

# Sepsis: The Task Force Awakens.

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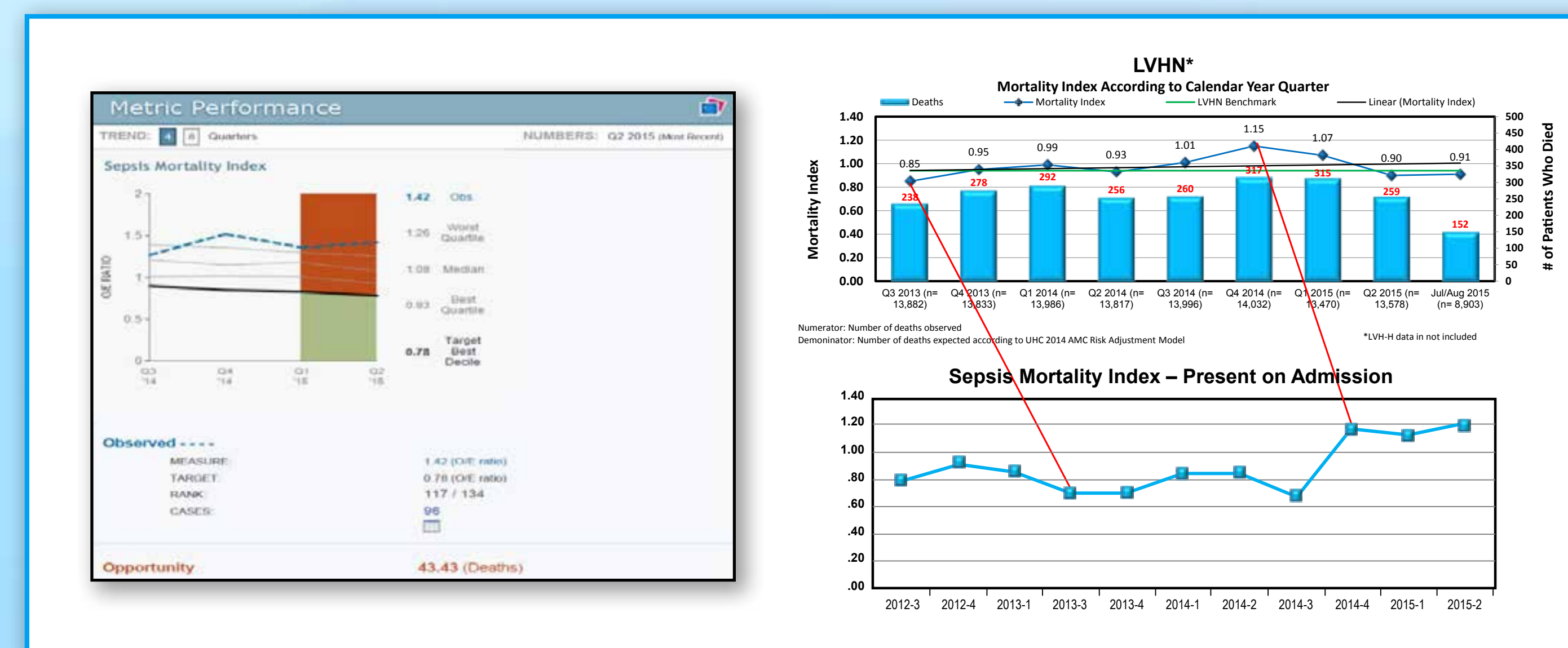
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# Sepsis: The Task Force Awakens

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## Learning Objectives:

- Describe the value in utilizing the Vizient Vitals in Performance Tool to recognize opportunities in overall mortality and sepsis mortality
- Discuss treatment guidelines for the management of sepsis
- Describe components of a multi-disciplinary sepsis management program



## Goal:

Decrease O/E sepsis mortality as evidenced by percent decline in the mortality index (MAX Goal = 0.80).

## Analysis:

Utilizing Lean methodology, in February 2015 our Network gathered a team of stakeholders across multiple disciplines for a Rapid Improvement Event (RIE). This “Sepsis Task Force” was charged to improve **early recognition and management of sepsis patients** in order to reduce sepsis mortality. The outcome of this event defined current and future state of sepsis care.

