



**ACTIONS FROM YOU**

# **South Carolina Birth Outcomes Initiative (SCBOI) Dashboard**

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Moderated by: Lynn Martin, LMSW

SCBOI Symposium

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# ACKNOWLEDGEMENTS

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- Ana López – De Fede, PhD; Distinguished Research Professor Emerita and Associate Director
- Chloe Rodriguez Ramos, MPH; Translation and Implementation Products Coordinator
- Courtney Baskin; Senior Geospatial Web Developer
- Linga Murthy Kotagiri, MD, MPH; Senior Maternal & Child Health Data Manager
- Prince Addo, MPH, PhD Candidate; Graduate Research Assistant

We would like to thank Chris Finney, MS, Division Director, SCRFA, for providing the data used to calculate the dashboard measures, and Aunyika Moonan, PhD, MSPH, CPHQ, Vice President, SCHA, for her support in communicating with birthing facilities.

The SCBOI Dashboard was developed under contract with the South Carolina Department of Health & Human Services.



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# INTRODUCTION

# BACKGROUND

IFS is a non-partisan research institute dedicated to improving policy, advancing practice and strengthening families and communities using university-community interdisciplinary research and practice.

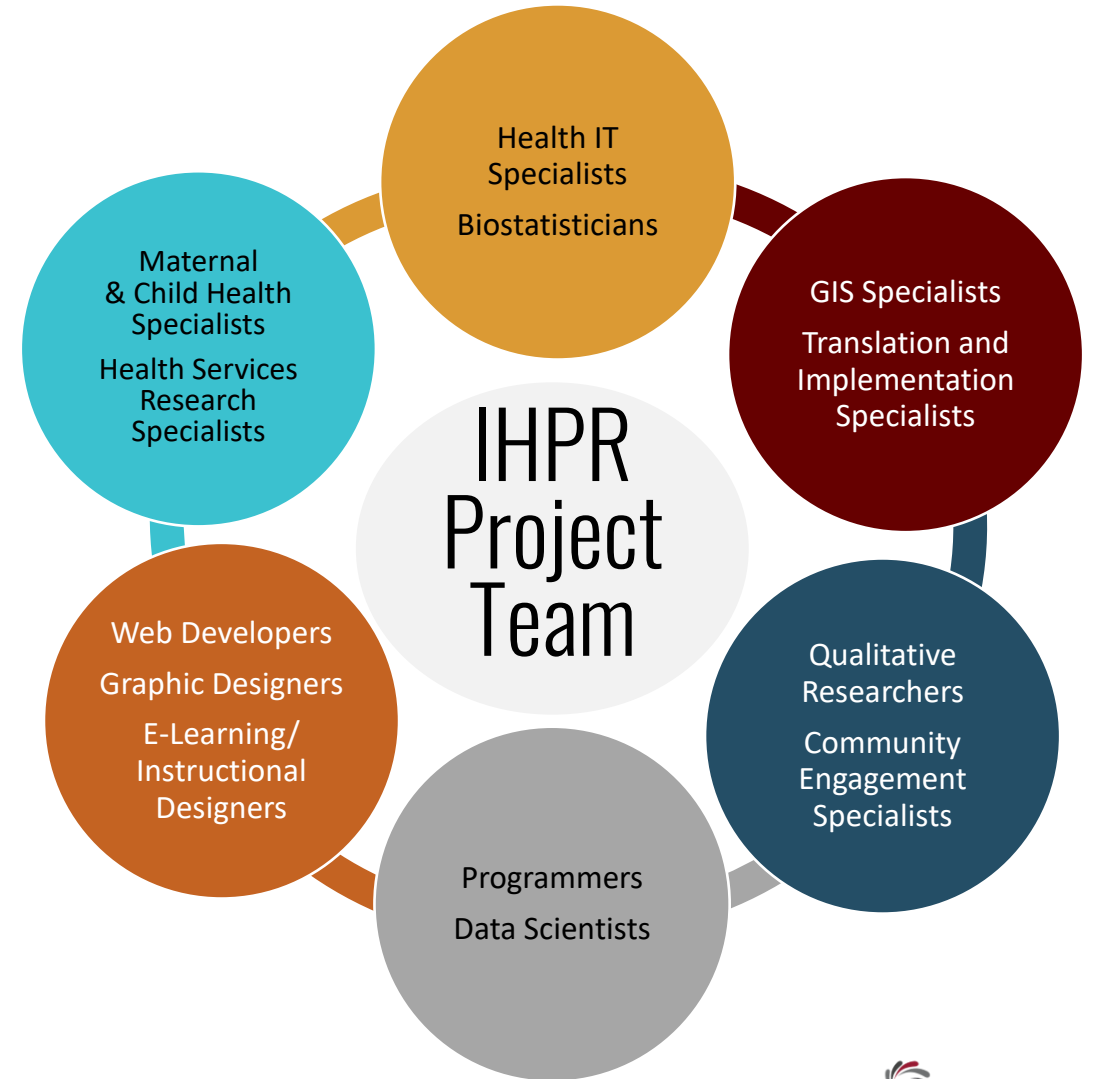
- It was created in the early 1990s through the interdisciplinary efforts of a task force commissioned by USC.
- It was securely grounded by a generous donation from Cindy and Evan Nord.
- It is currently housed within the College of Social Work at USC.



