AIM

ALLIANCE FOR INNOVATION ON MATERNAL HEALTH

Structure Measure Update & Transition Packet

V1.0 July 2022

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Introduction

The purpose of this document is to introduce the new AIM Structure Measure Scale that will be used for most structure measures beginning October 1, 2022. It includes a discussion of the rationale for the change, describes the new scale, highlights the strengths of the new scale, presents visualization examples, offers guidance for use of the scale, outlines the transition logistics, and provides supporting resources and FAQs.

Rationale for Change

The two structure measure response types now in use by AIM are: (1) a *date* that the structure was put in place, or (2) a response of *yes* or *no* to indicate whether the structure is in place. These formats lack the functionality to recognize and capture incremental progress towards a structure being fully in place.

Structure measures often require several steps to put them fully in place that are not accounted for in either of these formats. The specific steps will differ based on the structure measure of interest. Using the Obstetric Hemorrhage patient safety bundle structure measure (S6) *Patient Education Materials on Urgent Postpartum Warning Signs* as an example, steps might include:

- Build support and understanding of the need for the structure (patient education materials relative to urgent postpartum warning signs)
- Compile resource materials
- Review, curate, and customize resource materials
- Ensure materials align with culturally and linguistically appropriate standards
- Finalize resource materials (design, print, digital, access/location)
- Establish routine method for assuring all patients know postpartum warning signs
- Maintain (update)

Changing the way, we record this information is *primarily* intended to allow facility-based teams to more accurately capture and measure their progress, as well as to continue to capture whether the structure is fully in place. Teams will now be able to give themselves "credit" for incremental progress that may contribute to an increased understanding of the progress made as well as the tasks remaining. This, in turn, may contribute to increased motivation by celebrating success along the path to putting the structure fully in place. State and jurisdiction teams will also gain the ability to understand facility progress and offer technical assistance (TA) as appropriate in response to specific needs identified.

The New Scale

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

Not Started	1	2	3	4	5	Fully In Place

While no scale is perfect, this scale has several advantages over the previous structure measurement options (i.e., advantages over a date or yes/no response format).

Understanding and Interpreting Scale Endpoints

A value of **1** indicates that the team has not started working on putting the structure in place. Previously, the lack of a date or a "No" response did not differentiate between not having started working on a structure versus some other point along the way to having it fully in place.

Since structure measures will be reported on a monthly or quarterly basis (aligned with process measure reporting frequency in the AIM Data Center), the period that the structure was Fully in Place *will* be known. The exact date a structure was fully in place will not be recorded in the AIM Data Center (ADC), however teams are welcome to track this information outside of the ADC if they find it useful.

A value of **5** (Fully in Place) aligns with current measures (i.e., Date or Yes) in terms of providing the information that the structure measure is in place.

The simple labeling of the scale extremities can be universally applied to all structure measures.

Assessing "Fully in Place"

Assessing whether a structure is fully in place may include considering the intent of the structure which may span multiple bundle elements and documents. The goal is to report openly and candidly on whether the structure is fully in place in accordance with best (or promising) practices to the extent possible. In some cases, best practices may not be available, and the team will need to make their best assessment.

Understanding and Interpreting Scale Midpoints

The midpoints (values of **2**, **3**, and **4**) provide a means to capture incremental progress.

To preserve the universal nature of the scale across patient safety bundles and topics, the midpoints intentionally lack labels. This has the advantage of giving teams maximum flexibility in the use of the scale to meet their needs while retaining enough standardization through the extremity labels to allow some comparisons to be made even when the midpoints vary. See below for further discussion of this concept.

Each collaborative or facility can choose to specify the midpoint labels for the structures in the bundle they are working on. A "key" may be created to allow interpretation of the midpoint values when viewing visualizations within the AIM Data Center. This key will *not* be uploaded to the ADC, but rather can be retained for use by the facility and/or collaborative when interpreting visualizations in the ADC. If labeled, the midpoint labels should be clear and related to the specific structure for the bundle being implemented. Collaboratives and facilities may *not* re-label the scale extremities.

A collaborative or facility may decide to leave the midpoints unlabeled. While some information may be lost, this is still a reasonable choice since progress can be shown. Users may not know specifically *what* progress occurred, but they will see that some progress towards putting the structure fully in place occurred in a particular reporting period.

See the FAQs for more details on the midpoints and other information.

Maintenance of Established Structures

AIM recognizes that implementing a structure once is not enough. Structures can degrade over time, the evidence base can change, and staff changes may weaken initial structures if transitions in staffing are not optimal. Maintenance of structure measures is not currently captured or monitored in a standardized manner. In other words, the original yes/no or date completed provides no information about whether the structure was maintained. It is unlikely that maintenance can be integrated into the new scale through labeling, however, it is possible to address within the definitions and guidance provided here.

