

**Data Upload Guide** 

Version 3.0 October 2022

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### Introduction

Welcome to AIM! The AIM team is excited to work with your state or jurisdiction team to set up a smooth data collection and submission process for contributing data to AIM and using the AIM Data Center to monitor bundle implementation and impact.

This document is designed for State and Jurisdiction Data Coordinators to use as a technical guide for submitting data as part of AIM state and jurisdiction enrollment as well as submitting data for specific AIM patient safety bundles on an ongoing basis. Additionally, this document includes information on using the AIM Data Center to assess data quality and integrity.



#### **About the AIM Data Center**

The AIM Data Center is a national data submission system, server, and QI tool. It gives administrators the ability to submit data and track AIM bundle implementation and severe maternal morbidity (SMM) in states, jurisdictions, and hospitals.

Through the AIM Data Center, state and jurisdiction administrators may view cross collaborative comparisons of specific measures, state-specific dashboards, and automated hospital reports. Additionally, state and jurisdiction administrators can manage other users and hospitals with the AIM Data Center. Hospital administrators may view comparisons of their hospital's data with other hospitals in their collaborative of a similar type.

#### **AIM Data Center**

#### **Different Views Objective: Based on User Data Submission Dashboard** Allow states to implement data collection systems that View national, state 1. Data Quality most closely align with their **Hospital Administrators** and hospital data Assessment quality improvement goals. via interactive charts Automatically identify outliers and and visualizations. Hospitals Submit Data Directly State Administrators assess quality of transfusion coding. to the AIM Data Center **Note:** AIM national Hospital administrators upload 2. Integrate Into administrators may National Administrators process and structure data only view deidentified National Data Set directly to the AIM Data Center. hospital data for states. State administrators upload Allow state For states other than outcome data on hospitals' behalf. administrators their own, AIM state to benchmark administrators may only their quality view data aggregated to States Develop Their Own improvement the state level. projects against **Data Collection System** other states in the Hospital administrators upload AIM Data Center. process and structure data to a state-run data collection system. State administrators upload structure, process and outcome data on hospitals' behalf.

Each state project has a different mix of data entry processes.

#### AIM Data Center Enrollment and Logging on for the First Time

Before being invited to the AIM Data Center, AIM requires the following from enrolled states and jurisdictions:

- 1. A fully executed subaward or participation agreement, including data use agreement, with the American College of Obstetricians and Gynecologists
- 2. Birthing facilities recruited to participate in AIM patient safety bundle implementation with your state or jurisdiction, which may include establishing data use agreements so their data can be shared with AIM
- 3. A hospital demographics file containing metadata on recruited birthing facilities
- 4. Additional patient safety bundle information for AIM Data Center dashboard configuration.

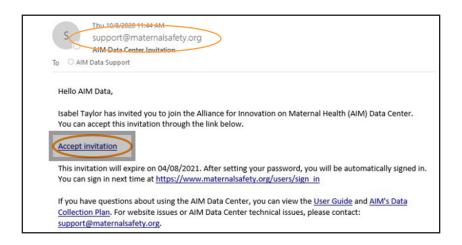
As AIM receives the above information from your state or jurisdiction team, the AIM Data Team will establish your team's dashboard in the Data Center and invite state- and jurisdiction-based users to the Data Center.

#### 1. Activate Your AIM Data Account

► You will receive an email from **support@maternalsafety.org** with the subject line of "AIM Data Center Invitation."

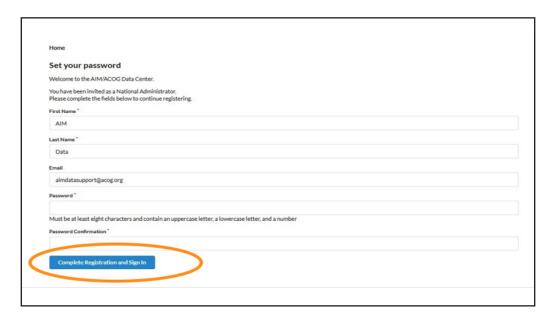
# 2. Click on the "Accept invitation" hyperlink to complete your registration in the AIM Data Center

Please Note: This email is sometimes sent to Junk or Spam folders.



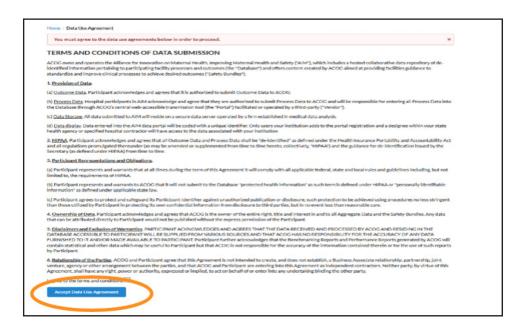
#### 3. Provide Account Information

► On the registration page, you will be asked to enter your name, email, and password. Share these details and click "Complete Registration and Sign In."



#### 4. Sign In, Review and Accept the Data Center's Data Use Agreement

▶ Upon setting up your AIM Data Center account, you will be asked to review and accept the Data Center's data use agreement. This is the data use agreement found in your state or jurisdiction's subaward or participation agreement with ACOG. Once you click "Accept Data Use Agreement," registration is now complete, and you have access to the Data Center.



### **Next Steps for AIM Data Center Users**

#### 1. Submit Baseline Outcome Measures Data

Baseline data allows hospital, state/jurisdiction, and national administrators to assess the impact of AIM patient safety bundle (PSB) implementation. Specifically, collection and submission of baseline data helps administrators compare severe maternal morbidity (SMM) and other outcomes as PSBs are implemented over time. This data should be collected at both the state/jurisdiction- and hospital-levels and should be disaggregated by race, ethnicity, and payor, as data are available.

#### From which year should I collect baseline data?

AIM requests baseline data be calculated quarterly from 2016 to present, to account for the transition from ICD-9 to ICD-10 and reduces burden on states to code for different ICD versions. In instances in which calculating data from 2016 to present is not feasible, calculate baseline outcome measures from the past three calendar years.