**IFS is the 4<sup>th</sup> oldest University-Medicaid partnership in the US**, providing TA and research support since 1996. IFS has had the full Medicaid data longer than any other external entity in the state. The data are ingested and fully processed monthly.

# INTEGRATED HEALTH POLICY RESEARCH (IHPR)

- An IFS division, led by Dr. Ana López-De Fede and Kathy Mayfield-Smith, that is home to a diverse, interdisciplinary team with expertise in various forms of research methods and technologies.
- Provides researchers, policy makers, and practitioners with collaborative opportunities to identify policies and practices that are grounded in research.
- Translates that research into innovative practices and helps to promote their adoption.





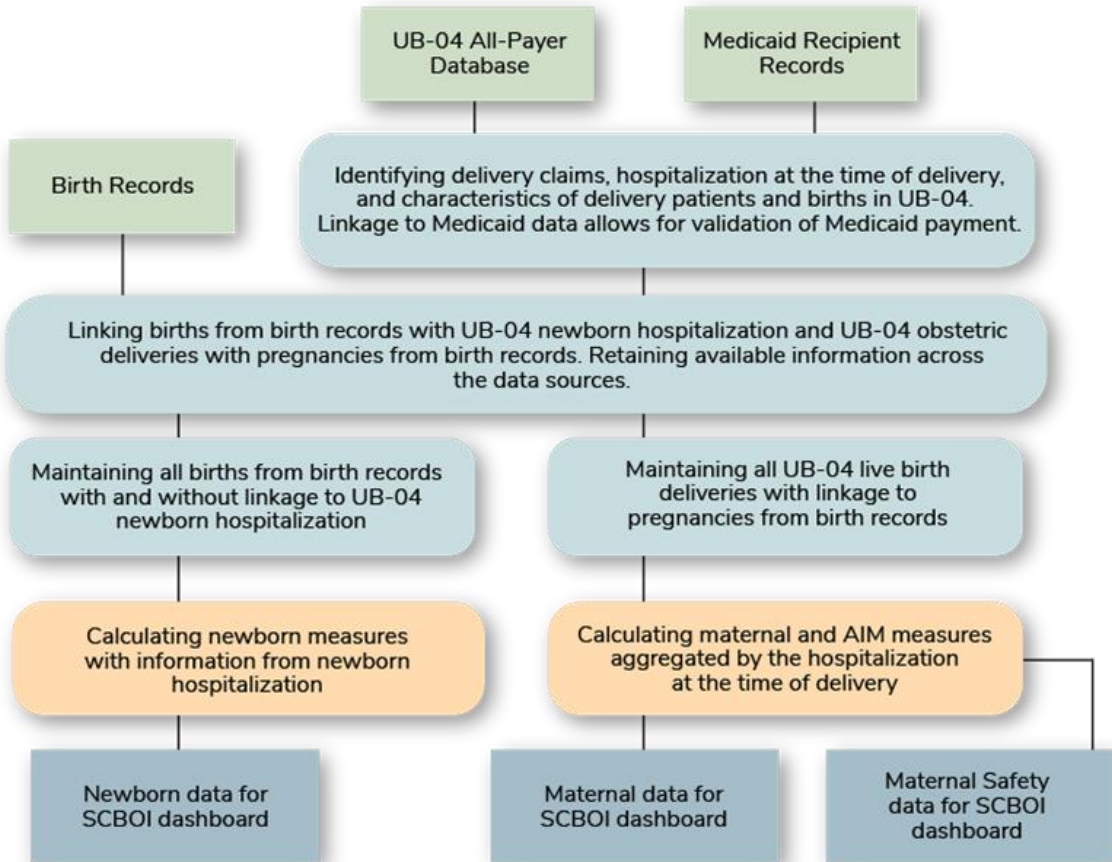
# SCBOI DASHBOARD

Updated data as of September 2024. All data reflects post-ICD-10 time periods and is reported using calendar year and quarters (CY21-23, Q1, 2021 – Q4, 2023).



# SCBOI DASHBOARD DATA AND STRENGTHS

**BOI DATA PROCESSING FLOWCHART**  
Events from October 1, 2020 – September 30, 2023 (Inclusive)



Since 2019, IFS has reported statewide and hospital data on the SCBOI dashboard, an interactive, secure, online reporting tool. The tool allows birthing facilities to:

- login and view newborn and maternal health data and outcome measures,
- filter their data by parameters like Mother’s Age Group, Mother’s Race, and Rural/Urban ZIP Code,
- see how they compare within their perinatal level and statewide,
- explore improvement tips for each measure and access web resources,
- and view Alliance for Innovation on Maternal Health (AIM) specific measures and find out more about the AIM program.



# THE HOME PAGE

Links are provided to information about data partners, the data used in reporting and measure definitions, and instructions on how to use the application.

## ABOUT THE DASHBOARD

The SCBOI interactive dashboard provides users with an instant visual representation of the statewide maternal and birth outcomes metrics – across payment, individual, facility-level, and geographical characteristics. Users can filter, print, and share these data. By connecting data to quality improvement information, the dashboard is a tool that facilitates data-driven collaborative decisions to improve the clinical outcomes of mothers and babies in SC.



