.76	(0.88, 3.15)	542	1.41
#Morris W	42	0	0.00	0.45	0.00	(0.00,22.41)	42	0.00
#Phadke K	33	0	0.00	0.19	0.00	(0.00,67.05)	32	0.00
#Sullivan P	62	2	3.23	0.72	5.17	(0.58,18.65)	54	5.32
TOTAL	3175	43	1.35	1.17	1.34	(0.97, 1.80)	2408	0.81
Montefiore Medical Center - Moses								
##Amsalem Y	256	1	0.39	1.40	0.32	(0.00, 1.79)	187	0.00
##Bliagos D	160	1	0.63	1.54	0.47	(0.01, 2.59)	141	0.00
##Bortnick A	27	1	3.70	1.52	2.80	(0.04,15.61)	26	2.09
##Celaj S	241	2	0.83	1.21	0.79	(0.09, 2.86)	182	0.91
##Greenberg M	435	5	1.15	0.84	1.58	(0.51, 3.68)	388	1.00
##Johnson M	381	5	1.31	0.93	1.63	(0.53, 3.81)	340	0.98
##Krim N	68	1	1.47	0.56	3.03	(0.04,16.87)	64	0.00

Table 5, *continued*

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
Montefiore Medical Center - Moses, <i>continued</i>								
##Menegus M	126	2	1.59	1.23	1.49	(0.17, 5.37)	99	2.10
#Monrad E	1	0	0.00	0.08	0.00	(0.00,100.0)	1	0.00
##Pyo R	307	2	0.65	1.18	0.63	(0.07, 2.29)	264	0.34
Rodriguez M	81	2	2.47	1.09	2.60	(0.29, 9.40)	57	2.50
#Sehhat K	110	0	0.00	0.48	0.00	(0.00, 8.01)	106	0.00
##Shih A T	160	4	2.50	1.56	1.85	(0.50, 4.73)	101	0.00
#Slovut D	3	0	0.00	1.19	0.00	(0.00,100.0)	1	0.00
##Srinivas V	47	0	0.00	0.79	0.00	(0.00,11.35)	42	0.00
#Wiley J	17	0	0.00	0.54	0.00	(0.00,46.31)	14	0.00
All Others	36	0	0.00	1.28	0.00	(0.00, 9.14)	28	0.00
TOTAL	2456	26	1.06	1.10	1.11	(0.73, 1.63)	2041	0.67
Montefiore Medical Center - Weiler								
##Bortnick A	286	5	1.75	2.07	0.97	(0.31, 2.26)	194	0.37
##Charney R	21	0	0.00	1.79	0.00	(0.00,11.26)	21	0.00
##Greenberg M	31	0	0.00	0.45	0.00	(0.00,30.33)	31	0.00
##Johnson M	22	0	0.00	1.09	0.00	(0.00,17.66)	18	0.00
##Menegus M	362	1	0.28	1.07	0.30	(0.00, 1.66)	277	0.36
##Messinger D	9	0	0.00	1.91	0.00	(0.00,24.56)	9	0.00
#Monrad E	302	2	0.66	1.44	0.53	(0.06, 1.91)	238	0.00
#Slovut D	209	2	0.96	1.73	0.64	(0.07, 2.30)	121	0.00
Sokol S	213	2	0.94	1.07	1.01	(0.11, 3.65)	160	0.67
##Srinivas V	129	1	0.78	1.14	0.78	(0.01, 4.36)	112	0.00
All Others	45	0	0.00	1.17	0.00	(0.00, 8.03)	39	0.00
TOTAL	1629	13	0.80	1.41	0.65 **	(0.35, 1.12)	1220	0.21 **
Mount Sinai Beth Israel								
#Aslam A F	58	2	3.45	1.52	2.62	(0.29, 9.45)	45	4.40
#Aslam A K	149	1	0.67	0.27	2.88	(0.04,16.02)	143	0.00
Diwan R	62	0	0.00	0.41	0.00	(0.00,16.49)	62	0.00
Fox J	1216	10	0.82	1.02	0.93	(0.45, 1.71)	1120	0.60
##Gowda R	718	10	1.39	1.59	1.01	(0.48, 1.85)	610	0.85
Huang Y	459	4	0.87	0.39	2.61	(0.70, 6.68)	456	1.78
Kanei Y	474	9	1.90	1.95	1.12	(0.51, 2.13)	332	0.83
#Kwan T	630	2	0.32	0.35	1.03	(0.12, 3.73)	627	0.68
##Lee P C	2	0	0.00	0.36	0.00	(0.00,100.0)	2	0.00
#Liou M	250	0	0.00	0.38	0.00	(0.00, 4.49)	246	0.00
Patel R H	20	0	0.00	0.65	0.00	(0.00,32.38)	20	0.00
##Puma A	225	2	0.89	0.41	2.49	(0.28, 8.99)	225	1.54
#Punukollu G	171	1	0.58	0.53	1.27	(0.02, 7.09)	165	0.86
#Rosero H	484	6	1.24	0.98	1.46	(0.53, 3.18)	420	0.33
#Vales L	8	0	0.00	0.46	0.00	(0.00,100.0)	8	0.00
#Wilentz J	4	0	0.00	0.42	0.00	(0.00,100.0)	4	0.00
All Others	30	0	0.00	0.70	0.00	(0.00,20.03)	28	0.00
TOTAL	4960	47	0.95	0.94	1.16	(0.86, 1.55)	4513	0.76
Mount Sinai Hospital								
Baber U	146	1	0.68	1.74	0.45	(0.01, 2.52)	128	0.00
Bander J	330	3	0.91	1.20	0.87	(0.18, 2.55)	299	0.47
##Bliagos D	109	1	0.92	0.63	1.68	(0.02, 9.37)	108	1.09
Dangas G	451	5	1.11	1.61	0.79	(0.26, 1.85)	391	0.68
##Dominguez-Echeva	142	1	0.70	0.91	0.89	(0.01, 4.94)	142	0.62
##Duvvuri S	5	0	0.00	1.63	0.00	(0.00,51.92)	5	0.00
##Fernaine G	43	1	2.33	1.28	2.10	(0.03,11.68)	42	2.08
##Gowda R	4	0	0.00	0.25	0.00	(0.00,100.0)	4	0.00
##Hameedi A	233	0	0.00	0.23	0.00	(0.00, 7.72)	233	0.00
Hasan C	200	1	0.50	0.24	2.44	(0.03,13.58)	200	1.74
#Jayasundera T	10	0	0.00	0.29	0.00	(0.00,100.0)	10	0.00
Kapur V	57	0	0.00	0.78	0.00	(0.00, 9.52)	53	0.00
##Kesanakurthy S	529	4	0.76	0.64	1.35	(0.36, 3.47)	517	0.92
##Kim M	28	0	0.00	0.43	0.00	(0.00,34.87)	27	0.00
Kini A	2693	11	0.41	0.72	0.65	(0.32, 1.17)	2598	0.27 **
Kovacic J	111	0	0.00	2.12	0.00	(0.00, 1.80)	79	0.00
Krishnan P	305	2	0.66	0.58	1.31	(0.15, 4.74)	292	0.95

Table 5, *continued*

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
Mount Sinai Hospital, <i>continued</i>								
Lee J	14	0	0.00	0.24	0.00	(0.00,100.0)	14	0.00
##Lee P C	5	0	0.00	0.41	0.00	(0.00,100.0)	4	0.00
#Limaye A	285	5	1.75	1.88	1.08	(0.35, 2.52)	248	0.40
Mittal N	47	0	0.00	0.26	0.00	(0.00,34.56)	47	0.00
#Moreno P	789	3	0.38	0.66	0.66	(0.13, 1.93)	774	0.18
Palkhiwala S	520	0	0.00	0.41	0.00	(0.00, 1.97)	515	0.00
##Patel M	22	0	0.00	0.41	0.00	(0.00,46.81)	22	0.00
#Patel V	29	0	0.00	0.18	0.00	(0.00,82.16)	29	0.00
##Pyo R	151	3	1.99	1.05	2.17	(0.44, 6.35)	139	1.34
##Shah A	34	1	2.94	0.94	3.61	(0.05,20.06)	33	3.34
#Shah A R	1	0	0.00	1.96	0.00	(0.00,100.0)	1	0.00
Sharma S	3356	16	0.48	0.84	0.66 **	(0.37, 1.07)	3331	0.41 **
Soffer D	63	0	0.00	0.78	0.00	(0.00, 8.59)	63	0.00
#Suleman J	540	0	0.00	0.39	0.00	(0.00, 2.01)	538	0.00
Sweeny J	395	5	1.27	1.01	1.45	(0.47, 3.38)	369	1.21
#Wiley J	58	0	0.00	2.02	0.00	(0.00, 3.61)	42	0.00
##Yadav S	16	0	0.00	0.17	0.00	(0.00,100.0)	16	0.00
##Zgheib M	13	0	0.00	0.24	0.00	(0.00,100.0)	13	0.00
All Others	197	1	0.51	0.80	0.73	(0.01, 4.05)	180	0.51
TOTAL	11931	64	0.54	0.82	0.76 **	(0.58, 0.97)	11506	0.45 **
Mount Sinai St. Lukes								
##Amsalem Y	27	0	0.00	0.82	0.00	(0.00,19.08)	24	0.00
#Coven D	85	1	1.18	1.38	0.98	(0.01, 5.46)	65	0.00
##Gotsis W	21	1	4.76	0.70	7.84	(0.10,43.63)	21	4.70
##Gowda R	30	0	0.00	0.60	0.00	(0.00,23.60)	27	0.00
Hong M	144	4	2.78	1.55	2.06	(0.55, 5.28)	120	0.74
Husain S S	28	1	3.57	0.43	9.48	(0.12,52.72)	28	6.01
##Krim N	7	0	0.00	0.31	0.00	(0.00,100.0)	7	0.00
Leber R	254	5	1.97	1.27	1.78	(0.58, 4.17)	202	0.79
#Moreno P	44	0	0.00	0.33	0.00	(0.00,28.82)	44	0.00
Palazzo A	90	2	2.22	1.32	1.94	(0.22, 7.00)	71	0.00
##Silverman G	6	0	0.00	0.47	0.00	(0.00,100.0)	5	0.00
Simon C	442	11	2.49	2.38	1.20	(0.60, 2.15)	394	0.99
##Slater J	1	0	0.00	0.15	0.00	(0.00,100.0)	1	0.00
Tamis-Holland J	146	1	0.68	1.72	0.46	(0.01, 2.55)	92	0.00
All Others	15	0	0.00	0.33	0.00	(0.00,84.39)	15	0.00
TOTAL	1340	26	1.94	1.63	1.37	(0.90, 2.01)	1116	0.86
NY Presbyterian Queens								
Chiu Sungkin	57	0	0.00	0.19	0.00	(0.00,38.11)	57	0.00
Chiu Sungwai	66	0	0.00	0.27	0.00	(0.00,23.82)	66	0.00
#David M	39	1	2.56	0.23	13.10	(0.17,72.90)	39	10.74
##Grunwald A	73	1	1.37	1.01	1.56	(0.02, 8.69)	41	3.32
#Gupta R	47	0	0.00	0.96	0.00	(0.00, 9.34)	46	0.00
Gustafson G	280	1	0.36	0.96	0.43	(0.01, 2.38)	197	0.00
##Hameedi A	268	0	0.00	0.23	0.00	(0.00, 6.93)	267	0.00
##Koss J	50	3	6.00	2.11	3.28	(0.66, 9.59)	21	0.00
Lee H	57	0	0.00	0.23	0.00	(0.00,31.65)	57	0.00
Moustakakis E	378	5	1.32	1.08	1.41	(0.45, 3.28)	238	2.24
##Papadacos S	145	3	2.07	1.96	1.22	(0.24, 3.56)	73	1.34
Park C	440	7	1.59	0.85	2.15	(0.86, 4.44)	331	1.07
#Perry-Bottinger L	2	0	0.00	0.79	0.00	(0.00,100.0)	2	0.00
All Others	14	1	7.14	1.71	4.80	(0.06,26.70)	7	0.00
TOTAL	1916	22	1.15	0.89	1.49	(0.93, 2.26)	1442	1.09
NYP - Lawrence Hospital								
##Apfelbaum M	14	0	0.00	0.88	0.00	(0.00,34.35)	7	0.00
##Hjemdahl-Monsen	41	0	0.00	0.41	0.00	(0.00,25.04)	37	0.00
##Kalapatapu K	48	0	0.00	0.90	0.00	(0.00, 9.82)	46	0.00
#Nazif T	2	0	0.00	0.75	0.00	(0.00,100.0)	2	0.00
All Others	8	0	0.00	4.58	0.00	(0.00,11.53)	1	0.00
TOTAL	113	0	0.00	0.98	0.00	(0.00, 3.83)	93	0.00

Table 5, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
NYP Hospital - Brooklyn Methodist								
#Ariyarahaj V	2	0	0.00	0.18	0.00	(0.00,100.0)	2	0.00
#Aslam A F	111	1	0.90	0.42	2.46	(0.03,13.67)	105	0.00
#Aslam A K	199	0	0.00	0.22	0.00	(0.00, 9.78)	195	0.00
#Badero O	136	0	0.00	0.26	0.00	(0.00,11.75)	136	0.00
Brener S	440	20	4.55	2.20	2.38 *	(1.45, 3.67)	290	1.47
Chokshi A	85	0	0.00	0.66	0.00	(0.00, 7.54)	83	0.00
##Dominguez-Echeva	13	0	0.00	0.38	0.00	(0.00,86.51)	13	0.00
Haq S	197	5	2.54	1.57	1.86	(0.60, 4.35)	178	1.31
##Hoyek W	74	0	0.00	0.34	0.00	(0.00,16.87)	74	0.00
Jasty B	126	1	0.79	0.51	1.78	(0.02, 9.89)	124	1.12
#John S	3	0	0.00	0.26	0.00	(0.00,100.0)	3	0.00
##Kesanakurthy S	9	0	0.00	0.23	0.00	(0.00,100.0)	9	0.00
#Kwan T	18	0	0.00	0.35	0.00	(0.00,67.54)	18	0.00
#Patel V	163	3	1.84	0.76	2.80	(0.56, 8.17)	159	2.52
##Rehman S	73	2	2.74	1.07	2.94	(0.33,10.61)	69	2.34
#Rosero H	1	0	0.00	0.12	0.00	(0.00,100.0)	1	0.00
Rouvelas P	91	0	0.00	0.39	0.00	(0.00,11.76)	91	0.00
Sacchi T	1126	15	1.33	1.02	1.50	(0.84, 2.48)	992	0.88
##Shah A	446	5	1.12	0.55	2.33	(0.75, 5.44)	437	1.54
Shaknovich A	186	3	1.61	0.86	2.16	(0.43, 6.32)	183	1.56
Shohat E	52	0	0.00	0.25	0.00	(0.00,32.76)	51	0.00
##Srivastava S	3	0	0.00	1.00	0.00	(0.00,100.0)	3	0.00
##Yadav S	93	1	1.08	0.25	4.93	(0.06,27.44)	93	3.47
All Others	276	1	0.36	0.59	0.71	(0.01, 3.93)	263	0.00
TOTAL	3923	57	1.45	0.91	1.84 *	(1.40, 2.39)	3572	1.13 *
NYP Hospital - Columbia Presbyterian								
#Aboufares A	249	5	2.01	1.36	1.70	(0.55, 3.96)	209	1.79
Ali Z	397	6	1.51	1.79	0.97	(0.35, 2.11)	340	0.38
##Apfelbaum M	30	0	0.00	0.32	0.00	(0.00,43.66)	29	0.00
##Bliagos D	79	0	0.00	1.10	0.00	(0.00, 4.88)	78	0.00
Brogno D	412	4	0.97	0.60	1.85	(0.50, 4.74)	409	1.27
Collins M	433	10	2.31	1.99	1.34	(0.64, 2.46)	392	1.17
##Dominguez-Echeva	51	0	0.00	0.65	0.00	(0.00,12.71)	51	0.00
George I	3	1	33.33	8.27	4.64	(0.06,25.83)	3	6.79
Gray W	107	2	1.87	2.60	0.83	(0.09, 2.99)	80	1.56
##Hjemdahl-Monsen	261	3	1.15	1.16	1.14	(0.23, 3.34)	251	0.85
#Irobunda C	164	1	0.61	1.78	0.39	(0.01, 2.20)	138	0.00
##Kalapatapu K	289	3	1.04	1.18	1.01	(0.20, 2.96)	274	0.34
##Kesanakurthy S	2	0	0.00	0.97	0.00	(0.00,100.0)	2	0.00
Kirtane A	452	3	0.66	1.49	0.51	(0.10, 1.50)	397	0.25
Kodali S	275	7	2.55	2.29	1.28	(0.51, 2.64)	251	0.94
##Kreps E	14	0	0.00	2.81	0.00	(0.00,10.74)	13	0.00
Leon M	109	1	0.92	0.67	1.57	(0.02, 8.73)	109	1.01
#Moses J	1025	6	0.59	0.62	1.09	(0.40, 2.37)	1021	0.72
##Motivala A	20	0	0.00	0.81	0.00	(0.00,25.95)	20	0.00
#Nazif T	157	2	1.27	1.87	0.78	(0.09, 2.83)	140	0.88
Parikh M	748	2	0.27	0.74	0.41	(0.05, 1.50)	714	0.38
#Perry-Bottinger L	21	0	0.00	0.48	0.00	(0.00,41.50)	21	0.00
Pucillo A	192	0	0.00	0.87	0.00	(0.00, 2.54)	180	0.00
##Puma A	110	0	0.00	0.43	0.00	(0.00, 8.84)	110	0.00
Rabbani L	635	7	1.10	0.84	1.51	(0.60, 3.11)	583	0.96
Rentrop K	62	0	0.00	0.25	0.00	(0.00,27.15)	62	0.00
#Sehhat K	18	0	0.00	0.45	0.00	(0.00,52.06)	18	0.00
##Shih A T	4	1	25.00	1.74	16.52	(0.22,91.90)	4	11.95
#Stathopoulos I	294	1	0.34	0.67	0.58	(0.01, 3.25)	292	0.41
Stone G	13	0	0.00	1.30	0.00	(0.00,25.06)	13	0.00
Weinberger J	55	0	0.00	0.55	0.00	(0.00,13.97)	53	0.00
#Williams M	78	2	2.56	1.28	2.31	(0.26, 8.33)	70	1.73
All Others	596	11	1.85	1.47	1.44	(0.72, 2.58)	514	1.26
TOTAL	7355	78	1.06	1.15	1.06	(0.84, 1.33)	6841	0.79

