New York State Report on Sepsis Care Improvement Initiative: Hospital Quality Performance

Office of the Medical Director
Office of Quality and Patient Safety
March 2017
(Revised June 2017)

2015





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Note: Document revised in June 2017 to remove the protocol initiated language from the rapid and early treatment statewide trends description; correct a typo in Tables 1 and 4; and update Technical Appendix A to show that the RAMR is the best estimate if the state had a case mix identical to the hospital and not vice versa.

New York State Report on Sepsis Care Improvement Initiative: Hospital Quality Performance
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Overview

Sepsis is defined as a clinical syndrome in which patients have an infection which is accompanied by signs and symptoms of a systemic inflammatory response. Sepsis of sufficient severity that major organ systems in the body (such as heart, kidney, brain and others) are impaired is referred to as 'severe sepsis'. Patients with severe sepsis that have continued organ system impairment and/or low blood pressure that does not respond to treatment with adequate fluid replacement are considered to be in 'septic shock'. Severe sepsis and septic shock impacts approximately 50,000 patients in NY each year, and on average almost 30% of patients will die from this syndrome. In addition, many more may experience lifelong impairments as a result of the broad impact that sepsis may have on organ and tissue function. For purposes of this report, the term 'sepsis' will be used to indicate severe sepsis and septic shock.

The combination of early detection of sepsis coupled with appropriate interventions can significantly improve the chances of survival for patients with all types of sepsis. This public report is one part of a statewide initiative to reduce the impact of this deadly condition by improving early detection and intervention for patients with sepsis, focused on the most deadly form – severe sepsis and septic shock.

The New York State Sepsis Initiative

This report describes the New York State Sepsis initiative, statewide trends in key quality measures and outcomes, key collaborations between the NYS DOH and external partners, the sepsis quality measures and outcomes on which hospitals are rated, and shows the hospital ratings for these key measures. It is the first of its kind in the nation. It represents considerable efforts by New York State hospitals and clinicians, over the past three years, to measure and improve care for individuals with this common, complex, and lethal, condition.

Beginning in 2014 each acute care hospital in New York that provides care to patients with sepsis was required by amendment of Title 10 of the New York State Codes, Rules and Regulations (Sections 405.2 and 405.4) to develop and implement evidence informed sepsis protocols which describe their approach to both early recognition and treatment of sepsis patients. In addition, hospitals were required to report data to the New York State Department of Health (Department) beginning in 2014 that are used to calculate each hospital's performance on key measures of early treatment and protocol use. Hospitals were also required to submit sufficient clinical information on each patient with sepsis to allow the Department to develop a methodology to evaluate 'risk adjusted' mortality rates for each hospital. Risk adjustment permits comparison of hospital performance and takes into consideration the different mix of demographic and comorbidity attributes, including sepsis severity, of patients cared for within each hospital.

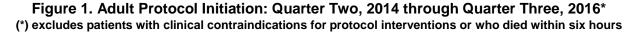
What follows is the report of these results for use of protocols, adherence to key interventions within those protocols within specific recommended time frames and risk adjusted mortality rates (adults) for each reporting hospital in New York. Public reporting of hospital performance is one dimension of New York's overall initiative to focus quality and safety improvement efforts on the identification and care of patients with sepsis in New York.

Statewide Trends

Data reported by hospitals for 10 quarters (second quarter 2014 through third quarter 2016) are the basis for the following trend analysis. Despite the early nature of this initiative we can demonstrate encouraging improvements in protocol initiation, rapid and early treatment, and mortality over time. The graphs below show statewide changes over each quarter beginning in 2014 through the most recent quarter of data in 2016. NOTE: For the time determined measures in the trend graphs for this section, 'time zero' is defined as the date/time when each hospital determined that its protocol had been initiated for each patient. If a hospital did not initiate a protocol, 'time zero' is the earliest time in the clinical data for the patient (e.g. triage, arrival, etc.).

Protocol Initiation

Figure 1 shows the percentage of adult patients (age \geq 18) with severe sepsis or septic shock for whom a protocol was initiated at the treating hospital. At the onset of the initiative, the protocol was initiated for 73.7% of patients. This percentage has increased progressively to a high of 84.7% in quarter three of 2016.



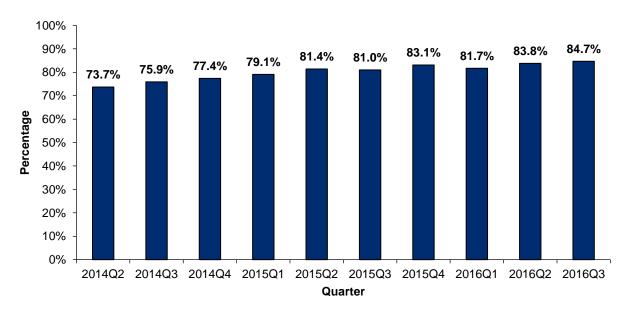


Figure 2 shows the percentage of pediatric patients (age < 18) with severe sepsis or septic shock for whom a protocol was initiated at the treating hospital. At the onset of the initiative, the protocol was initiated for 80.6% of patients. This percentage fluctuated in subsequent quarters possibly due to the low number of pediatric sepsis cases across the state. In the most recent quarter of 2016, a protocol was initiated at the treating hospital for 85.3% of the pediatric patients with severe sepsis or septic shock.

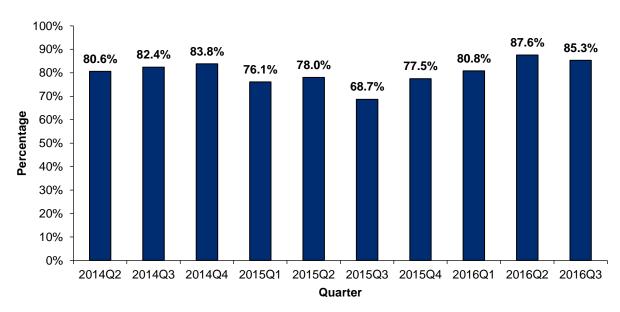


Figure 2. Pediatric Protocol Initiation: Quarter Two, 2014 through Quarter Three, 2016* (*) excludes patients with clinical contraindications for protocol interventions or who died within one hour

Rapid and Early Treatment

Figure 3 shows the percentage of adult patients (age ≥ 18) with severe sepsis or septic shock for whom all of the recommended early treatments in the 3-hour early management bundle were administered. At the onset of the initiative, the treatments in the 3-hour early management bundle were successfully completed for 41.5% of those patients with severe sepsis or septic shock. This percentage increased progressively and reached a high of 55.2% in quarter three of 2016.

Figure 4 shows the percentage of adult patients (age ≥ 18) with severe sepsis or septic shock for whom all of the recommended early treatments in the 6-hour early management bundle were administered. At the onset of the initiative, the treatments in the 6-hour bundle measure were successfully completed for 22.6% of those patients with severe sepsis or septic shock. This percentage increased progressively and reached a high of 36.4% in quarter three of 2016.

Figure 3. Adult Early Intervention (3-Hour Early Management Bundle):

Quarter Two, 2014 through Quarter Three, 2016*

(*) excludes patients with clinical contraindications for protocol interventions or who died within six hours

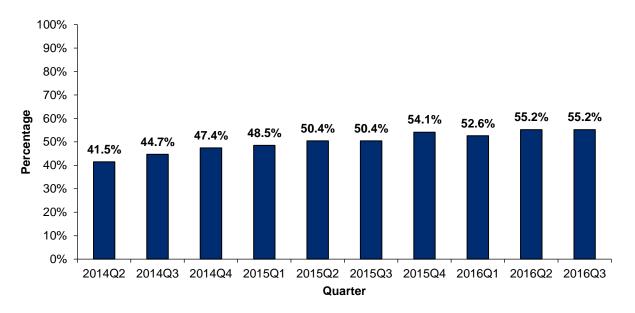


Figure 4. Adult Early Intervention (6-Hour Early Management Bundle):

Quarter Two, 2014 through Quarter Three, 2016*

(*) excludes patients with clinical contraindications for protocol interventions or who died within six hours

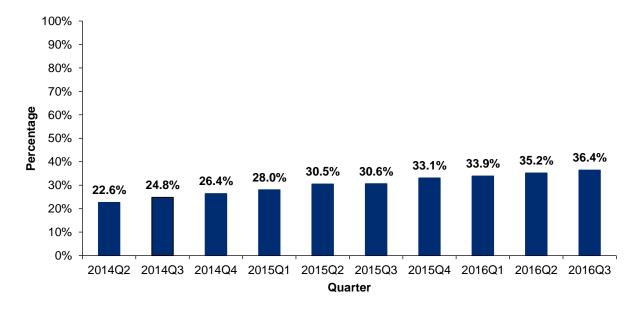


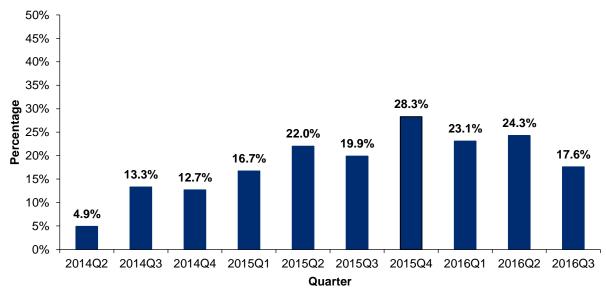
Figure 5 shows the percentage of pediatric patients (age < 18) with severe sepsis or septic shock for whom all of the recommended early treatments in the 1-hour early management

bundle were administered. At the onset of the initiative, the treatments in the 1-hour bundle measure were successfully completed for 4.9% of those patients with severe sepsis or septic shock. This percentage was higher in subsequent quarters but demonstrated significant unexplained fluctuations potentially related to small case volume. In the most recent quarter, quarter three of 2016, the treatments in the 1-hour bundle were successfully administered to 17.6% of those pediatric patients diagnosed with severe sepsis or septic shock.

Figure 5. Pediatric Early Intervention (1-Hour Early Management Bundle):

Quarter Two, 2014 through Quarter Three, 2016*

(*) excludes patients with clinical contraindications for protocol interventions or who died within one hour



Mortality

Figure 6 shows the percentage of adult patients (age \geq 18) with severe sepsis or septic shock who died during their hospital stay. At the onset of the initiative, approximately 30.2% of those patients treated for severe sepsis or septic shock died in the hospital. This percentage decreased over time and reached a low of 25.4% in quarter three of 2016.

