2019 Mississippi State Public Health System Assessment

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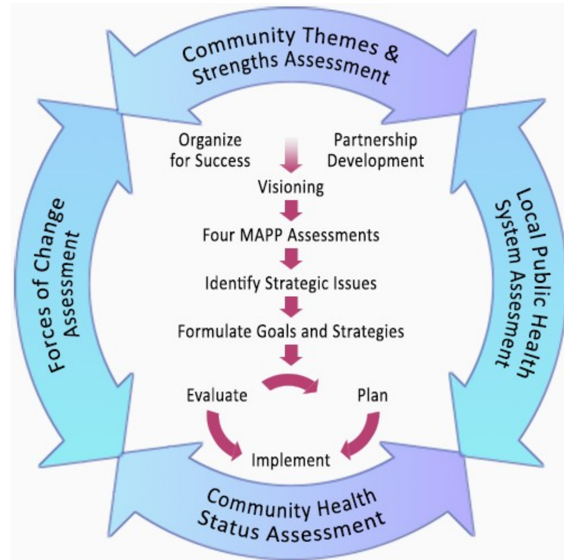
Introduction

In 2019, the Mississippi State Health Department (MSDH) completed a comprehensive State Health Assessment (SHA) using the Mobilizing for Action through Planning and Partnerships (MAPP) process (See Figure 1). MAPP utilizes four assessments to gain a comprehensive picture of community health.

Figure 1: The MAPP Process (NACCHO, 2013)



The **Community Health Status Assessment (CHSA)** provides quantitative information on community health conditions.

The **State Public Health System Assessment (SPHSA)** measures how well different local public health system partners work together to deliver the Essential Public Health Services.

The **Forces of Change Assessment (FOCA)** identifies forces that may affect a community as well as opportunities and threats associated with those forces.

The **Community Themes and Strengths Assessment (CTSA)** identifies assets in the community and issues important to community residents.

The Mississippi State Department of Health conducted the Mississippi State Public Health System Assessment on December 11, 2019, as one of the four assessments in the Mobilizing for Action through Planning and Partnerships (MAPP) process.

The SPHSA is used to understand the overall strengths and weaknesses of the public health system based on the 10 Essential Public Health Services. Results from the SPHSA will be analyzed in collaboration with reports from the three other assessments in the MAPP process. Strategic analysis of these assessment results will inform the identification of prevailing issues impacting the health of the state. Issues will be strategically prioritized with consideration of a variety of factors, including the current progress and action on the priorities identified from the last assessment and planning cycle. Goals and action plans will be developed or updated for each of these priority health issues. These action plans will be implemented and aligned to improve the state public health system and ultimately the health and wellbeing of Mississippi residents.

Executive Summary

Mississippi's 2019 State Public Health System Assessment revealed a number of cross-cutting themes that arose in dialogue across each breakout group:

- **Nationally Ranked Emergency Preparedness and Response:** Emergency preparedness and response efforts were highlighted throughout the essential service breakout groups as one of the state's greatest strengths. The state public health system is well-prepared to handle potential health threats, hazards, and state emergencies. The state maintains a strong system for surveillance and monitoring as well as implementing emergency plans.

- **Comprehensive Smoking Cessation Initiatives:** Smoking cessation efforts throughout the state public health system were consistently referred to as a best practice example for collaboration and communication, mobilizing partners, and long-term impact.

- **Limited Workforce Capacity and Resources:** Participants identified workforce capacity and development as critical areas for improvement throughout the SPHS. The SPHS endures high turnover rates and staff shortages that impede on the development, implementation, and evaluation of needed initiatives and programs. As well, the SPHS lacks a collective public health workforce development plan or extensive professional development opportunities to address gaps in personnel or skills across the system. Opportunities for improving Mississippi's public health workforce included conducting a system-wide workforce assessment, increasing professional development activities, and creating a statewide workforce development plan. These opportunities could improve retention and recruitment rates throughout the system.

- **Limited Collective Evaluation Activities:** Model Standard 3, Performance Management and Quality Improvement, consistently scored low across each Essential Service. The lowest average score calculated as 44.0 (moderate) compared to the average scores of the other Model Standards from each Essential Service. Consistent themes throughout the breakout groups show a lack of collective effort to review evaluation activities across the system, as well as a lack of evaluation beyond grant requirements and regulations. Participants consistently identified limited workforce capacity dedicated to evaluation activities as a barrier to strong collective evaluation efforts throughout the system. Participants acknowledged setting evaluation activities as a system-wide priority as an opportunity to improve the state's Performance Management and Quality Improvement.

- **Inconsistent Collaboration and Communication:** The SPHS lacks consistent and effective communication efforts to allow coordination and alignment of services, workforce development, and evaluation activities. Silos and a lack of formalized partnerships were continually reported as a hinderance preventing coordination and alignment throughout the system. The SPHS should improve collaboration and break down silos through increased collective communication efforts. Communication and collaboration could improve through formalized communication mechanisms, increased accessibility and use of electronic systems (e.g. electronic health records), and sharing strategic plans. Participants also reported engaging

partner organizations in activities developed through the SHIP as an avenue for increasing collaboration and communication in the SPHS.

- **Data Availability and Sharing:** Accessing and sharing data remained a recurring theme throughout essential services discussions as a critical area for improvement. Limited communication and silos throughout the SPHS prevent partner organizations from efficiently accessing and sharing data to get a more accurate picture of health and well-being in the state. Participants also reported a lack of awareness about the availability of data from state agencies and other partner organizations. Across the essential service discussions, participants consistently reported a need for data-sharing throughout the state public health system. While partner organizations individually collect data, they require a system to easily access relevant data from assessment and evaluation activities throughout the state.

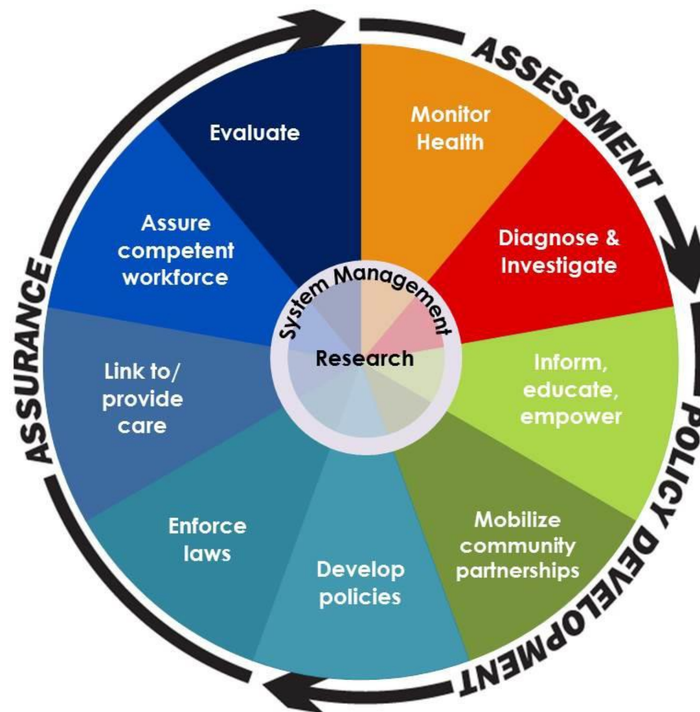
- **Assessing and Serving Populations Affected by Health Inequities and Health Disparities:** Participants also reported that lack of coordination, silos, workforce gaps, and funding limitations prevent the SPHS from adequately providing services and collaboratively assessing the needs of populations affected the greatest by health inequities and health disparities, including rural and undocumented populations. Accessing vulnerable populations to assess needs and provide services was consistently highlighted as an area for improvement.

Assessment Methodology

Assessment Instrument

The National Public Health Performance Standards (NPHPS) Assessment measures the performance of the state public health system -- defined as the collective efforts of public, private and voluntary entities, as well as individuals and informal associations that contribute to the public's health within a state. This may include organizations and entities such as the state health department, other governmental agencies, healthcare providers, human service organizations, schools and universities, faith institutions, youth development organizations, economic and philanthropic organizations, and many others. Any organization or entity that contributes to the health or wellbeing of the state is considered part of the public health system. Ideally, a group that is broadly representative of these public health system partners will participate in the assessment process. By sharing their diverse perspectives, all participants will gain a better understanding of each organization's contributions, the interconnectedness of activities, and how the public health system can be strengthened. The NPHPS does not focus specifically on the capacity or performance of any single agency or organization.

The instrument is framed around the **10 Essential Public Health Services (EPHS)** that are utilized in the field to describe the scope of public health.



The 10 EPHSs are defined as:

1. Monitor health status to identify community health problems.
2. Diagnose and investigate health problems and health hazards in the community.
3. Inform, educate, and empower people about health issues.
4. Mobilize community partnerships to identify and solve health problems.
5. Develop policies and plans that support individual and community health efforts.
6. Enforce laws and regulations that protect health and ensure safety.
7. Link people to needed personal health services and assure the provision of health services.
8. Assure a competent public and personal health care workforce.
9. Evaluate effectiveness, accessibility, and quality of personal/population-based health services.
10. Research for new insights and innovative solutions to health problems.

For each essential service in the state instrument, there are four **Model Standards**: Planning and Implementation, State-Local Relationships, Performance Management and Quality Improvement, and Public Health Capacity and Resources. For each model standard, there are a series of questions, or performance standards, to explore and score overall public health system performance in the state.

All **Performance Measures** are designed to be scored based on how well participants perceive that, collectively, all members of the local public health system meet the standard. Results are reached through group consensus.

Performance standards are scored by participants to assess system performance on the following scale:

Level	Description
Optimal Activity (76-100%)	The public health system is doing absolutely everything possible for this activity and there is no room for improvement.
Significant Activity (51-75%)	The public health system participates a great deal in this activity and there is opportunity for minor improvement.
Moderate Activity (26-50%)	The public health system somewhat participates in this activity and there is opportunity for greater improvement.
Minimal Activity (1-25%)	The public health system provides limited activity and there is opportunity for substantial improvement.
No Activity (0%)	The public health system does not participate in this activity at all.

NPHPS results are intended to be used for quality improvement purposes for the public health system and to guide the development of the overall public health infrastructure. Analysis and interpretation of data should also take into account variation in knowledge about the public health system among assessment participants: this variation may introduce a degree of random non-sampling error.

Assessment Methodology

The assessment retreat was held on December 11 and began with a plenary presentation to welcome participants, provide an overview of the process, introduce the staff and answer questions. Following the plenary presentation, participants moved to break-out groups for discussion and scoring work for two assigned essential services areas. (Prior to the retreat, participants were divided into five groups based on the diagram below.)

	SPHSA Breakout Groups	
Group	**EPHS**	**Topics**
A	EPHS 1	Monitor health status to identify community health problems.
	EPHS 2	Diagnose & investigate health problems & health hazards in the community.
B	EPHS 3	Inform, educate, and empower people about health issues.
	EPHS 4	Mobilize community partnerships to identify and solve health problems.
C	EPHS 5	Develop policies and plans that support individual and community health efforts.
	EPHS 6	Enforce laws and regulations that protect health and ensure safety.
D	EPHS 7	Link people to needed personal health services and assure the provision of health services.
	EPHS 9	Evaluate effectiveness, accessibility and quality of personal/population-based health services.
E	EPHS 8	Assure a competent public and personal health care workforce.
	EPHS 10	Research for new insights and innovative solutions to health problems.

Each group was professionally facilitated, recorded, and staffed by note takers. The program ended with a plenary session where highlights were reported by members of each group. Event organizers facilitated the end-of-day dialogue, outlined next steps, and analyzed and reported assessment findings to the Mississippi State Health Assessment and Improvement Committee (SHAIC) and retreat participants.

Assessment Participants

The Mississippi SHAIC developed a list of agencies to be invited to participate in the full day assessment retreat. The event organizers carefully considered how to balance participation across sectors and agencies to ensure that diverse perspectives as well as adequate expertise were represented in each breakout group.

The event drew 68 public health system partners that included public, private and voluntary sectors. The composition of attendees reflected a diverse representation of partners that was apportioned as follows:

Constituency Represented	Total Attended
Business Group	1
Coalitions	1
Colleges and Universities	7
Community-Based Organizations	2
Hospitals/Health Systems and Services	10
Mississippi State Department of Health (centralized)	31
Insurance Providers	1
State Government	1
Tribal Government	1
Non-profit and Advocacy	9
MS Department of Mental Health	2
MS Department of Education	1
Foundations	1

Results of the Mississippi State Public Health System Assessment

The table and graph below together provide an overview of the state public health system's performance in each of the 10 Essential Public Health Services.

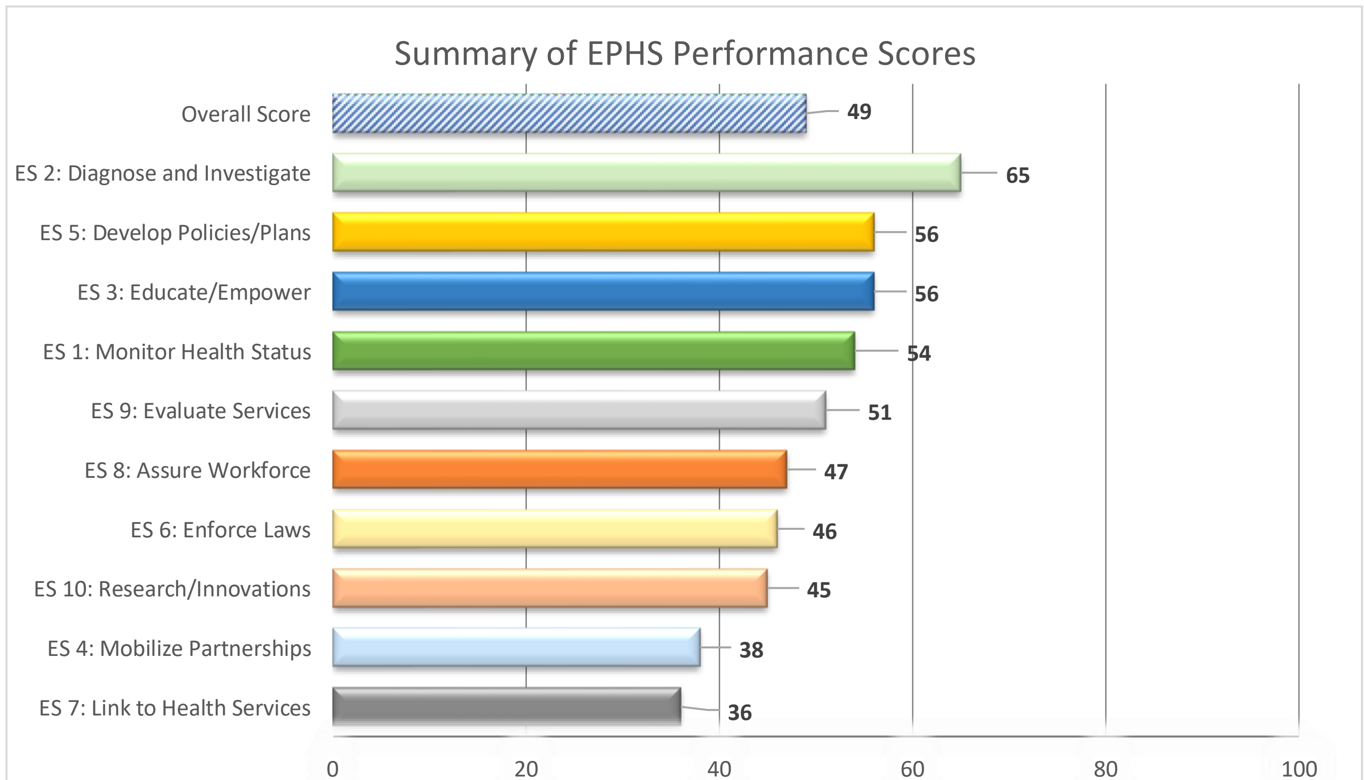
Summary of Essential Public Health Service Scores			
EPHS	**EPHS Description**	**2019 Score**	**Overall Ranking**
1	Monitor health status to identify community health problems.	54 Significant	3rd
2	Diagnose and investigate health problems and health hazards in the community.	65 Significant	1st
3	Inform, educate, and empower people about health issues.	56 Significant	2nd
4	Mobilize community partnerships to identify and solve health problems.	38 Moderate	8th
5	Develop policies and plans that support individual and community health efforts.	56 Significant	2nd
6	Enforce laws and regulations that protect health and ensure safety.	46 Moderate	6th
7	Link people to needed personal health services and assure the provision of health services.	36 Moderate	9th
8	Assure a competent public and personal health care workforce.	47 Moderate	5th
9	Evaluate effectiveness, accessibility, and quality of personal/population-based health services.	51 Significant	4th
10	Research for new insights and innovative solutions to health problems.	45 Moderate	7th
Overall State Public Health System Performance Score		**49 Moderate**	

The table above provides a quick overview of the system's performance in each of the 10 Essential Public Health Services. Each EPHS score is a composite value determined by the scores given by participants to those activities that contribute to each essential service. The scores range from a minimum value of 0% (no activity is performed pursuant to the standards) to maximum of 100% (all activities associated with the standards are performed at optimal levels).

