



HOW DATA DRIVES ACTION

South Carolina Maternal Health Data Snapshot

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South Carolina Birth Outcomes Initiative Symposium
Oct. 30, 2024

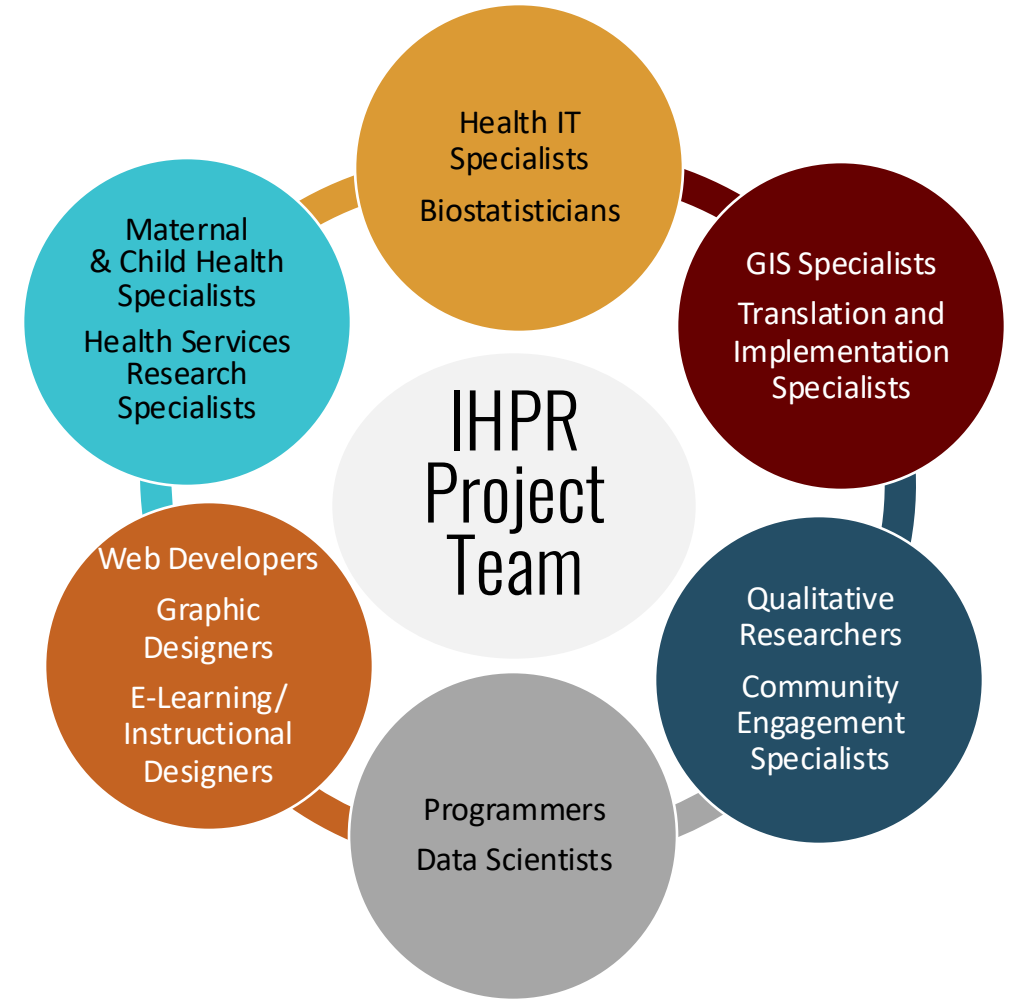


ACKNOWLEDGEMENTS

We would like to thank the following team members at IFS for their contribution to this work:

- Ana López – De Fede, PhD; Distinguished Research Professor Emerita and Associate Director
- Chloe Rodriguez Ramos, MPH; Translation and Implementations Products Coordinator
- Linga Murthy Kotagiri, MD, MPH; Senior Maternal & Child Health Data Manager
- Prince Addo, MPH, PhD Candidate; Graduate Research Assistant
- Angela Kneece, BS; GIS Manager I
- Nathaniel Bell, PhD; Associate Professor and Director of Research and Evaluation
- James Edwards; Research Associate

Thank you to Chris Finney from the South Carolina Revenue and Fiscal Affairs Office and Aunyika Moonan from the South Carolina Hospital Association for their data and hospital outreach support. Additional thanks to the South Carolina Department of Health Maternal and Child Health Bureau staff that supported the SCMMMRC data.



SUGGESTED CITATION:

Gareau, S., López-De Fede, A., Rodriguez Ramos, C., Kotagiri, M., Addo, P., Kneece, A., Bell, N., Edwards, J. (2024, October). *How Data Drives Action: South Carolina Maternal Health Data Snapshot* [PowerPoint Slides]. Institute for Families in Society, University of South Carolina, Columbia, SC.

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A photograph of a woman with long blonde hair, wearing a blue hospital gown with a pattern of small red and blue squares, sitting in a hospital bed. She is holding a newborn baby in her arms. The baby is wearing a white onesie and is looking towards the right. The background is a bright, out-of-focus hospital room. A semi-transparent white banner is overlaid on the left side of the image, containing the title and subtitle text.