Deliveries

*Improving labor and delivery*

Maternal health delivery characteristics and labor & delivery outcomes.



Births

*Addressing prematurity, low birthweight, and newborn care*

Newborn health birth characteristics and newborn outcomes.



Maternal Safety

*Promoting consistent and safe maternal care*

Alliance for Innovation on Maternal Health information and several maternal morbidity outcomes.



FAQs

Information about gaining access to hospital-level reports and using the dashboard.



User Guide

How to Use the Interactive Dashboard.



Contact Us

Help and support.

## DATA PARTNERS

This South Carolina Birth Outcomes Initiative (SCBOI) Interactive Report was developed under contract with the South Carolina Department of Health & Human Services by the University of South Carolina (USC) Institute for Families in Society (IFS). We wish to acknowledge the valuable contributions made by IFS Maternal and Child Health, Statistics, GIS, Data Science, and Information Design staff members in the development of this product.

The authors would also like to acknowledge Chris Finney, MS, Program Manager, SC Revenue and Fiscal Affairs Office, Health and Demographics Division, for providing USC IFS with the data used to calculate the findings in this report and Auryika Moonan, PhD, CPHQ, Executive Director, Data & Measurement, South Carolina Hospital Association, for her support in communicating with birthing facilities.



Healthy Connections  
MEDICAID



SOUTH CAROLINA  
REVENUE AND FISCAL AFFAIRS OFFICE  
Transforming data into solutions for South Carolina

SCHA  
SC HOSPITAL ASSOCIATION

\*Data Update\* Updated data as of September 2024. All data reflects post-ICD-10 time periods and is reported using calendar year and quarters (CY21-23, Q1 2021 - Q4 2023).

If there are any questions or concerns regarding the data, please contact the Support Team at [ifsreports@mailbox.sc.edu](mailto:ifsreports@mailbox.sc.edu).

