

Leveraging Data for Equity in Maternal and Child Health: Final Formative Evaluation Report on the Data Roadmap for Racial Equity Advancement in Maternal and Child Health Project



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and Territorial Health Officials

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Table of contents

High-level findings.....	3
Context.....	3
Population- and system-level data gathering and analysis	4
Strategy development.....	4
Data communication.....	4
Performance measurement, monitoring, and evaluation	4
Background	5
Report structure.....	5
Methods.....	6
Findings by Roadmap topic.....	7
Context.....	7
Population- and system-level data gathering and analysis	10
Strategy development.....	13
Data communication.....	15
Performance measurement, monitoring, and evaluation	19
Discussion and conclusion	19
Community-level engagement and data communication	19
Embedding racial equity tenets within trainings, strategy development, and monitoring.....	20
Infrastructure support	21
References	22

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High-level findings

The Association of State and Territorial Health Officials (ASTHO) leads the Data Roadmap for Racial Equity Advancement in Maternal and Child Health (DREAM) project, a Learning Community (LC) to support states in building data capacity to address racial equity in maternal and child health. Specifically, the DREAM LC supports states to implement Title V National Performance Measures (NPMs) in postpartum visits (PPV) or children's medical homes (CMH) using the [Racial Equity Data Roadmap developed by the Massachusetts Department of Public Health \(MA DPH\)](#). The National Institute for Children's Health Quality (NICHQ) performed a mixed methods formative evaluation to inform LC activities on addressing racial/ethnic equity in Title V NPMs. The structure of this report follows the MA DPH Roadmap, incorporating both quantitative and qualitative components to address each MA DPH Roadmap data-to-action step sequentially.

Context

- Six states focused their efforts on PPV, while one state concentrated on CMH in the DREAM LC. One state addressed both NPMs. All states identified their state's department of health as the primary implementation source for Title V.
- Seven out of the eight states reported their agencies provided access to racial equity trainings and workshops within the past year, mostly consisting of one-time, introductory sessions.
- States were asked a series of questions about their current approaches to address the following MA DPH Roadmap data-to-action steps: Gathering and analyzing data, contextualizing data, strategy development, and identifying interventions.
 - State teams referenced how advisory groups, agencies, and health equity teams housed within their department of health were involved in each data-to-action step. Data stewards, healthcare/clinicians, epidemiologists, and federal partners were also mentioned for their involvement in data-to-action steps, but to a lesser extent.
 - Funding, payment, and resources (or a lack thereof) were noted as facilitators and barriers to all data-to-action steps.
 - Relationship building skills were referenced as facilitators across three data-to-action steps, as collaboration, commitment, shared goals, and openness (referenced in gathering and analyzing data, contextualizing data, and strategy development) and positive, established, consistent partnerships (referenced in gathering and analyzing data, contextualizing data, and identifying interventions). Leveraging the voices of community members and individuals with lived experience was also considered a facilitator for three data-to-action steps (gathering and analyzing data, contextualizing data, and strategy development).
 - The following themes were noted as barriers across three data-to-action steps: difficulty identifying individuals from the appropriate entities or communities (referenced in gathering and analyzing data, contextualizing data, and strategy development), experiencing bureaucratic siloes (referenced in gathering and analyzing data, contextualizing data, and identifying interventions), and challenges around capacity and time demands (referenced in gathering and analyzing data, strategy development, and identifying interventions).



Population- and system-level data gathering and analysis

- States primarily used national- and state-level quantitative secondary data sources to understand racial/ethnic disparities related to their NPMs.
 - Though many survey respondents indicated data quality challenges with their data sources, most respondents had an ability to communicate such barriers to the respective data sources.
- All informants reported having room to grow in involving community in data gathering and analysis, though common areas of existing engagement included formalized partnerships with community organizations, needs assessments, and qualitative data collection.
 - Relatedly, no respondents utilized community-level data sources, and no respondents performed a root cause analysis, a method to identify and address underlying sources of inequities related to their NPMs.

Strategy development

- When asked about their approaches to NPM strategy development, DREAM LC participants considered potential racial equity impact when selecting and developing strategies related to NPMs slightly more compared to the intervention planning and implementation stages.

Data communication

- States mostly communicated data findings to decision makers/strategists annually, while communication for collaborators/impacted populations mostly occurred on an ad hoc basis. States communicated data findings to decision makers/strategists via internal memos, private and public presentations, and graphic displays, while data findings were communicated to collaborators/impacted populations through public presentations and graphic displays only.
 - Slightly fewer respondents explicitly highlighted equity topics with collaborators/impacted populations compared to decision makers/strategists.
 - Half of respondents believed their data communication mechanisms left decision makers/strategists equipped to understand topics related to NPMs, while two respondents believed the same was true for collaborators/impacted populations.

Performance measurement, monitoring, and evaluation

- Two respondents monitored the impact of their interventions related to NPMs, with one stratifying their data by race/ethnicity, geography, insurance, income.



Background

ASTHO leads the DREAM project, a LC to support states in building data capacity to identify, understand, and address racial equity in maternal and child health. Specifically, the DREAM LC supports states to implement Title V NPMs in PPV or CMH using the [Racial Equity Data Roadmap developed by the MA DPH](#). The MA DPH Roadmap is a tool to support programs and states towards eliminating structural racism by authentically engaging communities, framing data in the broader contexts that impact health, and designing solutions that address root causes.

NICHQ's Department of Applied Research and Evaluation (DARE) performed a mixed methods formative evaluation to inform LC activities on addressing racial/ethnic equity in Title V NPMs. This report summarizes findings from the formative evaluation, encompassing data from three different activities with state teams: the Request for Application (RFA) survey form, Key Informant Interviews (KIIs), and the Data Capacity Assessment (hereon referred to the Assessment).

Report structure

Table 1. Overview of MA DPH Roadmap as addressed in NICHQ evaluation.

