

Institute for Families in Society at the University of South Carolina

South Carolina Birth Outcomes Initiative (SCBOI) Dashboard

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ACKNOWLEDGEMENTS

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- Sarah Gareau, DrPH, MEd, MCHES; Assistant Professor, Maternal and Child Health & Health Equity Evaluation Projects Team Lead
- 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
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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 thorough 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 4th 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

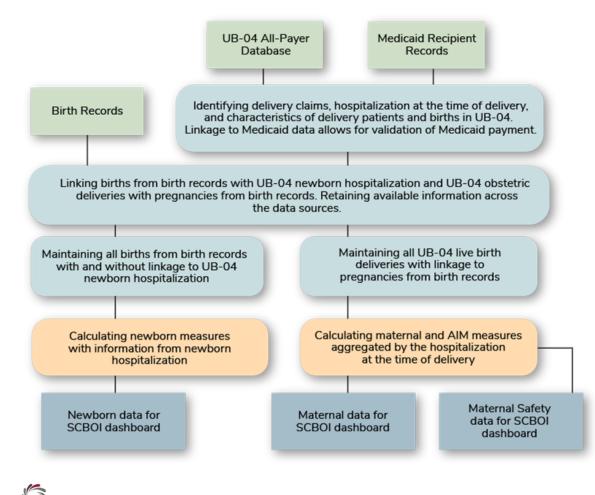
Updated data as of September 2024. All data reflects post-ICD-10 time periods and is reported using calendar year and quarters (CY21-23, Q1, 2021 – Q4, 2023).



SCBOI DASHBOARD DATA AND STRENGTHS

BOI DATA PROCESSING FLOWCHART

Events from October 1, 2020 - September 30, 2023 (Inclusive)





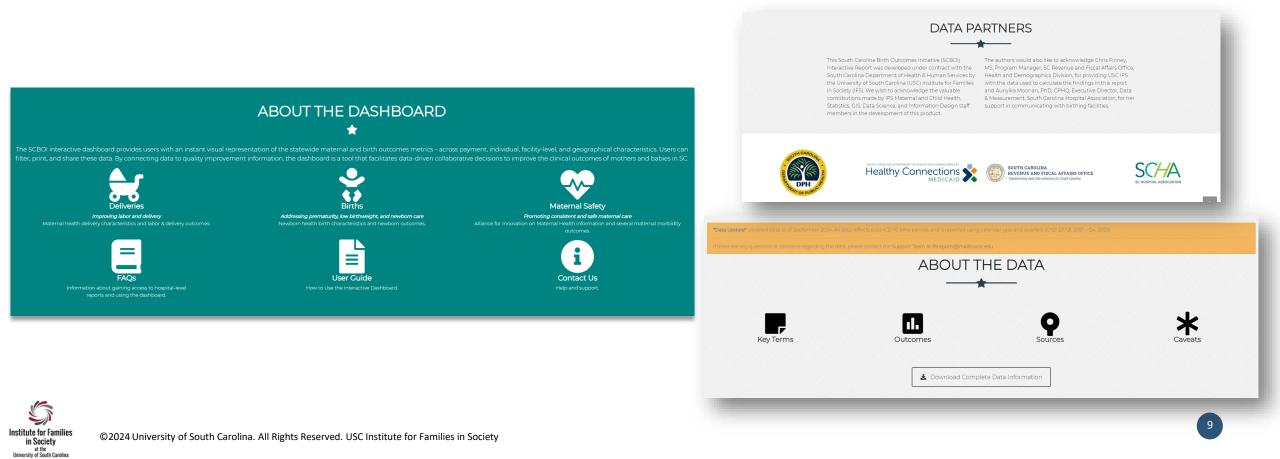
Since 2019, IFS has reported statewide and hospital data on the SCBOI dashboard, an interactive, secure, online reporting tool. The tool allows birthing facilities to:

- 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.

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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.



AVAILABLE REPORTS

Statewide

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

Hospitals

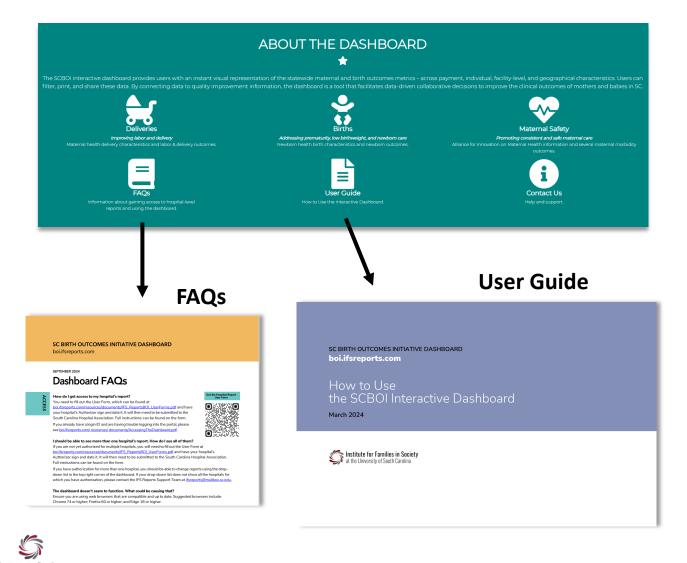
• Hospital-specific reports, requiring login with permission from the hospital.



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

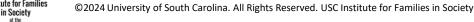
RESOURCES





Users can get answers to frequently asked questions and a how-to on the use of the dashboard by accessing the FAQ and User Guide documents on the homepage.

