
Background

The Alliance for Innovation on Maternal Health (AIM) identified common data needs among enrolled state and jurisdiction teams to address in a group learning setting and developed a Data Support Community of Learning (COL). As part of the COL, AIM hosted 8 educational offerings between January and August 2022, engaging participants in peer learning and providing opportunities for individualized technical assistance with expert faculty. Details on the educational offerings can be found in [Appendix A](#).

Registration

The Data Support COL had 2 enrollment tiers with different participation expectations to support varying state and jurisdiction team capacities. Those who registered as Participants were expected to attend all educational offerings and actively engage in peer learning. Those who registered as Observers were expected to attend educational offerings and engage in peer learning as desired. States who were awarded funding through the State Systems Development Initiative Maternal Health Enhancement Supplement (SSDI MHE, HRSA-21-130) were required to register for the Participant enrollment tier for AIM's Data Support COL, and at least 1 SSDI-affiliated staff was required attend all 8 educational offerings.

The Data Support COL had 78 registrants representing 36 states and jurisdictions, and 10 states were SSDI MHE recipients. Out of the 78 registrants, 51 registered as Participants and 27 registered as Observers. 36 of the 51 registrants expressed interest in receiving Data Support COL supplemental funds, representing 22 states.

Supplemental Funds

7 states received \$25,000 in supplemental funding as part of engagement in the Data Support COL. States who received funds were required to participate in all 8 educational offerings, share reflections and work throughout COL, and submit evaluation assessments.

Educational Offerings and Office Hours Structure

Education offerings and office hours followed consistent formats throughout the Data Support COL. Educational Offerings were 90 minutes in length, with 45-minute faculty presentations and 15 minutes for questions. 2 states who received supplemental funds presented brief report-outs outlining their strategies and progress for improving their data processes for quality improvement for the remaining 30 minutes of the educational offering. Office hours were 90 minutes in length, and state teams were assigned 15–20-minute time slots to receive individualized technical assistance from the educational offering's faculty.

The average number of attendees for the 8 monthly sessions was 80. The session with the highest number of attendees was Severe Maternal Morbidity with 112 attendees. The session with the lowest number of attendees was Monitoring and Reporting Data from QI initiatives with 54 attendees. More information on registration and attendance at sessions, as well as attendance at office hours with expert faculty, can be found in [Appendix A](#).

Evaluation and Assessments

At the end of each educational offering, participants were asked to rank their perceived helpfulness of the offering. Additionally, they were asked to share how they plan to apply content from the educational offering to their work and share suggestions for improvement. On average, about 18 participants per session completed the survey. The educational offering, "Data Quality: Race, Ethnicity, Social and Structural Drivers of Health," had the highest rating, and 100% of respondents rated the session 4 or greater on a 5-point scale (1 = Not at all helpful, 5 = Extremely helpful). The educational offering, "Data Quality: Hospital Records versus Administrative Data," had the lowest rating, and 58% of respondents rated the session 4 or greater on the same 5-point scale. More details from the surveys can be found in [Appendix B](#).

At the conclusion of the Data Support COL, participants completed a post-assessment. 26 participants completed the post-assessment, which asked for basic feedback on the COL and for participants to rank their self-efficacy for each of the educational offerings' learning objectives before and after the Data Support COL to assess knowledge gained.

On average, more respondents somewhat or strongly agreed that they are more confident in their ability to apply the educational offerings' learning objectives to their work after attending the Data Support COL, demonstrating knowledge gained through the COL. When asked to rank the educational offerings from most to least helpful, respondents found the educational offerings, "Data Quality: Race, Ethnicity, Social and Structural Drivers of Health"

and “Data Quality: Hospital Records versus Administrative Data,” most and least helpful, respectively.

46% of respondents thought that state team report outs were very or extremely helpful, and they suggested allocating more time and opportunities for peer learning and in-depth group discussions. 43% of respondents who attended office hours thought they were very or extremely helpful. Respondents recommended providing more time and opportunities for individualized technical assistance and varying days and times of office hours to accommodate schedules. More details from the post-assessment can be found in [Appendix C](#).

Future Considerations

Based on respondent feedback, AIM has identified several areas for improvement for its next Data Support COL. AIM plans to dedicate more time for participant discussion and peer learning; vary the availabilities of faculty office hours and improve upon its structure; and offer individualized data coaching to interested participants. AIM plans to develop an updated curriculum that is responsive to state and jurisdiction teams based on feedback provided.

Appendix A: Educational Offerings Details

Educational Offering	Date & Time	Learning Objectives	Session Registrants	Session Attendees	Office Hours Attendees
Planning QI Initiatives with Evaluation in Mind: What Is It You Want to Use Your Data For?	January 7, 2022 2:00PM-3:30PM	• Articulate the value of determining evaluation measures for quality improvement (QI) projects early; • Identify at least 2 evaluation methods or frameworks for assessing multi-site QI projects; • Form at least 3 evaluation questions related to QI projects.	104	96	12
Data Collection Strategies & Tools for Facility-Reported Measures	February 8, 2022 3:00PM-4:30PM	• Identify at least 3 different tools (e.g., software) that could be used for collecting AIM facility-level data; • Describe at least 3 strategies for assuring facility-level data quality; • Describe at least two strategies to actively support persons responsible for facility-level data collection.	110	97	11
Severe Maternal Morbidity	March 16, 2022 1:00PM-2:30PM	• Describe the importance and evolution of SMM; • Understand how to calculate SMM; • Understand SMM measurement issues affecting trends and state comparisons.	134	112	14
Data Quality: Hospital Records vs. Administrative Data	April 5, 2022 3:00PM-4:30PM	• Describe at least 3 strategies for improving the quality of hospital record data; • Describe at least 3 strategies for improving the quality of administrative data;	101	79	5