Roadmap data-to-action step	Roadmap topic (Green headings)	NICHQ data source(s)	NICHQ evaluation question topic (Orange sub-headings)
1. Looking at health issues with a focus on the impact of racism	Context	RFA	<ul style="list-style-type: none"> Leadership and NPM investment
2. Determining if program is ready to use data to address racism	Context	Assessment KII	<ul style="list-style-type: none"> Collaboration Equity training
3. Understanding what the data say about differences in health outcomes by race and ethnicity	Population- and system-level data gathering and analysis	Assessment KII	<ul style="list-style-type: none"> Quantitative data Data quality Contextualizing data Community engagement
4. Using other sources of data to uncover causes of the differences	Population- and system-level data gathering and analysis	Assessment KII	<ul style="list-style-type: none"> Alternative data sources
5. Making plans to act on differences that are unjust or avoidable	Strategy development	Assessment KII	<ul style="list-style-type: none"> Prioritization Collaboration and community engagement Intervention planning
6. Presenting data in ways that help people make sense of the numbers	Data communication	Assessment KII	<ul style="list-style-type: none"> Data communication
7. Moving from data to action	Performance measurement, monitoring, and evaluation	Assessment	<ul style="list-style-type: none"> Performance measurement

The RFA, KII guide, and the Assessment were developed by NICHQ in close partnership with the ASTHO team to directly align with the different topic areas of the MA DPH Roadmap. Correspondingly, the



structure of this report will closely follow the MA DPH Roadmap, incorporating both quantitative and qualitative components to address each data-to-action step sequentially. The sections of this report are organized by MA DPH Roadmap topic, denoted by headings in **green** text. Within each section and MA DPH Roadmap topic, the discussion is organized by each NICHQ evaluation topic, and denoted by sub-headings in **orange** text. This structure was selected to offer a holistic perspective of where states stood in their work addressing disparities in NPMs at the time of data collection for the formative evaluation, which occurred in Fall 2023. **Table 1** provides a full summary of the MA DPH Roadmap as applied to the different components of NICHQ's evaluation.

Methods

All formative evaluation activities were first piloted with the Vermont team. The Vermont team was selected for a pilot due to having an established relationship with ASTHO and their willingness to participate in a pilot.

States that completed the RFA were invited to participate in a KII. After participation in a KII, states were asked to complete the Assessment (see **Figure 1**). Sample composition for the three data streams is summarized in **Table 2**. Due to the small sample size, survey findings should be interpreted with caution. Further, though we reference topics related to maternal health and motherhood in this report, we recognize that there may be members in a participating state's community who prefer gender-neutral terminology.

Figure 1. Overview of formative evaluation activities for the DREAM project.



Table 2. Sample composition of each formative evaluation data stream.

	Request for Application (N=8)	Key Informant Interview (N=8) ¹	Assessment (N=8) ²
Participating States	<ul style="list-style-type: none"> · Connecticut · Iowa · Kansas · Louisiana · Ohio · Rhode Island · Utah · Vermont 	<ul style="list-style-type: none"> · Connecticut · Iowa · Kansas · Louisiana · Ohio · Rhode Island · Utah · Vermont 	<ul style="list-style-type: none"> · Connecticut · Kansas · Louisiana · Ohio · Rhode Island · Utah · Vermont

Key informant interviews

For KIIs, we employed descriptive phenomenological qualitative analysis as the research design (Creswell, 2013; Neubauer et al., 2019; van Manen, 1990). The primary objective of the analysis was to understand participating state teams' perceptions and lived experiences in promoting racial/ethnic

¹ In KIIs, there were a range of one to five state team members present in each state's KII, and 30 state team members present in total.

² While there was a total of eight responses in the Assessment, only seven states completed the Assessment: Iowa opted to not continue with the DREAM LC, and Ohio submitted two responses, since they planned to address both NPMs in the DREAM LC.

equity in Title V NPMs within their state. KIIs were selected over focus groups to foster shared discussion individualized for each state team.

NICHQ developed the KII guide in collaboration with the ASTHO team. The KII guide entailed a series of questions aligned with the MA DPH Roadmap on state **context; population- and system-level data gathering and analysis; strategy development;** and **data communication**. Two members of the ASTHO team led data collection and recorded KIIs virtually on the Zoom platform or in person. Transcripts were obtained by ASTHO using the Rev.com service.

Transcript data were analyzed by two analysts at NICHQ using rapid analysis in the NVivo platform. Rapid analysis entails coding findings from transcripts onto pre-determined domains (Hamilton, 2013, 2020; Taylor et al., 2018). The researchers followed the five phases for rapid analysis of focus group data as outlined by Hamilton, embedding reflexivity into all stages of the analysis (2013, 2020). Two analysts coded and overlapped on four cases. Once coding consistency was established, one analyst completed analysis of the remaining four cases. Themes were transferred to a matrices (Averill, 2002) and exemplar quotes were identified.

RFA and Assessment

The RFA was designed for prospective states to share preliminary information on state **context**.

The Assessment had two main goals: to understand how states i.) use data to **understand** disparities in NPMs, and ii.) use data to **address** disparities in NPMs. The Assessment addressed the following topics as aligned with the MA DPH Roadmap: state **context; population and system level data gathering and analysis; strategy development; data communication;** and **performance measurement, monitoring, and evaluation**.

The ASTHO team led data collection for the RFA and Assessment. NICHQ led analyses of the RFA and Assessment data. Due to revisions to the Assessment between the Vermont pilot and the full formative evaluation, manual data cleaning was required to ensure harmonization between the two different survey versions. As such, two NICHQ analysts performed data cleaning. Once data cleaning was complete, one analyst led analysis, and the other completed quality control.

Findings by Roadmap topic

Context

The first and second sections of the MA DPH Roadmap supports users to assess i.) to what extent a state and its partners currently look at health issues with a focus on the impact of racism, and ii.) determine if a state is ready to use data to address racism and disparities. To understand DREAM LC participants' context, NICHQ captured data on leadership, NPM investment, collaboration, and equity trainings.

Leadership and NPM investment

DREAM LC participants responded to a series of questions about their leadership and potential partners in addressing disparities in their respective NPM in the RFA. Of the eight RFA respondents, six states reported planning to focus exclusively on PPV in the DREAM LC. Additionally, one state planned to address CMH, and another state aimed to address both NPMs. All states identified their state's department of health (DOH) as the primary implementation source for Title V.



Furthermore, among the eight RFA respondents, five reported having some level of investment from Title V but no current NPM (see **Table 3**). Additionally, one respondent indicated no current Title V

investment and another respondent reported having current Title V investment with NPM. Lastly, the other response (from the Ohio team, addressing both NPMs) indicated, “For PPV, we have some Title V investment but no NPM. For CMH, we have current Title V investment with a national outcome measure.”

Table 3. Description of current Title V investment within state’s NPM focus area.

	N	%
Some Title V investment, but no current NPM	5	63%
No current Title V investment	1	13%
Current Title V investment with NPM	1	13%
Other	1	13%

Note: Percents add to cover 100% due to rounding.

