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Master of Public Health Capstone Experience

Workforce Assessment: Measuring the Impacts of COVID-19 on the Maternal and Child Health Workforce

Ashleigh Sutphen, Maternal and Child Health

Capstone Committee:

Committee Chair: Dr. Abbie Raikes, PhD Second Committee Member: Denise Pecha, LCSW Third Committee Member: Chad Abresch, PhD Fourth Committee Member: Dr. Shannon Maloney, PhD

Abstract

Workforce assessments provide an opportunity to assess, evaluate, and identify the needs of a particular workforce. The use of workforce assessments in the field of maternal and child health (MCH) has been an ongoing and a strongly supported effort by the Health Resources & Services Administration: Maternal and Child Health Bureau (MCHB). The maternal and child health workforce is responsible for providing essential public health services to some of the most vulnerable populations such as mothers, children, and people living with disabilities. Thus, the continuation of providing these essential public health services is critical – even in the midst of a pandemic.

CityMatCH, with the support of the Maternal and Child Health Bureau (MCHB), has created an online assessment to measure the impacts of the COVID-19 pandemic on the maternal and child health (MCH) workforce. This partnership has yielded multiple workforce assessments over the years to identify, assess, and support the MCH workforce. The purpose of the 2020 online workforce assessment was to support and increase capacity of urban public health departments and MCH leaders in monitoring and responding to current and emerging public health issues and threats, specifically COVID-19 and service provision. This assessment is in alignment with project year one in a five-year cooperative agreement awarded to CityMatCH by MCHB.

The online survey was developed and reviewed by CityMatCH staff and federal partners, and was used for program assessment and evaluation purposes. In total, the online survey was 18 questions, comprised of both closed and open-ended questions, and was analyzed through the survey collection system RedCAP and Microsoft Excel. State and local public health department representatives from across the country were surveyed. My contributions to the 2020 workforce assessment included data cleaning, analysis, and reporting. In addition to the data analysis, I was able to utilize my skills in written communication to provide CityMatCH with a written report and a summation of the assessment results to share with our federal partner, MCHB, to inform strategies to strengthen the capacity of the maternal and child health workforce.

This workforce assessment helped us gain an understanding of on-the-ground experiences of local and state public health departments during the pandemic and provided us with further understanding of the impacts of COVID-19 on the MCH workforce. Results from the assessment shed light on the challenges of delivering MCH services virtually, the impact it had on the MCH staff as they were reassigned from their regular MCH duties to COVID-19 duties, and the concerns for future MCH outcomes due to the pandemic.

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Chapter 1 – Introduction

Specific Aims

A program evaluation involves the monitoring and assessment of an existing public health program to improve delivery of public health services. Those who deliver these services are known as the public health workforce, broadly defined to include "all those engaged during a significant part of the time in work that creates the conditions within which people can be healthy" (Tilson & Gebbie, 2004). More specifically, the maternal and child health (MCH) workforce includes those who deliver public health services to women, mothers, children, and families. In a report published by the Institute of Medicine (IOM), the importance of assessing the public health workforce to further their development and address their needs was emphasized. The IOM report shared,

The issue of workforce training and competency is central to the success of any public health system. Governmental public health agencies have a responsibility to identify the public health workforce needs within their jurisdictions and to implement policies and programs to fill those needs. In addition, an assessment of current competency levels and needs is essential to develop and deliver the appropriate competency-based training, as well as to evaluate the impact of that training in practice settings (Institute of Medicine (US) Committee on Assuring the Health of the Public in the 21st Century., 2002)

By conducting workforce assessments, public health skills and core competencies of the workforce can be assessed, and the capacity of the workforce can be regularly monitored in effort to improve delivery of essential public health services. Thus, just as public health programs are routinely evaluated to measure progress and improve services, conducting routine assessment of those who deliver these public health programs should be considered a fundamental component of program evaluation as it provides an opportunity to strengthen each.

The Maternal and Child Health Bureau (MCHB) has identified conducting workforce assessments as one of its core functions. To support their efforts in conducting routine workforce assessments, MCHB provides funding for partner organizations in the form of cooperative agreements. It is through these cooperative agreements that CityMatCH is able to conduct annual workforce assessments to carry out the core function addressing "current and emerging public health issues and threats." Within this core function, identified and stated in their cooperative agreement with MCHB, it is the goal of CityMatCH to support and increase the capacity of urban MCH leaders in monitoring and responding to current and emerging public health issues and threats (CityMatCH , 2019). Comment

CityMatCH aims to support and increase the capacity of urban MCH leaders through capacity building and innovative strategies. Because of the profound impact of COVID-19 on the field of maternal and child health, this year's assessment attempted to measure the proportion of state and local health departments' workforce that was deployed to COVID-19 duties, the number of employees that have returned to their primary MCH duties, and both the positive and negative impacts that COVID-19 has had on their workforce and capacity to deliver MCH services. The results of this assessment will showcase the need for innovative strategies to further build capacity, support the current MCH workforce, and provide evidence for increased efforts to address the needs and gaps in delivery of MCH services to further improve MCH outcomes.