Much of the work done during the RIE focused on defining the root causes of high sepsis mortality. Recognizing the fact that our Network had no standard care pathway for sepsis patients, the team did a deep dive into the reasons “why”. Among the root causes were:

- No standardized order set for all care levels (ED/Med Surg/ICU)
- Sepsis screen not used routinely in the ED
- Vital signs not assessed by First Nurse in the ED
- No standard nursing assessment criteria for sepsis

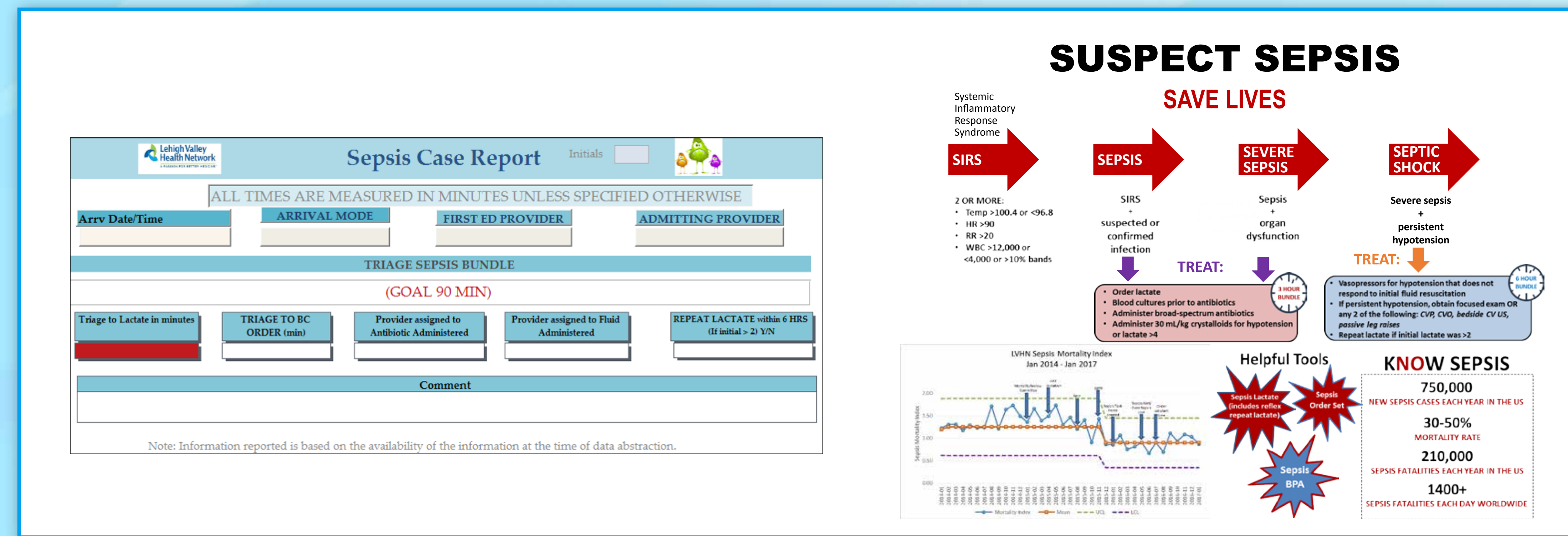
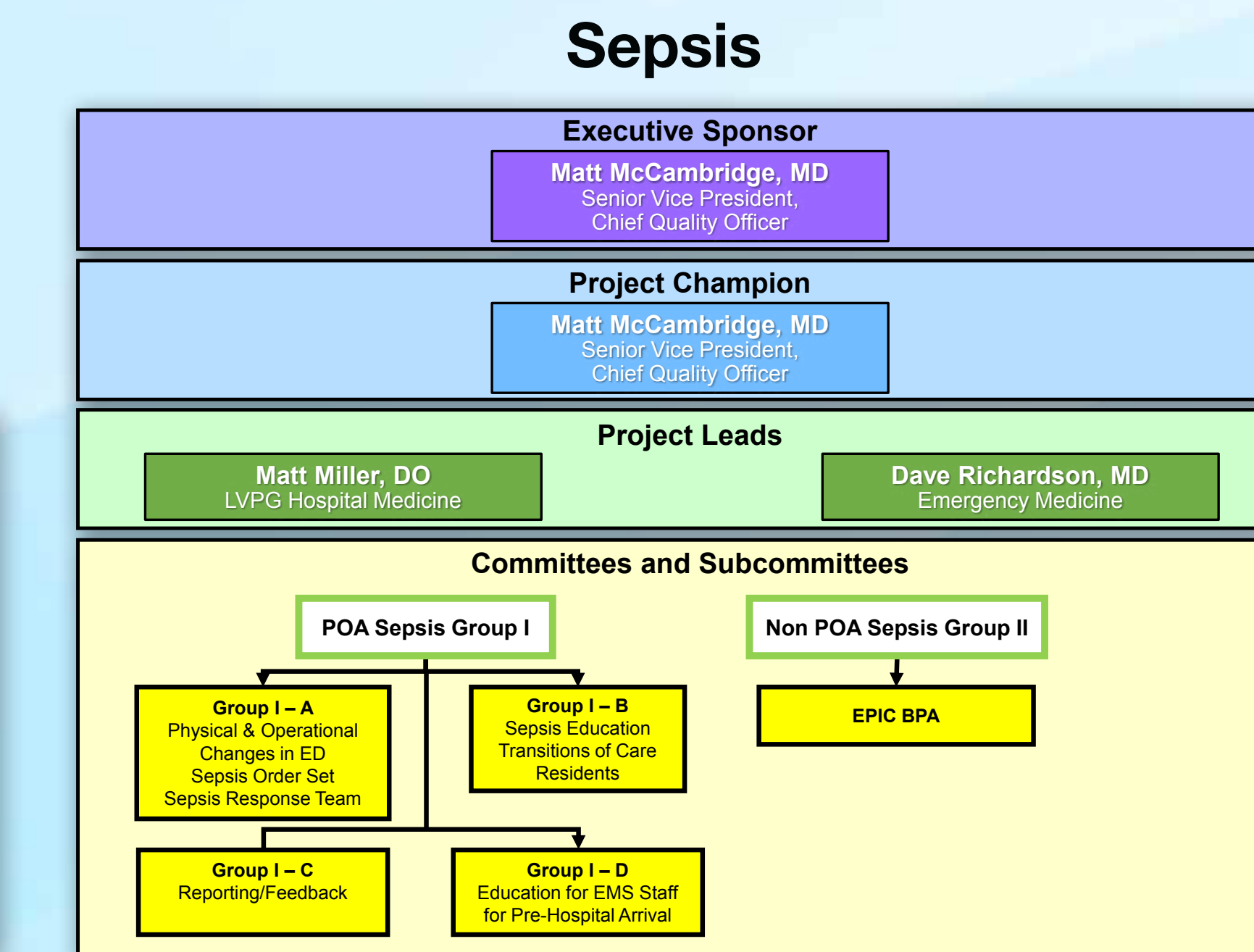
In a review of the literature, we decided to adopt the Surviving Sepsis Campaign’s 2012 “International Guidelines for Management of Severe Sepsis and Septic Shock” 3-hour and 6-hour bundles, with the caveat that “ED Time to First Antibiotic” and “ED Time to Fluid Resuscitation” goals would change to 90 minutes (instead of 180 minutes). We also referenced the June 1992 Chest article “Definitions for Sepsis and Organ Failure and Guidelines for the Use of Innovative Therapies in Sepsis”, as well as CMS’s SEP-1 core measure in developing our guidelines for sepsis evaluation and treatment.