Figure 7 shows the percentage of pediatric patients (age < 18) with severe sepsis or septic shock who died during their hospital stay. At the onset of the initiative, approximately 6.8% of those patients treated for severe sepsis or septic shock died in the hospital. This percentage fluctuated over time reaching a high of 15.3% in quarter one of 2015 and a low of 6.5% in quarter 3 of 2015.

Figure 6. Adult In-Hospital Mortality: Quarter Two, 2014 through Quarter Three, 2016

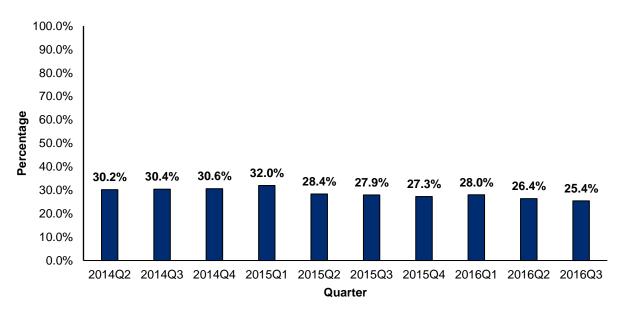
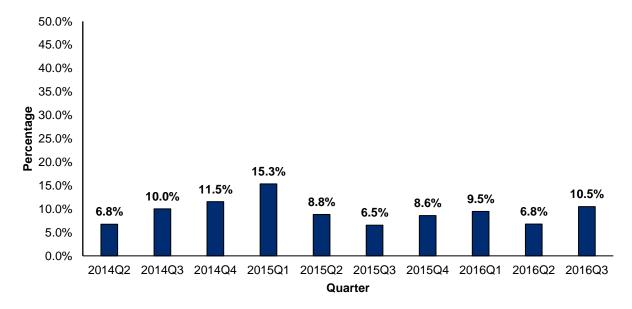


Figure 7. Pediatric In-Hospital Mortality: Quarter Two, 2014 through Quarter Three, 2016



Sepsis Improvement Initiatives: Collaborations

The Department is collaborating with federal, state, and private initiatives to improve sepsis awareness, advance sepsis care, and make maximal use of the data collected from hospitals to better understand which clinical practices are influencing survival and other important outcomes for patients. Several of these efforts to improve sepsis care are described below.

Sepsis Advisory Group

The Department convenes an ad hoc group of clinicians from across New York that has assisted with the development and implementation of the initiative since 2013. This diverse expert group includes both adult and pediatric specialists who treat patients with sepsis. The advisory group has provided key input into the structure of on-going quarterly performance reports presented to each hospital on their protocol use, protocol adherence, and mortality results compared to statewide averages as well as trended over time. These interim feedback reports have provided the stimulus for hospitals leading to the improvements we have seen over time.

In addition to providing input in the refinement of our data collection and measurement process, the group will advise the department on new developments and interventions for patients with sepsis, including treatments and processes of care delivery, that show promise to improve outcomes for patients with sepsis throughout New York. With the completion of the first quality reporting cycle for hospitals the advisory group will transition from measurement and data development to active use of results aimed at identifying and disseminating promising clinical interventions and system improvements from those hospitals with exceptional results.

IPRO, Implementation Business Partner

IPRO (formerly Island Peer Review Organization) assisted the Department throughout the initiative from the review of hospital sepsis protocols to development of data dictionary, feedback reports, and analyses. Key activities included the streamlining of electronic data collection, ensuring data integrity, customizing reports, providing webinars, and helpdesk support to hospitals.

Partnership For Patients (P4P)

The Center for Medicare and Medicaid Services (CMS) has awarded the hospital associations in New York State with grants to support a variety of quality and safety improvements focused on inpatient care. The Healthcare Association of New York State (HANYS) and the Greater New York Hospital Association (GNYHA) have worked in collaboration with the participating hospitals and the Department in making sepsis care one of the priorities for this improvement work. This initiative aims to help hospitals improve sepsis care processes by supporting front line staff adherence to their protocols. The Department, in collaboration with IPRO, ensures

that this innovative initiative can make maximal use of the data that has been collected to date in order to focus improvement activities on key clinical interventions that create challenges for clinicians and hospitals and be able to share promising practices.

For example, the P4P has focused on improvement in the following areas:

- Early Identification of Patients with Sepsis
 - Implementation of screening processes leveraging electronic health records to create 'early warning systems'
- Timely Treatment
 - Revising workflow processes including point of care testing, rapid antibiotic access, decision supported order sets, and Rapid Response or 'Code Sepsis' teams
- Clinical Management
 - Standardized tools for communication between hospitals and clinicians
- Case Review
 - Real time review of cases with identification of educational opportunities for clinicians

IPRO/CMS Collaboration: Community Based Providers

The Centers for Medicare and Medicaid Services (CMS) awarded the Atlantic Quality Innovation Network led by IPRO a two-year contract award to provide education to improve early identification, treatment and management of sepsis patients among pre-hospital providers and the general public in the Northeastern and Central New York region and the Charleston area in South Carolina. The ultimate objective of this initiative is to reduce sepsis-related morbidity and mortality through education utilizing evidence based practices and protocols. Targeted community-based healthcare providers include skilled nursing facilities, home health agencies and physician practices. Using a Train-the-Trainer model, more than 7,500 clinical and non-clinical staff have been trained on identifying the early signs and symptoms of sepsis as well as recognizing sepsis as a medical emergency. Collaborative partnerships with the Center for Disease Control & Prevention, Home Care Association of New York State, Sepsis Alliance, and The Rory Staunton Foundation have garnered wide spread exposure of the initiative outside of the target regions. Process, proximal and outcome performance measures are used to evaluate the effectiveness of the Community Based Sepsis Initiative.

Private Foundations

Several private foundations have provided support and assistance in raising public awareness regarding sepsis which has amplified the work of the initiative in New York. In addition, the Rory Staunton Foundation created by the Staunton family and named for Rory Staunton, a 12 year old New York resident who died from sepsis in 2012 was instrumental in advocating for the existing regulations ('Rory's Regulations') in New York and now, in other states as well. Other organizations, such as the Sepsis Alliance, have also played an important national role in bringing attention and focus to sepsis care.

Measure Descriptions

The following measures are included in this report and are briefly summarized below. The measures evaluate several key processes of care (and one important outcome – mortality) that can increase the probability of surviving an episode of sepsis. The Adult New York State sepsis process of care measures were developed using a National Quality Forum (NQF) measure for guidance: NQF #500 Severe Sepsis and Septic Shock: Management Bundle.

- The percentage of patients who received care using the hospital developed sepsis protocol
- The percentage of adult patients with sepsis treated in the emergency room with the hospital's sepsis protocol who received all the recommended early treatments in the 3hour early management bundle within three (3) hours of their arrival
- The percentage of adult patients with septic shock treated in the emergency room with the hospital's sepsis protocol who received all the recommended early treatments in the 6-hour early management bundle within six (6) hours of their arrival
- The percentage of pediatric patients with sepsis treated in the emergency room with the hospital's sepsis protocol who received all the recommended early treatments within one (1) hour of their arrival
- The risk adjusted inpatient mortality (death) rate of adult patients in each hospital

Percentage Receiving Protocol Treatment (Adult and Pediatric)

This reported rate for each hospital describes what percentage of sepsis patients in each hospital received care consistent with the initiation of their formal protocol, excluding those cases with identified (and justified) clinical or advanced directive exceptions. After adjusting for patient factors, the department's analysis of the data shows that the odds of dying are 21% less for adult patients who receive protocol driven treatments compared to patients who do not receive protocol driven treatments.

While all patients with sepsis are required to be considered for protocol treatment, hospitals and clinicians may have valid reasons for not making use of a protocol. These reasons include that the patient has advanced directives in place restricting the use of some/all of protocol interventions, patient/family declines interventions, clinical contraindications for some/all of the protocol interventions, or patient is enrolled in a research study involving different interventions or approaches. Hospitals were permitted to exclude those specific patients from protocol measures and overall approximately 3% of pediatric patients and 7% of adult cases were excluded from protocol interventions. The majority of these exclusions were due to clinical contraindications. However, there are other instances in which a patient may have not received protocol driven care unrelated to these exceptions, which may describe missed opportunities in the identification of sepsis or the delayed application of protocol interventions. We asked hospitals to indicate for each case whether their protocol was initiated (using their own definition of protocol initiation described to the Department when they submitted their protocols for review and approval) as well as indicate whether there were exclusions as described above.

Percentage Receiving All Treatments in Three Hours (Adult)

For purposes of evaluating the ability of hospitals to implement their own protocols, we used an existing measure (with minor modifications) that has been approved by the National Quality Forum (NQF) for sepsis treatment. NQF is a public/private partnership organization that reviews quality measures for use in public reporting and payment programs for the Center for Medicare and Medicaid Services. This composite measure (NQF #500 Severe Sepsis and Septic Shock: Management Bundle) includes a three (3) hour timed 'bundled' measure in which the beginning time (or 'time zero') for patients with severe sepsis and septic shock presenting in the Emergency Department is defined as the recorded triage time. The interventions within this measure include measurement of a blood lactate level, obtaining blood cultures prior to giving antibiotics, and administering broad spectrum antibiotics. These interventions collectively have been demonstrated to help direct appropriate care (lactate and blood cultures), as well as provide early important treatment (antibiotics) for life threatening infections. Patients with clinical exclusions and patients who have been transferred from or to another acute care hospital ARE EXCLUDED from this measure. After adjusting for patient factors, the Department's analysis of the data shows that the odds of dying are 27% less for adult patients who receive all of the recommended treatments within three hours compared to patients who do not receive all of the recommended treatments.

Percentage With Septic Shock Receiving All Treatments in Six Hours (Adult)

Patients with septic shock require additional treatments to stabilize and treat their condition beyond the interventions described in the three hour bundle. These patients have very low blood pressure or significantly elevated blood lactate levels that suggest a more serious condition. For those patients there are three additional interventions that comprise the six hour bundle. These interventions address supporting blood pressure and organ function with both fluids and other medications (vasopressors) as well as re-measuring blood lactate levels when the initial lactate is abnormal. This measure, using the same 'time zero' as the three hour bundle, measures the percentage of patients with septic shock (a subset of all patients) that received all of the three hour bundle as well as the three additional interventions described in this section. Patients with clinical exclusions and patients who have been transferred from or to another acute care hospital ARE EXCLUDED from this measure. After adjusting for patient factors, the Department's analysis of the data shows that the odds of dying are 26% less for adult patients who receive all of the recommended treatments within six hours compared to patients who do not receive all of the recommended treatments.

