



ALLIANCE FOR INNOVATION
ON MATERNAL HEALTH

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Data Upload Guide
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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 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.

Objective:

Allow states to implement data collection systems that most closely align with their quality improvement goals.

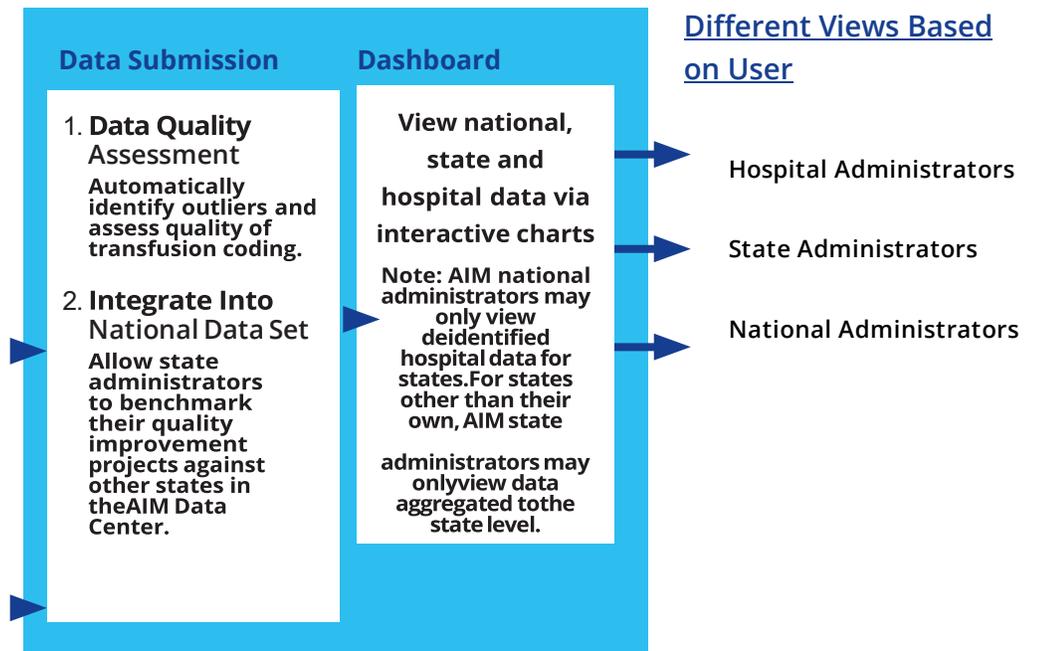
Hospitals Submit Data Directly to the AIM Data Center

Hospital administrators upload process and structure data directly to the AIM Data Center. State administrators upload outcome data on hospitals' behalf.

States Develop Their Own Data Collection System

Hospital administrators upload process and structure data to a state-run data collection system. State administrators upload structure, process, and outcome data on hospitals' behalf.

AIM Data Center



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

AIM Data Center Enrollment and Logging on for the First Time

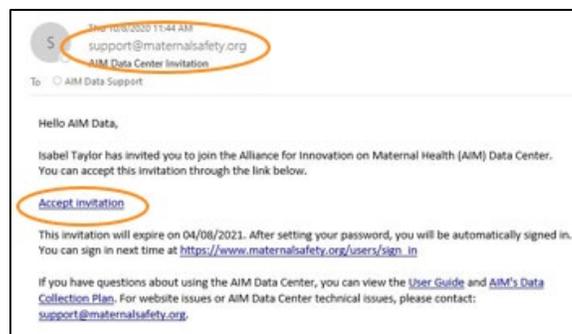
Before being invited to the AIM Data Center, AIM requires the following from enrolled states and jurisdictions:

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 Center Account
 - a. 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

- a. 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.”

Home

Set your password

Welcome to the AIM/ACOG Data Center.

You have been invited as a National Administrator.
Please complete the fields below to continue registering.