Table 5, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
NYP Hospital - Weill Cornell								
Bergman G	463	3	0.65	1.43	0.52	(0.10, 1.52)	411	0.00 **
##Charney R	197	2	1.02	0.96	1.22	(0.14, 4.40)	195	0.86
Feldman D	448	2	0.45	1.35	0.38	(0.04, 1.37)	385	0.00
Gade C	32	0	0.00	0.32	0.00	(0.00,41.17)	32	0.00
##Kesanakurthy S	109	2	1.83	0.45	4.66	(0.52,16.84)	109	3.44
Kim L	336	6	1.79	1.63	1.26	(0.46, 2.74)	273	0.84
##Messinger D	101	1	0.99	1.69	0.68	(0.01, 3.76)	97	0.44
Minutello R	424	6	1.42	1.46	1.12	(0.41, 2.43)	359	0.62
Sharma A	184	1	0.54	1.02	0.61	(0.01, 3.40)	164	0.00
Singh H	154	5	3.25	2.24	1.67	(0.54, 3.90)	112	1.76
Slotwiner A	146	0	0.00	1.82	0.00	(0.00, 1.59)	124	0.00
##Srivastava S	23	0	0.00	0.38	0.00	(0.00,48.11)	23	0.00
Swaminathan R	154	4	2.60	2.26	1.32	(0.36, 3.39)	120	1.29
#Wilentz J	108	0	0.00	0.45	0.00	(0.00, 8.68)	107	0.00
Wong S	548	6	1.09	0.69	1.83	(0.67, 3.99)	531	1.27
Yang Y	123	0	0.00	0.27	0.00	(0.00,12.65)	123	0.00
TOTAL	3550	38	1.07	1.26	0.98	(0.69, 1.34)	3165	0.61
NYU Hospitals Center								
##Attubato M	1322	12	0.91	0.82	1.28	(0.66, 2.24)	1253	0.81
##Babaev A	661	2	0.30	0.60	0.58	(0.06, 2.08)	652	0.45
#Bangalore S	33	0	0.00	1.16	0.00	(0.00,11.05)	27	0.00
##Coppola J	141	1	0.71	0.59	1.37	(0.02, 7.64)	135	1.03
#David M	35	0	0.00	0.34	0.00	(0.00,35.76)	35	0.00
##Farid A	93	0	0.00	0.25	0.00	(0.00,18.12)	92	0.00
##Feit F	596	3	0.50	0.49	1.19	(0.24, 3.47)	583	0.79
##Fernaine G	4	0	0.00	0.33	0.00	(0.00,100.0)	4	0.00
##Iqbal S	18	1	5.56	1.02	6.27	(0.08,34.90)	10	0.00
#Jayasundera T	237	0	0.00	0.26	0.00	(0.00, 6.74)	237	0.00
Kokolis S	15	0	0.00	0.60	0.00	(0.00,47.24)	15	0.00
#Liou M	47	0	0.00	0.30	0.00	(0.00,30.16)	47	0.00
#Miller L	22	0	0.00	3.90	0.00	(0.00, 4.92)	11	0.00
##Papadakos S	237	2	0.84	0.41	2.35	(0.26, 8.50)	236	1.47
#Serrano-Gomez C	111	1	0.90	0.83	1.25	(0.02, 6.97)	102	0.00
##Shah A	43	0	0.00	0.26	0.00	(0.00,37.88)	43	0.00
#Shah B	21	0	0.00	1.64	0.00	(0.00,12.30)	13	0.00
##Slater J	378	4	1.06	0.67	1.81	(0.49, 4.64)	337	1.31
##Srivastava S	47	0	0.00	0.29	0.00	(0.00,31.13)	47	0.00
##Staniloae C	115	2	1.74	0.48	4.17	(0.47,15.04)	112	1.22
#Vales L	39	0	0.00	0.60	0.00	(0.00,17.96)	37	0.00
#Williams M	20	1	5.00	1.54	3.75	(0.05,20.85)	20	2.35
##Yadav S	3	0	0.00	0.16	0.00	(0.00,100.0)	3	0.00
#Yatskar L	20	0	0.00	0.25	0.00	(0.00,83.08)	20	0.00
All Others	164	1	0.61	1.01	0.70	(0.01, 3.87)	129	0.73
TOTAL	4422	30	0.68	0.66	1.19	(0.80, 1.70)	4200	0.76
NYU Winthrop Hospital								
#Blumenthal S	2	0	0.00	0.69	0.00	(0.00,100.0)	2	0.00
##Caselnova R	103	2	1.94	1.29	1.74	(0.20, 6.28)	100	1.38
Donohue D	259	3	1.16	1.21	1.10	(0.22, 3.22)	195	0.53
#Galler B	12	0	0.00	4.72	0.00	(0.00, 7.46)	9	0.00
#Gambino A	758	6	0.79	0.95	0.96	(0.35, 2.09)	669	0.59
#Green S	197	2	1.02	1.95	0.60	(0.07, 2.17)	122	0.61
##Hormozi S	3	0	0.00	0.32	0.00	(0.00,100.0)	3	0.00
#Khan W	68	1	1.47	1.57	1.08	(0.01, 6.02)	67	0.71
Marzo K	284	1	0.35	0.96	0.42	(0.01, 2.34)	222	0.74
Naidu S	236	1	0.42	1.18	0.41	(0.01, 2.30)	196	0.48
#Schwartz R	899	7	0.78	1.45	0.62	(0.25, 1.28)	785	0.40
#Witkes D	5	0	0.00	1.98	0.00	(0.00,42.64)	5	0.00
#Zisfein J	82	1	1.22	0.99	1.42	(0.02, 7.93)	81	1.02
All Others	63	0	0.00	0.78	0.00	(0.00, 8.63)	63	0.00
TOTAL	2971	24	0.81	1.25	0.75 **	(0.48, 1.11)	2519	0.56

Table 5, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
North Shore University Hospital								
##Bagga R	3	0	0.00	1.90	0.00	(0.00,74.06)	3	0.00
#Blumenthal S	71	0	0.00	0.29	0.00	(0.00,20.58)	70	0.00
#Boutis L	1107	9	0.81	1.13	0.83	(0.38, 1.58)	902	0.49
#Dhama B	89	0	0.00	0.69	0.00	(0.00, 6.83)	86	0.00
##Friedman G H	10	1	10.00	0.44	25.95	(0.34,100.0)	10	12.45
##Fuschetto D	69	1	1.45	1.02	1.64	(0.02, 9.15)	63	1.14
#Galler B	312	5	1.60	0.98	1.88	(0.61, 4.38)	306	1.38
#Green S	50	0	0.00	1.14	0.00	(0.00, 7.43)	35	0.00
##Grunwald A	112	2	1.79	0.84	2.46	(0.28, 8.87)	102	1.24
##Hameedi A	7	0	0.00	0.41	0.00	(0.00,100.0)	7	0.00
##Hormozi S	7	0	0.00	1.85	0.00	(0.00,32.56)	7	0.00
#Jauhar R	334	1	0.30	0.94	0.37	(0.00, 2.03)	267	0.48
##Joseph S	2	0	0.00	0.19	0.00	(0.00,100.0)	2	0.00
#Kaplan B	1335	7	0.52	0.99	0.61	(0.25, 1.26)	1212	0.41
#Katz S	213	2	0.94	1.11	0.97	(0.11, 3.51)	179	1.04
##Kim M	392	4	1.02	1.40	0.84	(0.23, 2.16)	299	0.71
##Koss J	126	0	0.00	0.64	0.00	(0.00, 5.28)	111	0.00
Kruger A	201	2	1.00	1.41	0.81	(0.09, 2.93)	189	0.37
#Lederman S	2	0	0.00	0.25	0.00	(0.00,100.0)	2	0.00
#Lee A	152	0	0.00	2.19	0.00	(0.00, 1.27)	111	0.00
#Marchant D	140	3	2.14	1.30	1.90	(0.38, 5.55)	101	1.72
#Meraj P	295	5	1.69	1.92	1.02	(0.33, 2.37)	214	0.75
##Ong L Y	80	0	0.00	0.80	0.00	(0.00, 6.57)	78	0.00
##Papadakos S	78	0	0.00	0.71	0.00	(0.00, 7.62)	78	0.00
##Patcha R	22	1	4.55	1.15	4.55	(0.06,25.34)	22	2.56
##Polena S	35	1	2.86	1.31	2.51	(0.03,13.95)	35	1.50
##Poumpouridis K	42	0	0.00	0.53	0.00	(0.00,19.10)	39	0.00
#Rutkin B	250	6	2.40	1.61	1.72	(0.63, 3.74)	190	1.04
#Singh A	30	0	0.00	0.75	0.00	(0.00,18.74)	20	0.00
##Singh V	1	0	0.00	2.83	0.00	(0.00,100.0)	.	.
##Strizik B	154	0	0.00	0.70	0.00	(0.00, 3.91)	148	0.00
Vidyarthi V	16	0	0.00	0.22	0.00	(0.00,100.0)	16	0.00
##Weinberg M	147	1	0.68	1.01	0.78	(0.01, 4.33)	99	0.00
#Witkes D	58	0	0.00	0.70	0.00	(0.00,10.40)	57	0.00
All Others	110	2	1.82	1.37	1.52	(0.17, 5.50)	87	1.71
TOTAL	6052	53	0.88	1.13	0.89	(0.67, 1.17)	5147	0.64
Olean General Hospital								
##Chockalingam S	9	0	0.00	0.52	0.00	(0.00,89.73)	5	0.00
#Giambartolomei A	17	1	5.88	1.29	5.24	(0.07,29.14)	8	0.00
#Mallavarapu C	284	3	1.06	1.06	1.14	(0.23, 3.34)	136	0.00
##Malpeso J	11	0	0.00	0.61	0.00	(0.00,63.02)	6	0.00
All Others	21	0	0.00	0.97	0.00	(0.00,20.65)	12	0.00
TOTAL	342	4	1.17	1.04	1.29	(0.35, 3.31)	167	0.00
Orange Regional Medical Center								
#Agarwal A	18	0	0.00	0.42	0.00	(0.00,55.47)	18	0.00
#Cuomo L	142	1	0.70	1.08	0.75	(0.01, 4.18)	81	0.00
##Gotsis W	502	4	0.80	0.96	0.96	(0.26, 2.46)	371	1.14
##Kalapatapu K	260	0	0.00	0.83	0.00	(0.00, 1.95)	252	0.00
##Motivala A	187	1	0.53	1.33	0.46	(0.01, 2.59)	118	0.84
##Silverman G	243	2	0.82	1.15	0.82	(0.09, 2.97)	137	0.80
#Timmermans R	2	0	0.00	1.43	0.00	(0.00,100.0)	2	0.00
All Others	121	2	1.65	1.05	1.81	(0.20, 6.52)	96	0.00
TOTAL	1475	10	0.68	1.03	0.76	(0.36, 1.40)	1075	0.54
Richmond University Medical Center								
##Duvvuri S	42	0	0.00	0.65	0.00	(0.00,15.37)	33	0.00
##Farid A	2	0	0.00	0.16	0.00	(0.00,100.0)	2	0.00
##Gala B	31	1	3.23	1.32	2.81	(0.04,15.63)	22	14.71
##Snyder S	2	0	0.00	0.80	0.00	(0.00,100.0)	.	.
#Swamy S	20	0	0.00	0.48	0.00	(0.00,43.96)	18	0.00
##Zgheib M	6	0	0.00	0.35	0.00	(0.00,100.0)	6	0.00
All Others	17	0	0.00	1.98	0.00	(0.00,12.55)	9	0.00
TOTAL	120	1	0.83	0.96	0.99	(0.01, 5.53)	90	2.26

Table 5, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
Rochester General Hospital								
##Chockalingam S	179	1	0.56	0.94	0.68	(0.01, 3.80)	163	0.00
#Doling M	5	0	0.00	0.39	0.00	(0.00,100.0)	5	0.00
Fitzpatrick P	182	0	0.00	1.17	0.00	(0.00, 1.99)	129	0.00
Gacioch G	493	8	1.62	1.39	1.35	(0.58, 2.66)	313	0.00
#Krishnamoorthy V	444	11	2.48	1.43	2.00	(1.00, 3.58)	292	1.53
##Ong L S	1522	18	1.18	0.92	1.49	(0.88, 2.35)	1311	0.79
#Patel T	196	5	2.55	0.81	3.63 *	(1.17, 8.47)	180	3.05 *
Scortichini D	150	1	0.67	0.36	2.13	(0.03,11.86)	146	1.44
#Singer G	344	1	0.29	0.60	0.56	(0.01, 3.12)	335	0.39
#Stefek P	6	0	0.00	0.33	0.00	(0.00,100.0)	6	0.00
##Stuver T	1040	11	1.06	1.07	1.14	(0.57, 2.04)	785	0.99
All Others	176	5	2.84	1.24	2.63	(0.85, 6.14)	122	2.26
TOTAL	4737	61	1.29	1.02	1.45	(1.11, 1.86)	3787	0.90
Samaritan Hospital								
#Bishop G	40	1	2.50	1.07	2.68	(0.04,14.92)	11	14.39
##Delago A	33	0	0.00	2.55	0.00	(0.00, 5.02)	10	0.00
##Esper D	21	0	0.00	2.31	0.00	(0.00, 8.72)	2	0.00
##Khawaja H	2	1	50.00	5.14	11.21	(0.15,62.36)	.	.
##Maroney J	12	0	0.00	0.71	0.00	(0.00,49.79)	6	0.00
#Martinelli M	17	0	0.00	1.25	0.00	(0.00,19.92)	4	0.00
##Papaleo R	394	2	0.51	0.53	1.10	(0.12, 3.99)	308	0.78
#Roccario E	15	2	13.33	4.24	3.62	(0.41,13.08)	4	0.00
##Winston B	46	2	4.35	1.41	3.56	(0.40,12.85)	14	8.33
All Others	40	0	0.00	0.75	0.00	(0.00,14.09)	31	0.00
TOTAL	620	8	1.29	0.94	1.58	(0.68, 3.12)	390	1.61
Saratoga Hospital								
All Others	87	3	3.45	1.46	2.71	(0.55, 7.93)	71	2.39
TOTAL	87	3	3.45	1.46	2.71	(0.55, 7.93)	71	2.39
South Nassau Communities Hospital								
#Freeman J	698	10	1.43	1.11	1.49	(0.71, 2.74)	522	1.68
##Hormozi S	15	0	0.00	2.23	0.00	(0.00,12.63)	1	0.00
##Patel M	12	1	8.33	1.18	8.11	(0.11,45.12)	8	5.97
#Petrossian G	36	0	0.00	1.46	0.00	(0.00, 8.03)	35	0.00
#Rehman A	448	6	1.34	0.94	1.63	(0.60, 3.56)	286	1.50
##Rehman S	62	0	0.00	0.52	0.00	(0.00,13.07)	59	0.00
#Zisfein J	277	2	0.72	0.69	1.21	(0.14, 4.36)	246	0.98
TOTAL	1548	19	1.23	0.98	1.44	(0.87, 2.25)	1157	1.43 *
Southside Hospital								
##Arkonac B	471	4	0.85	1.19	0.83	(0.22, 2.11)	430	0.53
##Bench T	1	0	0.00	0.10	0.00	(0.00,100.0)	1	0.00
##Caselnova R	42	0	0.00	2.40	0.00	(0.00, 4.19)	27	0.00
##Deutsch E	180	0	0.00	0.84	0.00	(0.00, 2.81)	158	0.00
#Gandotra P	408	2	0.49	1.05	0.54	(0.06, 1.95)	351	0.50
##Hormozi S	258	4	1.55	0.95	1.88	(0.50, 4.81)	215	1.80
##Lee P J	292	2	0.68	0.85	0.93	(0.10, 3.37)	265	0.37
##Ong L Y	6	0	0.00	0.82	0.00	(0.00,86.07)	6	0.00
##Patel R B	103	3	2.91	1.28	2.63	(0.53, 7.68)	67	3.49
##Poumpouridis K	3	0	0.00	0.21	0.00	(0.00,100.0)	3	0.00
#Reich D	273	4	1.47	1.18	1.43	(0.38, 3.66)	240	0.42
All Others	24	0	0.00	1.49	0.00	(0.00,11.81)	19	0.00
TOTAL	2061	19	0.92	1.08	0.98	(0.59, 1.54)	1782	0.68
St. Barnabas Hospital								
##Amsalem Y	13	1	7.69	7.58	1.17	(0.02, 6.50)	2	0.00
##Bortnick A	3	0	0.00	3.41	0.00	(0.00,41.30)	2	0.00
##Celaj S	380	5	1.32	0.78	1.94	(0.63, 4.53)	331	0.39
##Greenberg M	15	0	0.00	1.36	0.00	(0.00,20.66)	3	0.00
##Johnson M	9	0	0.00	2.65	0.00	(0.00,17.69)	1	0.00
##Menegus M	3	0	0.00	0.52	0.00	(0.00,100.0)	1	0.00
##Pyo R	9	1	11.11	7.04	1.82	(0.02,10.12)	2	0.00
##Srinivas V	2	0	0.00	0.19	0.00	(0.00,100.0)	2	0.00
TOTAL	434	7	1.61	1.19	1.57	(0.63, 3.23)	344	0.37

Table 5, continued

	Cases	Deaths	OMR	All Cases EMR	RAMR	95% CI for RAMR	Non-emergency Cases	RAMR
St. Catherine of Siena Hospital								
##Deutsch E	205	0	0.00	0.89	0.00	(0.00, 2.31)	174	0.00
##Hormozi S	196	2	1.02	1.15	1.02	(0.11, 3.68)	164	0.53
##Khan S	87	3	3.45	1.31	3.04	(0.61, 8.88)	66	0.00
#Madrid A	2	0	0.00	0.83	0.00	(0.00,100.0)	.	.
#Patel N	26	0	0.00	2.11	0.00	(0.00, 7.68)	14	0.00
##Patel R B	107	2	1.87	0.92	2.35	(0.26, 8.49)	73	2.44
##Rosenband M	127	0	0.00	1.23	0.00	(0.00, 2.70)	101	0.00
#Tsiamtsiouris T	6	0	0.00	1.50	0.00	(0.00,47.00)	.	.
##Weinstein J	41	2	4.88	2.82	1.99	(0.22, 7.18)	18	0.00
All Others	83	0	0.00	1.25	0.00	(0.00, 4.06)	70	0.00
TOTAL	880	9	1.02	1.21	0.98	(0.45, 1.85)	680	0.32
St. Elizabeth Medical Center								
##Bhan R	203	1	0.49	0.87	0.65	(0.01, 3.63)	177	0.00
#ElGharib N	18	0	0.00	1.11	0.00	(0.00,21.06)	13	0.00
#Kelberman M	170	3	1.76	1.28	1.59	(0.32, 4.63)	140	0.58
##Kozman H	2	0	0.00	0.92	0.00	(0.00,100.0)	1	0.00
#Maclsaac H	507	18	3.55	1.97	2.07 *	(1.23, 3.28)	416	1.14
#Mathew T C	70	1	1.43	1.13	1.46	(0.02, 8.14)	51	0.00
#Patel A	176	2	1.14	1.39	0.94	(0.11, 3.39)	126	1.11
#Sassower M	654	11	1.68	1.15	1.68	(0.84, 3.01)	560	1.31
#Varma P	177	3	1.69	1.49	1.31	(0.26, 3.82)	120	0.00
All Others	70	0	0.00	0.83	0.00	(0.00, 7.29)	59	0.00
TOTAL	2047	39	1.91	1.38	1.60	(1.13, 2.18)	1663	0.93
St. Francis Hospital								
Abittan M	255	3	1.18	0.76	1.79	(0.36, 5.24)	248	1.51
Berke A	203	9	4.43	2.66	1.92	(0.88, 3.65)	175	2.01
Chung W	223	5	2.24	1.62	1.59	(0.51, 3.72)	176	0.36
##Deutsch E	5	0	0.00	0.18	0.00	(0.00,100.0)	5	0.00
Ezratty A	216	3	1.39	1.21	1.33	(0.27, 3.87)	182	1.43
##Friedman G H	294	4	1.36	1.30	1.20	(0.32, 3.08)	250	0.70
Goldman A B	56	1	1.79	1.60	1.28	(0.02, 7.15)	34	0.00
##Grunwald A	62	1	1.61	1.21	1.54	(0.02, 8.55)	48	0.00
Gulotta R	85	1	1.18	0.91	1.49	(0.02, 8.31)	82	1.08
##Hormozi S	3	0	0.00	0.49	0.00	(0.00,100.0)	3	0.00
##Khan S	5	0	0.00	0.83	0.00	(0.00,100.0)	5	0.00
##Koss J	45	1	2.22	1.80	1.42	(0.02, 7.91)	31	0.00
##Lee P J	1	0	0.00	1.25	0.00	(0.00,100.0)	1	0.00
Lituchy A	517	4	0.77	1.37	0.65	(0.17, 1.66)	479	0.42
#Madrid A	194	2	1.03	0.92	1.30	(0.15, 4.68)	171	0.63
Mezzafonte S	341	1	0.29	1.06	0.32	(0.00, 1.77)	302	0.30
Minadeo J	140	3	2.14	1.84	1.34	(0.27, 3.91)	100	0.67
#Moses J	203	3	1.48	1.77	0.96	(0.19, 2.82)	203	0.75
Oruci E	174	0	0.00	0.95	0.00	(0.00, 2.56)	166	0.00
Pappas T	334	1	0.30	0.91	0.38	(0.00, 2.11)	326	0.00
##Patcha R	13	0	0.00	1.29	0.00	(0.00,25.22)	13	0.00
##Patel M	33	2	6.06	1.75	3.98	(0.45,14.38)	32	3.15
#Petrossian G	753	4	0.53	1.17	0.52	(0.14, 1.34)	744	0.38
#Rehman A	1	0	0.00	0.32	0.00	(0.00,100.0)	1	0.00
##Rosenband M	4	0	0.00	0.55	0.00	(0.00,100.0)	4	0.00
Shlofmitz R	2823	14	0.50	0.67	0.86	(0.47, 1.44)	2768	0.61
#Tsiamtsiouris T	309	3	0.97	1.45	0.77	(0.16, 2.25)	277	0.65
Venditto J	99	3	3.03	1.14	3.05	(0.61, 8.91)	95	2.50
##Weinstein J	25	0	0.00	1.27	0.00	(0.00,13.27)	24	0.00
##Yadav S	177	5	2.82	1.77	1.83	(0.59, 4.28)	140	1.09
TOTAL	7593	73	0.96	1.07	1.03	(0.81, 1.30)	7085	0.67
St. Josephs Hospital								
##Bhan R	16	0	0.00	0.43	0.00	(0.00,61.34)	16	0.00
Caputo R	1327	22	1.66	1.35	1.41	(0.89, 2.14)	1020	1.11
El-Khally Z	1278	5	0.39	1.37	0.33 **	(0.11, 0.77)	1031	0.15 **
Fischi M	984	13	1.32	1.23	1.24	(0.66, 2.11)	722	0.77
#Giambartolomei A	73	2	2.74	1.86	1.69	(0.19, 6.11)	35	2.96