Each team should plan for how they will ensure that each structure is reviewed and/or revised as needed for maintenance. A structure that has not been reviewed on schedule should prompt a downgrading of the score from a 5 (Fully in Place) to a 4 (something less than fully in place). A later review/revision allows the score to return to a 5 until the next review period has expired. AIM recommends that state and jurisdiction teams explicitly identify strategies to ensure maintenance of established structures, particularly during periods of facility staff turnover.

Information Gained

The improved structure measurement schema has the potential to yield information at the facility (most gained), collaborative and national levels. This is one of the main advantages of using the new structure measure scale. All structure measures will be available at the facility level in the form they are reported. In addition, these same structure measures may be available at the collaborative (aggregate facilities) and national (aggregate collaboratives) levels.

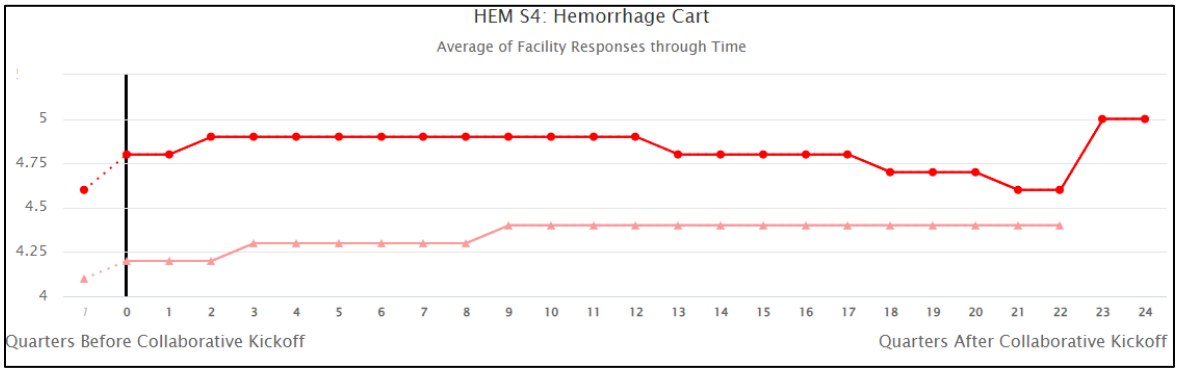
Using data collected from the scale, it may be summarized in multiple ways for monitoring and reporting:

- # and % Not Started
- # and % In Progress
- # and % Fully in Place
- Progressing or Stagnant (e.g., no progress for 1 quarter or more)
- Backsliding, re-entry, jumping
    - *Backsliding* occurs when progress is lost, and the score decreases from the previous reporting period
    - *Re-entry* to the scale occurs after backsliding occurs
    - *Jumping* occurs when significant progress occurs, and the score increases by more than one point in a reporting period
- Speed/Pace
    - Time from Not Started to Fully in Place
    - Not Started could be defined as the bundle implementation date and/or the last date a value of **1** was recorded.
- # and % retaining Fully in Place at the end of the set period

Visualization Examples

AIM has updated ADC visualizations to accommodate updated structure measure reporting. The available ADC visualizations are a few examples of how data may be visualized and are not exhaustive.