Significance

In 2020, CityMatCH, a national membership organization of city and county health departments' maternal and child health (MCH) programs and leaders representing urban communities in the United States (CityMatCH, 2020), was awarded a five-year cooperative agreement by the Health Resources & Services Administration: Maternal and Child Health Bureau (MCHB). MCHB administers programs, supports research, and invests in workforce training to ensure the health and wellbeing of mothers, children, and families across their lives (HRSA: Maternal and Child Health Bureau, 2020). MCHB

primarily supports states and jurisdictions through the Title V Maternal and Child Health Block Grant. In 2018, the Maternal and Child Health Block Grant program, one of the single largest funders of maternal and child health programs, funded 59 states (including jurisdictions), serving an estimated 55 million individuals (HRSA: Maternal and Child Health Bureau , 2020). Currently, CityMatCH serves as the only national organization that extends membership to leaders of MCH programs working directly in 170 urban health departments nationwide and extending associate memberships to any public health leaders working on urban MCH issues. In total, CityMatCH has contact with 671 public health representatives.

Over the course of the past two decades, CityMatCH has been awarded six cooperative agreements funded by MCHB. In previous cooperative agreements and needs assessments conducted by CityMatCH, areas of need in the urban MCH workforce and gaps in delivery of services have been identified. For example, previous assessments aimed at monitoring and responding to current and emerging public health issues and threats have identified emerging MCH issues such as infant mortality; maternal mortality and morbidity; opioids and neonatal abstinence syndrome; postpartum depression and maternal mental health. (CityMatCH , 2019).

In response to the COVID-19 pandemic, CityMatCH has selected COVID-19 to be the central topic of the first workforce assessment for their 2020 cooperative agreement. COVID-19 took hold of the world as a global pandemic by the early months of 2020 (American Journal of Managed Care , 2021), calling upon public health leaders to respond immediately. Included in these efforts were numerous MCH leaders, requiring MCHB to provide guidance and support during temporary reassignment of personnel during a declared public health emergency (Health Resources & Services Administration: Maternal and Child Health Bureau , 2021). While MCH leaders are deployed to COVID-19 response teams across the country, the MCH programs and services that these leaders are charged with, such as the Pediatric Mental Health Care Access Program, Healthy Start Program, Newborn Screenings, and Emergency Medical Services for Children, may be impacted by COVID-19 reassignments (Health Resources & Services Administration: Maternal and Child Health Bureau , 2021). The purpose of this survey was to conduct an

online workforce assessment to measure the impacts of COVID-19 on the MCH workforce to support and increase our MCH leaders' capacity in responding to this current and emerging public health threat.

As a resource to hundreds of urban public health departments, CityMatCH has heard over the course of the past 12 months that the most pressing and current issue their workforce is facing is COVID-19 (CityMatCH Member Representatives, personal communication, March 16, 2020). To capture these issues, measure the impact, identify needs, and develop strategies to support these urban public health departments, the survey is a deliverable for the cooperative agreement and a method to achieve the long-term objective of supporting and increasing the capacity of urban MCH leaders and their ability to deliver MCH services.

Through the Master of Public Health Capstone Experience, CityMatCH and I were able to work in partnership on this workforce assessment. As a current MPH student with a concentration in maternal and child health, my studies are current, provide me with access to resources on conducting quantitative and qualitative research, and provide me with essential maternal and child health skills that are needed to understand the scope of the workforce and the services they deliver. My contributions to the data analysis and reporting procedures provided CityMatCH with an in-depth report on the findings from the assessment, including a full written report, an oral presentation, and a summation of the workforce assessment findings that can be shared with CityMatCH, its members, and MCHB. It is through this partnership that CityMatCH is provided with a strong analysis of the impacts of this current public health threat and the needs of the MCH workforce that may otherwise not be feasible.

Chapter 2 – Background

Epidemiologic Description of COVID-19

Coronavirus Disease 2019 (COVID-19) is caused by a novel virus that was first identified in Wuhan, China in December 2019 (World Health Organization , 2020). The virus presents itself as a respiratory illness, typically mild to moderate in most cases and most will recover without medical intervention (Centers for Disease Control and Prevention , 2021). However, older aged individuals and those with underlying medical issues such as hypertension, cardiovascular disease, and diabetes are at higher risk for developing more severe symptoms (Wolff, Nee, Hickey, & Marschollek, 2020). Additionally, there are disparities in risk based on race and ethnicity, and income in the United States (Raifman & Raifman, 2020) . Containing COVID-19 is challenging due to the virus being an airborne disease, spread through droplets of saliva or discharge, which increases the rate of transmission, and is coupled with the added challenge of the pre-symptomatic shedding of the virus, leading to troubles in fully containing the virus and preventing high rates of community spread (World Health Organization , 2020).

