

# Clinician-Centered Analytics Drive Sepsis Improvements



## RESULTS

- **22.8 percent relative decrease** in sepsis mortality during the intervention period (2022–2025).
- **Reduced mortality** observed-to-expected ratio from **>1.4 to 1.08**.
- **25-minute decrease** in median time to antibiotics.

## PRODUCTS

- **Health Catalyst® Data Platform**
- **Sepsis Analytics Accelerator**

## THE CHALLENGE

Sepsis causes over 270,000 deaths annually and results in \$38 billion in healthcare costs. Delayed recognition of sepsis contributes to poor outcomes. Carle Health identified an opportunity to improve the timely recognition and treatment of sepsis.

## THE SOLUTION

Carle formed an interdisciplinary sepsis team to drive sepsis improvement efforts. The team first focused on patients with sepsis present on admission to the emergency department and then expanded to inpatients.

The team strategically reorganized and refined EHR processes, standardized alerts, and implemented an AI tool to trigger RNs to screen patients for sepsis before alerting the physician. Using the Health Catalyst® Data Platform and Sepsis Analytics Accelerator, Carle visualized performance, gaining new insights. It was able to separate RN and physician metrics, highlight individual variation, and focus on time from time zero to antibiotic administration.

## THE RESULT

Using high-value data and analytics, Carle was able to improve the timely recognition and treatment of sepsis, create individual accountability, and reduce sepsis mortality.



**The Health Catalyst data platform enabled us to accurately track process metrics at both the nurse and physician level, which was essential in driving timely, consistent care.**

Dr. David Lovinger, MD, FHM, FACP, Associate Chief Medical Officer, Health Informatics, Clinical Associate Professor, Carle Illinois College of Medicine, Carle Health