Percentage Receiving All Treatments Within One Hour (Pediatric)

As with adults, early treatment with fluids and antibiotics to children with severe sepsis is associated with improved survival. Using guideline recommendations from the Pediatric Advanced Life Support (PALS) program of the American Heart Association this measure evaluates the percentage of pediatric patients with sepsis that received parenteral fluids, blood cultures, and antibiotics within one hour of their presentation in the emergency room. Patients with clinical exclusions and patients who have been transferred from or to another acute care hospital ARE EXCLUDED from this measure.

Risk Adjusted Mortality Rates (Adult)

The use of sepsis protocols and the measures to evaluate protocol adherence are important to patients in so far as they can improve the probability of survival. In order to fairly compare hospitals on this critical outcome (survival) it is first necessary to be able to account for patient differences which can increase the risk of dying from sepsis. A 'risk adjustment' is used which takes into account accompanying chronic illnesses which can complicate treatment and outcomes for patients with sepsis, patient demographic factors such as age, and the severity of sepsis for each patient. This measure describes the 'risk adjusted' percentage of all patients with sepsis at each hospital who died during that hospital stay. This measure excludes acute care transfer patients, patients with advanced directives that restricted the use of any protocol interventions, or patients that refused any of the protocol interventions. More detail regarding the risk adjustment methodology can be found in Technical Appendix A.

Performance Data

The clinical sepsis data submitted by the hospitals for patients with severe sepsis and septic shock for calendar year 2015 was used to calculate the sepsis performance metrics listed above. The performance measures are only reported for those hospitals with greater than 10 sepsis cases in calendar year 2015.

After calculating the performance measures for each hospital, the data for each individual measure was ordered from the lowest percentage to the highest percentage and divided into quintiles. Each hospital was assigned to a "performance level" category based on the quintile into which their percentage fell for a given measure. Those hospitals ranked in quintile 1 are the lowest performers and those hospitals ranked in quintile 5 are the highest performers. Table 1 shows the quintiles, category assignment, and the percentages assigned to each category for the three adult measures – protocol initiated, 3-hour bundle, and 6-hour bundle. Table 1 shows, for example, that a hospital was ranked into quintile 1 for the protocol initiated measure if the protocol was initiated for between 4 and 70.23% of the sepsis cases treated at the hospital. The value of 70.23% was chosen as the cutoff for quintile 1 because 20% of the values for this measure were at or below 70.23% in calendar year 2015.

Table 1. Category Assignment for the Adult Sepsis Performance Measures

Quintile	Category (Performance Level)	Summary Table Symbol	Ranking Percentiles	Protocol Initiated (%)	3-Hour Bundle (%)	6-Hour Bundle (%)
Quintile 5	Highest	Best	$80^{th} - 100^{th}$	99.95 - 100.00	69.24 - 88.46	41.68 - 75.00
Quintile 4	High	0	60 th - 80 th	93.87 - 99.94	60.18 - 69.23	33.80 - 41.67
Quintile 3	Middle	0	40 th - 60 th	85.72 - 93.86	52.90 - 60.17	27.15 - 33.79
Quintile 2	Low	0	20 th - 40 th	70.24 - 85.71	45.46 - 52.89	20.37 - 27.14
Quintile 1	Lowest	Worst	0 th - 20 th	4.00 - 70.23	7.27 - 45.45	0.00 - 20.36

Table 2 shows each hospital along with the "performance level" category for the adult performance measures using symbols that correspond to the category symbols shown in Table 1. The data is suppressed due to small sample size (S.S.) when a hospital did not have more than 10 patients for the measure. An N.C. indicates that the measure was not calculated because the hospital did not have any patients that satisfied the criteria for inclusion in the measure. The detailed data with specific hospital and statewide values for the individual performance measures is shown in Technical Appendix B.

Table 2. Adult Sepsis Performance Measure Summary Report by Hospital

Facility Name	Protocol Initiated (Adult)	3-Hour Bundle (Adult)	6-Hour Bundle (Adult)
Adirondack Medical Center-Saranac Lake Site		S.S.	S.S.
Albany Medical Center Hospital	0	•	•
Albany Memorial Hospital	0	0	O
Alice Hyde Medical Center	•	•	0
Arnot Ogden Medical Center		0	•
Auburn Community Hospital		•	•
Aurelia Osborn Fox Memorial Hospital	0	S.S.	S.S.
Bellevue Hospital Center	•	0	•
Bertrand Chaffee Hospital	•	S.S.	S.S.
Bon Secours Community Hospital	O	•	•
Bronx-Lebanon Hospital Ctr - Concourse Div.	0		
Brookdale Hospital Medical Center	•	0	
Brookhaven Memorial Hospital Medical Center		•	•
Brooklyn Hospital Center - Downtown Campus	•	•	0
Brooks Memorial Hospital	•	S.S.	S.S.
Buffalo General Medical Center			•
Canton-Potsdam Hospital	0	0	•
Catskill Regional Medical Center		•	•
Cayuga Medical Center at Ithaca	•	•	•
Champlain Valley Physicians Hospital Med Ctr	•	•	0
Chenango Memorial Hospital	0	0	•
Claxton-Hepburn Medical Center	0	0	•
Clifton Springs Hospital and Clinic		S.S.	S.S.

Facility Name	Protocol Initiated (Adult)	3-Hour Bundle (Adult)	6-Hour Bundle (Adult)
Columbia Memorial Hospital	•	0	0
Community Memorial Hospital	•	S.S.	S.S.
Coney Island Hospital	•	•	•
Corning Hospital	•	•	0
Cortland Regional Medical Center	0	0	•
Crouse Hospital	0		•
Degraff Memorial Hospital	•	•	•
Eastern Long Island Hospital	•	S.S.	S.S.
Eastern Niagara Hospital - Lockport Division	•	•	•
Elizabethtown Community Hospital	•	S.S.	S.S.
Ellis Hospital	•		•
Elmhurst Hospital Center	•	0	•
Erie County Medical Center	•		
F F Thompson Hospital	0	•	0
Faxton-St Lukes Healthcare St Lukes Division	•	0	
Flushing Hospital Medical Center	•	0	•
Forest Hills Hospital	•	•	•
Franklin Hospital	•	0	0
Geneva General Hospital	•	•	•
Glen Cove Hospital	•	•	•
Glens Falls Hospital	•	•	•
Good Samaritan Hospital Medical Center	0		O
Good Samaritan Hospital of Suffern	•	0	0
Gouverneur Hospital	•	S.S.	S.S.
Harlem Hospital Center	•		•
HealthAlliance Hospital Broadway Campus	•	•	•
Highland Hospital	•	0	•
Hudson Valley Hospital Center	•	•	•
Huntington Hospital	•		0

Highest
Performer
High
Performer

Middle
Performer

Low
Performer

Lowest
Performer

Worst

Facility Name	Protocol Initiated (Adult)	3-Hour Bundle (Adult)	6-Hour Bundle (Adult)
Interfaith Medical Center	0	0	0
Jacobi Medical Center	0	0	•
Jamaica Hospital Medical Center	•	0	•
John T Mather Memorial Hospital	•	0	•
Jones Memorial Hospital	0	•	•
Kenmore Mercy Hospital	•	•	•
Kings County Hospital Center	•	0	•
Kingsbrook Jewish Medical Center	•	0	•
Lawrence Hospital Center	•	•	0
Lenox Hill Hospital	•	•	0
Lewis County General Hospital	•	S.S.	S.S.
Lincoln Medical & Mental Health Center	0	0	•
Little Falls Hospital	•	S.S.	S.S.
Long Island Jewish Medical Center	•	0	0
Lutheran Medical Center	•	0	•
Maimonides Medical Center	•	•	
Mary Imogene Bassett Hospital	•	0	0
Massena Memorial Hospital	•	•	0
Medina Memorial Health Care System	•		
Memorial Hospital for Cancer and Allied Dis	0	•	•
Mercy Hospital	•	0	0
Mercy Medical Center	•	•	•
Metropolitan Hospital Center	•	•	•
Millard Fillmore Suburban Hospital	•	Q	0
Montefiore Med Center - Einstein College Div	•	•	•
Montefiore Medical Center - Moses Div	•		•
Montefiore Medical Center-Wakefield Hospital	•		•
Montefiore Mount Vernon Hospital	•		•
Montefiore New Rochelle Hospital	•		•

Highest
Performer
High
Performer

Middle
Performer

Low
Performer

Lowest
Performer

Worst

Facility Name	Protocol Initiated (Adult)	3-Hour Bundle (Adult)	6-Hour Bundle (Adult)	
Moses-Ludington Hospital	•	S.S.	S.S.	
Mount Sinai Beth Israel	•	•	•	
Mount Sinai Beth Israel Brooklyn	•	•	•	
Mount Sinai Hospital	•		•	
Mount Sinai Hospital - Queens	•	0	0	
Mount Sinai Roosevelt	0	0	•	Bes
Mount Sinai St. Lukes	0	0	•	Hi Pe
Mount St Marys Hospital and Health Center	•		•	
Nassau University Medical Center	•		•	
Nathan Littauer Hospital		0	•	Pe
New York Community Hospital of Brooklyn, Inc	•	•	•	l N
New York Hospital Medical Center of Queens	•		•	Pe
New York Methodist Hospital	•		•	
New York Presbyterian Hospital - Allen Hospital	•	0	•	Pe
New York Presbyterian Hospital - Columbia	•		•	
New York Presbyterian Hospital - Weill Cornell	•	0	•	Pe
New York-Presbyterian/Lower Manhattan	•	•	0	
Newark-Wayne Community Hospital	•	•	•	Wo
Niagara Falls Memorial Medical Center	•		•	
Nicholas H Noyes Memorial Hospital	•	S.S.	S.S.	
North Central Bronx Hospital	•	•	•	
North Shore University Hospital	•		•	
Northern Dutchess Hospital	O	•	•	
Northern Westchester Hospital	•	0	O	
Nyack Hospital	0	•	0	
NYU Hospitals Center	0	•	•	
OConnor Hospital	O	N.C.	N.C.	
Olean General Hospital	•	•	0	
Oneida Healthcare	•	0		