First Name*

Last Name*

Email

Password*

Must be at least eight characters and contain an uppercase letter, a lowercase letter, and a number

Password Confirmation*

[Complete Registration and Sign In](#)

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

- a. 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.

Home Data Use Agreement

You must accept the data use agreement before it can be processed.

TERMS AND CONDITIONS OF DATA SUBMISSION

ACOG owns and operates the Alliance for Innovation on Maternal Health, Improving Maternal Health and Safety (“AIMH”), which includes a federal collaborative data repository of de-identified information pertaining to participating facility processes and outcomes (the “Database”) and offers content created by ACOG aimed at providing a platform for data to standardize and improve clinical processes to achieve desired outcomes (“Safety Bundles”).

1. Description of Data

1.1 Outcome Data: Participant acknowledges and agrees that it is authorized to submit Outcome Data to ACOG.

1.2 Process Data: Through participation in AIM, Participant acknowledges and agrees that they are authorized to submit Process Data to ACOG and will be responsible for entering all Process Data into the Database through ACOG’s central web-accessible transmission tool (the “Portal”) facilitated or operated by a third party (“Vendor”).

1.3 Data Storage: All data submitted to AIM will reside on a secure data server, operated by a third party, for medical data analysis.

1.4 Data Display: Data entered into the AIM data portal will be coded with a unique identifier. Only users with institution access to the portal registration and a designee within your state health agency or specified hospital contractor will have access to the data associated with your institution.

1.5 HIPAA: Participant acknowledges and agrees that all Outcome Data and Process Data shall be “de-identified” as defined under the Health Insurance Portability and Accountability Act and all regulations promulgated thereunder (as may be amended or supplemented from time to time herein, collectively, “HIPAA”) and the guidance for de-identification issued by the Secretary (as defined under HIPAA) from time to time.

2. Participant Representations and Warrantions

2.1 Participant represents and warrants that at all times during the term of this Agreement it will comply with all applicable federal, state and local laws and guidelines (including, but not limited to, the requirements of HIPAA).

2.2 Participant represents and warrants to ACOG that it will not submit to the Database “protected health information” as such term is defined under HIPAA or “personally identifiable information” as defined under applicable state laws.

2.3 Participant agrees to protect and safeguard its Participant Identifier against unauthorized publication or disclosure, such protection to be achieved using procedures no less rigorous than those utilized by Participant in protecting its own confidential information or disclosure to third parties, but in no event, less than reasonable care.

3. Ownership of Data

3.1 Participant acknowledges and agrees that ACOG is the owner of the entire right, title and interest in and to all Aggregate Data and the Safety Bundles. Any data that can be attributed directly to Participant need not be published without the express permission of the Participant.

4. Publication and Release of Information

4.1 PARTICIPANT ACKNOWLEDGES AND AGREES THAT THE DATA BENCHMARK AND PERFORMANCE REPORTS GENERATED BY ACOG AND PROVIDED TO IT AND FOR ACOG AS PART OF THE AIMH PROGRAM WILL BE SUBJECT TO THE APPLICABLE STATE AND FEDERAL ACOG AND THIRD PARTY POLICY ON THE ACCURACY OF ANY DATA. PARTICIPANT FURTHER ACKNOWLEDGES THAT THE BENCHMARKING REPORTS AND PERFORMANCE REPORTS GENERATED BY ACOG WILL CONTAIN STATISTICAL AND OTHER DATA WHICH MAY BE CONFIDENTIAL TO PARTICIPANT BUT THAT ACOG IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION CONTAINED THEREIN OR FOR THE USE OF SUCH REPORTS BY PARTICIPANT.

5. Relationship of the Parties

5.1 ACOG and Participant agree that this Agreement is not intended to create, and does not establish, a Business Associate relationship, partnership, joint venture, agency or other arrangement between the parties, and that ACOG and Participant are entering into this Agreement as independent contractors. Neither party, by virtue of this Agreement, shall have any right, power or authority, expressed or implied, to act on behalf of or enter into any understanding binding the other party.