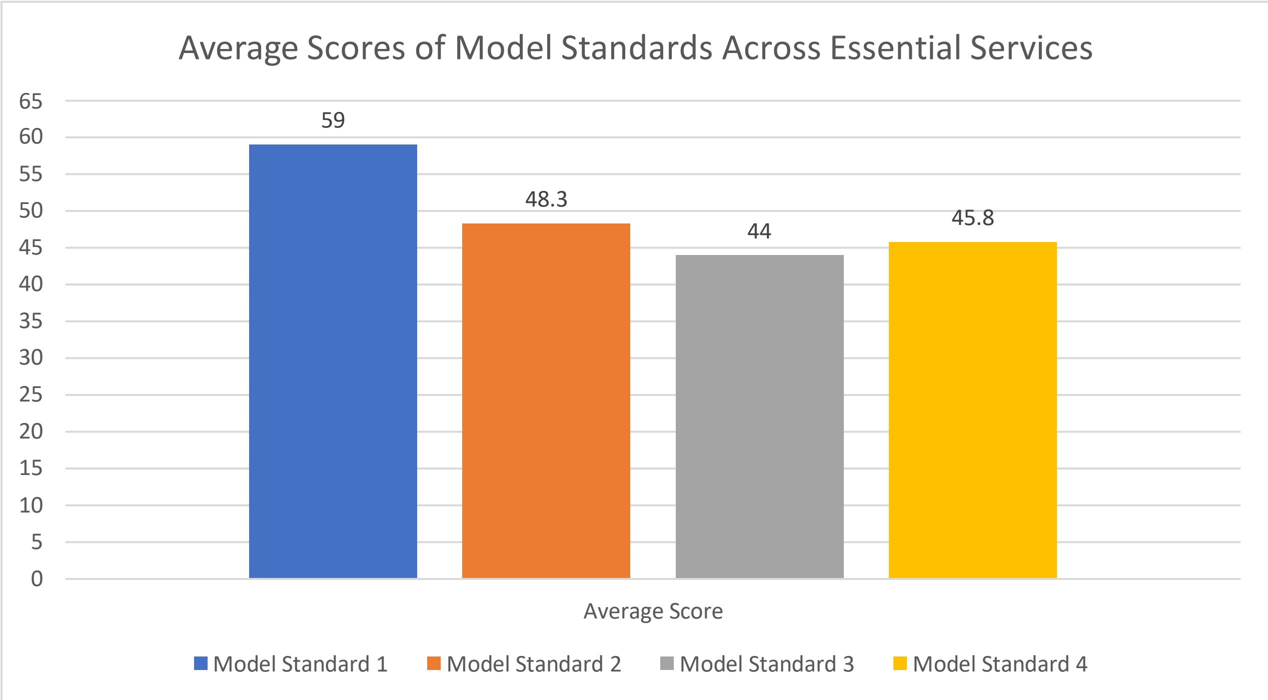
Scores and Common Themes for Each Essential Public Health Service

The following graphs and scores are intended to help the Mississippi State Public Health System gain a better understanding of its collective performance and work toward strengthening areas for improvement. For each Essential Service and Model Standard, a bar graph depicts each Model Standard average and a cumulative rating score, discussion themes, and a summary of strengths, weaknesses, and opportunities for immediate and long-term improvement.

The chart below provides a graphic representation of the 2019 Essential Public Health Service scores for Mississippi, from highest to lowest, with the overall score present.



The chart below presents the average scores of the four Model Standards across all Essential Services. Overall, Planning and Implementation (Model Standard 1) scored the highest across Essential Services with an average score of 59 (Significant). On the other hand, Performance Management and Quality Improvement (Model Standard 3) scored the lowest with an average score of 44 (Moderate). Model Standard 2, State-Local Relationships, and Model Standard 4, Public Health Capacity and Resources, scored Moderate with average scores of 48.3 and 45.8 respectively.



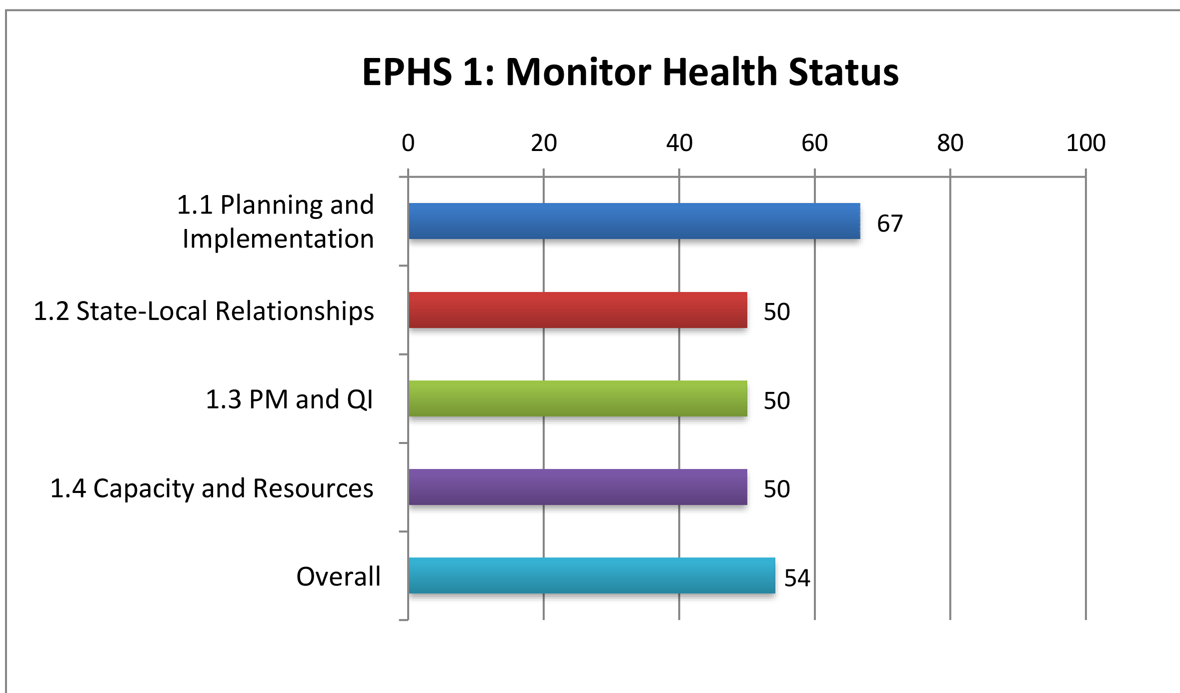
Essential Service 1: Monitor Health Status to Identify Community Health Problems

Participant dialogue to assess performance for Essential Public Health Service 1 explored the following key questions:

What's going on in our state?
Do we know how healthy we are?

Monitoring health status to identify community health problems encompasses the following:

- Assessment of statewide health status and its determinants, including the identification of health threats and the determination of health service needs.
- Analysis of the health of specific groups that are at higher risk for health threats than the general population.
- Identification of community assets and resources that support partner organizations in the state public health system in promoting health and improving quality of life.
- Interpretation and communication of health information to diverse audiences in different sectors.
- Collaboration in integrating and managing public health related information systems.



Overall performance for Essential Service 1 scored as significant. Model Standard 1.1 (Planning and Implementation) scored in the significant range. Model Standards 1.2 (State-Local Relationships), 1.3 (Performance Management and Quality Improvement), and 1.4 (Public Health Capacity and Resources) scored in the high moderate range. Performance for Essential Service 1 was ranked third out of the 10 Essential Services.

Essential Service 1 Summary

1.1 Planning and Implementation

This model standard focuses on the work the public health system does to collect all types of health data on the state's population on an ongoing basis. This first model standard is especially interested in how well the system maintains these data collection and monitoring programs. 1.1 also focuses on the extent to which the health data is available for use and readily identifies health threats.

Participants discussed the current data collection and dissemination systems throughout the state. Overall, participants acknowledged that the system is mostly efficient in their data collection with room for improvement. Various organizations within the public health system have created data collection systems for their programs. MSDH participants provided various examples of data collection systems that are currently electronic-based and, in some instances, available online (example: MSTAHRS). Participants described a good tracking system in place for communicable diseases. At the same time, many current data collection methods require the use of paper and electronic-based surveys; which can be presented as a barrier. Some programs are working on moving their reports, such as morbidity reports, to an electronic-based system. Additionally, participants noted a lack of standardization of data collection that leads to discrepancies in the processes used throughout the system.

"One of the things we can improve is having that data governance that allows the accessibility and reporting of more data, which comes down to a capacity issue."

"I think we are great at acquiring data, but as far as collaboration and actually doing something with that data I think we slide."

The discussion also focused on collaborative efforts for data collection as well as data accessibility post-collection. Participants acknowledged limited collaboration on data collection efforts outside of the Mississippi State Department of Health. MSDH is often acknowledged as the primary resource for public health-related data. However, there remains a need for the system to utilize the data collection efforts of the partners beyond the department of health as a resource. The participants discussed the presence of vertical collaboration with government entities (i.e. CDC) and a lack of horizontal collaboration with other partner organizations in the system. Participants noted that although MSDH data collection is sufficient, MSDH has restrictions present a barrier to improving the overall data collection system.

The Mississippi State Department of Health currently has regulatory systems in place for compliance data. Regulatory systems allow information to be collected when there is not a system in place to send out information, due to a lack of capacity. However, participants noted that the current systems are not user-friendly, and the data is scattered. This makes the data inaccessible unless a partner knows who to call to receive the data. Overall, the discussion centered around a need for collaborative efforts in the data and monitoring systems to improve accessibility and collection methods.

1.2 State-Local Relationships

This model standard focuses on the extent to which the system works with local public health entities to provide useful health-related data and timely assistance with data interpretation, use, and dissemination. This section also focuses on how well the system provides guidance and technical assistance on the development of information systems for monitoring population health at the local level.

As aforementioned, the centralized Department of Health provides a majority of the data requested by partners. Currently, MSDH works with local health entities and provides county specific data. The system has created a new coalition called MEHAC – MS Emergency Healthcare Coalition that could serve as a resource for data collection and coordination. It would be first step in advancing communication and coordination. In terms of media, the agency has a policy where they do not communicate directly with reporters. Instead, the information is disseminated and then communicated to the media. MSDH participants stated a vision of providing greater data access to the public and the partner organizations. Overall, participants of this breakout session were unable to provide more information on this model standard due to a lack of knowledge.

1.3 Performance Management and Quality Improvement

This model standard focuses on the extent to which the system evaluates how good or effective it is at monitoring health status. This section also focuses on how well the system manages performance in this area and continually tries to improve the collective efforts across the state to effectively assess health status.

Overall, participants described monitoring activities and evaluations of monitoring activities that take place as a result of grant requirement and regulations. Grant regulations require identification of community health problems. At the same time, mental health and child health have statewide epidemiological outcomes and workgroups. Participants noted a lack of evaluation of monitoring activities beyond grant requirements and regulations. Discussion centered around the potential for collaboration across the public health system as a method of improving the current lack of effectiveness evaluations.

Participants also noted an absence of a collective evaluation of monitoring activities. Monitoring activities and the evaluation of those activities is taking place at the individual organization level, but participants reported a lack of collaboration across the SPHS. This is consistent with feedback in Essential Service 9: Evaluate effectiveness, accessibility, and quality of personal/population-based health services. Effective collaboration and communication across the system was identified as an opportunity for improvement. Participants reported a lack of awareness of available data that can be utilized by partner organizations. Participants reported the strength of data collection at the individual level, while also describing a need to increase collaboration and communication to increase awareness and education of currently available data across the system.

1.4 Public Health Capacity and Resources

This model standard focuses on the extent to which the system allocates sufficient financial resources to this monitoring and assessment function. This section also focuses on how well the system works together to coordinate efforts, align plans and invest in resources (both technology and skilled people) to effectively monitor the health of the state.

MSDH participants described a strong commitment of financial resources to state agency health status monitoring efforts. However, limited funding for monitoring health status to non-state entities served as a barrier to higher performance. Participants also noted a lack of financial resources committed to retaining professional experts in relevant positions, as well as high expectations that lead to high turnover. The discussion centered around how high expectations for high quality experts, with limited resources and funding, limits the system's capacity to be sustainable. Participants discussed the

potential for more work and commitment to financial resources for partner organizations as an opportunity for improvement.

Participants reported that MSDH has shown improvements in data governance and their internal IT infrastructure for security, conferencing, and data sharing. At the same time, some programs do require partnerships with entities outside of the health department. Participants discussed that existing healthcare and health-focused coalitions share information and collaborate.

ES 1 Strengths, Weaknesses, and Opportunities for Improvement

Strengths

Data Collection

- Regulatory compliance data is available to the public health system.
- Partners have capacity to receive data and maintain the data with a federally funded surveillance system in place.
- A new project has begun to create a data catalog for those to be able to connect with the right program to get the data needed.
- The CDC has created a web-based system to query data for the state.

Weaknesses

Current Practices

- Participants recognize a lack of resources that places the system at a disadvantage.
- Lack of communication and collaboration across the public health system.
- The required work is often completed, but there is a consistent lack of follow-through (face/presence to public).
- Federally funded or maintained programs/initiatives are prioritized over community health problems.

Workforce

- The system often faces high turnover due to lower wage impacts that make the positions unsustainable. There is a quality of staff and their expertise, but a lack of resources and capacity to sustain them.

Data Accessibility

- Data is often not easily accessible.
- Some facilities send out encrypted data that is inaccessible to some partners throughout the system.

Short-term Opportunities for Improvement

Collaboration and Alignment

- Create and implement general stakeholder meetings focused on data collection.

- Identify existing coalitions and the work they have achieved thus far. (SHIP, mayoral councils, coalitions, etc.).
- Ask state organizations together to discuss and share updates of their work.

Workforce

- More intentional partnerships with universities on intern to employee pipeline.

Long-term Opportunities for Improvement

Collaboration

- Mississippi Emergency Healthcare Coalition is new and could be a resource for data collection, increased coordination, and advancing communication efforts.

Workforce

- Advocate for updates and improvements to pay scales and hiring processes.

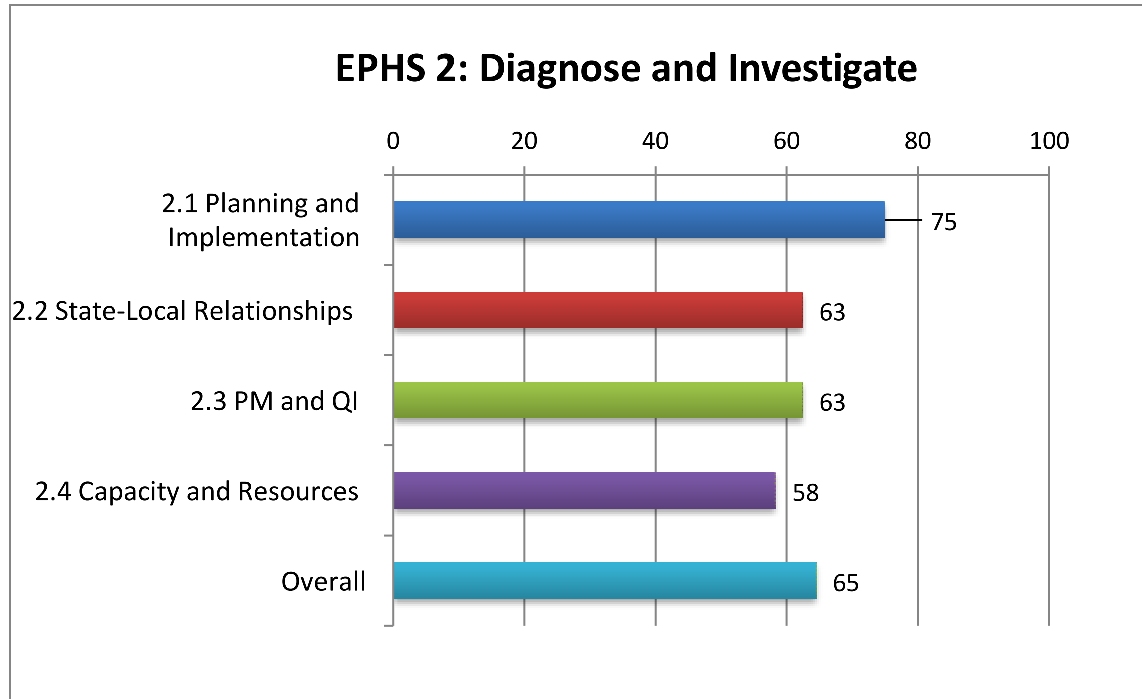
Essential Service 2: Diagnose and Investigate Public Health Problems and Hazards

Participant dialogue to assess performance for Essential Public Health Service 2 explored the following key questions:

What's going on in our state?
Are we prepared for outbreaks?

Diagnosing and investigating health problems and health hazards in the community encompasses the following:

- Epidemiologic surveillance and investigation of disease outbreaks and patterns of infectious and chronic diseases, injuries, and other adverse health conditions.
- Population-based screening, case finding, investigation, and the scientific analysis of health problems.
- Rapid screening, high volume testing, and active infectious disease epidemiologic investigations.



Overall performance for Essential Service 2 scored as significant. Model Standard 2.1 (Planning and Implementation) scored in the high significant range. Model Standards 2.2 (State-Local Relationships) and 2.3 (Performance Management and Quality Improvement) produced the same score in the significant range. Model Standard 2.4 (Public Health Capacity and Resources) also scored in the significant range. Performance for Essential Service 2 was ranked first out of the 10 Essential Services.

Essential Service 2 Summary

2.1 Planning and Implementation

This model standard focuses on the extent to which the system provides a broad scope of surveillance and epidemiology services to identify health problems and threats. This model standard also focuses on the capacity of the system to maintain or initiate heightened surveillance in emergencies. Furthermore, it includes an assessment of the lab capacity and the ability as a system to work collaboratively to respond to health problems and hazards.

Participants noted that the MSDH epidemiology office is efficient with mapping disease throughout Mississippi and, as a result, determining where services are needed. Due to this, the system has been successful in preparing for health problems and threats to health. The system has a strong capacity for surveillance and identification of emerging health threats and has shown that capacity in situations, such as the Ebola outbreak. MSDH partners with UMMC and rapid response teams in the emergency preparedness realm of public health threats. The scope of these activities includes chronic disease, injury, environmental hazards, and maternal and child health. Epidemiological studies of disease patterns, risk factors, and evidence-based programs are being conducted, as well. Studies are used based on data collection and analysis of that data. The Office of Health Data and Research at MSDH continually conducts analysis, examines trends, and integrates state surveillance with national and local surveillance systems.

"I think we do a great job of surveillance, of identifying public health threats, of being able to investigate those public health threats, of being able to stand up surveillance as needed to identify threats (especially emerging ones), to bring the resources to bear across the agencies."

