



OHA STATEWIDE SEPSIS INITIATIVE: SEPSIS DOCUMENTATION

May 15, 2024

SEPSIS WEBSITE

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Sepsis

Reducing Sepsis Mortality in Ohio Through Early Recognition, Appropriate Intervention

The OHA Board of Trustees identified reducing sepsis mortality in Ohio as one of the key focus areas for OHA and Ohio hospitals. Sepsis is the body's overwhelming and life-threatening response to infection that can lead to tissue damage, organ failure and death. In other words, it's your body's over active and toxic response to an infection. Sepsis impacted an estimated 41,000 Ohioans in 2017. Early recognition and treatment can reduce the morbidity and mortality of sepsis.

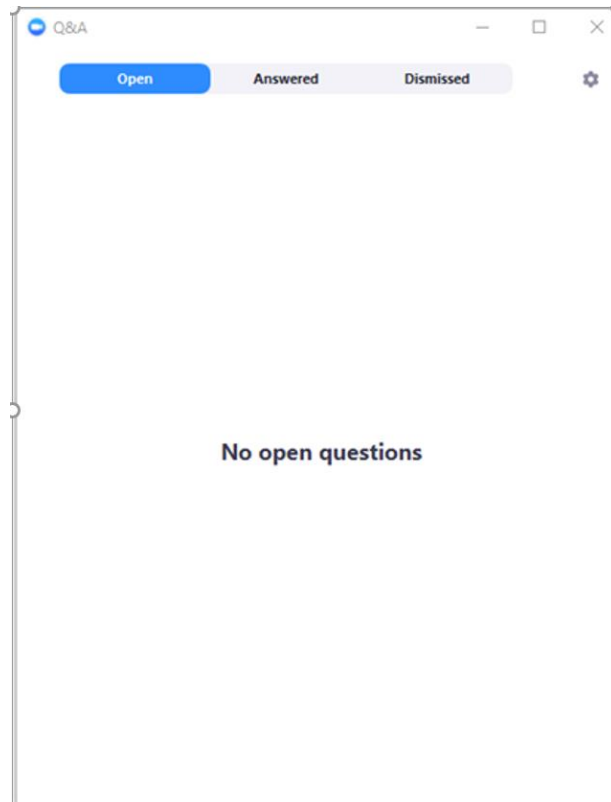
CONTINUING EDUCATION

- The link for the evaluation of today's program is:
<https://www.surveymonkey.com/r/Sepsis-May2024>
- Please be sure to access the link, complete the evaluation form, and request your certificate. The evaluation process will remain open **two weeks** following the webcast. Your certificate will be emailed to you when the evaluation process closes after the 2-week process.
- If you have any questions, please contact Dorothy Frabott (Dorothy.Frabott@ohiohospitals.org)

CONFLICT OF INTEREST

The presenter for today's program has disclosed no potential or actual conflicts of interest.

SUBMITTING QUESTIONS





Upcoming FREE webinars and events from Sepsis Alliance:

May 16: [Sepsis Alliance Symposium: Maternal and Neonatal Sepsis](#) (RN CE credit hours)

May 30: [The Impact of Rapid Diagnostics on Antimicrobial Stewardship Practices](#) (bioMérieux Sponsored Webinar)

June 14: [Peer-to-Peer Sepsis Quality Improvement in Action](#) (RN CE credit hours)

July 18: [Awareness and Advocacy: Trailblazing Sepsis Awareness Month at Your Organization](#) (RN CE credit hours)

PRESENTER(S)

AMY STEPHENS, MBA, RN, CPHQ, CHC
AVP of Quality and Compliance
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Staff Physician and Medical Director
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Cleveland Clinic





Memorial INPATIENT PAVILION



- Founded March 1952.
- A not-for-profit community hospital serving Union and five surrounding counties—primary service area of 94,000 individuals.
- Union County population: 66,898 (July 2022 Census estimate)
- Marysville City population: 27,157 (July 2022 Census estimate)
- Union County is one of the fastest growing counties in Ohio
- 99-bed acute and primary care facility with over 40 additional service lines.
- 3,372 inpatient discharges in 2023

Other health system statistics include:

- A medical staff of more than 419 providers.
- Over 294 adult and teen volunteers.
- Governed by an eight-member Board of Trustees.
- Employees: Over 870 at Memorial Hospital and 150 at Memorial Medical Group.