[Accept Data Use Agreement](#)

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?

AIM'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 AIM'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.

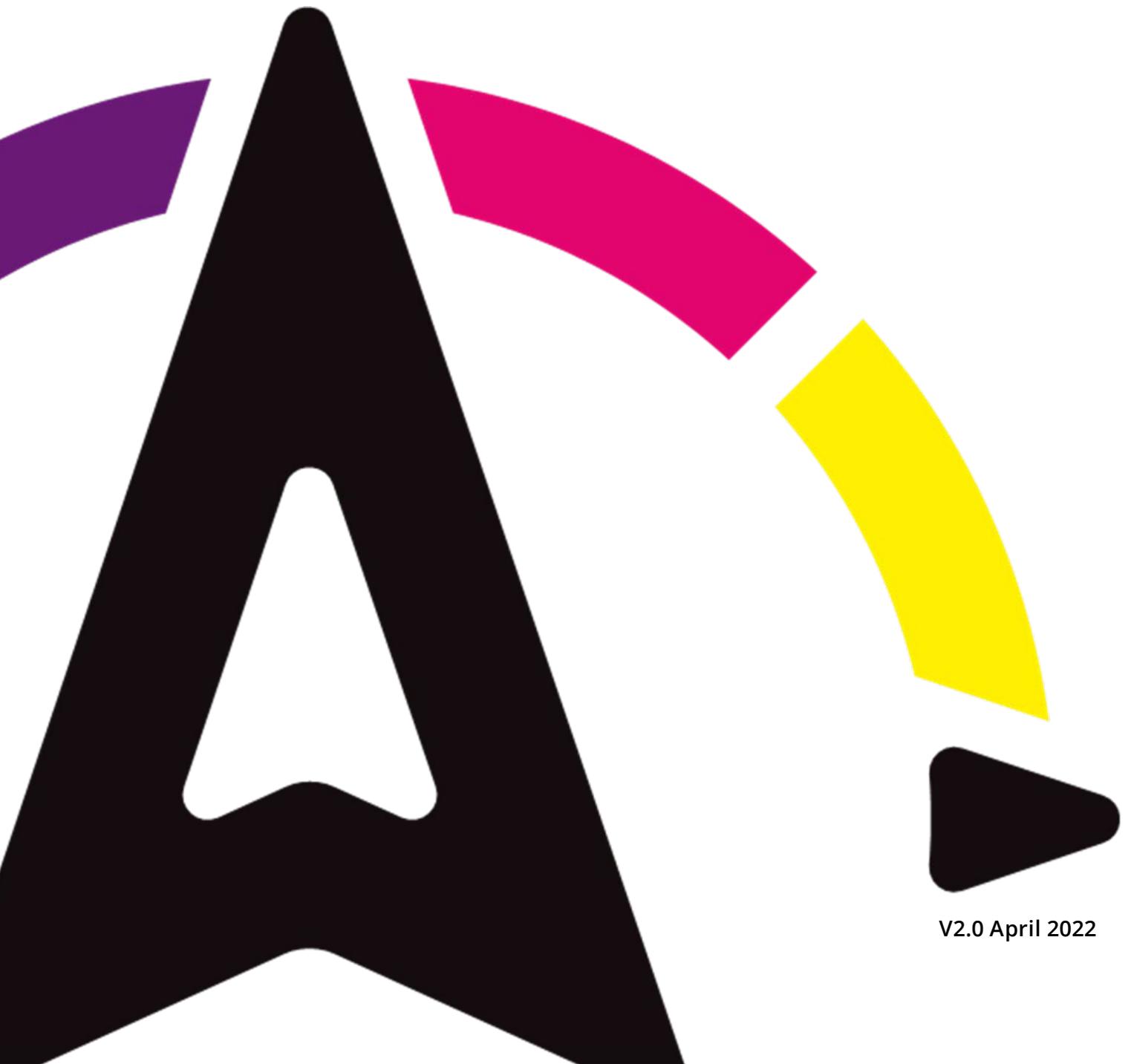
We recommend that you first upload baseline outcome measures data before inviting hospital users to the Data Center. If you need support inviting hospital users in bulk, please contact the AIM Data Team.