Highest Performer

High Performer

• Middle Performer 0 Low Performer

Lowest Performer

Facility Name	Protocol Initiated (Adult)	3-Hour Bundle (Adult)	6-Hour Bundle (Adult)
Orange Regional Medical Ctr-Goshen Campus		•	•
Oswego Hospital	•	•	•
Our Lady of Lourdes Memorial Hospital Inc	O	0	•
Peconic Bay Medical Center	•	0	•
Phelps Memorial Hospital Assn	•	•	•
Plainview Hospital	•	•	•
Putnam Hospital Center	•	•	•
Queens Hospital Center	•	O	•
Richmond University Medical Center	0	•	•
River Hospital, Inc.	•	S.S.	S.S.
Rochester General Hospital	•	•	•
Rome Memorial Hospital, Inc	•		•
Roswell Park Cancer Institute	0	N.C.	N.C.
Samaritan Hospital	0	•	•
Samaritan Medical Center	0	0	O
Saratoga Hospital	•	•	•
SBH Health System	0	O	0
Sisters of Charity Hospital	O		•
Sisters of Charity Hospital - St Joseph Campus	•	O	•
SJRH - Andrus Pavilion	•	•	•
Soldiers and Sailors Memorial Hospital	•	•	S.S.
South Nassau Communities Hospital	0	•	•
Southampton Hospital	•	0	•
Southside Hospital	•	•	•
St Anthony Community Hospital	•	•	•
St Catherine of Siena Hospital	•	•	•
St Charles Hospital	•	•	•
St Elizabeth Medical Center	0		•
St Francis Hospital	0	0	0

Worst

Facility Name	Protocol Initiated (Adult)	3-Hour Bundle (Adult)	6-Hour Bundle (Adult)
St Francis Hospital - Poughkeepsie	0	•	•
St James Mercy Hospital	•	S.S.	S.S.
St Johns Episcopal Hospital So Shore	•	•	0
St Josephs Hospital Health Center	0		•
St Josephs Medical Center	•	•	•
St Lukes Cornwall Hospital/Newburgh	0	•	•
St Peters Hospital	•	•	•
St. Joseph Hospital	•	0	•
St. Marys Healthcare	•	0	0
St. Marys Hospital	•	•	•
Staten Island University Hospital - North	•		0
Staten Island University Hospital - South	•	0	•
Strong Memorial Hospital	•	•	•
Syosset Hospital	•	•	•
The Unity Hospital of Rochester	•	•	0
Tri Town Regional Healthcare	•	S.S.	S.S.
United Health Services Hospitals Inc Binghamton General Hospital	•	•	
United Health Services Hospitals Inc Wilson Medical Center	•	0	•
United Memorial Medical Center North Street Campus	0	•	0
University Hospital (Stonybrook)	0	0	0
University Hospital of Brooklyn	•		•
University Hospital SUNY Health Science Center (Syracuse)	•	0	•
Upstate University Hospital at Community General	•	•	•
Vassar Brothers Medical Center	•	•	•
Westchester Medical Center	•		O
White Plains Hospital Center	0	O	O
Winthrop-University Hospital	•	0	•
Womans Christian Association	•	•	O
Woodhull Medical & Mental Health Center	•	0	

Highest Performer

High Performer

Middle Performer

Low Performer

Lowest Performer

Worst

Facility Name	Protocol Initiated (Adult)	3-Hour Bundle (Adult)	6-Hour Bundle (Adult)
Wyckoff Heights Medical Center		0	0
Wyoming County Community Hospital	•	S.S.	S.S.

Table 3 shows the high and low performing hospitals for the adult risk-adjusted mortality rate outcome measure. High and low performing hospitals were determined based on whether there was a statistically significant difference between the expected number of deaths based on the statistical model and the observed number of deaths based on the submitted data. Those with a statistically significant difference between the expected and observed number of deaths where the observed number of deaths was less than expected were assigned to the high performer category (*). Those with a statistically significant difference between the expected and observed number of deaths where the observed number of deaths was higher than expected were assigned to the low performer category (*). Those without a statistically significant difference between the expected and observed number of deaths were assigned to the middle performer category (◊). The data is suppressed due to small sample size (S.S.) when a hospital did not have more than 10 patients for the measure. An N.C. indicates that the measure was not calculated because the hospital did not have enough patients to calculate a valid risk adjusted mortality rate. The detailed data with specific hospital values for the riskadjusted mortality rate outcome measure is shown in Technical Appendix B.

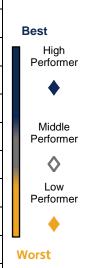
Table 3. Adult Sepsis Outcome Measure Summary Report by Hospital

Facility Name	Risk Adjusted Mortality Rate
Adirondack Medical Center- Saranac Lake Site	\Diamond
Albany Medical Center Hospital	\Diamond
Albany Memorial Hospital	\Diamond
Alice Hyde Medical Center	♦
Arnot Ogden Medical Center	•
Auburn Community Hospital	♦
Aurelia Osborn Fox Memorial Hospital	♦
Bellevue Hospital Center	♦
Bertrand Chaffee Hospital	♦
Bon Secours Community Hospital	•
Bronx-Lebanon Hospital Ctr - Concourse Div.	*
Brookdale Hospital Medical Center	\Diamond
Brookhaven Memorial Hospital Medical Center	♦

Facility Name	Risk Adjusted Mortality Rate	
Brooklyn Hospital Center - Downtown Campus	♦	
Brooks Memorial Hospital	\Diamond	Best
Buffalo General Medical Center	♦	High Performer
Canton-Potsdam Hospital	♦	*
Catskill Regional Medical Center	♦	Middle
Cayuga Medical Center at Ithaca	\Diamond	Performer
Champlain Valley Physicians Hospital Med Ctr	♦	Low
Chenango Memorial Hospital	♦	Performer
Claxton-Hepburn Medical Center	\Diamond	•
Clifton Springs Hospital and Clinic	♦	Worst
Columbia Memorial Hospital	\Diamond	
Community Memorial Hospital	N.C.	
Coney Island Hospital	•	

Facility Name	Risk Adjusted Mortality Rate
Corning Hospital	\Diamond
Cortland Regional Medical Center	♦
Crouse Hospital	♦
Degraff Memorial Hospital	\Diamond
Eastern Long Island Hospital	♦
Eastern Niagara Hospital - Lockport Division	♦
Elizabethtown Community Hospital	N.C.
Ellis Hospital	\Diamond
Elmhurst Hospital Center	\Diamond
Erie County Medical Center	\Diamond
F F Thompson Hospital	\Diamond
Faxton-St Lukes Healthcare St Lukes Division	♦
Flushing Hospital Medical Center	\Diamond
Forest Hills Hospital	♦
Franklin Hospital	\Diamond
Geneva General Hospital	♦
Glen Cove Hospital	\Diamond
Glens Falls Hospital	♦
Good Samaritan Hospital Medical Center	♦
Good Samaritan Hospital of Suffern	•
Gouverneur Hospital	S.S.
Harlem Hospital Center	♦
HealthAlliance Hospital Broadway Campus	\Diamond
Highland Hospital	♦
Hudson Valley Hospital Center	\Diamond
Huntington Hospital	\Diamond
Interfaith Medical Center	♦
Jacobi Medical Center	\Diamond

Facility Name	Risk Adjusted Mortality Rate
Jamaica Hospital Medical Center	♦
John T Mather Memorial Hospital	♦
Jones Memorial Hospital	♦
Kenmore Mercy Hospital	\Diamond
Kings County Hospital Center	♦
Kingsbrook Jewish Medical Center	♦
Lawrence Hospital Center	\Diamond
Lenox Hill Hospital	♦
Lewis County General Hospital	♦
Lincoln Medical & Mental Health Center	♦
Little Falls Hospital	N.C.
Long Island Jewish Medical Center	♦
Lutheran Medical Center	♦
Maimonides Medical Center	♦
Mary Imogene Bassett Hospital	♦
Massena Memorial Hospital	\Diamond
Medina Memorial Health Care System	♦
Memorial Hospital for Cancer and Allied Dis	♦
Mercy Hospital	♦
Mercy Medical Center	\Diamond
Metropolitan Hospital Center	\Diamond
Millard Fillmore Suburban Hospital	♦
Montefiore Med Center - Einstein College Div	♦
Montefiore Medical Center - Moses Div	♦
Montefiore Medical Center- Wakefield Hospital	♦
Montefiore Mount Vernon Hospital	♦
Montefiore New Rochelle Hospital	♦
Moses-Ludington Hospital	N.C.



Facility Name	Risk Adjusted Mortality Rate
Mount Sinai Beth Israel	•
Mount Sinai Beth Israel Brooklyn	•
Mount Sinai Hospital	\Q
Mount Sinai Hospital - Queens	♦
Mount Sinai Roosevelt	•
Mount Sinai St. Lukes	♦
Mount St Marys Hospital and Health Center	♦
Nassau University Medical Center	•
Nathan Littauer Hospital	•
New York Community Hospital of Brooklyn, Inc	♦
New York Hospital Medical Center of Queens	♦
New York Methodist Hospital	♦
New York Presbyterian Hospital - Allen Hospital	♦
New York Presbyterian Hospital - Columbia	♦
New York Presbyterian Hospital - Weill Cornell	♦
New York-Presbyterian/Lower Manhattan	♦
Newark-Wayne Community Hospital	♦
Niagara Falls Memorial Medical Center	♦
Nicholas H Noyes Memorial Hospital	♦
North Central Bronx Hospital	♦
North Shore University Hospital	\Diamond
Northern Dutchess Hospital	♦
Northern Westchester Hospital	♦
Nyack Hospital	♦
NYU Hospitals Center	♦
OConnor Hospital	N.C.
Olean General Hospital	♦
Oneida Healthcare	♦

Facility Name	Risk Adjusted Mortality Rate
Orange Regional Medical Ctr- Goshen Campus	♦
Oswego Hospital	•
Our Lady of Lourdes Memorial Hospital Inc	♦
Peconic Bay Medical Center	\Diamond
Phelps Memorial Hospital Assn	♦
Plainview Hospital	♦
Putnam Hospital Center	♦
Queens Hospital Center	\Diamond
Richmond University Medical Center	♦
River Hospital, Inc.	N.C.
Rochester General Hospital	♦
Rome Memorial Hospital, Inc	\Diamond
Roswell Park Cancer Institute	\Diamond
Samaritan Hospital	♦
Samaritan Medical Center	\Diamond
Saratoga Hospital	♦
SBH Health System	♦
Sisters of Charity Hospital	♦
Sisters of Charity Hospital – St. Joseph Campus	♦
SJRH - Andrus Pavilion	\Diamond
Soldiers and Sailors Memorial Hospital	♦
South Nassau Communities Hospital	♦
Southampton Hospital	♦
Southside Hospital	♦
St Anthony Community Hospital	♦
St Catherine of Siena Hospital	♦
St Charles Hospital	♦
St Elizabeth Medical Center	♦