Table 5, *continued*

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
St. Josephs Hospital, <i>continued</i>								
Iskander A	935	18	1.93	1.54	1.44	(0.85, 2.27)	707	1.35
O'Hern M	476	7	1.47	1.42	1.20	(0.48, 2.47)	350	0.79
Reger M	106	1	0.94	0.63	1.73	(0.02, 9.64)	99	1.32
Simons A	722	7	0.97	1.13	0.99	(0.39, 2.03)	482	0.68
TOTAL	5917	75	1.27	1.34	1.09	(0.86, 1.37)	4462	0.82
St. Lukes Cornwall Hospital - Newburgh								
#Gosselin R	148	2	1.35	1.44	1.08	(0.12, 3.89)	113	1.18
##Gotsis W	1	0	0.00	1.34	0.00	(0.00,100.0)	1	0.00
#Hadid A	268	4	1.49	1.44	1.20	(0.32, 3.06)	197	0.49
#Hadid A B	123	2	1.63	1.09	1.72	(0.19, 6.21)	73	0.00
#Jafar M	3	0	0.00	0.47	0.00	(0.00,100.0)	3	0.00
#Shah N	247	4	1.62	1.84	1.01	(0.27, 2.60)	170	0.73
TOTAL	790	12	1.52	1.51	1.16	(0.60, 2.03)	557	0.72
St. Peters Hospital								
#Bishop G	390	7	1.79	1.49	1.39	(0.56, 2.87)	256	0.95
##Delago A	9	1	11.11	2.45	5.22	(0.07,29.06)	1	0.00
##Esper D	306	2	0.65	1.06	0.71	(0.08, 2.56)	266	0.69
##Khawaja H	27	0	0.00	0.53	0.00	(0.00,29.60)	24	0.00
##Maroney J	49	0	0.00	0.87	0.00	(0.00, 9.89)	40	0.00
#Martinelli M	628	7	1.11	0.85	1.51	(0.61, 3.12)	502	1.13
##Papaleo R	6	0	0.00	1.66	0.00	(0.00,42.31)	.	.
#Roccario E	592	10	1.69	1.28	1.52	(0.73, 2.79)	422	1.49
##Winston B	318	6	1.89	1.01	2.14	(0.78, 4.67)	270	0.73
All Others	68	0	0.00	0.67	0.00	(0.00, 9.27)	59	0.00
TOTAL	2393	33	1.38	1.11	1.43	(0.99, 2.01)	1840	0.99
Staten Island University Hospital- North								
##Duvvuri S	216	2	0.93	0.92	1.15	(0.13, 4.17)	177	0.63
##Farid A	71	1	1.41	0.48	3.36	(0.04,18.71)	67	0.00
##Gala B	110	4	3.64	1.18	3.56	(0.96, 9.11)	107	2.20
##Hoyek W	161	1	0.62	0.97	0.74	(0.01, 4.11)	121	1.74
##Kandov R	468	4	0.85	1.02	0.97	(0.26, 2.48)	383	0.31
##Malpeso J	181	4	2.21	1.29	1.98	(0.53, 5.06)	119	2.15
##Motivala A	46	0	0.00	0.54	0.00	(0.00,17.13)	45	0.00
##Royzman R	258	5	1.94	1.48	1.51	(0.49, 3.51)	169	0.96
##Snyder S	145	4	2.76	0.98	3.25	(0.87, 8.32)	115	2.76
#Swamy S	40	0	0.00	0.32	0.00	(0.00,33.41)	39	0.00
Tamburrino F	413	3	0.73	0.95	0.88	(0.18, 2.59)	356	0.00
Vazzana T	33	0	0.00	0.47	0.00	(0.00,27.41)	33	0.00
Warchol A	35	0	0.00	0.28	0.00	(0.00,43.83)	31	0.00
##Zgheib M	185	3	1.62	0.56	3.35	(0.67, 9.78)	181	1.41
All Others	84	0	0.00	0.44	0.00	(0.00,11.44)	77	0.00
TOTAL	2446	31	1.27	0.96	1.52	(1.03, 2.16)	2020	0.92
Strong Memorial Hospital								
Chaudhary I	197	3	1.52	2.03	0.87	(0.17, 2.53)	100	1.27
Cove C	418	11	2.63	1.66	1.83	(0.91, 3.27)	278	0.71
#Doling M	592	8	1.35	0.97	1.61	(0.69, 3.17)	450	1.83
Garringer J	247	1	0.40	1.07	0.44	(0.01, 2.43)	185	0.80
Gassler J	249	0	0.00	1.10	0.00	(0.00, 1.54)	159	0.00
#Krishnamoorthy V	29	0	0.00	0.96	0.00	(0.00,15.22)	20	0.00
Ling F	475	3	0.63	1.49	0.49	(0.10, 1.42)	316	0.29
Narins C	521	7	1.34	1.08	1.43	(0.57, 2.95)	325	1.64
##Stuver T	58	0	0.00	1.14	0.00	(0.00, 6.42)	42	0.00
TOTAL	2786	33	1.18	1.28	1.06	(0.73, 1.50)	1875	0.99

Table 5, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-emergency	
			OMR	EMR	RAMR		Cases	RAMR
UHS - Wilson Medical Center								
Ahmed O	328	4	1.22	1.51	0.93	(0.25, 2.38)	231	0.00
Jamal N	238	5	2.10	2.61	0.93	(0.30, 2.17)	175	0.69
Kashou H	609	11	1.81	0.88	2.36 *	(1.17, 4.22)	461	1.16
Rehman A U	124	1	0.81	1.78	0.52	(0.01, 2.90)	75	0.00
Traverse P	426	5	1.17	1.34	1.01	(0.33, 2.36)	323	0.39
#Yarkoni A	120	3	2.50	1.79	1.61	(0.32, 4.71)	94	0.81
All Others	244	7	2.87	1.53	2.16	(0.87, 4.45)	187	2.42
TOTAL	2089	36	1.72	1.45	1.37	(0.96, 1.89)	1546	0.82
Unity Hospital of Rochester								
##Chockalingam S	112	5	4.46	2.08	2.47	(0.80, 5.77)	72	3.13
##Ong L S	48	1	2.08	1.86	1.29	(0.02, 7.17)	17	0.00
#Patel T	689	11	1.60	1.35	1.37	(0.68, 2.44)	523	0.85
#Singer G	34	1	2.94	2.66	1.27	(0.02, 7.08)	23	0.00
TOTAL	883	18	2.04	1.52	1.55	(0.92, 2.44)	635	1.07
University Hospital - Brooklyn								
#Badero O	14	0	0.00	0.49	0.00	(0.00,61.99)	13	0.00
#Castillo R	23	2	8.70	2.01	4.98	(0.56,18.00)	.	.
Cavusoglu E	216	4	1.85	1.71	1.25	(0.34, 3.19)	141	0.74
#Chadow H	13	0	0.00	2.71	0.00	(0.00,11.97)	.	.
Dogar M	69	0	0.00	1.11	0.00	(0.00, 5.54)	58	0.00
Feit A	153	3	1.96	1.56	1.44	(0.29, 4.22)	103	0.70
#Hegde S	67	3	4.48	2.84	1.82	(0.37, 5.31)	28	0.00
#John S	85	2	2.35	1.60	1.69	(0.19, 6.11)	74	0.90
#Kantrowitz N	1	0	0.00	0.53	0.00	(0.00,100.0)	1	0.00
Marmur J	275	8	2.91	2.37	1.41	(0.61, 2.79)	164	0.00
TOTAL	916	22	2.40	1.91	1.45	(0.91, 2.19)	582	0.45
University Hospital - SUNY Upstate								
##Bhan R	111	2	1.80	0.55	3.77	(0.42,13.61)	93	4.50
Ford T	152	2	1.32	1.70	0.89	(0.10, 3.23)	84	0.99
##Kozman H	259	10	3.86	1.71	2.60 *	(1.25, 4.78)	163	3.26 *
All Others	141	3	2.13	1.91	1.28	(0.26, 3.75)	74	0.00
TOTAL	663	17	2.56	1.55	1.90	(1.11, 3.04)	414	2.12 *
University Hospital - Stony Brook								
##Bench T	41	0	0.00	0.73	0.00	(0.00,14.21)	36	0.00
Dervan J	161	1	0.62	1.24	0.58	(0.01, 3.22)	149	0.58
Gruberg L	601	13	2.16	1.95	1.28	(0.68, 2.19)	347	1.52
Jeremias A	506	13	2.57	2.10	1.41	(0.75, 2.41)	269	1.46
##Joseph S	79	2	2.53	0.62	4.71	(0.53,16.99)	75	3.11
##Khan S	102	0	0.00	0.62	0.00	(0.00, 6.63)	95	0.00
Korlipara G	200	2	1.00	0.70	1.63	(0.18, 5.90)	190	1.22
Lawson W	467	5	1.07	1.80	0.68	(0.22, 1.60)	273	0.60
#Lederman S	236	1	0.42	1.37	0.36	(0.00, 1.99)	223	0.00
Mani A	651	13	2.00	2.01	1.15	(0.61, 1.96)	416	0.60
Montellese D	141	1	0.71	0.96	0.85	(0.01, 4.75)	126	0.69
#Patel D	24	0	0.00	0.27	0.00	(0.00,64.39)	20	0.00
#Patel N	317	2	0.63	0.89	0.81	(0.09, 2.94)	272	0.36
#Pulipati B	18	1	5.56	0.36	17.85	(0.23,99.30)	18	11.31
##Rosenband M	104	1	0.96	1.27	0.87	(0.01, 4.85)	99	0.78
##Weinstein J	321	6	1.87	1.11	1.93	(0.71, 4.21)	288	1.31
All Others	121	1	0.83	1.78	0.53	(0.01, 2.98)	53	0.00
TOTAL	4090	62	1.52	1.55	1.13	(0.87, 1.45)	2949	0.86
Vassar Brothers Medical Center								
Gorwara S	416	9	2.16	1.83	1.36	(0.62, 2.59)	267	0.90
#Gosselin R	22	0	0.00	0.77	0.00	(0.00,25.10)	17	0.00
#Jafar M	863	12	1.39	1.20	1.33	(0.69, 2.32)	644	0.54
Kantaros L	379	5	1.32	1.32	1.15	(0.37, 2.69)	246	0.86
#Shah N	4	0	0.00	0.34	0.00	(0.00,100.0)	4	0.00
Yen M	340	3	0.88	1.37	0.74	(0.15, 2.17)	223	0.00
TOTAL	2024	29	1.43	1.37	1.20	(0.80, 1.73)	1401	0.56

Table 5, *continued*

	Cases	Deaths	OMR	All Cases		95% CI for RAMR	Non-emergency	
				EMR	RAMR		Cases	RAMR
Westchester Medical Center								
Ahmad H	284	5	1.76	1.71	1.18	(0.38, 2.76)	165	0.41
##Charney R	37	1	2.70	0.38	8.19	(0.11,45.56)	35	4.46
#Cohen M B	224	6	2.68	1.99	1.55	(0.57, 3.38)	137	1.24
#Cuomo L	141	2	1.42	2.07	0.79	(0.09, 2.86)	87	0.86
##Gotsis W	115	1	0.87	1.41	0.71	(0.01, 3.96)	72	0.00
#Hadid A	13	0	0.00	0.86	0.00	(0.00,37.84)	13	0.00
#Hadid A B	1	0	0.00	0.14	0.00	(0.00,100.0)	1	0.00
##Messinger D	27	1	3.70	0.69	6.23	(0.08,34.64)	26	3.86
##Shih A T	24	0	0.00	1.26	0.00	(0.00,14.00)	20	0.00
##Silverman G	46	1	2.17	1.37	1.82	(0.02,10.14)	25	0.00
#Timmermans R	282	6	2.13	1.70	1.44	(0.53, 3.14)	157	1.00
All Others	43	0	0.00	3.11	0.00	(0.00, 3.16)	20	0.00
TOTAL	1237	23	1.86	1.72	1.24	(0.79, 1.86)	758	0.87
White Plains Hospital								
##Apfelbaum M	70	1	1.43	2.39	0.69	(0.01, 3.84)	31	0.00
##Bliagos D	500	7	1.40	1.49	1.09	(0.43, 2.24)	426	0.48
##Charney R	97	1	1.03	1.15	1.03	(0.01, 5.74)	67	0.00
#Cohen M B	7	0	0.00	0.21	0.00	(0.00,100.0)	6	0.00
##Greenberg M	130	1	0.77	0.77	1.15	(0.02, 6.41)	100	1.20
##Hjemdahl-Monsen	84	1	1.19	0.70	1.97	(0.03,10.97)	77	1.40
#Irobunda C	5	0	0.00	0.65	0.00	(0.00,100.0)	2	0.00
##Johnson M	19	0	0.00	1.52	0.00	(0.00,14.65)	9	0.00
##Kalapatapu K	135	1	0.74	0.91	0.93	(0.01, 5.19)	124	0.80
##Messinger D	71	0	0.00	1.20	0.00	(0.00, 4.97)	55	0.00
All Others	2	0	0.00	3.72	0.00	(0.00,56.84)	1	0.00
TOTAL	1120	12	1.07	1.28	0.97	(0.50, 1.69)	898	0.60
Statewide Total	144196	1661	1.15				118461	0.74

* 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, 2013-2015** (Listed Alphabetically by Hospital)