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 two files - one will have structure measures data and one will have process and outcome measures data. All state and jurisdiction administrators are expected to upload outcome measures data on behalf of participating hospitals.



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Process and Outcome Measures File Formatting

Process and outcome measures files 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 format puts individual measures in columns like a REDCap export.

Process/Outcome Measures (default): Use the following information to format the header for your default process and outcomes measures files.

** Please see [Appendix A](#) for a sample file for 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. 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.
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. 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.
measure	The specific process/outcome measure being reported. <i>*Please see Appendix C for case sensitive variable names for default process/outcome measure files.</i>
population	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.

Header Text	Description
	<p>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.”</p> <p><i>*Race and ethnicity variable names are case sensitive, please see Appendix D for more details.</i></p> <p style="text-align: center;">OR</p> <p>By Payor: 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.</p> <p>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.”</p> <p><i>*Payor variable names are case sensitive, please see Appendix E for more details.</i></p>
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	<p>Used for some process 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.</p> <p>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.</p>

Process/Outcomes Measures (wide): 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. 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.
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. 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.
population	Input "all" for all rows.
measures (in columns)	The specific process/outcome measure being reported. To reference case-sensitive measure names for reporting, use the following templates, located on the AIM Data Resource Webpage : <ul style="list-style-type: none"> • Safe Reduction of Primary Cesarean Birth • Obstetric Hemorrhage • Severe Hypertension in Pregnancy • Care for Pregnant and Postpartum People with Substance Use Disorder

Collecting and Formatting Data for Outcome and Process Measures



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

1. Sourcing Outcome Measures Data
 - a. 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 Data
 - a. Outcome measures can be reported at the state/jurisdiction, collaborative, and hospital levels.
 - b. 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.
 - c. When reporting data for all the facilities participating in AIM PSB implementation, use “collaborativewide” in the hospital_unique_identifier column of your file.
 - d. When reporting data for all facilities within a state or jurisdiction regardless of participation in AIM PSB implementation, use “statewide” in the hospital_unique_identifier column of your file.
3. Disaggregating Process and Outcome Measures Data by Race and Ethnicity or by Payor
 - a. 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.
 - b. 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.
 - c. 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.

Structure Measures File Formatting

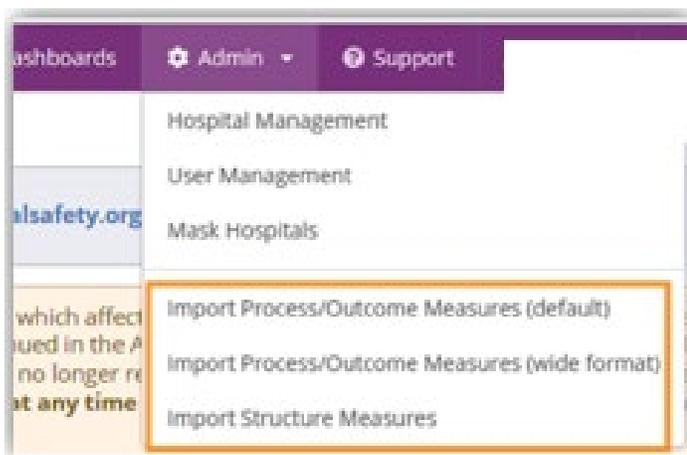
Use the following information to format the header for your structure measures file.