MATERNAL HEALTH LANDSCAPE

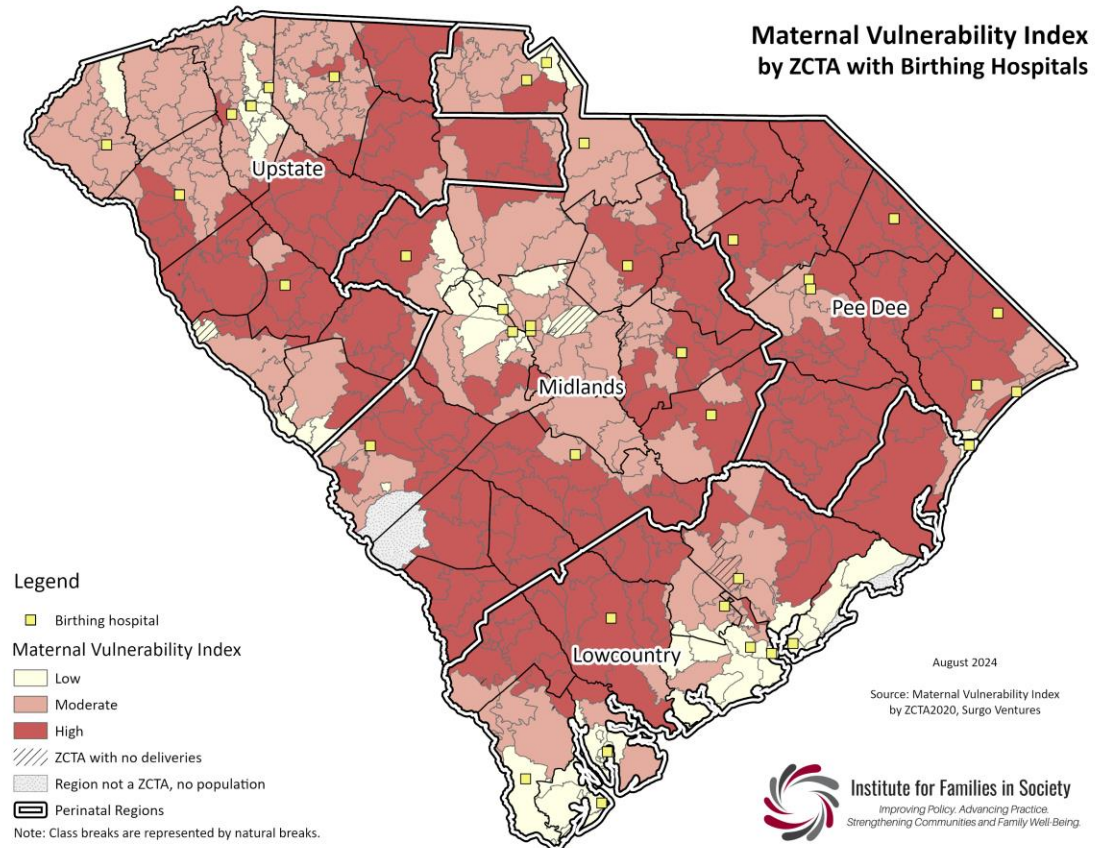
DATA FROM CY 2023



SC MATERNAL HEALTH LANDSCAPE

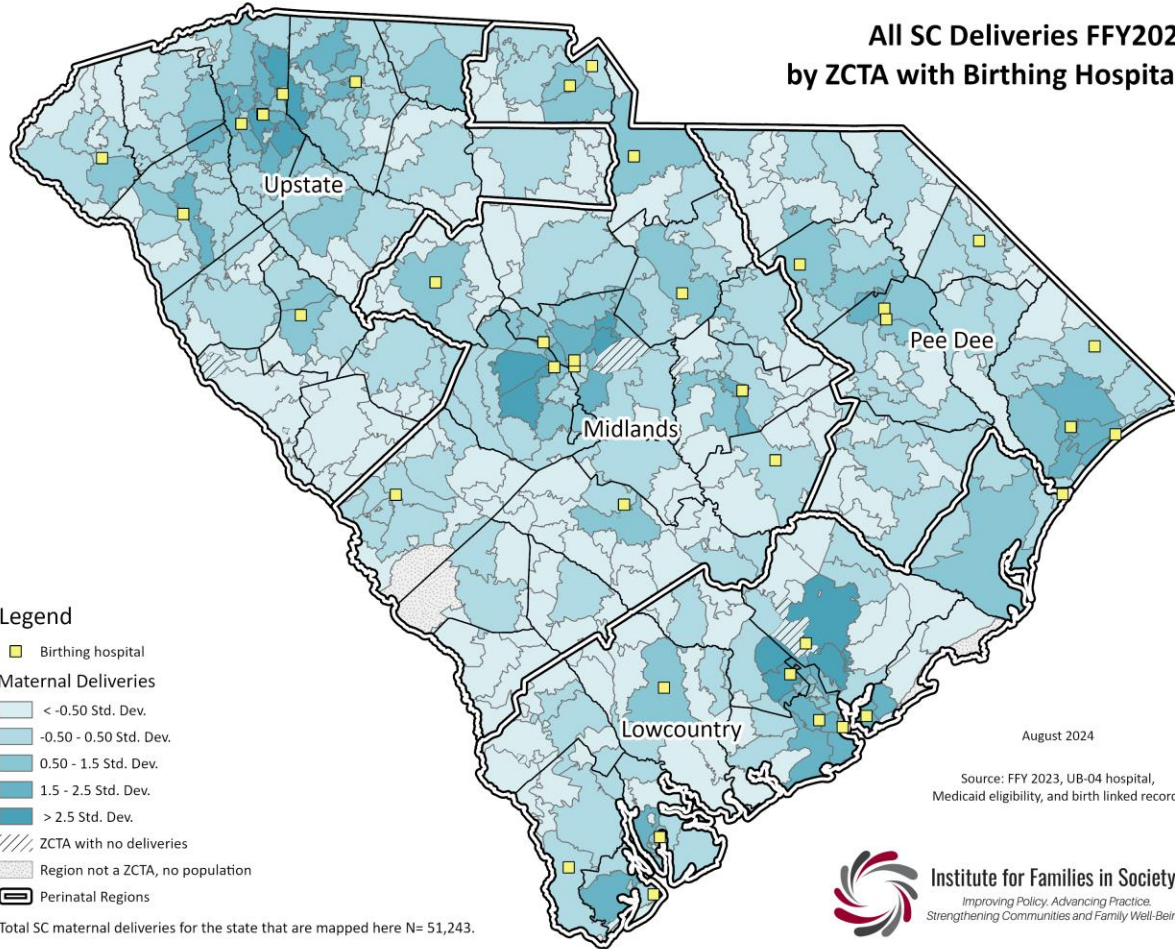
It will take our power in partnership to effectively change the system of care.