Educational Offering	Date & Time	Learning Objectives	Session Registrants	Session Attendees	Office Hours Attendees
		Identify the basic steps involved in cleaning data in relation to quality improvement activities.			
Data Quality: Race, Ethnicity, Social and Structural Drivers of Health	May 5, 2022 2:00PM-3:30PM	- Identify at least three best practices for collecting Race, Ethnicity, and Social and Structural Drivers of Health data; - Describe strategies for improving the quality of race, ethnicity, and social and structural drivers of health data; - Give at least 2 examples of practical uses of race, ethnicity, and social and structural drivers of health data.	99	73	6
QI Visualization Best Practices	June 7, 2022 1:00PM-2:30PM	- Identify at least 5 pre-attentive attributes in the context of data visualization; - Discuss at least 3 data visualization best practices; - Critique a visualization using data visualization best practices.	101	70	8
Monitoring & Reporting Data from QI Initiatives	July 8, 2022 3:00PM-4:30PM	- Interpret a statistical process control chart; - Describe considerations for tailoring a visualization to a specific audience; - Give an example of using a report to influence stakeholders.	87	54	2
Evaluation Methods: What Do You Do with the Data You Collected?	August 2, 2022	Give an example of evaluation data use in the context of QI;	82	55	Not held due to COVID-19

Educational Offering	Date & Time	Learning Objectives	Session Registrants	Session Attendees	Office Hours Attendees
	2:00PM-3:30PM	- Describe the importance of the dissemination of evaluation findings; - Identify at least 3 components of an evaluation report.			

Appendix B: Individual Educational Offering Feedback Survey Results

Educational Offering	Perceived Helpfulness of Session	Selected Qualitative feedback
Planning QI Initiatives with Evaluation in Mind: What Is It You Want to Use Your Data For?	Not Collected	Not Collected
Data Collection Strategies & Tools for Facility-Reported Measures	15 out of 22 respondents (~67%) rated the session 4 or greater on a 5-point scale (1 = Not at all helpful, 5 = Extremely helpful).	<i>"I loved the ideas about how to handle QI during COVID. I also liked the ideas about how to recognize teams that are doing well with QI initiatives."</i> <i>"I liked the prework reflections – taking a step back to reflect on the data collection goals and moving the data to action."</i>
Severe Maternal Morbidity	17 out of 21 respondents (~80%) rated the session 4 or greater on a 5-point scale (1 = Not at all helpful, 5 = Extremely helpful).	<i>"[I plan to] examine our SMM calculations and learn best practices on how to compare facility-level rates against historical averages, rather than between facilities."</i>
Data Quality: Hospital Records vs. Administrative Data	10 out of 17 respondents (~58%) rated the session 4 or greater on a 5-point scale (1 = Not at all helpful, 5 = Extremely helpful).	<i>"Dr. Gee shared lots of helpful tips, especially about forming a partnership with late adopters and listening to their concerns."</i> <i>"Liked the diversity of format --speakers, Jamboard, presentations."</i>
Data Quality: Race, Ethnicity, Social and Structural Drivers of Health	14 respondents (~100%) rated the session 4 or greater on a 5-point scale (1 = Not at all helpful, 5 = Extremely helpful).	<i>"I liked the discussion around disparities not needing to be statistically significant to be useful for QI work."</i> <i>"[I plan to apply] strategies to include small populations in data analysis/results [to my work]."</i>
QI Visualization Best Practices	17 out of 22 respondents (~76%) rated the session 4 or greater on a 5-point scale (1 = Not at all helpful, 5 = Extremely helpful).	<i>"Like how they shared maps/graphics that didn't work, that was helpful."</i> <i>"So many data visualization resources that will be incredibly helpful as we prepare to launch our new data dashboard."</i>
Monitoring & Reporting Data from QI Initiatives	15 out 17 respondents (~87%) rated the session 4 or greater on a 5-point scale (1 = Not at all helpful, 5 = Extremely helpful).	<i>"This was a great overview for me - I want my teammates (who are QI coaches) to watch this so they can better explain the utilization of charts for their hospitals."</i> <i>"I am going to re-watch this session as I want to remember how Daisy and Brent explained the SPC charts because it was so user friendly and easy to understand. I want to be able to replicate that when I am coaching teams to build their</i>

Educational Offering	Perceived Helpfulness of Session	Selected Qualitative feedback
		<i>confidence in understanding and interpreting their data."</i>
Evaluation Methods: What Do You Do with the Data You Collected?	10 out of 15 respondents (~66%) rated the session 4 or greater on a 5-point scale (1 = Not at all helpful, 5 = Extremely helpful).	<i>"[This session had a] clear explanation of how improvement work should include rationale, implementation plan, and evaluation, and how these all fit together."</i> <i>"[This session made me reflect on] getting to the "WHY"... making sure that we all know why we need the data and what we plan to change based on its results."</i>

Appendix C: Post-Assessment Results

The visualization represents self-reported understanding of the learning objectives for each educational offering before and after participation in the Data Support COL. For the purposes of brevity, results displayed below were averaged across each of the offerings' 3 learning objectives to depict a mean Likert score for before and after each session. Learning objectives can be found in [Appendix A](#).

