



**IntelliSep**<sup>®</sup>  
SEPSIS TEST

**TRANSFORMING SEPSIS CARE**

**Real-World Results from  
IntelliSep at OLOL**

 **Cytovale**<sup>®</sup>

# Our Lady of the Lake Regional Medical Center

## FACILITY FACTS

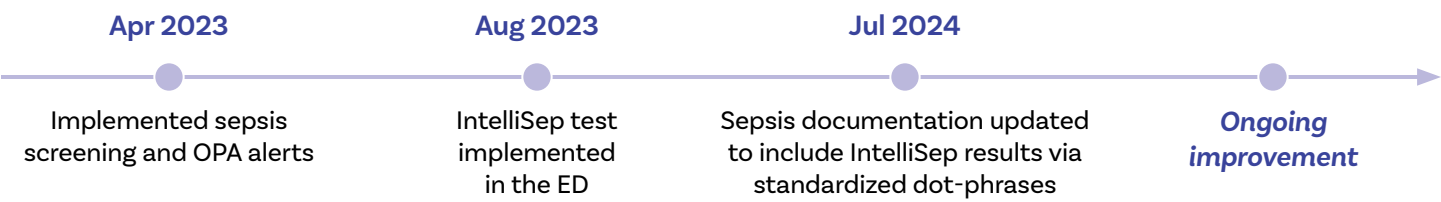
- Flagship hospital of Franciscan Missionaries of Our Lady Health System
- Largest inpatient facility in Louisiana (800 beds)
- Level 1 Trauma Center and major academic teaching hospital for LSU

## EMERGENCY DEPARTMENT OVERVIEW

- Regional ED Volume: 96,000 ED visits annually
- ESI Avg: 2.8
- 3 Freestanding EDs
- Market ED Volume: 158,000 visits

With a longstanding commitment to sepsis care, Our Lady of the Lake Regional Medical Center enhanced early recognition and treatment by developing a protocol using Epic’s Our Practice Advisory (OPA) alerts. This protocol incorporates both triage and provider tools to streamline screening, standardize diagnostic order sets, and guide timely ED decisions.

## TIMELINE OF SEPSIS QUALITY IMPROVEMENT INITIATIVE WITH INTELLISEP



IntelliSep is the first and only FDA-cleared diagnostic test to aid in early sepsis detection in the ED. In ~8 minutes, it assesses biophysical properties of white blood cells and delivers clinically actionable insights about sepsis risk, presented as a numerical value with three interpretation bands.

See the IntelliSep Test Instructions for Use for all cleared claims and performance data.

## Two ways for ordering IntelliSep



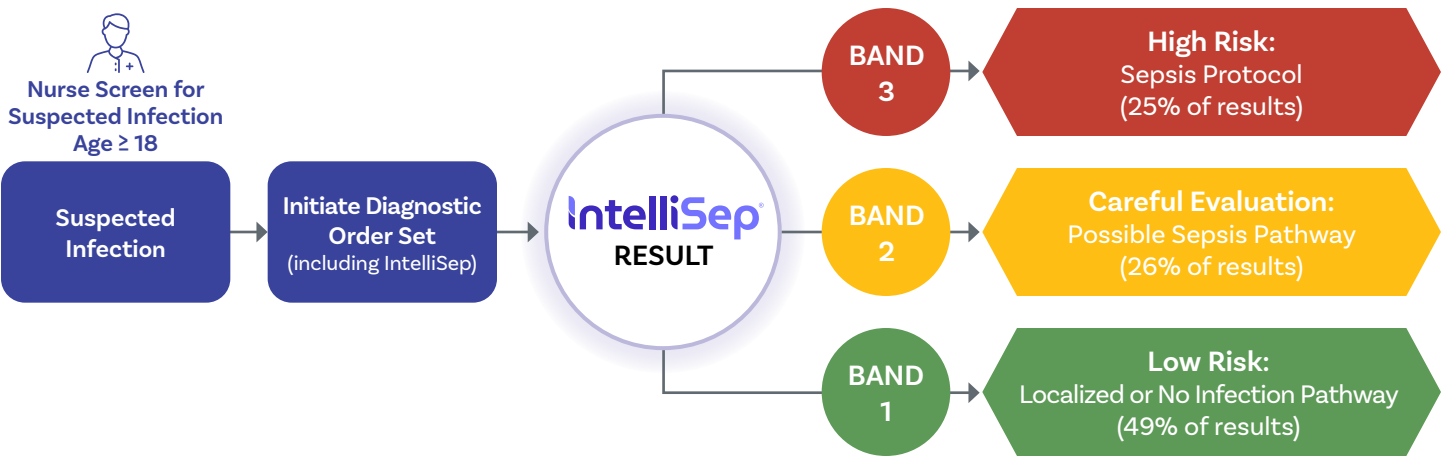
**Primary (Triage) OPA:**  
triggered by triage vitals and nursing questionnaire