Facility Name	Risk Adjusted Mortality Rate
St Francis Hospital	\Diamond
St Francis Hospital - Poughkeepsie	♦
St James Mercy Hospital	♦
St Johns Episcopal Hospital So Shore	♦
St Josephs Hospital Health Center	♦
St Josephs Medical Center	\Diamond
St Lukes Cornwall Hospital/Newburgh	♦
St Peters Hospital	♦
St. Joseph Hospital	♦
St. Marys Healthcare	♦
St. Marys Hospital	•
Staten Island University Hospital - North	•
Staten Island University Hospital - South	♦
Strong Memorial Hospital	♦
Syosset Hospital	♦
The Unity Hospital of Rochester	♦

Facility Name	Risk Adjusted Mortality Rate	
Tri Town Regional Healthcare	N.C.	
United Health Services Hospitals Inc Binghamton General Hospital	♦	
United Health Services Hospitals Inc Wilson Medical Center	♦	Best
United Memorial Medical Center North Street Campus	\Diamond	High Performe
University Hospital (Stonybrook)	•	•
University Hospital of Brooklyn	•	
University Hospital SUNY Health Science Center	♦	Middle Performe
Upstate University Hospital at Community General	♦	♦
Vassar Brothers Medical Center	♦	Low Performe
Westchester Medical Center	\Diamond	•
White Plains Hospital Center	\Diamond	Worst
Winthrop-University Hospital	♦	
Womans Christian Association	\Diamond	
Woodhull Medical & Mental Health Center	♦	
Wyckoff Heights Medical Center	\Diamond	
Wyoming County Community Hospital	♦	

Table 4 shows the quintiles, category assignment, and the percentages assigned to each category for the two pediatric measures – protocol initiation and 1-hour bundle. For the protocol initiation measure, all hospitals with a protocol treatment measure percentage of 100% were assigned to quintile 5 so there are "highest" but not "high" performers for this measure. Risk adjusted mortality rates were not calculated for the pediatric population due to the significantly smaller volume of cases for each hospital compared to adult cases and the current lack of a standardized, validated risk adjustment model for the pediatric sepsis population.

Table 5 shows each hospital along with the "performance level" category for the pediatric performance measures using symbols that correspond to the "performance level" category symbols shown in Table 3. The data is suppressed for small sample sizes (S.S.) when a hospital did not have more than 10 patients for the measure. An N.C. indicates that the measure was not calculated because the hospital did not have any patients that satisfied the criteria for inclusion in the measure. The detailed data with specific hospital and statewide values for the individual performance measures is shown in Technical Appendix B.

Table 4. Category Assignment for the Pediatric Sepsis Performance Measures

Quintile	Category (Performance Level)	Summary Table Symbol	Percentiles Included	Protocol Initiation (%)	1-Hour Bundle (%)
Quintile 5	Highest	Best	80 th - 100 th	100.00	21.05
Quintile 4	High	0	60 th - 80 th	100.00	12.50 – 21.04
Quintile 3	Middle	0	40 th - 60 th	93.0 – 99.99	11.11 – 12.49
Quintile 2	Low	•	20 th - 40 th	56.5 – 92.9	3.92 – 11.10
Quintile 1	Lowest	Worst	0 th - 20 th	15.7 – 56.4	0.00 - 3.91

Table 5. Pediatric Sepsis Performance Measures Summary Report by Hospital

Facility Name	Protocol Initiated (Pediatric)	1-Hour Bundle (Pediatric)
Albany Medical Center	0	S.S.
Women and Children's Hospital of Buffalo		S.S.
University Hospital	0	•
Strong Memorial Hospital		S.S.
Winthrop-University Hospital	•	S.S.
University Hospital SUNY Health Science Center	•	S.S.
Westchester Medical Center	•	0
Montefiore Medical Center – Henry and Lucy Moses Division		•
Bronx-Lebanon Hospital Center – Concourse Division		S.S.
Kings County Hospital Center	•	S.S.
Maimonides Medical Center	•	•
Mount Sinai Hospital	•	N.C.
New York Presbyterian Hospital – New York Weill Cornell Center	•	•
NYU Hospitals Center	•	S.S.
New York Presbyterian Hospital – Columbia Presbyterian Center	•	•
Long Island Jewish Schneiders Children's Hospital Division	•	•

Highest Performer

High Performer

Middle Performer

Low Performer

Lowest Performer

Worst

Next Steps

The Department has several important initiatives to refine and enhance the utility of this data for improvement.

Identification and Sharing of Promising Practices

Being able to identify those facilities with lower sepsis mortality rates now enables the Department and the Sepsis Advisory Group to better explore and identify the specific clinical practices and delivery systems implemented that are likely to be key 'success' elements in improving outcomes. These include, but are not limited to, innovative approaches to early identification of high risk patients, rapid response of early interventions, mobilization of clinical, laboratory, and pharmacy resources within the institution, sepsis protocol content, quality improvement activities, use of clinical decision support through electronic medical records, workforce sepsis training and education, and more. Both the Advisory Group and the P4P provide a forum for discussion and dissemination of these findings.

Data Collection Improvement and Alignment

The data dictionary will continue to be streamlined and improved so that hospitals and their data collection staff can completely and accurately report all data elements needed for valid and reliable quality measurement. On-going data audits provide information to both hospitals and to the Department that serve to identify variables requiring further elaboration. During the time of this statewide initiative, the Center for Medicare and Medicaid Services (CMS) began to require data collection from hospitals on a sample of adult patients with sepsis ('SEP-1' measure). The Department will be working with CMS and with hospitals to align our data collection initiative, where appropriate, with this new federal requirement.

Future Measurement: Pediatrics and Morbidity

The Department plans to explore the ability to evaluate other important pediatric sepsis outcomes beyond the one hour bundle including risk adjusted mortality. While the number of pediatric cases for each hospital will not permit statistically valid comparisons these results could be used for quality improvement and internal hospital benchmarking. Last, there are other outcomes in addition to survival that are important to clinicians and patients related to serious and long lasting organ or tissue damage that can result from sepsis. While there are currently no standardized metrics or data to capture this information the Department is committed to exploring ways to develop new and innovative measures in this important area.

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Technical Appendix A: Risk Adjustment Methodology

The objective of the risk adjustment process is to assess hospital performance after accounting for differences in patient case mix between hospitals. In the first part of the process, a mortality model estimates the probability of in-hospital mortality for each patient with sepsis. This estimate is based on patient demographic, comorbidity, and severity of illness characteristics. Multivariable logistic regression was used to determine which variables are important and accurate in estimating the probability of mortality for each patient. Treatment variables, within the control or influence of the providers and hospital, are not included in the prediction model. Table A1 shows the thirteen (13) variables in this model that are used to estimate the probability of mortality as well as the overall performance of the model. Variables are primarily binary or categorical; three of them are continuous. These are age (in years), first serum lactate (mmol/L), and comorbidity count. The model includes both main effects and interactions. Variables were included as main effects if their *p*-values were <0.05; interactions had to be statistically significant and clinically relevant. The dataset for model development included 43,204 patients. 10% of these patients were randomly selected and set aside to validate the model developed on the other 90% of the patients.

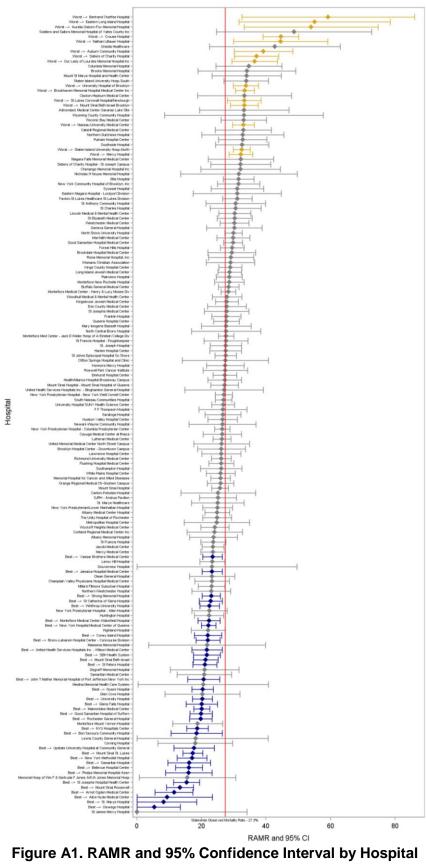
The risk adjusted model in this report makes use of the most recent complete and audited data from four quarters of patient data submission in 2015. All patients who were discharged and transferred from one hospital to another were excluded from model development and the application of the model to each hospital's result. Patients with advanced care directives in place prior to the episode of sepsis who declined sepsis protocol interventions, or who refused sepsis protocol interventions at the time of presentation, were removed from the data set. Patients admitted more than once in 2015 for sepsis are represented only once for purposes of development of the risk adjusted model (using their last admission only). For purposes of evaluating each hospital's performance, each admission is included.

To assess hospital performance, the probability of hospital mortality is calculated for every patient from that hospital using the logistic regression model. These probabilities are summed over all the patients at that hospital to calculate the expected number of deaths for that hospital. The actual number of deaths is determined for all patients in that hospital as well. The 'standardized' mortality ratio (SMR) is calculated by dividing the observed by the expected number of deaths in each hospital. The SMR was then multiplied by the statewide mortality rate to obtain a risk adjusted mortality rate (RAMR) and a 95% confidence interval for the RAMR. The RAMR provides the best estimate of what each hospital's mortality rate would have been if the state had a case mix that was identical to the hospital. If the confidence interval for a hospital's RAMR is entirely below the statewide rate, the hospital performed significantly better than the state average. If the hospital's confidence interval was entirely above the statewide rate the hospital performed significantly worse than the statewide rate. Figure A1 contains a plot showing the RAMR and confidence interval for each hospital. The highest performing hospitals are displayed in blue and the lowest performing hospitals are displayed in gold.