## ABOUT THE DATA



Key Terms



Outcomes



Sources



Caveats

Download Complete Data Information



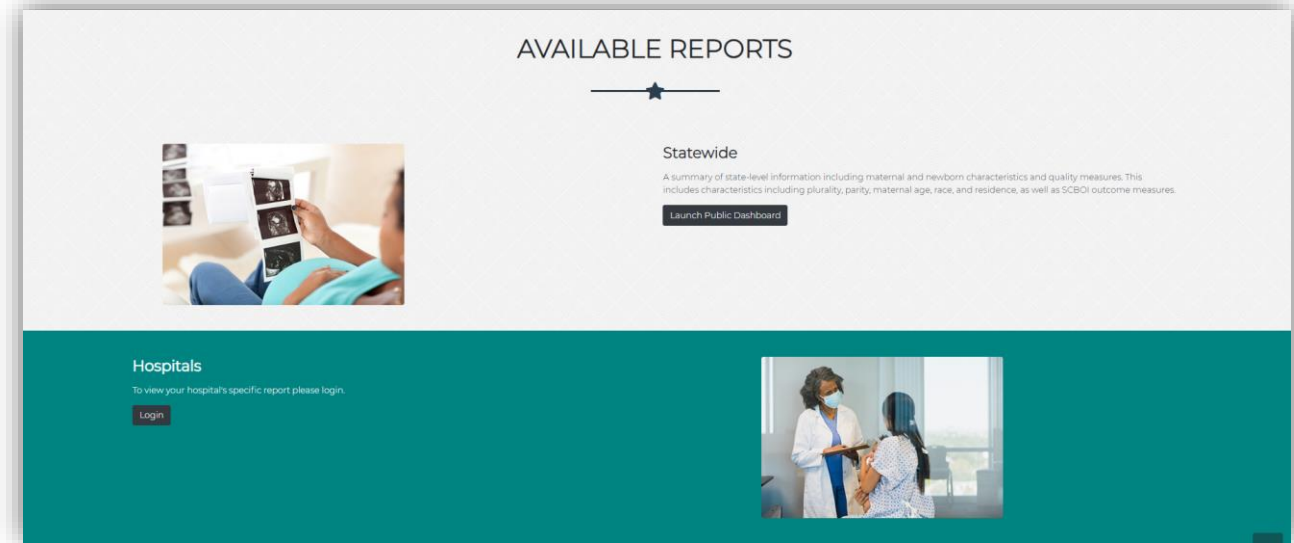
# AVAILABLE REPORTS

## Statewide

- A publicly available summary of state-level information including maternal and newborn characteristics and quality measures. This includes characteristics such as plurality, parity, maternal age, race, adequacy of prenatal care, and residence, as well as SCBOI outcome measures.

## Hospitals

- Hospital-specific reports, requiring login with permission from the hospital.



## SCBOI Dashboard Strengths for Hospital QI

- Medicaid eligibility verified through enrollment files
- Self-identified race
- Linkage and confirmation of measures, such as gestation and parity, from birth records
- Comparison to like hospitals and statewide
- Vetted and continuously updated measures using current federal standards



