Foundational Public Health Services in Missouri
The Journey to Develop a Unique FPHS Model
May 2019 – December 2019

Background
In Missouri the saying, “If you’ve seen one health department, you’ve seen one health department” rings true. The Show Me State has 114 autonomous local public health agencies (LPHAs) with varying sources of funding and diverse programs and services. Lack of consistency in the definition of local public health in Missouri creates system fragmentation and hinders consistent delivery of population health services and clear communication about the significant reach and essential value of public health.

Foundational Public Health Services Defined
Foundational public health services (FPHS) describe a minimum set of fundamental services and capabilities that must be available in every community in order to have a functional public health system. These services do not define what the smallest local public health agency currently provides, nor are they aspirational. They are the minimal services a competent public health system should be able to offer every resident. Additional services can be added to this framework, in order to achieve state or national accreditation or meet specific local needs. The overall goal is effective and efficient population health management with a focus on health equity and social determinants of health.

Missouri’s Process
In May 2019, Missouri joined several other states engaged in public health system transformation, with efforts to develop a FPHS model. The work began with a literature review around the national FPHS model and models developed by other states. Public health stakeholders participating in the #HealthierMO initiative recognized that the most successful FPHS model would be one that clearly defines the important role of public health in a thriving community, and that stakeholders best felt would represent and serve them. To achieve this level of support, the initiative formed a 24-member representative FPHS workgroup with the goals of identifying “truly necessary” public health capabilities and areas that should be included in a model and developing a visual look for Missouri. The draft model was presented to local public health administrators in September 2019, and their feedback informed revisions. The model was then shared with the #HealthierMO initiative’s Executive Committee, leading to further changes. Finally, the model was presented to the Executive Committee for review in December 2019 and received their approval.

The model should hold us accountable for what we do.
-Jonathan Garoutte, MoDHSS

The Missouri model builds on the Core Public Health Functions and 10 Essential Services to create an operational framework vital to the long-term transformation of Missouri’s public health system. It will allow local public health agencies (LPHAs) to identify capacity gaps, demonstrate the cost for delivering foundational public health services, and explain future funding requests. It will facilitate local public health leadership in the process of building local, regional, and state partnerships in order to assure
population health. Missouri’s process of FPHS model development is defined in more detail in the following sections.

**FPHS Model Literature Review, May 2019**

Todd Daniel, PhD, the lead evaluator for Missouri’s #HealthierMO initiative, conducted a literature review to provide background on historical and current FPHS work around the nation. His findings revealed that public health professionals in the state of Washington were the first to develop a FPHS model in conjunction with their public health system transformation movement. The creators of the Washington model then collaborated with public health professionals from across the nation. Building on the Core Public Health Functions and 10 Essential Services, they created the first national model of foundational public health services. This RESOLVE model later underwent revisions and transitioned to being housed at the Public Health National Center for Innovations (PHNCI).

The PHNCI version has been used by at least five other states. Each state has made changes to the appearance, such as changing language or highlighting specific priorities like health equity, but none of the states have removed any services from the original national model. The only true addition has been Health Equity and Social Determinants of Health. The only real subtraction has been Accountability/Performance Management. The most common change has been collapsing five categories into four by combining Maternal, Child Health and Chronic Disease.

**Missouri’s FPHS Workgroup Formed, May 2019**

Following lessons learned in public health system transformation efforts in Kansas, Missouri developed a foundational public health services workgroup with representation based on county population and geographic regions. Also in a similar approach to Kansas, Missouri Department of Health and Senior Services representatives were selected based on their area of expertise corresponding to the original RESOLVE FPHS model. Based on input from the #HealthierMO Executive Committee, two representatives from Missouri universities with a public health program were added to the workgroup. The local public health agencies (LPHAs) invited to sit on the workgroup were not being represented elsewhere on a #HealthierMO workgroup or committee, and this was, in part, an effort to increase representation of LPHAs in the transformation initiative. Invited representatives who were not able to serve on the FPHS workgroup were replaced by a representative from an organization of similar size from the same region.
Final FPHS Workgroup membership included the following:

**Local Public Health Agency Representatives:**
- Region A, Population Urban: Platte County: Mary Jo Vernon, RN, BSN, Director
- Region B, Population Rural: Macon County: Mike Chambers, Administrator
- Region C, Population Urban: St. Louis City: Fredrick Echols, M.D., Director
- Region D, Population Urban: Jasper County: Tony Moehr, EPHS III, Administrator
- Region E, Population Semi-urban: Cape Girardeau County: Jane Wernsman, Director
- Region F, Population Densely settled rural: Gasconade County: Greg Lara, Administrator
- Region G, Population Rural: Carter County: Michelle Walker, Administrator
- Region H, Population Semi-urban: Clinton County: Blair Shock, Administrator
- Region I, Population Semi-urban: Pulaski County: Deborah Baker, Director
- Region A, Population Densely settled rural: Henry County: Peggy Bowles, Administrator
- Region D, Population Semi-urban: Stone County: Pam Burnett, Administrator
- Region F, Population Densely settled rural: Osage County: Susan Long, RN, BSN, Administrator
- Region H, Population Rural: Tri-County: Lilli Parsons, RN, Administrator
- Region B, Population Densely settled rural: Linn County: Krista Neblock, RN, BHS, Administrator

**Missouri Department of Health and Senior Services (DHSS) Representatives:**
- Center for Local Public Health Services: Ken Palermo
- Section for Epidemiology: Rebecca Lander
- Section for Disease Prevention: Nicole Massey
- Section for Environmental Health: Jonathan Garoutte and Dusty Johnson
- Section for Women’s Health: Martha Smith
- Section for Community Health Services and Initiatives: Tiffany Tu’ua
- Section for Healthy Families and Youth: Cindy Reese

**Missouri’s Academic Institutions Representatives:**
- Washington University: Lora Iannotti, Associate Dean for Public Health and Associate Professor
- University of Missouri: Enid Schatz, Associate Professor and Chair, Dept of Health Sciences
- St. Louis University: Tom Burroughs, Interim Dean, College for Public Health and Social Justice

**First FPHS Workgroup Meeting – June 2019**
The Foundational Public Health Services (FPHS) Workgroup met for the first time on June 29, 2019 in Jefferson City. The workgroup was tasked with the following:
1) Define what “foundational public health services” means for Missouri,
2) Identify the capabilities and areas that must be available in every Missouri community, and
3) Draft a FPHS model for Missouri.

Meeting facilitator Eric Armbrecht, PhD, led participants through a number of small group and large group interactive exercises that resulted in a draft definition of Missouri’s foundational public health services and activity categories based on the national FPHS model. This draft definition would later be
refined to create a statement public health leadership could use to communicate the purpose of the FPHS model with policymakers.

Todd Daniel, PhD, the initiative's lead evaluator, described his literature review on national work focused around foundational public health services model development.

The workgroup discussed foundational public health services like communicable disease and environmental public health. They worked to develop a logical grouping of potential service areas and eliminated those that were not foundational for every county. They talked about how to handle specific functions of public health like immunizations, WIC, food establishment inspections, childhood lead poisoning, and client safety. Overall, they agreed to remove silos and integrate foundational components, and said ongoing "case study" discussions could be useful to guide the development of statewide FPHS model implementation recommendations in the future.

The workgroup wrestled with issues like how to stay within a public health role, but still address gaps within a specific community. They also debated whether local public health agencies needed to deliver services or just assure service delivery, that is, strategically work with community partners to assure that there is funding for the service, that those who need the service have access to it, and that there is a plan in place to provide the service. They concluded that differences in service delivery and scale would likely occur as a result of available resources and that some programs and/or services should be centralized rather than delivered locally.

The workgroup was asked to individually select from a list of Communicable Disease and Environmental Health components those items that are “truly necessary” to be provided by all public health departments in Missouri. A more detailed survey was sent to the group following the meeting.

**Second FPHS Workgroup Meeting – August 2019**

On August 1, 2019, facilitator Eric Armbrecht met with the FPHS Workgroup again to obtain their critical feedback on how stakeholders should visualize the Missouri FPHS model and describe it. He explained the FPHS model should create a consistent expectation of the fundamental public health programs and services that must be available in every county in order for Missouri to have a functional public health system. The model should also facilitate a cost analysis for the foundational public health capabilities and areas it includes.

*Public health has to be the stop-gap for people without access.*

-Tony Moehr, Administrator
Jasper County Health Department

*If the workgroup makes a true change to the Missouri model, such as adding “vulnerable population,” they will need to further identify the abilities that define that piece of the model and a way to attach costs to that.*

-Todd Daniel, PhD, Lead Evaluator
#HealthierMO Initiative
Missouri: FPHS Model Development Process

#HealthierMO initiative project manager Casey Parnell described progress being made in other states undergoing public health system transformation efforts. She stated that Kansas, Ohio and Kentucky are most similar to Missouri in structure, but only Missouri is using a grassroots approach. Parnell emphasized the following key points:

- Transformation is a long-term process with no end point (continuous quality improvement).
- None of the states deviated significantly from the national FPHS model.
- Cross-jurisdictional and resource sharing are a must, happening in every state so far.
- Cost assessments done so far have had similar results, making data comparable.
- Some states have had success changing legislation and increasing funding for public health.
- When implementing the FPHS model, consider human resources policies.