**Secondary (Provider) OPA:**  
triggered later by the Epic Sepsis Model if clinical criteria are met

*\* Clinicians were educated on these pathways during the first month of implementation.*  
*\* As of July 2024, clinicians could order the test at their discretion, independent of the EPIC alert.*

## EMERGENCY DEPARTMENT WORKFLOW USING INTELLISEP



The above Decision Making notes regarding IntelliSep were generated by the Emergency Department of Our Lady Of the Lake Regional Medical Center and were based on their institutional practices and site validation of IntelliSep. See the IntelliSep Test Instructions for Use for all cleared claims and performance data.

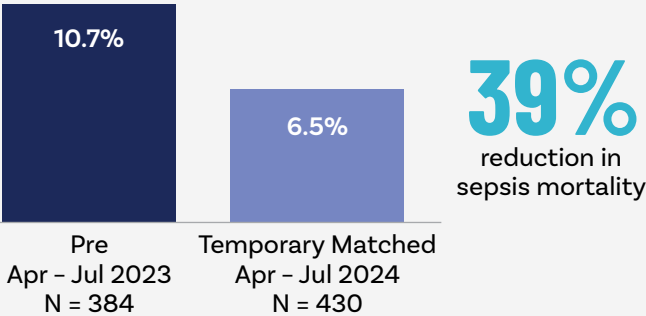
# IntelliSep Impact at Our Lady of the Lake Regional Medical Center

## 1-Year Real-World Outcomes

### CLINICAL IMPACT

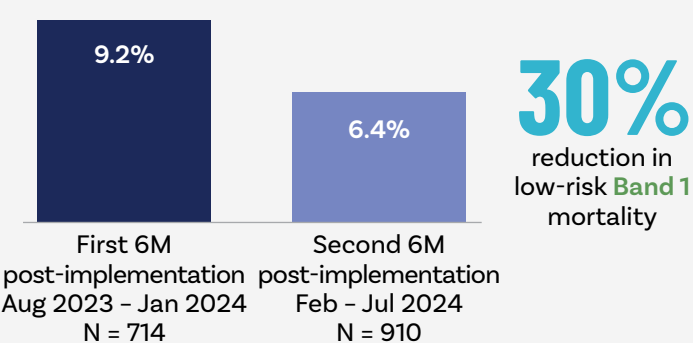
#### 30-Day Sepsis Associated Mortality Rate<sup>1</sup>