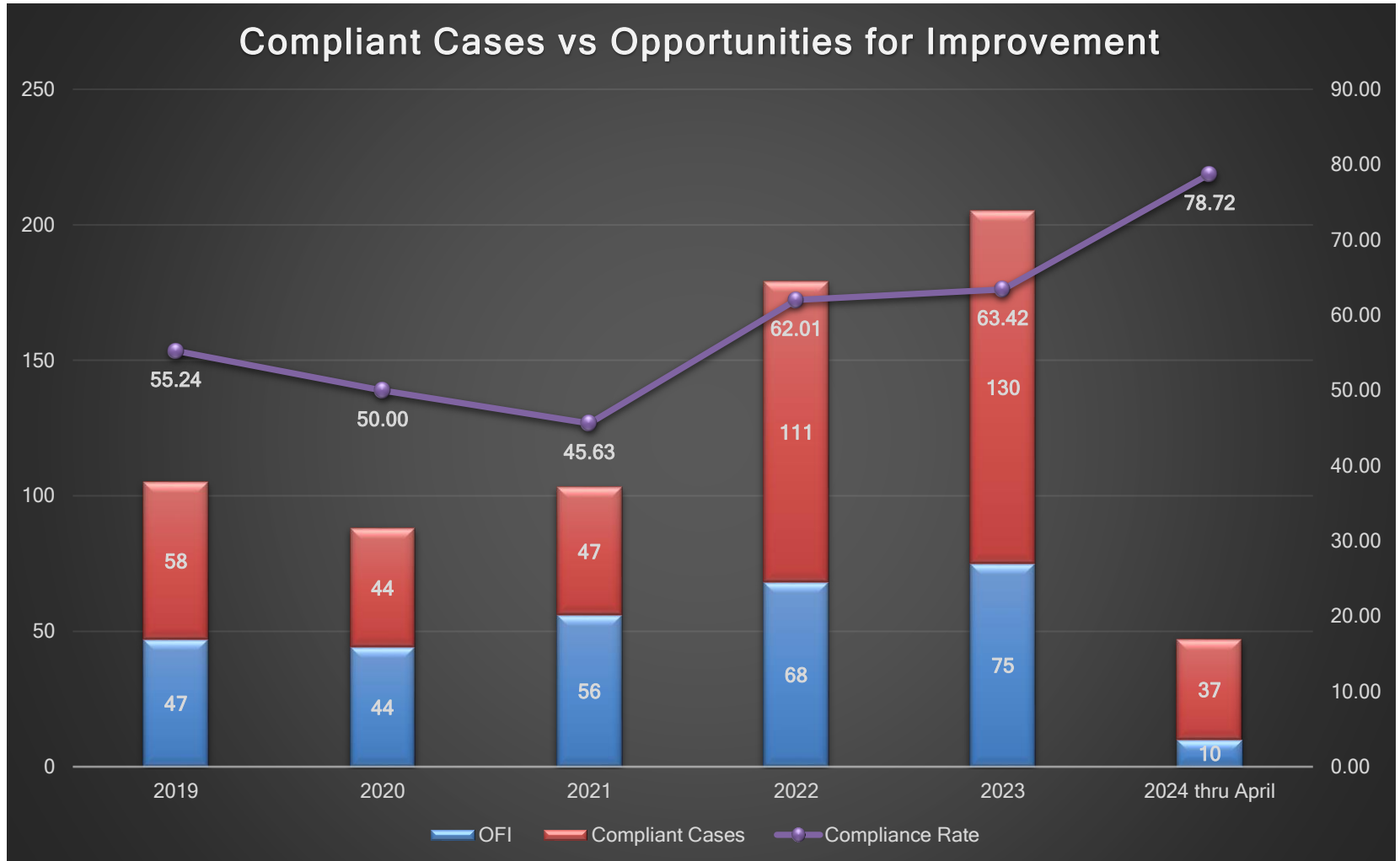


SEPSIS DOCUMENTATION JOURNEY

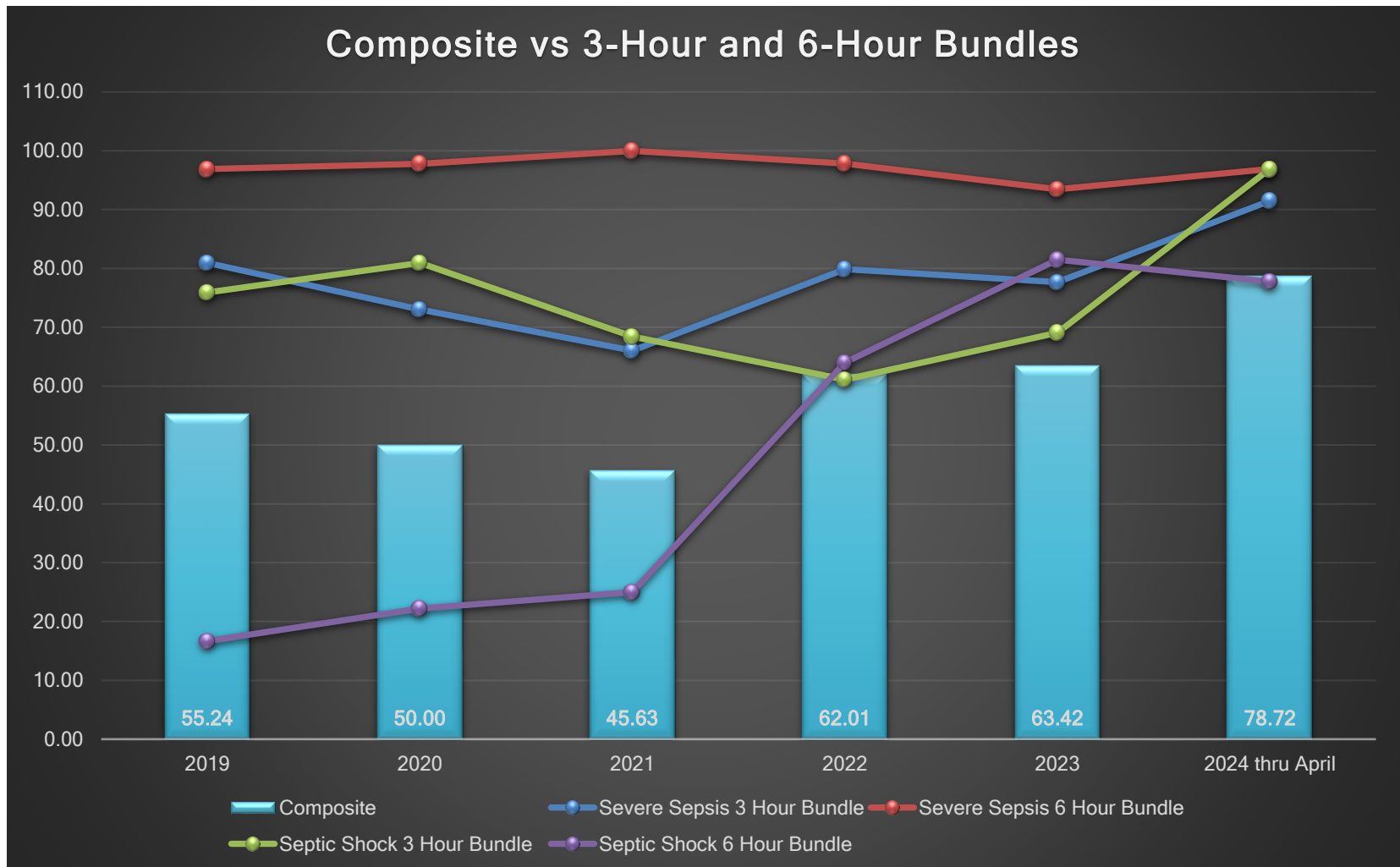
Our Sepsis Journey:

- 2019 prioritized sepsis documentation improvement within our hospital and began to see an increase in our volume of cases diagnosed with severe sepsis. Quality also started working closely with our CDI specialist on documentation improvement efforts.
- We transitioned from McKesson Paragon to EPIC in October 2020, at the same time we were moving into our new inpatient tower and were 7 months into the COVID pandemic.
- Late 2021, we started our Sepsis Committee utilizing the framework from Anthem Q-HIP.
- In 2022, we welcomed a new hospitalist group and incorporated our ER Providers into the committee. We also named sepsis physician champions.
- In 2022, we started tying our Sepsis Core Measure compliance to the hospital's quality goals.
- In 2022, we also created our Adult Sepsis Screening and Treatment Policy
- Early 2023, we implemented the Sepsis SmartPhrase in EPIC and again began to see an increase in the volume of sepsis cases in parallel with increased buy-in from the hospitalist group.
- January 2023, were notified that we were targeted for CMS validation.