Collaboration

In KIIs, informants were asked to summarize the different leaders, positions, departments, and partners involved in several data-to-action steps of the MA DPH Roadmap (gathering and analyzing data, contextualizing data, strategy development, and identifying interventions to address disparities in NPMs) (see **Table 4**). The most discussed entities across these four data-to-action steps were professionalized roles, such as advisory groups, agencies, and health equity teams housed in a state’s respective department of health. Data stewards, healthcare/clinicians, epidemiologists, and federal partners were each mentioned across three action steps, followed by evaluators and leadership positions, which were discussed in two action steps each. Repeated references to these different entities suggest strong existing relationships, and may represent opportunities to support participants in future public health projects related to racial equity by expanding partnerships, or alternatively, investing in new partnerships.

Table 4. Entities referenced across multiple data-to-action steps.

Gathering and analyzing data	Contextualizing data	Strategy development	Identifying interventions
Advisory groups			
Agencies			
Health equity teams			
Data stewards			
Healthcare, hospitals, clinicians		Healthcare, hospitals, clinicians	
Epidemiologists			Epidemiologists
Federal/national partners		Federal/national partners	
	Evaluators		Evaluators
Leadership roles			

Informants were then asked to summarize facilitators and barriers in addressing each data-to-action step. Facilitators referenced across multiple action steps are displayed in **Table 5**. Funding, payment, and resources were noted as a facilitator across all data-to-action steps. Two themes related to relationship building skills were referenced across three action steps, through i.) collaboration, commitment, shared goals, and openness (referenced in gathering and analyzing data, contextualizing data, and strategy development) and ii.) positive, established, consistent partnerships (referenced in gathering and analyzing data, contextualizing data, and identifying interventions). Leveraging the voices



of community members and individuals with lived experience was considered a facilitator for three data-to-action steps (gathering and analyzing data, contextualizing data, and strategy development). Data processes, formal community partnerships, established systems, contract management, and engagement opportunities both online and in person were referenced across two data-to-action steps.

Table 5. Facilitators referenced across multiple data-to-action steps.

Gathering and analyzing data	Contextualizing data	Strategy development	Identifying interventions
Funding/payment			
Collaboration, commitment, shared goals, openness			
Community data and voices			
Positive established, consistent partnerships			Positive established, consistent partnerships
Data processes and disaggregation			Data processes and disaggregation
Community partnership			
Relationship/contract management		Relationship/contract management	
Established processes, systems, communication		Established processes, systems, communication	
Hybrid engagement			

Barriers referenced across multiple data-to-action steps are displayed in **Table 6**. Similar to findings on facilitators, a lack of funding, payment, and resources were discussed as a barrier across all data-to-action steps. Difficulty in engaging with individuals from the appropriate entities or communities was noted across three data-to-action steps (referenced in gathering and analyzing data, contextualizing data, and strategy development), as were experiencing bureaucratic siloes (referenced in gathering and analyzing data, contextualizing data, and identifying interventions), and challenges around capacity, overwhelm, and time demands (referenced in gathering and analyzing data, strategy development, and identifying interventions). Challenges understanding data, establishing priorities and goals, recruiting community members and people with lived experience, developing new processes, data access barriers, and political constraints influencing communication approaches were all referenced across two data-to-action steps.

Table 6. Barriers referenced across multiple data-to-action steps.

Gathering and analyzing data	Contextualizing data	Strategy development	Identifying interventions
Funding/payment			
Getting the right people at the table			
Siloes			Siloes
Busy/capacity		Busy/capacity	
Data fluency			
Managing and defining priorities			
Difficulty recruiting community members			Difficulty recruiting community members
Developing processes			Developing processes
Limited/inaccessible data			Limited/inaccessible data
Political/communication constraints			



Equity training

The Assessment included a series of questions about racial equity trainings, workshops, webinars, consultants, or other equity resources their respective DOH provided. Seven respondents reported that their DOH offered some racial equity training to staff, with six respondents indicating that their last training occurred within the past year. One respondent reported that their agency last offered racial equity-focused trainings over five years ago.

Respondents shared attendance and delivery details about their states' racial equity-focused resources, trainings, and workshops. Most respondents completed one-time, introductory courses addressing health equity, social determinants of health, and socioeconomic and racial inequalities in the U.S. These trainings were delivered through platforms such as webinars, information sessions, orientations, and documentary screenings.

Furthermore, Assessment respondents estimated the level of staff participation in these racial-equity focused offerings. Three respondents reported that the majority of their staff members attended trainings, while four respondents noted that half or fewer staff members attended the trainings.

Population- and system-level data gathering and analysis

The third and fourth sections of the MA DPH Roadmap indicate users should i.) assess what their data say about differences in health outcomes by race and ethnicity, and ii.) use other sources of data to identify causes of the uncovered racial/ethnic differences. To understand where DREAM LC participants stood in their data usage for NPMs, NICHQ asked a series of questions on quantitative data usage, data quality, contextualizing data, community engagement, and alternative data sources.

Quantitative data

Assessment respondents listed the quantitative secondary data sources used to identify differences in health outcomes by race/ethnicity related to their respective NPMs (see **Table 7**). Six respondents reported using state-level sources.

Examples of state-level sources included Pregnancy Risk Assessment Monitoring System (PRAMS) and vital statistics. Five respondents used national data sources, including the National Survey of Children's Health (NSCH). Two respondents used insurance claims data and other sources, and one respondent used local- or county-level data sources. No respondents utilized data sources collected and stored by the community, perhaps indicating an opportunity for future related projects to develop programming to assist states in identifying community data sources.

Table 7. Utilization of secondary data sources.