Table A1. Variables in the Risk Adjusted Mortality Rate (RAMR) model

Main effects or Interactions	%	β	Adjusted OR	<i>p</i> -value
Race/Ethnicity - main effect		•	-	•
White, Non-Hispanic	56.7	-F	Reference-	
Black, Non-Hispanic	15.3	0.188	1.21	< 0.001
Hispanic	9.2	-0.073	0.93	0.112
Multi-racial	1.6	0.165	1.18	0.096
Unknown, Non-Hispanic	7.2	0.043	1.04	0.382
Unknown	10.0	0.101	1.11	0.016
Payer - main effect				0.0.0
Medicare	59.9	-F	Reference-	
Medicaid	16.6	0.099	1.11	0.011
Private HMO	18.9	0.067	1.07	0.056
Self-pay	1.3	0.646	1.91	< 0.001
Other	3.2	-0.023	0.98	0.750
Site of infection - main effect	0.2	0.020	0.00	0.100
Urinary	22.6	-F	Reference-	
Respiratory	39.9	0.599	1.82	< 0.001
Gastrointestinal	12.6	0.543	1.72	< 0.001
Skin	6.7	0.484	1.62	< 0.001
Central Nervous System	0.6	0.723	2.06	< 0.001
Other	8.8	0.723	1.75	< 0.001
Unknown	8.7	0.900	2.46	< 0.001
Admission source - main effect	0.7	0.900	2.40	< 0.001
Non-health facility, POA	68.2		<u> </u>	
Clinic	4.1	-0.033	0.97	0.605
			1.52	
Different Hospital	6.3	0.418	1.34	< 0.001
SNF/ICF	19.6	0.289	1.34	< 0.001
Another HC facility	0.8	0.278	1.52	0.040
Between unit transfer	0.4	0.459	2.07	0.013
Hospice	0.1	0.727		0.075
Other	0.5	-0.330	0.72	0.106
Lower respiratory infection	50.4	_) of a variance	
No Yes	50.4 49.6	0.281	Reference- 	< 0.001
MV severity	49.0	0.201	-	< 0.001
No	87.6	-F	. I	
Yes	12.4	0.519		< 0.001
Lower respiratory infection#MV severity				
Yes#Yes		-0.398	0.89	< 0.001
Septic shock diagnosis				
Severe Sepsis	51.3		Reference-	
Septic Shock	48.7	0.770	2.16	< 0.001
Platelet count or Thrombocytopenia	70.0) - (
No Yes	76.3 23.7	0.285	Reference- 1.33	< 0.001
Metastatic cancer	23.1	0.200	1.33	< 0.001
No	89.3	F	I Reference-	
Yes	10.7	0.460	1.58	< 0.001
Lymphoma/Leukemia/Multiple Myeloma	-			
No	94.8	F	Reference-	
Yes	5.2	0.135	1.14	0.011
Age	100	0.060		< 0.001
Square root of comorbidity count		2.410		< 0.001
Age#square root of comorbidity count		-0.021	Varies	< 0.001
Serum Lactate	100	0.245		< 0.001
Serum Lactate*Serum Lactate	100	-0.002		0.001
Serum Lactate#square root of comorbidity count		-0.043	Varies	< 0.001

Intercept = -8.548 C Statistic = 0.773



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Technical Appendix B

The following tables show data summaries of performance and outcome measures for inpatient sepsis care for New York State Hospitals.

Table B1 contains performance and outcome measures for inpatient adult (age ≥ 18) sepsis care for New York State Hospitals. This table includes the Risk Adjusted Mortality Rates (RAMR) per 100 sepsis patients along with the following quality measures: protocol initiated, 3-hour bundle, and 6-hour bundle. The RAMR (N1) includes all patients except for those with advanced directives, transfer patients, and patients who declined interventions. See Technical Appendix A for additional information about the RAMR model. The Protocol Initiated measure (N2) includes all patients except for those excluded from the protocol or who died within six hours. This measure indicates the percentage of patients in the denominator for whom a protocol was initiated. The protocol can be initiated in the ED, ward, or ICU. This measure is only reported for those hospitals with greater than 10 adult sepsis cases in 2015. The 3-hour and 6-hour bundle measures (N3) include all patients with a protocol initiated in the ED who were eligible for the bundle. Transfer cases were excluded from the bundle measures. These two measures report the percentage of bundle-eligible patients with a protocol initiated in the ED who received all of the interventions specified in the bundle in the time frame. This measure is only reported for those hospitals with greater than 10 adult sepsis cases in 2015.

Table B2 contains the performance measures for inpatient pediatric (age < 18) sepsis care for New York State Hospitals. This table includes the following performance measures: protocol initiated and 1-hour bundle. The Protocol Initiated measure (N2) includes all patients except for those excluded from the protocol or those who died within one hour. This measure indicates the percentage of patients in the denominator for whom a protocol was initiated. The protocol can be initiated in the ED, ward, or ICU. This measure is only reported for those hospitals with greater than 10 pediatric sepsis cases in 2015. The 1-hour bundle measure (N3) includes all patients with a protocol initiated in the ED who were eligible for the bundle. Transfer cases were excluded. This measure reports the percentage of bundle-eligible patients with a protocol initiated in the ED who received all of the interventions specified in the bundle in the time frame. This measure is only reported for those hospitals with greater than 10 pediatric sepsis cases in 2015.

In both tables, the highest performers are highlighted in blue and the lowest performers are highlighted in gold. The cells that contain an S.S. indicate that the data was suppressed due to low counts. The cells that contain an N.C. indicate that the measure was not calculated because the hospital did not have any patients that satisfied the criteria for inclusion in the measure (performance measures) or the hospital did not have enough patients to calculate a valid risk adjusted mortality rate (outcome measure).

Table B1. Adult Sepsis Quality of Care Performance and Outcome Measures

		Ris	k Adjusted N	ates	Protoc	ol Initiated	- Adult	3-1	Hour Bund	lle	6-Hour Bundle			
Facility PFI	Facility Name	Number of Cases ^a (N1)	Number of Deaths	RAMR	High/Low Performer	Number of Cases ^b (N2)	% Protocol Initiated	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile
324	Adirondack Medical Center- Saranac Lake Site	40	12	33.21		49	20.41	1	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.
1	Albany Medical Center Hospital	466	111	24.90		753	91.63	3	254	36.61	1	254	25.98	2
4	Albany Memorial Hospital	108	26	23.72		124	93.55	3	91	49.45	2	91	23.08	2
325	Alice Hyde Medical Center	32	3	9.32	HIGH	40	72.50	2	22	86.36	5	21	33.33	3
116	Arnot Ogden Medical Center	129	19	11.51	HIGH	187	68.98	1	87	51.72	2	87	12.64	1
85	Auburn Community Hospital	72	31	39.19	LOW	78	51.28	1	20	50.00	2	19	42.11	5
739	Aurelia Osborn Fox Memorial Hospital	13	8	53.95	LOW	16	87.50	3	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.
1438	Bellevue Hospital Center	454	61	16.15	HIGH	513	99.81	4	339	59.29	3	336	41.07	4
280	Bertrand Chaffee Hospital	13	6	59.25	LOW	22	81.82	2	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.
708	Bon Secours Community Hospital	194	22	18.50	HIGH	210	77.14	2	153	79.74	5	153	62.75	5
1178	Bronx-Lebanon Hospital Center - Concourse Division	329	89	22.03	HIGH	310	90.32	3	159	26.42	1	157	16.56	1
1286	Brookdale Hospital Medical Center	74	29	29.41		74	100.00	5	72	52.78	2	72	8.33	1
885	Brookhaven Memorial Hospital Medical Center Inc	667	239	33.42	LOW	678	47.79	1	323	65.02	4	316	37.34	4
1288	Brooklyn Hospital Center - Downtown Campus	51	22	26.18		52	100.00	5	51	68.63	4	50	30.00	3
98	Brooks Memorial Hospital	25	10	34.05		33	15.15	1	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.
207	Buffalo General Medical Center	502	169	28.42		675	32.89	1	104	43.27	1	104	21.15	2
815	Canton-Potsdam Hospital	40	12	25.20		49	89.80	3	27	51.85	2	27	25.93	2
971	Catskill Regional Medical Center	72	28	32.96		85	40.00	1	31	83.87	5	31	45.16	5
977	Cayuga Medical Center at Ithaca	243	51	26.43		254	49.61	1	123	72.36	5	121	54.55	5
135	Champlain Valley Physicians Hospital Medical Center	222	52	23.29		243	41.15	1	57	66.67	4	55	30.91	3
128	Chenango Memorial Hospital Inc	29	12	32.11		38	92.11	3	25	56.00	3	25	44.00	5
798	Claxton-Hepburn Medical Center	38	11	33.34		48	87.50	3	29	51.72	2	29	34.48	4

		Ris	sk Adjusted N	ates	Protocol Initiated - Adult			3-1	Hour Bund	lle	6-Hour Bundle			
Facility PFI	Facility Name	Number of Cases ^a (N1)	Number of Deaths	RAMR	High/Low Performer	Number of Cases ^b (N2)	% Protocol Initiated	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile
676	Clifton Springs Hospital and Clinic	30	9	27.41		42	28.57	1	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.
146	Columbia Memorial Hospital	43	17	34.68		42	76.19	2	29	58.62	3	29	27.59	3
401	Community Memorial Hospital Inc	N.C.	N.C.	N.C.	N.C.	11	81.82	2	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.
1294	Coney Island Hospital	293	73	22.03	HIGH	294	100.00	5	288	64.93	4	287	45.99	5
866	Corning Hospital	77	10	18.07		92	71.74	2	52	63.46	4	51	33.33	3
158	Cortland Regional Medical Center Inc	101	22	24.11		124	89.52	3	88	55.68	3	85	22.35	2
636	Crouse Hospital	292	102	44.63	LOW	319	89.66	3	191	30.37	1	189	15.87	1
581	Degraff Memorial Hospital	62	12	20.96		67	29.85	1	11	63.64	4	11	36.36	4
891	Eastern Long Island Hospital	12	7	55.02	LOW	14	57.14	1	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.
565	Eastern Niagara Hospital - Lockport Division	17	8	31.07		20	100.00	5	15	80.00	5	14	42.86	5
303	Elizabethtown Community Hospital	N.C.	N.C.	N.C.	N.C.	20	100.00	5	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.
829	Ellis Hospital	284	88	31.54		350	80.86	2	187	29.95	1	187	10.70	1
1626	Elmhurst Hospital Center	420	120	27.28		427	98.59	4	320	54.06	3	316	26.90	2
210	Erie County Medical Center	168	48	27.85		189	99.47	4	110	23.64	1	105	13.33	1
678	F F Thompson Hospital	88	29	26.65		102	92.16	3	69	60.87	4	69	30.43	3
599	Faxton-St Lukes Healthcare St Lukes Division	229	88	31.07		247	78.95	2	170	54.71	3	169	16.57	1
1628	Flushing Hospital Medical Center	238	93	26.13		236	98.31	4	191	52.88	2	191	21.99	2
1638	Forest Hills Hospital	554	143	29.52		570	100.00	5	399	67.67	4	391	36.83	4
518	Franklin Hospital	255	80	27.71		271	100.00	5	194	58.76	3	190	28.95	3
671	Geneva General Hospital	46	22	30.17		53	100.00	5	42	69.05	4	42	45.24	5
490	Glen Cove Hospital	56	10	20.28		58	100.00	5	56	71.43	5	56	37.50	4
1005	Glens Falls Hospital	305	56	20.11	HIGH	307	43.65	1	77	74.03	5	72	47.22	5
925	Good Samaritan Hospital Medical Center	674	212	29.79		685	93.14	3	523	42.45	1	518	25.10	2
779	Good Samaritan Hospital of Suffern	359	92	19.90	HIGH	342	71.35	2	238	58.82	3	232	30.17	3