## Countermeasures:

Following our RIE, our “Sepsis Task Force” divided work into two committees, Present on Admission (POA) and Not Present on Admission (Non-POA). Subcommittees were then formed to address these two conditions (see multicolor Structure Document).

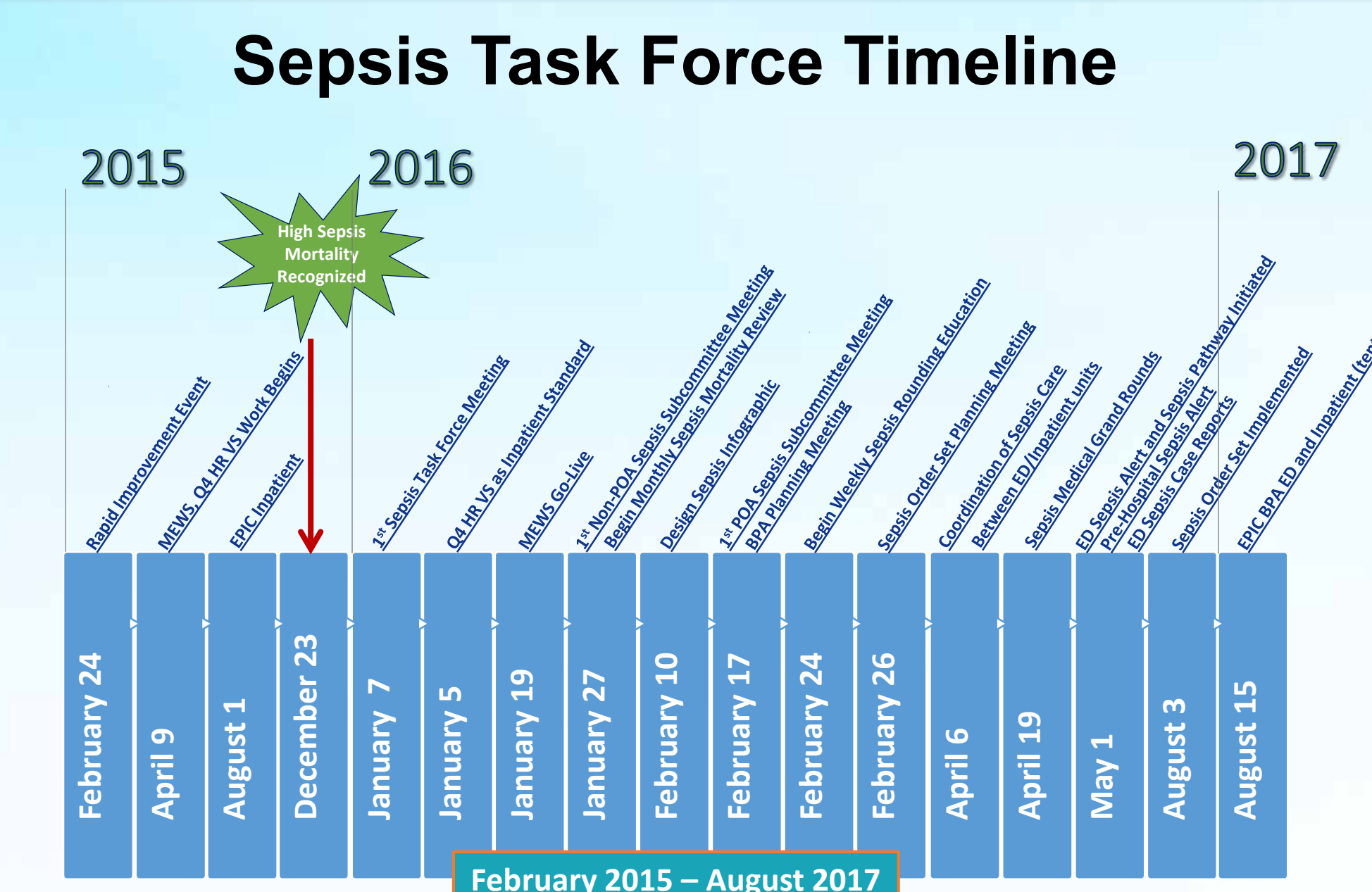
In reviewing our list of root causes, our committees developed several countermeasures, including:

- Sepsis Education
  - ED Sepsis Case Reports (see image)
  - eLearning Modules
  - Grand Rounds
  - Weekly Rounding, or “Bucket Rounds” (see image)
  - EMS Staff Education Sessions
  - Infographic (see image)
  - Huddles
- ED Sepsis Pathway
- Sepsis Order Sets
- ED Sepsis Alert
- EPIC BPA



## Plan:

The majority of opportunity at LVHN was in our Present on Admission cases. The focus of our work began in two areas: the ED and Nursing. Implementation of a Modified Early Warning System (MEWS) and standardization of every 4 hour vital signs laid the ground work for Network-wide sepsis improvement.