The discussion also focused on laboratories and laboratory systems. Participants described a well-functioning system for the organization of private and public laboratories. At the same time, the system has a well-maintained network of appropriately licensed laboratories. The MSDH epidemiology lab also participates in the National Laboratory Response Network. The system partners with other labs and the CDC to conduct testing of environmental agents, such as water, air, and soil.

2.2 State-Local Relationships

This model standard focuses on the extent to which the system provides assistance to local public health systems in 1) interpreting epidemiological and laboratory data and 2) identifying possible public health threats and appropriate responses to these treats.

Participants discussed current partnerships in which assistance is provided to epidemiological services and laboratory findings. The MSDH epidemiological office provides assistance to groups like the hospital association with anti-biotic drug resistance and how to conduct surveillance and response to outbreaks. Another example of assistance was the state health department partnering with the American Heart Association and their blood pressure program. MSDH provides information on the location of the highest incident areas of high blood pressure to assess what interventions are needed. Technical assistance and support are provided to tribal organizations through interpretation and response to TB, STI, and HIV data. In addition, limited trainings are conducted to provide assistance to local public health systems in the interpretation of epidemiologic and laboratory findings when funds are available. Education to the public and partner organizations was identified as an area of improvement. Participants described providing information and guidance about public health problems and potential health threats through public educations, community engagement (e.g. Jackson Heart Study), and announcements (e.g. MSDH flu announcements).

2.3 Performance Management and Quality Improvement

This model standard focuses on the extent to which the system reviews the effectiveness of their surveillance, emergency preparedness, and investigation procedures given best practices. This section also focuses on how well the system works together to manage their performance in this area for the purpose of improvement.

Participants reported that the emergency response plans, surveillance, and investigation for emergent issues is efficient and often above national standards. Participants reported that most systems for surveillance are developed by the federal government and, as a result, are based in current public health science. An example described by a participant is the Behavioral Risk Factor Surveillance System (BRFSS) developed by the CDC as a system of health-related telephone surveys. Additionally, much of surveillance utilized in the system is based on the CDC case definitions for surveillance that are analyzed and updated as needed. Participants reported that Mississippi places in the top three in the nation for emergency response efforts.

The Mississippi State Department of Health manages the VMSG dashboard where all of the performance management data for the agency will be housed. A component of the VMSG dashboard will be able to communicate with outside organizations to receive data for performance measures. However, the capacity of the system is currently limited to holding the data and running reports.

Participants discussed how the system consistently uses relevant standards to establish system-wide expectations, measure performance, and report on progress. However, participants reported an absence of ongoing quality improvement activities in diagnosing and investigating health problems and hazards. Participants suggested engaging programs to conduct quality improvement activities as an opportunity for improvement.

2.4 Public Health Capacity and Resources

This model standard focuses on the extent to which the system allocates sufficient financial resources to provide epidemiological, laboratory, and investigative support. This section also focuses on how well the system works together to coordinate efforts, align plans, and invest in resources (both technology and skilled people) to effectively carry out this EPHS.

Participants reported an adequate commitment of financial resources to support the diagnosis and investigation of health problems and hazards. The system allocates existing resources while also actively seeking out additional resources. Participants identified a need for increased communication between partner organizations to ensure efforts are not duplicated and to improve system performance. Participants also reported a skilled workforce in detecting and investigating health problems but seek improvements to increase staffing capacity. Some partner organizations and programs are insufficiently staffed to meet the extensive needs of this work.

ES 2 Strengths, Weaknesses, and Opportunities for Improvement

Strengths

Emergency Response and Laboratory System

- The system demonstrated success during the Ebola crisis.
- The public health system has guidance through regulations.
- Ability and willingness to respond and assist in epidemiological functions.
- Mississippi is in the top three in the nation for emergency response efforts.
- The system follows national standards and maintains use of current best practices.
- The system does what is necessary to meet the needs of the community.

Weaknesses

Laboratory System

- A lack of public awareness on existing services.
- The general population often has difficulty navigating important websites and online resources.
- Participants have difficulty identifying other partner organizations.
- Partner organizations are not conducting quality improvement activities.
- There is a lack of capacity building entities and activities throughout the public health system.
- Activity and staff levels are often dictated by funding sources.

Short-term Opportunities for Improvement

Laboratory System

- Improve online resources to make them more accessible to the population.
- Create a method to provide effective public education.
- Improve public communication and messaging related to available resources.
- Revisit roles and responsibilities of current partner organizations.
- Publicize the office of performance improvement.

Long-term Opportunities for Improvement

Laboratory System

- Once an effective public education campaign is created, continue to provide training and education.
- Identify new partner organizations and engage them in the process.
- Engage programs to conduct quality improvement activities.
- Address retention and recruitment through State Personnel Board.

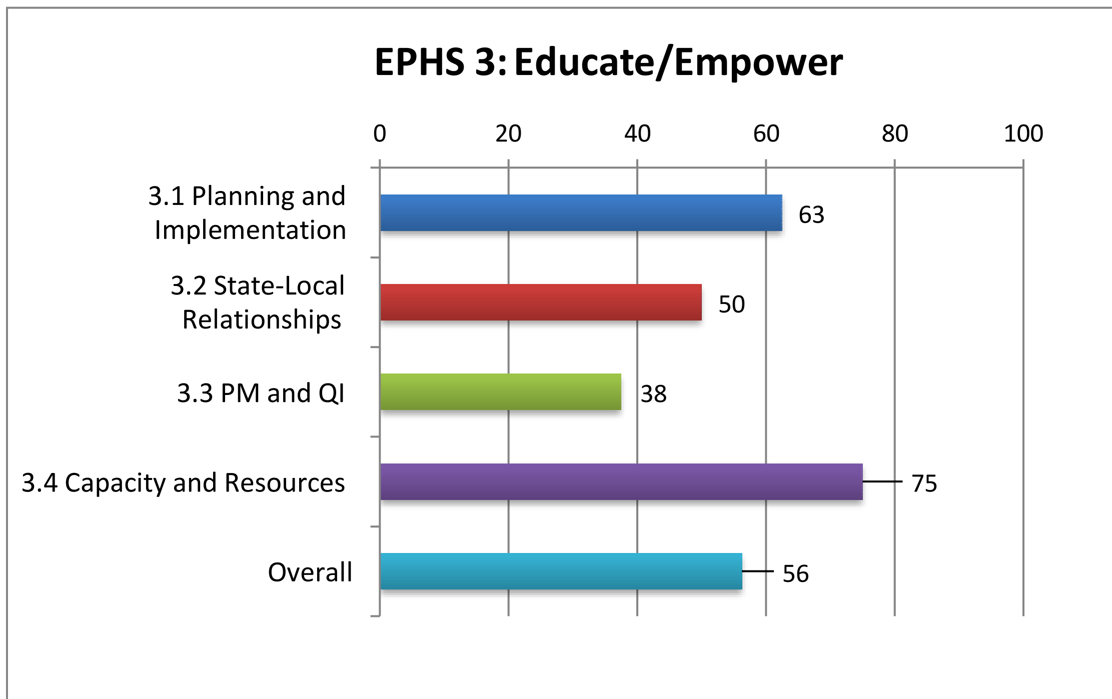
Essential Service 3: Inform, Educate, and Empower People about Health Issues

Participant dialogue to assess performance for Essential Public Health Service 3 explored the following key questions:

What's going on in our state?
How well do we keep all people and segments of our state informed about health issues?

Informing, educating, and empowering people about health issues encompasses the following:

- Health information, health education, and health promotion activities designed to reduce health risk and promote better health.
- Health communication plans and activities such as media advocacy, social marketing, and risk communication.
- Accessible health information and educational resources.
- Partnerships with schools, faith communities, work sites, personal care providers, and others to implement and reinforce health education and health promotion programs and messages.



Overall performance for Essential Service 3 scored as significant. Model Standards 3.1 (Planning and Implementation) and 3.4 (Public Health Capacity and Resources) scored in the high significant range. Model Standards 3.2 (State-Local Relationships) and 3.3 (Performance Management and Quality Improvement) scored in the moderate range. Performance for Essential Service 3 was ranked second with Essential Service 5 out of the 10 Essential Services.

Essential Service 3 Summary

3.1 Planning and Implementation

This model standard focuses on the extent to which the system implements public health programs and communicates with diverse audiences. This model standard reflects the ability of the system to deliver interventions that are aligned with health improvement objectives. It also reflects the ability to effectively communicate about healthy choices and during public health emergencies.

Participants described various existing health education programs and services offered to community members throughout the state. A common theme described by participants was partners typically utilize evidence and research-based theories and models when designing and implementing programs and services. Often, evidence-based models are written into the grant applications with metrics and measures in place. At the same time, participants recognize a great deal of competition for the same services and programs due to limited funding sources. This competition is exacerbated by a lack of collaboration between partners doing the same work. Participants acknowledged the existence of silos in the public health system as a barrier to collaboration preventing successful promotion and implementation of these programs and services. Some discussed the issue of the same few large partner organizations providing most of these programs and services where they can. Silos throughout the system continually prevent collaboration where successful collaboration could increase health promotion and education in the state. At the same time, the silos are described as topic-related rather than community-centered. Participants described how shifting from topic-focused approaches to community-centered approaches could break down silos. This shift would also aid partner organizations in reaching populations affected the most by health inequities and health disparities, as well as rural populations.

Participants described how the current models utilized in the public health system prevent partners from effectively reaching some populations, meeting their needs, and promoting healthy behaviors. Participants acknowledged that the current models work successfully in some areas of the state, but remain unsuccessful in other areas and with other populations.

The current health communication practices are framed after the present model as reported by participants. They utilize multiple vehicles, billboards, and radio spots in an attempt to reach at-risk populations in different areas. However, participants noted a need to improve health communication with those populations while breaking down silos with the partner organizations. One partner described the issue of “checking the box” instead of effectively communicating with populations, such as the Hispanic population, to promote healthy behaviors. The current mode of communication has resulted in missing populations at greater risk for or those affected the most by health inequities and health disparities within the state.

> *"We keep telling people about prevention and economic opportunity as if they will get it if we keep saying it enough, but they are not getting. If we don't build up this understanding of health equity and root causes and lack of access and opportunity and how these things effect health, we are never going to get there. We don't build up that understanding of social determinants from the ground up, then it's hard to get a group to get health education on all of these topical areas."*

Participants also discussed the existence of a crisis plan. There is confusion on the source of the crisis plan, as well as the implementation process. Discussion focused on the need to fully define crisis, as well as where they stand. Some discussed how each community has their own plan, and come as close as they can to the standard of the crisis plan. Twenty-one health centers in the state are required to have a plan in place along with periodic drills. There were questions about whether or not the periodic drills

were being implemented or if regulatory bodies followed up to ensure the drills were being implemented.

Overall, participants recognized successes in some areas and topics, with a need to apply a community-based approach to program and services that promote healthy behaviors.

3.2 State-Local Relationships

This model standard focuses on the extent to which the system provides technical assistance at the local level regarding health education, health communication, and health promotion efforts. This model standard also focuses on how well the system supports locals in developing effective communication plans and strategies for public health emergencies.

The dialogue centered around the need to provide technical assistance to local public health systems and organizations. Participants noted that some organizations do not have the resources (capacity, staff) to use the current model for technical assistance; which was identified as a guide. Participants noted that plans for technical assistance and support are developed but not necessarily implemented. Participants identified a need for the entity providing assistance, at the local level, to monitor implementation as well as ensure follow-through. Participants noted that current efforts at the local level lack coordination, leading to duplication of efforts. In addition, quality improvement activities are not always supported. There is a strong need for more capacity from leaders to provide effective training and technical assistance.

Participants also described how inadequate resources and silos prevent the SPHS from adequately providing services and assessing the needs of populations in rural communities. Participants reported that the system struggles to reach some populations at higher risk for or being affected the most by health inequities and health disparities, specifically those in rural communities. An opportunity for improvement was described as discovering how to effectively reach populations in rural communities and prioritize local needs as a process, rather than just as an outcome. Participants also noted how the faith-based community could be a mechanism for reaching these populations.

3.3 Performance Management and Quality Improvement

This model standard focuses on the extent to which the system reviews the effectiveness of the health promotion, health education, and health communication efforts. This model standard also focuses on how well the system works together to improve the collective performance of the interventions and communications efforts.

Participants discussed the ability to review the effectiveness of health communication, education, and promotion services relies on the consumer’s comprehension of the message. Consumers have to understand the message and the changes they need to implement from the services. Participants noted that programs have not been able to review effectiveness since the messaging has not been successfully understood by the target population. The SPHS must also measure the effectiveness of the message by whether or not change was implemented over time. A lack of capacity due to staffing shortages across the SPHS also prevents the system’s ability to review the effectiveness of these services. Participants recognized the need for more effective and relatable messaging with these programs to assess if the service accurately reflects and addresses the needs of the community.

In terms of measuring performance of these services, discussion centered around mandated performance measurements and outcomes. Participants described reporting this information as a weakness throughout the public health system. Currently, evaluation results are not widely shared throughout the system. Participants reiterated that successful performance management requires the presence of both assessment and follow-up in place to advance progress. The current system practices assessment but participants identified that the follow up piece was absent. Participants described a lack of user-friendly reporting services and resource (staff, funding) capacity as barriers to improving the measurement of performance.

3.4 Public Health Capacity and Resources

This model standard focuses on the extent to which the system allocates sufficient financial resources to interventions that focus on health education, promotion, and communication. This section also focuses on how well the system works together to coordinate efforts, align plans, and invest in resources (both technology and skilled people) to effectively educate and empower people about health issues.

The dialogue centered around the lack of funding for public health initiatives preventing their ability to provide health communication, education, and promotion services throughout the system. Participants discussed how a lack of education and financial commitment to health initiatives serves as a barrier. Public health funding has continually been cut and partners must consistently locate new resources. The public health system, specifically within state agencies, maintains a high turnover rate. Other workforce developments offer signing and moving bonuses, student loan repayments or aid, and higher salaries. There is a need to make the state more appealing to skilled workers and experts in this field. The current system does not allow for sustainability in these activities due to a lack of funding and workforce shortages.

ES 3 Strengths, Weaknesses, and Opportunities for Improvement

Strengths

Practices

- Partners are required to utilize evidence-based best practices.
- Partners have passion, skills, quality leadership, educational initiatives, and Institutions of Higher Learning partnerships as assets.

Weaknesses

Collaboration

- Lack of community-centered efforts in the public health system.
- Participants recognize a lack of collaborations/partnerships, both internally and externally.
- Efforts are often duplicated within the public health system due to a lack of coordination.

Effective Implementation

- There is a lack of effective implementation and follow-through.
- The public health system does not always effectively reach at-risk and rural populations.
- Overall, there is a lack of public awareness for these issues.

Resources

- Partners are not effectively using the data that is currently available.
- There is a lack of capacity in the form of time, personnel, and funding preventing improvements, as well as a lack of clarity of roles.
- There is change resistance and QI is not supported.

Short-term Opportunities for Improvement

Data Sharing

- Utilize the Garret County Planning Tool, a data sharing system.

Collaboration

- Creation of a stakeholder database to share contact information.

Addressing barriers

- Identify current efforts and practices throughout the system.
- Reach rural and at-risk populations more effectively through targeted practices.
- Shift focus to prioritize local issues as a process not just an outcome.
- Utilize faith-based organizations within communities.

- Utilize the Robert Wood Johnson Cultural Center Communities.

Workforce

- Improve workplace issues through educating current workforce, funding, and retention plans.

Long-term Opportunities for Improvement

Collaboration

- Create an online directory of resources and stakeholders (DHS has a similar tool by county) and maintain the directory.
- Build more beneficial partnerships.

Quality Improvement

- Develop more capacity for quality improvement activities.
- Focus quality improvement activities on population health.

Essential Service 4: Mobilize Partnerships to Identify and Solve Health Problems

Participant dialogue to assess performance for Essential Public Health Service 4 explored the following key questions:

What's going on in our state?
Are we engaging all possible partners?

Mobilizing partnerships to identify and solve health problems encompasses the following:

- The building of a statewide partnership to collaborate in the performance of public health functions and essential services in an effort to utilize the full range of available human and material resources to improve the state's health status.
- The leadership and organizational skills to convene statewide partners (including those not typically considered to be health-related) to identify public health priorities and create effective solutions to solve state and local health problems.
- Assistance to partners and communities to organize and undertake actions to improve the health of the state's communities.

EPHS 4: Mobilize Partnerships

Overall performance for Essential Service 4 scored as moderate. Model Standard 4.1 (Planning and Implementation) scored in the significant range. Model Standard 4.2 (State-Local Relationships) scored in the moderate range. 4.3 (Performance Management and Quality Improvement) and 4.4 (Public Health Capacity and Resources) produced the same score in the minimal range. Performance for Essential Service 4 was ranked eighth out of the 10 Essential Services.

Essential Service 4 Summary

4.1 Planning and Implementation

This model standard focuses on the extent to which the system engages groups to participate in task forces, coalitions, collaboratives, and other joint efforts to build support for addressing public health problems. This model standard also focuses on how well the system is able to organize and sustain partnerships that take action, use data, set priorities, align efforts, and maximize resources.

Participants reported the strong presence of coalitions and task forces that have created a structure to mobilize action throughout the state. However, there is a lack of advocacy to address issues with the legislature. Participants noted that coalition partners representing state agencies have restrictions that prevent their ability to advocate past a certain level. In addition, participants representing entities outside the state reported a need for improvement to advocate to legislature. At the basic level, there is a need to provide public education to constituents, as well as legislative members, on health-related issues.

Discussion around sustainability for coalitions and task forces produced an assortment of ideas about the extent to which the system organizes partnerships. Some participants noted a lack of follow-through or broad representation in some partnerships, as well as high turnover halting the partnership process and preventing sustainability. Other participants noted efforts to organize formal sustained partnerships through mechanisms like memorandums of understanding (MOU) or reports. Overall, participants reported that sustainability is dependent on the individual coalition or task force.

"We have to reevaluate how we are using those coalitions and making sure we are not doing double overlap there. In terms of having too many people in the same area."