# USE OF THE SCBOI DASHBOARD FOR QUALITY IMPROVEMENT



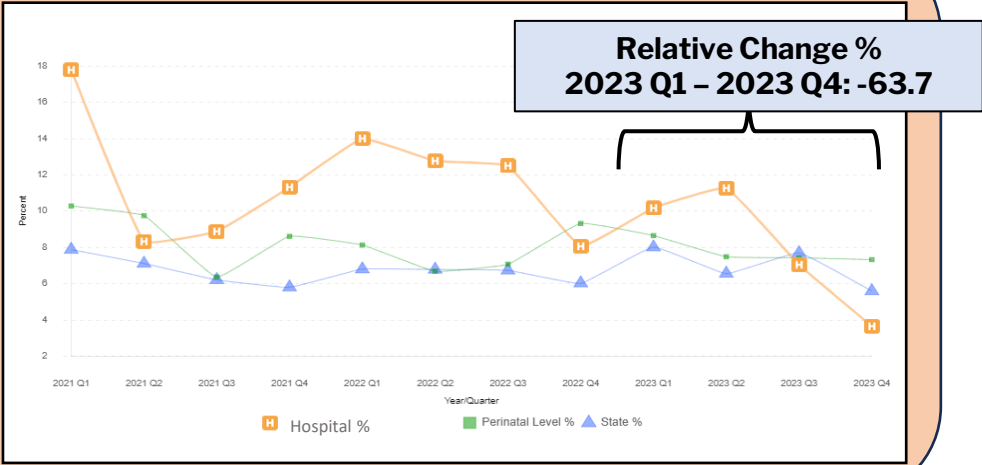
# COMPARE OUTCOMES TO LIKE HOSPITALS AND EXAMINE TRENDS



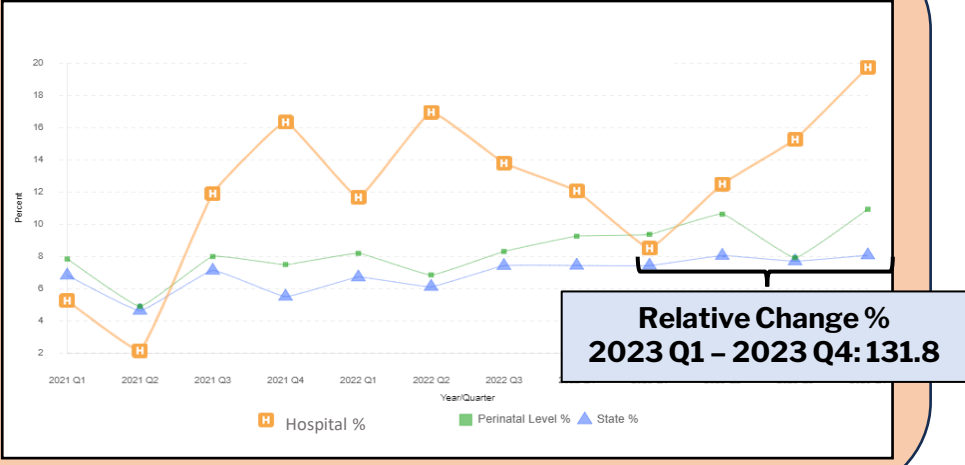
How do I know which maternal outcomes to target for QI/PSB at my hospital?

**EXAMPLE:** The rate of **SMM/Maternal Hemorrhage** for the hospital below has **decreased over time** and is now lower than hospitals within the same perinatal level. Adversely, the **rate of SMM/Severe Hypertension** has **worsened** in comparison to the rate among like hospitals. This troublesome trend indicates the need to implement the related AIM PSB focused on Severe Hypertension in Pregnancy (*the currently active bundle in SC*).

### SMM/Maternal Hemorrhage



### SMM/Severe Hypertension

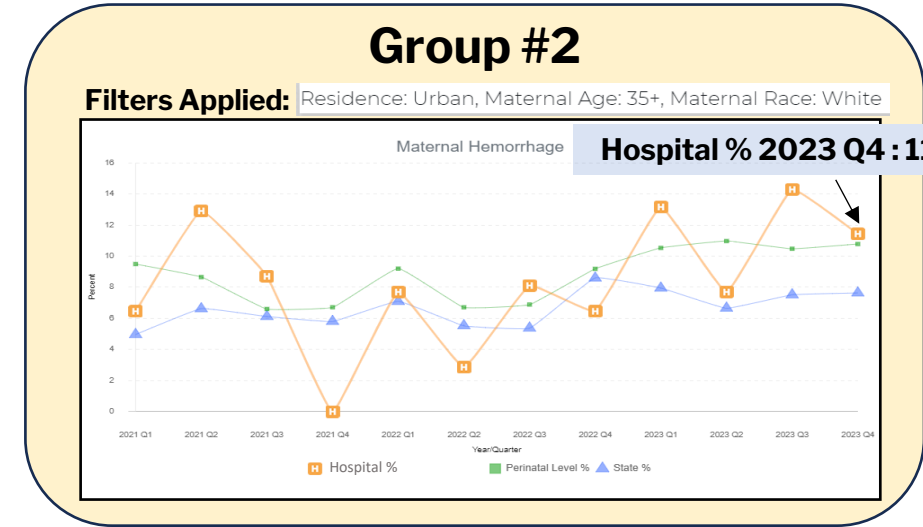
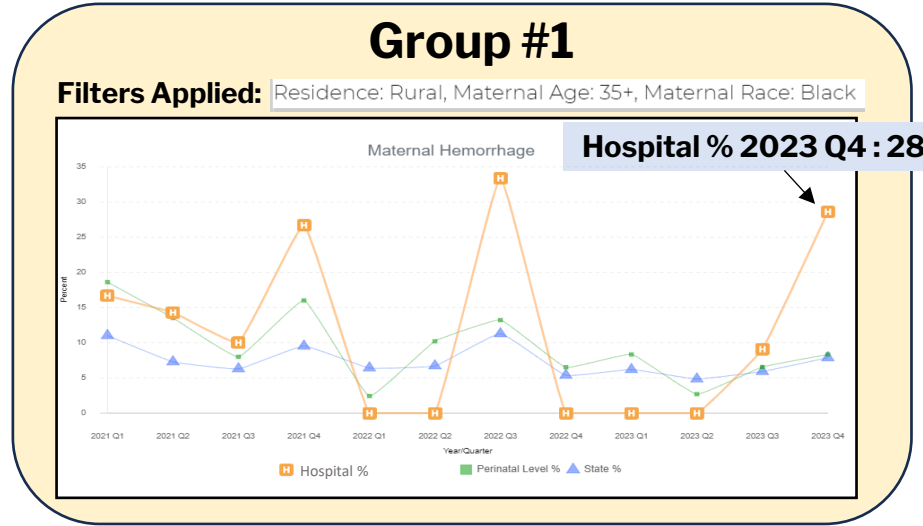


