NJHA's Institute for Quality and Patient Safety
New Jersey 2015 Sepsis Learning- Action Collaborative
Charter

I. Introduction

The New Jersey Hospital Association's (NJHA) Institute for Quality and Patient Safety (Institute) is committed to working with its members to improve hospital sepsis care and associated patient outcomes. New Jersey's statewide inpatient severe sepsis mortality rate is close to 30 percent[1], with a national rate ranging from 20 to 50 percent[2]. Quality improvement agencies, including the Centers for Medicare and Medicaid Services and National Quality Forum, have made reducing sepsis rates a national healthcare priority.

The Institute has a strong history of supporting New Jersey hospitals through sepsis collaborative efforts focused on the intensive care unit (ICU). Now, partnering with experts and mentors hospitals from the Surviving Sepsis Campaign, it will focus its collaborative efforts on identifying and treating sepsis outside of the ICU, in the medical surgical patient population.

II. Background

Based on statewide hospital data, over 6,000 patients with severe sepsis died in New Jersey hospitals in 2013. These deaths account for nearly a 30 percent mortality rate related to severe sepsis across 72 hospitals. Severe sepsis mortality reaches beyond ICUs and emergency departments (EDs). This is why the Surviving Sepsis Campaign 2013 East Coast Collaborative's focus is on addressing severe sepsis in the medical -surgical patient population. Currently, 10 New Jersey hospitals are participating in the Surviving Sepsis Campaign 2013 East Coast Collaborative. The interventions tested at these sites include: developing early sepsis recognition screening, standardized treatment protocols, enhanced nurse-to-provider communication tools and harnessing of the electronic health record capabilities to create electronic sepsis alerts. The 10 participating hospitals will serve as mentors for this project.

The role of Measureventionist represents a novel approach to improving healthcare outcomes. A Measureventionist is a healthcare team member that has a high level of knowledge and understanding of clinical best practices. They use clinical data from both the electronic health record and interdisciplinary communication, i.e. daily rounds, to apply interventions in real time to improve clinical outcomes. The role of the Measureventionist has been used to successfully reduce the risk of healthcare-acquired venous thromboembolism and catheter-associated urinary tract infections[3]. There is a significant opportunity to adapt the Measurevention approach to the efforts of preventing severe sepsis.

III. Mission
The mission of the New Jersey 2015 Sepsis Learning-Action collaborative is to spread evidence-based sepsis interventions beyond ICUs and EDs to medical-surgical patient populations. This will be achieved by utilizing a systems-based approach to harness the combined power of

physician and nursing leadership, executive support, clinical expertise, unit-based engagement and information technology.

IV. Goals
By the end of 2015, all New Jersey hospitals will:
1. Implement sepsis early recognition screening and standardized sepsis treatment protocols.
2. Reduce severe sepsis mortality rates in New Jersey by 20 percent.

V. Methods

To achieve the collaborative goals, an approach will be used that combines the clinical expertise of Phil Dellinger, MD, FCCM, FCCP, and Christa Schorr, RN, MSN, FCCM, as core faculty along with the organizational strength and data capabilities of the Institute. The collaborative will spread the success of the sepsis interventions and lessons learned from the 10 mentor sites to all N.J. hospitals through a learning- action sepsis collaborative that will begin in January 2015. By highlighting the efforts of the 10 mentor sites, the collaborative will provide the most current evidence coupled with the strongest implementation strategies and tools.

In addition to sepsis-related content, the collaborative will also introduce the role of a Measureventionist and teams will be asked to identify individuals who will be designated as this role within the organization. The Measureventionists will play a crucial role in helping to identify early sepsis patients and coach front line staff to implement the necessary interventions in real time. To further improve the teamwork and communication skills of all team members, NJHA's TeamSTEPPS master trainers will incorporate TeamSTEPPS tools as part of the collaborative content.

To have the greatest impact on sepsis mortality, hospitals must work collaboratively. Participants are expected to share successes, challenges, experiences and ideas during all facilitated events such as face-to-face meetings, calls and Webinars. Senior staff and/or clinician involvement is required.

VI. Overview of Collaborative
The collaborative will span 12 months, beginning in January 2015, and ending in December 2015. Sepsis-related content will be delivered through expert faculty and peer-to-peer sharing. Learning sessions will consist of monthly Webinars and two, in- person learning sessions. A combination of outcome and process metrics will be collected to measure progress.