"It is important that we are making sure we align our vision, goals, and following sustainability planning (across the SPHS), which is one of our long-term opportunities"

4.2 State-Local Relationships

This model standard focuses on the extent to which the system provides support and technical assistance to local public health systems on building partnerships. This model standard also focuses on how well the system incentivizes the locals to develop and engage broad-based partnerships for addressing community health problems versus just a single issue.

Dialogue on assistance to build partnerships centered around identifying the leading entity that provides this assistance. There is little clarification throughout the system on who provides the assistance, funding, and the process of the assistance. The Department of Health has provided successful assistance to the system, but there is still a lack of sustainability. Some noted the lack of funding in the communities prevent sustainability of the programs. Because funding fluctuates, the areas of success fluctuate as well. If there are no resources, there are no incentives to carry out the plan/program. Another partner also noted the lack of civil infrastructure in the Delta. Participants discussed how creating something new is not always the solution, but sometimes the solution can be to adapt the system to meet needs.

4.3 Performance Management and Quality Improvement

This model standard focuses on the extent to which the system reviews the effectiveness of the partnership efforts. This model standard also focuses on how well the system works together to improve the performance of the partnership activities.

Participants discussed the current practices of actively managing and improving performance in partnership activities. The strength to which partners have effectively managed and improved their performance is an evaluation of your investment of time. Participants who are tasked with building and expanding partnerships will spend a bulk of their time on that aspect of the partnership, with little time devoted elsewhere. Participants working within smaller partnerships do have the time to dedicate their activities towards managing and improving performance. However, participants noted that increased documentation of partnership activities has served as an asset to performance management and QI. Documentation processes have become standardized and are in place. Participants acknowledged that many good partnerships are already in place, but require time as a resource to reach the next level.

4.4 Public Health Capacity and Resources

This model standard focuses on the extent to which the system allocates sufficient financial resources to our community mobilization and partnership efforts. This section also focuses on how well the system works together to coordinate partnership efforts, align plans, and invest in resources (both technology and skilled people) to build and work with coalitions.

The dialogue focused on the lack of funding sources to sustain partnerships. There is extensive competition for funding sources with little revenue to allocate to multiple entities. However, participants noted that MSDH does a great job of aligning and coordinating their efforts to mobilize partnerships. Participants would like to see this effort continued with the expansion of partnerships to non-traditional organizations, such as environmental groups. At the same time, participants discussed the need for time and resources to align and make the partnerships more efficient.

ES 4 Strengths, Weaknesses, and Opportunities for Improvement

Strengths

Partnerships

- The public health system has organized various coalitions to identify and solve health problems.
- Partner organizations display a strong willingness to participate in activities as well as an agreed agenda, desire, and passion among partners.
- There are existing items in place that support this ES, such as – existing partnerships, current trainings, and the centralized Department of Health.

Processes

- Documentation processes are standardized and in place.
- Technical assistance is being provided by MSDH.
- Current limitations have required creativity and efficiency.
- Access to federal resources as well as available experts in Mississippi.

Weaknesses

Collaboration

- Bureaucracy and red tape have limited the activities of coalitions and partnerships.
- Some partners have differing agendas or are competing organizations for funding.
- There is a lack of efficient communication as well as follow through across the public health system.
- Some grants require forced partnership that might not be productive.
- Mobilizing partnerships is not a priority for the public health system.
- The centralized Department of Health means a lack of local focus with state and federal priorities overshadowing local priorities. With that, participants recognize that the top-down approach does not always allow for local entities to express and address their needs.

Financial Resources

- The centralized Department of Health is dependent on state/federal funds. In addition, there is a discrepancy between the amount of work required and the amount of grant money.
- There is a lack of resources (including trainings and tools) for partnership creation and management.
- Limited funding sources increases competition in an unproductive manner.
- There is a hesitancy to find new funding sources.

Culture

- Participants recognize a culture of interagency mistrust that prevents productive partnerships.
- Political climate stymies the work of partnerships.

- There is a lack of experts in Mississippi and a lack of knowledge about the identity of existing experts.

Short-term Opportunities for Improvement

Collaboration

- Identify relevant organizations across the system.
- Make mobilizing partnerships a priority.
- Evaluate goals and objectives of partnerships.
- Re-write workplans with partnerships in mind.
- Create financial incentives to join partnerships and remain an active member.
- Partnerships need to evaluate their investment of time.

Resources

- Reprioritization of current resources.
- Eliminate duplication efforts and funding.
- Create or identify resources (tools and trainings) that improve partnership activities and promote more effective partnership management.
- Find local experts (community champions) to join partnerships.

Long-term Opportunities for Improvement

Collaboration

- Maintain an easily accessible database of partners.
- Maintain partnerships by sharing resource streams.
- Promote sustainable partnerships to address certain goals and evaluate the effectiveness of those partnerships.
- Align vision, goals, and funding for sustainability planning.

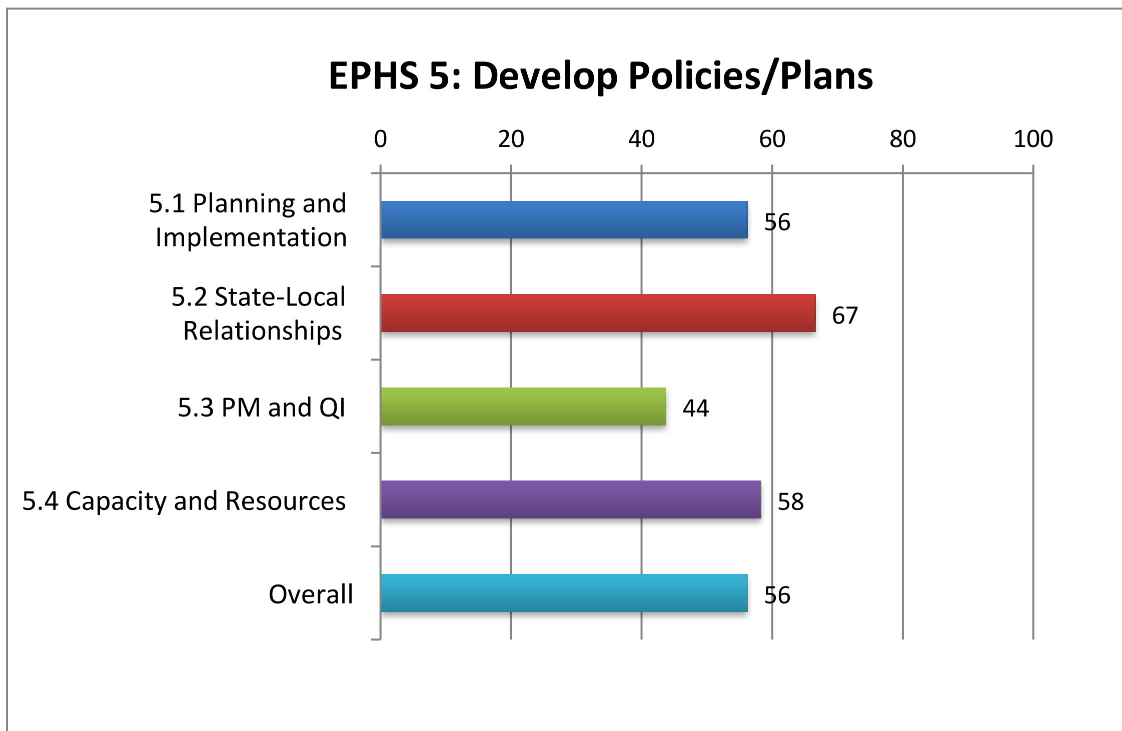
Essential Service 5: Develop Policies and Plans that Support Individual and Statewide Health Efforts

Participant dialogue to assess performance for Essential Public Health Service 5 explored the following key questions:

What's going on in our state?
Do we support all health efforts?

Developing policies and plans that support individual and statewide health efforts encompasses the following:

- Systematic health planning that relies on appropriate data, develops and tracks measurable health objectives, and establishes strategies and actions to guide health improvement at the state and local levels.
- Development of legislation, codes, rules, regulations, ordinances, and other policies to enable performance of the EPHS, supporting individual, community, and state health efforts.
- The process of dialogue, advocacy, and debate among groups affected by the proposed health plans and policies prior to adoption of such plans or policies.



Overall performance for Essential Service 5 scored as significant. Model Standards 5.1 (Planning and Implementation), 5.2 (State-Local Relationships), and 5.4 (Public Health Capacity and Resources) scored in the significant range. Model Standard 5.3 (Performance Management and Quality Improvement) scored in the moderate range. Performance for Essential Service 5 was ranked second with Essential Service 3 out of the 10 Essential Services.

Essential Service 5 Summary

5.1 Planning and Implementation

This model standard focuses on the extent to which the system engages in collaborative improvement planning processes. This model standard also focuses on the development of the state health improvement plan as well as emergency response plans and protocols. Additionally, the model includes the work in health policy development throughout the state.

Participants reported that partner organizations across the system create and implement health improvement processes. However, the key piece of collaboration among partner organizations is often absent from the process. A wide systematic approach to collaboration efforts among partners does not take the rural layout of the state into account. Due to this, decision makers at the local level are not often represented and involved in statewide efforts. Participants recognize a need to identify and engage new partners, including non-traditional partners, such as the Department of Transportation and school boards, as well as policy makers on the front end of the health improvement process. Participants also reported a need to prioritize effective communication and messaging to increase awareness throughout the system on a statewide health improvement plan.

"Policy makers need to be involved on the front end with the process and being involved with developing a health improvement plan. Buy in on the front end is difficult, but it is what we need."

"We do things, but we don't link it back to the state health improvement plan in a way that is easily visible. Maybe that isn't a problem, it just becomes part of our culture. I don't know that the good things we see happening get tied back to the state health improvement plan. It should be linked back."

Participants described the strong use of data, objectives, and strategies that specify measurable indicators in the state health improvement plan. However, participants noted that currently available data limits the extent to which it can be used throughout the plan. Participants described how engaging new partner organizations would expand the scope of objectives and strategies in the health improvement plan. As well, improving communication throughout the system would increase awareness of currently available data.

Participants from this breakout group reiterated the strength of the all-hazards preparedness plans in place for the state. The current system is heavily driven by grant funding for which concerns arose on the possibility of funding cuts leading to a decrease in importance on this preparedness system. Participants noted that the key to sustainability is a continued process of education that is currently taking place in the system.

5.2 State-Local Relationships

This model standard focuses on the extent to which the system provides support and technical assistance to the local public health systems on developing community health improvement plans and linking those plans to others. This section also focuses on how well the system works together to assist locals with all-hazards preparedness plans and the development of health policy at the local level.

Dialogue centered around the capacity to provide technical assistance and the willingness to receive it. A participant representing MSDH noted that the capacity to provide technical assistance exists, but the problem lies in communicating that to communities and partner organizations.

Participants reiterated the strength of the emergency response and preparedness system. At the same time, participants described an excellent relationship with emergency response-oriented coalitions to

ensure an ongoing effort to be prepared. MSDH maintains various formalized written agreements with numerous local level entities to ensure coordinated response.

Participants reported that technical assistance to policy development is dependent on the health-related area. Many of the policy development efforts are topic specific and targeted, such as – breastfeeding and tobacco. Participants recognized that consistent messaging and funding is needing to move policy forward.

5.3 Performance Management and Quality Improvement

This model standard focuses on the extent to which the system regularly evaluates progress on the state's health improvement objectives. This section also focuses on how well the system reviews policies to determine their public health impact and conducts exercises and drills to test the preparedness response capacity. Finally, this model standard includes the collective efforts to improve the performance in policy development and planning.

In many cases, partner organizations must review progress as a part of funding requirements. However, there is a gap between monitoring progress and linking that progress back to the state health improvement plans in a way that is easily visible. Participants suggested using the health improvement plan as an opportunity to share partner organization best practices and accomplishments throughout the system.

A participant reported that a current priority for Medicaid is reviewing policies to determine their public health impacts. Medicaid has been charged with figuring out how they are making positive impacts on health outcomes while doing an inventory of all of the services they offer. However, this example is the only noted activity in which partner organizations review new and existing policies to determine their public health impacts.

Participants noted that while the emergency response and preparedness plans are extensive, there is a lack of formal exercises and drills of the procedures and protocols. One participant reported that partner organizations might not conduct exercises and drills without MSDH present. Participants noted a disconnect between the emergency response and preparedness professionals and the front-line staff in the public health system. Participants debated the merits of mandating drills by noting requirements would increase competency on the front end, but could reduce buy-in.

Overall, participants noted that the ability to actively manage and improve their collective performance in statewide planning and policy development is heavily resource dependent. Larger organizations have the ability to conduct activities towards quality improvement while smaller organizations might not have the capacity.

5.4 Public Health Capacity and Resources

This model standard focuses on the extent to which the system allocates sufficient financial resources to the planning and policy development activities. This section also focuses on how well the system works together to coordinate efforts, align plans, and invest in resources (both technology and skilled people) to effectively develop plans and policies to improve health.

Participants reiterated that commitment to financial resources for policy development efforts is topic dependent. There are various opportunities for policy development on health issues like tobacco that receive financial resources from various entities. Participants noted that this commitment to financial

resources for tobacco policy is based on extensive collaboration throughout the system. The collaboration efforts aligning with financial resources has shaped the system's ability to advance policy in this health area and can be replicated in other health-related issues.

ES 5 Strengths, Weaknesses, and Opportunities for Improvement

Strengths

Engagement

- There has been a trend of upward engagement from system partners.
- The public health system has organized and convened coalitions to promote health in the state (i.e. tobacco, vaping).
- The previous SHA/SHIP process produced local level engagement.
- Participants recognize passion for statewide health efforts at the grassroots level.

Policy Development

- There is strong policy development in some targeted areas of health, such as – tobacco and breastfeeding.

Emergency Response and Preparedness

- Participants recognize the current state emergency response and preparedness systems as assets for the public health system.

System Monitoring

- Grant requirements for quality and performance monitoring ensure that there is some form of monitoring.

Weaknesses

Communication

- No communication of policy success between agencies, programs, and communities.
- There is no process in place to effectively identify and engage new partners.
- There is a segment of the population with strong mistrust of government in relation to disaster response and disease control.
- The current culture aligns more with organizational self-interest versus collaboration.
- There is a need for improved communication and engagement across partner organizations and throughout the public health system.

Financial Restrictions

- Funding restrictions.
- Grant deliverable monitoring is not outcome focused.
- If the grant does not require an activity, it will most likely not happen.

Limited Resources

- With data limitations, partners are often uninformed about the data that is currently available.
- The scope of health improvement plan goals, objectives, and strategies is sometimes narrowed by what can be measured.
- Participants recognize that the policy efforts throughout the system are broad across topics but lack depth.
- Data limitations place policy efforts at a disadvantage, and there is no solution in place to measure without it.
- There is a lack of linking stakeholders and partner organization to initiatives developed from State Health Improvement Plan.
- Participants recognize that current resources are topic dependent.

Short-term Opportunities for Improvement

Communication

- Increased buy-in from policy makers on the front end of health improvement plans.
- Increased knowledge and awareness of State Health Improvement Plan and clarify nomenclature.
- Continue to include statewide input.
- Engage and include schools and the education system in efforts.
- Promote broader engagement with non-traditional partners.
- Find a way to differentiate among state health plans.

Resources

- Create a system for cross sector data sharing.

Long-term Opportunities for Improvement

Collaboration and Communication

- Evaluate the current system of communication across the public health system and implement improvement strategies to increase effective communication.
- Promote more effective messaging on policy development efforts throughout the public health system.
- Continue to effectively maintain and support successful activities.
- Create a system for inter-hospital communication.

Resources

- From cross-sector data sharing, create a data hub that is accessible to the public health system.

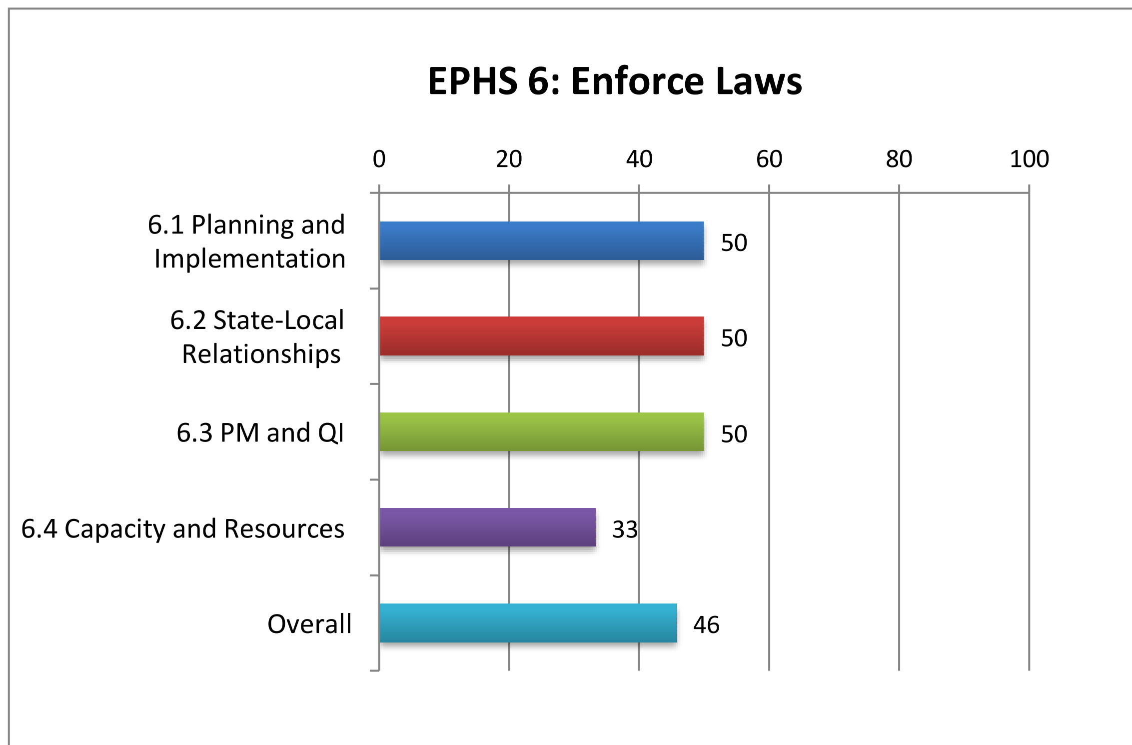
Essential Service 6: Enforce Laws and Regulations that Protect Health and Ensure Safety

Participant dialogue to assess performance for Essential Public Health Service 6 explored the following key questions:

What's going on in our state?
Do our laws keep us safe and healthy?

