

# Quality Transparency Dashboard

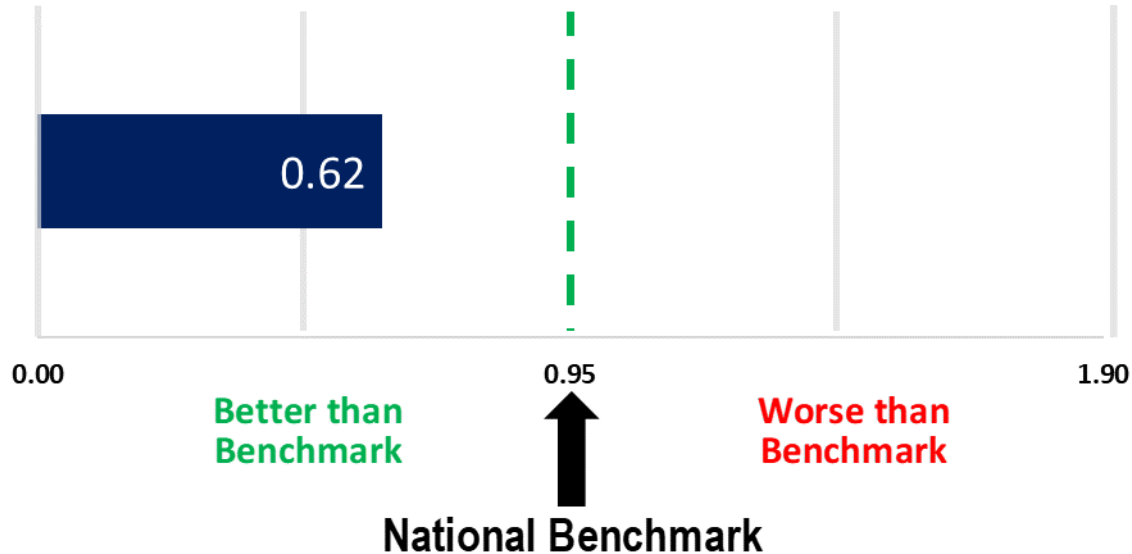
- In collaboration with the Hospital Quality Institute (HQI), the Patient Safety Movement Foundation (PSMF) and the California Hospital Association (CHA)
- Includes a succinct expression of 5 quantitative outcome measures and 3 program status measures, as well as consumer-level explanations and limitations of each measure

# Five Outcome Measures

1. Central line-Associated Blood Stream Infection (CLABSI)
2. Colon Surgical Site Infection (SSI)
3. Nulliparous, Term, Singleton, Vertex (NTSV) Cesarean Birth Rate
4. Sepsis Mortality
5. All-Cause 30-day Unplanned Readmission Rate

# CLABSI

## Central line-Associated Blood Stream Infection (CLABSI) Standardized Infection Ratio Oct 2019 – Mar 2021



## What are we doing to improve:

UCI Health has an ongoing CLABSI performance improvement team that supports best practices for insertion, maintenance and discontinuation of central lines. The team regularly performs central line quality rounds to ensure that our central lines are maintained at the highest level. The team facilitates an in-depth review of all CLABSI cases to assess for apparent causes and routinely follows up on actions items developed during these reviews to ensure they are completed.

# Outcome Measure Definition

- **CLABSI – Central line-Associated Blood Stream Infection:**

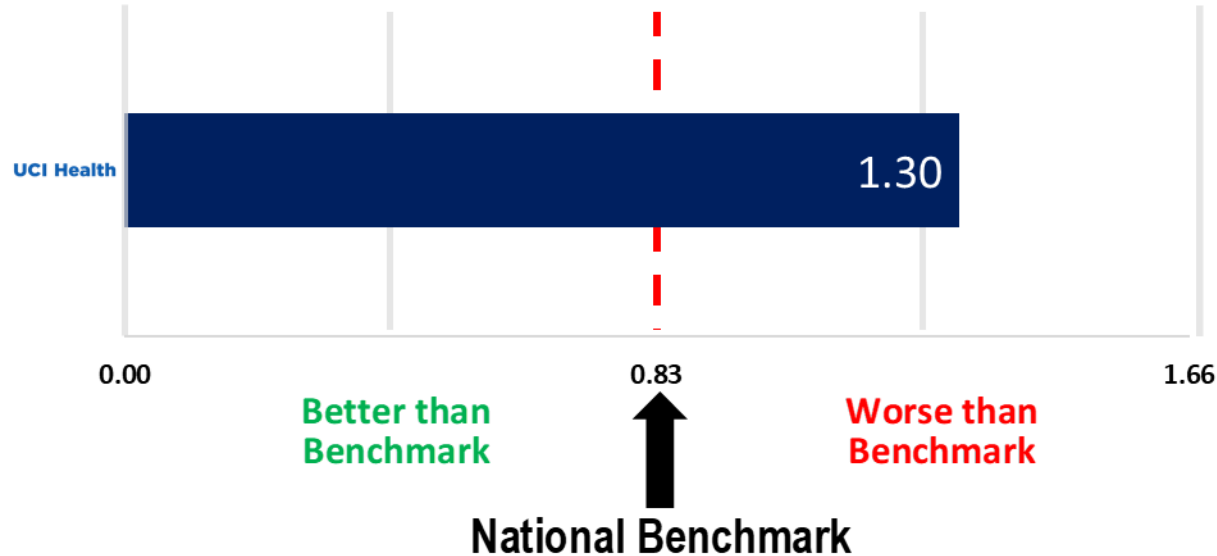
A central line is an intravenous catheter (IV) that allows access to large veins that empty out close to the heart to quickly treat conditions and can stay in place for weeks or months. Central Line Associated Blood Stream Infections (CLABSIs) occur when germs enter the bloodstream through a central line and cause an infection. The value shown above is a Standardized Infection Ratio (SIR), which is the ratio of observed-to-expected infections during the measure period. SIRs below 1.00 indicate that the observed number of infections during the measure period was lower than would be expected under normal conditions, whereas values above 1.00 indicate that the observed number of infections was higher than expected.