- Since 2012, **13** labor and delivery units have closed.
- Over half of counties in SC represent a medically underserved area (MUA).
 - Nearly 2 in 5 counties in SC had low access to maternity care or were a **maternity care desert** (March of Dimes, 2023).
- SC has one of the **top 5 highest maternal vulnerability** rates in the nation driven by high physical health and SES needs. Many high MVI areas have no birthing facility.
- Among publicly reported states, **SC ranks 8th nationally** in maternal mortality.
- Results of a recent SC AIM survey administered by IFS with the support of SCDHHS, in which 76% of birthing facilities responded (January-February 2024), report lack of **ED provider training, low staffing, limited resources, and physician buy-in** as barriers to care.



DELIVERIES ACROSS COMMUNITIES IN SOUTH CAROLINA

All SC Deliveries FFY2023
by ZCTA with Birthing Hospitals



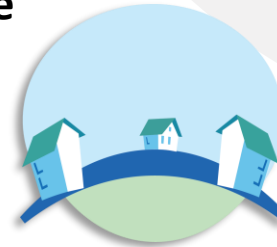
RURAL HEALTH TAKEAWAY

Urban areas and higher designation hospitals see the greatest volume of deliveries. Key facts regarding birthing persons residing in rural areas include:

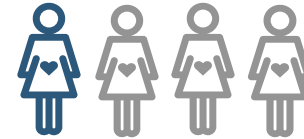
Residence

Urban: 73%

Rural: 26%



Birthing persons of color comprised roughly **41%** of deliveries among rural residents.



Represented 1 in 4 severe maternal morbidity events.

1,787

Babies born prematurely to mothers in rural areas.



Medicaid paid **71%** of rural deliveries (vs. 60% statewide).

19% had a perinatal mental health diagnosis.

DELIVERY CHARACTERISTICS

(CY 2023)

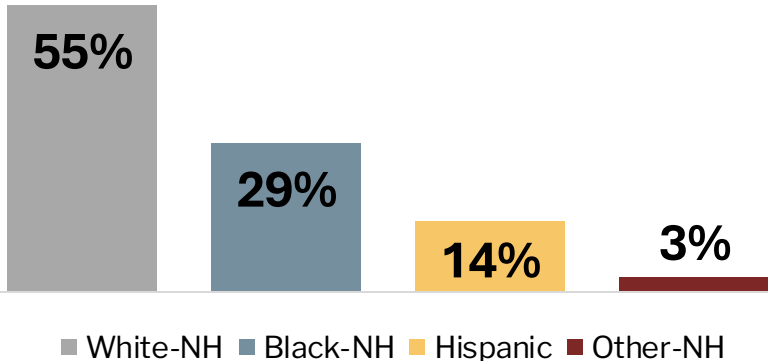
SC QUICK FACTS

- 3 out of every 5 deliveries was paid for by Medicaid.
- 1 in 5 birthing persons received inadequate prenatal care.
- Approximately 1 in 10 birthing persons delivered premature or had a low birthweight baby.
- Roughly 1 in 4 had a potentially avoidable cesarean.
- Nearly 1 in 5 were ages 35 or older.