Public health leaders are rapidly gathering, measuring, and reporting data on the virus as there has been no knowledge of this strain of coronavirus disease in humans captured before 2019 (World Health Organization , 2020). Because of this, there is little literature of both the direct and indirect impacts on MCH programs, workforce, and the populations served to date. A recent report shared the key challenges that health departments faced in their response to COVID-19 including the lack of clarity in roles and authority; gaps in funding: the persistent need to address systematic health inequities; leadership and workforce implications; limitations in data sharing and technology platforms across organizations (i.e., hospitals, laboratories, public health departments, etc.); and partnerships and community engagement (DeSalvo, et al., 2021). As the literature and research continues to expand, it is crucial that this measurement takes place during the pandemic as an effort to increase support for the field of MCH, and public health entirely (Martin & Kronstadt, 2020). To our knowledge, this will be among the first assessments created to capture the impacts of COVID-19 on the MCH workforce directed by public health departments. CityMatCH serves as the national organization of MCH leaders, providing a natural alignment to conduct this assessment at a national, cross-sectional level.

Role of Public Health Departments & COVID-19 Specific Duties

In the United States, public health departments are charged with 10 essential public health services (HealthyPeople 2020, 2020):

- 1. Monitor population health status
- 2. Investigate, diagnose, and address health problems
- 3. Communicate effectively to educate people about health
- 4. Strengthen, support, and mobilize communities
- 5. Create, champion, and implement policies
- 6. Enforce laws and regulations to promote safety
- 7. Link people to needed health services
- 8. Ensure competent public and personal health care workforces
- 9. Evaluate effectiveness of population-based health services
- 10. Research new insights and innovations to solve health problems

During the COVID-19 pandemic, the role of public health departments grew immensely, and they served as one of the major agencies leading the pandemic response. In a recent assessment conducted in conjunction with the National Academy of Medicine, the discussion paper "Public Health COVID-19 Impact Assessment: Lessons Learned and Compelling Needs " reported that additional foundational capabilities supporting the public health response to COVID-19 included the following domains: emergency preparedness and response, assessment and surveillance, communications, policy development and support, and community partnership development (DeSalvo, et al., 2021). During the time of our data collection, public health departments were also informed that two vaccines were under development and soon seeking Emergency Use Authorization (U.S. Department of Health and Human Services, 2021) and, if approved, would fall into their scope of duties for distribution to the public.

Partner Organization Description

CityMatCH was first initiated in 1988 as a project in the Boston Department of Health and Hospitals with the goal of improving the organization and delivery of services to urban families and children. The project soon developed into a national organization in 1991 and has since continued to support local health departments in serving urban women, children, and families (CityMatCH, 2020). Their mission is to "strengthen public health leaders and organizations to promote equity and improve the health of urban women, families, and communities." CityMatCH values equity and justice, the effective use of science, and a strong and connected MCH workforce. In their work, CityMatCH advocates for local-level health departments and showcases the need for investing in and strengthening the capacity of local health departments. As an advocate, CityMatCH has a unique position as an organization to help support local health departments' needs and relay these needs to state and federal partners, such as the Maternal and Child Health Bureau (MCHB).

Over the course of the past year, CityMatCH has responded to technical assistance (TA) requests from urban local health departments; hosted member check-in calls for peer-to-peer support and to provide a space for members to learn from one another's on-the-ground experiences with COVID-19; and identified the need to conduct a workforce assessment on the impacts of COVID-19 on the MCH workforce.

Workforce Assessment Description

In previous workforce assessments conducted by CityMatCH, areas of need in the maternal and child health workforce and gaps in their delivery of MCH services have been identified. In response to identifying these needs, CityMatCH has supported the MCH workforce through capacity-building strategies. CityMatCH's efforts have been awarded funding from MCHB on multiple occasions. Recently,

CityMatCH was awarded their sixth cooperative agreement from MCHB to continue their work in strengthening the capacity of the MCH workforce, including conducting annual workforce assessments.

CityMatCH has heard over the course of the past 12 months that the most pressing and current issue their workforce is facing is COVID-19 (CityMatCH Member Representatives, personal communication, March 16, 2020). To capture these issues, measure the impact, identify needs, and develop strategies to support the MCH workforce, CityMatCH developed a workforce assessment based on practical need from the field. The assessment is both is a deliverable for their cooperative agreement with MCHB and a method to achieve their long-term objective of supporting and increasing the capacity of urban MCH leaders in monitoring and responding to current and emerging public health issues and threats.