Enforcing laws and regulations that protect health and ensure safety encompasses the following:

- The review, evaluation, and revision of laws (laws refer to all laws, regulations, statutes, ordinances, and codes) designed to protect health and ensure safety to assure that they reflect current scientific knowledge and best practices for achieving compliance.
- Education of persons and entities in the regulated environment to encourage compliance with laws designed to protect health and ensure safety.
- Enforcement activities of public health concern, including, but not limited to, enforcement of clean air and potable water standards; regulation of healthcare facilities; safety inspections of workplaces; review of new drug, biological, and medical device applications; enforcement activities occurring during emergency situations; and enforcement of laws governing the sale of alcohol and tobacco to minors, seat belt and child safety seat usage, and childhood immunizations.



Overall performance for Essential Service 6 scored as moderate. All model standards scored in the moderate range. Model Standards 6.1 (Planning and Implementation), 6.2 (State-Local Relationships), and 6.3 (Performance Management and Quality Improvement) produced the same score. Performance for Essential Service 6 was ranked sixth out of the 10 Essential Services.

Essential Service 6 Summary

6.1 Planning and Implementation

This model standard focuses on the extent to which the system conducts legal reviews and assures that they have appropriate emergency powers in place. This model standard also focuses on how well the system works together to ensure compliance with laws and regulations and to ensure that these efforts result in their intended purposes. Finally, this model standard ensures that the administrative services are customer centered.

From a regulatory standpoint, there has been a push within health protection to ensure current laws are applicable to today's science and standards. Participants noted that state laws do not always keep pace with current technology and medical advancements preventing the system from utilizing potentially beneficial tools. A participant representing MSDH noted that Mississippi does not have a "health in all policies" consideration that would assure that existing and proposed state laws are designed to protect the public's health and assure safety. According to the CDC, "Health in All Policies (HiAP) is a collaborative approach that integrates and articulates health considerations into policymaking across sectors to improve the health of all communities and people".[1] Participants discussed that the legislature has no consistent consultation with the public health system partners before proposing or enacting legislation that continually limits partner organizations' influence in policies that potentially effect public health.

"We don't have any state laws that require "health in all policies" policy/law/consideration. It's left up to the organization. Most people aren't going to do something extra if they don't have to. Even if it is designed to protect public health."

Alternatively, participants described a strong authority for preventing, managing, and containing emergency health threats at the state and local level. Participants noted examples such as the skilled containment of Ebola and the authority to close schools for influenza outbreaks. At the same time, participants noted the lack of enforcement authority since state statue often gives MSDH regulatory responsibility without any regulatory enforcement authority. Participants also discussed the excellent advisory board system in place that establishes cooperative relationships between regulatory bodies and partner entities to assure public health safety. The public health system maintains efficient alignment with the official line of control for emergency health threats.

"We have strong, but general authority. We don't have a lot of definitions and specifics. Like bed bugs or mold, we must ensure that there are no issues, but we can't enforce the regulation."

Participants noted administrative processes that are customer-centered as an opportunity for improvement. The system maintains complex licensure processes that lack transparency and simplified navigation. One participant provided a successful example of a solution where Medicaid conducts provider workshops that are mandatory prior to submitting applications. Participants suggested a deliberate effort to simplify and streamline the licensure process, including process mapping on the regulatory side.

6.2 State-Local Relationships

This model standard focuses on the extent to which the system provides technical assistance to local public health systems on current thinking and best practices for achieving compliance with

[1] Center for Disease Control and Prevention, Office of the Associate Director for Policy and Strategy: https://www.cdc.gov/policy/hiap/index.html

enforcement efforts. This section focuses on how well the system works together to assist local governing bodies in incorporating current scientific knowledge and best practices in local laws.

Participants described a process where partner organizations request technical assistance from state entities rather than regulatory entities seeking out partner organizations to provide assistance. Current practices also focus efforts on compliance assistance, education, and enforcement as needed. Regulatory entities have taken a more educational approach to regulations that is instructive and informative.

Participants also reported governing bodies as generally unreceptive to incorporating current scientific knowledge and best practices in laws. There is a need to educate governing bodies on current scientific knowledge and best practices. Participants suggested making effective use of partner organizations to provide education to both governing entities and constituents. At the same time, partner organizations should build new relationships with governing bodies and non-public health partners to promote best practices in laws. Participants provided an example of engaging civil engineers, city planners, and architects to teach on the benefits of building more sidewalks in communities. Overall, participants suggested a priority of engaging and educating governing bodies to incorporate current scientific knowledge and best practices in local laws.

6.3 Performance Management and Quality Improvement

This model standard focuses on the extent to which the systems reviews the effectiveness of our regulatory, compliance, and enforcement activities designed to improve and protect the public's health. This section also focuses on how well the system works together to manage and improve the performance in legal, compliance, and enforcement efforts.

Participants described efficient efforts across the public health system to review the effectiveness of their regulatory, compliance, and enforcement activities. At the same time, advisory boards and councils work to improve compliance in the regulative community through education, representation, and eventually communication with other entities. Specifically, the communication component allows for better overall compliance in the system. Participants provided some examples in which partner organizations actively manage and improve their collective performance in legal, compliance, and enforcement activities. For example, nursing home and childcare facilities regularly conduct meetings to review latest regulations, identify issues, and improve collaboration to ensure quality. Participants reported the successes of current quality improvement activities, while also noting the need to increase collaboration and continuously improve collective efforts across the system.

6.4 Public Health Capacity and Resources

This model standard focuses on the extent to which the system, allocate sufficient financial resources to the enforcement activities. This section also focuses on how well the system works together to coordinate efforts, align plans, and invest in resources (both technology and skilled people) to assure that the laws have a sound legal basis for public health action and to enforce public health-related laws.

System capacity and resources received the lowest score in this Essential Service, with inadequate funding and a lack of coordinated efforts as the driving forces behind the low score. Participants reported an increase in financial resources from years past in area-specific regulatory activities, such as pharmacological reporting of opioid prescriptions, food protection, onsite wastewater, and reviews of new restaurants. However, many necessary enforcement activities do not take place due to a lack of

funding allocated to regulatory entities. An example of that is the lack of oversight of support professionals in childcare and personal care (in-home nursing, elder care, etc.) in terms of continuous background checks. Participants suggested a prioritization of financial resources allocated to enforcement activities for oversight of these entities.

Participants reported a variance in alignment and coordination with partner organizations that lacks a strategic and conscious effort from the system. Participants noted functional coordination only exists where partner organizations overlap. Concurrently, partner organizations individually invest in professional expertise, but fail to work collaboratively with the system to effectively utilize the expertise. Participants also reported that experts are often strained when providing expertise, due to a low volume of experts in the system. As well, the system lacks sufficient succession planning for professional expertise on a wide scale. Overall, participants recognized the capacity and resources are often siloed and lack financial commitment to prevent efficient implementation, protection, and enforcement of public health laws and regulations.

ES 6 Strengths, Weaknesses, and Opportunities for Improvement

Strengths

- The current utilization of advisory boards for regulations and enforcement.
- The system has a strong focus on compliance.
- There is a presence of regulation-related education and compliance assistance.
- Merchant education at Attorney General's office (tobacco free coalition).

Weaknesses

Collaboration

- Receptiveness of policy makers to current science and best practices.
- Lack of coordination in strategic planning process.
- Current collaboration efforts lack extensive expertise because not all partners are included.

Professional Expertise and Buy-in

- Current experts leaving or retiring without succession plans.
- Lack of buy-in where local partner organizations are proactive on remaining in compliance with laws and regulations. Due to this, the state is forced to intervene after non-compliance has already taken place.

Policy

- Health is not required in all Mississippi policies/legislation.

Short-term Opportunities for Improvement

Education

- Create workshops for the regulatory community.
- SPHS partner organizations can participate in "process mapping" for regulation-related activities.
- Participants recognize a need for process mapping to inform enforcement and regulation.

Collaboration

- The public health system should stress development of relationships with professionals, groups, etc.
- Governor's initiative to reduce regulatory burden will ensure some level of quality improvement and reduce unnecessary regulations.

Long-term Opportunities for Improvement

Collaboration

- Identify additional beneficiaries to public health-related laws beyond public health.
- Create a mechanism for strategic coordination to comply with and enforce laws and regulations.
- Ensure that collaborative efforts include continuous quality improvement.

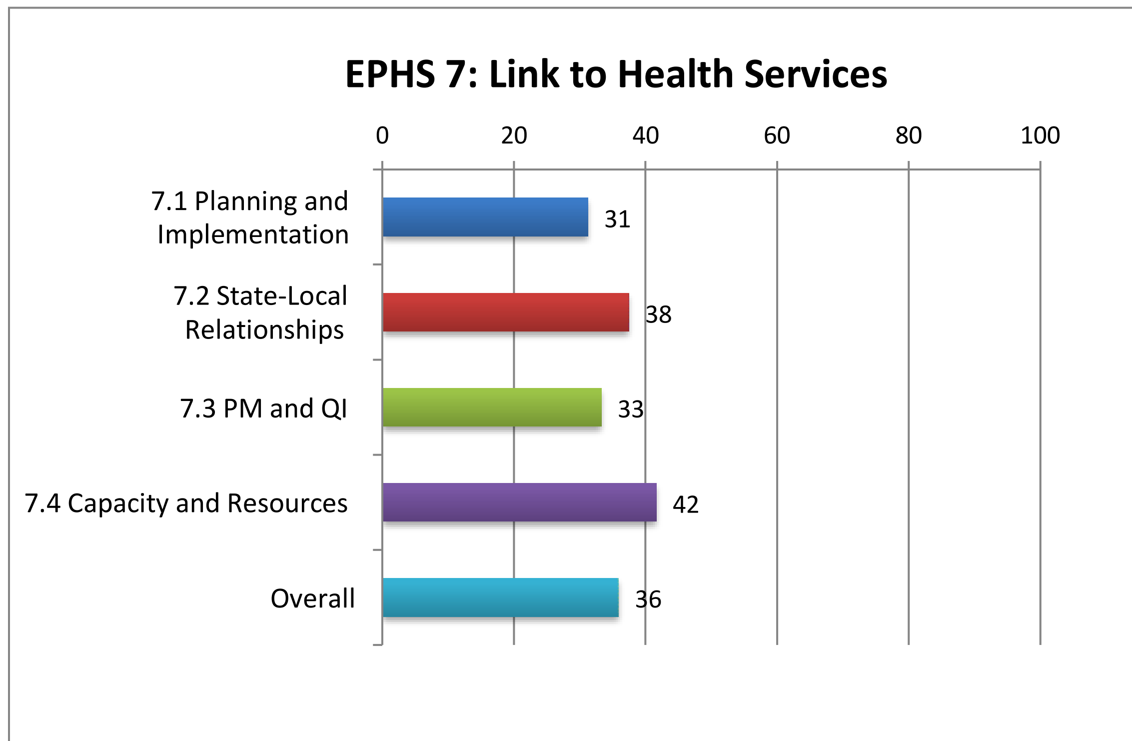
Essential Service 7: Link People to Needed Personal Health Services and Assure the Provision of Health Care When Otherwise Unavailable

Participant dialogue to assess performance for Essential Public Health Service 7 explored the following key questions:

What's going on in our state?
Do the residents of our state have access to the health services they need?

Linking people to needed personal health services and ensuring the provision of health care when otherwise unavailable encompasses the following:

- Assessment of access to and availability of quality personal health services for the state's population.
- Assurances that access is available in a coordinated system of quality care which includes outreach services to link populations to preventive and curative care, medical services, case management, enabling social and mental health services, culturally and linguistically appropriate services, and healthcare quality review programs.
- Partnership with public, private, and voluntary sectors to provide populations with a coordinated system of healthcare.
- Development of a continuous improvement process to assure the equitable distribution of resources for those in greatest need.



Overall performance for Essential Service 7 scored as moderate. Each of the model standards produced scores in the moderate range. Performance for Essential Service 7 was ranked last out of the 10 Essential Services.

Essential Service 7 Summary

7.1 Planning and Implementation

This model standard focuses on the extent to which the system assesses the availability and accessibility of personal health services, including consideration for underserved populations. This section also focuses on how well the system collaborates to deliver accessible health services, including the use of a statewide health insurance exchange. It also includes a review of the efforts to decrease health disparities in the state.

Participants described the current issues that prevent access and availability to care for underserved populations. They identified several underserved populations that experience barriers to access, such as – individuals living with mental health conditions, the LGBTQ+ community, individuals living with disabilities, undocumented community members, rural communities, and low-income communities. Since the last SHA/SHIP process, the public health system has addressed some of the needs of these communities through the creation of population-specific services. As an example, MSDH and partner organizations created a clinic designed to address the needs of the LGBTQ+ population as well as a special medical needs shelter staffed by MSDH. However, participants noted that these services have limited accessibility due to resource (time, staff, and funding) shortages. In particular, a participant representing the Mississippi Department of Mental Health described a significant shortage in psychiatrists in the state, with an absence of an assessment to analyze this shortage or determine a resolution. Participants suggested utilizing Community Health Workers as a support system between local providers and patients to reduce the medical provider gap. Overall, participants noted implementing innovative solutions to bridge the provider gap, such as Community Health Workers and peer support networks, as an opportunity for growth.

"Everybody is doing something with good intentions, but the collaboration and communication is fragmented. If we are going to move the needle to decrease disparities and improve overall health we got to communicate."

"Unless we look at health equity across systems, we will not be able to do citizens of this state justice."

The dialogue centered around the success of individual efforts to assess availability and access of personal health services while also focusing on the severe lack of collaborative efforts in the system. Partner organizations have implemented comprehensive processes to assess barriers to personal health services in their service areas. However, as service area gaps exist, there remains an inability to efficiently assess barriers or deliver accessible health services across the state, and on a local level. The disbandment of the health insurance exchange and Mississippi not being a Medicaid expansion state were reported as weaknesses that prevent the public health systems from assuring access to insurance coverage and health services. Participants noted that while the public health system has advocated for the exchange and Medicaid expansion, this is a politically sensitive issue that does not have strong support across the state.

Participants also stated a public health system acknowledges the social determinants of health, but it requires a coordinated effort to formally identify social determinants throughout the state. This remains an issue of obtaining information through current literature rather than collecting richer qualitative data through focus groups and surveys within the communities. With a collaborative assessment effort, there is also a need for data sharing and publication that is readily accessible to partner organizations. Participants suggested a shift towards including constituents in service planning and implementation processes will give them a voice to present their communities' needs. Participants described the need

for more consistent and strategic collaboration across the state public health system to decrease disparities and improve overall health.

7.2 State-Local Relationships

This model standard focuses on the extent to which the system provides support and technical assistance to the local public health systems on approaches to meeting personal healthcare needs of underserved populations. This section also focuses on how well the system provides technical assistance to local healthcare providers who deliver services to underserved populations.

Participants noted a shift in attitude of the system to be more open to training staff and systematic change. This shift has begun to alleviate the burden of the service consumer to obtain those services. The Office of Preventative Health has funded nine preventative health teams access the state that are responsible for preventative health activities, such as – school health, preventative health education, and farmer's markets. The preventative health teams also work on the community level to collaborate and coordinate with stakeholders to be the resource for community health, identifying services and reducing barriers. Community needs assessments in individual organizations and programs were identified as a strength on an internal level. However, participants noted that the information gathered by these entities has not been utilized to provide support to other organizations in the public health system.

Participants identified technical assistance activities taking place on an internal level, as well as some from entities like the Mississippi Public Health Institute. Overall, participants could not identify enough technical assistance activities in place for assessing and meeting the needs of underserved populations to score higher than low moderate.

7.3 Performance Management and Quality Improvement

This model standard focuses on the extent to which the system collaborates to evaluate the quality of personal healthcare services. This section also focuses on how well the system works together to review changes in barriers to healthcare and the extent to which they try and improve the performance related to this EPHS.

Participants noted internal efforts to review the quality of personal healthcare services. Maternal and Child Health has created a continuous care for children with special-needs learning collaborative with local community health centers. The learning collaborative participates in quality improvement and care coordination activities. The collaborative will eventually work towards reviewing the long-term outcomes for children. Similarly, UMC has internal performance evaluations for personal healthcare services. Participants described grievance reporting within state agencies as a mechanism for assuring quality and providing services.

Participants described a weakness as inconsistent shared use of electronic health records throughout the system. The existence of multiple platforms for EHRs throughout the system serves as a barrier to shared use. The behavioral health system is moving towards an integrated platform for electronic health records. Participants suggested mimicking other state's models of limited platforms to move to an integrated platform for electronic health records across the board. As well, there is a need to make meaningful use of the data that is being reported. Without a centralized home

or consistency in data reporting, the system cannot make meaningful use of the data. There needs to be a better connectivity between the private sector and the government to efficiently utilize the data.

7.4 Public Health Capacity and Resources

This model standard focuses on the extent to which the system allocates sufficient financial resources designed to link people to needed personal healthcare services. This section also focuses on how well the system works together to coordinate efforts, align plans, and invest in resources (both technology and skilled people) to effectively identify gaps and assure that linkages occur.