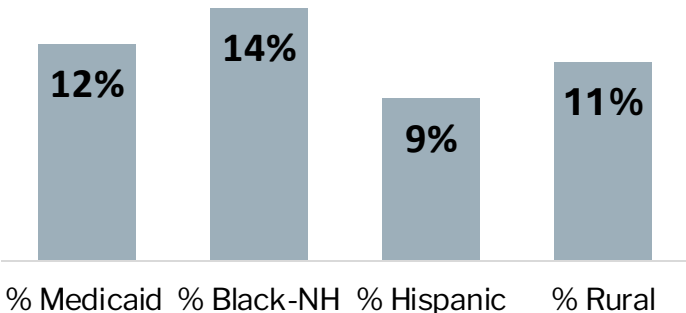


**~37% High School/
GED or less**

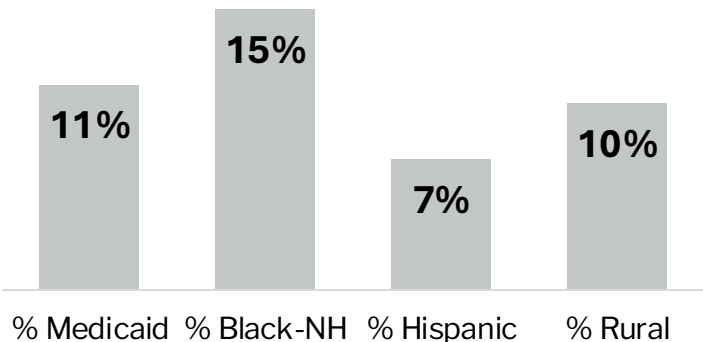
Race/Ethnicity



Premature Delivery Disparities



Low Birthweight Delivery Disparities



Disparities in premature and low birthweight deliveries were predominantly seen among Black-NH patient and Medicaid beneficiaries.

DELIVERY CHARACTERISTICS (CONT.)

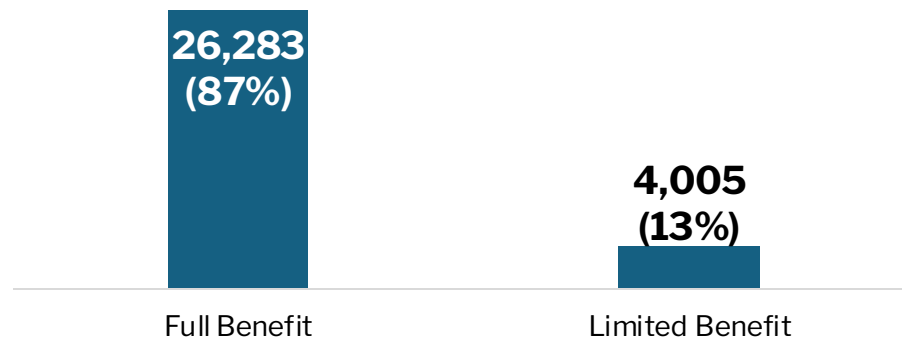
MEDICAID ELIGIBILITY SNAPSHOT (FFY 2023)

TAKEAWAY

Our MCH data was linked with a Medicaid eligibility file to determine timing and type of Medicaid coverage.

In a recent IFS analysis of over 9,000 mothers whose deliveries were paid for by Medicaid, **2 out of 3** were enrollees in Medicaid at the start of their pregnancies, indicating the important role of Medicaid in support of quality prenatal care.

Statewide Medicaid at Delivery by Enrollment Type





SMM OUTCOMES

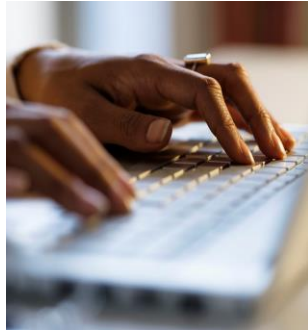
DATA FROM CY 2023

Severe Maternal Morbidity (SMM) represents unexpected outcomes of labor and delivery that can result in short or long-term consequences. It reflects 20 conditions of severity and near missed events as defined by the Alliance for Innovation on Maternal Health (AIM).



MATERNAL HEALTH DATA: IFS AIM REPORTING PROCESS

Outcome Measures



IFS Data Team

IFS uses SCRFA-provided billing, birth, and Medicaid eligibility records to calculate outcome measures quarterly as delineated in the data collection plan of each AIM patient safety bundle (PSB).



SCBOI Portal

IFS shares results with individual hospitals via the SCBOI portal.

Process and Structure Measures

SC AIM Survey

IFS curates and administers a survey at least twice a year to facilities and their AIM Champions to collect process and structure measure data.



AIM Champion

The AIM Champion, a hospital staff member who coordinates their facilities adoption of the PSB, completes the survey.



AIM Data Center

IFS analyzes and uploads all data to the AIM Data Center using a provided template and later shares results with the Quality and Patient Safety Workgroup.

AIM

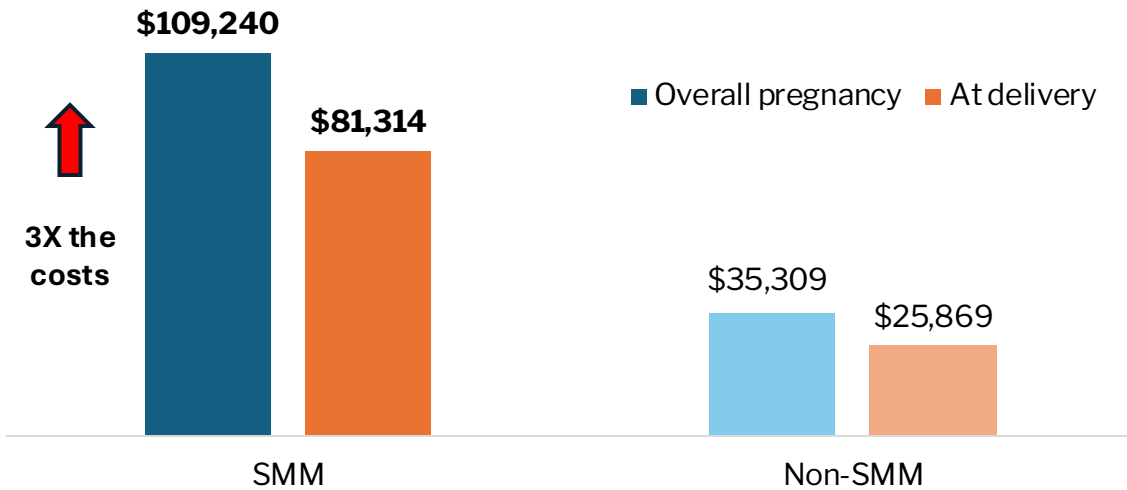
ALLIANCE FOR INNOVATION
ON MATERNAL HEALTH

Welcome to the AIM Data Center!