#### Which SMM codes list should I use to collect baseline data?

AlM's latest **SMM Code List** is suitable to use to collect baseline data for your state and hospitals. This SMM Code List is updated on a regular basis, usually once a year. Additionally, the **Federally Available Data Resource Document** has sample SAS code for calculating SMM that uses a definition that should align with AlM's.

Please note that at the time of this guide's publication the CDC has not updated the SMM codes list on their website, and it does not contain an accurate SMM algorithm.

#### 2. Invite Hospital Users, As Desired.

We recommend that you first upload baseline outcome measures data before inviting hospital users to the Data Center. If you need support inviting hospital users in bulk, please contact the AIM Data Team.

# 3. Submit Other Process, Structure, and Outcome Measures Data on a regular basis.

If your state or jurisdiction team collects process and structure measures from facility teams using an alternate data collection platform, plan to submit this quality improvement data to AIM at least once a year, though more frequent submission is encouraged.

## **File Formatting Instructions**

If hospitals participating in AIM patient safety bundle implementation do not submit their process and structure measures data directly to the AIM Data Center, you will upload a file that contains process, structure, and outcome measures data. All state and jurisdiction administrators are expected to upload outcome measures data on behalf of participating hospitals.

The process, structure, and outcomes measures file can be formatted in two ways for successful upload to the Data Center: default and wide. The default file formatting option puts individual measures in rows, and the wide file formatting option puts individual measures in columns like a REDCap export.



# **Import Measures (Default)**

Use the following information to format the header for your default process, structure, and outcomes measures files:

Please see **Appendix A** for a sample file formatting reference.

Header Text	Description
hospital_unique_identifier	The unique identifier used for each hospital reporting data as determined by the State or Jurisdiction Data Coordinator. Reference your submitted hospital demographics file for hospital unique identifiers.
period_start_date	The start date of the period for which data is being reported.  Process measures data can be reported in monthly or quarterly intervals based on calendar year quarters. Structure measures can be submitted on the quarterly intervals based on calendar year quarters.  The outcome measures data can be reported in quarterly intervals based on calendar year quarters or in yearly intervals based in increments of a single calendar year. NTSV Cesarean births data may be submitted in monthly intervals.
period_end_date	The end date of the period for which data is being reported.  Process measures data can be reported in monthly or quarterly intervals based on calendar year quarters. Structure measures can be submitted on the quarterly intervals based on calendar year quarters.  Outcome measures data can be reported in quarterly intervals based on calendar year quarters or in yearly intervals based in increments of a single calendar year. NTSV Cesarean births data may be submitted in monthly intervals.
measure	The specific process/structure/outcome measure being reported.  *Please see <b>Appendix B</b> for case sensitive variable names for default file format.

Header Text	Description
	By Race and Ethnicity: At minimum, report data for "all." Additionally, report data disaggregated by specific racial and ethnic groups. AIM recommends reporting disaggregated data as small number reporting requirements in your state or jurisdiction allow.
	The AIM Data Center does not assume the sum of all data reported disaggregated by race and ethnicity is equivalent to "all." For visualizations to work in the AIM Data Center, data must at minimum be reported for "all."
population	*Race and ethnicity variable names are case sensitive, please refer to <b>Appendix C</b> for more details"
population	OR
	<b>By Payor:</b> At minimum, report data for "all." Additionally, report data disaggregated by payor. AIM recommends reporting disaggregated data as small number reporting requirements in your state or jurisdiction allow.
	Note that the AIM Data Center does not assume the sum of all data reported disaggregated by payor is equivalent to "all." For visualizations to work in the AIM Data Center, data must at minimum be reported for "all."
	*Payor variable names are case sensitive, please refer to <b>Appendix D</b> for more details"
numerator	Numerator value for a particular measure. If there are no cases for a measure for a given reporting period, populate with 0. Leave blank for measures requiring values (i.e., some process measures). If a facility did not report data for the reporting period, omit the row.
denominator	Denominator value for a particular measure. If there are no cases for a measure for a given reporting period, populate with 0. Leave blank for measures requiring values (i.e., some process measures). If a facility did not report data for the reporting period, omit the row.
value	Used for some process measures and all structure measures. If there are no cases for a measure that requires reporting data using the value column, populate with 0. Leave blank for measures requiring numerators and denominators. If a facility did not report data for the reporting period, omit the row.
	In addition to using the value column to report integers, use this column to report data for measures that require a TRUE/ FALSE response, such as the topics_covered variable for unit drills.

# **Import Measures (Wide Format)**

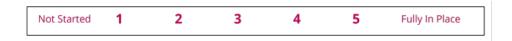
Use the following information to format the header for your wide process and outcomes measures file:

Header Text	Description
respondent_unique_identifier	The unique identifier used for each hospital reporting data as determined by the State or Jurisdiction Data Coordinator. Reference your submitted hospital demographics file for respondent unique identifiers. (These are the same as hospital_unique_identifiers.)
period_start_date	The start date of the period for which data is being reported.  Process measures data can be reported in monthly or quarterly intervals based on calendar year quarters. Structure measures can be submitted on the quarterly intervals based on calendar year quarters.  Outcome measures data can be reported in quarterly intervals based on calendar year quarters or in yearly intervals based in increments of a single calendar year. NTSV Cesarean births data may be submitted in monthly intervals.
period_end_date	The end date of the period for which data is being reported.  Process measures data can be reported in monthly or quarterly intervals based on calendar year quarters. Structure measures can be submitted on the quarterly intervals based on calendar year quarters. Outcome measures data can be reported in quarterly intervals based on calendar year quarters or in yearly intervals based in increments of a single calendar year. NTSV Cesarean births data may be submitted in monthly intervals.
Measures (in columns)	The specific process/structure/outcome measure being reported.  Use the below templates to reference case-sensitive measure names for reporting:  • Severe Hypertension  • Obstetric Hemorrhage  • Reduction of Primary CS  • Care for Pregnant and Postpartum People With Substance  Use Disorder  • Postpartum Discharge Transition  • Cardiac Conditions in Obstetrical Care

# Collecting and Formatting Data for Structured Measures (Revised October 2022)

The AIM National Team revised how structure measures data are collected as part of its data collection plans. Before revision, the AIM Data Center accepted the date that the structure was out in place, or a response of yes or not to indicate whether the structure is in place. These formats lacked the functionality to recognize and capture incremental progress towards a structure being fully in place.