Additionally, each tab within the dashboards has a related improvement tips document providing a summary of programs and initiatives that may help hospitals address some of the greatest challenges affecting MCH in SC.



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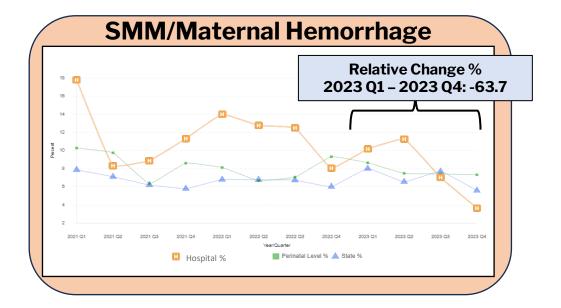
USE OF THE SCBOI DASHBOARD FOR QAP AND AIM QI INITIATIVES

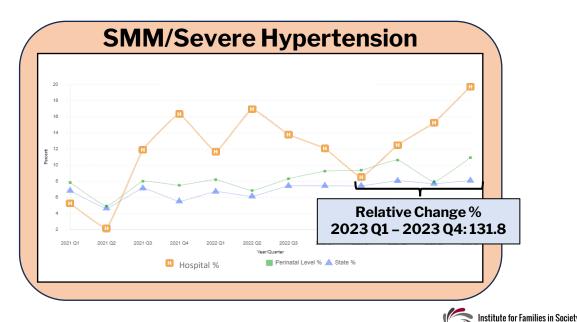


COMPARE OUTCOMES TO LIKE HOSPITALS AND EXAMINE TRENDS



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).





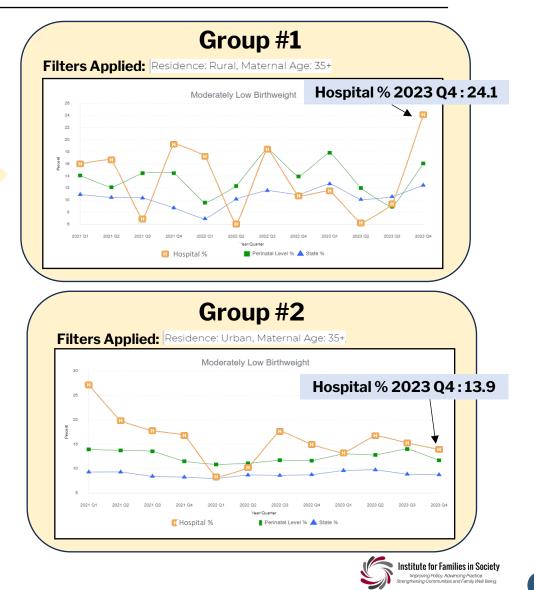
IDENTIFY TARGET POPULATIONS BY USING FILTERS



Which obstetric patients need additional care coordination?

EXAMPLE: Using filters identifies the greatest risk patient for low birthweight. Patients identified under **Group #1 experienced higher** rates of moderately low birthweight (1,500 – 2,499 grams) for 2023 Q4 in comparison to Group #2.

This specific analysis could help hospitals target their efforts in addressing the third goal of Maternal Health Milestones by the South Carolina Quality Achievement Program (QAP) to decrease LBW.



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	r Denominator	r 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

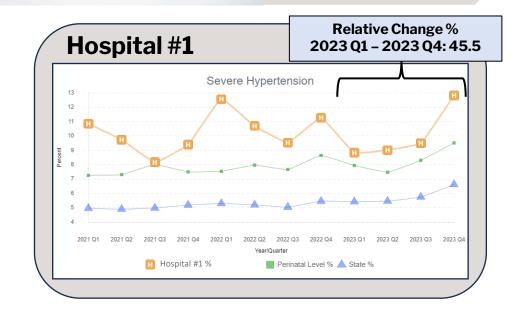
Year Qtr	. Numer	rator Denomin	ator Hospital %
2021 Q1	137	522	26.2
2021 Q2	135	490	27.6
2021 Q3	142	546	26.0
2021 Q4	142	537	26.4
2022 Q1	134	496	27.0
2022 Q2	166	576	28.8
2022 Q3	173	638	27.1
2022 Q4	153	526	29.1
2023 Q1	167	543	30.8
2023 Q2	157	560	28.0
2023 Q3	172	646	26.6
2023 Q4	150	601	25.0

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. Further analysis within the dashboard can help explain the high rates of preterm birth in this hospital and guide efforts to improve this outcome; a goal of QAP.

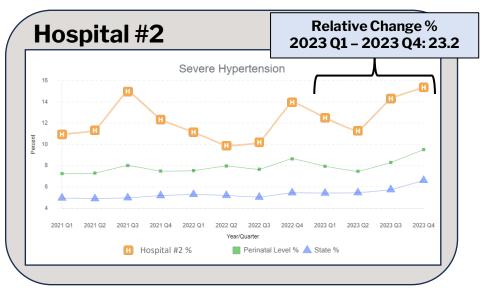


LOOK FOR TRENDS ACROSS ALL HOSPITALS IN MY SYSTEM

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 and associated AIM bundle implementation should be prioritized in Hospital #1.





RECENT DASHBOARD ENHANCEMENTS

AIM Q4 2023 DASHBOARD ENHANCEMENTS

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 <u>resource guide</u> 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

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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.





QUESTIONS?



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