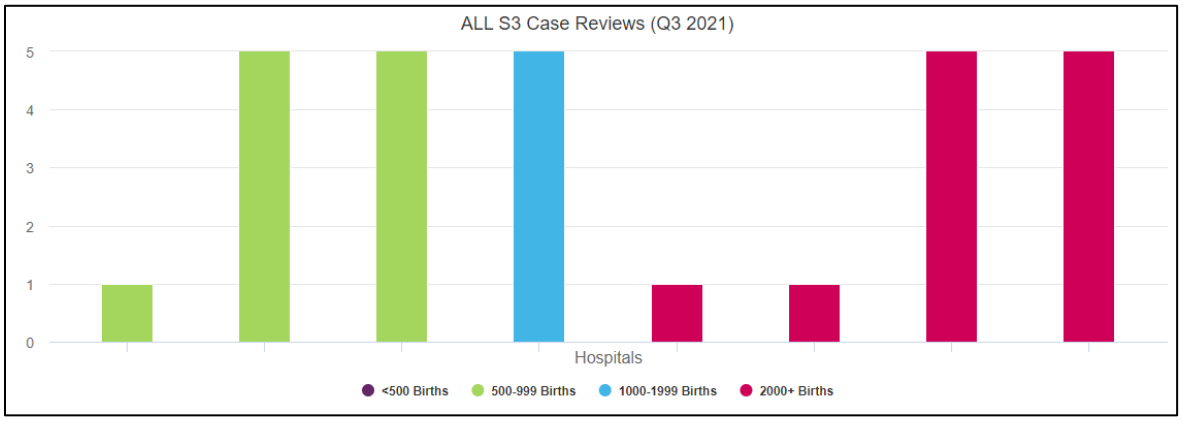
Cross Collaborative Comparisons



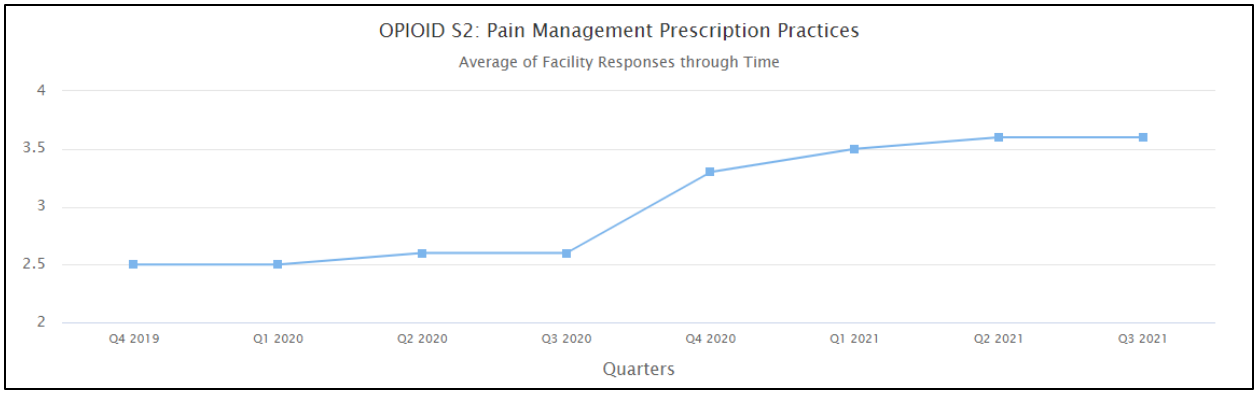
Cross collaborative comparisons now depict the average of collaborative responses through time.

State and Jurisdiction Team Dashboards

The landing page for structure measure results will continue to display the percentages of facilities who reported that a given structure was fully in place for a reporting period in a tabular format.



Comparison bar graphs now depict facility teams' responses (1-5) for a given reporting period. Each bar represents a facility that can be identified by state and jurisdiction administrators in the ADC.

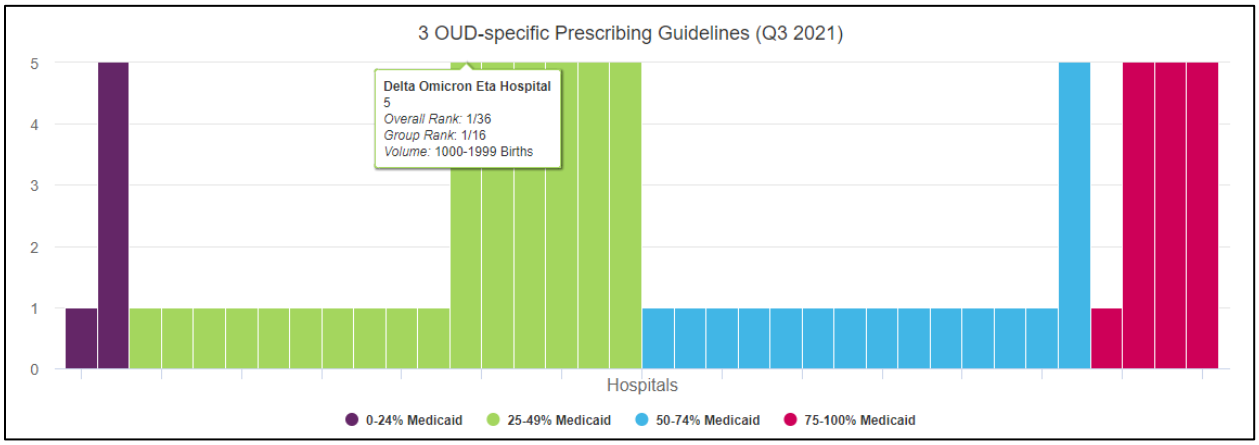


Structure measure trendlines in state team dashboards now depict the average of collaborative responses through time. Data can be further visualized by facility characteristics (e.g., urbanicity, NICU level).