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Aboufares A	253	5	1.98	1.35	1.69	(0.54, 3.95)	213	1.77
Lenox Hill Hospital	4	0	0.00	0.39	0.00	(0.00,100.0)	4	0.00
NYP-Columbia Presby.	249	5	2.01	1.36	1.70	(0.55, 3.96)	209	1.79
Agarwal A	119	2	1.68	1.03	1.87	(0.21, 6.76)	90	0.00
Good Sam - Suffern	101	2	1.98	1.14	2.00	(0.22, 7.21)	72	0.00
Orange Regional Med Ctr	18	0	0.00	0.42	0.00	(0.00,55.47)	18	0.00
Amsalem Y	366	3	0.82	1.75	0.54	(0.11, 1.58)	256	0.32
Bronx-Lebanon-Concourse	68	1	1.47	2.26	0.75	(0.01, 4.17)	41	1.38
Lenox Hill Hospital	2	0	0.00	3.49	0.00	(0.00,60.46)	2	0.00
Montefiore - Moses	256	1	0.39	1.40	0.32	(0.00, 1.79)	187	0.00
Mount Sinai St. Lukes	27	0	0.00	0.82	0.00	(0.00,19.08)	24	0.00
St. Barnabas Hospital	13	1	7.69	7.58	1.17	(0.02, 6.50)	2	0.00
Apfelbaum M	114	1	0.88	1.66	0.61	(0.01, 3.39)	67	0.00
NYP-Columbia Presby.	30	0	0.00	0.32	0.00	(0.00,43.66)	29	0.00
NYP-Lawrence Hosp	14	0	0.00	0.88	0.00	(0.00,34.35)	7	0.00
White Plains Hospital	70	1	1.43	2.39	0.69	(0.01, 3.84)	31	0.00
Ariyarajah V	17	0	0.00	0.18	0.00	(0.00,100.0)	17	0.00
Maimonides Medical Ctr	15	0	0.00	0.18	0.00	(0.00,100.0)	15	0.00
NYP-Brooklyn Methodist	2	0	0.00	0.18	0.00	(0.00,100.0)	2	0.00
Arkonac B	501	4	0.80	1.15	0.80	(0.22, 2.05)	459	0.51
Good Sam-West Islip	20	0	0.00	0.58	0.00	(0.00,36.66)	20	0.00
Long Island Jewish MC	10	0	0.00	0.66	0.00	(0.00,64.45)	9	0.00
Southside Hospital	471	4	0.85	1.19	0.83	(0.22, 2.11)	430	0.53
Aslam A F	169	3	1.78	0.80	2.56	(0.51, 7.48)	150	2.00
Mount Sinai Beth Israel	58	2	3.45	1.52	2.62	(0.29, 9.45)	45	4.40
NYP-Brooklyn Methodist	111	1	0.90	0.42	2.46	(0.03,13.67)	105	0.00
Aslam A K	348	1	0.29	0.24	1.38	(0.02, 7.70)	338	0.00
Mount Sinai Beth Israel	149	1	0.67	0.27	2.88	(0.04,16.02)	143	0.00
NYP-Brooklyn Methodist	199	0	0.00	0.22	0.00	(0.00, 9.78)	195	0.00
Attubato M	1345	12	0.89	0.82	1.25	(0.65, 2.19)	1267	0.80
Bellevue Hospital Ctr	14	0	0.00	1.28	0.00	(0.00,23.50)	5	0.00
Lenox Hill Hospital	9	0	0.00	0.37	0.00	(0.00,100.0)	9	0.00
NYU Hospitals Center	1322	12	0.91	0.82	1.28	(0.66, 2.24)	1253	0.81
Babaev A	673	2	0.30	0.64	0.54	(0.06, 1.94)	655	0.45
Bellevue Hospital Ctr	9	0	0.00	3.27	0.00	(0.00,14.34)	.	.
Lenox Hill Hospital	3	0	0.00	0.43	0.00	(0.00,100.0)	3	0.00
NYU Hospitals Center	661	2	0.30	0.60	0.58	(0.06, 2.08)	652	0.45
Badero O	150	0	0.00	0.29	0.00	(0.00, 9.88)	149	0.00
NYP-Brooklyn Methodist	136	0	0.00	0.26	0.00	(0.00,11.75)	136	0.00
Univ. Hosp-Brooklyn	14	0	0.00	0.49	0.00	(0.00,61.99)	13	0.00
Bagga R	532	4	0.75	1.09	0.80	(0.21, 2.04)	434	0.23
Huntington Hospital	507	4	0.79	1.08	0.84	(0.23, 2.16)	409	0.26
Long Island Jewish MC	22	0	0.00	1.12	0.00	(0.00,17.20)	22	0.00
North Shore Univ Hosp	3	0	0.00	1.90	0.00	(0.00,74.06)	3	0.00
Bangalore S	388	6	1.55	2.02	0.88	(0.32, 1.92)	289	0.39
Bellevue Hospital Ctr	355	6	1.69	2.10	0.93	(0.34, 2.01)	262	0.43
NYU Hospitals Center	33	0	0.00	1.16	0.00	(0.00,11.05)	27	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Bench T	166	0	0.00	1.25	0.00	(0.00, 2.03)	113	0.00
Brookhaven Memorial	124	0	0.00	1.44	0.00	(0.00, 2.37)	76	0.00
Southside Hospital	1	0	0.00	0.10	0.00	(0.00,100.0)	1	0.00
Univ. Hosp-Stony Brook	41	0	0.00	0.73	0.00	(0.00,14.21)	36	0.00
Bhan R	342	4	1.17	0.82	1.64	(0.44, 4.19)	293	0.90
Faxton - St. Lukes	12	1	8.33	3.10	3.10	(0.04,17.25)	7	0.00
St. Elizabeth Med Ctr	203	1	0.49	0.87	0.65	(0.01, 3.63)	177	0.00
St. Josephs Hospital	16	0	0.00	0.43	0.00	(0.00,61.34)	16	0.00
Univ. Hosp-Upstate	111	2	1.80	0.55	3.77	(0.42,13.61)	93	4.50
Bishop G	430	8	1.86	1.45	1.48	(0.64, 2.92)	267	1.24
Samaritan Hospital	40	1	2.50	1.07	2.68	(0.04,14.92)	11	14.39
St. Peters Hospital	390	7	1.79	1.49	1.39	(0.56, 2.87)	256	0.95
Bliagos D	848	9	1.06	1.35	0.91	(0.41, 1.72)	753	0.39
Montefiore - Moses	160	1	0.63	1.54	0.47	(0.01, 2.59)	141	0.00
Mount Sinai Hospital	109	1	0.92	0.63	1.68	(0.02, 9.37)	108	1.09
NYP-Columbia Presby.	79	0	0.00	1.10	0.00	(0.00, 4.88)	78	0.00
White Plains Hospital	500	7	1.40	1.49	1.09	(0.43, 2.24)	426	0.48
Blumenthal S	73	0	0.00	0.30	0.00	(0.00,19.28)	72	0.00
NYU Winthrop Hospital	2	0	0.00	0.69	0.00	(0.00,100.0)	2	0.00
North Shore Univ Hosp	71	0	0.00	0.29	0.00	(0.00,20.58)	70	0.00
Bortnick A	316	6	1.90	2.04	1.07	(0.39, 2.33)	222	0.61
Montefiore - Moses	27	1	3.70	1.52	2.80	(0.04,15.61)	26	2.09
Montefiore - Weiler	286	5	1.75	2.07	0.97	(0.31, 2.26)	194	0.37
St. Barnabas Hospital	3	0	0.00	3.41	0.00	(0.00,41.30)	2	0.00
Boutis L	1144	11	0.96	1.24	0.89	(0.44, 1.60)	906	0.58
Long Island Jewish MC	37	2	5.41	4.70	1.33	(0.15, 4.79)	4	26.63
North Shore Univ Hosp	1107	9	0.81	1.13	0.83	(0.38, 1.58)	902	0.49
Calandra S	470	3	0.64	0.91	0.81	(0.16, 2.37)	344	0.81
Buffalo General Hosp	2	0	0.00	0.65	0.00	(0.00,100.0)	2	0.00
Mercy Hospital	468	3	0.64	0.91	0.81	(0.16, 2.37)	342	0.81
Caselnova R	577	9	1.56	1.03	1.74	(0.79, 3.30)	514	1.29
Brookhaven Memorial	3	0	0.00	2.27	0.00	(0.00,62.04)	.	.
Good Sam-West Islip	429	7	1.63	0.83	2.26	(0.91, 4.67)	387	1.33
NYU Winthrop Hospital	103	2	1.94	1.29	1.74	(0.20, 6.28)	100	1.38
Southside Hospital	42	0	0.00	2.40	0.00	(0.00, 4.19)	27	0.00
Castillo R	348	7	2.01	1.76	1.32	(0.53, 2.71)	213	0.29
Brookdale Univ Hosp Med Ctr	325	5	1.54	1.74	1.02	(0.33, 2.37)	213	0.29
Univ. Hosp-Brooklyn	23	2	8.70	2.01	4.98	(0.56,18.00)	.	.
Celaj S	655	10	1.53	1.11	1.58	(0.76, 2.91)	516	0.62
Bronx-Lebanon-Concourse	34	3	8.82	4.13	2.46	(0.49, 7.19)	3	0.00
Montefiore - Moses	241	2	0.83	1.21	0.79	(0.09, 2.86)	182	0.91
St. Barnabas Hospital	380	5	1.32	0.78	1.94	(0.63, 4.53)	331	0.39
Chadow H	251	3	1.20	1.82	0.75	(0.15, 2.21)	148	0.00
Brookdale Univ Hosp Med Ctr	238	3	1.26	1.78	0.82	(0.16, 2.39)	148	0.00
Univ. Hosp-Brooklyn	13	0	0.00	2.71	0.00	(0.00,11.97)	.	.
Charney R	352	4	1.14	1.00	1.31	(0.35, 3.35)	318	0.87
Montefiore - Weiler	21	0	0.00	1.79	0.00	(0.00,11.26)	21	0.00
NYP-Weill Cornell	197	2	1.02	0.96	1.22	(0.14, 4.40)	195	0.86
Westchester Med Ctr	37	1	2.70	0.38	8.19	(0.11,45.56)	35	4.46
White Plains Hospital	97	1	1.03	1.15	1.03	(0.01, 5.74)	67	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Chockalingam S	300	6	2.00	1.35	1.70	(0.62, 3.71)	240	1.19
Olean General Hosp.	9	0	0.00	0.52	0.00	(0.00,89.73)	5	0.00
Rochester General Hosp	179	1	0.56	0.94	0.68	(0.01, 3.80)	163	0.00
Unity Hospital	112	5	4.46	2.08	2.47	(0.80, 5.77)	72	3.13
Cohen M B	231	6	2.60	1.93	1.55	(0.57, 3.37)	143	1.24
Westchester Med Ctr	224	6	2.68	1.99	1.55	(0.57, 3.38)	137	1.24
White Plains Hospital	7	0	0.00	0.21	0.00	(0.00,100.0)	6	0.00
Conley J	878	9	1.03	1.06	1.11	(0.51, 2.10)	714	0.74
Buffalo General Hosp	748	9	1.20	1.14	1.22	(0.56, 2.31)	588	0.86
Mercy Hospital	130	0	0.00	0.64	0.00	(0.00, 5.09)	126	0.00
Coppola J	306	4	1.31	1.17	1.28	(0.35, 3.29)	248	0.88
Bellevue Hospital Ctr	164	3	1.83	1.68	1.26	(0.25, 3.67)	112	0.77
Lenox Hill Hospital	1	0	0.00	0.21	0.00	(0.00,100.0)	1	0.00
NYU Hospitals Center	141	1	0.71	0.59	1.37	(0.02, 7.64)	135	1.03
Coven D	139	2	1.44	1.69	0.98	(0.11, 3.55)	107	0.68
Lenox Hill Hospital	54	1	1.85	2.17	0.98	(0.01, 5.48)	42	1.11
Mount Sinai St. Lukes	85	1	1.18	1.38	0.98	(0.01, 5.46)	65	0.00
Cuomo L	283	3	1.06	1.57	0.78	(0.16, 2.27)	168	0.45
Orange Regional Med Ctr	142	1	0.70	1.08	0.75	(0.01, 4.18)	81	0.00
Westchester Med Ctr	141	2	1.42	2.07	0.79	(0.09, 2.86)	87	0.86
Dashkoff N	566	7	1.24	1.57	0.91	(0.36, 1.87)	406	0.35
Buffalo General Hosp	543	7	1.29	1.59	0.93	(0.37, 1.92)	389	0.37
Erie County Med Ctr	22	0	0.00	1.13	0.00	(0.00,16.97)	16	0.00
Mercy Hospital	1	0	0.00	0.17	0.00	(0.00,100.0)	1	0.00
David M	74	1	1.35	0.28	5.59	(0.07,31.10)	74	4.32
NYP-Queens	39	1	2.56	0.23	13.10	(0.17,72.90)	39	10.74
NYU Hospitals Center	35	0	0.00	0.34	0.00	(0.00,35.76)	35	0.00
Delago A	749	21	2.80	1.28	2.52 *	(1.56, 3.86)	620	1.82 *
Albany Med. Ctr	706	20	2.83	1.21	2.70 *	(1.65, 4.17)	608	1.83 *
Glens Falls Hospital	1	0	0.00	0.15	0.00	(0.00,100.0)	1	0.00
Samaritan Hospital	33	0	0.00	2.55	0.00	(0.00, 5.02)	10	0.00
St. Peters Hospital	9	1	11.11	2.45	5.22	(0.07,29.06)	1	0.00
Deutsch E	720	2	0.28	0.74	0.43	(0.05, 1.55)	646	0.23
Good Sam-West Islip	330	2	0.61	0.61	1.14	(0.13, 4.13)	309	0.51
Southside Hospital	180	0	0.00	0.84	0.00	(0.00, 2.81)	158	0.00
St. Catherine of Siena	205	0	0.00	0.89	0.00	(0.00, 2.31)	174	0.00
St. Francis Hospital	5	0	0.00	0.18	0.00	(0.00,100.0)	5	0.00
Dhama B	333	3	0.90	0.85	1.23	(0.25, 3.59)	321	0.81
Long Island Jewish MC	244	3	1.23	0.90	1.57	(0.32, 4.59)	235	1.07
North Shore Univ Hosp	89	0	0.00	0.69	0.00	(0.00, 6.83)	86	0.00
Doling M	597	8	1.34	0.96	1.60	(0.69, 3.16)	455	1.82
Rochester General Hosp	5	0	0.00	0.39	0.00	(0.00,100.0)	5	0.00
Strong Memorial Hosp	592	8	1.35	0.97	1.61	(0.69, 3.17)	450	1.83
Dominguez-Echevarria A	295	1	0.34	1.04	0.38	(0.00, 2.09)	291	0.25
Lenox Hill Hospital	6	0	0.00	0.55	0.00	(0.00,100.0)	6	0.00
Lutheran Medical Ctr	83	0	0.00	1.62	0.00	(0.00, 3.13)	79	0.00
Mount Sinai Hospital	142	1	0.70	0.91	0.89	(0.01, 4.94)	142	0.62
NYP-Brooklyn Methodist	13	0	0.00	0.38	0.00	(0.00,86.51)	13	0.00
NYP-Columbia Presby.	51	0	0.00	0.65	0.00	(0.00,12.71)	51	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Duvvuri S	263	2	0.76	0.89	0.98	(0.11, 3.54)	215	0.54
Mount Sinai Hospital	5	0	0.00	1.63	0.00	(0.00,51.92)	5	0.00
Richmond Univ Med Cntr	42	0	0.00	0.65	0.00	(0.00,15.37)	33	0.00
Staten Island Univ Hosp	216	2	0.93	0.92	1.15	(0.13, 4.17)	177	0.63
ElGharib N	204	2	0.98	0.69	1.63	(0.18, 5.88)	182	1.19
Faxton - St. Lukes	186	2	1.08	0.65	1.90	(0.21, 6.85)	169	1.39
St. Elizabeth Med Ctr	18	0	0.00	1.11	0.00	(0.00,21.06)	13	0.00
Emerson R	235	6	2.55	1.51	1.95	(0.71, 4.24)	136	1.59
Buffalo General Hosp	2	0	0.00	0.59	0.00	(0.00,100.0)	2	0.00
Erie County Med Ctr	3	0	0.00	0.36	0.00	(0.00,100.0)	2	0.00
Mercy Hospital	230	6	2.61	1.53	1.96	(0.72, 4.27)	132	1.61
Esper D	626	4	0.64	1.19	0.62	(0.17, 1.58)	475	0.64
Albany Med. Ctr	299	2	0.67	1.25	0.62	(0.07, 2.23)	207	0.58
Samaritan Hospital	21	0	0.00	2.31	0.00	(0.00, 8.72)	2	0.00
St. Peters Hospital	306	2	0.65	1.06	0.71	(0.08, 2.56)	266	0.69
Farhi E	784	13	1.66	0.96	2.00	(1.06, 3.42)	577	0.79
Buffalo General Hosp	781	13	1.66	0.95	2.03	(1.08, 3.46)	575	0.79
Mercy Hospital	3	0	0.00	3.27	0.00	(0.00,43.04)	2	0.00
Farid A	166	1	0.60	0.35	1.99	(0.03,11.07)	161	0.00
NYU Hospitals Center	93	0	0.00	0.25	0.00	(0.00,18.12)	92	0.00
Richmond Univ Med Cntr	2	0	0.00	0.16	0.00	(0.00,100.0)	2	0.00
Staten Island Univ Hosp	71	1	1.41	0.48	3.36	(0.04,18.71)	67	0.00
Feit F	609	3	0.49	0.49	1.16	(0.23, 3.39)	592	0.79
Bellevue Hospital Ctr	7	0	0.00	0.77	0.00	(0.00,78.44)	3	0.00
Lenox Hill Hospital	6	0	0.00	0.34	0.00	(0.00,100.0)	6	0.00
NYU Hospitals Center	596	3	0.50	0.49	1.19	(0.24, 3.47)	583	0.79
Fernaine G	400	4	1.00	1.30	0.89	(0.24, 2.27)	337	0.50
Lenox Hill Hospital	15	0	0.00	0.33	0.00	(0.00,85.74)	15	0.00
Lutheran Medical Ctr	338	3	0.89	1.36	0.75	(0.15, 2.20)	276	0.29
Mount Sinai Hospital	43	1	2.33	1.28	2.10	(0.03,11.68)	42	2.08
NYU Hospitals Center	4	0	0.00	0.33	0.00	(0.00,100.0)	4	0.00
Freeman J	709	10	1.41	1.12	1.45	(0.70, 2.68)	533	1.60
Long Island Jewish MC	11	0	0.00	1.58	0.00	(0.00,24.38)	11	0.00
South Nassau Com. Hosp	698	10	1.43	1.11	1.49	(0.71, 2.74)	522	1.68
Friedman G H	320	5	1.56	1.23	1.47	(0.47, 3.43)	275	1.00
Long Island Jewish MC	16	0	0.00	0.29	0.00	(0.00,90.70)	15	0.00
North Shore Univ Hosp	10	1	10.00	0.44	25.95	(0.34,100.0)	10	12.45
St. Francis Hospital	294	4	1.36	1.30	1.20	(0.32, 3.08)	250	0.70
Fuschetto D	134	1	0.75	0.97	0.89	(0.01, 4.95)	121	0.66
Long Island Jewish MC	47	0	0.00	0.90	0.00	(0.00,10.00)	44	0.00
Lutheran Medical Ctr	10	0	0.00	1.16	0.00	(0.00,36.35)	6	0.00
Maimonides Medical Ctr	8	0	0.00	0.70	0.00	(0.00,75.67)	8	0.00
North Shore Univ Hosp	69	1	1.45	1.02	1.64	(0.02, 9.15)	63	1.14
Gala B	145	5	3.45	1.23	3.23	(1.04, 7.55)	133	2.58
Maimonides Medical Ctr	4	0	0.00	1.90	0.00	(0.00,55.72)	4	0.00
Richmond Univ Med Cntr	31	1	3.23	1.32	2.81	(0.04,15.63)	22	14.71
Staten Island Univ Hosp	110	4	3.64	1.18	3.56	(0.96, 9.11)	107	2.20
Galler B	324	5	1.54	1.12	1.59	(0.51, 3.70)	315	1.26
NYU Winthrop Hospital	12	0	0.00	4.72	0.00	(0.00, 7.46)	9	0.00
North Shore Univ Hosp	312	5	1.60	0.98	1.88	(0.61, 4.38)	306	1.38