AIM has developed a flexible 5-point Likert-scale for structure measurement that ranges from Not Started to Fully In Place.



A value of **1** indicates a facility team has not started working on establishing the structure. A value of **5** indicates that the structure measure is fully in place.

**There are no midpoint labels on the scale.** Midpoints are intended to broadly represent progress toward establishing a structure or backsliding. This measurement approach prioritizes facility teams' self-assessment of progress towards establishing a structure. AIM encourages state and jurisdiction teams to use reported structure measure data to target outreach to facility teams that have experienced backsliding or stagnation over reporting periods.

For further information please refer to the Structure Measure Transition Packet.

As a result of these updates, state and jurisdiction administrators may now report structure measures data in one file with process and outcome measures data. Data previously reported as dates can be recorded to a value of 5 for file formatting. Likewise, data previously reported as not in place can be recorded to a value of 1 for file formatting.

# **Collecting and Formatting Data for Outcome and Prcess Measures**

The following are further instructions and considerations for reporting outcome and process measures data:

#### 1. Sourcing Outcome Measures Data

Outcome measures use data reported by hospitals to state- or jurisdiction-level Departments of Health and/or Data Coordinating Bodies.

#### 2. Scale of Reporting

Outcome measures can be reported at the state/jurisdiction, collaborative, and hospital levels.

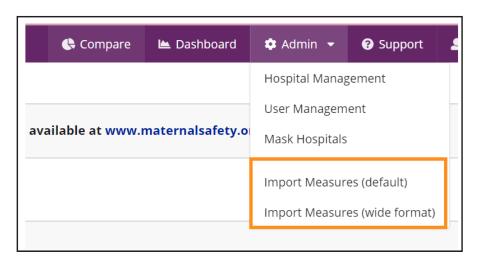
- When reporting data on behalf of an individual hospital, use the state or jurisdiction team designated unique identifier, which can be found in your hospital demographics file.
- ▶ When reporting data for **all the facilities participating in AIM PSB implementation**, use "collaborativewide" in the hospital\_unique\_identifier column of your file.
- ▶ When reporting data for **all facilities within a state or jurisdiction <u>regardless</u> of participation in <b>AIM PSB implementation**, use "statewide" in the hospital\_unique\_identifier column of your file.

#### 3. Disaggregating Outcome Data by Race and Ethnicity or by Payor:

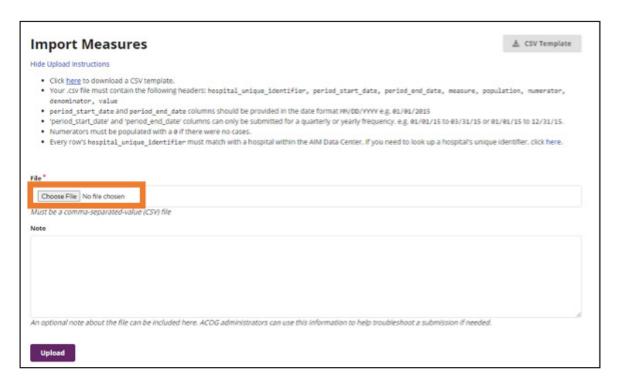
- ► State and jurisdiction teams can now submit data disaggregated by race and ethnicity or by payor for all outcome measures and all process measures that are collected using numerators and denominators.
- ► AIM recommends disaggregating process and outcome measures by 2 or more races and ethnicities. The racial and ethnic groups for which you report disaggregated data may vary due to your state or jurisdiction's demographics and other considerations, but AIM suggests reporting data at minimum for Non-Hispanic White, Non-Hispanic Black, Hispanic, and other patients.
- While we ask for quarterly submissions of outcome data not disaggregated by race and ethnicity or payor, you may upload outcome measures data disaggregated by race, ethnicity, and payor annually to avoid small case counts and protect patient privacy.

## **Upload Your Files to the AIM Data Center**

1. Hover over the Admin tab to select which set of measures you would like to import. This will take you to the page to upload your file.



2. Review your file against the portal's instructions and upload your file. Add notes as necessary.



3. After a successful submission, you will be prompted to review a downloadable change summary report. You can choose to send an email confirmation to yourself or other administrators in your state or jurisdiction by selecting "Notify by Email."



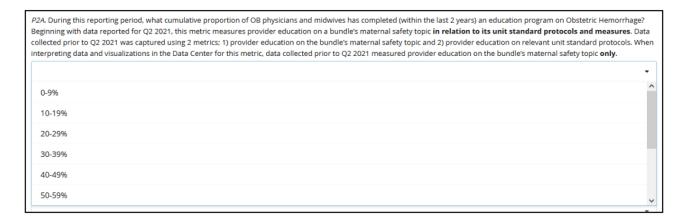
## **Basic Troubleshooting for Data Uploads**

- 1. (For the *Default* and *Wide* file formats) All column and variable names are case sensitive. Refer to Appendix B for variable names for process, outcome, and structure measures.
- 2. (For the *Default* and *Wide* file formats) all column headers need to be present. For example, even if you are not reporting data using the value column in the default file format, the value column header needs to be present for successful file upload.
- 3. (For the *Default* and *Wide* file formats) If a hospital team did not report any data for a reporting period, omit rows containing measure names and no data for the hospital.
- 4. If reporting data disaggregated by race and ethnicity or payor, report at minimum data for "all" in the population column in addition to data attributable to a racial/ethnic group or payor type. The AIM Data Center does not assume the sum of all data reported disaggregated by payor is equivalent to "all." For visualizations to work in the AIM Data Center, data must at minimum be reported for "all."
- 5. (For the *Default* and *Wide* file formats) Monthly, quarterly, and annual reporting coincides with calendar years. Annual reporting is for a single calendar year.

Reporting Period	Period Start and End Date Examples		
Monthly (Process Measures and NTSV Cesarean Birth Data)	01/01/21 and 01/31/21		
Quarterly (Process and Outcome Measures)	01/01/21 and 03/31/21 04/01/21 and 06/30/21 07/01/21 and 09/30/21 10/01/21 and 12/31/21		
Annually (Outcome Measures Only)	01/01/21 and 12/31/21		

# 6. (For the Default and Wide file formats) Provider/Nursing Education Data Collection and Formatting

Provider and nursing education data are collected in the AIM Data Center by asking for estimates in increments of 10% (round up):



When formatting provider and nursing education data for AIM using the default process/outcome file format, use the value column to report midpoint estimates based on facility team reporting.