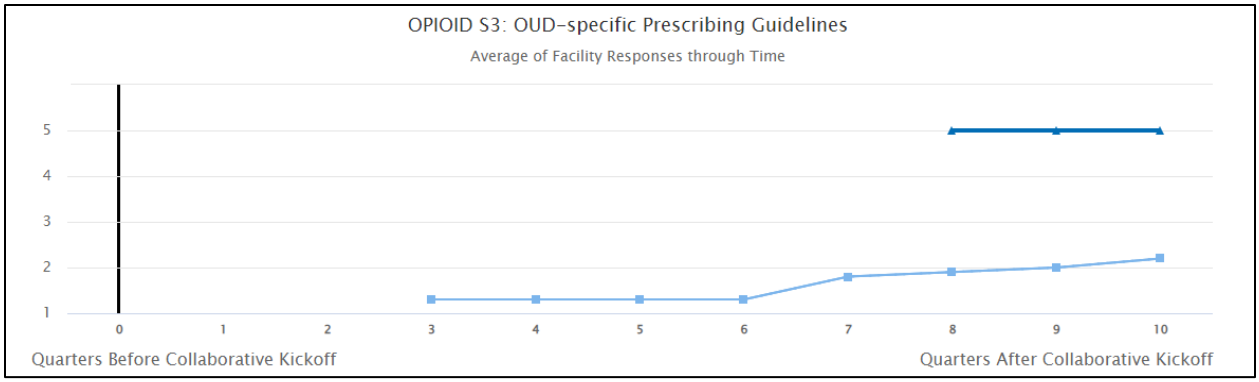
The structure measure submission status page has also been updated. The table now includes summary information of the number and percentage of facilities who have indicated a structure measure is fully in place. The table has also bee color coded to visually depict progress towards establishing a structure.

Facility Team Dashboards

Facility team dashboards contain visualizations like a state or jurisdiction teams' dashboard. Key differences are depicted in this section.



Comparison bar graphs now depict facility teams' responses (1-5) for a given reporting period. Note that other facility users may not view data directly attributable to other facility names in the ADC.



Structure measure trendlines in facility team dashboards allow for comparison between a facility's responses and average collaborative responses through time. Data can be further visualized by facility characteristics (e.g., urbanicity, NICU level).

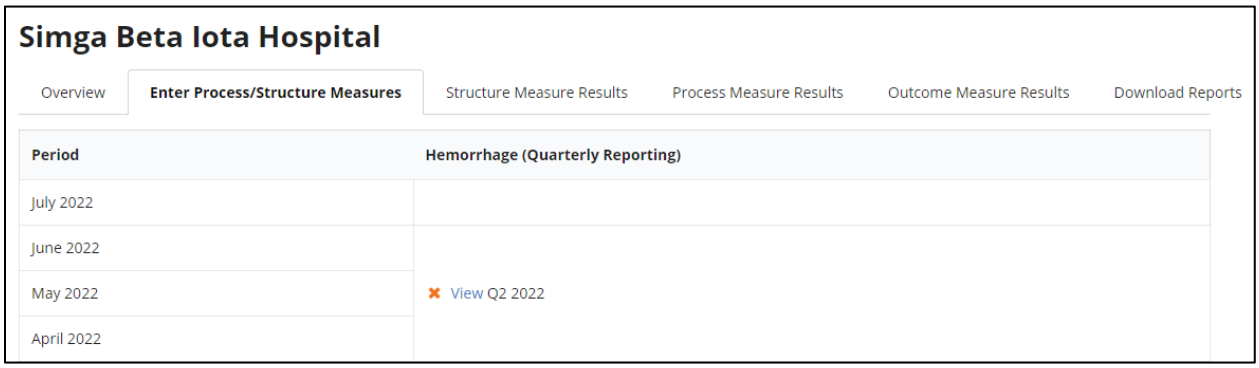
Note that data will not always appear directly following the formally stated collaborative kickoff due to a state team changing their start date for a patient safety bundle and not updating the ADC or facilities not reporting data for several periods.

Transition Logistics

Facility Reporting to the AIM Data Center

These transition logistics are best suited to state and jurisdiction teams whose facilities report structure and process measures data directly to the ADC.

Process and Structure measures are being combined into one reporting interface based on preexisting process measures data reporting. The formal transition will occur for the reporting period beginning October 1, 2022. A new data reporting page for facility teams in the AIM Data Center displays a combined process and structure measure data submission interface.



Facility teams may now report structure and process measure data using the same data collection form in the ADC.