p < 0.001



#### 30-Day In-Hospital Mortality Rate Band 1 Patients<sup>2</sup>

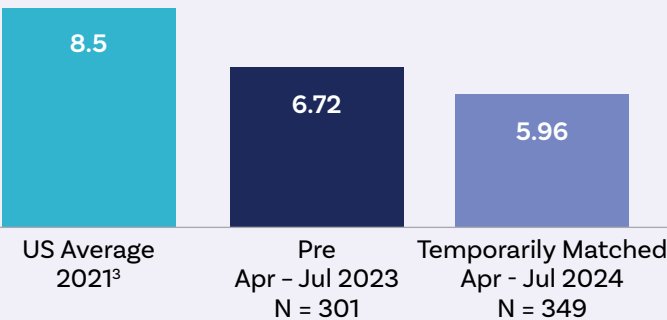
p < 0.05



### OPERATIONAL AND FINANCIAL IMPACT

#### Hospital LOS for Sepsis Patients<sup>1</sup>

p < 0.048



**0.76**

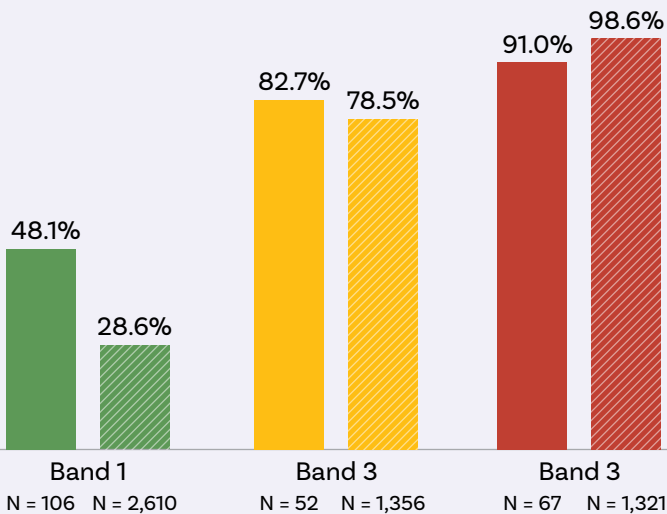
day reduction  
in LOS



**\$2,235**

estimated savings  
per sepsis patient<sup>3,4</sup>

#### Blood Culture Use Rate<sup>1</sup>



Improved risk stratification enables smarter testing  
and staffing efficiency

**40%**

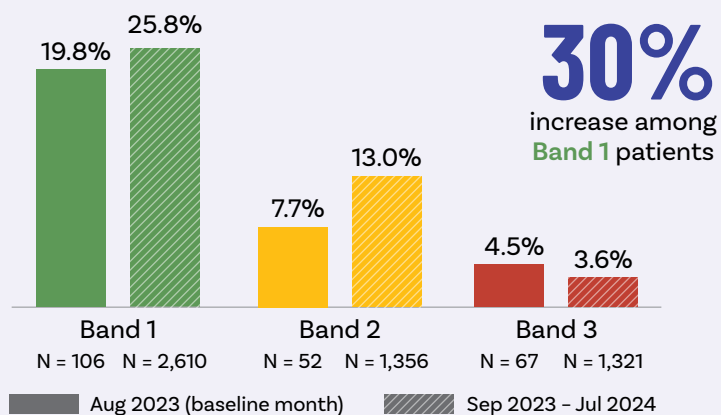
reduction in unnecessary  
blood cultures for low-risk  
**Band 1** patients