Dialogue for this discussion centered around the barriers that prevent the system from adequately committing financial resources to personal healthcare services. Participants discussed that some funding is allocated to specific health-related issues identified throughout the state, such as tobacco usage. However, there is a need for more adequate allocation of funding to assure the sustainable provision of needed personal healthcare. One barrier identified was a lack of government resource commitment. Participants also noted a problem with transparency where funders need to ensure a competitive process that shows what is being done, how it is measured, and identified outcomes. Participants reiterated that a lack of sufficient data has prevented the system from receiving adequate funding to address barriers and provide relevant services. Data limitations also prevent partner organizations from identifying measurements of success within the services. As well, participants noted that funding requirements create restrictions for collaboration that, reinforcing a fragmented and siloed system. These barriers work together to prevent the system from adequately committing financial resources designed to link people to needed personal healthcare services.

Participants described a strong presence of public sector entities to align and coordinate their efforts but a lack of coordination between public and private entities. A strength was identified as MSDH's consistent commitment to their mission that serves as a foundation to coordinate efforts. Participants suggested a strategic effort to align and coordinate private and public entities and their work to provide personal healthcare as an opportunity for growth.

ES 7 Strengths, Weaknesses, and Opportunities

Strengths

Addressing barriers

- UMMC opened a clinic serving the LGBTQ+ population.
- Some data available on access-related needs.
- Mississippi currently has opened and operated special medical needs shelters in the state.
- Individual organizations complete assessments to address needs of their target populations.
- There is a move to link more children and families to preventative care.
- There is a broadening of the percent of poverty level to qualify more individuals and families to receive services.

Collaboration

- Participants recognized an increase in partnerships as well as dialogue.
- Partners maintain strong relationships with the Mississippi State Department of Health.
- The Mississippi State Department of Health reinstated the Department of Health Equity.
- Participants recognize a shift in attitude of the system to training and systemic change.
- There is a drive to provide education to legislation, including the use of narratives.
- Behavioral health is moving towards an integrated system where data is being reported.
- MSDH and UMC partnership with a commitment to mission.

Evaluation Practices

- MSPQC has hospital initiatives that are backed by BCBS, including hospital report cards and HEDIS.
- Partner organizations often have internal reviews of the quality of services.
- Partner organizations provide services based on evaluations (MS Tobacco-Free Coalition).
- The Division on Medicaid has a system to provide responses to complaints.
- Better Government Plan

Weaknesses

Collaboration and Communication

- Participants recognize a fragmented system with a lack of coordination across services.
- The fragmented system is especially difficult for special and/or marginalized populations.
- There are policies that are deliberately set up to encourage fragmentation.
- Participants recognize a lack of communication to inform others that assessments are being conducted.
- A need for better connectivity between private entities and the state.

Accessibility

- LGBTQ+ clinic only open once a month; which equates to low accessibility for clients.
- Mississippi is not a Medicaid expansion state.
- There is a lack of services that are attainable for average income levels. A gap has been created that is a disadvantage to these individuals and families as they attempt to access health services.
- Information is presented without complete follow-up with clients.

Evaluation Limitations

- There is a large issue with data limitations.
- There is a need for easier access to Medicaid Data.
- The current Legislative system lacks sufficient staff with health backgrounds potentially limiting policy discussions beneficial to ensuring public health related policies are implemented.
- There is minimal technical assistance to providers who provide personal health care to underserved communities.
- Participants recognize an inconsistent use of electronic health records with many areas lacking access to EHRs.
- Participants recognize a lack of transparency in the process with many requirements and restrictions (financial resources).
- There are minimal blended funding opportunities.

Short-Term Opportunities for Improvement

Collaboration

- Partners and state agencies should begin the process of sharing strategic plans across the system.
- Public health investment in professional expertise.
- The public health system can create a mechanism for communication and collaboration.
- Mississippi should consider Medicaid expansion
- The system needs to be able to provide technical assistance.
- Create or maintain an existing collaborative group to advocate and educate the legislature to advance health.
- Partners need continuous funding to improve the issue of data accessibility.

Long-Term Opportunities for Improvement

Collaboration

- Improved efforts for education and aligning resources for improved health outcomes.
- Creation of a sustainable public and private partnership/collaboration.
- Review and revise expectations and pay scales for providers throughout the state.
- Partners must continually utilize the communication mechanism outlined in the short-term opportunities.

Evaluation Activities

- A system for tracking health outcomes in a meaningful way across the board.
- A consistent and statewide electronic health records system.
- Specific coordination efforts to share assessments across partner organizations.

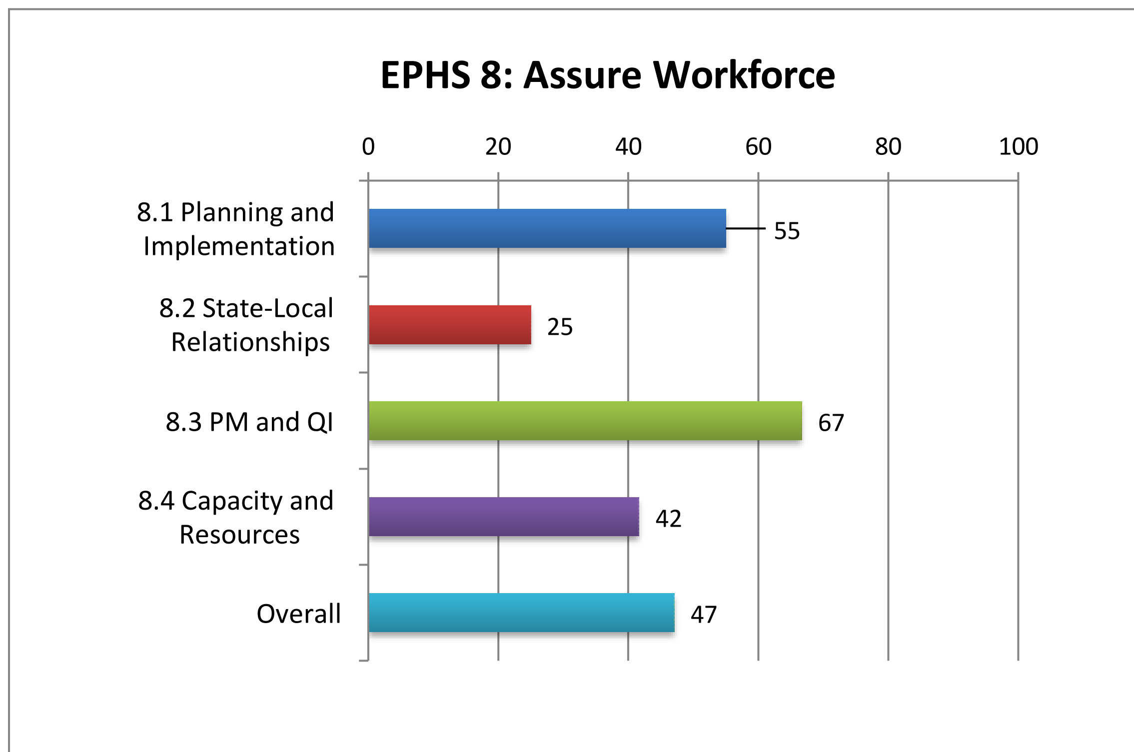
Essential Service 8: Assure a Competent Public and Personal Healthcare Workforce

Participant dialogue to assess performance for Essential Public Health Service 8 explored the following key questions:

What's going on in our state?
Is our workforce informed and up to date?

Ensuring a competent public and personal health care workforce encompasses the following:

- Education, training, development, and assessment of health professionals—including partners, volunteers, and community health workers—to meet statewide needs for public and personal health services.
- Efficient processes for credentialing technical and professional health personnel.
- Adoption of continuous quality improvement and life-long learning programs.
- Partnerships among professional workforce development programs to assure relevant learning experiences for all participants.
- Continuing education in management, cultural competence, and leadership development programs.



Overall performance for Essential Service 8 scored as moderate. Model Standards 8.1 (Planning and Implementation) and 8.3 (Performance Management and Quality Improvement) scored in the significant range. Model Standard 8.2 (State-Local Relationships) scored in the high minimal range, and 8.4 (Public Health Capacity and Resources) scored in the moderate range. Performance for Essential Service 8 was ranked fifth out of the 10 Essential Services.

Essential Service 8 Summary

8.1 Planning and Implementation

This model standard focuses on the extent to which the system develops a statewide workforce plan(s) and provide opportunities for building skills and enhancing competencies. This section also focuses on how well the system works together to assure a competent workforce that supports and incentivizes life-long learning.

Participants discussed how an internal workforce development plan at MSDH could be applied and/or shared throughout the public health system. Participants suggested communicating with the partner organizations on the MSDH workforce development plan process, sharing some of their resources, and linking what the partner organizations are doing with workforce development plans. As well, participants discussed representation in the workforce development plan process to create new opportunities. One partner suggested the universities for their workforce development trainings and programs would be beneficial to the public health system.

"When we think about the public health system as a whole, that when it comes to these local public health efforts, especially in those rural areas maybe they don't have the resources and the expertise to push out some of this workforce development that we're seeing that is needed out there. But universities and colleges and some bigger organizations have that [capacity]."

Participants also discussed current personal health care service workforce development efforts taking place throughout the state. Representatives of organizations advancing personal healthcare workforce described sufficient assessment processes that analyze staffing shortages and drive improvement activities throughout the state. As well, human resource regulatory standards and educational standards require healthcare workers to participate in professional development or certification activities to achieve higher levels of professional practice. Participants agreed that human resource departments throughout the public health system provide quality competency training, on an internal level, to employees. The dialogue centered around increasing collaboration and exploring local efforts for statewide development.

8.2 State-Local Relationships

This model standard focuses on the extent to which the system provides support and technical assistance to local public health systems in assessing local workforce needs. This section also focuses on how well the system works together to provide locals with assistance in the area of workforce development.

In the dialogue around employee recruitment, participants discussed a lack of effective recruitment activities that promote Mississippi as a good state to reside and work. Participants reported that current recruitment activities are taking place; however, the system lacks effective messaging and advertising. Current efforts include high school visits and career fairs to advertise clinical recruitment across the state. Participants also noted that policy and funding cuts limit these activities and efforts. Participants recognized a need for partnerships and support throughout the public health system. The closing of local health departments impacted the vacancy rate as well as access to care in different, particularly rural, areas.

Participants reported having to find innovative solutions, such as rural residency programs, to combat staff shortages and vacancies throughout the state. The Mississippi Rural Physician and Rural Dentists Scholarship Program was identified as an asset to developing relationships with local clinics and hospitals to assess needs and connect their graduates to those areas. Participants also discussed how

the recruitment issue prevents extensive information or solutions to combat low retention rates. Dialogue around resolutions to recruitment and retention issues focused on the need to prioritize the education and collaboration pieces throughout the system.

8.3 Performance Management and Quality Improvement

This model standard focuses on the extent to which the system reviews the workforce development activities, evaluates the preparation level of new public health practitioners, and continually improves the performance related to this EPHS.

Internal organizations conduct evaluations and reviews of workforce development activities, but there is no collaborative system-wide review of these activities. Participants reported a need for a collaborative workforce development plan as well as formal quality improvement activities to review the plan. On the academic level, academic partner organizations are efficient at evaluating the preparation of personnel entering the workforce. The public health program at USM is certified by the Council on Education for Public Health. The School of Public Health at Jackson State University is the only school for public health in the state. The Mississippi University for Women is attempting to gain accreditation for their program. In terms of accreditation, the accreditation process is under continuous quality improvement and requires an annual report on improvement measures. Concurrently, these programs offer certifications to prepare individuals as they enter the workforce.

Participants also discussed that internal organizations manage and improve their own performance but lack collaboration within the public health system in the quality improvement process. The dialogue centered around promoting a collaborative effort as well as reporting out progress to the public health system.

8.4 Public Health Capacity and Resources

This model standard focuses on the extent to which the system allocates sufficient financial resources to the population-based and personal healthcare workforce needs. This section also focuses on how well the system works together to coordinate efforts, align plans, and invest in resources (both technology and skilled people) to make sure the workforce is competent and up to date.

Overall, participants discussed that, due to budget cuts from the legislature, Mississippi is unable to adequately commit financial resources to workforce development efforts. However, discussion also centered around other activities that contribute to workforce development efforts. Participants reported that organizations, such as UMMC, work with the Department of Health to provide training to staff and put an electronic patient record system in place. Another example provided by participants is the use of Telehealth as an opportunity to contribute to workforce development efforts. Participants noted that these systems could be utilized to dismantle the silos in place within the system.

In terms of professional expertise, larger organizations have robust HR departments that provide workforce development activities and are skilled in human resource development. However, on a local level, there is a lack of professional expertise that prevents improvements in workforce development due to a lack of sufficient resources. Participants also noted a lack of collaborative efforts from larger organizations that have access to these resources to share on the local level.

ES 8 Strengths, Weaknesses, and Opportunities for Improvement

Strengths

Workforce Development

- The public health system has effective licensing and credentialing processes that promotes professionalism in the workforce.
- The governor's statewide workforce development plan.
- The University of Mississippi Medical Center received funding through legislation in 2012 to create the Office of Physician Workforce.
- Larger organizations and educational institutions have excellent human resources departments.
- The Mississippi Public Health Association convenes a conference annually as thevoice of public health in the state.

Investment in the Public Health Workforce

- The public health program at USM is certified by the Council on Education for Public Health. The School of Public Health at Jackson State University is the only school for PH in the state. The Mississippi University for Women is attempting to gain accreditation for their program.
- Programs throughout the state are preparing entry-level healthcare workers.
- The Mississippi Legislature allocated funding to create the Mississippi Rural Physicians Scholarship Program (MRPSP).

Weaknesses

Workforce Retention and Recruitment

- Lower wage positions without professional goal licensure requirements have limited opportunities or access to workforce development training, if it is not required for a specific license.
- Participants recognize that the state does not truly address rural public health workforce needs. Rural areas struggle with recruitment and retention of rural public health workers.

Collaboration

- Lack of collaboration among the public health system partners with statewide workforce development plans.
- Limited collaboration throughout the public health system to share current workforce development resources.
- Lack of public health understanding in the legislature that often results in budget cuts from important public health initiatives.

Funding

- There is a lack of funding for workforce development (trainings, scholarships, etc.) that has been exacerbated by funding cuts.
- Current pipeline efforts to develop workforce are limited.
- Limited workforce development resources (including funding and expertise) in local/rural areas.

Short-term Opportunities for Improvement

Workforce Development

- Creation of a workforce development plan with the Mississippi State Department of Health that is communicated to participants for collaboration and shared resources.
- Prioritize representation from partner organizations in the planning process for the WFD plan.
- Workforce development plans exist for nursing and physicians, but not allied health professionals, such as social workers, etc.
- Locating data on personnel needs throughout the state through entities like the Mississippi Department of Employment Security.

Long-term Opportunities for Improvement

Workforce Development

- Develop a plan for more equitable and affordable continuing education for health care workers.

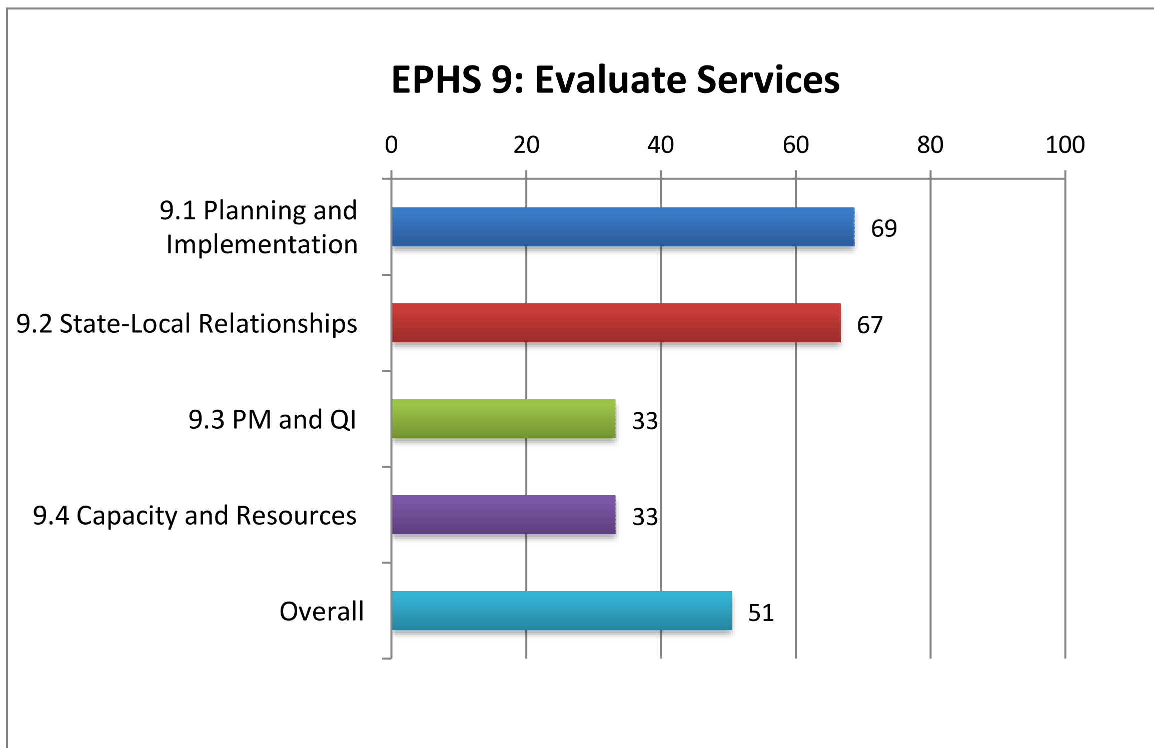
Essential Service 9: Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-based Health Services

Participant dialogue to assess performance for Essential Public Health Service 9 explored the following key questions:

What's going on in our state?
How are our services performing?

Evaluating effectiveness, accessibility, and quality of personal and population-based health services encompasses the following:

- Evaluation and critical review of health programs, services, and systems to determine program effectiveness and to provide information necessary for allocating resources and reshaping programs for improved efficiency, effectiveness, and quality.
- Assessment of and quality improvement in the state public health system's performance and capacity.