		Ris	sk Adjusted N	ates	Protoc	ol Initiated	- Adult	3-1	Hour Bund	lle	6-Hour Bundle			
Facility PFI	Facility Name	Number of Cases ^a (N1)	Number of Deaths	RAMR	High/Low Performer	Number of Cases ^b (N2)	% Protocol Initiated	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile
812	Gouverneur Hospital	S.S.	S.S.	S.S.	S.S.	15	100.00	5	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.
1445	Harlem Hospital Center	174	62	27.49		167	98.20	4	125	42.40	1	123	13.82	1
990	HealthAlliance Hospital Broadway Campus	140	54	27.22		158	94.94	4	93	78.49	5	93	55.91	5
409	Highland Hospital	289	54	22.06		374	100.00	5	226	55.31	3	222	36.94	4
1039	Hudson Valley Hospital Center	275	80	26.59		274	79.56	2	204	71.08	5	198	43.43	5
913	Huntington Hospital	225	62	22.36		239	100.00	5	191	72.25	5	191	28.27	3
1309	Interfaith Medical Center	123	57	29.87		122	86.07	3	45	46.67	2	45	28.89	3
1165	Jacobi Medical Center	455	116	23.59		421	90.02	3	281	48.04	2	280	24.29	2
1629	Jamaica Hospital Medical Center	380	126	23.31	HIGH	392	54.59	1	189	54.50	3	185	19.46	1
895	John T Mather Memorial Hospital of Port Jefferson New York Inc	220	51	20.69	HIGH	247	97.98	4	205	45.85	2	205	20.49	2
267	Kenmore Mercy Hospital	200	52	27.38		201	74.13	2	125	72.00	5	124	41.13	4
1301	Kings County Hospital Center	384	127	28.92		401	99.75	4	273	47.25	2	270	27.04	2
1315	Kingsbrook Jewish Medical Center	272	116	27.88		274	100.00	5	241	52.70	2	240	25.00	2
1122	Lawrence Hospital Center	122	40	26.18		119	83.19	2	67	80.60	5	67	28.36	3
1450	Lenox Hill Hospital	509	101	23.37		525	100.00	5	388	65.98	4	385	33.77	3
383	Lewis County General Hospital	31	3	18.20		36	13.89	1	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.
1172	Lincoln Medical & Mental Health Center	189	73	30.34		201	93.53	3	115	53.04	3	115	39.13	4
362	Little Falls Hospital	N.C.	N.C.	N.C.	N.C.	25	100.00	5	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.
1630	Long Island Jewish Medical Center	754	151	28.75		781	100.00	5	577	50.78	2	575	28.17	3
1304	Lutheran Medical Center	622	196	26.35		634	99.37	4	490	57.96	3	486	34.98	4
1305	Maimonides Medical Center	573	167	20.09	HIGH	537	99.07	4	455	36.48	1	454	14.10	1
746	Mary Imogene Bassett Hospital	130	31	27.69		252	95.63	4	71	57.75	3	71	30.99	3
804	Massena Memorial Hospital	15	4	21.75		21	100.00	5	17	64.71	4	16	31.25	3
718	Medina Memorial Health Care System	13	3	20.55		20	100.00	5	12	41.67	1	12	16.67	1

	Facility Name	Risk Adjusted Mortality Rates				Protoc	ol Initiated	- Adult	3-1	Hour Bund	lle	6-Hour Bundle		
Facility PFI		Number of Cases ^a (N1)	Number of Deaths	RAMR	High/Low Performer	Number of Cases ^b (N2)	% Protocol Initiated	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile
39	Memorial Hosp of Wm F & Gertrude F Jones A/K/A Jones Memorial Hosp	19	4	15.63		22	90.91	3	16	62.50	4	16	37.50	4
1453	Memorial Hospital for Cancer and Allied Diseases	396	150	25.91		434	89.40	3	94	65.96	4	94	44.68	5
213	Mercy Hospital	413	151	32.19	LOW	421	80.76	2	269	57.99	3	265	29.43	3
513	Mercy Medical Center	256	84	23.59		250	94.80	4	185	73.51	5	179	51.40	5
1454	Metropolitan Hospital Center	52	14	24.73		54	96.30	4	50	46.00	2	50	16.00	1
3067	Millard Fillmore Suburban Hospital	388	86	23.15		411	27.01	1	36	52.78	2	36	27.78	3
3058	Montefiore Med Center - Jack D Weiler Hosp of A Einstein College Div	1,177	325	27.63		1,192	12.00	1	147	12.93	1	140	5.71	1
1169	Montefiore Medical Center - Henry & Lucy Moses Div	1,143	337	28.34		1,185	21.77	1	275	7.27	1	259	2.70	1
1168	Montefiore Medical Center- Wakefield Hospital	571	124	22.33	HIGH	575	4.00	1	22	18.18	1	22	9.09	1
1061	Montefiore Mount Vernon Hospital	83	18	18.80		96	95.83	4	63	33.33	1	63	15.87	1
1072	Montefiore New Rochelle Hospital	335	90	28.59		330	97.88	4	289	42.56	1	289	22.49	2
309	Moses-Ludington Hospital	N.C.	N.C.	N.C.	N.C.	17	100.00	5	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.
1439	Mount Sinai Beth Israel	422	89	21.32	HIGH	432	95.60	4	324	63.58	4	324	50.31	5
1324	Mount Sinai Beth Israel Brooklyn	290	108	33.26	LOW	279	100.00	5	208	73.08	5	205	47.32	5
1456	Mount Sinai Hospital	833	231	25.74		849	100.00	5	359	39.00	1	355	23.66	2
1639	Mount Sinai Hospital - Mount Sinai Hospital of Queens	262	87	27.14		244	100.00	5	206	52.91	3	200	33.50	3
1466	Mount Sinai Roosevelt	472	51	13.36	HIGH	483	89.86	3	375	56.00	3	367	38.96	4
1469	Mount Sinai St. Lukes	685	113	17.30	HIGH	673	93.61	3	564	53.01	3	555	38.74	4
583	Mount St Marys Hospital and Health Center	46	18	33.97		52	63.46	1	22	45.45	1	22	9.09	1
528	Nassau University Medical Center	464	172	33.01	LOW	455	72.31	2	288	43.40	1	280	23.57	2
330	Nathan Littauer Hospital	68	17	44.49	LOW	97	50.52	1	14	57.14	3	14	42.86	5
1293	New York Community Hospital of Brooklyn, Inc	103	42	31.51		104	75.00	2	79	86.08	5	77	40.26	4

		Risk Adjusted Mortality Rates				Protoc	ol Initiated	- Adult	3-1	Hour Bund	lle	6-Hour Bundle		
Facility PFI	Facility Name	Number of Cases ^a (N1)	Number of Deaths	RAMR	High/Low Performer	Number of Cases ^b (N2)	% Protocol Initiated	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile
1637	New York Hospital Medical Center of Queens	1,020	254	22.19	HIGH	1,088	94.49	4	1,043	43.53	1	995	24.72	2
1306	New York Methodist Hospital	160	40	17.08	HIGH	232	100.00	5	160	13.75	1	148	2.03	1
3975	New York Presbyterian Hospital - Allen Hospital	169	42	22.49		184	100.00	5	161	52.17	2	137	21.17	2
1464	New York Presbyterian Hospital - Columbia Presbyterian Center	810	258	26.43		839	99.88	4	496	31.65	1	480	13.54	1
1458	New York Presbyterian Hospital - New York Weill Cornell Center	619	208	26.92		595	99.83	4	392	48.98	2	359	16.71	1
1437	New York-Presbyterian/Lower Manhattan Hospital	184	62	25.01		178	100.00	5	129	52.71	2	117	32.48	3
1028	Newark-Wayne Community Hospital	87	17	26.54		98	54.08	1	52	69.23	4	52	46.15	5
574	Niagara Falls Memorial Medical Center	53	19	32.19		47	95.74	4	40	35.00	1	40	15.00	1
393	Nicholas H Noyes Memorial Hospital	16	6	31.62		19	10.53	1	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.
1186	North Central Bronx Hospital	49	13	27.66		56	85.71	2	31	70.97	5	31	45.16	5
541	North Shore University Hospital	916	263	29.90		1,041	100.00	5	672	39.29	1	669	20.03	1
192	Northern Dutchess Hospital	36	13	32.77		35	82.86	2	27	77.78	5	27	48.15	5
1117	Northern Westchester Hospital	150	39	23.04		165	100.00	5	96	54.17	3	94	26.60	2
776	Nyack Hospital	447	107	20.36	HIGH	438	86.76	3	405	51.36	2	367	27.25	3
1463	NYU Hospitals Center	399	99	18.75	HIGH	340	88.82	3	221	77.83	5	211	68.72	5
165	OConnor Hospital	N.C.	N.C.	N.C.	N.C.	12	83.33	2	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.
66	Olean General Hospital	112	29	23.31		120	100.00	5	78	67.95	4	77	28.57	3
397	Oneida Healthcare	15	7	42.74		17	94.12	4	13	46.15	2	13	0.00	1
699	Orange Regional Medical Ctr- Goshen Campus	321	93	25.91		334	63.77	1	199	81.41	5	195	40.00	4
727	Oswego Hospital	158	6	5.41	HIGH	204	75.00	2	125	64.80	4	124	38.71	4
43	Our Lady of Lourdes Memorial Hospital Inc	172	51	36.51	LOW	179	74.30	2	108	58.33	3	108	41.67	4
938	Peconic Bay Medical Center	131	41	33.12		149	69.13	1	93	58.06	3	92	34.78	4
1129	Phelps Memorial Hospital Assn	156	21	16.04	HIGH	185	99.46	4	146	64.38	4	139	33.81	4
552	Plainview Hospital	483	119	28.59		505	100.00	5	353	70.54	5	348	41.09	4