Purpose of Capstone

To serve as my capstone project, I partnered with CityMatCH to assist with data analysis and reporting of their 2020 MCH workforce assessment. Through my capstone project, I was able to strengthen two foundational public health competencies within two domains: *planning and management to promote health* and *evidence-based approaches to public health*. In addition to strengthening these two foundational competencies, I was able to strengthen two maternal and child health competencies: *examine the historical development of MCH public policies and practices in the US for federal, state, and local agencies serving MCH populations and analyze the current gaps in MCH services and programs and identify the key public health issues for MCH populations at the local, state, national and global levels.*

One of my primary roles for the workforce assessment was analysis of the data collected from the *CityMatCH MCH Workforce Scan on the Impact of COVID* online assessment. The workforce assessment was created in RedCAP, an online database and survey platform, and can be found in the Appendix. The survey was 18 questions, comprised of both closed and open-ended formats. Two of my committee members, Dr. Chad Abresch and Denise Pecha, are CityMatCH staff who were involved with creating the

workforce assessment and both provided me with helpful background information and guidance on desired outcomes for the report.

For the data analysis, I began with cleaning the assessment responses, curating the data, and organizing the sections for the report. After organizing and analyzing each section, I was able to export condensed stats and figures from relevant questions into the report. Additional steps were taken to provide context to the responses and the public health department representation we had.

My second primary role was creating a written report and summation of the final results. A key component of this report was researching and expanding my knowledge of the historical development of MCH programs, policies, and infrastructure that continue to serve the field of MCH today. I was then able to identify key public health issues for MCH populations and the MCH workforce through thematic analysis of the workforce assessment results. I was able to pull together major themes of the impacts, needs, and emerging outcomes shared by the MCH workforce. The results of this assessment showcase the need for innovative strategies to further build capacity, support the current MCH workforce, and provide evidence for increased efforts to address the needs and gaps in delivery of MCH services due to the COVID-19 pandemic. The results of the workforce assessment will be shared with CityMatCH's federal partner, the Maternal and Child Health Bureau, to inform and develop a collaborative response to strengthen the MCH workforce capacity.

Assessment Framework

The second core function CityMatCH committed to in their cooperative agreement was to "support and increase capacity of urban MCH leaders in monitoring and responding to current and emerging public health issues and threats." To achieve this goal, objective one states that by the end of the five-year project, CityMatCH will conduct an assessment of urban MCH programs' capacity to provide MCH services and addressing emerging MCH needs at least five times. More specifically, in project years 1, 3, and 5, the CityMatCH Member Assessments will be aimed at "assessing the capacity for monitoring and responding to current and emerging health issues and threats" and in project years 2 and 4, the CityMatCH Member Assessments will instead be aimed at "assessing workforce needs and strengths on the core functions of public health, MCH epidemiology, program development, and leadership." The assessment of public health issues and threats will inform many additional CityMatCH projects, Learning Network Webinars, communication, and leadership and epidemiology training, and conference sessions (CityMatCH , 2019).

Chapter 3 – Methods

Development of Assessment

The *CityMatCH MCH Workforce Scan on the Impacts of COVID* was developed to assess and evaluate the impacts of COVID-19 on the capacity of the MCH workforce and service provision. The goals of the workforce assessment were to find out the impacts on provision of typical MCH services (home-visiting programs, WIC clinics, newborn screenings, etc.); the MCH population and possible implications for their health outcomes; and the public health infrastructure. With these goals in mind, an online workforce assessment was developed.

As a national organization, CityMatCH regularly utilizes online communication, databases, and platforms to engage with and provide technical assistance to its members. For the creation, distribution, collection, and analysis for the workforce assessment, an online survey was selected. The online survey was then distributed through RedCAP as a customized email to all 671 invited participants, including the 170 CityMatCH member health departments, and all data was collected and analyzed through the platform and additional statistical analysis platforms as needed. This assessment does not constitute for Institutional Review Board (IRB) approval as this research design falls underneath public health surveillance which is defined as "a systematic collection of information about the activities, characteristics and outcomes of a specific program or model, to contribute to continuous program improvement, and/or to inform decisions about future program development" (Department of Health & Human Services , 2010).

Data Collection

This workforce assessment is a cross-sectional, program evaluation design (Creswell & Guetterman, Survey Designs, 2019). It was created for the purpose of program assessment and evaluation of the MCH workforce and service provision. The assessment will inform both CityMatCH and MCHB by providing data for the specific goal outlined in their cooperative agreement. Since this survey instrument is unique and specific to this program, it has not been used in any prior studies or research projects. Sample

questions included on the assessment are presented in Table 1.

Table 1.

Sample Questions included on the CityMatCH MCH Workforce Scan on the Impact of COVID

Sample Questions included on the CityMatCH MCH Workforce Scan on the Impact of COVID

What type of health department do you work for?

Please describe your health department or organization type.

What is your relationship with the local health department?

In what city/county and state do you work for?

During the COVID pandemic, what proportion of MCH staff have been removed from their regular duties and reassigned to COVID duties in your organization?

How has COVID *positively* affected your ability to deliver MCH services? Check ALL that apply

How has COVID *negatively* affected your ability to deliver MCH services? Check ALL that apply.