**8%**

increase in blood cultures  
in high-risk **Band 3**

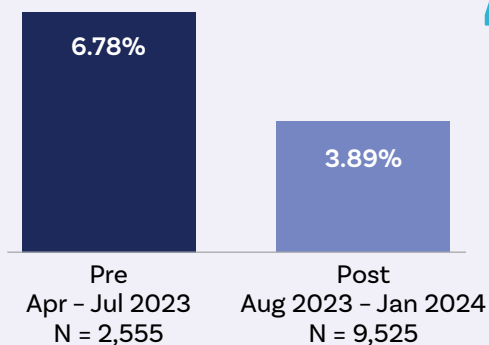
## OPERATIONAL AND FINANCIAL IMPACT

### ED Discharge Rate<sup>2</sup>



### 3-Day ED Return Rate<sup>2</sup>

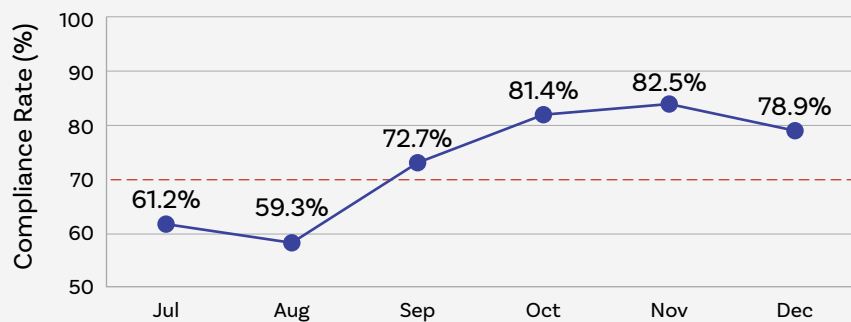
$p < 0.032$



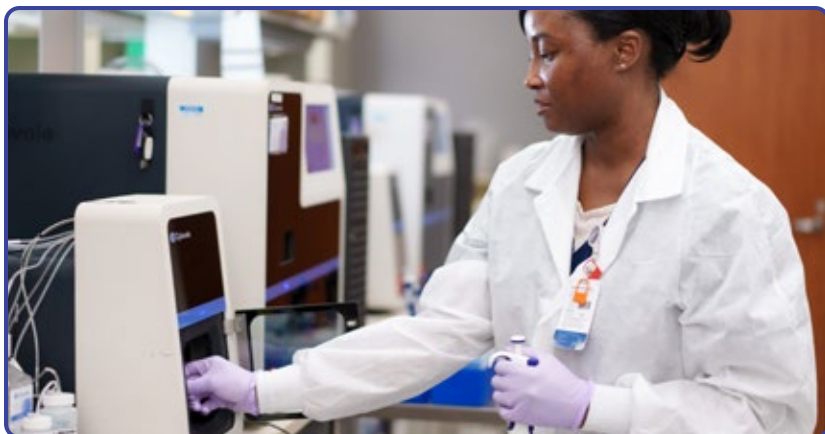
## QUALITY MEASURE IMPACT

- Investigation period: Jul - Dec 2024
- Sampled 100 discharged patients/month with a sepsis ICD-10 code
- N = 598

### SEP-1 Compliance<sup>5</sup>



**29%**  
increase in SEP-1 compliance  
while reducing use of resources<sup>1,5</sup>







***"Our results show that a higher percentage of patients are returning home to their families earlier, at lower cost for them and the hospital. Our ability to improve patient flow has been revolutionary."***

**Christopher Thomas, MD**

Chief Quality Officer  
Franciscan Missionaries of Our Lady Health System



***"These findings spotlight how IntelliSep enables clinicians to detect sepsis earlier in patients for whom the condition wasn't otherwise suspected. Conversely, IntelliSep also provides an objective tool for clinicians to rule out sepsis and move onto an alternative diagnosis."***

**Hollis O'Neal, MD, MSc**

Critical Care Physician, Medical Director of Research  
Our Lady of the Lake Regional Medical Center



***"This is a game-changer for us. Until this point there hasn't been a clear diagnostic tool to determine if a patient had or could develop sepsis. With clear and early detection, we are able to get patients the appropriate treatment, at the right time."***

**Mark Laperouse, MD**

Medical Director of Emergency Services  
Our Lady of the Lake Regional Medical Center





# ***“IntelliSep helps us save one life every week.”***

**— Mark Laperouse, MD**

Medical Director of Emergency Services  
Our Lady of the Lake Regional Medical Center



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**cytovale.com**

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<sup>1</sup> Thomas CB, Wyler B, D'Antonio CM, Laperouse M, et al. Impact of a Sepsis Quality Improvement Initiative on Clinical and Operational Outcomes. *Healthcare*. 2025; 13(11):1273.

<sup>2</sup> Data on file.

<sup>3</sup> AHRQ Report to Congress: An Assessment of Sepsis in the United States and its Burden on Hospital Care (2023)

<sup>4</sup> Assuming average \$2,941 cost per inpatient day; \$25,000 per sepsis admission and LOS of 8.5 days

<sup>5</sup> Thomas CB, Richard K, Grantham A, Jagneaux T, Sorrells M, O'Neal H. Investigation of the Effect of Implementing a Host Response Test on SEP-1 Compliance. Presented at: ACEP Scientific Assembly; 2025 Oct; Salt Lake City, UT.