	N	%
State-level source	6	75%
National data source	5	63%
Insurance claims data	2	25%
Other	2	25%
Local or county-level source	1	13%

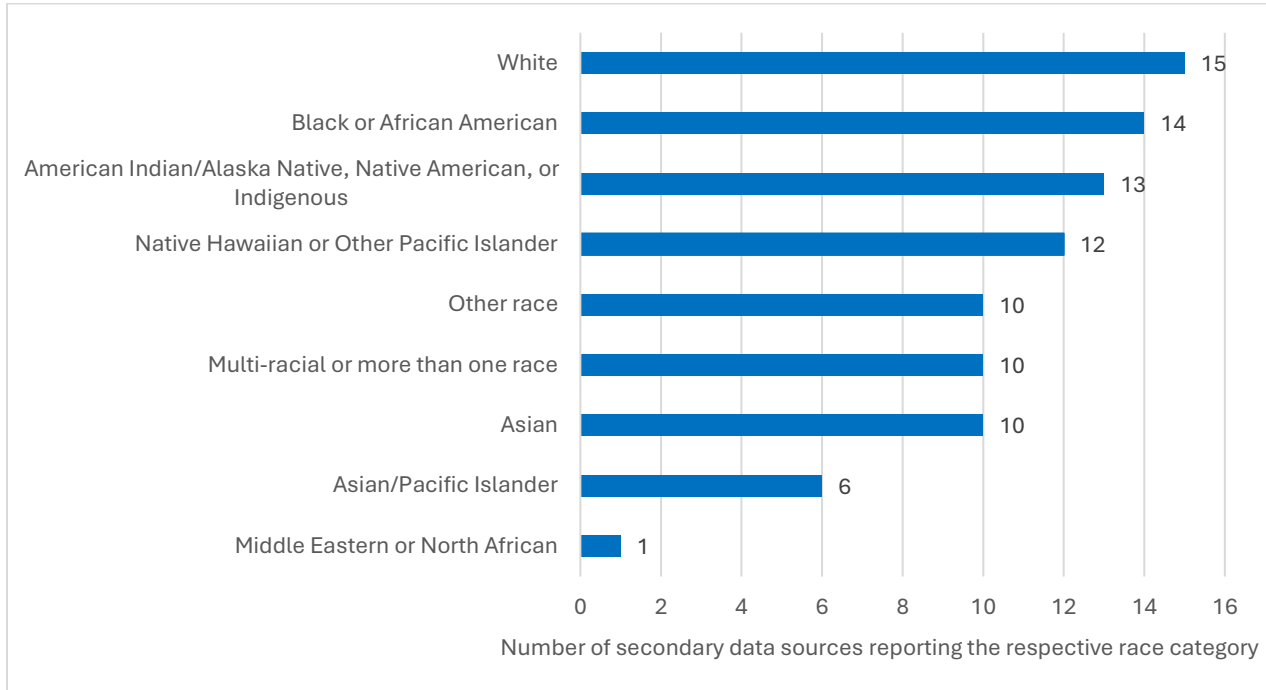
Note: Percents add to over 100% and total N is larger than 8 because respondents could select more than one data source option.

Respondents were asked if the racial/ethnic categories for their secondary data sources were self-reported. Twelve of the secondary data sources (75%) contained self-reported racial/ethnic categories while four (25%) of the secondary data sources were not self-reported. Moreover, Assessment respondents specified the racial categories their secondary data sources provided (see **Chart 1**). Out of



the 16 data sources referenced, the most common racial categories were White (15), followed by Black/African American (14), Indigenous American (13) and Native Hawaiian or Other Pacific Islander (12). Additionally, 10 data sources each reported other race, multi-racial, and Asian race categories. Six data sources reported Asian/Pacific Islander and one data source reported Middle Eastern or North African categories. One data source did not provide any race data.

Chart 1. Racial categories reported in respondent-identified secondary data sources.



The Assessment then asked respondents how ethnicity was reported in each respondents’ secondary data source (see **Table 8**). Out of the 16 data sources referenced, most (10) reported Hispanic categories as integrated into race reporting (e.g., White non-Hispanic, Black non-Hispanic, Black Hispanic, etc.) On the other hand, five data sources reported race and ethnicity separately. One reported data source did not provide any ethnicity data.

Table 8. Ethnicity reporting in respondent-identified secondary data sources.

	N	%
Hispanic categories are incorporated into race reporting; data source reports race/ethnicity combined	10	63%
Hispanic categories are not incorporated into race reporting; data source reports race and ethnicity separately	5	31%
Ethnicity categories are not reported	1	6%

Note: The denominator for this question is 16, reflecting the number of data sources respondents referenced in the survey.

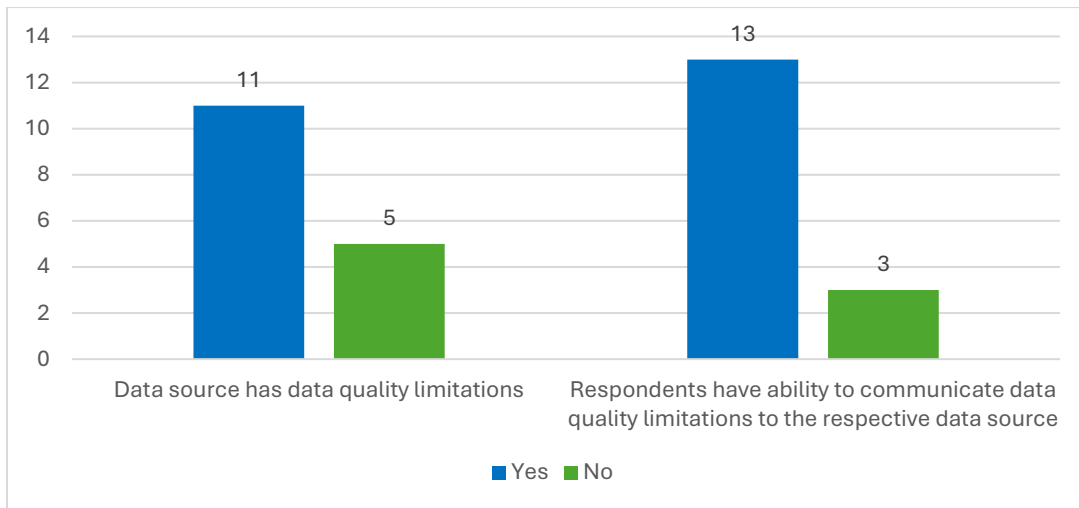
Data quality

As a continuation of Assessment survey questions on quantitative secondary data sources, respondents were asked if their reported data sources had any quality limitations (e.g., missing data, data suppression, small sample sizes, racial/ethnic category accuracy, time lag for data releases, etc.). If so,