Please expand upon your responses to the last two questions, especially if you indicated a reduction in quality of services provided or changes in key components of service. Please also share any other ways COVID has affected your ability to deliver MCH service, positively or negatively.

Thinking about the short- and long-term impacts of COVID, what concerns, if any, do you have about MCH outcomes?

Thinking about the short- and long-term impacts of COVID, what, if any, do you anticipate for *emerging* MCH outcomes or needs?

The data collection procedure was an online questionnaire format. The assessment was built by CityMatCH staff utilizing the RedCAP web platform. Next, the final assessment was distributed in November 2020 through the RedCAP platform utilizing a distribution tool to send a customized email to the list of participants, track responses, and house completed responses. Reminder emails were sent to encourage participation and yield a higher completion rate among participants. The survey closed in January 2021 and the data has been saved in the RedCAP platform and made available to export to additional data analysis platforms such as Microsoft Excel, SPSS, SAS, Stata, and R. Due to the simplicity of the assessment, RedCAP and Microsoft Excel were used for all analysis procedures. Results are to be shared with CityMatCH and the Maternal and Child Health Bureau.

Data Measures and Indicators

The final version of the assessment is included in the Appendix. The assessment was 18 questions and estimated to take no longer than 15 minutes to complete. The following sections were included: health department demographics, MCH workforce impacts, and impacts on delivery of MCH services.

Health Department Demographics

The assessment's first questions inquired about the type of health department the respondent worked for, the type of agency they worked for if not a health department, and their relationship with the local health department if a state health department or agency. We also collected demographic information regarding the city and state they were located in. In addition, I matched state responses to their corresponding Title V Maternal and Child Health Block Grant Regions to provide a brief snapshot of MCHB representation.

Workforce Impact

In our efforts to measure the impact of COVID-19 on the maternal and child health workforce, we asked the representative what proportion of their MCH staff had been removed from their regular duties and reassigned to COVID duties in their organization and provided an opportunity for them to elaborate on their response in an open comment textbox. We then followed that question with inquiring on if the MCH staff have returned to carrying out their MCH duties, and allowed them to elaborate on their response in an open comment textbox. Finally, we asked the representative if they anticipated their MCH staff in their organization to return to pre-COVID numbers and capacity both within the short-term (within the next 12 months) and the long-term (beyond 12 months), and again allowed them to elaborate on their responses in an open comment textbox.

Impact on Delivery of MCH Services

The final questions in our assessment evaluated the impacts of COVID-19 on the ability to deliver MCH services. We asked respondents how COVID *positively* affected their ability to deliver

MCH services including: everything we do is virtual; we do some virtual and some in-person activities with safety precautions; we were able to expand the reach of our services; we increased attendance and engagement; we created a new mode of delivering the same services; we streamlined the provision of services; staff capacity to provide services remained more or less the same; we were able to increase the quality of services rendered; shifted focus from the more traditional MCH needs to COVID-specific needs (e.g. seeing the need for masks and sanitizer instead of pack-and-plays). We also asked respondents how COVID *negatively* affected their ability to deliver MCH services including: everything we do is virtual; attendance and engagement decreased, diminished capacity to provide the same services due to less staff; services rendered were/are delayed (e.g. canceled and rescheduled appointments for later date, follow-up is delayed, provision of goods is delayed); reduction in quality of services rendered; unable to find alternate ways to meet with clients (e.g. virtual video chatting not an option, unable to find time, etc.); unable to carry our key components of services (e.g. seeing the home during traditional home visit); shifted focus from more traditional MCH needs to COVID-specific needs (seeing the need for masks and sanitizer instead of pack-and-plays); complete cancellation of services; increased difficulty engaging with community members (i.e. the general public we serve). Respondents were then provided with an opportunity to expand upon their responses to these two questions, especially if they indicated a reduction in quality of services provided or changes in key components of services, as well as any other ways COVID impacted their ability to deliver MCH services. Next, respondents were asked to provide comments on their concerns about MCH outcomes due to short- and long-term impacts of COVID. Finally, respondents were asked to provide comments on what they anticipate for emerging MCH outcomes or needs due to short- and long-term impacts of COVID. At the end of the assessment, there was an opportunity to leave us with any final comments or to further elaborate on any of the topics mentioned in the assessment.

Analysis Procedures

The analysis procedure was completed using RedCAP's *Data Exports, Reports, and Stats* function. This online platform also provides automated export procedures for data analysis and can produce data export files available to download for common statistical packages such as Microsoft Excel, SPSS, SAS, Stata, and R. Due to the simplicity of the data, analysis was conducted solely using RedCAP and exporting the data into an Excel file for analysis. Data was organized by each question and condensed into either percentages or grouped by response counts and frequencies. Additional analysis was performed to include state counts and MCHB Title V Maternal and Child Health Block Grant Region counts for displaying representation. Finally, the open comment responses were then analyzed through thematic analysis to identify themes and categories for this report.