# IDENTIFY TARGET POPULATIONS BY USING FILTERS



Which obstetric patients need additional care coordination?

**EXAMPLE:** Using filters identifies the greatest risk patient for maternal hemorrhage. Patients identified under **Group #1** experienced **higher rates of maternal hemorrhage for 2023 Q4** in comparison to **Group #2**.



# EXPORT TABLES FOR EACH OUTCOME AND COMPARE



What is the relationship between maternal & newborn outcome characteristics?



Primary C-Section (TJC PC-02, NTSV)  
Hospital

| Year Qtr. | Numerator | Denominator | Hospital % |
|-----------|-----------|-------------|------------|
| 2021 Q1   | 63        | 245         | 25.7       |
| 2021 Q2   | 72        | 296         | 24.3       |
| 2021 Q3   | 76        | 285         | 26.7       |
| 2021 Q4   | 79        | 310         | 25.5       |
| 2022 Q1   | 58        | 303         | 19.1       |
| 2022 Q2   | 60        | 272         | 22.1       |
| 2022 Q3   | 64        | 292         | 21.9       |
| 2022 Q4   | 56        | 287         | 19.5       |
| 2023 Q1   | 70        | 302         | 23.2       |
| 2023 Q2   | 60        | 270         | 22.2       |
| 2023 Q3   | 68        | 347         | 19.6       |
| 2023 Q4   | 62        | 311         | 19.9       |

Preterm (<37 weeks)  
Hospital

| Year Qtr. | Numerator | Denominator | Hospital % |
|-----------|-----------|-------------|------------|
| 2021 Q1   | 137       | 522         | 26.2       |
| 2021 Q2   | 135       | 490         | 27.6       |
| 2021 Q3   | 142       | 546         | 26.0       |
| 2021 Q4   | 142       | 537         | 26.4       |
| 2022 Q1   | 134       | 496         | 27.0       |
| 2022 Q2   | 166       | 576         | 28.8       |
| 2022 Q3   | 173       | 638         | 27.1       |
| 2022 Q4   | 153       | 526         | 29.1       |
| 2023 Q1   | 167       | 543         | 30.8       |
| 2023 Q2   | 157       | 560         | 28.0       |
| 2023 Q3   | 172       | 646         | 26.6       |
| 2023 Q4   | 150       | 601         | 25.0       |

**EXAMPLE:** This example shows a comparison between a hospital's primary c-section and preterm birth rates. Despite the high rates of preterm birth, this hospital has successfully reduced their rates of primary c-section to prior COVID-19 rates.