Overall performance for Essential Service 9 scored as significant. Model Standards 9.1 (Planning and Implementation) and 9.2 (State-Local Relationships) scored in the significant range. Model Standards 9.3 (Performance Management and Quality Improvement) and 9.4 (Public Health Capacity and Resources) produced the same score in the moderate range. Performance for Essential Service 9 was ranked fourth out of the 10 Essential Services.

Essential Service 9 Summary

9.1 Planning and Implementation

This model standard focuses on the extent to which the system evaluates the population-based health efforts, healthcare efforts, and public health system efforts. This section also focuses on the extent to which the system partners seek certification, accreditation, licensure, or other means that acknowledge high levels of performance.

Participants noted the ability to routinely evaluate population-based health services is dependent on partner organizations' internal capacity to perform evaluation activities. Concurrently, participants reported that funding requirements dictate the use of evidence-based evaluation activities. While partner organizations effectively conduct monitoring and surveillance activities, they reported an inability to conduct further evaluation activities due to a lack of capacity (i.e. staffing, funding, time). Participants described that the system monitors and uses surveillance, but does not always apply that to the best standard or the Guide to Community Preventive Services and actually make the adjustment that might be needed. There is a need for evaluation of measurements and implementing change from that evaluation. Participants also noted a disconnect between the understanding of whether or not epidemiologists can evaluate population-based health services. Participants discussed the need for evaluators to be present throughout the entire planning and implementation processes, as evaluation is critical to the effectiveness of these services.

"In collecting data and being able to share whatever learned with constituents, so we are not doing something to them or for them but allowing them to help drive whatever it is that they think is needed."

Participants noted that while individual organizations are conducting evaluations, partners are unaware of the evaluation activities taking place due to a lack of consistent communication. This communication barrier prevents collaboration and coordination to improve evaluation efforts across the public health system. As well, participants reported a lack of awareness on the non-state agency side of the system for how the evaluation information is being used. Participants reiterated that the current system upholds silos and fragmentation preventing a collaborative effort to evaluate personal and population-based health services.

While evaluation efforts for personal and population-based health services remain fragmented in the system, participants noted that the system provides strong evaluation efforts to the overall performance of the state public health system. Participants provided the State Health Assessment-State Health Improvement Plan and health-related summits as examples of evaluating the performance of the public health system. Participants noted a strength in identifying and gathering stakeholders across the system to participate in these performance evaluation efforts. At the same time, participants suggested consistent communication and reporting efforts on the part of MSDH to keep stakeholders engaged following the development and throughout the implementation of the SHA/SHIP.

9.2 State-Local Relationships

This model standard focuses on the extent to which the system provides support, technical assistance, and training to local public health systems in evaluating their efforts. This model standard also includes appropriate local-level dissemination of state-level performance evaluations. Additionally, the model standard focuses on how well the system works together to provide locals with assistance in seeking agency credentials such as accreditation or licensure.

Participants representing MSDH discussed how the state agency has the ability to provide technical assistance to partner organizations upon request. At the same time, they noted capacity is still limited to provide technical assistance as it is typically tied to funding. Participants also called for a shift in the system to transition from crisis mode to a planning infrastructure.

While technical assistance for evaluation remains in limited capacity, participants described a strong system in place for technical assistance related to certification, accreditation, and licensure processes. Participants described a strong emphasis on seeking certifications, accreditations, and licensure throughout the system. State agencies require certifications and licensures for most professional health service providers. Participants noted a strength in technical assistance from MSDH for certifications, accreditations, and licensures. A participant representing the Choctaw Health Center reported significant assistance from the Office of Performance Improvement throughout their ongoing accreditation process (CHA/CHIP).

9.3 Performance Management and Quality Improvement

This model standard focuses on the extent to which the system reviews the effectiveness of the evaluation efforts, as well as the extent to which they monitor and improve the performance of these efforts. This model standard also includes an assessment of the quality improvement activities related to evaluation efforts of the public health system and services as well as the healthcare delivery.

The dialogue centered around how a lack of system collaboration on evaluation activities prevents the system's ability to collectively review the effectiveness of their evaluation activities, as well as promote quality improvement processes. Participants reiterated the need to significantly increase collaboration and communication across the system. At the same time, participants did provide examples where these activities are taking place. Participants suggested creating a mechanism to share results/findings from evaluation practices as well as strategic plans across the public health system. At the same time, the system needs to take on evaluation as a priority and implement methods for evaluations within the system.

Participants noted an inconsistency with actively managing and improving collective performance in evaluation activities. Participants reported that they struggle with availability of relevant standards for programs. As well, they are unaware if the programs know what those standards are and what they mean. One participant reported that some programs, such as wastewater, do not have state program standards. Participants indicated a need to develop program standards and inform programs about those standards across the system.

9.4 Public Health Capacity and Resources

This model standard focuses on the extent to which the system allocates sufficient financial resourcesto the evaluation of the efforts, services, and systems. This section also focuses on how well the system works together to coordinate efforts, align plans, and invest in resources (both technology and skilled people) to effectively evaluate the efforts, services, and systems.

Participants reiterated that the major driving force behind the inability to effectively evaluate services is a lack of capacity. Internal capacity varies by size of the individual partner organization. Collectively, the system does not have the workforce, time, or funding resources to commit to evaluation efforts. Participants previously reported that funding, especially federal funding, requires evaluation to be conducted, but more financial resources should be allocated. Participants suggested increasing

opportunities for blended funding to hire experts in evaluation science. The system requires a commitment of financial resources to increase staffing of experts, promote sustainability, further evaluation efforts past monitoring and surveillance activities.

Participants discussed the need for strategic alignment and shared performance measures, as many efforts are going in contradictory directions or are duplicative. This alignment could breakdown silos and improve system coordination across the system.

ES 9 Strengths, Weaknesses, and Opportunities for Improvement

Strengths

Current System Evaluation Processes

- A strong system is in place to monitor outbreaks (illness, disease).
- Mississippi is currently in the process of updating the SHA/SHIP previously conducted in 2014.
- Partner organizations conduct internal satisfaction surveys to evaluate effectiveness of services.
- Medical and nursing boards consistently put out information and complete evaluation activities.
- Funding often requires the use of evidence-based practices.
- Public Health accreditations and their requirements (including tribal health services).

Collaboration

- MSDH makes consistent efforts to engage stakeholders.
- Participants recognize strong leadership throughout the public health system.
- Mississippi has gathered stakeholders for summits and assessment to create joint strategic planning and evaluation.
- There is capacity to provide technical assistance from MSDH by request.
- There is collaboration through state worksite wellness program.

Weaknesses

Workforce

- Overall, the public health system organizations are under-equipped staffing-wise to evaluate, which means there is a lack of internal capacity.
- A low pool of experts to pull from with expertise on evaluation and evaluation science.

Limited Evaluation Activities

- Not applying measurements and surveillance to evaluation process (improvements).
- There is no performance management system.
- Psychiatric Residential Treatment Facilities throughout the state require an improvement in evaluation processes beyond current monitoring activities.
- There is no infrastructure to transition from crisis to planning throughout the system. The state of crisis throughout the system means a lack of capacity and evaluation practices.
- There is a lack of sustainability with current evaluation practices.

Communication and Collaboration

- The system does not communicate often enough to keep stakeholders and partner organizations engaged in evaluation and improvement processes.
- If evaluation does take place, results from the evaluation practices are siloed.
- Due to extensive demands on the system, sharing of results from evaluation practices are not a priority and do not often take place.
- Partner organizations often must work towards funder requirements over impact.

Short-term Opportunities for Improvement

Collaboration

- Engage stakeholders to determine standards for Psychiatric Residential Treatment Facilities.
- Create a mechanism to share results/findings from evaluation practices across the public health system.
- Take on evaluation as a priority for the system and implement methods for evaluation within the system.
- There is a need for strategic alignment internally (within each partner organization) and externally (throughout the public health system).
- Across the board, partner organizations need to increase familiarity with performance measures.
- Individual partner organizations add cross-system collaboration performance measures to job descriptions.

Funding

- Increase opportunities for blended funding to invest in experts in evaluation science.

Long-term Opportunities for Improvement

Collaboration

- Create a culture of consistent communication to keep partners engaged with priorities from SHA/SHIP.
- Encourage collaboration and contribution to priorities from SHA/SHIP across the public health system.

Evaluation as a Priority

- Following the prioritization of evaluation (as described in short-term opportunities), take on implementation of evaluation practices and results, as well as quality improvement as a priority for the system.
- Long term performance management system.

Evaluation Activities

- Implement and evaluate PRTF services following determination of standards (as described in short-term opportunities).

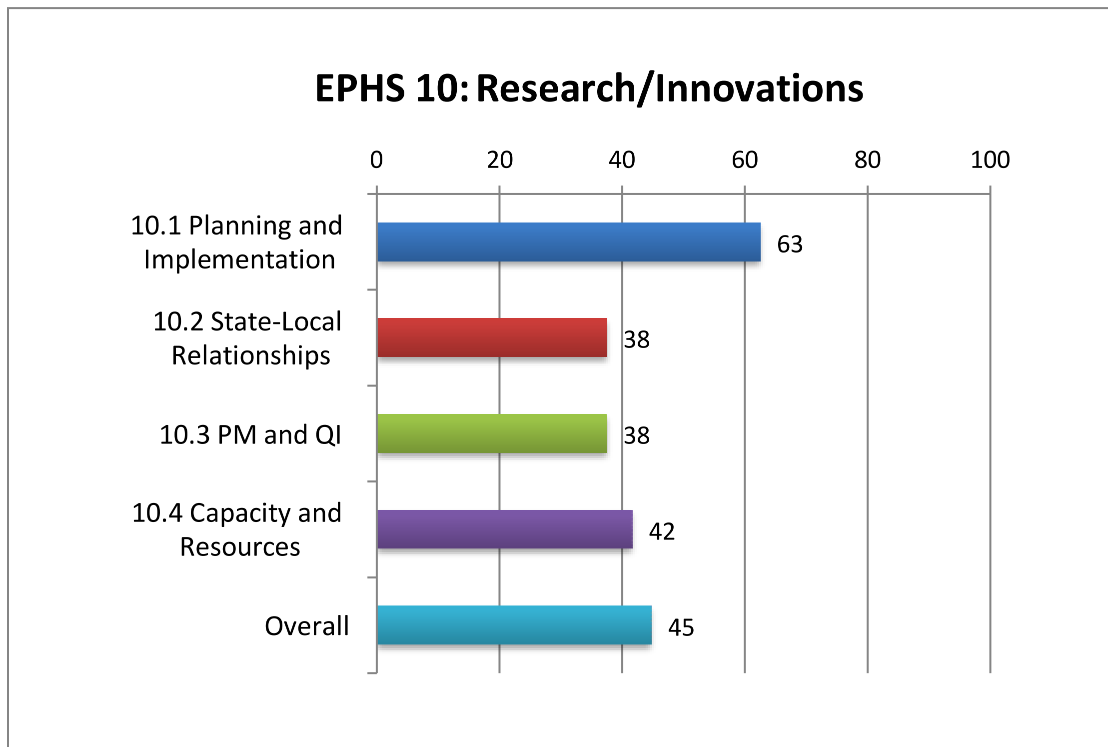
Essential Service 10: Research for New Insights and Innovative Solutions to Health Problems

Participant dialogue to assess performance for Essential Public Health Service 10 explored the following key questions:

What's going on in our state?
Do we participate in research activities?

Researching for new insights and innovative solutions to health problems encompasses the following:

- A full continuum of research ranging from field-based efforts to foster improvements in public health practice to formal scientific research.
- Linkage with research institutions and other institutions of higher learning to identify and apply innovative solutions and cutting-edge research to improve public health performance.
- Internal capacity to mount timely epidemiologic and economic analyses and conduct needed health services research.



Overall performance for Essential Service 10 scored as moderate. Model Standards 10.1 (Planning and Implementation) scored in the significant range. Model Standards 10.2 (State-Local Relationships) and 10.3 (Performance Management and Quality Improvement) produced the same score in the moderate range. Model Standard 10.4 (Public Health Capacity and Resources) also scored in the moderate range. Performance for Essential Service 10 was ranked seventh out of the 10 Essential Services.

Essential Service 10 Summary

10.1 Planning and Implementation

This model standard focuses on the extent to which the system fosters innovations by establishing research priorities, disseminating research findings, and collaborating with academic institutions. This section also focuses on how well the system engages in practice-based research.

Participants discussed a high level of investment in research and joint-research projects, especially at the academic level. Participants from academic institutions reported continuous collaborative efforts on research with other programs and partners in the public health system. The work at Jackson State has attracted outside interest from stakeholders in health-related issues throughout the country leading to collaboration. At the same time, participants also discussed a need to bridge the gap between research conducted primarily at the academic level, versus within local public health system partner organizations. Partner organizations have identified a need to provide doctoral candidates with more expansive practical experience that includes leadership practice training to combat a lack of researchers outside of academic institutions.

"While we have research efforts, we have the challenge of disseminating them, and there is no performance management system statewide to measure collaborative efforts across different institutes."

"The challenge of research is how does it translate into making the community on the boots on the ground level, and I don't know how we're doing on that. "

Participants noted that the dissemination process of the research findings to the local public health system is absent. Current practices dictate extensive searching through research database systems to locate relevant research findings. Despite the fact that all research is available to the public through academic journals, research findings specific to the local system are not easily accessible. Participants recognize that efficient dissemination to partner organizations is vital to improving best practices and finding innovative solutions throughout the system.

10.2 State-Local Relationships

This model standard focuses on the extent to which the system provides support and technical assistance to local public health systems in their research activities and the translation and use of research findings.

Participants described individual efforts throughout the state where academic institutions assist local providers to improve practices within their programs. As an example, UMMC is providing assistance to local clinics to promote early healthy development through the establishment of developmental screening systems. This assistance includes regular meetings to develop how that practice is going to look in a particular clinic. In some instances, partner organizations involve local providers, such as physicians and nurse practitioners, when conducting these activities. At the same time, participants noted that the conversation did not produce adequate examples of technical assistance when scoring. Participants also noted that an important piece to these activities is ensuring the local partners have the infrastructure they need. Participants described access to technology and internet as an example.

Participants reported that although research is taking place, the key component of translating that research for accessibility on the local level is absent. The lack of translating research serves as a barrier that prevents meaningful change in practice within the local public health system. The public health system lacks the ability to consistently and efficiently apply research findings to practice. Participants suggested the need for translating research as well as supporting the growth of community-based research to apply findings more accurately to practice.

10.3 Performance Management and Quality Improvement

This model standard focuses on the extent to which the system reviews the research activities and continually improves the performance to ensure innovation and high-quality research. Participants described a lack of awareness about existing methods to inform individuals about current research activities throughout the state. However, participants were not aware of collaborative efforts taking place throughout the public health system to share results/findings or review research activities. Participants reported the new Office of Data Operations and Research as an opportunity for growth in this area.

10.4 Public Health Capacity and Resources

This model standard focuses on the extent to which the system allocates sufficient financial resources for the research activities. This section also focuses on how well the system works together to coordinate efforts, align plans, and invest in resources (both technology and skilled people) to effectively carry out the research and translate findings to practice.

Participants described the availability of funds from MSDH to specific areas of health improvement, such as – the Jackson Heart Study, HIV, and the opioid epidemic. However, participants noted that this can be applied as an asset to a small subset of entities that might not always be relevant. This discussion led back to the dissemination of information for workforce development and research activities. One participant suggested a need for a clearinghouse level entity to look at workforce development and workforce needs, as well as research translation relevant to the state. A mechanism, such as a clearinghouse, that could allow for this information to be effectively disseminated and promote the commitment of financial resources to health improvement in the state. This commitment of financial resources would require involvement and coordination with the legislature to be sustainable.

Discussion also centered around coordination of research activities throughout the state. Participants reported limited coordination in current efforts between some partner organizations. Participants also discussed the need for a system, such as the health information exchange, that shares interactive, integrative data throughout the public health system. Currently, this system cannot be utilized due to a lack of funding from the legislature to allow MSDH to provide comprehensive information dissemination. Participants noted that despite funding limitations there is a strong presence of professional expertise in the state to conduct research activities.

ESS 10 Strengths, Weaknesses, and Opportunities for Improvement

Strengths

Advancing Research Best Practices

- Research and joint research projects are being done, but they need to include community-based and population-based research.

Funding

- Researchers can apply for sub-grants through the Mississippi State Department of Health.

Workforce

- Professional research expertise of the university/academic workforce.
- The public health system has an asset in current policy organizations and educational institutions that do research activities.

Weaknesses

Data and Information Limitations

- The dissemination of information from research activities is not adequately or consistently getting to the partners that need it (including research at the local level).
- Partner organizations recognize a lack of awareness of research done at MSDH.
- There is a lack of shared data or findings from research that might prove relevant to other partners.

Evaluation of Research

- No performance management system. Re: research at the state level (more individual).
- Evaluation of research relevance does not take place.
- The system does not always do an adequate job of providing quality research leadership.

Expanding Scope of Work

- Lack of support for the growth of the community-based research at the local level.

Short-term Opportunities for Improvement

Data Accessibility

- Create a system for cross-sector research data and results sharing.

Long-term Opportunities for Improvement

Coordination and Alignment

- Support growth of community-based research at the local level through technical assistance activities.
- MSDH providing more awareness and transparency to partner organizations on current research activities.

Conclusion

Mississippi’s 2019 State Public Health System Assessment revealed a number of cross-cutting themes that arose in dialogue across each breakout group:

The 2019 SPHSA revealed a number of key areas of strength for the public health system, including a robust emergency preparedness and response system, impactful smoking cessation initiatives, and an increased investment in the future of public health. These strengths were highlighted throughout essential service breakout groups as examples of efforts that can be applied to other needs in the state public health system. Weaknesses identified throughout the assessment include limited workforce capacity and development efforts, funding shortages, inadequate cross-system collaboration and communication, data limitations, and accessing populations at increased risk for or affected the most by health inequities and health disparities. Participants also identified short and long-term opportunities for improvement to address the weaknesses described in essential service breakout groups. The most common opportunities for improvement described throughout the assessment include increasing availability and accessibility of data, breaking down of silos through effective cross-system communication efforts, increasing resources including professional development within the public health system, creating a statewide public health workforce development plan, and increasing coordination of the assessment of needs and serving populations affected by health inequities and health disparities.