- **Limitations:**

In the calculation of the Standardized Infection Ratio (SIR), the CDC adjusts for differences between hospitals. However, patient risk factors are not taken into account. These patient-specific variables (e.g., poor skin integrity, immunosuppression) can increase the risk of developing a central line infection. Hence, the SIR for hospitals that care for more medically complex or immunosuppressed patients may not be adequately adjusted to account for those patient-specific risk factors.

# Colon SSI

## Colon Surgical Site Infection (SSI) Standardized Infection Ratio Oct 2019 – Mar 2021



## What are we doing to improve:

UC Irvine Medical Center is dedicated to achieving the highest surgical quality outcomes. Multidisciplinary performance improvement system is actively leading evidence-based strategies on surgical site infection (SSI) prevention. Standardized perioperative patient care pathways and order sets have been implemented to assure best practices adherence organization-wide. Ongoing thorough monitoring of compliance with SSI prevention practices (bundles) has been conducted by different levels of the organization in order to assure high adherence and identify opportunities for improvement. Data is used to drive practice and process changes to eliminate the risk of SSIs.

# Outcome Measure Definition

- **Colon SSI – Colon Surgical Site Infection:**

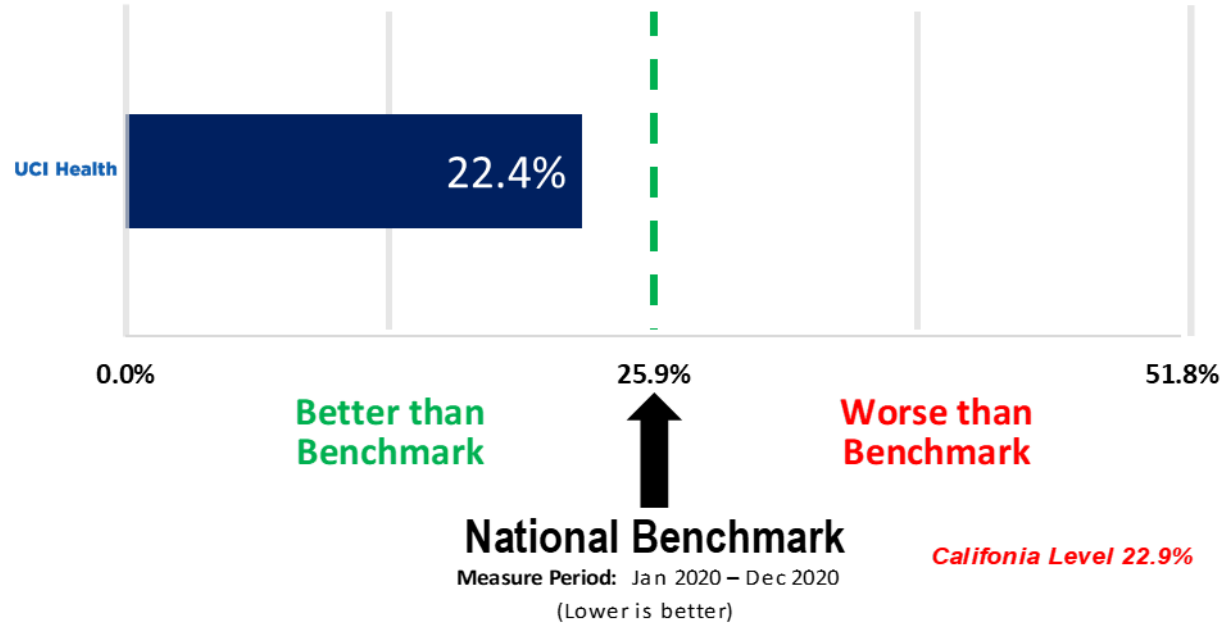
An infection (usually bacteria) that occurs after a person has colorectal surgery that occurs at the body site where the surgery took place. While some involve only the skin, others are more serious and can involve tissues under the skin, organs, or implanted material. The value shown above is a Standardized Infection Ratio (SIR), which is the ratio of observed-to-expected infections during the measure period. SIRs below 1.00 indicate that the observed number of infections during the measure period was lower than would be expected under normal conditions, whereas values above 1.00 indicate that the observed number of infections was higher than expected.