Chapter 4 – Results

The results of the *CityMatCH MCH Workforce Scan on COVID* are presented below in four sections: 1) health department demographics; 2) MCH workforce impacts; 3) provision of MCH services impacts; and 4) major findings in the respondents' comments on ability to conduct MCH services, concerns about MCH outcomes, emerging MCH outcomes or needs, and final comments. Responses are presented with figures and tables including rates and counts, in addition to discussion on the themes coded from thematic analysis of the open comment responses.

Health Department Demographics

Basic demographics of the workforce assessment respondents were collected. We asked respondents what type of health department they worked for (Figure 1) and the city/county and state they work in, which has been presented in a map based on state representation (Figure 2). Additionally, city/county and state data were analyzed and matched to the corresponding Title V Maternal and Child Health Block Grant Region (Table 2) to capture representation for MCHB. The basic demographics for the respondents are provided below.

Figure 1.

Type of health department respondents work for. 38 respondents (74.5%) work for a local (city/county) health department and 13 respondents (25.5%) work for a state health department.

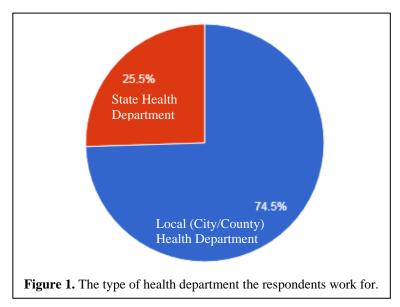


Figure 2.

Map of state representation of respondents. States highlighted in green indicate at least one response from a health department representative. In total, 25 different states were reported in our results.

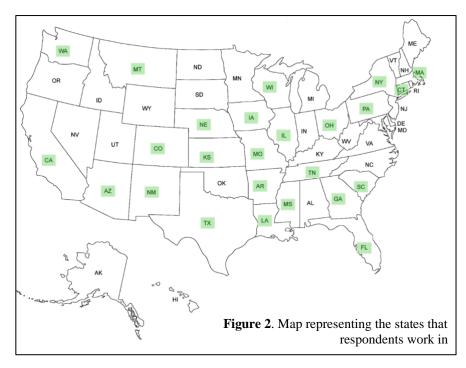


Table 2.

Title V Maternal and Child Health Block Grant Region:	Count of responses from each region:
Region 1	2
Region 2	2
Region 3	4
Region 4	6
Region 5	7
Region 6	10
Region 7	5
Region 8	5
Region 9	12
Region 10	2

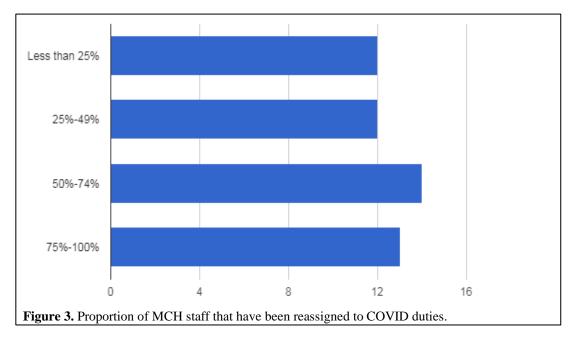
MCHB Title V MCH Block Grant Regions Represented

MCH Workforce Impacts

Respondents were asked what proportion of MCH staff have been removed from their regular MCH duties and reassigned to COVID duties (Table 3), what proportion of those staff have returned to their MCH duties (Table 4), and if they anticipate if their staff will return to pre-COVID numbers and capacity both in the short-term (Figure 3) and the long-term (Figure 4). Results for the impacts on the MCH workforce are presented in the following section with major findings from the respondents' open comments discussed.

Figure 3.

The proportion of MCH staff within respondents' organization that have been removed from their regular duties and reassigned to COVID duties.



We asked respondents to elaborate on their responses to the previous question, "During the COVID pandemic, what proportion of MCH staff have been removed from their regular duties and reassigned to COVID duties in your organization?" Over half of respondents indicated that 50% or more of their MCH staff had been reassigned. Further comments shared by the respondents included: "all hands on COVID deck;" "100% were assigned to COVID response"; "everyone is on standby"; "almost all have added some COVID duties to their workday and/or work nights or weekends"; "majority of our [MCH] division are nurses, so we were impacted greatly"; and "staff are working on COVID *and* programmatic requirements, most staff are working at least hours overtime weekly". A second theme identified among responses to this question were the impacts of staff who were not reassigned. For example, one respondent stated, "remaining staff duties have shifted in response to the pandemic, providing guidance to local contractors on their COVID response at times." Other comments included: "Most are only doing COVID 50% of the time or less to maintain MCH programs"; "As we hired more staff, many redeployed staff returned to their MCH roles"; and "Other staff remained in Continuity of Operations (COOP) which

were modified for pandemic conditions". Many respondents noted that their public health nurses were significantly impacted and if not all, a majority, were deployed from their MCH roles. Finally, numerous respondents noted their experience with services being suspended as needed, high turnover due to their epidemiologists taking new positions with COVID response organizations, and for some, the only MCH services that have been able to continue are those that are contracted out for those services.