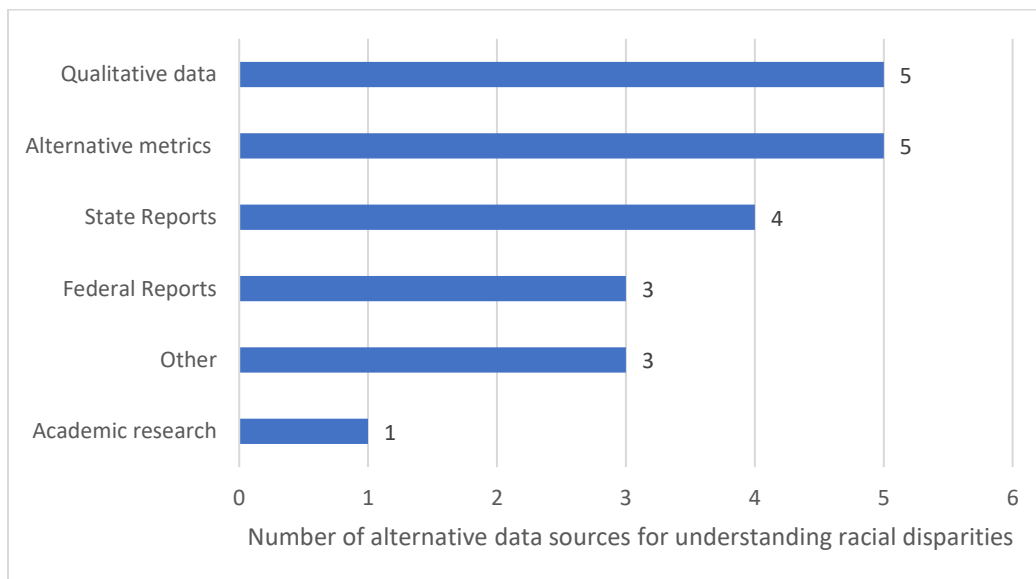
they were asked if they have a way to communicate data limitations to the respective data source (see **Chart 2**). Respondents indicated that many of their data sources (11) had limitations related to data quality. The two most frequently encountered data limitations were small sample sizes (5 respondents) and time lag for data releases (3 respondents). The respondents who experienced data quality limitations elaborated that data reliability and suppression were a concern due to low response rates or small sample sizes, particularly when disaggregating data by racial/ethnic subgroups. Despite the data limitations encountered, respondents were able to communicate these aforementioned data challenges with 81% (13) of the reported data sources.

Chart 2. Secondary data source quality limitations (left) vs. ability to communicate data quality challenges to the respective data source (right).



Contextualizing data

Chart 3. Alternative data sources used to understand underlying causes of racial disparities.



Respondents were asked about other data sources used to contextualize racial disparities and the needs of their target populations (see **Chart 3**). Qualitative data and metrics (e.g., Child Opportunity Index, Life Course Metrics) emerged as the most frequently used, with five respondents each. State reports were another common source, with four respondents relying on them. Federal reports and other sources were slightly less utilized, with three respondents each. Examples of other sources included vital records and hospital discharge data. Lastly, academic research was used by one respondent.

Community engagement

In KIIs, informants were asked to summarize their community engagement efforts around gathering/analyzing data from the aforementioned data sources to address inequities in NPMs. Five informants referenced formalized agency and community partnerships to contribute to gathering and analyzing data to address inequities in NPMs. One informant summarized their community partnerships, which were brokered through a community-based organization:

“[One of our partners is] very knowledgeable about community engagement...anything, from creating focus group discussion questions [to reporting], we get feedback on that [through her] from the community. We want to make sure that whatever we do, it doesn't end just at a report, it continues on...We recruit people with lived experience to the group...ultimately, the people who are impacted and the communities are the ones who are the experts in their needs.”

Other methods informants used to engage community in gathering and analyzing data ranged from requesting feedback on a data analysis, performing a needs assessment, or face-to-face engagement. Three informants expressed an interest in expanding their efforts to further engage communities in gathering and analyzing data related to NPMs.

Alternative data sources

Assessment respondents were asked a series of questions about alternative data sources used to understand inequities in their NPMs. No respondents reported having conducted a root cause analysis³, representing a potential training opportunity for future projects related to racial equity. Furthermore, one Assessment respondent utilized environmental scans to understand inequities in NPMs, presenting another topic for future projects to consider incorporating into programming.

Strategy development

The fifth section of the MA DPH Roadmap outlines how states and programs can make plans to address racial/ethnic differences that are unjust or avoidable. Relatedly, NICHQ asked DREAM LC participants a series of questions about their prioritization approaches, collaboration and community engagement, and intervention planning to address disparities in NPMs.

³ A root cause analysis is a method to identify and address underlying sources of inequities associated with NPMs. A summary of root cause analysis methodology was provided within the Assessment.

Prioritization

Assessment respondents were asked to what extent they considered potential racial equity impact when i.) **developing or selecting strategies** and ii.) **planning or implementing strategies** for their NPMs (see **Table 9**). When developing and selecting strategies to address NPMs, four respondents reported considering the potential racial equity impact ‘very much so’ or ‘a good amount.’ Three respondents considered potential racial equity impact ‘somewhat’ when developing and selecting strategies to address NPMs. When planning or implementing strategies related to NPMs, three respondents reported considering the potential racial equity impact ‘very much so,’ with four respondents ‘somewhat’ considering racial equity in NPMs. This may indicate an opportunity for ASTHO to further expand participants’ capacity for considering racial equity in planning and implementing NPM strategies in future projects related to racial equity.

Table 9. To what extent did your department consider the potential racial equity impact when i.) **developing or selecting strategies** (left) or **planning or implementing strategies** (right) to improve outcomes related to your NPM?

	Developing or selecting strategies		Planning or implementing strategies	
	N	%	N	%
Very much so	3	38%	3	38%
A good amount	1	13%	0	0%
Somewhat	3	38%	4	50%
A little bit	0	0%	0	0%
Not at all	0	0%	0	0%
Missing	1	13%	1	13%

Collaboration and community engagement

In KIIs, informants were asked to describe the different leaders, positions, departments, and partners involved in prioritizing and developing strategies to address inequities in NPMs. Advisory groups, agencies, health equity teams, data stewards, federal partners, clinicians, and leadership roles were all reported by informants to contribute strategy development to address inequities in NPMs. Three informants expressed both positive and negative sentiments while discussing how their state legislature contributes to strategy development. One informant shared how their legislature was helpful in this regard, as evidenced in the following quote:

“There was a Senate bill that passed to protect maternal health. One of the components is developing a licensure category for freestanding birthing centers where the centers would be able to operate outside of the traditional hospital model for low-risk deliveries. Given that there have been issues within our state with hospitals closing maternity wards over the past few years, we have found that that created an access gap. And so, this is an effort that the state is taking to help bridge that gap.”