** Please see [Appendix B](#). for a sample file for 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 respondent unique identifiers.
measure	The specific structure measure being reported. <i>*Please see the Appendix C for case sensitive variable names for structure measure files.</i>
date	The date the measure was implemented. Input the date using a MM/DD/YYYY format. If the measure is not in place, input "not_in_place." If a facility did not report data for the reporting period, omit the row.

Uploading 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 using the Data Center's directions, attach and upload your file.

Directions: Please keep the following in mind when submitting your CSV data:

- Your .csv file must contain the following headers: hospital_unique_identifier, period_start_date, period_end_date, measure, population, numerator, denominator, value
- 'period_start_date' and 'period_end_date' columns should be provided in the date format MM/DD/YYYY e.g. 01/01/2015
- 'period_start_date' and 'period_end_date' columns can only be submitted for a quarterly or yearly frequency. e.g. 01/01/15 to 03/31/15 or 01/01/15 to 12/31/15.
- Numerators must be populated with a 0 if there were no cases.
- Every row's 'hospital_unique_identifier' must match with a hospital within the AIM Data Center. If you need to look up a hospital's unique identifier, click [here](#).

Choose File No file chosen

Upload

Basic Troubleshooting for Data Collection and File Uploads

1. (For all process/outcome and structure measure file formats) All column and variable names are case sensitive. Refer to [Appendix C](#). for variable names for default process/outcome measure files and structure measure files.
2. (For all process/outcome and structure measure file formats) All column headers need to be present. For example, even if you are not reporting data using the value column, the value column header needs to be present for successful file upload.
3. (For default process/outcome and structure measure 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. (For all process/outcome file formats) 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 all process/outcome file formats) 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 Only)	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 all process/outcome 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):

P2A. During this reporting period, what cumulative proportion of OB physicians and midwives has completed (within the last 2 years) an education program on Obstetric Hemorrhage? Beginning with data reported for Q2 2021, this metric measures provider education on a bundle's maternal safety topic **in relation to its unit standard protocols and measures**. Data collected prior to Q2 2021 was captured using 2 metrics; 1) provider education on the bundle's maternal safety topic and 2) provider education on relevant unit standard protocols. When interpreting data and visualizations in the Data Center for this metric, data collected prior to Q2 2021 measured provider education on the bundle's maternal safety topic **only**.

A screenshot of a dropdown menu with a scroll bar on the right. The menu is open, showing a list of reporting ranges: 0-9%, 10-19%, 20-29%, 30-39%, 40-49%, and 50-59%. The background is white, and the text is black.

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 Education 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 process/outcome file format) For process and outcome measures reported using numerators and denominators:
 - a. All columns should be populated except for the 'value' column.
 - b. The denominator value should be equal to or greater than the numerator value.

8. (For the default process/outcome file format) For process measures reported using the 'value' column, such as integers, midpoint estimates or reporting TRUE/FALSE:
 - a. All columns should be populated except for the 'numerator' and 'denominator' columns.
 - b. 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:

P1A. During this reporting period, the number of OB drills conducted for any patient safety topic.

P1B. During this reporting period, what topics were covered in the OB drills?

Topic	Yes	No
Hemorrhage	<input checked="" type="radio"/>	<input type="radio"/>
Severe Hypertension	<input checked="" type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input checked="" type="radio"/>

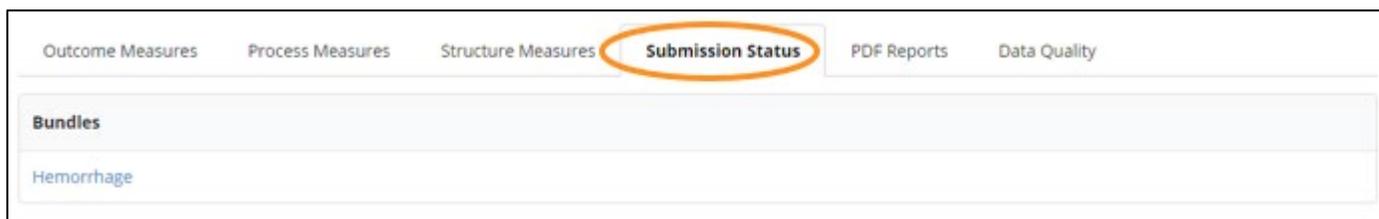
Refer to [Appendix C](#) for variable names for default process/outcome measures files.