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Gambino A	785	6	0.76	0.93	0.94	(0.34, 2.05)	693	0.57
Brookhaven Memorial	27	0	0.00	0.53	0.00	(0.00,29.79)	24	0.00
NYU Winthrop Hospital	758	6	0.79	0.95	0.96	(0.35, 2.09)	669	0.59
Gandotra P	441	3	0.68	1.06	0.74	(0.15, 2.15)	384	0.65
Good Sam-West Islip	33	1	3.03	1.29	2.70	(0.04,15.05)	33	1.73
Southside Hospital	408	2	0.49	1.05	0.54	(0.06, 1.95)	351	0.50
Gelormini J	623	6	0.96	1.64	0.68	(0.25, 1.47)	468	0.16
Buffalo General Hosp	33	0	0.00	0.67	0.00	(0.00,18.98)	32	0.00
Mercy Hospital	590	6	1.02	1.69	0.69	(0.25, 1.51)	436	0.17
Giambartolomei A	90	3	3.33	1.76	2.19	(0.44, 6.38)	43	2.74
Olean General Hosp.	17	1	5.88	1.29	5.24	(0.07,29.14)	8	0.00
St. Josephs Hospital	73	2	2.74	1.86	1.69	(0.19, 6.11)	35	2.96
Gosselin R	170	2	1.18	1.36	1.00	(0.11, 3.61)	130	1.08
St. Lukes Cornwall Hosp	148	2	1.35	1.44	1.08	(0.12, 3.89)	113	1.18
Vassar Bros. Med Ctr	22	0	0.00	0.77	0.00	(0.00,25.10)	17	0.00
Gotsis W	640	6	0.94	1.03	1.05	(0.38, 2.29)	466	1.08
Good Sam - Suffern	1	0	0.00	0.60	0.00	(0.00,100.0)	1	0.00
Mount Sinai St. Lukes	21	1	4.76	0.70	7.84	(0.10,43.63)	21	4.70
Orange Regional Med Ctr	502	4	0.80	0.96	0.96	(0.26, 2.46)	371	1.14
St. Lukes Cornwall Hosp	1	0	0.00	1.34	0.00	(0.00,100.0)	1	0.00
Westchester Med Ctr	115	1	0.87	1.41	0.71	(0.01, 3.96)	72	0.00
Gowda R	752	10	1.33	1.55	0.99	(0.47, 1.82)	641	0.83
Mount Sinai Beth Israel	718	10	1.39	1.59	1.01	(0.48, 1.85)	610	0.85
Mount Sinai Hospital	4	0	0.00	0.25	0.00	(0.00,100.0)	4	0.00
Mount Sinai St. Lukes	30	0	0.00	0.60	0.00	(0.00,23.60)	27	0.00
Green S	247	2	0.81	1.78	0.52	(0.06, 1.89)	157	0.52
NYU Winthrop Hospital	197	2	1.02	1.95	0.60	(0.07, 2.17)	122	0.61
North Shore Univ Hosp	50	0	0.00	1.14	0.00	(0.00, 7.43)	35	0.00
Greenberg M	611	6	0.98	0.82	1.38	(0.51, 3.01)	522	0.99
Montefiore - Moses	435	5	1.15	0.84	1.58	(0.51, 3.68)	388	1.00
Montefiore - Weiler	31	0	0.00	0.45	0.00	(0.00,30.33)	31	0.00
St. Barnabas Hospital	15	0	0.00	1.36	0.00	(0.00,20.66)	3	0.00
White Plains Hospital	130	1	0.77	0.77	1.15	(0.02, 6.41)	100	1.20
Grunwald A	403	6	1.49	0.85	2.01	(0.73, 4.37)	340	1.52
Long Island Jewish MC	156	2	1.28	0.65	2.26	(0.25, 8.16)	149	1.62
NYP-Queens	73	1	1.37	1.01	1.56	(0.02, 8.69)	41	3.32
North Shore Univ Hosp	112	2	1.79	0.84	2.46	(0.28, 8.87)	102	1.24
St. Francis Hospital	62	1	1.61	1.21	1.54	(0.02, 8.55)	48	0.00
Gupta R	115	0	0.00	1.03	0.00	(0.00, 3.56)	111	0.00
Long Island Jewish MC	68	0	0.00	1.08	0.00	(0.00, 5.76)	65	0.00
NYP-Queens	47	0	0.00	0.96	0.00	(0.00, 9.34)	46	0.00
Hadid A	281	4	1.42	1.41	1.16	(0.31, 2.98)	210	0.46
St. Lukes Cornwall Hosp	268	4	1.49	1.44	1.20	(0.32, 3.06)	197	0.49
Westchester Med Ctr	13	0	0.00	0.86	0.00	(0.00,37.84)	13	0.00
Hadid A B	124	2	1.61	1.08	1.72	(0.19, 6.20)	74	0.00
St. Lukes Cornwall Hosp	123	2	1.63	1.09	1.72	(0.19, 6.21)	73	0.00
Westchester Med Ctr	1	0	0.00	0.14	0.00	(0.00,100.0)	1	0.00
Hameedi A	1171	2	0.17	0.30	0.65	(0.07, 2.36)	1166	0.43
Long Island Jewish MC	663	2	0.30	0.35	0.98	(0.11, 3.55)	659	0.64
Mount Sinai Hospital	233	0	0.00	0.23	0.00	(0.00, 7.72)	233	0.00
NYP-Queens	268	0	0.00	0.23	0.00	(0.00, 6.93)	267	0.00
North Shore Univ Hosp	7	0	0.00	0.41	0.00	(0.00,100.0)	7	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Haq N	435	7	1.61	1.14	1.62	(0.65, 3.34)	306	0.80
Buffalo General Hosp	1	0	0.00	0.30	0.00	(0.00,100.0)	1	0.00
Mercy Hospital	434	7	1.61	1.14	1.62	(0.65, 3.35)	305	0.80
Hegde S	169	3	1.78	1.93	1.06	(0.21, 3.10)	130	0.00
Bellevue Hospital Ctr	102	0	0.00	1.33	0.00	(0.00, 3.11)	102	0.00
Univ. Hosp-Brooklyn	67	3	4.48	2.84	1.82	(0.37, 5.31)	28	0.00
Hjemdahl-Monsen C	386	4	1.04	0.98	1.22	(0.33, 3.12)	365	0.90
NYP-Columbia Presby.	261	3	1.15	1.16	1.14	(0.23, 3.34)	251	0.85
NYP-Lawrence Hosp	41	0	0.00	0.41	0.00	(0.00,25.04)	37	0.00
White Plains Hospital	84	1	1.19	0.70	1.97	(0.03,10.97)	77	1.40
Hormozi S	1025	11	1.07	0.97	1.27	(0.63, 2.27)	874	0.84
Good Sam-West Islip	543	5	0.92	0.88	1.21	(0.39, 2.82)	481	0.59
NYU Winthrop Hospital	3	0	0.00	0.32	0.00	(0.00,100.0)	3	0.00
North Shore Univ Hosp	7	0	0.00	1.85	0.00	(0.00,32.56)	7	0.00
South Nassau Com. Hosp	15	0	0.00	2.23	0.00	(0.00,12.63)	1	0.00
Southside Hospital	258	4	1.55	0.95	1.88	(0.50, 4.81)	215	1.80
St. Catherine of Siena	196	2	1.02	1.15	1.02	(0.11, 3.68)	164	0.53
St. Francis Hospital	3	0	0.00	0.49	0.00	(0.00,100.0)	3	0.00
Hoyek W	310	3	0.97	1.30	0.86	(0.17, 2.50)	242	0.61
Lutheran Medical Ctr	69	2	2.90	3.07	1.09	(0.12, 3.93)	41	0.00
Maimonides Medical Ctr	6	0	0.00	1.88	0.00	(0.00,37.55)	6	0.00
NYP-Brooklyn Methodist	74	0	0.00	0.34	0.00	(0.00,16.87)	74	0.00
Staten Island Univ Hosp	161	1	0.62	0.97	0.74	(0.01, 4.11)	121	1.74
Iqbal S	286	2	0.70	1.19	0.68	(0.08, 2.44)	215	0.00
Bellevue Hospital Ctr	267	1	0.37	1.20	0.36	(0.00, 1.99)	204	0.00
Lenox Hill Hospital	1	0	0.00	0.35	0.00	(0.00,100.0)	1	0.00
NYU Hospitals Center	18	1	5.56	1.02	6.27	(0.08,34.90)	10	0.00
Irobunda C	169	1	0.59	1.75	0.39	(0.01, 2.17)	140	0.00
NYP-Columbia Presby.	164	1	0.61	1.78	0.39	(0.01, 2.20)	138	0.00
White Plains Hospital	5	0	0.00	0.65	0.00	(0.00,100.0)	2	0.00
Iyer V	515	11	2.14	1.46	1.68	(0.84, 3.01)	355	1.04
Buffalo General Hosp	514	11	2.14	1.45	1.70	(0.85, 3.04)	355	1.04
Erie County Med Ctr	1	0	0.00	7.81	0.00	(0.00,54.11)		
Jafar M	866	12	1.39	1.20	1.33	(0.69, 2.32)	647	0.54
St. Lukes Cornwall Hosp	3	0	0.00	0.47	0.00	(0.00,100.0)	3	0.00
Vassar Bros. Med Ctr	863	12	1.39	1.20	1.33	(0.69, 2.32)	644	0.54
Jain S	442	5	1.13	1.39	0.94	(0.30, 2.18)	323	0.36
Jamaica Hosp Med Ctr	231	3	1.30	2.14	0.70	(0.14, 2.05)	114	0.00
Lenox Hill Hospital	211	2	0.95	0.58	1.89	(0.21, 6.81)	209	0.63
Jauhar R	1253	8	0.64	0.93	0.79	(0.34, 1.56)	1087	0.78
Long Island Jewish MC	919	7	0.76	0.92	0.95	(0.38, 1.97)	820	0.88
North Shore Univ Hosp	334	1	0.30	0.94	0.37	(0.00, 2.03)	267	0.48
Jayasundera T	247	0	0.00	0.27	0.00	(0.00, 6.44)	247	0.00
Mount Sinai Hospital	10	0	0.00	0.29	0.00	(0.00,100.0)	10	0.00
NYU Hospitals Center	237	0	0.00	0.26	0.00	(0.00, 6.74)	237	0.00
John S	88	2	2.27	1.56	1.68	(0.19, 6.07)	77	0.90
NYP-Brooklyn Methodist	3	0	0.00	0.26	0.00	(0.00,100.0)	3	0.00
Univ. Hosp-Brooklyn	85	2	2.35	1.60	1.69	(0.19, 6.11)	74	0.90