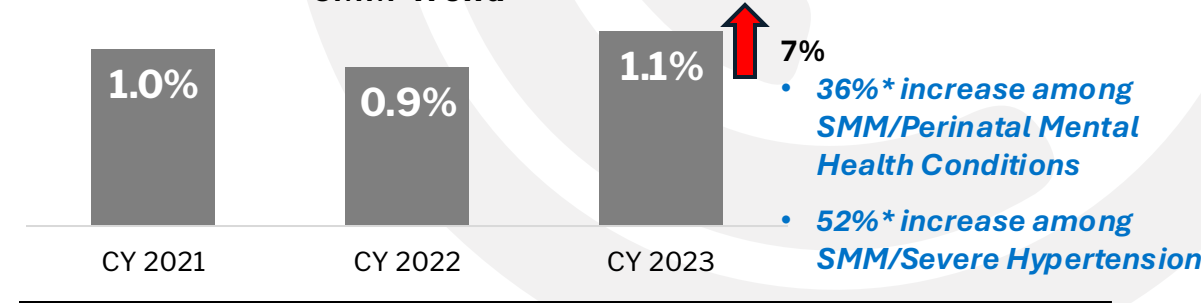
SMM VS. NON-SMM CHARACTERISTICS

(CY 2023)

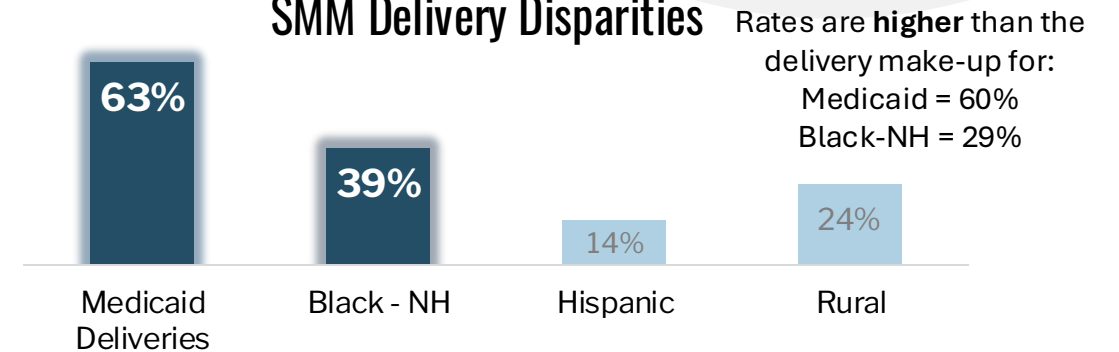
Mean Charges



SMM Trend



SMM Delivery Disparities



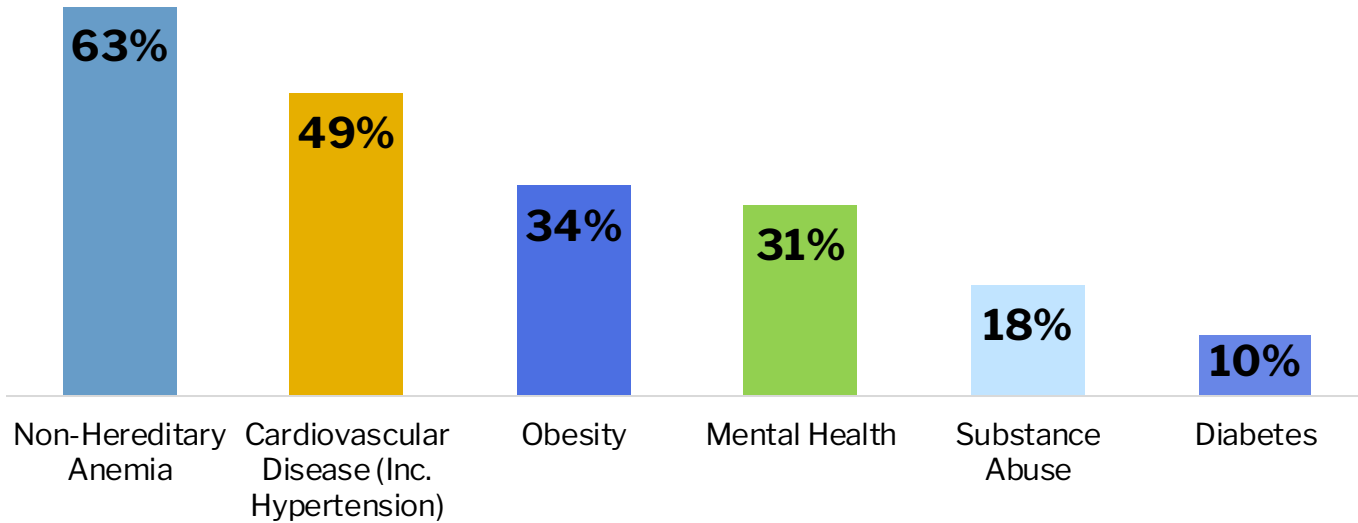
In a 2023 study, SC ranked 6th in the nation for SMM among individuals with Medicaid insurance.