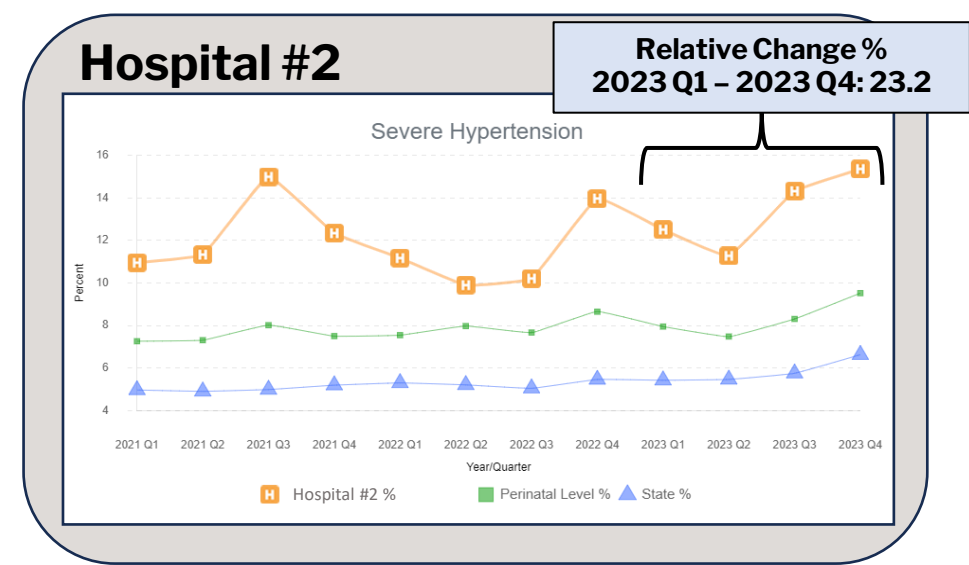
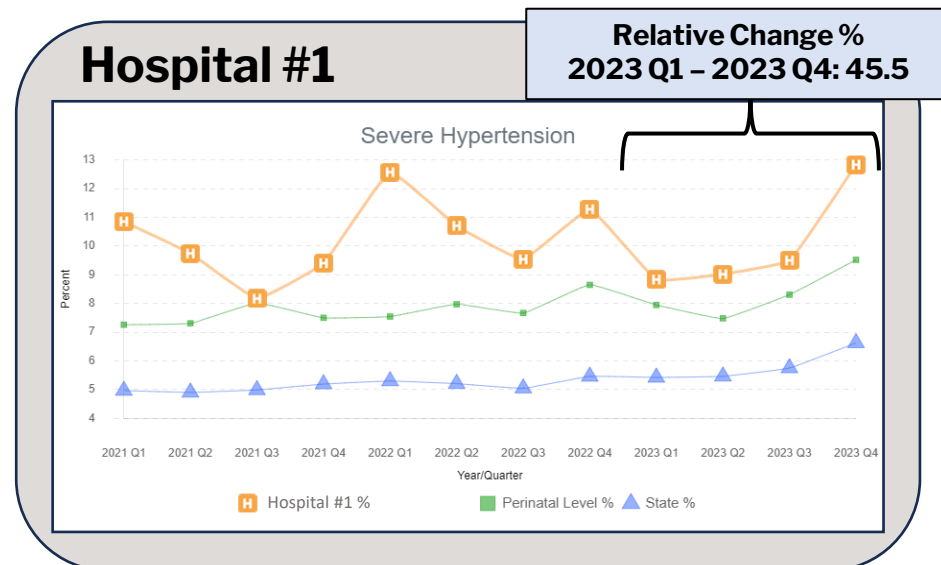


# LOOK FOR TRENDS ACROSS ALL HOSPITALS IN MY SYSTEM



**If managing multiple hospitals, how can I ascertain which need additional training support/incentives?**

**EXAMPLE:** From 2023 Q1 to 2023 Q4, Hospital #1 experienced a greater increase over time of severe hypertension cases at 45.5% whereas Hospital #2 increased by roughly half the rate. With a goal of addressing the rapidly increasing rate, quality improvement efforts should be focused on Hospital #1.



# RECENT DASHBOARD ENHANCEMENTS



# CURRENT DASHBOARD ENHANCEMENTS

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## NEW

- Perinatal mental health and its SMM trend added to the Maternal Safety tab. *Why?*
  - Mental health conditions are a leading cause of pregnancy-related death ([SCMMMRC 2024 Legislative Brief](#)).
  - Future implementation of the AIM Perinatal Mental Health patient safety bundle.
- Filter for adequacy of prenatal care.
- New Perinatal Quality Improvement Tips [resource guide](#) which provides a summary of programs and initiatives that may help address some of the greatest challenges affecting maternal and newborn health in SC.

## UPCOMING ADDITIONS

We will launch two new newborn quality measures in December with data through March of 2024.

- Preterm birth rate among people with cardiac conditions – an AIM measure included in the cardiac conditions bundle.
- Newborns with unexpected complications (TJC, PC-06) – a balance measure to the existing TJC PC-02 avoidable primary cesarean measure.





# LIVE DEMO



# QUESTIONS?



# CONTACT

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