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Johnson M	449	6	1.34	1.07	1.43	(0.52, 3.12)	373	1.22
Bronx-Lebanon-Concourse	18	1	5.56	2.93	2.18	(0.03,12.14)	5	23.75
Montefiore - Moses	381	5	1.31	0.93	1.63	(0.53, 3.81)	340	0.98
Montefiore - Weiler	22	0	0.00	1.09	0.00	(0.00,17.66)	18	0.00
St. Barnabas Hospital	9	0	0.00	2.65	0.00	(0.00,17.69)	1	0.00
White Plains Hospital	19	0	0.00	1.52	0.00	(0.00,14.65)	9	0.00
Joseph S	95	2	2.11	0.67	3.63	(0.41,13.09)	91	2.26
Brookhaven Memorial	13	0	0.00	1.06	0.00	(0.00,30.71)	13	0.00
Long Island Jewish MC	1	0	0.00	0.45	0.00	(0.00,100.0)	1	0.00
North Shore Univ Hosp	2	0	0.00	0.19	0.00	(0.00,100.0)	2	0.00
Univ. Hosp-Stony Brook	79	2	2.53	0.62	4.71	(0.53,16.99)	75	3.11
Kalapatapu K	732	4	0.55	0.99	0.64	(0.17, 1.63)	696	0.25
NYP-Columbia Presby.	289	3	1.04	1.18	1.01	(0.20, 2.96)	274	0.34
NYP-Lawrence Hosp	48	0	0.00	0.90	0.00	(0.00, 9.82)	46	0.00
Orange Regional Med Ctr	260	0	0.00	0.83	0.00	(0.00, 1.95)	252	0.00
White Plains Hospital	135	1	0.74	0.91	0.93	(0.01, 5.19)	124	0.80
Kandov R	518	5	0.97	1.19	0.93	(0.30, 2.17)	411	0.27
Good Sam - Suffern	2	0	0.00	3.23	0.00	(0.00,65.49)	.	.
Lutheran Medical Ctr	48	1	2.08	2.85	0.84	(0.01, 4.69)	28	0.00
Staten Island Univ Hosp	468	4	0.85	1.02	0.97	(0.26, 2.48)	383	0.31
Kantrowitz N	13	0	0.00	0.49	0.00	(0.00,66.74)	12	0.00
Maimonides Medical Ctr	12	0	0.00	0.48	0.00	(0.00,72.80)	11	0.00
Univ. Hosp-Brooklyn	1	0	0.00	0.53	0.00	(0.00,100.0)	1	0.00
Kaplan B	1625	9	0.55	1.03	0.62	(0.28, 1.18)	1456	0.39
Long Island Jewish MC	290	2	0.69	1.21	0.66	(0.07, 2.37)	244	0.33
North Shore Univ Hosp	1335	7	0.52	0.99	0.61	(0.25, 1.26)	1212	0.41
Katz S	223	3	1.35	1.24	1.25	(0.25, 3.64)	180	1.04
Long Island Jewish MC	10	1	10.00	4.01	2.87	(0.04,15.97)	1	0.00
North Shore Univ Hosp	213	2	0.94	1.11	0.97	(0.11, 3.51)	179	1.04
Kelberman M	183	4	2.19	1.29	1.95	(0.52, 4.99)	147	0.57
Faxton - St. Lukes	13	1	7.69	1.41	6.28	(0.08,34.96)	7	0.00
St. Elizabeth Med Ctr	170	3	1.76	1.28	1.59	(0.32, 4.63)	140	0.58
Kesanakurthy S	790	6	0.76	0.61	1.43	(0.52, 3.12)	770	1.04
Lenox Hill Hospital	141	0	0.00	0.63	0.00	(0.00, 4.75)	133	0.00
Mount Sinai Hospital	529	4	0.76	0.64	1.35	(0.36, 3.47)	517	0.92
NYP-Brooklyn Methodist	9	0	0.00	0.23	0.00	(0.00,100.0)	9	0.00
NYP-Columbia Presby.	2	0	0.00	0.97	0.00	(0.00,100.0)	2	0.00
NYP-Weill Cornell	109	2	1.83	0.45	4.66	(0.52,16.84)	109	3.44
Khan S	194	3	1.55	0.94	1.90	(0.38, 5.56)	166	0.00
St. Catherine of Siena	87	3	3.45	1.31	3.04	(0.61, 8.88)	66	0.00
St. Francis Hospital	5	0	0.00	0.83	0.00	(0.00,100.0)	5	0.00
Univ. Hosp-Stony Brook	102	0	0.00	0.62	0.00	(0.00, 6.63)	95	0.00
Khan W	408	7	1.72	1.09	1.81	(0.73, 3.74)	338	1.48
Brookhaven Memorial	340	6	1.76	0.99	2.05	(0.75, 4.45)	271	2.04
NYU Winthrop Hospital	68	1	1.47	1.57	1.08	(0.01, 6.02)	67	0.71
Khawaja H	34	1	2.94	0.86	3.94	(0.05,21.92)	26	0.00
Albany Med. Ctr	5	0	0.00	0.94	0.00	(0.00,90.23)	2	0.00
Samaritan Hospital	2	1	50.00	5.14	11.21	(0.15,62.36)	.	.
St. Peters Hospital	27	0	0.00	0.53	0.00	(0.00,29.60)	24	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Kim M	845	8	0.95	1.13	0.96	(0.41, 1.90)	695	0.82
Elmhurst Hospital Ctr	2	0	0.00	1.53	0.00	(0.00,100.0)	.	.
Lenox Hill Hospital	400	3	0.75	0.88	0.99	(0.20, 2.88)	364	0.95
Long Island Jewish MC	23	1	4.35	1.97	2.55	(0.03,14.18)	5	0.00
Mount Sinai Hospital	28	0	0.00	0.43	0.00	(0.00,34.87)	27	0.00
North Shore Univ Hosp	392	4	1.02	1.40	0.84	(0.23, 2.16)	299	0.71
Koss J	393	6	1.53	0.94	1.88	(0.68, 4.08)	325	0.92
Long Island Jewish MC	172	2	1.16	0.59	2.25	(0.25, 8.13)	162	1.97
NYP-Queens	50	3	6.00	2.11	3.28	(0.66, 9.59)	21	0.00
North Shore Univ Hosp	126	0	0.00	0.64	0.00	(0.00, 5.28)	111	0.00
St. Francis Hospital	45	1	2.22	1.80	1.42	(0.02, 7.91)	31	0.00
Kozman H	268	11	4.10	1.71	2.76 *	(1.37, 4.93)	167	3.24 *
Faxton - St. Lukes	7	1	14.29	2.12	7.77	(0.10,43.25)	3	0.00
St. Elizabeth Med Ctr	2	0	0.00	0.92	0.00	(0.00,100.0)	1	0.00
Univ. Hosp-Upstate	259	10	3.86	1.71	2.60 *	(1.25, 4.78)	163	3.26 *
Kreps E	67	3	4.48	3.12	1.65	(0.33, 4.83)	39	0.00
Bassett Medical Center	12	2	16.67	5.72	3.36	(0.38,12.12)	5	0.00
Cayuga Med Ctr Ithaca	41	1	2.44	2.47	1.14	(0.01, 6.33)	21	0.00
NYP-Columbia Presby.	14	0	0.00	2.81	0.00	(0.00,10.74)	13	0.00
Krim N	269	5	1.86	2.29	0.93	(0.30, 2.18)	151	0.00
Bronx-Lebanon-Concourse	194	4	2.06	2.97	0.80	(0.21, 2.05)	80	0.00
Montefiore - Moses	68	1	1.47	0.56	3.03	(0.04,16.87)	64	0.00
Mount Sinai St. Lukes	7	0	0.00	0.31	0.00	(0.00,100.0)	7	0.00
Krishnamoorthy V	473	11	2.33	1.40	1.91	(0.95, 3.43)	312	1.40
Rochester General Hosp	444	11	2.48	1.43	2.00	(1.00, 3.58)	292	1.53
Strong Memorial Hosp	29	0	0.00	0.96	0.00	(0.00,15.22)	20	0.00
Kukar A	290	0	0.00	0.60	0.00	(0.00, 2.41)	258	0.00
Jamaica Hosp Med Ctr	7	0	0.00	1.23	0.00	(0.00,49.18)	.	.
Lenox Hill Hospital	283	0	0.00	0.59	0.00	(0.00, 2.54)	258	0.00
Kwan T	648	2	0.31	0.35	1.00	(0.11, 3.63)	645	0.66
Mount Sinai Beth Israel	630	2	0.32	0.35	1.03	(0.12, 3.73)	627	0.68
NYP-Brooklyn Methodist	18	0	0.00	0.35	0.00	(0.00,67.54)	18	0.00
Lasic Z	455	4	0.88	1.35	0.75	(0.20, 1.92)	315	0.64
Jamaica Hosp Med Ctr	231	4	1.73	1.99	1.00	(0.27, 2.57)	98	1.90
Lenox Hill Hospital	224	0	0.00	0.69	0.00	(0.00, 2.73)	217	0.00
Lederman S	238	1	0.42	1.36	0.36	(0.00, 1.98)	225	0.00
North Shore Univ Hosp	2	0	0.00	0.25	0.00	(0.00,100.0)	2	0.00
Univ. Hosp-Stony Brook	236	1	0.42	1.37	0.36	(0.00, 1.99)	223	0.00
Lee A	628	5	0.80	1.46	0.63	(0.20, 1.47)	505	0.72
Long Island Jewish MC	476	5	1.05	1.22	0.99	(0.32, 2.32)	394	0.95
North Shore Univ Hosp	152	0	0.00	2.19	0.00	(0.00, 1.27)	111	0.00
Lee P C	80	2	2.50	2.56	1.13	(0.13, 4.06)	53	0.00
Lutheran Medical Ctr	65	2	3.08	3.08	1.15	(0.13, 4.15)	39	0.00
Maimonides Medical Ctr	8	0	0.00	0.19	0.00	(0.00,100.0)	8	0.00
Mount Sinai Beth Israel	2	0	0.00	0.36	0.00	(0.00,100.0)	2	0.00
Mount Sinai Hospital	5	0	0.00	0.41	0.00	(0.00,100.0)	4	0.00
Lee P J	797	4	0.50	0.69	0.83	(0.22, 2.13)	724	0.57
Good Sam-West Islip	504	2	0.40	0.61	0.76	(0.08, 2.73)	458	0.79
Southside Hospital	292	2	0.68	0.85	0.93	(0.10, 3.37)	265	0.37
St. Francis Hospital	1	0	0.00	1.25	0.00	(0.00,100.0)	1	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Limaye A	294	5	1.70	1.84	1.07	(0.34, 2.49)	254	0.39
Bronx-Lebanon-Concourse	9	0	0.00	0.62	0.00	(0.00,75.45)	6	0.00
Mount Sinai Hospital	285	5	1.75	1.88	1.08	(0.35, 2.52)	248	0.40
Liou M	297	0	0.00	0.36	0.00	(0.00, 3.91)	293	0.00
Mount Sinai Beth Israel	250	0	0.00	0.38	0.00	(0.00, 4.49)	246	0.00
NYU Hospitals Center	47	0	0.00	0.30	0.00	(0.00,30.16)	47	0.00
Maclsaac H	556	21	3.78	2.06	2.12 *	(1.31, 3.24)	451	1.20
Faxton - St. Lukes	49	3	6.12	2.90	2.43	(0.49, 7.10)	35	1.48
St. Elizabeth Med Ctr	507	18	3.55	1.97	2.07 *	(1.23, 3.28)	416	1.14
Madrid A	196	2	1.02	0.92	1.28	(0.14, 4.63)	171	0.63
St. Catherine of Siena	2	0	0.00	0.83	0.00	(0.00,100.0)	.	.
St. Francis Hospital	194	2	1.03	0.92	1.30	(0.15, 4.68)	171	0.63
Mallavarapu C	285	3	1.05	1.06	1.14	(0.23, 3.33)	136	0.00
Buffalo General Hosp	1	0	0.00	0.40	0.00	(0.00,100.0)	.	.
Olean General Hosp.	284	3	1.06	1.06	1.14	(0.23, 3.34)	136	0.00
Malpeso J	193	4	2.07	1.25	1.91	(0.51, 4.89)	125	2.11
Bassett Medical Center	1	0	0.00	1.43	0.00	(0.00,100.0)	.	.
Olean General Hosp.	11	0	0.00	0.61	0.00	(0.00,63.02)	6	0.00
Staten Island Univ Hosp	181	4	2.21	1.29	1.98	(0.53, 5.06)	119	2.15
Mangla A	382	9	2.36	1.19	2.28	(1.04, 4.34)	263	2.30 *
Jamaica Hosp Med Ctr	207	5	2.42	1.53	1.82	(0.59, 4.24)	94	2.67
Lenox Hill Hospital	175	4	2.29	0.78	3.37	(0.91, 8.63)	169	2.09
Marchant D	163	3	1.84	1.46	1.45	(0.29, 4.23)	106	1.62
Long Island Jewish MC	23	0	0.00	2.46	0.00	(0.00, 7.47)	5	0.00
North Shore Univ Hosp	140	3	2.14	1.30	1.90	(0.38, 5.55)	101	1.72
Maroney J	200	6	3.00	1.46	2.36	(0.86, 5.14)	148	0.68
Albany Med. Ctr	139	6	4.32	1.74	2.86	(1.04, 6.23)	102	1.02
Samaritan Hospital	12	0	0.00	0.71	0.00	(0.00,49.79)	6	0.00
St. Peters Hospital	49	0	0.00	0.87	0.00	(0.00, 9.89)	40	0.00
Martinelli M	645	7	1.09	0.86	1.46	(0.58, 3.00)	506	1.13
Samaritan Hospital	17	0	0.00	1.25	0.00	(0.00,19.92)	4	0.00
St. Peters Hospital	628	7	1.11	0.85	1.51	(0.61, 3.12)	502	1.13
Masud ARZ	508	9	1.77	1.16	1.76	(0.81, 3.35)	439	0.80
Buffalo General Hosp	55	1	1.82	0.71	2.96	(0.04,16.48)	51	1.86
Mercy Hospital	453	8	1.77	1.21	1.68	(0.72, 3.31)	388	0.67
Mathew T C	212	4	1.89	0.93	2.35	(0.63, 6.01)	173	2.07
Faxton - St. Lukes	142	3	2.11	0.83	2.94	(0.59, 8.59)	122	3.08
St. Elizabeth Med Ctr	70	1	1.43	1.13	1.46	(0.02, 8.14)	51	0.00
Menegus M	491	3	0.61	1.11	0.64	(0.13, 1.86)	377	0.81
Montefiore - Moses	126	2	1.59	1.23	1.49	(0.17, 5.37)	99	2.10
Montefiore - Weiler	362	1	0.28	1.07	0.30	(0.00, 1.66)	277	0.36
St. Barnabas Hospital	3	0	0.00	0.52	0.00	(0.00,100.0)	1	0.00
Meraj P	952	11	1.16	1.55	0.86	(0.43, 1.54)	739	0.66
Long Island Jewish MC	657	6	0.91	1.38	0.76	(0.28, 1.66)	525	0.62
North Shore Univ Hosp	295	5	1.69	1.92	1.02	(0.33, 2.37)	214	0.75
Messinger D	208	2	0.96	1.40	0.79	(0.09, 2.86)	187	0.58
Montefiore - Weiler	9	0	0.00	1.91	0.00	(0.00,24.56)	9	0.00
NYP-Weill Cornell	101	1	0.99	1.69	0.68	(0.01, 3.76)	97	0.44
Westchester Med Ctr	27	1	3.70	0.69	6.23	(0.08,34.64)	26	3.86
White Plains Hospital	71	0	0.00	1.20	0.00	(0.00, 4.97)	55	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Miller L	86	2	2.33	2.75	0.98	(0.11, 3.52)	51	0.00
Bellevue Hospital Ctr	64	2	3.13	2.35	1.53	(0.17, 5.53)	40	0.00
NYU Hospitals Center	22	0	0.00	3.90	0.00	(0.00, 4.92)	11	0.00
Monrad E	303	2	0.66	1.44	0.53	(0.06, 1.91)	239	0.00
Montefiore - Moses	1	0	0.00	0.08	0.00	(0.00,100.0)	1	0.00
Montefiore - Weiler	302	2	0.66	1.44	0.53	(0.06, 1.91)	238	0.00
Moreno P	833	3	0.36	0.64	0.64	(0.13, 1.88)	818	0.17
Mount Sinai Hospital	789	3	0.38	0.66	0.66	(0.13, 1.93)	774	0.18
Mount Sinai St. Lukes	44	0	0.00	0.33	0.00	(0.00,28.82)	44	0.00
Morris W	841	13	1.55	1.19	1.49	(0.79, 2.56)	666	1.05
Buffalo General Hosp	799	13	1.63	1.23	1.52	(0.81, 2.60)	624	1.09
Mercy Hospital	42	0	0.00	0.45	0.00	(0.00,22.41)	42	0.00
Moses J	1228	9	0.73	0.81	1.04	(0.48, 1.98)	1224	0.73
NYP-Columbia Presby.	1025	6	0.59	0.62	1.09	(0.40, 2.37)	1021	0.72
St. Francis Hospital	203	3	1.48	1.77	0.96	(0.19, 2.82)	203	0.75
Motivala A	253	1	0.40	1.14	0.40	(0.01, 2.22)	183	0.57
NYP-Columbia Presby.	20	0	0.00	0.81	0.00	(0.00,25.95)	20	0.00
Orange Regional Med Ctr	187	1	0.53	1.33	0.46	(0.01, 2.59)	118	0.84
Staten Island Univ Hosp	46	0	0.00	0.54	0.00	(0.00,17.13)	45	0.00
Nazif T	159	2	1.26	1.86	0.78	(0.09, 2.82)	142	0.87
NYP-Columbia Presby.	157	2	1.27	1.87	0.78	(0.09, 2.83)	140	0.88
NYP-Lawrence Hosp	2	0	0.00	0.75	0.00	(0.00,100.0)	2	0.00
Ong L S	1571	19	1.21	0.95	1.47	(0.89, 2.30)	1328	0.77
Cayuga Med Ctr Ithaca	1	0	0.00	1.35	0.00	(0.00,100.0)	.	.
Rochester General Hosp	1522	18	1.18	0.92	1.49	(0.88, 2.35)	1311	0.79
Unity Hospital	48	1	2.08	1.86	1.29	(0.02, 7.17)	17	0.00
Ong L Y	252	0	0.00	0.64	0.00	(0.00, 2.61)	225	0.00
Huntington Hospital	166	0	0.00	0.56	0.00	(0.00, 4.57)	141	0.00
North Shore Univ Hosp	80	0	0.00	0.80	0.00	(0.00, 6.57)	78	0.00
Southside Hospital	6	0	0.00	0.82	0.00	(0.00,86.07)	6	0.00
Papadakos S	481	5	1.04	0.93	1.29	(0.42, 3.01)	408	1.05
Lenox Hill Hospital	21	0	0.00	0.47	0.00	(0.00,42.62)	21	0.00
NYP-Queens	145	3	2.07	1.96	1.22	(0.24, 3.56)	73	1.34
NYU Hospitals Center	237	2	0.84	0.41	2.35	(0.26, 8.50)	236	1.47
North Shore Univ Hosp	78	0	0.00	0.71	0.00	(0.00, 7.62)	78	0.00
Papaleo R	443	2	0.45	0.62	0.84	(0.09, 3.04)	320	0.76
Albany Med. Ctr	34	0	0.00	1.31	0.00	(0.00, 9.46)	11	0.00
Glens Falls Hospital	9	0	0.00	1.14	0.00	(0.00,41.27)	1	0.00
Samaritan Hospital	394	2	0.51	0.53	1.10	(0.12, 3.99)	308	0.78
St. Peters Hospital	6	0	0.00	1.66	0.00	(0.00,42.31)	.	.
Patcha R	255	2	0.78	0.92	0.98	(0.11, 3.56)	213	0.59
Huntington Hospital	220	1	0.45	0.87	0.60	(0.01, 3.34)	178	0.00
North Shore Univ Hosp	22	1	4.55	1.15	4.55	(0.06,25.34)	22	2.56
St. Francis Hospital	13	0	0.00	1.29	0.00	(0.00,25.22)	13	0.00
Patel A	192	2	1.04	1.40	0.86	(0.10, 3.10)	135	1.02
Faxton - St. Lukes	16	0	0.00	1.45	0.00	(0.00,18.17)	9	0.00
St. Elizabeth Med Ctr	176	2	1.14	1.39	0.94	(0.11, 3.39)	126	1.11
Patel D	34	0	0.00	0.32	0.00	(0.00,39.07)	28	0.00
Brookhaven Memorial	10	0	0.00	0.43	0.00	(0.00,99.33)	8	0.00
Univ. Hosp-Stony Brook	24	0	0.00	0.27	0.00	(0.00,64.39)	20	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Patel M	67	3	4.48	1.21	4.26	(0.86,12.45)	62	3.30
Mount Sinai Hospital	22	0	0.00	0.41	0.00	(0.00,46.81)	22	0.00
South Nassau Com. Hosp	12	1	8.33	1.18	8.11	(0.11,45.12)	8	5.97
St. Francis Hospital	33	2	6.06	1.75	3.98	(0.45,14.38)	32	3.15
Patel N	343	2	0.58	0.99	0.68	(0.08, 2.46)	286	0.34
St. Catherine of Siena	26	0	0.00	2.11	0.00	(0.00, 7.68)	14	0.00
Univ. Hosp-Stony Brook	317	2	0.63	0.89	0.81	(0.09, 2.94)	272	0.36
Patel R B	342	9	2.63	1.15	2.63 *	(1.20, 4.99)	218	2.82 *
Brookhaven Memorial	11	0	0.00	1.48	0.00	(0.00,25.97)	1	0.00
Good Sam-West Islip	121	4	3.31	1.23	3.10	(0.83, 7.95)	77	2.06
Southside Hospital	103	3	2.91	1.28	2.63	(0.53, 7.68)	67	3.49
St. Catherine of Siena	107	2	1.87	0.92	2.35	(0.26, 8.49)	73	2.44
Patel T	885	16	1.81	1.23	1.70	(0.97, 2.75)	703	1.42
Rochester General Hosp	196	5	2.55	0.81	3.63 *	(1.17, 8.47)	180	3.05 *
Unity Hospital	689	11	1.60	1.35	1.37	(0.68, 2.44)	523	0.85
Patel V	192	3	1.56	0.67	2.68	(0.54, 7.84)	188	2.38
Mount Sinai Hospital	29	0	0.00	0.18	0.00	(0.00,82.16)	29	0.00
NYP-Brooklyn Methodist	163	3	1.84	0.76	2.80	(0.56, 8.17)	159	2.52
Perry-Bottinger L	23	0	0.00	0.51	0.00	(0.00,35.92)	23	0.00
NYP-Columbia Presby.	21	0	0.00	0.48	0.00	(0.00,41.50)	21	0.00
NYP-Queens	2	0	0.00	0.79	0.00	(0.00,100.0)	2	0.00
Petrossian G	789	4	0.51	1.19	0.49	(0.13, 1.26)	779	0.36
South Nassau Com. Hosp	36	0	0.00	1.46	0.00	(0.00, 8.03)	35	0.00
St. Francis Hospital	753	4	0.53	1.17	0.52	(0.14, 1.34)	744	0.38
Phadke K	717	17	2.37	1.31	2.09 *	(1.22, 3.35)	452	0.90
Buffalo General Hosp	684	17	2.49	1.36	2.11 *	(1.23, 3.37)	420	0.92
Mercy Hospital	33	0	0.00	0.19	0.00	(0.00,67.05)	32	0.00
Polena S	411	5	1.22	0.82	1.72	(0.55, 4.01)	353	1.56
Huntington Hospital	366	4	1.09	0.78	1.62	(0.43, 4.14)	308	1.62
Long Island Jewish MC	10	0	0.00	0.41	0.00	(0.00,100.0)	10	0.00
North Shore Univ Hosp	35	1	2.86	1.31	2.51	(0.03,13.95)	35	1.50
Poumpouridis K	90	0	0.00	0.54	0.00	(0.00, 8.68)	78	0.00
Lenox Hill Hospital	16	0	0.00	0.68	0.00	(0.00,38.93)	10	0.00
Long Island Jewish MC	29	0	0.00	0.52	0.00	(0.00,28.08)	26	0.00
North Shore Univ Hosp	42	0	0.00	0.53	0.00	(0.00,19.10)	39	0.00
Southside Hospital	3	0	0.00	0.21	0.00	(0.00,100.0)	3	0.00
Pulipati B	102	5	4.90	1.10	5.14 *	(1.66,11.99)	75	5.62 *
Brookhaven Memorial	84	4	4.76	1.26	4.36 *	(1.17,11.16)	57	4.81 *
Univ. Hosp-Stony Brook	18	1	5.56	0.36	17.85	(0.23,99.30)	18	11.31
Puma A	354	2	0.56	0.43	1.52	(0.17, 5.47)	354	0.95
Lenox Hill Hospital	19	0	0.00	0.61	0.00	(0.00,36.34)	19	0.00
Mount Sinai Beth Israel	225	2	0.89	0.41	2.49	(0.28, 8.99)	225	1.54
NYP-Columbia Presby.	110	0	0.00	0.43	0.00	(0.00, 8.84)	110	0.00
Punukollu G	419	4	0.95	0.58	1.91	(0.51, 4.89)	408	1.28
Lenox Hill Hospital	248	3	1.21	0.61	2.29	(0.46, 6.70)	243	1.53
Mount Sinai Beth Israel	171	1	0.58	0.53	1.27	(0.02, 7.09)	165	0.86
Pyo R	527	10	1.90	1.59	1.37	(0.66, 2.52)	407	0.67
Elmhurst Hospital Ctr	60	4	6.67	4.23	1.82	(0.49, 4.65)	2	0.00
Montefiore - Moses	307	2	0.65	1.18	0.63	(0.07, 2.29)	264	0.34
Mount Sinai Hospital	151	3	1.99	1.05	2.17	(0.44, 6.35)	139	1.34
St. Barnabas Hospital	9	1	11.11	7.04	1.82	(0.02,10.12)	2	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Raza J	563	6	1.07	0.80	1.54	(0.56, 3.35)	442	1.44
Jamaica Hosp Med Ctr	213	1	0.47	1.06	0.51	(0.01, 2.85)	102	0.00
Lenox Hill Hospital	350	5	1.43	0.64	2.58	(0.83, 6.02)	340	1.84
Rehman A	449	6	1.34	0.94	1.63	(0.60, 3.55)	287	1.50
South Nassau Com. Hosp	448	6	1.34	0.94	1.63	(0.60, 3.56)	286	1.50
St. Francis Hospital	1	0	0.00	0.32	0.00	(0.00,100.0)	1	0.00
Rehman S	197	2	1.02	0.79	1.48	(0.17, 5.33)	188	1.16
Long Island Jewish MC	62	0	0.00	0.73	0.00	(0.00, 9.34)	60	0.00
NYP-Brooklyn Methodist	73	2	2.74	1.07	2.94	(0.33,10.61)	69	2.34
South Nassau Com. Hosp	62	0	0.00	0.52	0.00	(0.00,13.07)	59	0.00
Reich D	665	4	0.60	0.87	0.80	(0.21, 2.05)	601	0.19
Good Sam-West Islip	392	0	0.00	0.65	0.00	(0.00, 1.66)	361	0.00
Southside Hospital	273	4	1.47	1.18	1.43	(0.38, 3.66)	240	0.42
Roccario E	607	12	1.98	1.35	1.68	(0.87, 2.94)	426	1.48
Samaritan Hospital	15	2	13.33	4.24	3.62	(0.41,13.08)	4	0.00
St. Peters Hospital	592	10	1.69	1.28	1.52	(0.73, 2.79)	422	1.49
Rosenband M	235	1	0.43	1.24	0.40	(0.01, 2.20)	204	0.43
St. Catherine of Siena	127	0	0.00	1.23	0.00	(0.00, 2.70)	101	0.00
St. Francis Hospital	4	0	0.00	0.55	0.00	(0.00,100.0)	4	0.00
Univ. Hosp-Stony Brook	104	1	0.96	1.27	0.87	(0.01, 4.85)	99	0.78
Rosero H	485	6	1.24	0.97	1.46	(0.53, 3.18)	421	0.33
Mount Sinai Beth Israel	484	6	1.24	0.98	1.46	(0.53, 3.18)	420	0.33
NYP-Brooklyn Methodist	1	0	0.00	0.12	0.00	(0.00,100.0)	1	0.00
Royzman R	315	9	2.86	1.90	1.73	(0.79, 3.28)	200	1.22
Good Sam - Suffern	5	3	60.00	8.76	7.89 *	(1.59,23.06)	.	.
Lutheran Medical Ctr	52	1	1.92	3.32	0.67	(0.01, 3.71)	31	2.78
Staten Island Univ Hosp	258	5	1.94	1.48	1.51	(0.49, 3.51)	169	0.96
Rutkin B	268	6	2.24	1.60	1.61	(0.59, 3.51)	195	1.03
Long Island Jewish MC	18	0	0.00	1.49	0.00	(0.00,15.74)	5	0.00
North Shore Univ Hosp	250	6	2.40	1.61	1.72	(0.63, 3.74)	190	1.04
Sassower M	699	12	1.72	1.27	1.55	(0.80, 2.71)	587	1.22
Faxton - St. Lukes	45	1	2.22	3.05	0.84	(0.01, 4.67)	27	0.00
St. Elizabeth Med Ctr	654	11	1.68	1.15	1.68	(0.84, 3.01)	560	1.31
Schwartz R	924	8	0.87	1.43	0.70	(0.30, 1.37)	805	0.49
Brookhaven Memorial	25	1	4.00	0.98	4.72	(0.06,26.29)	20	5.28
NYU Winthrop Hospital	899	7	0.78	1.45	0.62	(0.25, 1.28)	785	0.40
Sehhat K	128	0	0.00	0.48	0.00	(0.00, 6.94)	124	0.00
Montefiore - Moses	110	0	0.00	0.48	0.00	(0.00, 8.01)	106	0.00
NYP-Columbia Presby.	18	0	0.00	0.45	0.00	(0.00,52.06)	18	0.00
Serrano-Gomez C	130	2	1.54	1.23	1.44	(0.16, 5.19)	106	1.98
Bellevue Hospital Ctr	19	1	5.26	3.60	1.68	(0.02, 9.37)	4	21.73
NYU Hospitals Center	111	1	0.90	0.83	1.25	(0.02, 6.97)	102	0.00
Shah A	564	6	1.06	0.56	2.19	(0.80, 4.76)	554	1.48
Lenox Hill Hospital	41	0	0.00	0.63	0.00	(0.00,16.33)	41	0.00
Mount Sinai Hospital	34	1	2.94	0.94	3.61	(0.05,20.06)	33	3.34
NYP-Brooklyn Methodist	446	5	1.12	0.55	2.33	(0.75, 5.44)	437	1.54
NYU Hospitals Center	43	0	0.00	0.26	0.00	(0.00,37.88)	43	0.00
Shah A R	552	11	1.99	1.66	1.38	(0.69, 2.48)	440	1.21
Good Sam - Suffern	551	11	2.00	1.66	1.39	(0.69, 2.48)	439	1.22
Mount Sinai Hospital	1	0	0.00	1.96	0.00	(0.00,100.0)	1	0.00