Conversely, one informant demonstrated how their legislature and leadership could limit their work in promoting equity in NPMs:



“While [our agency is] in the driver's seat around most things [related to] maternal health, we may get some direction from our Director on the strategies she would like to see within our maternal health program. Or, [we receive direction] through the legislature [on] programming...[there are] some bigger things happening in the state and we get that push from higher-level [individuals to follow their direction].”

Additionally, informants were asked to summarize their community-engagement efforts around strategy development to address inequities in NPMs. Six informants shared examples of existing community engagement, though two informants reported that they felt they had progress to make in this area. Informants discussed opportunities for community feedback, which were often implemented through community partners, and included mechanisms such as the needs assessment process, virtual and in-person feedback sessions, and community partner groups. Community partners referenced included Planned Parenthood, Healthy Start, birthing hospitals, and doulas organizations, among others. Two informants discussed formal qualitative data collection efforts, with one informant elaborating on how qualitative data enhanced their needs assessment process:

“Through our needs assessment process...we'll be involving communities in [strategy] conversations, whether that be in focus groups, key informant interviews, or surveys. We've also been...really intentional in trying to bring in voices as we're doing program planning as well. So, it's not just [like we engage the community] during the needs assessment and then we [leave]. We're bringing [the community] into [strategy] conversations, which is something that we hadn't done in the past.”

Intervention planning

The Assessment asked respondents the extent to which they anticipated that strategies to address NPMs may have a differential impact on different racial/ethnic groups. Four respondents were missing, perhaps indicating survey fatigue, as this was the last question of the Assessment. Among those who did respond, two respondents each reported anticipating a ‘good amount’ and ‘somewhat’ of a differential impact on different racial/ethnic groups. Two respondents noted that though their NPM is not currently reported, they anticipated they would have a more informed understanding of NPM differential impacts once they began participation in the DREAM LC.

Data communication

The sixth section of the MA DPH Roadmap provides guidance on presenting data in ways that help diverse audiences make sense of the findings. To address this topic, NICHQ asked DREAM LC participants a series of questions related to data communication settings, methods, frequencies, and messages related to their NPMs.

In KIIs, informants explained when communication around NPMs occurs within their state’s data-to-action cycle. Half of informants reported that data communication typically occurs during a concrete period of need, for instance, on an ad hoc basis, for reporting requirements, during Title V Block Grant

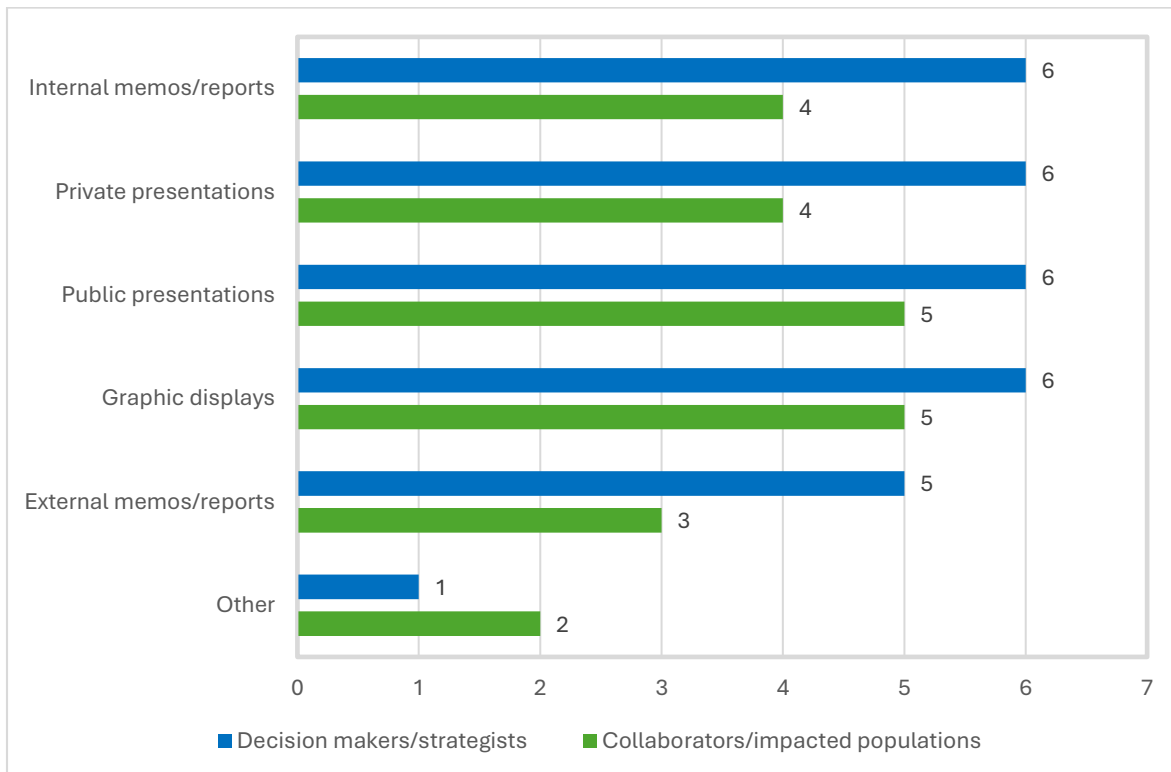


application development, for a needs assessment, or during a public input period. For the four states that reported taking an intentional approach to data communication, they discussed communicating with the support of community partners or agency leaders (e.g., Directors and Governors) and within regular, pre-determined intervals. A barrier to NPM data communication shared by one state was political limitations, noting: “[our state] explicitly censors data related to inequities... it's publicly accessible data, [but we] can't publicly contextualize [it].” Two informants discussed how they desired a more deliberate approach to data communication, as exhibited in this excerpt:

“There is a disconnect and there's not really a process. I think our programmatic staff and the team at the PQC are really clued in to the data and what they're seeing. But we don't have a structured process to say, ‘Okay, here's the data. What are we doing? What do we need to be doing differently?’ We're certainly not looking at the data from an equity perspective at this point. So I think that's a growth point for us, to be a little more structured.”

Similarly, Assessment respondents were asked the setting for which secondary data are shared with i.) decision makers/strategists and ii.) collaborators/impacted populations (see **Chart 4**).

Chart 4. How are data shared with i.) decision makers/strategists and ii.) collaborators/impacted populations?