Provider and Nursing Educator Reporting Range	Midpoint Estimate for File Formatting
0-9%	5
10-19%	15
20-29%	25
30-39%	35
40-49%	45
50-59%	55
60-69%	65
70-79%	75
80-89%	85
90-100%	95

These midpoint estimates should be used for other AIM measures that ask for estimates in increments of 10% (round up), such as measures part of AIM's Obstetric Hemorrhage data collection strategy.

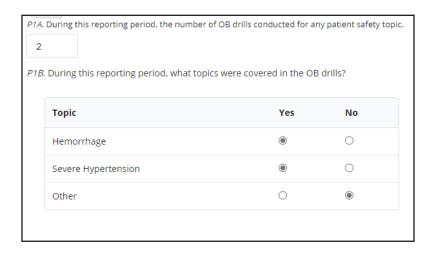
# 7. (For the Default file format) For process and outcome measures reported using numerators and denominators:

- ► All columns should be populated except for the 'value' column.
- ▶ The denominator value should be equal to or greater than the numerator value.

# 8. (For the Default file format) For process measures and structure reported using the 'value' column, such as integers, midpoint estimates or reporting TRUE/FALSE

- ▶ All columns should be populated except for the 'numerator' and 'denominator' columns.
- ▶ Document which topics were covered during a unit drill by inputting 'TRUE' or 'FALSE' for each unit drill topic. Topics include unit drills for obstetric hemorrhage, severe hypertension, and drills on any other patient safety topic.

For reference, this is how unit drills data are collected in the AIM Data Center:



Refer to Appendix B for variable names for process, outcomes, and structure measures.

9. (For the Default and Wide file formats) As of October 2022, structure measures are reported on a 5-point Likert scale. A value of 1 indicates that the team has "not started" working on putting the structure in place while a value of 5 indicates that the structure is "Fully in Place". For more information on the how structure measures are reported, please refer to the structure measure and transition packet.

NOTE: If your file upload fails, review the errors per the Data Center's comments, correct them and re-upload the file. If you continue to have trouble uploading your files, please contact aimdatasupport@acog.org.

## **Monitoring Data Submission Status**

This section of the Data Center allows state and jurisdiction administrators to review hospital- and state or jurisdiction-level data submission statuses by patient safety bundle and measure type. Use this Data Center dashboard to edit or add hospital-level structure and process measures data. User instructions are below.

1. Click the "Submission Status" tab under your state or jurisdiction dashboard.



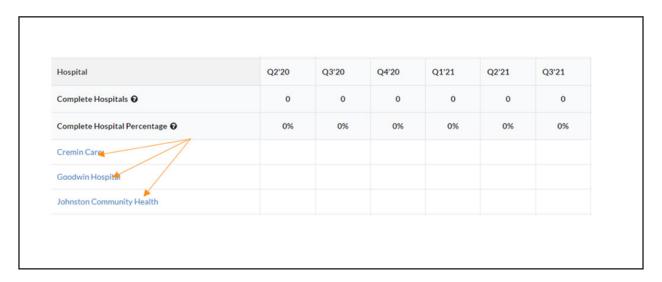
2. Click the patient safety bundle for which you would like to view data submission statuses for participating hospitals.



3. Click a measure type – Process or Structure – to view the overall and hospital-specific data. Click on "Recent Submissions" to view the last time data reported by hospital.

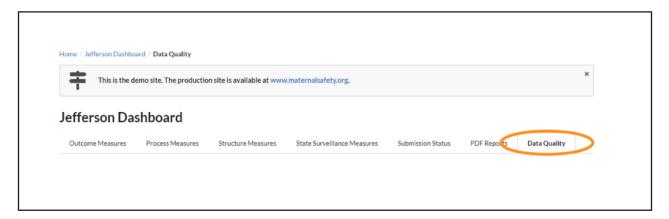


4. Click hospital names under "Complete Hospital Percentage" to view and edit data entry statuses for structure and process measures and to view measure results for individual hospitals.



## **Assessing Data Quality**

Use this section of the AIM Data Center to assess data quality related to quality of blood transfusion coding for severe maternal morbidity (SMM) and hospital outliers by measure.



#### 1. Assessing Quality of Blood Transfusion Quality:



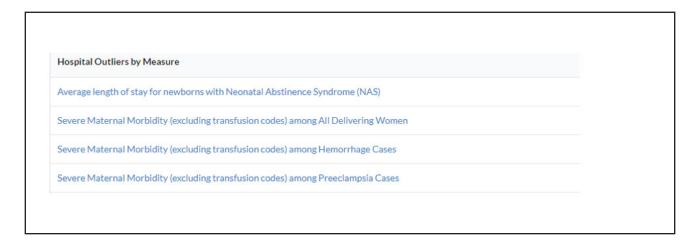
► Click on <u>Transfusion Coding</u> to view hospitals that may not have coded blood transfusions for certain reporting periods. This is determined by comparing the numerators of the hospital's SMM rate that includes transfusion codes with the numerators or the hospital's SMM rate that excludes transfusion codes. If both versions of the SMM rate have the same numerator, that hospital likely did not code for blood transfusions.

► Click on <u>Transfusion Exclusion</u> to view hospitals that may have erroneous data for a given quarter. This is determined by comparing the denominators of the hospital's SMM rate that includes transfusion codes with the hospital's SMM rate that excludes transfusion codes. Denominators for both versions of the SMM rate should be the same and hospitals with unequal denominators are flagged in this report.

For more information on coding for transfusions, refer to the AIM Data FAQ on blood transfusion coding.