(Admon et al.)

SMM deliveries are seen at a higher rate among Black-NH patients, those 35-54 years old, Medicaid beneficiaries, and those with co-existing physical and behavioral health conditions.

CLINICAL DRIVERS OF SMM (CY 2023)

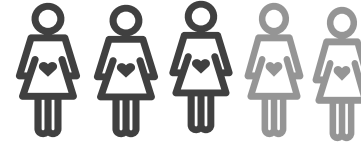
Co-occurring Conditions among SMM Deliveries



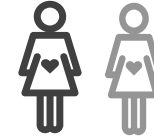
 Even though the statewide SMM rate was 1%, the rate among CVD patients was 5%, among diabetics was 3%, and among anemia patients was 2%.

AMONG SMM DELIVERIES:

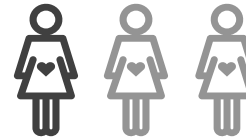
About 3 in 5 had **non-hereditary anemia**.



Nearly 1 in 2 had **cardiovascular disease**.



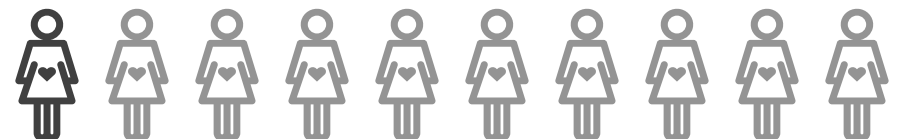
About 1 in 3 had **obesity** or a **mental health condition**.



About 1 in 5 had **substance use disorder**.



Just over 1 in 10 had **diabetes**.



BARRIERS TO TREATING SMM

Takeaways from the AIM Severe Hypertension in Pregnancy Baseline Survey

- Identifying the severe hypertension patients and completed training were challenges at many facilities.
- Timely treatment of persistent severe hypertension and follow-up within 3 or 7 days (depending on severity) were the lowest process measures.
- Engagement of the emergency department in screening was the lowest structure measure and noted as a barrier.
- Other barriers included low staffing, limited resources, and physician buy-in.



SC MATERNAL MORBIDITY AND MORTALITY REVIEW COMMITTEE (SCMMMRC)

DATA FROM CY 2018-2020

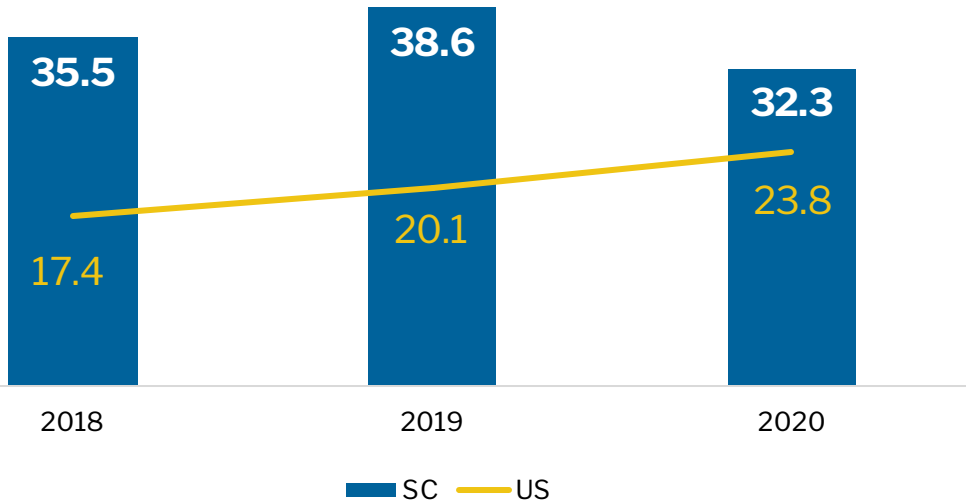
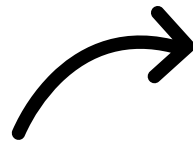


The following is a summarized view of
the 2024 SCMMMRC Legislative Brief.
For the full brief, click [here](#).



PREGNANCY-RELATED DEATHS (CY 18-20)

Pregnancy-Related Mortality Ratio (PRMR)



Pregnancy-related deaths, when compared to their White counterparts, were:

- **4.2x** more likely among **Black-NH**.
- **2.5x** more likely among **rural Black-NH**.
- **5.5x** more likely among **obese Black-NH**.

Discrimination as a Driver of Pregnancy-Related Deaths



Of deaths reviewed from 2018-2020, **discrimination** was recognized as a **contributing factor for roughly 1 in 3**.

Note: In a recent SC AIM survey, hospital staff were often unaware whether OB providers had completed equity education centered on respectful care.