Table 4.

100% still with COVID duties

The proportion of mon staff minin respondents of gandanon mar nave retained to men mon danes.		
Proportion of MCH Staff that have returned to their MCH duties:	Percent	
100% back to MCH duties	13.7%	
Most of their time is back to MCH	35.3%	
Splitting time evenly between COVID and MCH	19.6%	
Most of their time still with COVID duties	21.6%	

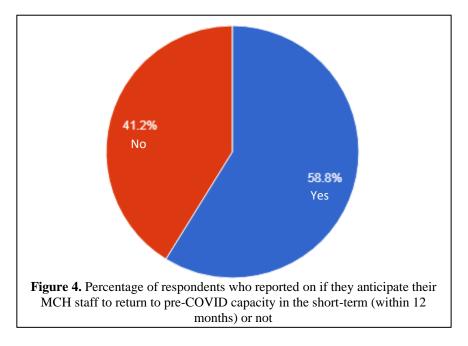
9.8%

The proportion of MCH staff within respondents' organization that have returned to their MCH duties.

We asked respondents to elaborate on their responses to the previous question, "Have MCH staff returned to carrying out their MCH duties?" Three major themes were pulled from the respondents' comments to this question. Nearly half of respondents noted that their staff were either 100% back to MCH duties or most of their time is back to MCH. However, nearly 41% of respondents noted that their MCH staff were either splitting their duties evenly between COVID and MCH, or that they are still spending most of their time with COVID duties. Comments from this theme include: "with pandemic modifications;" "volunteer to work overtime to assist with COVID;" "for those still working COVID, it is in addition to their MCH duties;" "public health nurses still rotating through discharge planning roles, 6 staff work as contact tracers for a year, management staff working in DOC and other COVID support roles"; and "they were back (to MCH) but are back to COVID now". Unfortunately, a third theme was found regarding the reduction in capacity of staff, which included staff have been permanently reassigned, their organization has lost staff positions, or that returning to MCH duties remains a low priority. Respondents shared that "with the surge, COVID time is increasing for all MCAH staff;" "MCH is not high priority and most of staff has been reassigned to COVID work;" "some were returned to programs, but then many quit the local health department;" "there are staff that are on long-term reassignment to the COVID division that may be there until COVID is no longer;" and "I get 8 hours per week for MCH when COVID duties allow".

Figure 4.

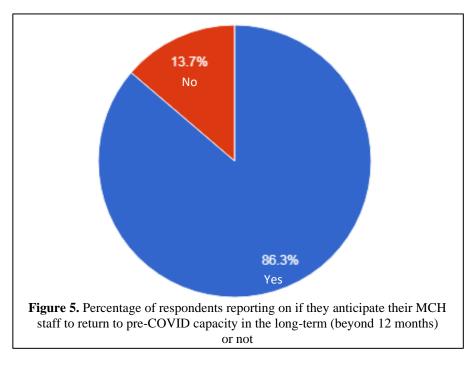
Percentage of respondents who anticipate that their MCH staff in their organization will return to pre-COVID numbers and capacity within the next 12 months. Out of 51 respondents, 30 (58.8%) said "yes" and 21 (41.2%) said "no".



In responding to the question, "Do you anticipate that the MCH staff in your organization will return to pre-COVID numbers and capacity within the next 12 months" 30 respondents said "yes" and 16 provided us with further comments on their response. Although more respondents indicated that they anticipated that their staff were expected to return to pre-COVID numbers than not, many of their comments were conditional and only "hopeful." For example, some comments included: "Caveat, they can be redirected at any time;" "If the vaccine is effective;" "That is the hope but uncertain due to surging numbers;" and "with Pandemic modifications, as applicable." In responding to the same question, 21 respondents said "no" and 15 provided us with further comments on their response. Many respondents still have concerns regarding their ability to return to pre-COVID staff numbers and capacity and expressed their concerns in the comments. Their comments included: "It is very unpredictable, but we are anticipating the needing to get staff to do COVID related duties if no funding is received prior to 2021"; "Partially, yes, but entirely, absolutely not"; "Not 100% but perhaps, 75-80% to capacity"; and "Staff will return, but we've lost a number of positions due to the economic downturn and impact on county revenues."

Figure 5.

Percentage of respondents who anticipate that their MCH staff in their organization will return to pre-COVID numbers and capacity in the long-term (beyond 12 months). Out of 51 respondents, 44 (86.3%) said "yes" and 7 (13.7%) said "no" on whether they anticipate their MCH staff to return to pre-COVID numbers and capacity in the long-term within their organization.