Initiative evaluator, Dr. Todd Daniel, presented outcomes from the survey FPHS Workgroup members had completed following their July meeting. The survey asked them to identify “truly necessary” components under each FPHS capability and area in the FPHS model that should be provided by every local public health agency in order to have a functional public health system in Missouri. Dr. Daniel stated that while the workgroup’s survey responses were very helpful, he would feel more comfortable with a larger data set, as only 19 surveys were usable.

Dr. Armbrecht presented the workgroup with two rough sketches of FPHS models built on feedback and input on surveys. They were intended to be different, rough sketches to solicit workgroup feedback.

**Liked:**
- connectedness/overlap of activities
- language easy to understand
- more detail
- access is first category listed
- vulnerable population (population-specific needs were called out)
- additional services tailored to each community (icing on the cake)

**Liked:**
- whether or not the word “health equity” is used, liked it as a foundation rather than a wrap-around lens
- title specifying “governmental public health”
- wording “responsive” and “programs”
- inclusion of “behavioral health”
- “access to medical and behavioral health”
Missouri: FPHS Model Development Process

Disliked:
- health equity as a lens (different based on personal bias, opens door for inconsistency)
- injury prevention and chronic disease should not go together
- vital records is missing (NOTE: under Organizational Administrative Competencies)
- “local”
- population vs vulnerable

Disliked:
- “health equity” (buzzword hard to articulate)
- PH doesn’t deliver behavioral health
- categories too high level and broad
- things missing (MCH)
- groupings
- separation communicates silos
- “access” doesn’t convey “assure and linkage”
- vulnerable pop should be better defined

Dr. Armbrecht asked each workgroup member to draw a rough sketch of a model that contained the pieces they felt were most important. Based on these sketches and feedback from the workgroup, he drew a new draft model and presented it back to the workgroup for discussion. He explained his methodology:

- Based on earlier discussion around health equity having a different lens for each individual, Dr. Armbrecht left health equity out of the model. He explained if it was spelled out, it would need an individual cost associated with it. However, it can still be integrated throughout public health work.
- He kept the four primary areas overlapping to show how programmatic work is connected.
- He grouped all programmatic areas under four main categories.
- Safety included injury prevention, emergency response and other public health programs.
- Since chronic disease is more about health promotion and prevention than managing chronic disease, he identified the group title Prevention and Promotion. This area would also include Maternal, Child Health (MCH), since that is the majority of the work done with the MCH population.
- The draft model attempts to incorporate special populations under Local Responsive Services and Programs, without calling out individual population groups.
- The term “vulnerable populations” was dropped, in order to not perpetuate the perception that public health serves only the poor, and emphasize the truth that public health is for everyone.
- Linkages to Medical, Behavioral and Community Resources is depicted as wrap-around services, since they primarily support the most vulnerable who need assistance getting linkage to resources. The word “community” is included to capture areas like transportation and housing that play a definite role in health outcomes.
- For simplicity, the capabilities listed in the national PHNCI model are grouped here under Operations and Management Capabilities, and will be defined through evaluation metrics.

With only a couple minor suggestions, the group agreed the sketch captured their ideas well and included all of the core components they felt were important.
Focus Groups – September 2019
The #HealthierMO team developed a more polished draft representation of Dr. Armbrecht’s model to present to local public health administrators across Missouri during focus group sessions. Ten sessions were held across the state in September, 2019. Seven sessions were held in person and three were held virtually. A total of 67 local public health agency representatives participated in the focus groups.

Parnell provided an overview of the FPHS development process so far, and then asked a series of questions to collect input from the broader audience. While there was variance in the feedback received, the general consensus was that the focus groups like the interconnectedness of the foundational areas, however, they did not especially like the way the model was visually represented. There was a great deal of discussion and diverse opinions on the language used to describe the foundational areas.

Since the model is intended to be used over the long-term and should remain relevant, despite changes in the public health system, focus group participants were asked to describe what they thought public health in Missouri might look like in 20 years. Opinions varied on whether public health would shift to providing more clinical services, or whether it would function more as a strategist and convener of partners in order to simply assure service delivery. Most agreed that funding would play an important role in a shift of any kind.