The results from this State Public Health System Assessment will be utilized to develop the state’s understanding of the performance of the state public health system and the public health activities. Participants of this assessment provided valuable insight into the performance of the system as a whole. This report will support the overall 2019 Mississippi State Health Assessment and inform a comprehensive State Health Improvement Plan.

Appendix 1: List of Participating Organizations

Organizations
Mississippi State Department of Health
MS Blood Services
Center for Mississippi Health Policy
American Health Association
JMM Foundation/Double Up Food Bucks
Healthy MS
Foundation for the Mid-South
Community Health Center Association of Mississippi
Mississippi Tobacco-Free Coalitions for MSDH
Mississippi Division of Medicaid
Mississippi Farm Bureau
Mississippi Public Health Association
American Lung Association
Families as Allies
Mississippi State Department of Mental Health
Delta Medical Foundation
University of Mississippi Medical Center
Choctaw Health Center
Mississippi Business Group on Health
Mississippi Institutions of Higher Learning
Mississippi Community College Board
Mississippi State Department of Education
Mississippi State University
Jackson State University
Office of Mississippi Physician Workforce

Appendix 2: Essential Service Scores

ESSENTIAL SERVICE 1: Monitor Health Status to Identify Community Health Problems		
1.1	Model Standard: Planning and Implementation	
1.1.1	How well do SPHS partner organizations maintain data collection and monitoring programs designed to measure the health status of the state's population?	75
1.1.2	How well do SPHS partner organizations make health data accessible in useful health data products?	50
1.1.3	How well do SPHS partner organization work together to maintain a data reporting system designed to identify potential threats to the public's health?	75
1.2	Model Standard: State-Local Relationships	
1.2.1	How well do statewide SPHS partner organizations assist (e.g., through training, consultations) local public health systems in the interpretation, use, and dissemination of health-related data?	50
1.2.2	How well do partner organizations in the SPHS work collaboratively to regularly provide local public health systems with a uniform set of local health-related data?	50
1.2.3	How well do SPHS partner organizations provide technical assistance in the development of information systems needed to monitor health status at the local level?	50
1.3	Model Standard: Performance Management and Quality Improvement	

1.3.1	How well do SPHS partner organizations work together to review the effectiveness of their efforts to monitor health status?	50
1.3.2	How well do SPHS partner organizations actively manage and improve their collective performance in health status monitoring?	50
1.4	Model Standard: Public Health Capacity and Resources	
1.4.1	How well do SPHS partner organizations work together to commit financial resources to health status monitoring efforts?	50
1.4.2	How well do SPHS partner organizations align and coordinate their efforts to monitor health status?	50
1.4.3	How well do SPHS partner organizations collectively have the professional expertise to carry out health status monitoring activities?	50

ESSENTIAL SERVICE 2: Diagnose and Investigate Health Problems and Health Hazards		
2.1	Model Standard: Planning and Implementation	
2.1.1	How well do SPHS partner organizations operate surveillance and epidemiology activities that identify and analyze health problems and threats to the health of the state's population?	75
2.1.2	How well do SPHS partner organizations maintain the capability to rapidly initiate enhanced surveillance when needed for a statewide/regional health threat?	75

2.1.3	How well do SPHS partner organizations organize their private and public laboratories (within the state and outside of the state) into a well-functioning laboratory system?	75
2.1.4	How well do SPHS partner organizations maintain in-state laboratories that have the capacity to analyze clinical and environmental specimens in the event of suspected exposure or disease outbreak?	75
2.1.5	How well do SPHS partner organizations work together to respond to identified public health threats?	75
2.2	Model Standard: State-Local Relationships	
2.2.1	How well do SPHS partner organizations provide assistance (through consultations and/or training) to local public health systems in the interpretation of epidemiologic and laboratory findings?	50
2.2.2	How well do SPHS partner organizations provide local public health systems with information and guidance about public health problems and potential public health threats (e.g., health alerts, consultations)?	75
2.3	Model Standard: Performance Management and Quality Improvement	
2.3.1	How well do SPHS partner organizations periodically review the effectiveness of the state surveillance and investigation system?	75
2.3.2	How well do SPHS partner organizations actively manage and improve their collective performance in diagnosing and investigating health problems and health hazards?	50
2.4	Model Standard: Public Health Capacity and Resources	

2.4.1	How well do SPHS partner organizations work together to commit financial resources to support the diagnosis and investigation of health problems and hazards?	50
2.4.2	How well do SPHS partner organizations align and coordinate their efforts to diagnose and investigate health hazards and health problems?	50
2.4.3	How well do SPHS partner organizations collectively have the professional expertise to identify and analyze public health threats and hazards?	75

ESSENTIAL SERVICE 3: Inform, Educate, and Empower People about Health Issues		
3.1	Model Standard: Planning and Implementation	
3.1.1	How well do SPHS partner organizations implement health education programs and services designed to promote healthy behaviors?	50
3.1.2	How well do SPHS partner organizations implement health promotion initiatives and programs designed to reduce health risks and promote better health?	50
3.1.3	How well do SPHS partner organizations implement health communications designed to enable people to make healthy choices?	50
3.1.4	How well do SPHS partner organizations maintain a crisis communications plan to be used in the event of an emergency?	100
3.2	Model Standard: State-Local Relationships	

3.2.1	How well do statewide SPHS partner organizations provide technical assistance to local public health systems (through consultations, training, and/or policy changes) to develop skills and strategies to conduct health communication, health education, and health promotion?	50
3.2.2	How well do statewide SPHS partner organizations support and assist local public health systems in developing effective emergency communications capabilities?	50
3.3	Model Standard: Performance Management and Quality Improvement	
3.3.1	How well do SPHS partner organizations periodically review the effectiveness of health communication, health education and promotion services?	50
3.3.2	How well do SPHS partner organizations actively manage and improve their collective performance to inform, educate and empower people about health issues?	25
3.4	Model Standard: Public Health Capacity and Resources	
3.4.1	How well do SPHS partner organizations Work together to commit financial resources to health communication and health education and health promotion efforts?	25
3.4.2	How well do SPHS partner organizations Align and coordinate their efforts to implement health communication, health education, and health promotion services?	25
3.4.3	How well do SPHS partner organizations collectively have the professional expertise to carry out effective health communications, health education, and health promotion services?	25

ESSENTIAL SERVICE 4: Mobilize Partnerships to Identify and Solve Health Problems

4.1	Model Standard: Planning and Implementation	
4.1.1	How well do SPHS partner organizations mobilize task forces, ad hoc study groups, and coalitions to build statewide support for public health issues?	75
4.1.2	How well do SPHS partner organizations organize formal sustained partnerships to identify and to solve health problems?	50
4.2	Model Standard: State-Local Relationships	
4.2.1	How well do statewide SPHS partner organizations provide assistance (through consultations and/or trainings) to local public health systems to build partnerships for community health improvement?	50
4.2.2	How well do statewide SPHS partner organizations provide incentives for broad-based local public health system partnerships (instead of only single-issue task forces) through grant requirements, financial incentives and/or resource sharing?	25
4.3	Model Standard: Performance Management and Quality Improvement	
4.3.1	How well do SPHS partner organizations review their partnership development activities?	25
4.3.2	How well do SPHS partner organizations actively manage and improve their collective performance in partnership activities?	25

4.4	Model Standard: Public Health Capacity and Resources	
4.4.1	How well do SPHS partner organizations commit financial resources to sustain partnerships?	25
4.4.2	How well do SPHS partner organizations align and coordinate their efforts to mobilize partnerships?	25
4.4.3	How well do SPHS partner organizations collectively have the professional expertise to carry out partnership development activities?	25

ESSENTIAL SERVICE 5: Develop Policies and Plans that Support Individual and Statewide Health Efforts		
5.1	Model Standard: Planning and Implementation	
5.1.1	How well do SPHS partner organizations implement statewide health improvement processes that convene partners and facilitate collaboration among organizations to improve health and the public health system?	50
5.1.2	How well do SPHS partner organizations develop one or more state health improvement plan(s) to guide their collective efforts to improve health and the public health system?	50
5.1.3	How well do SPHS partner organizations have in place an All-Hazards Preparedness Plan to guide their activities to protect the state's population in the event of an emergency?	75
5.1.4	How well do SPHS partner organizations conduct policy development activities?	50

5.2	Model Standard: State-Local Relationships	
5.2.1	How well do SPHS partner organizations provide technical assistance and training to local public health systems for developing community health improvement plans?	50
5.2.2	How well do SPHS partner organizations provide technical assistance in the development of local all-hazards preparedness plans for responding to emergency situations?	75
5.2.3	How well do SPHS partner organizations provide technical assistance in local health policy development?	75
5.3	Model Standard: Performance Management and Quality Improvement	
5.3.1	How well do SPHS partner organizations review progress towards accomplishing health improvement across the state?	50
5.3.2	How well do SPHS partner organizations review new and existing policies to determine their public health impacts (e.g. using a Health in All Policies impact assessment approach)?	50
5.3.3	How well do SPHS partner organizations conduct formal exercises and drills of the procedures and protocols linked to its All-Hazards Preparedness Plan and make adjustments based on the results?	25
5.3.4	How well do SPHS partner organizations actively manage and improve their collective performance in statewide planning and policy development?	50
5.4	Model Standard: Public Health Capacity and Resources	

5.4.1	How well do SPHS partner organizations work together to commit financial resources to health planning and policy development efforts?	75
5.4.2	How well do SPHS partner organizations align and coordinate their efforts to implement health planning and policy development?	50
5.4.3	How well do SPHS partner organizations collectively have the professional expertise to carry out planning and policy development activities?	50

ESSENTIAL SERVICE 6: Enforce Laws and Regulations that Protect Health and Ensure Safety		
6.1	Model Standard: Planning and Implementation	
6.1.1	How well do SPHS partner organizations assure that existing and proposed state laws are designed to protect the public's health and ensure safety?	25
6.1.2	How well do SPHS partner organizations assure that laws give state and local authorities the power and ability to prevent, detect, manage, and contain emergency health threats?	75
6.1.3	How well do SPHS partner organizations establish cooperative relationships between regulatory bodies and entities in the regulated environment to encourage compliance and assure that laws accomplish their health and safety purposes (e.g. the relationship between the state public health agency and hospitals)?	75
6.1.4	How well do SPHS partner organizations ensure that administrative processes are customer-centered (e.g., obtaining permits and licenses)?	25
6.2	Model Standard: State-Local Relationships	

6.2.1	How well do SPHS partner organizations provide technical assistance and training to local public health systems on best practices in compliance and enforcement of laws that protect health and ensure safety?	50
6.2.2	How well do SPHS partner organizations assist local governing bodies in incorporating current scientific knowledge and best practices in local laws?	50
6.3	Model Standard: Performance Management and Quality Improvement	
6.3.1	How well do SPHS partner organizations review the effectiveness of their regulatory, compliance and enforcement activities?	50
6.3.2	How well do SPHS partner organizations actively manage and improve their collective performance in legal, compliance, and enforcement activities?	50
6.4	Model Standard: Public Health Capacity and Resources	
6.4.1	How well do SPHS partner organizations commit financial resources to the enforcement of laws that protect health and ensure safety?	25
6.4.2	How well do SPHS partner organizations align and coordinate their efforts to comply with and enforce laws and regulations?	25
6.4.3	How well do SPHS partner organizations collectively have the professional expertise to review, develop, and implement public health laws?	50

ESSENTIAL SERVICE 7: Link People to Needed Personal Health Services and Assure the Provision of Health Care When Otherwise Unavailable

7.1	Model Standard: Planning and Implementation	
7.1.1	How well do SPHS partner organizations assess the availability of and access to personal health services in the state?	25
7.1.2	How well do SPHS partner organizations collectively take policy and programmatic action to eliminate barriers to access to personal health care?	50
7.1.3	How well does SPHS organizations work together to establish and maintain a statewide health insurance exchange to assure access to insurance coverage for personal health care services?	0
7.1.4	How well do SPHS organizations mobilize their assets, including local public health systems, to reduce health disparities in the state?	50
7.2	Model Standard: State-Local Relationships	
7.2.1	How well do SPHS partner organizations provide technical assistance to local public health systems on methods for assessing and meeting the needs of underserved populations?	50
7.2.2	How well do SPHS partner organizations provide technical assistance to providers who deliver personal health care to underserved populations?	25
7.3	Model Standard: Performance Management and Quality Improvement	
7.3.1	How well do SPHS partner organizations work together to review the quality of personal health care services?	25

7.3.2	How well do SPHS partner organizations work together to review changes in barriers to personal health care?	25
7.3.3	How well do SPHS partner organizations actively manage and improve their collective performance in linking people to needed personal health care services?	50
7.4	Model Standard: Public Health Capacity and Resources	
7.4.1	How well do SPHS partner organizations work together to commit financial resources to assure the provision of needed personal health care?	50
7.4.2	How well do SPHS partner organizations align and coordinate their efforts to provide personal health care?	50
7.4.3	How well do SPHS partner organizations collectively have the professional expertise to carry out the functions of linking people to needed personal health care?	25

ESSENTIAL SERVICE 8: Assure a Competent Public and Personal Health Care Workforce		
8.1	Model Standard: Planning and Implementation	
8.1.1	How well do SPHS partner organizations work together to develop a statewide workforce plan that guides improvement activities in population-based workforce development, using results from assessments of the workforce needed to deliver effective population-based services?	50

8.1.2	How well do SPHS organizations work together to develop a statewide workforce plan(s) that guides improvement activities in personal health care workforce development, using results from assessments of the workforce needed to deliver effective personal health care services?	50
8.1.3	How well do SPHS partner human resources development programs provide training to enhance the technical and professional competencies of the workforce?	50
8.1.4	How well do SPHS partner organizations assure that individuals in the population-based and personal health care workforce achieve the highest level of professional practice?	75
8.1.5	How well do SPHS partner organizations support initiatives that encourage life-long learning?	50
8.2	Model Standard: State-Local Relationships	
8.2.1	How well do SPHS partner organizations assist local public health systems in planning for their future needs for population-based and personal health care workforces, based on workforce assessments?	25
8.2.2	How well do SPHS partner organizations assist local public health system organizations with workforce development?	25
8.3	Model Standard: Performance Management and Quality Improvement	
8.3.1	How well do SPHS partner organizations review their workforce development activities?	75

8.3.2	How well do SPHS academic-practice collaborations evaluate the preparation of personnel entering the SPHS workforce?	75
8.3.3	How well do SPHS partner organizations actively manage and improve their collective performance in workforce development?	50
8.4	Model Standard: Public Health Capacity and Resources	
8.4.1	How well do SPHS partner organizations commit financial resources to workforce development efforts?	50
8.4.2	How well do SPHS partner organizations align and coordinate their efforts to effectively conduct workforce development activities?	25
8.4.3	How well do SPHS partner organizations collectively have the professional expertise to carry out workforce development activities?	50

ESSENTIAL SERVICE 9: Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-Based Health Services		
9.1	Model Standard: Planning and Implementation	
9.1.1	How well do SPHS partner organizations routinely evaluate population-based health services in the state?	50

9.1.2	How well do SPHS partner organizations evaluate the effectiveness of personal health services in the state?	75
9.1.3	How well do SPHS organizations evaluate the performance of the state public health system?	75
9.1.4	How well do SPHS partner organizations seek appropriate certifications, accreditation, licensure, or other third-party evaluations and designations of high-performing organizations?	75
9.2	Model Standard: State-Local Relationships	
9.2.1	How well do SPHS partner organizations provide technical assistance (e.g., consultations, training) to local public health systems in their evaluation activities, including evaluations of population-based and personal health services and the local public health system?	75
9.2.2	How well do SPHS partner organizations share results of state-level performance evaluations with local public health systems for use in local planning processes?	50
9.2.3	How well do SPHS partner organizations assist their local counterparts to achieve certifications, accreditation, licensure, or other third-party designations of high-performing organizations?	75
9.3	Model Standard: Performance Management and Quality Improvement	
9.3.1	How well do SPHS partner organizations work together to regularly review the effectiveness of their evaluation activities?	25

9.3.2	How well do SPHS partner organizations actively manage and improve their collective performance in evaluation activities?	25
9.3.3	How well do SPHS partner organizations promote systematic quality improvement processes throughout the state public health system?	50
9.4	Model Standard: Public Health Capacity and Resources	
9.4.1	How well do SPHS partner organizations work together to commit financial resources for evaluation?	25
9.4.2	How well do SPHS partner organizations align and coordinate their efforts to conduct evaluations of population-based and personal health care services?	25
9.4.3	How well do SPHS partner organizations collectively have the professional expertise to carry out evaluation activities?	50

ESSENTIAL SERVICE 10: Research for New Insights and Innovative Solutions to Health Problems		
10.1	Model Standard: Planning and Implementation	
10.1.1	How well do SPHS partner organizations organize research activities and disseminate and use innovative research findings in practice, through the work of active academic-practice collaborations?	75

10.1.2	How well do SPHS partner organizations participate in and conduct research to discover more effective methods of improving the public's health?	50
10.2	Model Standard: State-Local Relationships	
10.2.1	How well do SPHS partner organizations provide technical assistance to local public health systems in research activities?	50
10.2.2	How well do SPHS partner organizations assist local public health systems in their use of research findings?	25
10.3	Model Standard: Performance Management and Quality Improvement	
10.3.1	How well do SPHS partner organizations work together to review their public health research activities?	25
10.3.2	How well do SPHS partner organizations actively manage and improve their collective performance in research and innovation?	50
10.4	Model Standard: Public Health Capacity and Resources	
10.4.1	How well do SPHS partner organizations work together to commit financial resources to research relevant to health improvement?	50

10.4.2	How well do SPHS partner organizations align and coordinate their efforts to conduct research?	25
10.4.3	How well do SPHS partner organizations collectively have the professional expertise to carry out research activities?	50