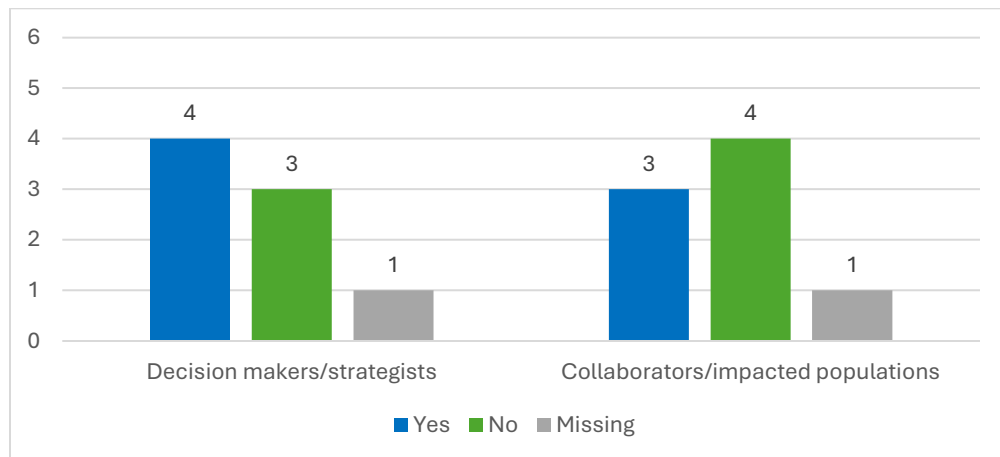


Among the data sharing platforms, the most used for decision makers/strategists was internal memos/reports, private and public presentations, and graphic displays, each with six respondents. The second most referenced platform to communicate with decision makers/strategists was external memos/reports, with five respondents. Additionally, one respondent identified 'other' methods for sharing data with decision makers/strategists, but did not explain the type of platform used. For collaborators and impacted populations, the most commonly referenced data communication platforms were graphic displays and public presentations, each indicated by five respondents. The second most referenced platforms were private presentations and internal memos/reports, each with four respondents. And the third most used platform was external memos/reports with three respondents. The 'other' options indicated using public-facing websites and social media.

Furthermore, the Assessment respondents shared their NPM data communication frequency for i.) decision makers/strategists and ii.) collaborators/impacted populations. Secondary data related to NPMs were communicated to decision makers/strategists by most respondents on an annual basis (6), while two respondents communicated on an ad hoc basis. For collaborators/impacted populations, data communication occurred on an ad hoc basis by five respondents. Three respondents reported having annual communication to collaborators/impact populations. Taking these interrelated findings together, future projects related to racial equity in data practices may consider supporting states to strengthen and expand their communication settings and frequency specifically with collaborators/impacted populations.

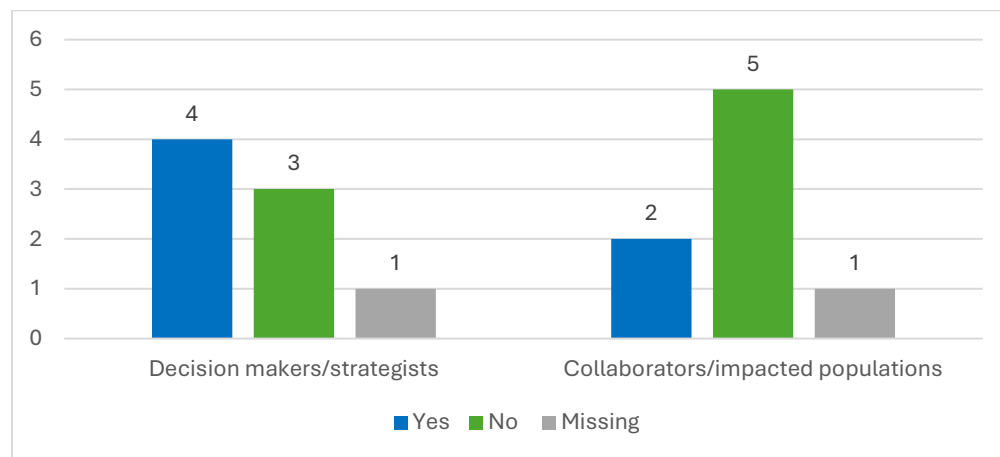
Assessment respondents were asked whether data communication strategies **explicitly highlighted topics related to equity** for i.) decision makers/strategists and ii.) collaborators/impacted populations (see **Chart 5**). For decision makers/strategists, four respondents indicated having communication strategies that explicitly highlighted topics around equity, while three respondents did not. For collaborators/impacted population, three respondents indicated explicitly highlighting topics around equity, while four respondents did not.

Chart 5. Do respondents believe that data communication strategies to decision makers/strategists (left) and collaborators/impacted populations (right) **explicitly highlighted topics around equity**?



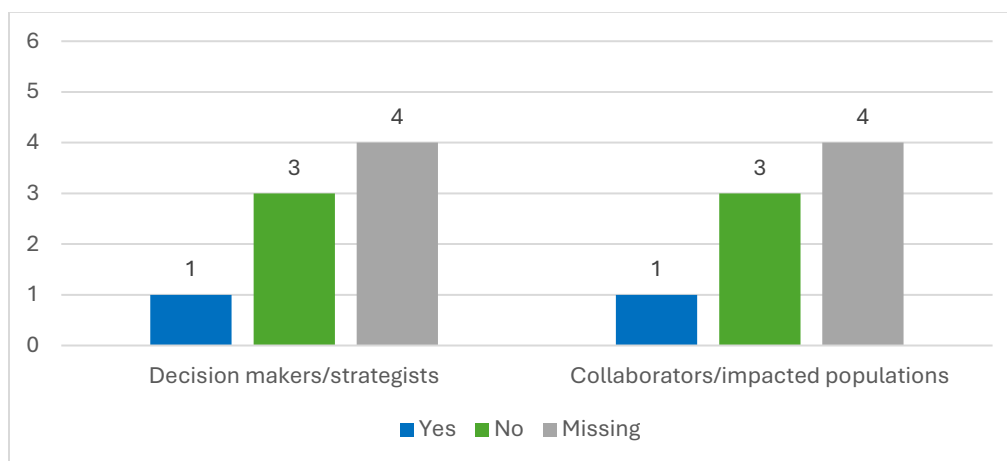
Then, Assessment respondents were asked if they believed that data communication mechanisms adequately equipped i.) decision makers/strategists and ii.) collaborators/impacted populations **to understand data and make informed decisions** on topics related to NPMs (see **Chart 6**). For decision makers/strategists, four respondents felt their secondary data communication mechanisms adequately equipped their understanding of NPMs, while three respondents did not feel this population was equipped to make informed decisions. On the other hand, for collaborators/impacted populations, two respondents felt their data communication equipped this group to make informed decisions on topics related to NPMs, and five respondents did not feel they are equipped to make informed decisions. Taking these interrelated findings together, future related initiatives may consider supporting states to strengthen and expand their communication methods and messaging specifically with collaborators/impacted populations.