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.*

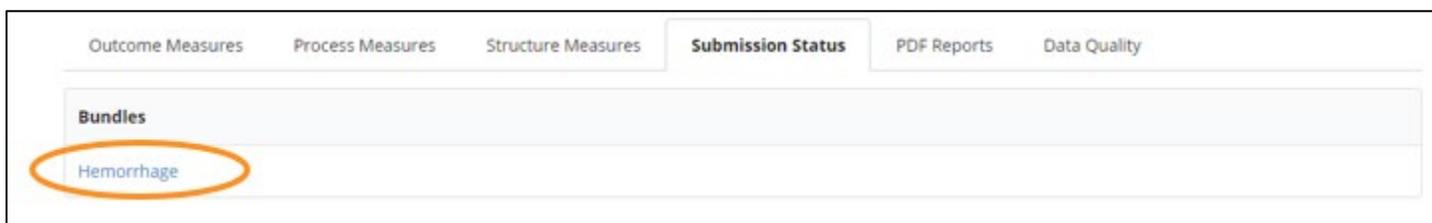
Monitoring Data Submission Status

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.

A screenshot of the 'Hemorrhage Bundle Submission Status' page. The page title is 'Hemorrhage Bundle Submission Status' and there is a 'Download CSV' button in the top right. Below the title are two tabs: 'Process Measures' and 'Structure Measures'. The 'Process Measures' tab is highlighted with an orange oval. Below the tabs is a note: 'For additional information, please consult AIM's Data Collection Plan. Hospitals marked as non-participating are excluded from completion calculations.' Below the note is a table with the following data:

Hospital	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022
Complete Hospitals	0	0	0	0	0
Complete Hospital Percentage	0%	0%	0%	0%	0%

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.

Hospital	Q2'20	Q3'20	Q4'20	Q1'21	Q2'21	Q3'21
Complete Hospitals 	0	0	0	0	0	0
Complete Hospital Percentage 	0%	0%	0%	0%	0%	0%
Cremin Care						
Goodwin Hospital						
Johnston Community Health						

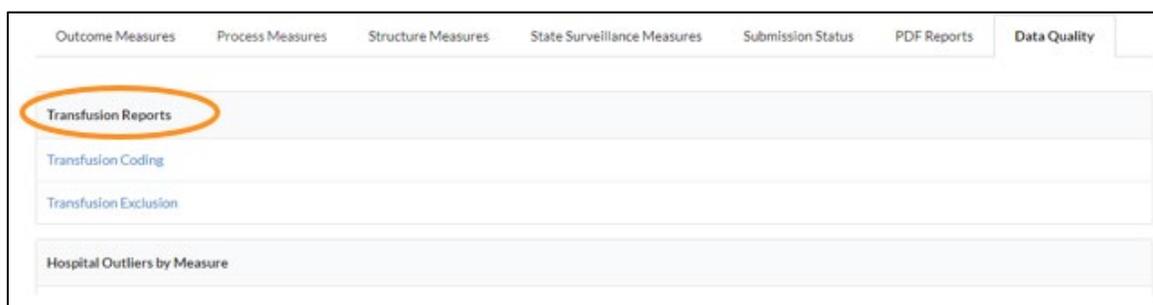


Assessing Data Quality

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:



- a. Click on Transfusion Coding 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.
- b. Click on Transfusion Exclusion 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:

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

Hospital Outliers by Measure
Average length of stay for newborns with Neonatal Abstinence Syndrome (NAS)
Severe Maternal Morbidity (excluding transfusion codes) among All Delivering Women
Severe Maternal Morbidity (excluding transfusion codes) among Hemorrhage Cases
Severe Maternal Morbidity (excluding transfusion codes) among Preeclampsia Cases

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



	A	B	C	D	E	F	G	H
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: Structure Measure File Formatting Reference



	A	B	C
1	hospital_unique_identifier	measure	date
2			
3			
4			
5			
6			
7			

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



Severe Hypertension in Pregnancy

Process/Outcome Measure Variable Name (Default)	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.
severe_maternal_morbidity_preeclampsia_cases	O3: Severe Maternal Morbidity among Preeclampsia Cases	Disaggregate by race/ethnicity and/or payor.
severe_maternal_morbidity_excluding_transfusions_preeclampsia_cases	O4: Severe Maternal Morbidity (excluding transfusions codes) among Preeclampsia Cases	Disaggregate by race/ethnicity and/or payor.
preeclampsia_nursing_education	P3: Nursing Education	Collect data in increments of 10%. Report midpoint estimate.
preeclampsia_provider_education	P2: Provider Education	Collect data in increments of 10%. Report midpoint estimate.
severe_htn_treatment	P4: Treatment of Severe HTN	Disaggregate by race/ethnicity and/or payor.
unit_drill_count	P1: Unit Drills	Report integer.
topics_covered_severe_hypertension	P1: Unit Drills	Report TRUE/FALSE
topics_covered_hemorrhage	P1: Unit Drills	Report TRUE/FALSE
topics_covered_other	P1: Unit Drills	Report TRUE/FALSE
preeclampsia_nursing_education_and_protocol (discontinued Q1 2021)	P3: Nursing Education (Discontinued after Q1, 2021)	

Process/Outcome Measure Variable Name (Default)	AIM Data Collection Plan Reference	Notes
preeclampsia_provider_education_and_protocol (discontinued Q1 2021)	P2: Provider Education (Discontinued after Q1, 2021)	

Structure Measure Name	AIM Data Collection Plan Reference
patient_family_support	S1: Patient, Family & Staff Support
debriefs	S2: Debriefs
multi_disciplinary_case_reviews	S3: Multidisciplinary Case Reviews
preeclampsia_protocols	S4: Unit Policy and Procedure
preeclampsia_ehr_integration	S5: EHR Integration

Obstetric Hemorrhage

Process/Outcome Measure Variable Name (Default)	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.
severe_maternal_morbidity_hemorrhage_cases	O3: Severe Maternal Morbidity among Preeclampsia Cases	Disaggregate by race/ethnicity and/or payor.
severe_maternal_morbidity_excluding_transfusions_hemorrhage_cases	O4: Severe Maternal Morbidity (excluding transfusions codes) among Preeclampsia Cases	Disaggregate by race/ethnicity and/or payor.
hemorrhage_nursing_education	P3: Nursing Education	Collect data in increments of 10%. Report midpoint estimate.
hemorrhage_nursing_education_and_protocol (Discontinued)	P3: Nursing Education (Discontinued after Q1, 2021)	Collect data in increments of 10%. Report midpoint estimate.

Process/Outcome Measure Variable Name (Default)	AIM Data Collection Plan Reference	Notes
hemorrhage_provider_education	P2: Provider Education	Collect data in increments of 10%. Report midpoint estimate.
hemorrhage_provider_education_and_protocol (Discontinued)	P2: Provider Education (Discontinued after Q1, 2021)	Collect data in increments of 10%. Report midpoint estimate.
hemorrhage_risk_assessment	P4: Risk Assessment	Collect data in increments of 10%. Report midpoint estimate.
quantified_blood_loss	PS: Quantified Blood Loss	Collect data in increments of 10%. Report midpoint estimate.
unit_drill_count	P1: Unit Drills	Report integer.
topics_covered_hemorrhage	P1: Unit Drills	Report TRUE/FALSE
topics_covered_severe_hypertension	P1: Unit Drills	Report TRUE/FALSE
topics_covered_other	P1: Unit Drills	Report TRUE/FALSE