#### 2. Assessing Outliers by Measure

 Click specific outcome measures to view hospital rates across reporting periods. Hospitals and reporting periods with outlier data will be highlighted



# **Appendices**

# **Appendix A: Process/Structure/Outcome Measure File Formatting Reference (Default)**

	А	В	С	D	E	F	G	Н
1	hospital_unique_identifier	period_start_date	period_end_date	measure	population	numerator	denominator	value
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								

# **Appendix B: Case-Sensitive Variable Names for AIM Patient Safety Bundles** (Default Process/Outcome Measures Format, Structure Measures)

### **Severe Hypertension in Pregnancy**

Variable Name	AIM Data Collection Plan Reference	Notes
severe_maternal_morbidity_excluding_transfusions	O1 Severe Maternal Morbidity (excluding transfusion codes alone)	Disaggregated by Race/Ethnicity and/or payor
severe_maternal_morbidity_excluding_transfusions_ preeclampsia	O2 Severe Maternal Morbidity among People with Preeclampsia (excluding transfusion codes alone)	Disaggregated by Race/Ethnicity and/or payor
severe_htn_treatment	P1 Timely Treatment of Persistent Severe Hypertension	Disaggregated by Race/Ethnicity and/or payor
severe_hypertension_symptoms_check_scheduling	P2A Scheduling of Postpartum Blood Pressure and Symptoms Checks	Disaggregated by Race/Ethnicity and/or payor
other_hypertensive_symptoms_check_scheduling	P2B Scheduling of Postpartum Blood Pressure and Symptoms Checks	Disaggregated by Race/Ethnicity and/or payor
preeclampsia_provider_education	P3A: Provider education on severe hypertension and preeclampsia Report estimate in 10% increments (round up)	Collect data in increments of 10%. Report midpoint estimate.
provider_equity_education	P3B: Provider education on respectful and equitable care Report estimate in 10% increments (round up)	Collect data in increments of 10%. Report midpoint estimate.
preeclampsia_nursing_education	P4A: Nursing education on severe hypertension and preeclampsia Report estimate in 10% increments (round up)	Collect data in increments of 10%. Report midpoint estimate.
nursing_equity_education	P4B: Nursing education on respectful and equitable care Report estimate in 10% increments (round up)	Collect data in increments of 10%. Report midpoint estimate.
preeclampsia_emergency_dept_nursing_education	P5 ED Provider & Nursing Education – Hypertension and Pregnancy. Report estimate in 10% increments (round up)	Collect data in increments of 10%. Report midpoint estimate.
unit_drill_count	P6A how many OB drills (In Situ and/or Sim Lab) were performed on your unit for any maternal safety topic? (Report Integer)	Report integer
topics_covered_hemorrhage	P6B. Topics covered in the OB drills (Report TRUE/FALSE)	Enter TRUE if unit drill topics included topics not related to severe hypertension or obstetric hemorrhage, FALSE if unit drill topics did not include other topics.
topics_covered_severe_hypertension	P6B. Topics covered in the OB drills (Report TRUE/FALSE)	Enter TRUE if unit drill topics included topics not related to severe hypertension or obstetric hemorrhage, FALSE if unit drill topics did not include other topics.

Variable Name	AIM Data Collection Plan Reference	Notes
topics_covered_other	P6B. Topics covered in the OB drills (Report TRUE/FALSE)	Enter TRUE if unit drill topics included topics not related to severe hypertension or obstetric hemorrhage, FALSE if unit drill topics did not include other topics.
patient_event_debriefs	S1 Patient Event Debriefs	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
debriefs	S2 Clinical Team Debriefs	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
multi_disciplinary_case_reviews	S3 Multidisciplinary Case Reviews	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
preeclampsia_protocols_2022_revision	S4 Unit Policy and Procedure	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
warning_signs_patient_education	S5 Patient Education Materials on Urgent Postpartum Warning Signs	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
emergency_department_screening	S56 Emergency Department (ED) Screening for Current or Recent Pregnancy	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
severe_maternal_morbidity (Discontinued)	O1 Severe Maternal Morbidity (Discontinued)	Disaggregated by Race/Ethnicity and/ or payor
severe_maternal_morbidity_preeclampsia (Discontinued)	O2 Severe Maternal Morbidity among People with Preeclampsia (Discontinued)	Disaggregated by Race/Ethnicity and/ or payor
preeclampsia_nursing_education_and_protocol (Discontinued)	P3B. % of nurses in past 2 years who have received education on standard unit protocol for treatment of severe hypertension. ( <b>Discontinued</b> )	Report in increments of 10%
preeclampsia_provider_education_and_protocol (Discontinued)	P2B. % of doctors & midwives in past 2 years who have received education on standard unit protocol for treatment of severe hypertension. (Discontinued)	Report in increments of 10%
patient_family_support (Discontinued)	S1. OB specific resources & protocols developed to support patients, family, and staff through major OB complications ( <b>Discontinued</b> )	Report in increments of 10%
preeclampsia_ehr_integration (Discontinued)	S5. Some of bundle processes integrated into hospital's HER system. (Discontinued)	Report in increments of 10%
preeclampsia_protocols (Discontinued)	S4. Hospital has OB hemorrhage policy & protocol reviewed & updated within past 2-3 years. ( <b>Discontinued</b> )	Report in increments of 10%