Chart 6. Do respondents believe that decision makers/strategists (left) and collaborators/impacted populations (right) feel the secondary data and data communication mechanisms adequately equip them **to understand and make informed decisions** on topics related to NPMs?



Finally, Assessment respondents were asked if data communication mechanisms equipped both i.) decision makers/strategists and ii.) collaborators/impacted populations **to understand and make informed decisions, specifically related to inequities** in NPMs (see **Chart 7**). One respondent indicated they believed their data communication mechanisms adequately equipped both groups to understand and make informed decisions related to inequities in NPMs, while three respondents believed both groups were not adequately equipped to make informed decisions related to inequities in NPMs. A challenge expressed among the three respondents was not having reliable, timely, or publicly available data to engender informed decision making. Four respondents did not respond to this question, perhaps indicating survey fatigue. Repeated references to data-related challenges may indicate opportunities for future initiatives to support states in identifying alternative data sources or analysis methodologies.

Chart 7. Do respondents believe that decision makers/strategists (left) and collaborators/impacted populations (right) feel the secondary data and data communication mechanisms adequately equip them **to understand and make informed decisions related to inequities** in NPMs?



Performance measurement, monitoring, and evaluation

The final section of the MA DPH Roadmap guides users on moving data into action. To address this topic, NICHQ asked DREAM LC participants to summarize their performance measurement, monitoring, and evaluation efforts related to NPMs.

Assessment respondents were asked whether they monitor the impact of their interventions related to NPMs. Six respondents reported that they do not monitor the impact of their interventions related to their NPMs, while two respondents do. One of the two respondents who monitored their interventions' impact used their state's Evidence-based or informed Strategy Measures (ESMs) and stratified their data by demographic factors (e.g., race/ethnicity, geography, insurance, and income). This may suggest that future projects related to racial equity in data practices should consider programming aimed at assisting states in building their capacity to monitor and evaluate racial equity interventions.

Discussion and conclusion

Throughout NICHQ's formative evaluation activities, state teams consistently expressed their excitement to participate in the DREAM LC and their desire to expand their current work in addressing racial/ethnic disparities in NPMs using the MA DPH Roadmap. These thematic findings, compiled across the three formative evaluation data streams and analyzed across the MA DPH Roadmap topics, may aid the ASTHO team in supporting participants of similar projects related to racial/ethnic equity in data practices.

Community-level engagement and data communication

In KIIs, state teams often referenced how professional roles (e.g., advisory groups, agencies, and health equity teams housed within the state's department of health, etc.) were involved in each MA DPH data-to-action step. Data stewards, healthcare/clinicians, epidemiologists, and federal partners were also mentioned for their involvement in data-to-action steps, but to a lesser extent. Though the voices of community members and people with lived experience were referenced as a facilitator across three

data-to-action steps (gathering and analyzing data, contextualizing data, and strategy development), states also reported having room to grow in community engagement. A barrier to this work as identified in KIIs were challenges in identifying and recruiting appropriate individuals within communities. Common areas of existing engagement included formalized partnerships with community-based organizations, needs assessments, and qualitative data collection.

There are several approaches that ASTHO may consider to enhance community engagement in similar projects, informed by the DREAM LC formative evaluation findings:

As identified in the Assessment, no respondents used community-level data sources nor performed a root cause analysis to understand underlying inequities in NPMs. Instead, most respondents used national- and state-level quantitative secondary data sources to understand racial/ethnic disparities related to their NPMs, though many respondents indicated data quality challenges with these data sources. **As such, ASTHO may assist participants in similar projects to build capacity around alternative community-based data approaches or methods to understand racial/ethnic disparities.**

Further, survey respondents consistently demonstrated a lesser developed approach to data communication with collaborators/impacted populations compared to decision makers/strategists in frequency, setting, method, and messaging. For instance, while most communication to decision makers/strategists occurred on an annual basis, communication for collaborators/impacted populations most frequently occurred on an ad hoc basis. States communicated to collaborators/impacted populations through public presentations and graphic displays only, whereas states communicated data findings to decision makers/strategists in twice as many settings (internal memos, private and public presentations, and graphic displays). Additionally, states explicitly highlighted equity topics less frequently with collaborators/impacted populations compared to decision makers/strategists. Survey respondents also suspected data communication mechanisms did not adequately equip collaborators/impacted populations to understand and make informed decisions about topics related to NPMs, pointing to not having reliable, timely, or publicly available data as the main barriers. Finally, in KIIs, informants often referenced an interest in expanding community engagement opportunities to gather and analyze data. **Informed by these findings, it appears that DREAM participants were eager to broadly learn more about community-engaged data communication and outreach, representing another area that ASTHO may consider for programming in future related initiatives.**

[Embedding racial equity tenets within trainings, strategy development, and monitoring](#)

All states identified their state's DOH as the primary implementation source for Title V. Most survey respondents indicated their DOH provided access to racial equity trainings, though most of these trainings were on an introductory, one-time basis. **As a result, ASTHO may consider providing access to or sharing options around continuous racial equity programming to support participants in similar projects in pursuing sustained education efforts.**

When survey respondents were asked about their approaches to NPM strategy development, DREAM LC participants tended to consider racial equity impact with slightly more frequency when selecting and developing strategies compared to intervention planning and implementation stages. **As such, for future projects, ASTHO may consider programming to emphasize racial equity throughout intervention planning and implementation specifically.**



Additionally, two survey respondents monitored their interventions related to NPMs, with one stratifying their data by race/ethnicity, geography, insurance, and income. **This represents an area of opportunity to grow participant capacity for monitoring and evaluation in other similar projects.**

Infrastructure support

In KIIs, informants were asked to summarize the different facilitators and barriers within each data-to-action step to address racial/ethnic equity in NPMs. Funding, payment, and resources (or a lack thereof) were noted across all data-to-action steps. Also noted across three data-to-action steps were barriers related to bureaucratic siloes (referenced in gathering and analyzing data, contextualizing data, and identifying interventions) and capacity and time demands (referenced in gathering and analyzing data, strategy development, and identifying interventions). **Each of these topics may be helpful to highlight in future projects, as they represent common areas of challenge and opportunity among DREAM LC participants.**



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