Discussion about whether health equity should be specifically called out in the model varied widely. Some felt it should be included. Others felt it was and should be included in work, but not singled out in the model. Some expressed concern about how including health equity in the model might increase the cost of delivery of services. Others felt “health equity” was just a buzzword that would fade, and others said the term was not clearly defined and could be interpreted differently by every person.

Third FPHS Workgroup Meeting – October 2019
The FPHS Workgroup held its third meeting virtually, via GoToMeeting, on October 8, 2019. The primary objective for the meeting was to review comments collected during the focus groups that were held with local public health administrators and key staff throughout Missouri in September 2019. A document summarizing the focus groups’ comments was shared with the FPHS Workgroup. Parnell gave a brief presentation to provide additional detail.

The Workgroup was then asked a series of questions to help the #HealthierMO team gain additional insight into final revisions recommended for the FPHS model. Main themes that emerged were whether health equity should be included in the model, who the audience for the model would be, and whether there was a need to create a unique model for Missouri or just adopt the PHNCI national model.
The group reviewed a set of five sample sketches Dr. Todd Daniel created, based on focus group and Workgroup input. They discussed each model’s strengths and weaknesses.

Members agreed the final FPHS model needs to be simple, easy to read and clearly representative of public health. They felt it should be recognizable and intuitive. They preferred something colorful, but not whimsical, that is visually unique to Missouri, but reflects wording from the national model. They emphasized the model needs to demonstrate the interconnectivity of components and show an accurate balance between the areas of public health expertise and the capabilities. The group did not reach consensus on whether the model should be fluid. They also had differing ideas on how health equity should be included in the model.

While discussion about the target audience for the model varied widely, the group concurred that it should initially be used with an internal audience of public health organizations, and could be shared more widely with a broader audience (public health stakeholders) in the future, with the use of more descriptive language.

During the focus group sessions, participants were also asked to complete a digital survey to help identify the FPHS that are “truly necessary” and should be provided by every health department (directly or through contractual or sharing agreements), unless the health department’s stated role is to ‘assure’ that service. Assurance of a service within the community was defined as “strategically working with community partners to ensure that there is funding for the service, that those who need the service have access to it, and that there is a plan in place to provide the service.”

Dr. Daniel provided a decision matrix, and “truly necessary” services were defined as those that fit at least one of the following criteria, adapted from a similar process conducted in Washington state.

1. Population-based preventive health services that target specific communities defined by geography, race, ethnicity, gender, illness, or other health conditions (e.g., water fluoridation, creation of walkable communities)
2. Governmental public health is the only or best potential provider of service (e.g., disease surveillance and epidemiology)
3. Mandated service provided by the public health authority (e.g., communicating reportable disease cases to the state health department.

Focus group participants were also asked to identify “truly necessary” foundational capabilities, or cross-cutting skills and capacities needed to support the foundational areas and other programs and activities.

Dr. Daniel compiled and analyzed survey results, and used them to inform development of a capacity assessment.
Graphic Design Artist Contracted – October 2019
In October 2019, the #HealthierMO team contracted with a professional graphic design artist to develop three concept sketches based on work completed to date and input from the FPHS Workgroup and focus groups. Initiative staff then selected two of the three models to present to the Executive Committee.

Models Reviewed by Executive Committee – October 2019
The two concept models were shared with the Executive Committee at their October 31, 2019 meeting. The group gravitated toward the circular depiction of the model, rather than the rectangular version. They supported the majority of the components in the model, but held a robust discussion about whether to add health equity. The consensus was that health equity may be included in public health work every day, but should be specifically called out in the model as an important lens through which to assure foundational public health areas.

They suggested minor changes to color and icons to avoid confusion about the specific role of public health versus other agencies and organizations. They also encouraged the language match that of the PHNCI national model.

Final Review by Executive Committee – December 2019
The #HealthierMO team made recommended revisions and minor adjustments to color, font size and spacing before presenting a revised version of the model back to the Executive Committee for review. Based on no further recommended changes, a formal vote to adopt this version was offered, and the Executive Committee voted to approve the FPHS model for implementation in Missouri.

Model Review with FPHS Workgroup – January 2020
Parnell hosted a virtual meeting with the FPHS Workgroup in January 2020 to thank them for their work on the model and explain revisions that led to the final version. She shared that the model would be rolled out to LPHAs across Missouri in January 2020 and asked for the workgroup’s input on communication strategies and any anticipated barriers. She also explained the workgroup’s next step would be to develop a statewide implementation plan.