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Shah B	159	1	0.63	1.47	0.49	(0.01, 2.74)	112	0.00
Bellevue Hospital Ctr	138	1	0.72	1.44	0.58	(0.01, 3.22)	99	0.00
NYU Hospitals Center	21	0	0.00	1.64	0.00	(0.00,12.30)	13	0.00
Shah N	251	4	1.59	1.81	1.01	(0.27, 2.59)	174	0.72
St. Lukes Cornwall Hosp	247	4	1.62	1.84	1.01	(0.27, 2.60)	170	0.73
Vassar Bros. Med Ctr	4	0	0.00	0.34	0.00	(0.00,100.0)	4	0.00
Shih A T	188	5	2.66	1.52	2.01	(0.65, 4.69)	125	0.80
Montefiore - Moses	160	4	2.50	1.56	1.85	(0.50, 4.73)	101	0.00
NYP-Columbia Presby.	4	1	25.00	1.74	16.52	(0.22,91.90)	4	11.95
Westchester Med Ctr	24	0	0.00	1.26	0.00	(0.00,14.00)	20	0.00
Silverman G	295	3	1.02	1.17	1.00	(0.20, 2.91)	167	0.69
Mount Sinai St. Lukes	6	0	0.00	0.47	0.00	(0.00,100.0)	5	0.00
Orange Regional Med Ctr	243	2	0.82	1.15	0.82	(0.09, 2.97)	137	0.80
Westchester Med Ctr	46	1	2.17	1.37	1.82	(0.02,10.14)	25	0.00
Singer G	378	2	0.53	0.78	0.78	(0.09, 2.81)	358	0.31
Rochester General Hosp	344	1	0.29	0.60	0.56	(0.01, 3.12)	335	0.39
Unity Hospital	34	1	2.94	2.66	1.27	(0.02, 7.08)	23	0.00
Singh A	244	2	0.82	1.06	0.89	(0.10, 3.21)	194	0.42
Long Island Jewish MC	214	2	0.93	1.11	0.97	(0.11, 3.52)	174	0.44
North Shore Univ Hosp	30	0	0.00	0.75	0.00	(0.00,18.74)	20	0.00
Singh V	748	4	0.53	0.61	1.01	(0.27, 2.57)	723	0.48
Lenox Hill Hospital	746	4	0.54	0.61	1.01	(0.27, 2.59)	723	0.48
Long Island Jewish MC	1	0	0.00	0.73	0.00	(0.00,100.0)	.	.
North Shore Univ Hosp	1	0	0.00	2.83	0.00	(0.00,100.0)	.	.
Slater J	386	5	1.30	0.78	1.92	(0.62, 4.48)	342	1.29
Bellevue Hospital Ctr	4	1	25.00	10.80	2.67	(0.03,14.84)	1	0.00
Lenox Hill Hospital	3	0	0.00	0.76	0.00	(0.00,100.0)	3	0.00
Mount Sinai St. Lukes	1	0	0.00	0.15	0.00	(0.00,100.0)	1	0.00
NYU Hospitals Center	378	4	1.06	0.67	1.81	(0.49, 4.64)	337	1.31
Slovut D	212	2	0.94	1.72	0.63	(0.07, 2.28)	122	0.00
Montefiore - Moses	3	0	0.00	1.19	0.00	(0.00,100.0)	1	0.00
Montefiore - Weiler	209	2	0.96	1.73	0.64	(0.07, 2.30)	121	0.00
Snyder S	148	4	2.70	0.97	3.21	(0.86, 8.21)	116	2.76
Lenox Hill Hospital	1	0	0.00	0.22	0.00	(0.00,100.0)	1	0.00
Richmond Univ Med Cntr	2	0	0.00	0.80	0.00	(0.00,100.0)	.	.
Staten Island Univ Hosp	145	4	2.76	0.98	3.25	(0.87, 8.32)	115	2.76
Srinivas V	178	1	0.56	1.04	0.62	(0.01, 3.47)	156	0.00
Montefiore - Moses	47	0	0.00	0.79	0.00	(0.00,11.35)	42	0.00
Montefiore - Weiler	129	1	0.78	1.14	0.78	(0.01, 4.36)	112	0.00
St. Barnabas Hospital	2	0	0.00	0.19	0.00	(0.00,100.0)	2	0.00
Srivastava S	73	0	0.00	0.35	0.00	(0.00,16.67)	73	0.00
NYP-Brooklyn Methodist	3	0	0.00	1.00	0.00	(0.00,100.0)	3	0.00
NYP-Weill Cornell	23	0	0.00	0.38	0.00	(0.00,48.11)	23	0.00
NYU Hospitals Center	47	0	0.00	0.29	0.00	(0.00,31.13)	47	0.00
Staniloae C	128	3	2.34	0.68	3.97	(0.80,11.61)	116	1.17
Bellevue Hospital Ctr	11	1	9.09	2.86	3.66	(0.05,20.39)	2	0.00
Lenox Hill Hospital	2	0	0.00	0.13	0.00	(0.00,100.0)	2	0.00
NYU Hospitals Center	115	2	1.74	0.48	4.17	(0.47,15.04)	112	1.22
Stathopoulos I	350	1	0.29	0.67	0.49	(0.01, 2.72)	347	0.33
Lenox Hill Hospital	56	0	0.00	0.69	0.00	(0.00,10.95)	55	0.00
NYP-Columbia Presby.	294	1	0.34	0.67	0.58	(0.01, 3.25)	292	0.41

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Stefek P	269	3	1.12	1.33	0.97	(0.19, 2.83)	150	1.50
Cayuga Med Ctr Ithaca	263	3	1.14	1.35	0.97	(0.20, 2.84)	144	1.54
Rochester General Hosp	6	0	0.00	0.33	0.00	(0.00,100.0)	6	0.00
Strizik B	387	2	0.52	1.12	0.53	(0.06, 1.92)	306	0.35
Huntington Hospital	230	2	0.87	1.41	0.71	(0.08, 2.57)	156	0.65
Long Island Jewish MC	3	0	0.00	0.65	0.00	(0.00,100.0)	2	0.00
North Shore Univ Hosp	154	0	0.00	0.70	0.00	(0.00, 3.91)	148	0.00
Stuver T	1100	11	1.00	1.08	1.07	(0.53, 1.92)	827	0.96
Cayuga Med Ctr Ithaca	2	0	0.00	3.43	0.00	(0.00,61.68)	.	.
Rochester General Hosp	1040	11	1.06	1.07	1.14	(0.57, 2.04)	785	0.99
Strong Memorial Hosp	58	0	0.00	1.14	0.00	(0.00, 6.42)	42	0.00
Suleman J	545	0	0.00	0.39	0.00	(0.00, 2.00)	543	0.00
Jamaica Hosp Med Ctr	5	0	0.00	0.27	0.00	(0.00,100.0)	5	0.00
Mount Sinai Hospital	540	0	0.00	0.39	0.00	(0.00, 2.01)	538	0.00
Sullivan P	255	5	1.96	1.19	1.89	(0.61, 4.42)	178	1.83
Buffalo General Hosp	193	3	1.55	1.35	1.33	(0.27, 3.89)	124	0.79
Mercy Hospital	62	2	3.23	0.72	5.17	(0.58,18.65)	54	5.32
Swamy S	60	0	0.00	0.37	0.00	(0.00,18.98)	57	0.00
Richmond Univ Med Cntr	20	0	0.00	0.48	0.00	(0.00,43.96)	18	0.00
Staten Island Univ Hosp	40	0	0.00	0.32	0.00	(0.00,33.41)	39	0.00
Timmermans R	284	6	2.11	1.70	1.44	(0.52, 3.12)	159	0.98
Orange Regional Med Ctr	2	0	0.00	1.43	0.00	(0.00,100.0)	2	0.00
Westchester Med Ctr	282	6	2.13	1.70	1.44	(0.53, 3.14)	157	1.00
Tsiamtsiouris T	315	3	0.95	1.45	0.76	(0.15, 2.21)	277	0.65
St. Catherine of Siena	6	0	0.00	1.50	0.00	(0.00,47.00)	.	.
St. Francis Hospital	309	3	0.97	1.45	0.77	(0.16, 2.25)	277	0.65
Vales L	47	0	0.00	0.58	0.00	(0.00,15.52)	45	0.00
Mount Sinai Beth Israel	8	0	0.00	0.46	0.00	(0.00,100.0)	8	0.00
NYU Hospitals Center	39	0	0.00	0.60	0.00	(0.00,17.96)	37	0.00
Varma P	206	3	1.46	1.52	1.10	(0.22, 3.22)	137	0.00
Faxton - St. Lukes	29	0	0.00	1.72	0.00	(0.00, 8.47)	17	0.00
St. Elizabeth Med Ctr	177	3	1.69	1.49	1.31	(0.26, 3.82)	120	0.00
Weinberg M	178	2	1.12	1.07	1.21	(0.14, 4.37)	117	0.83
Lenox Hill Hospital	14	0	0.00	0.62	0.00	(0.00,48.83)	13	0.00
Long Island Jewish MC	17	1	5.88	1.99	3.40	(0.04,18.91)	5	8.26
North Shore Univ Hosp	147	1	0.68	1.01	0.78	(0.01, 4.33)	99	0.00
Weinstein J	387	8	2.07	1.31	1.82	(0.79, 3.59)	330	1.15
St. Catherine of Siena	41	2	4.88	2.82	1.99	(0.22, 7.18)	18	0.00
St. Francis Hospital	25	0	0.00	1.27	0.00	(0.00,13.27)	24	0.00
Univ. Hosp-Stony Brook	321	6	1.87	1.11	1.93	(0.71, 4.21)	288	1.31
Wilentz J	112	0	0.00	0.45	0.00	(0.00, 8.39)	111	0.00
Mount Sinai Beth Israel	4	0	0.00	0.42	0.00	(0.00,100.0)	4	0.00
NYP-Weill Cornell	108	0	0.00	0.45	0.00	(0.00, 8.68)	107	0.00
Wiley J	75	0	0.00	1.68	0.00	(0.00, 3.35)	56	0.00
Montefiore - Moses	17	0	0.00	0.54	0.00	(0.00,46.31)	14	0.00
Mount Sinai Hospital	58	0	0.00	2.02	0.00	(0.00, 3.61)	42	0.00
Williams M	98	3	3.06	1.33	2.65	(0.53, 7.73)	90	1.90
NYP-Columbia Presby.	78	2	2.56	1.28	2.31	(0.26, 8.33)	70	1.73
NYU Hospitals Center	20	1	5.00	1.54	3.75	(0.05,20.85)	20	2.35

Table 6, continued

	Cases	Deaths	All Cases			95% CI for RAMR	Non-Emergency	
			OMR	EMR	RAMR		CASES	RAMR
Winston B	415	9	2.17	1.15	2.17	(0.99, 4.11)	303	0.99
Albany Med. Ctr	51	1	1.96	1.79	1.26	(0.02, 7.02)	19	0.00
Samaritan Hospital	46	2	4.35	1.41	3.56	(0.40,12.85)	14	8.33
St. Peters Hospital	318	6	1.89	1.01	2.14	(0.78, 4.67)	270	0.73
Witkes D	63	0	0.00	0.80	0.00	(0.00, 8.36)	62	0.00
NYU Winthrop Hospital	5	0	0.00	1.98	0.00	(0.00,42.64)	5	0.00
North Shore Univ Hosp	58	0	0.00	0.70	0.00	(0.00,10.40)	57	0.00
Yadav S	321	6	1.87	1.11	1.94	(0.71, 4.23)	282	1.28
Long Island Jewish MC	32	0	0.00	0.48	0.00	(0.00,27.36)	30	0.00
Mount Sinai Hospital	16	0	0.00	0.17	0.00	(0.00,100.0)	16	0.00
NYP-Brooklyn Methodist	93	1	1.08	0.25	4.93	(0.06,27.44)	93	3.47
NYU Hospitals Center	3	0	0.00	0.16	0.00	(0.00,100.0)	3	0.00
St. Francis Hospital	177	5	2.82	1.77	1.83	(0.59, 4.28)	140	1.09
Yarkoni A	273	6	2.20	1.78	1.42	(0.52, 3.10)	206	0.90
Arnot Ogden Med Ctr	153	3	1.96	1.77	1.28	(0.26, 3.73)	112	1.00
UHS-Wilson Med Ctr	120	3	2.50	1.79	1.61	(0.32, 4.71)	94	0.81
Yatskar L	511	1	0.20	0.79	0.29	(0.00, 1.59)	377	0.00
Elmhurst Hospital Ctr	491	1	0.20	0.81	0.29	(0.00, 1.61)	357	0.00
NYU Hospitals Center	20	0	0.00	0.25	0.00	(0.00,83.08)	20	0.00
Zgheib M	204	3	1.47	0.53	3.19	(0.64, 9.31)	200	1.34
Mount Sinai Hospital	13	0	0.00	0.24	0.00	(0.00,100.0)	13	0.00
Richmond Univ Med Cntr	6	0	0.00	0.35	0.00	(0.00,100.0)	6	0.00
Staten Island Univ Hosp	185	3	1.62	0.56	3.35	(0.67, 9.78)	181	1.41
Zisfein J	359	3	0.84	0.76	1.27	(0.26, 3.72)	327	1.00
NYU Winthrop Hospital	82	1	1.22	0.99	1.42	(0.02, 7.93)	81	1.02
South Nassau Com. Hosp	277	2	0.72	0.69	1.21	(0.14, 4.36)	246	0.98

* 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 (2015)

Based on Documentation in Medical Record

Patient Risk Factor	Definitions
Demographic	
Body Surface Area	<p>Body surface area (BSA) is a function of height and weight and increases for larger heights and weights. The statistical formula used to calculate BSA in this report is: $BSA (m^2) = 0.0003207 \times H^{0.3} \times W^{(0.7285 - (0.0188 \times \text{LOG}))}$ Where H is Height in centimeters and W is Weight in grams.</p>
Body Mass Index	<p>Body Mass Index (BMI) is a measure of body size that is the ratio of the weight of the body in kilograms to the square of its height in meters and is considered an indication of nutritional status of the body.</p> <p>The formula for BMI is: $BMI = \text{Weight} / \text{Height}^2$ where Height is height in meters (m) and Weight is weight in kilograms (kg).</p>
Hemodynamic State	
Non-Refractory Cardiogenic Shock	<p>Determined just prior to the intervention.</p> <p>Non-Refractory Cardiogenic Shock is defined as an episode of systolic blood pressure <90 mmHg and/or cardiac index < 2.2 L/min/m² determined to be secondary to cardiac dysfunction and the requirement for parenteral inotropic or vasopressor agents or mechanical support (e.g., IABP, extracorporeal circulation, VAD) to maintain blood pressure and cardiac index above those specified levels. (Definition adopted in 2015)</p> <p>Prior to 2015 the risk factor was called “Unstable” and defined as follows: Patient requires pharmacologic or mechanical support to maintain blood pressure or cardiac output.</p>
Refractory Cardiogenic Shock	<p>Refractory Cardiogenic Shock is defined as an episode of systolic blood pressure <80 mm Hg and/or cardiac index <2.0 L/min /m² determined to be secondary to cardiac dysfunction despite the use of parenteral inotropic or vasopressor agents or mechanical support (e.g., IABP, extracorporeal circulation, VADs). (Definition adopted in 2015.)</p> <p>Prior to 2015 the risk factor was called “Shock” and defined as follows: 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.</p>

Comorbidities

Cerebrovascular Disease	<p>The patient has cerebrovascular disease, documented by any one of the following:</p> <ul style="list-style-type: none">• CVA (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	<p>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:</p> <ul style="list-style-type: none">• Paroxysmal nocturnal dyspnea (PND)• Dyspnea on exertion (DOE) due to heart failure• Chest X-Ray showing pulmonary congestion <p>Documentation must include the presence of a diagnosis of CHF, evidence of symptoms, and treatment for CHF.</p>
Congestive Heart Failure (CHF), Past	<p>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:</p> <ul style="list-style-type: none">• Paroxysmal nocturnal dyspnea (PND)• Dyspnea on exertion (DOE) due to heart failure• Chest X-Ray showing pulmonary congestion <p>Documentation must include a diagnosis of CHF and evidence of treatment for CHF. Patient's clinical status may be compensated.</p>
Chronic Lung Disease	<p>The patient has chronic lung disease, and the severity level according to the following classification:</p> <ul style="list-style-type: none">• Mild - FEV1 60% to 75% of predicted, and/or on chronic inhaled or oral bronchodilator therapy.• Moderate - FEV1 50% to 59% of predicted, and/or on chronic steroid therapy aimed at lung disease.• Severe - FEV1 <50% predicted, and/or Room Air pO₂ < 60 or Room Air pCO₂ > 50.
Diabetes	<p>The patient has a history of diabetes diagnosed and/or treated by a healthcare provider.</p>
Peripheral Vascular Disease	<p>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.</p>

Comorbidities, *continued*

Renal Failure, Creatinine	The last Pre-PCI creatinine before the procedure was within the indicated range.
Renal Failure, Dialysis	The patient is on chronic peritoneal or hemodialysis.

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.

2015 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

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

Post-PCI Criteria

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

Variables in TAVR model not used in PCI models

Extensive Aortic Atherosclerosis

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

Hepatic Failure

The patient has cirrhosis or other liver disease and has a bilirubin > 2 mg/dL and a serum albumin < 3.5 g/dL.

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

2015 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 2015 are presented in the table that follows. Roughly speaking, the odds ratio for a risk factor represents the number of times more likely to die in the hospital during or after PCI or after hospital discharge but within 30 days of the PCI a patient with that risk factor is than a patient without the risk factor, all other risk factors being the same. For example, the odds ratio for the risk factor “CHF-Current” is 1.980. This means that a patient with CHF, within two weeks is approximately 1.980 times as likely to die in the hospital during the same admission as PCI or after hospital discharge but within 30 days of the PCI as a patient without CHF-Current who has the same other significant risk factors. The risk factors Non-Refractory Shock and Left Main Disease are also interpreted in the same way.

With regard to age, the odds ratio roughly represents the number of times more likely to die a patient who is over age 50 is than another patient who is one year younger, all other significant risk factors being the same. Thus, a patient undergoing PCI who is 51 years old has approximately 1.061 times the chance of dying in the hospital or within 30 days that a 50 year-old patient has, all other risk factors being the same. All patients aged 50 years or younger have roughly the same odds of dying in the hospital or after discharge but within 30 days, if their other risk factors are identical.

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

Ejection Fraction, which is the percentage of blood in the heart’s left ventricle that is expelled when it contracts (with more denoting a healthier heart), is subdivided into four ranges (less than 20 percent, 20 percent to 29 percent, 30 percent to 39 percent, and 40 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 40 percent or more. Thus, a PCI patient with an ejection fraction of less than 20 percent is about 5.189 times as likely to die in the hospital or within 30 days as a patient with an ejection fraction of 40 percent or higher, all other significant risk factors being the same.

Previous MI is subdivided into seven 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 twenty-three hours prior; with or without ST Elevation, one 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 five groups. Three categories represent patients with various levels of elevated creatinine, but no dialysis. The fourth 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 1.2 mg/dL.