Top 3 Leading Causes of Death

White

- Mental Health Conditions (100% Preventable)
- Hemorrhage (86% Preventable)
- Infections (86% Preventable)

Black-NH

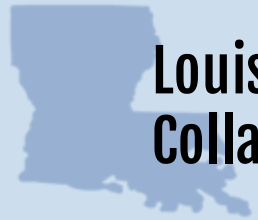
- Thrombotic Embolism (88% Preventable)
- Cardiomyopathy (75% Preventable)
- Hemorrhage



DATA TO ACTION

EXAMPLES OF HOW OTHER STATES HAVE INCENTIVIZED HOSPITAL ENGAGEMENT

DESIGNATIONS



Louisiana Perinatal Quality Collaborative (LaPQC)

Birth Ready Designation



This effort aims to highlight the healthcare improvement work and perinatal health outcome achievements of participating facilities.

Michigan Alliance for Innovation on Maternal Health



MI AIM Designation



This effort, for 2024, focuses predominantly on implementation; awarding participating facilities anywhere from bronze to platinum status on their efforts in implementing AIM Safety Bundles.

AWARD

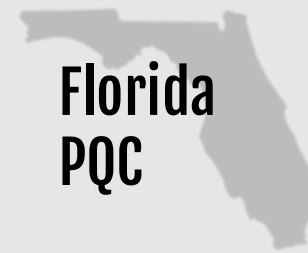
Rhode Island Women & Infants Hospital

Richard P. Welch Award for Continued Excellence in Patient and Family Centered Care

This hospital award is presented annually to a clinical and non-clinical employee who exhibit unwavering commitment to excellence in patient and family centered care.

LEGISLATION

Florida PQC



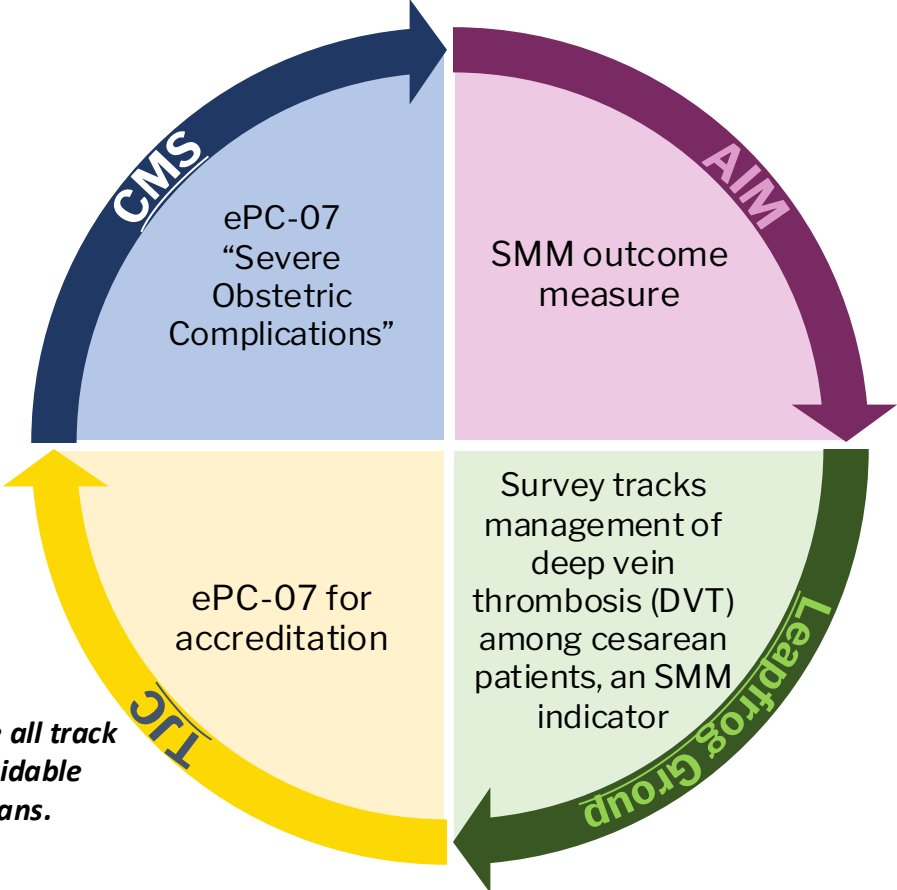
Florida State Statute Requiring Participation in Quality Improvement Initiatives

A Florida state statute announced in 2022 requires participation by maternity units in at least two Florida Perinatal Quality Collaborative initiatives.



COMMUNICATING HOW AIM IMPLEMENTATION/REPORTING ALIGNS WITH OTHER FEDERAL REQUIREMENTS

Another strategy for increasing hospital engagement in AIM reporting includes aligning it with other mandatory hospital reporting. This example shows how **AIM’s mission to decrease SMM aligns with other national requirements.**



Similarly, these all track potentially avoidable primary cesareans.