Structure measure responses will carry over across reporting periods. Please use the data submission page to make any necessary changes. Historic structure measure responses will be converted in the ADC using the following schema:

Original Format	Updated Format
No data ever reported	If a structure measure was never reported as In Place or Not in Place, no values will be assigned to historic data. Facility teams may submit data using the updated format for the reporting period beginning October 1, 2022.
Not_In_Place	Any structures reported as not in place will be assigned a value of 1. This will occur for all historic reporting periods after a facility start date. Facility teams may submit data using the updated format for the reporting period beginning October 1, 2022.
In place (MM/DD/YYYY)	Any structure measures reported as in place will be assigned a value of 5. This will occur for all historic reporting periods starting with the first reporting period the structure measure was marked as complete. Facility teams may submit data using the updated format for the reporting period beginning October 1, 2022.

State/Jurisdiction Reporting to the AIM Data Center

These transition logistics are best suited to state and jurisdiction teams whose facilities report structure and process measures data to a platform other than the ADC.

Structure measures are being added into the default and wide process/outcomes file upload formats. Structure measures will no longer require a separate file. The formal transition will occur for the reporting period beginning October 1, 2022. The data upload guide and supporting file formatting resources are in the process of being updated. The latest versions can always be found on the AIM Data Resources webpage.

Historic structure measure data can be reported using the new schema. If your team collected data on "in process" structure measures, please use the 5-point scale to report this information. Use a value of 3 as a midpoint for any reporting periods prior to October 2022.

Binary structure measures can still be reported using values of 1 and 5. Historic structure measure responses will be converted in the ADC using the schema in Table 1 above.

Frequently Asked Questions

What if we want to continue using AIM's original structure measures reporting schema?

The ADC will transition entirely to this reporting schema for the reporting period beginning October 1, 2022.

For reasons of comparability, we strongly encourage all teams to transition to the new format. There are many benefits outlined above for teams that transition fully to the new Likert-like scale.

If you have your own data collection system (e.g., REDCap), *you may continue with the original structure reporting schema* but must format your ADC data upload file using 1 or 5. However, reporting should be done each reporting period (versus the previous format of "one and done").

How often do we need to report structure measures?

State and jurisdiction teams will report structure measures at the same frequency as they report process measures to the AIM Data Center. This may be monthly or quarterly but must be the same frequency across process and structure measures.

If process and structure measures are not collected at the same frequency in an alternate data collection platform, data must be cleaned and aggregated to the same reporting frequency for upload to the ADC.

Do we have to use values of 1 and 5?

Yes, using the values of 1 and 5 are necessary for uploading data to the ADC. It also provides standardization necessary for interpretation and comparison.

Can we change the extremity *labels* for value of 1 and/or 5?

We strongly encourage all teams to adopt the new structure measure format. This provides standardization necessary for interpretation and comparison at the State and National levels.

If teams, feel they must use alternative labeling please contact the AIM Data Team to talk through the solutions to maintain transparency and alignment.

We currently use a different scale with only 3 points. Our endpoints either match or will match the new AIM scale. Do we have to use all 5 values?

No. Use of the midpoints in any combination is optional (though encouraged). For example, if you currently have a 3-point scale you might choose to use your midpoint label (e.g.

"Planning" or "In Progress") for a value of 3 and direct your facility or collaborative to *not* use and report values of 2 and 4. The 5-point scale in the ADC cannot be changed for direct facility reporting.

How will AIM know what our midpoint values mean for each structure measure if we label them and do not upload the labels to the AIM Data Center?

AIM will *not* know the *specific* meaning of midpoints.

AIM *will* know whether the work on the structure has *not* been started, *has* been started, or is *fully* in place. AIM will also know the month or quarter associated with each of these statuses. AIM will also be able to see that there has been progress along with the time period that the progress occurred.

The choice to "give up" some information at the national level was made in favor of the new scale prioritizing flexibility and utility for the improvement teams at the facility and state levels.

Does the collaborative or the facility determine midpoint labeling?

If midpoint labels are used, they could be developed by either.

Ideally, participating facilities and collaborative leadership will work cooperatively prior to bundle implementation to determine whether each facility will have the option to specify midpoint labels or if it will be done at the collaborative level. There are strengths and limitations to both options that can vary by the structure of interest.

The decision should consider that it *may* not be appropriate for facilities of differing volumes and levels of care to use the same labels for some structures.

Can we only move forward on the scale?

No, you may adjust your score up or down in accordance with your team's assessment. "Backsliding" is possible.

Can we go from 1 (Not Started) to 5 (Fully in Place) without using the midpoints of the scale?

Yes. You may "Jump" over one or more points on the scale in accordance with your team's assessment. If you backslide (above), you may re-enter the scale at any point.

Additional questions? Contact the AIM Data Team at aimdatasupport@acog.org.