Appendix 1

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

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	Odds Ratio
Demographic				
Age: number of years > 50	--	0.0588	<.0001	1.061
Body Mass Index (kg/m ²)				
< 18.5 kg/m ²	0.86	0.9752	0.0001	2.652
18.5 - < 25 kg/m ²	20.82	0.2681	0.0073	1.307
25 - 40 kg/m ²	72.65	– Reference –		1.000
> 40 kg/m ²	5.67	0.5290	0.0100	1.697
Hemodynamic Status				
Non-Refractory Shock	0.39	2.1219	<.0001	8.347
Ventricular Function				
Ejection Fraction				
Ejection Fraction 40% or greater	87.10	– Reference –		1.000
Ejection Fraction less than 20%	0.87	1.6465	<.0001	5.189
Ejection Fraction 20-29%	4.03	1.1215	<.0001	3.070
Ejection Fraction 30-39%	7.99	0.4802	0.0001	1.616
Pre-Procedural MI				
No MI within 14 Days	66.24	– Reference –		1.000
MI with ST Elevation				
MI < 6 hrs	9.89	1.9354	<.0001	6.927
MI 6-11 hrs	1.65	2.3651	<.0001	10.645
MI 12 – 23 hrs	0.78	2.5762	<.0001	13.147
MI without ST Elevation				
MI < 6 hrs	0.75	2.0432	<.0001	7.715
MI 6-23 hrs	4.41	1.0013	<.0001	2.722
MI with or without ST Elevation 1-14 days	16.28	0.9711	<.0001	2.641
Comorbidities				
Chronic Lung Disease				
None or Mild	98.14	– Reference –		1.000
Moderate	1.50	0.5005	0.0377	1.649
Severe	0.36	1.0732	0.0015	2.925
Congestive Heart Failure (CHF), Current (within 2 weeks)				
	7.16	0.6830	<.0001	1.980
Renal Failure				
No Renal Dialysis and Creatinine < 1.2 mg/dL	71.17	– Reference –		1.000
Creatinine ≥ 1.2 and ≤ 1.5 mg/dL	19.02	0.4411	<.0001	1.554
Creatinine > 1.5 and ≤ 2.0 mg/dL	4.76	0.5329	0.0009	1.704
Creatinine > 2.0 mg/dL	2.07	1.2394	<.0001	3.454
Renal Dialysis	2.98	1.5163	<.0001	4.556
Vessels Diseased				
Left Main Disease	4.45	0.6804	<.0001	1.975

Intercept = -7.2805

C Statistic = 0.866

Appendix 2

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

Appendix 2 contains the significant pre-procedural risk factors for 2015 New York State PCI patients who were not emergency patients (were not hemodynamically unstable and who did not suffer a heart attack within 24 hours prior to the PCI being performed).

The interpretation for Age: number of years > 50 and CHF-Current are the same as presented in Appendix 1.

The interpretation for BMI is similar to that in Appendix 1, except in this case there are only three groups and the reference group is patients with a BMI of 25 kg/m² or greater.

The interpretation for Ejection Fraction is also very similar to that described in Appendix 1,

except in this case the reference category is patients with an ejection fraction of 50% or more.

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.

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

Previous MI 1-14 days and Cerebrovascular Disease (not TIA only) are interpreted in the same way as CHF-Current in Appendix 1; the patient either has the risk factor or does not.

Appendix 2

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

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	Odds Ratio
Demographic				
Age: number of years > 50	–	0.0575	<.0001	1.059
Body Mass Index (kg/m ²)				
< 18.5 kg/m ²	0.87	1.1184	0.0003	3.060
18.5 - < 25 kg/m ²	20.66	0.2700	0.0394	1.310
25 kg/m ² or greater	78.47	– Reference –		1.000
Ventricular Function				
Ejection Fraction				
Ejection Fraction 50% or greater	76.68	– Reference –		1.000
Ejection Fraction less than 20%	0.74	1.5315	<.0001	4.625
Ejection Fraction 20-29%	3.44	1.0990	<.0001	3.001
Ejection Fraction 30-49%	19.14	0.3199	0.0263	1.377
Previous MI 1-14 days	19.66	0.9634	<.0001	2.621
Comorbidities				
Cerebrovascular Disease (not TIA only)	8.45	0.4205	0.0057	1.523
Chronic Lung Disease				
None	93.44	– Reference –		1.000
Mild	4.59	0.4735	0.0207	1.606
Moderate	1.57	0.8770	0.0008	2.404
Severe	0.40	1.2452	0.0007	3.474
Congestive Heart Failure (CHF), Current (within 2 weeks)	7.59	0.8787	<.0001	2.408
Renal Failure				
No Renal Dialysis and Creatinine < 1.2 mg/dL	70.67	– Reference –		1.000
Creatinine 1.2 - 2.5 mg/dL	25.08	0.3967	0.0032	1.487
Creatinine > 2.5 mg/dL	0.90	1.0709	0.0020	2.918
Renal Dialysis	3.35	1.3544	<.0001	3.875

Intercept = -7.2874

C Statistic = 0.843

Appendix 3

2015 Risk Factors For 30-Day Readmission For PCI

The significant pre-procedural risk factors for 30-day readmissions following PCI in 2015 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 Body Mass Index, Ejection Fraction, Chronic Lung Disease, and Renal Failure.

The interpretation for Female, MI within 20 days and Peripheral Vascular Disease are similar to that described for CHF-Current in Appendix 1.

Age is represented by both a linear and a quadratic (squared) term. This represents the fact that as patients age, their risk of readmission after PCI increases at an increasing rate. This functional form is used to improve the model's ability to predict readmission, 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.

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.

Cerebrovascular disease is divided into three groups: patients whose only cerebrovascular disease was a transient ischemic attack (TIA); patients who have cerebrovascular disease other than a TIA; and patients with no cerebrovascular disease. The odds ratios for the first two groups are relative to patients with no cerebrovascular disease.

In this model, Diabetes is represented by three categories: Diabetes with Diet Treatment, Diabetes with Insulin Treatment, and No Diabetes with Diet or Insulin Treatment. The last group includes patients without diabetes as well as those with diabetes not treated with diet therapy 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, 2015

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	OR
Demographic				
Age	--	-0.0506	<.0001	--
Age squared	--	0.0439	<.0001	--
Female	30.06	0.1999	<.0001	1.221
Body Mass Index (kg/m ²)				
<18.5 kg/m ²	0.87	0.3660	0.0088	1.442
18.5 - <25 kg/m ²	20.55	– Reference –		1.000
25 kg/m ² or greater	78.59	-0.2008	<.0001	0.818
Ventricular Function				
Ejection Fraction				
Ejection Fraction 40% or greater	87.49	– Reference –		1.000
Ejection Fraction less than 30%	4.62	0.3379	<.0001	1.402
Ejection Fraction 30-39%	7.89	0.1361	0.0169	1.146
Previous MI within 20 days	33.88	0.3134	<.0001	1.368
Comorbidities				
Cerebrovascular Disease				
No Cerebrovascular Disease	90.22	– Reference –		1.000
Only TIA	2.00	0.2689	0.0094	1.309
Cerebrovascular other than TIA	7.78	0.3529	<.0001	1.423
Chronic Lung Disease				
None	93.78	– Reference –		1.000
Mild	4.38	0.3442	<.0001	1.411
Moderate	1.49	0.5092	<.0001	1.664
Severe	0.35	0.6731	0.0006	1.960
Congestive Heart Failure (CHF)				
No CHF within 6 months	88.21	– Reference –		1.000
CHF, Current (within 2 weeks)	7.02	0.4735	<.0001	1.606
CHF, Past but not current (2 wks - 6 mon)	4.77	0.3157	<.0001	1.371
Diabetes				
None or not treated with Diet or Insulin	82.71	– Reference –		1.000
Diet Treatment	2.41	0.2062	0.0390	1.229
Insulin Treatment	14.89	0.2426	<.0001	1.275
Peripheral Vascular Disease	9.33	0.3037	<.0001	1.355
Renal Failure				
No Renal Dialysis and Creatinine < 1.2 mg/dL	71.62	– Reference –		1.000
Creatinine 1.2 - 1.5 mg/dL	18.82	0.1578	0.0003	1.171
Creatinine 1.6 - 2.0 mg/dL	4.67	0.2581	0.0003	1.294
Creatinine 2.1 - 2.5 mg/dL	1.13	0.4844	<.0001	1.623
Creatinine > 2.5 mg/dL	0.84	0.6433	<.0001	1.903
Renal Dialysis	2.92	1.0237	<.0001	2.784
Vessels Diseased				
Fewer than two	54.79	– Reference –		1.000
Two vessels diseased	32.03	0.1810	<.0001	1.198
Three vessels diseased	13.18	0.2784	<.0001	1.321

Intercept = -1.3951

C Statistic = 0.655

Appendix 4

2013-2015 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 2013-2015 time period are presented in the table that follows. The interpretation of this table is similar to the interpretation of Appendices 1-3. All variables other than One or More Previous PCI are interpreted in the same way as previously described.

One or More Previous PCI is interpreted in the same way as Congestive Heart Failure - Current 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/m² but less than 35 kg/m².

Appendix 4

Multivariate Risk-Factor Equation for In-Hospital/30-Day Deaths During or Following PCI, 2013-2015 (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	29.70	0.3639	<.0001	1.439
Body Mass Index (kg/m ²)				
< 18.5 kg/m ²	0.81	0.7326	<.0001	2.081
≥ 18.5 and < 25 kg/m ²	20.96	0.1752	0.0035	1.191
≥ 25 and < 35 kg/m ²	62.52	– Reference –		1.000
≥ 35 kg/m ²	15.71	0.1849	0.0230	1.203
Hemodynamic Status				
Non-Refractory Shock	0.47	1.9771	<.0001	7.221
Ventricular Function				
Ejection Fraction				
Ejection Fraction 50% or greater	71.64	– Reference –		1.000
Ejection Fraction less than 20%	0.84	1.7747	<.0001	5.899
Ejection Fraction 20-29%	4.07	1.1876	<.0001	3.279
Ejection Fraction 30-39%	7.95	0.7478	<.0001	2.112
Ejection Fraction 40-49%	15.49	0.2846	0.0001	1.329
Pre-Procedural MI				
No MI	47.68	– Reference –		1.000
MI with ST Elevation				
MI < 6 hrs	9.96	2.0126	<.0001	7.483
MI 6-11 hrs	1.66	2.1541	<.0001	8.620
MI 12 – 23 hrs	0.83	2.1684	<.0001	8.744
MI without ST Elevation				
MI < 6 hrs	0.80	1.6484	<.0001	5.199
MI 6-11 hrs	1.42	1.0313	<.0001	2.805
MI 12 – 23 hrs	3.07	1.2584	<.0001	3.520
MI with or without ST Elevation				
MI 1-14 days	16.26	1.0591	<.0001	2.884
MI > 14 days	18.32	0.2551	0.0132	1.291
Comorbidities				
Cerebrovascular Disease (not TIA only)	8.21	0.2063	0.0063	1.229
Peripheral Vascular Disease	9.27	0.3797	<.0001	1.462
Congestive Heart Failure (CHF , Current) (within 2 weeks)	6.91	0.6244	<.0001	1.867
Chronic Lung Disease				
None	93.77	– Reference –		1.000
Mild	3.41	0.2980	0.0097	1.347
Moderate	2.46	0.6992	<.0001	2.012
Severe	0.36	1.2018	<.0001	3.326
Renal Failure				
No Renal Dialysis and Creatinine < 1.2 mg/dL	70.88	– Reference –		1.000
Creatinine 1.2 - 1.5 mg/dL	19.48	0.3558	<.0001	1.427
Creatinine 1.6 - 2.0 mg/dL	4.83	0.6762	<.0001	1.966
Creatinine 2.1 - 3.0 mg/dL	1.55	1.0737	<.0001	2.926
Creatinine > 3.0 mg/dL	0.54	1.2404	<.0001	3.457
Renal Dialysis	2.73	1.5192	<.0001	4.569
Vessels Diseased				
Left Main Disease	4.46	0.5547	<.0001	1.741
Number of Vessels Diseased				
Fewer than Two Vessels Diseased	54.45	– Reference –		1.000
Two Vessels Diseased	32.09	0.1755	0.0036	1.192
Three Vessels Diseased	13.46	0.4059	<.0001	1.501
Previous Procedures				
Previous PCIs	43.83	-0.1262	0.0280	0.881

Intercept = -7.1049

C Statistic = 0.867

Appendix 5

2013-2015 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 2013-2015 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, 2013-2015 (Non-Emergency Cases)

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	Odds Ratio
Demographic				
Age	–	-0.0274	0.3583	–
Age Squared	–	0.0482	0.0218	–
Ventricular Function				
Ejection Fraction				
Ejection Fraction 50% or greater	76.45	– Reference –		1.000
Ejection Fraction less than 20%	0.72	2.0080	<.0001	7.449
Ejection Fraction 20-29%	3.46	1.5758	<.0001	4.835
Ejection Fraction 30-39%	6.50	1.2589	<.0001	3.522
Ejection Fraction 40-49%	12.86	0.9018	<.0001	2.464
Pre-Procedural MI				
No MI	58.02	– Reference –		1.000
MI 1- 14 days	19.70	1.5610	<.0001	4.764
MI > 14 days	22.28	0.6546	<.0001	1.924
Comorbidities				
Peripheral Vascular Disease	10.22	1.0470	<.0001	2.849
Congestive Heart Failure (CHF), Current (within 2 weeks)	7.25	1.3693	<.0001	3.933
Chronic Lung Disease				
None	93.41	– Reference –		1.000
Mild	3.63	1.0907	<.0001	2.976
Moderate	2.57	1.4554	<.0001	4.286
Severe	0.39	2.0334	<.0001	7.640
Renal Failure				
No Renal Dialysis and Creatinine < 1.2 mg/dL	70.30	– Reference –		1.000
Creatinine 1.2 - 1.5 mg/dL	19.59	0.6702	<.0001	1.955
Creatinine 1.6 - 2.5 mg/dL	6.12	0.9398	<.0001	2.559
Creatinine > 2.5 mg/dL	0.94	1.2963	<.0001	3.656
Renal Dialysis	3.05	1.7941	<.0001	6.014
Vessels				
Left Main Disease	4.75	1.1103	<.0001	3.035
Number of Vessels Diseased				
Fewer than Two Vessels Diseased	54.21	– Reference –		1.000
Two Vessels Diseased	32.26	0.6873	<.0001	1.988
Three Vessels Diseased	13.53	0.8996	<.0001	2.459
Sum of Risk Factors Squared	--	-0.0791	<.0001	0.924

Intercept = -7.4116

C Statistic = 0.848

Appendix 6

2013-2015 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 2013-2015 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, 2013-2015 (Emergency Cases)

Patient Risk Factors	Prevalence (%)	Regression Coefficient	P value	Odds Ratio
Demographic				
Age: number of years > 50	—	0.0527	<.0001	1.054
Female Gender	27.43	0.5839	<.0001	1.793
Hemodynamic Status				
Non-Refractory Shock	2.63	1.8059	<.0001	6.086
Ventricular Function				
Ejection Fraction				
Ejection Fraction 40% or greater	77.12	— Reference —		1.000
Ejection Fraction less than 20%	1.40	2.0495	<.0001	7.764
Ejection Fraction 20-29%	6.89	1.2512	<.0001	3.494
Ejection Fraction 30-39%	14.59	0.6760	<.0001	1.966
Pre-Procedural MI				
No STEMI within 24 hrs	30.24	— Reference —		1.000
STEMI within 24 hrs	69.76	0.8008	<.0001	2.227
Comorbidities				
Congestive Heart Failure (CHF), Current (within 2 weeks)				
	5.31	0.5293	<.0001	1.698
Renal Failure				
No Renal Dialysis and Creatinine < 1.2 mg/dL	73.55	— Reference —		1.000
Creatinine 1.2 - 1.5 mg/dL	18.99	0.5116	<.0001	1.668
Creatinine 1.6 - 2.0 mg/dL	4.26	0.9400	<.0001	2.560
Creatinine > 2.0 mg/dL	1.97	1.6831	<.0001	5.382
Renal Dialysis	1.23	1.9475	<.0001	7.011
Vessels Diseased				
Left Main Disease	3.12	0.7656	<.0001	2.150
Three Vessels Diseased	13.18	0.3287	0.0006	1.389

Intercept = -6.2126

C Statistic = 0.850

Appendix 7

Risk Factors for TAVR In-Hospital/30-Day Mortality in New York State 2013-2015

Most of the significant pre-procedural risk factors for in-hospital/30-day mortality following TAVR in the 2013-2015 time period presented in the table that follows have been previously described. Body surface area (BSA) is a function of height and weight and increases for larger heights and weights. This model includes terms for both BSA and BSA-squared, reflecting the complex relationship between BSA and in-hospital/30-day mortality. The quadratic function of BSA (BSA-squared) used in this statistical model reflects the fact that patients with very high or very low BSAs tend to have higher risks of in-hospital/30-day mortality than patients with intermediate levels of BSA. This functional form is used to improve the model's ability to predict mortality, but it means that the odds ratios for these terms do not have a straightforward interpretation.

Extensive Aortic Atherosclerosis and Hepatic Failure are interpreted the same way as CHF-Current in Appendix 1. The other risk factors in this model are interpreted as described in Appendices 1 – 6.

Appendix Table 7

Multivariable Risk Factor Equation for TAVR In-Hospital/30-Day Deaths in New York State in 2013-2015.

Patient Risk Factor	Prevalence (%)	Logistic Regression		
		Coefficient	P-Value	Odds Ratio
Demographic				
Age: Number of years greater than 80	—	0.0551	0.0002	1.057
Body Surface Area (10 m ²)	—	-0.7366	<.0001	—
Body Surface Area – squared (100 m ⁴)	—	0.0178	0.0002	—
Ventricular Function				
Ejection Fraction < 30%	8.35	0.4824	0.0122	1.620
Comorbidities				
Cerebrovascular Disease, not TIA only	19.03	0.4119	0.0058	1.510
Congestive Heart Failure (CHF), Current (within 2 weeks)	54.23	0.4235	0.0020	1.527
Chronic Lung Disease, Severe	12.59	0.5221	0.0023	1.686
Extensive Aortic Atherosclerosis	2.72	0.8136	0.0038	2.256
Hepatic Failure	0.13	2.1973	0.0127	9.001
Renal Failure				
No Renal Failure	90.37	— Reference —		1.000
Creatinine 2.1 - 2.5 mg/dL	3.08	0.6428	0.0286	1.902
Creatinine > 2.5 mg/dL or Dialysis	6.55	0.9632	<.0001	2.620
Vessels Diseased				
Left Main Disease	2.57	0.7013	0.0178	2.016

Intercept = 3.4275

C Statistic = 0.668

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

Brooklyn Hospital Center***
121 DeKalb Avenue
Brooklyn, New York 11201

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

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

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

**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

**NY Presbyterian Brooklyn
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

NYU - Winthrop University Hospital
259 First Street
Mineola, New York 11501

Niagara Falls Medical Center***
571 Tenth Street
Niagara Falls, New York 14304

North Shore University Hospital
300 Community Drive
Manhasset, New York 11030

Olean General Hospital*
515 Main Street
Olean, New York 14760

Orange Regional Medical Center*
707 East Main Street
Middletown, New York 10940

Peconic Bay Medical Center***
1300 Roanoke Avenue
Riverhead, New York 11901

Richmond University Medical Center*
355 Bard Avenue
Staten Island, New York 10310

Rochester General Hospital
1425 Portland Avenue
Rochester, New York 14621

Samaritan Hospital*
2215 Burdett Avenue
Troy, New York 12180

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

Southampton Hospital***
240 Meeting House Lane
Southampton, New York 11968

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

33 Research Way
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, New York 10601

* Hospital performs PCI without cardiac surgery on-site

** Hospital Closed or No Longer Performs PCI

†† Hospital started PCI after November 2015

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

or by writing to:

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