Performance Improvement 2019-present



Performance Improvement 2019-present



Performance Improvement 2019-present

| Core Measure Performance | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 thru April |
|------------------------------|-------|-------|-------|-------|-------|-----------------|
| OFI | 47 | 44 | 56 | 68 | 75 | 10 |
| Compliant Cases | 58 | 44 | 47 | 111 | 130 | 37 |
| Denominator | 105 | 88 | 103 | 179 | 205 | 47 |
| Excluded | 60 | 112 | 79 | 89 | 154 | 57 |
| Compliance Rate | 55.24 | 50.00 | 45.63 | 62.01 | 63.42 | 78.72 |
| *Compliant Cases = Numerator | | | | | | |

| Core Measure Performance | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 thru April |
|-----------------------------|-------|-------|--------|-------|-------|-----------------|
| Severe Sepsis 3 Hour Bundle | 80.95 | 73.03 | 66.02 | 79.88 | 77.67 | 91.49 |
| Severe Sepsis 6 Hour Bundle | 96.88 | 97.78 | 100.00 | 97.80 | 93.46 | 96.88 |
| Septic Shock 3 Hour Bundle | 75.90 | 80.95 | 68.42 | 61.11 | 69.09 | 96.88 |
| Septic Shock 6 Hour Bundle | 16.67 | 22.22 | 25.00 | 64.00 | 81.48 | 77.78 |
| Composite | 55.24 | 50.00 | 45.63 | 62.01 | 63.42 | 78.72 |



FORMATION OF A SEPSIS
IMPROVEMENT TEAM 2021

Anthem Q-HIP Measure Title: Continuous Quality Improvement (CQI) for Sepsis on Hospital Floors

Society of Critical Care Medicine - Surviving Sepsis Campaign

<https://www.sccm.org/SurvivingSepsisCampaign/Home>

Early Identification on Hospital Floors & Hour 1 Bundle Implementation Guide

<https://www.sccm.org/SurvivingSepsisCampaign/Resources/Implementation-Guide>

Description: Facility has a CQI program in place to improve the care of inpatients with sepsis on hospital floors/wards.

Evaluation Criteria: To meet the measure requirements, the following must be in place by the end of the measurement year:

- A sepsis improvement team with a designated leader and representation from both nursing and medical staff
- Action plan to implement routine screening for sepsis done by nurses on hospital floors/wards. If already implemented, the action plan should include improving the screening process on floors/wards.
- Action plan for hospital floors/wards to implement the Surviving Sepsis Campaign 1 Hour Bundle, including lactate measurement, blood cultures, broad-spectrum antibiotics, fluids and vasopressors. If already implemented, the action plan should address improving compliance with the Hour 1 Bundle.
- Educational program for nursing and medical staff. This should include the pathophysiology and early identification of sepsis, effective communication with the provider, and preparing for and giving timely treatments.
- Ongoing monitoring, data collection, reporting and feedback to clinical staff.



Memorial

THE SEPSIS NOTES



CMS VALIDATION



BILLING AND DENIALS

Hospitals and providers who target to meet CMS SEP-1 requirements, may be denied payments by insurers based on more clinically oriented definitions (SEPSIS-3 or CDC ASE).

- **SEPSIS-1 (1992):** The original Consensus Conference on Sepsis Definitions from 1992 which initiated the 2 out of 4 SIRS (systemic inflammatory response syndrome).
- **SEPSIS-2 (2001):** The Second Consensus Conference in 2001, expanded diagnostic criteria but retained the 2 or more SIRS criteria.
- **CMS SEP-1 (2015):** In 2015 The Centers for Medicare and Medicaid Services (CMS) instituted the sepsis SEP-1 quality improvement program.
- **SEPSIS-3 (2016):** The most recent 2016 Consensus Conference on Sepsis Definitions recommended elimination of the SIRS criteria due to its lack of sensitivity and specificity. Replaced with infection plus SOFA score of 2 or above.
- **CDC ASE (2018):** In 2018, the Centers for Disease Control and Prevention (CDC) published a hospital toolkit for sepsis where they provide the definition for the Adult Sepsis Event.