Structure Measure Name	AIM Data Collection Plan Reference
patient_family_support	S1: Patient, Family & Staff Support
debriefs	S2: Debriefs
multi_disciplinary_case_reviews	S3: Multidisciplinary Case Reviews
hemorrhage_cart	S4: Hemorrhage Cart
hemorrhage_protocol	S5: Unit Policy and Procedure
hemorrhage_ehr_integration	S6: EHR Integration

Safe Reduction of Primary Cesarean Birth

Process/Outcome Measure Variable Name (Default)	AIM Data Collection Plan Reference	Notes
cesarean_bundle_compliance	P3: Cesarean Bundle Compliance Rate	Disaggregate by race/ethnicity and/or payor.
cesarean_nursing_education_and_protocol	P2: Nursing Education Report as range using Value column and a midpoint estimate	Disaggregate by race/ethnicity and/or payor.
cesarean_provider_education_and_protocol	P1: Provider Education	Disaggregate by race/ethnicity and/or payor.
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	Collect data in increments of 10%. Report midpoint estimate.
severe_maternal_morbidity	O1: Severe Maternal Morbidity	Collect data in increments of 10%. Report midpoint estimate.
severe_maternal_morbidity_excluding_transfusions	O2: Severe Maternal Morbidity (excluding transfusion codes)	Disaggregate by race/ethnicity and/or payor.

Structure Measure Name	AIM Data Collection Plan Reference
cesarean_bundle_reviews	S4: Multidisciplinary Case Reviews for C/S bundle
cesarean_ehr_integration	S3: EHR Integration
cesarean_guidelines_for_labor_challenges	S2: Unit Policy and Procedure
cesarean_patient_family_support	S1a: Patient, Family & Staff Support
cesarean_shared_decision_making	S1b: Patient, Family & Staff Support

Obstetric Care for Women with Opioid Use Disorder (OLD)

Process/Outcome Measure Variable Name (Default)	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.

Structure Measure Name	AIM Data Collection Plan Reference
screening_policy_for_oud	S1: Universal Screening on L&D
routine_prescribing_practices	S2: General Pain Management Practices
oud_prescribing_guidelines	S3: OUD Pain Management guidelines

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

Process/Outcome Measure Variable Name (Default)	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	Disaggregate by race/ethnicity and/or payor.

Process/Outcome Measure Variable Name (Default)	AIM Data Collection Plan Reference	Notes
	who were counseled on medication for opioid use disorder (MOUD)	
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.
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.

Process/Outcome Measure Variable Name (Default)	AIM Data Collection Plan Reference	Notes
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.

Structure Measure Name	AIM Data Collection Plan Reference
resource_mapping	S1: Resource Mapping/Identification of Community Resources
event_debriefs	S2: Patient Event Debriefs
general_pain_management_guideliens	S3: General Pain Management Guidelines
oud_pain_management_guidelines	S4: OUD Pain Management Guidelines
verbal_screening_and_tools	S5: Validated Verbal Screening Tools and Resources Shared with Prenatal Care Sites

Appendix D: Case-Sensitive Variable Names for Formatting Data Disaggregated by Race and Ethnicity



Racial/Ethnic Group	Description
all	No disaggregation based on race and ethnicity. <u>Required for all reporting.</u>
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.

Appendix E: Case-Sensitive Variable Names for Formatting Data Disaggregated by Payor Type



Payor Type	Description
all	No disaggregation based on payor type. <u>Required for all reporting.</u>
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.

Appendix F: 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	<p>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</p> <p>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</p>

AIM Data Team Contacts		
Contact	When to Use	Email
AIM Data Support Email	General content questions as well as questions regarding: <ul style="list-style-type: none"> • 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.