## **Obstetric Hemorrhage**

Variable Name	AIM Data Collection Plan Reference	Notes
severe_maternal_morbidity_excluding _transfusions	O1 Severe Maternal Morbidity (excluding transfusion codes alone)	Disaggregated by Race/Ethnicity and/or payor
severe_maternal_morbidity_excluding_transfusions_ hemorrhage	O2 Severe Maternal Morbidity among People who Experienced an Obstetric Hemorrhage (excluding transfusion codes alone)	Disaggregated by Race/Ethnicity and/or payor
hem_risk_assessment	P1. Hemorrhage Risk Assessment	Disaggregated by Race/Ethnicity and/or payor
quant_blood_loss	P2. Quantified Blood Loss	Disaggregated by Race/Ethnicity and/or payor
post_hemorrhage_patient_support	P3. Patient Support After Obstetric Hemorrhage	Disaggregated by Race/Ethnicity and/or payor
hemorrhage_provider_education	P4A: Provider education on obstetric hemorrhage. Report estimate in 10% increments (round up)	Report in increments of 10%, using midrange value for data submission. Round up
provider_equity_education	P4B: Provider education on respectful and equitable care. Report estimate in 10% increments (round up)	Report in increments of 10%, using midrange value for data submission. Round up
hemorrhage_nursing_education	P5A: Nursing education on obstetric hemorrhage Report estimate in 10% increments (round up)	Report in increments of 10%, using midrange value for data submission. Round up
nursing_equity_education	P5B: Nursing education on respectful and equitable care. Report estimate in 10% increments (round up)	Report in increments of 10%, using midrange value for data submission. Round up
unit_drill_count	P6A. At end of quarter how many OB drills (Situ and/or Sim lab) performed for any maternal safety topic?	Report integer
topics_covered_hemorrhage	P6B. Topics covered during unit drills?	Enter TRUE if unit drill topics included topics not related to severe hypertension or obstetric hemorrhage, FALSE if unit drill topics did not include other topics.
topics_covered_severe_hypertension	P6B. Topics covered during unit drills?	Enter TRUE if unit drill topics included topics not related to severe hypertension or obstetric hemorrhage, FALSE if unit drill topics did not include other topics.
topics_covered_other	P6B. Topics covered during unit drills?	Enter TRUE if unit drill topics included topics not related to severe hypertension or obstetric hemorrhage, FALSE if unit drill topics did not include other topics.
patient_event_debriefs	S1. Has your department established a standardized process to conduct debriefs with patients after a severe event?	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
debriefs	a system to perform regular formal debriefs with the clinical team after cases.	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.

Variable Name	AIM Data Collection Plan Reference	Notes
multi_disciplinary_case_reviews	S3. Has your hospital established a to perform multidisciplinary systems-level reviews on cases of severe maternal morbidity (including, at a minimum, birthing patients admitted to the ICU or receiving ≥ 4 units RBC transfusions)?	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
hemorrhage_cart	S4. Does your hospital have obstetric hemorrhage supplies readily available in a cart or mobile box?	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
hemorrhage_policies_and_ procedures	S5. Does your hospital have obstetric hemorrhage supplies readily available in a cart or mobile box?	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
urgent_warning_signs_education	S6. Patient Education Materials on Urgent Postpartum Warning Signs	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
hemorrhage_quantified_blood_loss	S7. Does your facility have the resources and supplies readily available to quantify cumulative blood loss for both vaginal and cesarean births?	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
severe_maternal_morbidity (Discontinued)	O1. SMM including transfusions.	Disaggregated by Race/Ethnicity and/ or payor
severe_maternal_morbidity _hemorrhage (Discontinued)*	O2. SMM among mothers who experience hemorrhages, including transfusions.	Disaggregated by Race/Ethnicity and/ or payor
hemorrhage_nursing_education_ and_protocol (Discontinued)	P5B. % of nurses in past 2 years who have received education on standard unit protocol for hemorrhage.	Report in increments of 10%, using midrange value for data submission. Round up
hemorrhage_provider_education_ and_protocol (Discontinued)	P4B. % of doctors & midwives in past 2 years who have received education on standard unit protocol for hemorrhage.	Report in increments of 10%, using midrange value for data submission. Round up
quantified_blood_loss (Discontinued)	P5. At end of quarter, % of mothers who had quantified, cumulative measurement of blood loss from birth through recovery.	
patient_family_support (Discontinued)	S1. OB specific resources & protocols developed to support patients, family, and staff through major OB complications	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
hemorrhage_protocol (Discontinued)	S5. Hospital has OB hemorrhage policy & protocol reviewed & updated within past 2-3 years.	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
hemorrhage_ehr_integration (Discontinued)	S6. Some of bundle processes integrated into hospital's EHR system.	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
hemorrhage_multidisciplinary_case_review	OP1: Multidisciplinary Case Review	

# **Safe Reduction of Primary Cesarean Birth**

Variable Name	AIM Data Collection Plan Reference	Notes
cesarean_bundle_compliance	P3: Cesarean Bundle Compliance Rate	Report in increments of 10%, using midrange value for data submission. Round up
cesarean_nursing_education_and_protocol	P2: Nursing Education Report as range using Value column and a midpoint estimate	Report in increments of 10%, using midrange value for data submission. Round up
cesarean_provider_education_and_protocol	P1: Provider Education	Report in increments of 10%, using midrange value for data submission. Round up
ntsv_cesarean	O3: C/S Delivery Rate among Nulliparous, Term, Singleton, Vertex (NTSV) Population	Disaggregate by race/ethnicity and/or payor.
ntsv_cesarean_induction	O4: C/S Delivery Rate among Nulliparous, Term, Singleton, Vertex (NTSV) Population after Labor Induction	Disaggregate by race/ethnicity and/or payor.
severe_maternal_morbidity	O1: Severe Maternal Morbidity	Disaggregate by race/ethnicity and/or payor.
severe_maternal_morbidity_excluding_transfusions	O2: Severe Maternal Morbidity (excluding transfusion codes)	Disaggregate by race/ethnicity and/or payor.
cesarean_bundle_reviews	S4: Multidisciplinary Case Reviews for C/S bundle	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
cesarean_ehr_integration	S3: EHR Integration	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
cesarean_guidelines_for_labor_challenges	S2: Unit Policy and Procedure	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
cesarean_patient_family_support	S1a: Patient, Family & Staff Support	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
cesarean_shared_decision_making	S1b: Patient, Family & Staff Support	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.

# **Obstetric Care for Women with Opioid Use Disorder (OLD)**

Variable Name	AIM Data Collection Plan Reference	Notes
severe_maternal_morbidity	O1: Severe Maternal Morbidity	Disaggregate by race/ethnicity and/or payor.
severe_maternal_morbidity_excluding_transfusions	O2: Severe Maternal Morbidity (excluding transfusion codes)	Disaggregate by race/ethnicity and/or payor.
pregnancy_associated_opioid_death	O3: Pregnancy Associated Opioid Deaths	Disaggregate by race/ethnicity and/or payor.
biological_mother_discharge	P3: Percent of OEN who go home to biological mother	Disaggregate by race/ethnicity and/or payor.
mat_behavioral_treatment	P1: Percent of women with OUD during pregnancy who receive medication assisted treatment MAT or behavioral health treatment.	Disaggregate by race/ethnicity and/or payor.
nas_stay_length	O4: Average Length of stay for newborns with Neonatal Abstinence Syndrome (NAS)	Disaggregate by race/ethnicity and/or payor.
neonatal_abstienence_syndrome	SS2: Percent of newborns diagnosed with NAS	Disaggregate by race/ethnicity and/or payor.
newborns_affected_by_maternal_opiate_use	SS1: Percent of newborns diagnosed as affected by maternal use of opiates.	Disaggregate by race/ethnicity and/or payor.
pnc_site_universal_screening	P4: Universal Screening at Prenatal Care Sites	Report numerator and denominator.
screening_policy_for_oud	S1: Universal Screening on L&D	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
routine_prescribing_practices	S2: General Pain Management Practices	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.
oud_specific_prescribing_guidelines	S3: oud Pain Management guidelines	Report on a 5-point Likert-like scale that ranges from (1) Not Started to (5) Fully in Place.