Medicare Inpatient Hospital Billing for Sepsis

Sepsis is the body's extreme response to an infection. It is a life-threatening, emergency medical issue that often progresses quickly and responds best to early intervention. The definition of and guidance for sepsis have changed over the years in attempts to identify it more accurately. The definition of sepsis was updated in 2016 by an international task force to better differentiate sepsis from a general infection. This narrower definition is widely recognized by groups such as the World Health Organization. However, CMS and CDC currently recognize an older, broader definition. Sepsis is a frequently billed diagnosis in Medicare. There are concerns that hospitals may be taking advantage of this broader definition, as they have a financial incentive to do so. This study will analyze Medicare claims to assess patterns in the inpatient hospital billing of sepsis in 2023 and describe how the billing of sepsis varied among hospitals. We will also estimate the costs to Medicare associated with using the broader, rather than the narrower, definition of sepsis.

| Announced or Revised | Agency | Title | Component | Report Number(s) | Expected Issue Date (FY) |
|----------------------|--|--|--------------------------------------|------------------|--------------------------|
| March 2024 | Centers for Medicare and Medicaid Services, Centers for Disease Control and Prevention | Medicare Inpatient Hospital Billing for Sepsis | Office of Evaluation and Inspections | OEI-02-24-00230 | 2025 |



THANK YOU!

ROBIN REGULA, RN

AMY STEPHENS, MBA, RN, CPHQ, CHC

A Collaborative Interdisciplinary Process for Improving Sepsis Documentation and Expected Mortality

May 15, 2024

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Jonathan Castro MD, MS



ABOUT US – CCF Marymount

- Located in Garfield Heights, Ohio
- Opened in 1949
- Joined the Cleveland Clinic Health System in 1995
- 269 Bed Acute Care Hospital



BACKGROUND

- Meticulous documentation is critical for establishing provision of care, facilitating coding and billing, and accurately assigning risk of mortality
- From Q1 2021 through Q2 of 2022, CCF MM did not experience a decrease in sepsis mortality index (O:E) despite improvements in sepsis response and mortality rate

BACKGROUND

- A process called Documentation and Expected Mortality Improvement (DEMI) was developed at CCF MM
- A collaborative and interdisciplinary process with early identification of sepsis mortalities, chart review, and reconciliation.

OBJECTIVE / PURPOSE

- Mortality Index (O:E) – important for assessing performance, benchmarking, rankings and value based repayment
- DEMI
 - Implemented in Q3 2022
 - Daily mortality surveillance, chart review by members of our quality department and in collaboration with licensed independent providers, reconcile chart documentation

METHODS

QTM identifies potential sepsis mortalities

- Daily mortality list review to identify possible sepsis mortalities
- Search chart & review ED provider notes, H&P, & discharge summary (if written) for “sepsis” and “septic”

QTM conducts initial scanning review of chart, initiates tracking & notifies LIP of mortality

- If “sepsis” or “septic” is mentioned in the chart, look for:
- Variances in sepsis documentation
 - Missing POA conditions or designations

LIP conducts review, addresses opportunities for improvement, & notifies QTM of actions taken

- Reconcile differentials
- Add missing POA conditions
- Add high-weighted mortality variables
- Collaborate with other LIPs as needed

QTM collaborates with CIS & LIPs to track reviews & conduct follow up as needed

- Did case code out as a sepsis mortality?
- Were SEP-1 bundle metrics met?
- Were Cleveland Clinic Health System metrics met?
- What are opportunities for improvement?