Multi-disciplinary committees and subcommittees were essential to the success of this project. These teams included membership from the following departments/groups:

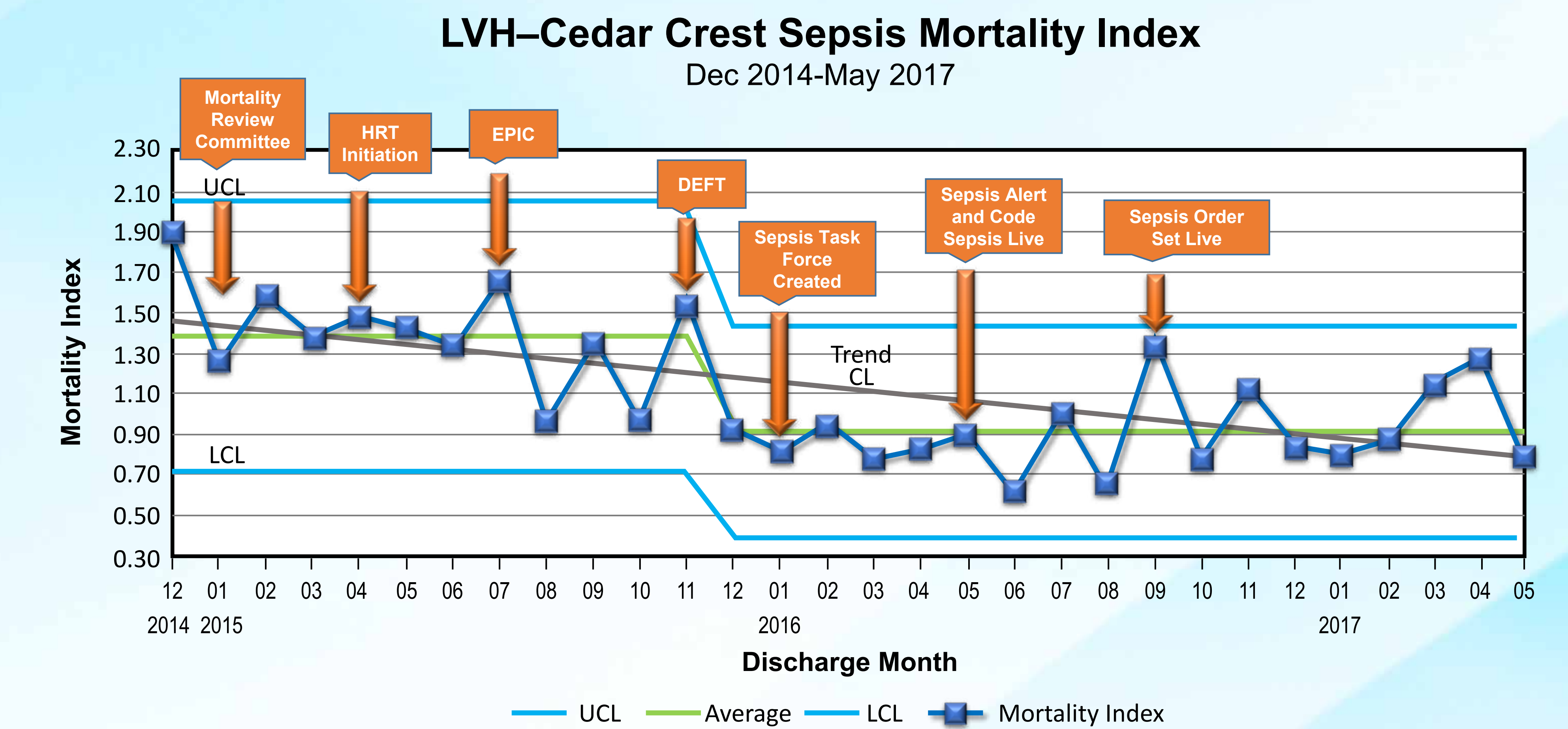
- Quality
- Patient Safety/Risk Management
- Pharmacy
- Information Services
- Nursing
- Physicians (ED/Critical Care/Hospitalists) and APCs
- Laboratory
- EMS
- Respiratory Care
- Education

## Follow-Up:

LVHN’s Quarter 3 2016 VIP report noted a significant improvement in our observed mortality rate of 0.9 with ZERO opportunity and Vizient Consortium ranking of 9/135! But our efforts did not stop there. We anticipate implementation of a sepsis Best Practice Advisory (BPA) Epic alert in August 2017. We are also nearing completion of an electronic sepsis dashboard that will be available through EPIC.



The work that we have accomplished over the last two and a half years has been invaluable to the care of our patients. We have saved hundreds of patients’ lives through implementing evidence-based, standardized care across our Network.



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