## **Care for Pregnant and Postpartum People with Substance Use Disorder (NEW)**

Variable Name	AIM Data Collection Plan Reference	Notes
severe_maternal_morbidity	SS2: Severe Maternal Morbidity (including transfusion codes)	Disaggregate by race/ethnicity and/or payor.
severe_maternal_morbidity_excluding_transfusions	SS3: Severe Maternal Morbidity (excluding transfusion codes)	Disaggregate by race/ethnicity and/or payor.
severe_maternal_morbidity_sud	SS2: Severe Maternal Morbidity (including transfusion codes) among people with SUD	Disaggregate by race/ethnicity and/or payor.
severe_maternal_morbidity_excluding _transfusions_ sud	SS3: Severe Maternal Morbidity (excluding transfusion codes) among people with SUD	Disaggregate by race/ethnicity and/or payor.
severe_maternal_morbidity_oud	SS2: Severe Maternal Morbidity (SMM) (including transfusion codes) among people with OUD	Disaggregate by race/ethnicity and/or payor.
severe_maternal_morbidity_excluding _transfusions_ oud	SS3: Severe Maternal Morbidity (SMM) (excluding transfusion codes) among people with OUD	Disaggregate by race/ethnicity and/or payor.
sud_among_pregnant_postpartum	SS1: Substance use disorders among pregnant and postpartum people	Disaggregate by race/ethnicity and/or payor.
oud_among_pregnant_postpartum	SS3: Severe Maternal Morbidity (SMM) (excluding transfusion codes) among people with OUD	Disaggregate by race/ethnicity and/or payor.
pregnancy_associated_opioid_death	SS4: Proportion of Pregnancy Associated Deaths due to overdose.	Disaggregate by race/ethnicity and/or payor.
biological_parent_discharge	O1: Percent of Newborns Exposed to Substances in Utero Who Go Home to Either Birth Parent	Disaggregate by race/ethnicity and/or payor.
medication_counseling	P2: Percent of pregnant and postpartum people with OUD who were counseled on medication for opioid use disorder (MOUD)	Disaggregate by race/ethnicity and/or payor.
medication_assisted_treatment_referral	O3: Percent of pregnant and postpartum people with SUD who received or were referred to recovery treatment services prior to delivery discharge	Disaggregate by race/ethnicity and/or payor.
naloxone_counseling	P4: Percent of pregnant and postpartum people with SUD who received Naloxone counseling	Disaggregate by race/ethnicity and/or payor.
naloxone_prescription	O4: Percent of pregnant and postpartum people with SUD who received or were prescribed Naloxone prior to delivery discharge	Disaggregate by race/ethnicity and/or payor.
recovery_treatment_services_counseling	P3: Percent of pregnant and postpartum people with SUD who were counseled on recovery treatment Services	Disaggregate by race/ethnicity and/or payor.

Variable Name	AIM Data Collection Plan Reference	Notes
recovery_treatment_services_referral	O3: Percent of pregnant and postpartum people with SUD who received or were referred to recovery treatment services prior to delivery discharge	Disaggregate by race/ethnicity and/or payor.
sud_universal_screening	P1: Percent of Pregnant and Postpartum People Screened for SUD	
sud_provider_and_nursing_education	P5: Provider and Nursing Education – Substance Use Disorders	Collect data in increments of 10%. Report midpoint estimate.
respectful_equitable_care_provider _and_nursing_ education	P6: Provider and Nursing Education – Respectful and Equitable Care	Collect data in increments of 10%. Report midpoint estimate.
resource_mapping	S1: Resource Mapping/Identification of Community Resources	Report on the flexible 5-point Likert-like scale.
Patient_event_debriefs	S2: Patient Event Debriefs	Report on the flexible 5-point Likert-like scale.
general_pain_management_guidelines	S3: General Pain Management Guidelines	Report on the flexible 5-point Likert-like scale.
oud_pain_management_guidelines	S4: OUD Pain Management Guidelines	Report on the flexible 5-point Likert-like scale.
verbal_screening_and_tools	S5: Validated Verbal Screening Tools and Resources Shared with Prenatal Care Sites	Report on the flexible 5-point Likert-like scale.

# **Postpartum Discharge Transition**

Variable Name	AIM Data Collection Plan Reference	Notes
ppdt_learning_experiences	P1A: Inpatient-Outpatient Provider Education- Learning Experiences	Report integers
ppdt_care_settings	P1B: Inpatient-Outpatient Care Provider Education- Care Settings Represented	Report integers
postpartum_concerns_education	P2: Provider and Nursing Education – Postpartum Concerns	Collect data in increments of 10%. Report midpoint estimate.
equitable_care_education	P3: Provider and Nursing Education – Respectful and Equitable Care	Collect data in increments of 10%. Report midpoint estimate.
postpartum_visit_scheduling	P4: Postpartum Visit Scheduling	Disaggregate by race/ethnicity and/or payor.
ssdoh_screening	P5: Screening for Social and Structural Drivers of Health (SSDOH)	Disaggregate by race/ethnicity and/or payor.
life_threatening_ppdt_concerns_education	P6: Patient Education on Life- Threatening Postpartum Concerns	Report N/D
postpartum_readmissions	SS1: Postpartum Readmissions within 42 Days	Disaggregate by race/ethnicity and/or payor.
postpartum_pregnancy_related_death	SS2: Postpartum Pregnancy-Related Deaths	Disaggregate by race/ethnicity and/or payor.
postpartum_visit_attendance	SS3: Postpartum Visit Attendance	Disaggregate by race/ethnicity and/or payor.
care_coordination_workgroup	S1: Inpatient-Outpatient Care Coordination Workgroup	Report on the flexible 5-point Likert-like scale.
ppdt_resource_mapping	S2: Resource Mapping/Identification of Community Resources	Report on the flexible 5-point Likert-like scale.
visit_template	S3: Shared Comprehensive Postpartum Visit Template	Report on the flexible 5-point Likert-like scale.
emergency_department_screening	S4: Emergency Department (ED) Screening for Current or Recent Pregnancy	Report on the flexible 5-point Likert-like scale.
warning_signs_patient_education	S5: Patient Education Materials on Urgent Postpartum Warning Signs	Report on the flexible 5-point Likert-like scale.
patient_event_debriefs	S6: Patient Event Debriefs	Report on the flexible 5-point Likert-like scale.