- **Limitations:**

Some, but not all patient-specific risk factors are included in the adjustment of the SIR for these types of infections. However, not all relevant risk factors are included (e.g., trauma, emergency procedures). Hence, the SIRs for hospitals performing more complex procedures or with larger volumes of trauma or emergency procedures may not be adequately adjusted to account for those patient-specific risk factors.

# NTSV Cesarean Birth Rate

Nulliparous, Term, Singleton, Vertex (NTSV)  
Cesarean Birth Rate Jan 2020 – Dec 2020



## What are we doing to improve:

California Health and Human Services Agency recognizes UCI Obstetrics Service line for our low NTSV Cesarean Delivery rates - lower than the statewide target in 4 out of the last 5 years. UCI has a robust Perinatal Transport Service providing higher level of care for both the mothers and babies with complications. At UCI, we do not perform preterm deliveries without a compelling indication, and we remain at 100% compliance with timing and administration of steroids for premature babies to help develop their lungs and brain.

# Outcome Measure Definition

- **NTSV - Nulliparous, Term, Singleton, Vertex Cesarean Birth Rate:**

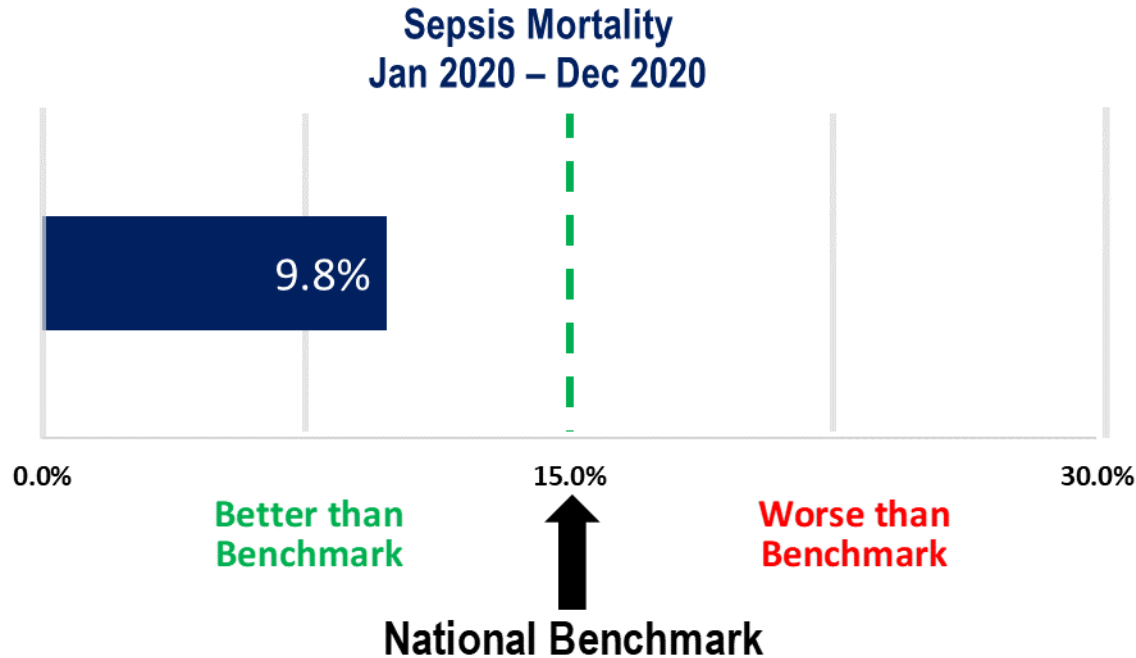
The percentage of cesarean (surgical) births among first-time mothers who are at least 37 weeks pregnant with one baby in a head down position (not breech or transverse). Lower values indicate that fewer cesareans were performed in the hospital among primarily low risk, first-time mothers.

- **Limitations:**

NTSV rates do not take into account certain obstetric conditions, such as placenta previa, that may make Cesarean delivery the safer route for both mother and infant.