CMS’ Birthing Friendly Designation

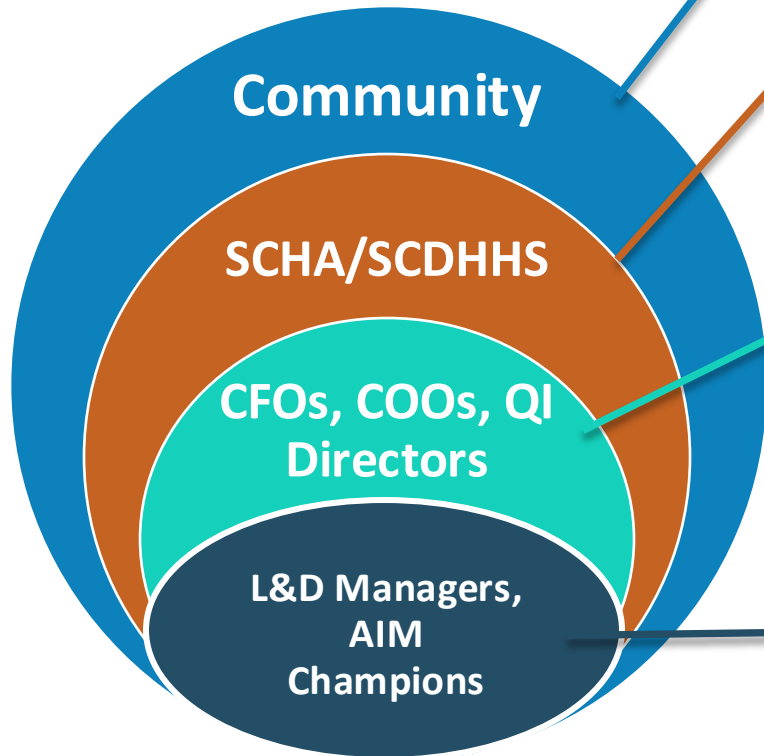
"Birthing-Friendly" is the first-ever CMS designation to describe high-quality maternity care. To earn the designation, hospitals and health systems report their progress on CMS's Maternal Morbidity Structural Measure to the Hospital Inpatient Quality Reporting (IQR) Program. The measure identifies whether a hospital or health system has:

1. Participated in a statewide or national perinatal quality improvement collaborative program; and,
2. Implemented evidence-based quality interventions in hospital settings to improve maternal health.

Note: Requirements will be more specific going forward. We can define what participation means for SC.

DATA TO ACTION

Action will take engagement from varying spheres of influence within the maternal health services space.



- Address social determinants of health, postpartum care transitions, care coordination, social support, and engagement of persons with living expertise.

- Enhance birthing friendly requirements for CMS structure measure.
- Coordinate AIM with other perinatal QI initiatives including the Quality Assurance Program.
- Establish incentives for participation including a perinatal award or AIM designation.

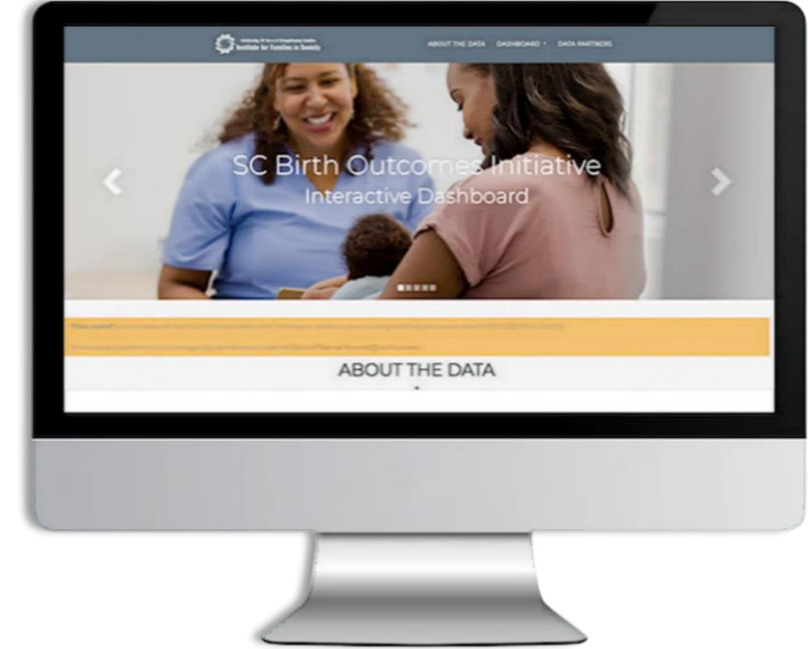
- Align AIM with other hospital reporting requirements (for CMS, The Joint Commission, and Leapfrog).
- Establish a resource repository to support implementation of evidence-based bundle policies, protocols, and trainings with an initial focus on the lowest-rated structure measures.
- Share information on potential return on investment (ROI) in improving AIM outcome measures.

- Attend Quality and Patient Safety Workgroup meetings to share best clinical practices, training, and resources to address process and structure measures requiring action.
- Use AIM standardized tools for SMM case review and debriefing.
- Encourage registration and use of the SCBOI dashboard and review survey results to use data to drive improved clinical practice.



SPECIFIC AIM ACTION STEPS

1. **Attend the SCBOI Quality and Patient Safety Workgroup** meetings to learn more about bundle implementation and evaluation.
2. **Encourage AIM survey response** in your hospital to accurately report on practices and policies implemented which support bundle progress.
3. **Engage in hospital-based bundle materials** and ensure best practices are set in place for prenatal and postpartum care visits.
4. **View the SCBOI dashboard user guide** which provides a collective summary of existing programs and initiatives that may support birthing facilities in addressing some of the greatest challenges affecting maternal and newborn health in SC.



[Access the SCBOI dashboard](#) to learn more about maternal and birth outcomes at your specific facility. ([Registration is required](#)).



CONTACT



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