		Risk Adjusted Mortality Rates				Protoc	ol Initiated	- Adult	3-1	Hour Bund	lle	6-Hour Bundle		
Facility PFI	Facility Name	Number of Cases ^a (N1)	Number of Deaths	RAMR	High/Low Performer	Number of Cases ^b (N2)	% Protocol Initiated	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile
752	Putnam Hospital Center	81	34	32.77		77	85.71	2	61	70.49	5	55	47.27	5
1633	Queens Hospital Center	330	98	27.71		350	97.71	4	248	51.21	2	241	19.50	1
1738	Richmond University Medical Center	345	139	26.13		341	91.50	3	123	46.34	2	123	16.26	1
377	River Hospital, Inc.	N.C.	N.C.	N.C.	N.C.	12	75.00	2	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.
411	Rochester General Hospital	843	115	19.79	HIGH	1,050	44.95	1	486	68.93	4	471	47.13	5
589	Rome Memorial Hospital, Inc	106	36	29.16		114	94.74	4	91	45.05	1	89	20.22	1
216	Roswell Park Cancer Institute	80	32	27.38		106	92.45	3	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.
756	Samaritan Hospital	138	23	16.18	HIGH	137	89.78	3	109	66.97	4	104	41.35	4
367	Samaritan Medical Center	101	19	20.88		112	86.61	3	76	53.95	3	72	22.22	2
818	Saratoga Hospital	205	55	26.62		211	76.78	2	155	72.26	5	152	50.00	5
1176	SBH Health System	274	70	21.70	HIGH	279	90.68	3	206	48.54	2	205	30.24	3
218	Sisters of Charity Hospital	111	48	37.09	LOW	117	74.36	2	57	43.86	1	56	26.79	2
292	Sisters of Charity Hospital - St Joseph Campus	46	21	32.14		38	84.21	2	31	48.39	2	29	20.69	2
1097	SJRH - Andrus Pavilion	149	46	25.14		158	31.65	1	49	69.39	5	48	41.67	4
1158	Soldiers and Sailors Memorial Hospital of Yates County Inc	12	6	48.70		15	100.00	5	11	63.64	4	S.S.	S.S.	S.S.
527	South Nassau Communities Hospital	683	227	26.81		640	91.09	3	551	63.34	4	533	40.34	4
889	Southampton Hospital	143	39	26.10		149	98.66	4	129	59.69	3	128	42.19	5
924	Southside Hospital	110	32	32.60		110	100.00	5	96	46.88	2	96	20.83	2
704	St Anthony Community Hospital	100	24	30.64		105	80.95	2	81	70.37	5	80	45.00	5
943	St Catherine of Siena Hospital	583	117	22.88	HIGH	574	96.69	4	505	73.86	5	502	64.54	5
896	St Charles Hospital	135	33	30.58		129	96.90	4	98	66.33	4	96	51.04	5
598	St Elizabeth Medical Center	134	57	30.31		153	79.74	2	86	39.53	1	86	12.79	1
563	St Francis Hospital	320	93	23.67		330	92.42	3	214	58.88	3	210	31.90	3
180	St Francis Hospital - Poughkeepsie	153	40	27.60		161	93.17	3	122	67.21	4	120	24.17	2

	Facility Name	Risk Adjusted Mortality Rates				Protoc	ol Initiated	- Adult	3-1	Hour Bund	lle	6-Hour Bundle			
Facility PFI		Number of Cases ^a (N1)	Number of Deaths	RAMR	High/Low Performer	Number of Cases ^b (N2)	% Protocol Initiated	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile	
870	St James Mercy Hospital	15	0	0.00		16	6.25	1	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.	
1635	St Johns Episcopal Hospital So Shore	443	141	27.49		452	36.73	1	134	61.94	4	134	32.09	3	
630	St Josephs Hospital Health Center	392	59	15.39	HIGH	529	86.58	3	319	42.32	1	306	23.20	2	
1098	St Josephs Medical Center	110	34	27.82		115	43.48	1	41	73.17	5	41	17.07	1	
694	St Lukes Cornwall Hospital/Newburgh	149	66	33.29	LOW	152	88.16	3	104	88.46	5	104	75.00	5	
5	St Peters Hospital	318	84	21.04	HIGH	347	100.00	5	216	63.89	4	214	22.90	2	
551	St. Joseph Hospital	235	71	27.55		239	80.75	2	173	58.96	3	164	38.41	4	
484	St. Marys Healthcare	71	22	25.09		87	98.85	4	66	57.58	3	65	29.23	3	
755	St. Marys Hospital	54	5	8.31	HIGH	58	74.14	2	38	81.58	5	38	39.47	4	
1740	Staten Island University Hosp- North	961	301	32.47	LOW	990	99.49	4	603	41.63	1	599	29.38	3	
1737	Staten Island University Hosp- South	165	47	33.86		166	100.00	5	121	52.89	2	121	40.50	4	
413	Strong Memorial Hospital	875	186	23.04	HIGH	1,044	94.44	4	637	47.10	2	614	35.18	4	
550	Syosset Hospital	112	31	31.10		119	100.00	5	79	81.01	5	77	38.96	4	
471	The Unity Hospital of Rochester	324	78	24.84		375	96.80	4	133	66.17	4	128	30.47	3	
8554	Tri Town Regional Healthcare	N.C.	N.C.	N.C.	N.C.	11	63.64	1	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.	
42	United Health Services Hospitals Inc Binghamton General Hospital	34	11	27.00		41	82.93	2	19	42.11	1	19	10.53	1	
58	United Health Services Hospitals Inc Wilson Medical Center	239	61	21.73	HIGH	275	84.00	2	128	46.88	2	128	24.22	2	
339	United Memorial Medical Center North Street Campus	87	23	26.24		98	90.82	3	76	61.84	4	75	29.33	3	
245	University Hospital (Stonybrook)	675	136	20.28	HIGH	726	93.11	3	563	56.66	3	545	33.76	3	
1320	University Hospital of Brooklyn	326	125	33.78	LOW	314	99.04	4	220	40.45	1	214	22.43	2	
635	University Hospital SUNY Health Science Center (Syracuse)	521	135	26.70		698	76.93	2	330	57.27	3	324	35.49	4	
628	Upstate University Hospital at Community General	240	32	17.74	HIGH	249	83.13	2	180	62.22	4	178	41.01	4	
181	Vassar Brothers Medical Center	504	147	23.42	HIGH	539	80.89	2	369	80.22	5	368	55.16	5	

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		Risk Adjusted Mortality Rates				Protoc	ol Initiated	- Adult	3-1	Hour Bund	lle	6-Hour Bundle		
Facility PFI	Facility Name	Number of Cases ^a (N1)	Number of Deaths	RAMR	High/Low Performer	Number of Cases ^b (N2)	% Protocol Initiated	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile
1139	Westchester Medical Center	229	85	30.20		373	97.59	4	95	41.05	1	94	21.28	2
1045	White Plains Hospital Center	339	84	25.96		331	87.31	3	231	49.35	2	226	25.22	2
511	Winthrop-University Hospital	779	157	22.52	HIGH	809	79.85	2	567	53.44	3	564	38.30	4
103	Womans Christian Association	106	33	29.00		133	57.89	1	65	67.69	4	59	23.73	2
1692	Woodhull Medical & Mental Health Center	201	73	27.93		207	99.52	4	108	46.30	2	107	16.82	1
1318	Wyckoff Heights Medical Center	241	72	24.13		237	68.78	1	118	60.17	3	114	29.82	3
1153	Wyoming County Community Hospital	15	4	33.15		17	41.18	1	S.S.	S.S.	S.S.	S.S.	S.S.	S.S.
	Statewide	43,604	11,917	27.33	Observed	46,845	81.19		27,937	54.07		27,354	31.53	

Table B2. Pediatric Sepsis Quality of Care Performance Measures

		Protoco	I Initiated - Ped	liatrics	1-Hour Bundle			
Facility PFI	Facility Name	Number of Cases ^b (N2)	% Protocol Initiated	Quintile	Number of Cases ^c (N3)	% Met Bundle	Quintile	
1	Albany Medical Center Hospital	30	93.3	3	S.S.	S.S.	S.S.	
208	Women And Childrens Hospital Of Buffalo	89	15.7	1	S.S.	S.S.	S.S.	
245	University Hospital	22	95.5	3	16	12.50	4	
413	Strong Memorial Hospital	39	56.4	1	S.S.	S.S.	S.S.	
511	Winthrop-University Hospital	16	87.5	2	S.S.	S.S.	S.S.	
635	University Hospital SUNY Health Science Center	14	92.9	2	S.S.	S.S.	S.S.	
1139	Westchester Medical Center	46	100	5	18	11.11	3	
1169	Montefiore Medical Center - Henry & Lucy Moses Div	56	37.5	1	15	0.00	1	
1178	Bronx-Lebanon Hospital Center - Concourse Division	29	48.3	1	S.S.	S.S.	S.S.	
1301	Kings County Hospital Center	16	100	5	S.S.	S.S.	S.S.	
1305	Maimonides Medical Center	24	100	5	19	21.05	5	
1456	Mount Sinai Hospital	13	100	5	N.C.	N.C.	N.C.	
1458	New York Presbyterian Hospital - New York Weill Cornell Center	35	100	5	16	0.00	1	
1463	NYU Hospitals Center	21	71.4	2	S.S.	S.S.	S.S.	
1464	New York Presbyterian Hospital - Columbia Presbyterian Center	91	100	5	51	3.92	2	
3376	Long Island Jewish Schneiders Children's Hospital Division	36	100	5	16	12.50	4	
	Statewide	683	75.11		241	7.88		

Note: The statewide rate for the quality measures is calculated using all hospitals regardless of the number of pediatric sepsis cases treated in 2015

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The authors would like to acknowledge Dr. Kathy Terry from IPRO, Dr. Stanley Lemeshow and Gary Phillips from Ohio State University, and Dr. Ed Hannan from State University of New York (SUNY) Albany for their contributions to this report.