# Sepsis Mortality



## Improvement Plans:

UCI Health Sepsis Task Force Committee meets monthly with key stakeholders to discuss sepsis bundle compliance, retrospective case reviews and process improvement opportunities. Current improvement plans focus on early detection and timely treatment of sepsis utilizing the newly developed ED sepsis checklist, Suspected Sepsis Order Set, and Best Practice Alert. Additionally, education efforts, including a new Computer-based Training module, are ongoing for physicians and nursing staff.

# Outcome Measure Definition

- **Sepsis Mortality:**

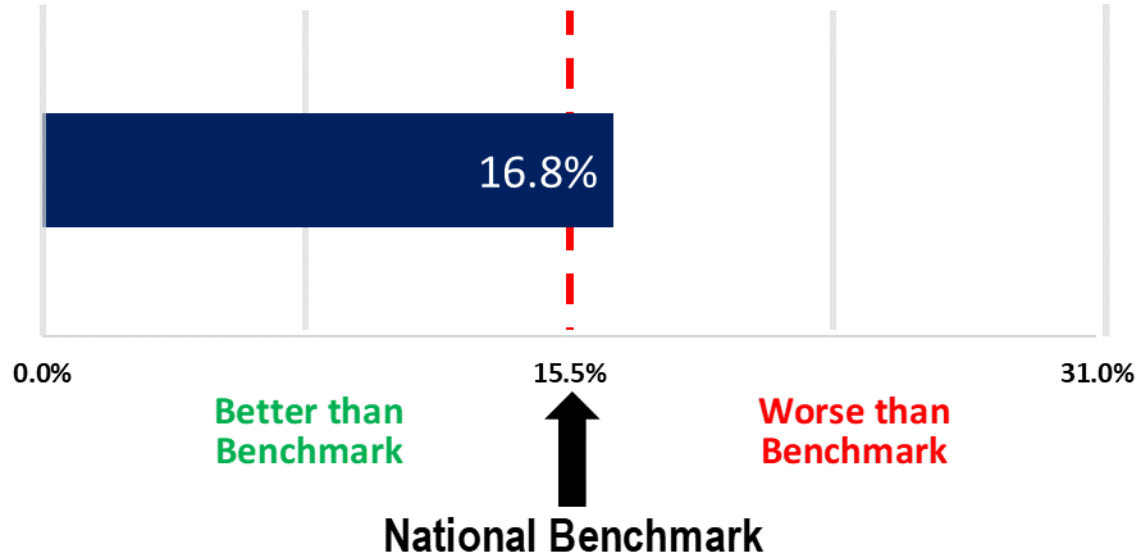
Percent of patients, with a severe infection, who die in the hospital. Most sepsis cases (over 90%) start outside the hospital. Lower percentage of death indicates better survival.

- **Limitations:**

Use of discharge/administrative data is limiting since such data has lower specificity for diagnoses than clinical data. In addition, without risk adjustment for differences in patient-specific factors, comparing rates among hospitals is difficult.

# 30-Day Readmissions

## All-Cause 30-day Unplanned Readmission Rate Jul 2019 – Nov 2019



## What are we doing to improve:

We deployed a program from CipherHealth to help manage follow-ups for discharged patients. A “Meds to Beds” program was developed and implemented to help provide meds to patients to ensure they have medication on hand when they are discharged. We also work closely with skilled nursing facilities to prevent avoidable readmission. In addition, there are initiatives led by Case Management to improve readmissions. Through our Readmission Task Force, we have been able to use technology and data to identify the high-risk patients for hospital readmission while they are still in the hospital for early intervention and prevention.

# Outcome Measure Definition

- **30-day Readmission - Hospital-wide All-Cause 30-day Unplanned Readmission Rate:**

The percentage of patients who were unexpectedly readmitted within 30 days of discharge from the hospital for any reason. Lower values indicate that fewer cases were unexpectedly readmitted after discharge.

- **Limitations:**

Some, but not all patient-specific risk factors are included in the adjustment of the readmission rate. However, not all relevant risk factors are included (e.g., trauma, emergency procedures).

# Three Program Status Measures

1. Maternity Safety Program
2. Sepsis Protocol
3. Respiratory Monitoring Program

# Program Status Measures

- **Maternity Safety Program**

**UC Irvine has a maternity safety program in place.** The maternity safety program provides a coordinated approach and emergency response to risks associated with pregnancy and childbirth.

- **Sepsis Protocol**

**UC Irvine has a sepsis protocol in place.** The sepsis protocol provides guidance for a coordinated approach to identification and treatment of an infection and inflammatory response which is present throughout the body.

- **Respiratory Monitoring Program**

**UC Irvine has a respiratory monitoring program in place.** The respiratory monitoring program provides guidance for assessment of risk of respiratory depression and includes continuous monitoring of breathing and functioning of the lungs and circulatory system when indicated.