METHODS

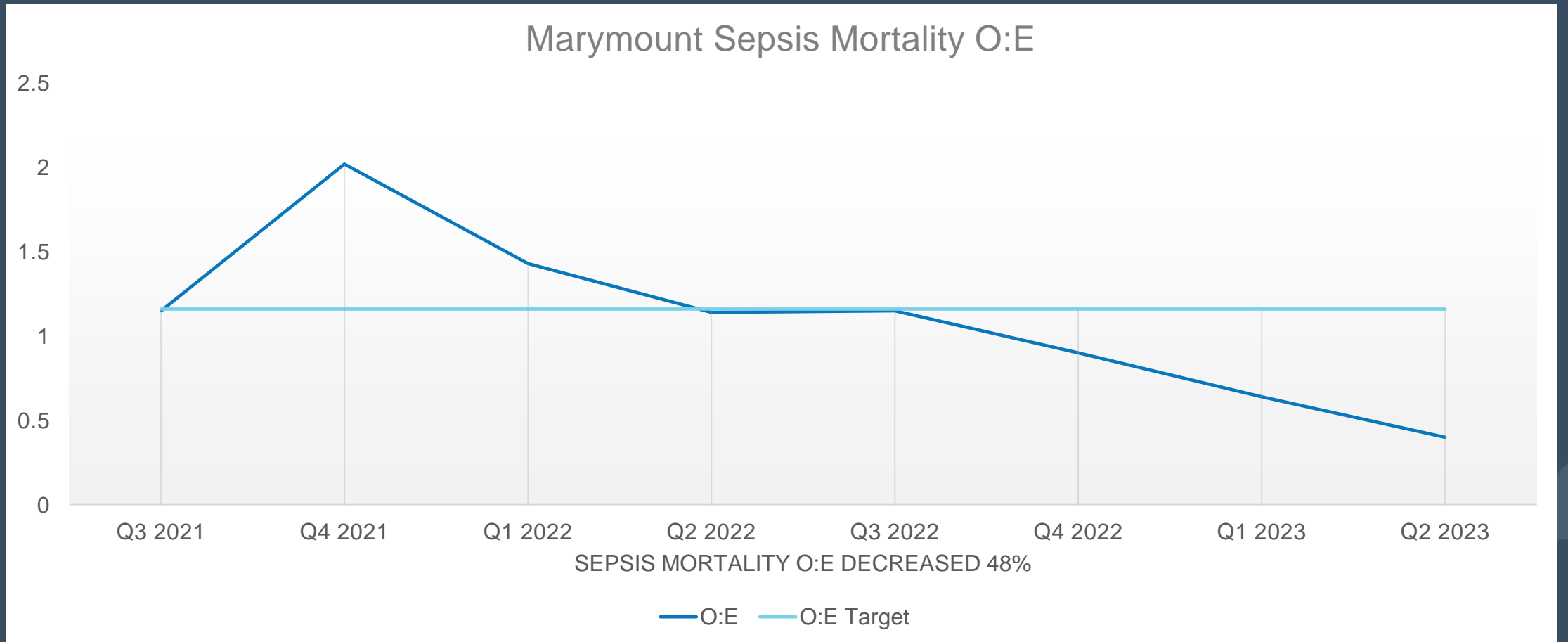
High-Weighted Sepsis Mortality Variables

| | |
|-----------------------|-------------------------|
| Vent on admission day | Respiratory failure |
| DNR on vent | Liver failure |
| Shock | Anemia |
| F/E disorders | Coagulation defect |
| Malnutrition/Cachexia | Thrombocytopenia |
| Metastatic CA | Plasma protein disorder |

OUTCOMES

- 75 Charts reviewed between 8/2022 & 6/2023
- 35 cases excluded as sepsis mortalities
 - Diagnoses clarified as other than sepsis
- In comparison to Q3 2021 through Q2 2022
 - Increase in number of patients treated for sepsis
 - Observed mortality rate decreased
 - Expected mortality rate decreased
 - Sepsis mortality O:E ratio decreased

OUTCOMES



CONCLUSIONS

- DEMI improved data accuracy & both observed & expected mortality
- Opportunities for improvement were identified & addressed

CONCLUSIONS

- Identified Opportunities for Improvement
 - Missing “Present on Admission” (POA) designation
 - Sepsis differentials without rule-in or rule-out
 - Variances in notes from primary and consulting teams
 - Discharge summary not reconciling diagnoses
 - Missing appropriate high-weight variables
 - Incorrectly attributed mortalities

KEY TAKEAWAY

A team-based collaborative, interdisciplinary Documentation and Expected Mortality Improvement (DEMI) process can positively impact the sepsis mortality index (O:E), hospital rankings, and other quality-based metrics



Every life deserves world class care.

OHA collaborates with member hospitals and health systems to ensure a healthy Ohio

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HelpingOhioHospitals



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