### **Cardiac Conditions in Obstetrical Care**

Variable Name	AIM Data Collection Plan Reference	Notes
ntsv_cesarean_cardiac	O1: NTSV Cesarean Birth Rate Among People with Cardiac Conditions	Disaggregate by race/ethnicity and/or payor.
preterm_birth_cardiac	O2: Preterm Birth Rate Among People with Cardiac Conditions	Disaggregate by race/ethnicity and/or payor.
standardized_pregnancy_risk_assessment	P1: Standardized Pregnancy Risk Assessments for People with Cardiac Conditions	Disaggregate by race/ethnicity and/or payor.
cardiac_conditions_care_plan	P2: Multidisciplinary Care Plan for Pregnant People with Cardiac Conditions	Disaggregate by race/ethnicity and/or payor.
provider_nursing_education_cardiac	P3: OB Provider and Nursing Education - Cardiac Conditions	Collect data in increments of 10%. Report midpoint estimate.
provider_nursing_education_equity	P4: OB Provider and Nursing Education - Respectful and Equitable Care	Collect data in increments of 10%. Report midpoint estimate.
ed_education_cardiac	P5: ED Provider and Nursing Education – Cardiac Conditions	Collect data in increments of 10%. Report midpoint estimate.
severe_maternal_morbidity_cardiac	SS1: Severe Maternal Morbidity Among People with Cardiac Conditions	Disaggregate by race/ethnicity and/or payor.
severe_maternal_morbidity_excluding_transfusion_ cardiac	SS2: Severe Maternal Morbidity Excluding Blood Transfusions Among People with Cardiac Conditions	Disaggregate by race/ethnicity and/or payor.
cardiac_pregnancy_related_death	SS3: Pregnancy-Related Deaths Due to Cardiac Conditions	Disaggregate by race/ethnicity and/or payor.
multidisciplinary_heart_team	S1:Multidisciplinary Pregnancy Heart Team	Report on the flexible 5-point Likert-like scale.
emergency_department_screening	S2: ED Screening for Current or Recent Pregnancy	Report on the flexible 5-point Likert-like scale.
urgent_warning_signs_education	S3: Patient Education Materials on Urgent Postpartum Warning Signs	Report on the flexible 5-point Likert-like scale.
ccoc_multi_disciplinary_case_reviews	S4: Multidisciplinary Case Reviews for CCOC Bundle	Report on the flexible 5-point Likert-like scale.
patient_event_debriefs	S5: Patient Event Debriefs	Report on the flexible 5-point Likert-like scale.
patient_event_debriefs	S6: Patient Event Debriefs	Report on the flexible 5-point Likert-like scale.

# **Appenix C: Case Sensitive Variable Names for Formatting Data Disaggregated** by Race and thnicity

Racial/Ethnic Group	Description
all	No disaggregation based on race and ethnicity. Required for all reporting.
asian	Non-Hispanic. A person having origins in any of the original peoples of East Asia, Southeast Asia, or the Indian subcontinent.
african_american	Non-Hispanic. Black or African American; a person having origins in any of the Black racial groups of Africa.
hispanic	A person of Cuban, Mexican, Puerto Rican, South or Central American or other Spanish culture or origin regardless of race.
multi_racial	Non-Hispanic. A person of 2 or more races.
native_american	Non-Hispanic. American Indian or Alaskan Native; a person having origins in any of the original peoples of North, South and/or Central America and who maintains tribal affiliation or community attachment.
native_hawaiian_pacific_islander	Non-Hispanic. A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
white	Non-Hispanic. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.
other	Non-Hispanic. Include all races for which disaggregated data were not reported.
race_not_reported	Race not reported in HDD or BC files.
unknown	Race not known.

# **Appenix D: Case-Sensitive Variable Names for Formatting Data Disaggregated** by Payor Type

Payor Type	Description	
all	No disaggregation based on payor type. Required for all reporting.	
medicaid	May include CHIP and Medicare.	
private	Private insurance.	
other_public	May include military insurance, IHS, other state or federal source.	
uninsured	May include those who self-pay, are not charged for services, or another payer.	

### **Appenix E: AIM Data Resources and Data Team Contacts**

Quick Resource Links		
AIM Data	www.maternalsafety.org	
AIM Data Center Log-In	https://www.maternalsafety.org/users/sign_in	
AIM Data Center Demo Site	https://demo.maternalsafety.org/ Demo Site State: Jefferson Demo Site Email Logins for State and Hospital Data hospital_admin@example.com hospital_read_only@ example.com state_admin@example.com state_ read_only@example.com Demo Site Password: Abcd1234 Demo Site Email Logins for C/S Bundle cs_hospital_ admin@example.com cs_hospital_read_only@ example.com cs_state_admin@example.com cs_ state_read_only@example.com Demo Site Password: Abcd1234	

AIM Data Team Contacts		
Contact	When to Use	Email
AIM Data Support Email	General content questions as well as questions regarding:  • AIM Data Collection Plans  • Measure Specifications  • Bundle Additions	aimdatasupport@acog.org
AIM Data Center Support	Technical issues or logistical questions regarding the AIM Data Center	support@maternalsafety.org

If unsure of which email to use, please direct questions to aimdatasupport@acog.org