A. Collaborative Leadership
Collaborative faculty will consist of both clinical experts in the field of sepsis research and treatment and experts in healthcare quality improvement.

1. Lead clinical faculty:
Phillip Dellinger, MD, FCCM, FCCP
Chief, Department of Medicine, Cooper University Health Care

Chair, Department of Medicine, Cooper Medical School, Rowan University

Christa Schorr, RN, MSN, FCCM
Assistant Professor of Medicine
Cooper Medical School of Rowan University

2. Lead collaborative coordinators:
Aline M. Holmes, DNP, MSN, RN
Senior Vice President, Clinical Affairs
Director, NJHA Institute for Quality and Patient Safety
New Jersey Hospital Association

Shannon Davila, RN, MSN, CIC, CPHQ
Clinical Quality Improvement Manager
New Jersey Hospital Association

Nancy E. Shafer Winter, MSN, RN, NE-BC
Director of Clinical Quality & Program Development/Lead Nurse Planner
New Jersey Hospital Association

B. Data collection
Data collection will consist of both chart abstracted, structural and administrative data collection.

1. Outcome measure:
Inpatient severe sepsis mortality rates (this data will be provided to hospitals by NJHA utilizing administrative data)

2. Process measures:
A. Required--***Percent compliance with severe sepsis 3-hour bundle elements (based on Surviving Sepsis Campaign)***
> • ***Measure lactate level.***
> • ***Obtain blood cultures prior to administration of antibiotics.***
> • ***Administer broad spectrum antibiotics.***
> • ***Administer 30 ml/kg crystalloid for hypotension or lactate ≥4mmol/L.***

This data will be collected by the hospital through chart review using an abstraction tool (example: Surviving Sepsis Campaign tool). Compliance rates will be reported to NJHA on a monthly basis through NJHA's Web-based data collection tool.

B. Optional-- ***Percent compliance with severe sepsis 6-hour bundle elements (based on Surviving Sepsis Campaign)***
> • ***Apply vasopressors (for hypotension that does not respond to initial fluid resuscitation) to maintain a mean arterial pressure (MAP) ≥65 mm Hg.***
> • ***In the event of persistent arterial hypotension despite volume resuscitation (septic shock) or initial lactate ≥4 mmol/L (36 mg/dL):***

> • *Measure central venous pressure (CVP).*
> • *Measure central venous oxygen saturation (ScvO2).*
> • *Re-measure lactate if initial lactate was elevated.*

This data will be collected by the hospital through chart review using an abstraction tool (example: Surviving Sepsis Campaign tool). Compliance rates will be reported to NJHA on a monthly basis through NJHA's Web-based data collection tool.

C. Required--***Percent of New Jersey hospitals that implement early sepsis recognition screening***
This data will be collected quarterly as a structural measure through NJHA's Web-based data collection tool.

D. Required--***Percent of New Jersey hospitals that implement standardized severe sepsis treatment protocols***
This data will be collected quarterly as a structural measure through NJHA's Web-based data collection tool.

C. Cost to join collaborative
There is no fee to join the collaborative. Monthly Webinars, toolkits and data collection tools will be offered free of charge to all participating hospitals. However, participants will be charged an attendance fee for both in-person learning sessions. Attendance fees cover cost of conference speakers, educational credits and lunch.

VI. Team Responsibilities
Participating organizations are expected to:
- Connect the goals of the collaborative work to a strategic initiative in their organization
- Provide a senior leader to sponsor and actively support the team as a champion to spread improvement within the facility
- Provide the resources to support the team, including resources necessary for learning sessions, and staff time to devote to this effort
- Provide expert staff from key support units in the organization (Quality Improvement, Infection Prevention, Clinical Policy Development, Information Technology, etc.) to support the team as needed
- Perform tests of change leading to process improvements within the organization
- Share information with the collaborative peer-to-peer network, including details of changes made and data related to collaborative metrics
- Actively participate in all monthly Webinars and in-person learning sessions.

References:
1. New Jersey Hospital Association CY2013 hospital administrative data set
2. Martin GS. Sepsis, Severe sepsis and septic shock: changes in incidence, pathogens and outcomes. Expert Rev Anti Infect Ther. 2012; 10(6):701-6
3. Uhland, V. MeasureVentionists: A Novel Approach to Infection Prevention. Prevention Strategist Fall 2014; 7 (3): 48-51