Out of the 44 respondents who indicated that they anticipate their staff to return to pre-COVID numbers and capacity in the long-term (beyond 12 months), 12 provided comments with their answers. Many indicated contingency on their staff's return based on the number of COVID cases. Additionally, many respondents indicated yes because they were "hopeful" for the upcoming vaccine distribution.

On the other hand, seven respondents indicated that they still do not anticipate that their staff will return to pre-COVID numbers and capacity in the long-term. Each of these seven respondents provided comments including: "Economic challenges leading to position reductions"; "Budget impact at the local level will impact MCH staffing"; "This has caused us to restructure the program"; "I am concerned about the sustainability of funding with COVID's impact (grant funding, local tax levy dollars, etc.)"; " Same as above (We have had a changeover in government and legislature and anticipate hiring freezes that would prevent us from rehiring vacancies)"; "Honestly I am not sure at this point as we do not know the new direction our new leadership plans on taking us"; and "I am hopeful that with a vaccine, the numbers and the spread will decline". A major theme in these responses is the concern for funding and economic implications that will prevent their staff from returning to pre-COVID numbers and capacity.

Provision of MCH Services Impacts

Respondents were asked how COVID positively (Table 5) and negatively (Table 6) affected their ability to deliver MCH services and asked to check all that applied to their service provision. Results for each of these questions are provided below.

Table 5.

How has COVID *positively* impacted your ability to deliver MCH services:	Percent
Everything we do is virtual	41.2%
We do some virtual and some in-person activities with safety precautions	51.0%
We were able to expand the reach of our services	31.4%
We increased attendance and engagement	33.3%
We created new mode of delivering the same services	68.6%
We streamlined the provision of services	37.3%
Staff capacity to provide services remained more or less the same	15.7%

How COVID positively impacted the respondents' ability to deliver MCH services. Respondents were asked to check all that applied to their organization.

We were able to increase the quality of services rendered	11.8%
Shifted focus from more traditional MCH needs to COVID- specific needs (e.g., seeing the need for masks and sanitizer instead of pack-and-plays)	31.4%

Among these responses, the top three positive impacts, in order, were: we created a new mode of

delivering the same services, we do some virtual and some in-person activities with precautions, and

everything we do is virtual.

Table 6.

How COVID negatively impacted the respondents' ability to deliver MCH services. Respondents were asked to check all that applied to their organization.

How has COVID *negatively* impacted your ability to deliver MCH services:	Percent
Everything we do is virtual	33.3%
Attendance and engagement decreased	45.1%
Diminished capacity to provide the same services due to less staff	54.9%
Services rendered were/are delayed (e.g., canceled and rescheduled appointments for later date, follow-up is delayed, provision of goods is delayed)	60.8%
Reduction in quality of services rendered	37.3%
Unable to find alternate ways to meet with clients (e.g., virtual video chatting not an option, unable to find time, etc.)	15.7%
Unable to carry out key components of services (e.g. seeing the home during a traditional home visit)	70.6%
Shifted focus from more traditional MCH needs to COVID- specific needs (e.g. seeing the need for masks and sanitizer instead of pack-and-plays)	35.3%
Complete cancellation of certain services	39.2%
Increased difficulty engaging with community members (i.e., the general public, people we serve)	62.7%

Among these responses, the top three impacts that respondents indicated that negatively impacted their ability to deliver MCH services, in order, were: unable to carry out key components of services (e.g., seeing the home during a traditional home-visit), increased difficulty engaging with community members (i.e. the general public, people we service), and services rendered were/are delayed (e.g. canceled and rescheduled appointments for later date, follow-up is delayed, provision of goods is delayed). It is also important to note that the fourth highest negative impact was their diminished capacity to provide the same services due to less staff, with over half of respondents indicating this impact.

Major Findings - Respondents' Comments on Ability to Conduct MCH Services, Concerns about MCH Outcomes, Emerging MCH Outcomes or Needs, and Final Comments.

Following these two questions, respondents were then asked to respond to four open-ended questions in an open comment textbox. The four prompts were: "Please expand upon your responses to the last two questions, especially if you indicated a reduction in quality of services or changes in key components of service. Please also share any other ways COVID has affected your ability to deliver MCH services, positively or negatively;" "Thinking about the short- and long-term impacts of COVID, what concerns, if any, do you have about MCH outcomes?;" "Thinking about the short- and long-term impacts of COVID, what if any, do you anticipate for emerging MCH outcomes or needs?;" and "Please elaborate on any of the topics mentioned in the scan or add additional comments." Thematic analysis was used to code and organize the results of the open comments to present major themes in the responses. Major findings and themes are discussed in the following sections.

Measuring the Impact of COVID on Their Ability to Conduct MCH Services.

Respondents were asked to comment on their ability to conduct MCH services. The first identified theme was the negative impacts of COVID on their ability to deliver services. Respondents expressed their challenges with delivering services including difficulties in: achieving the same level of engagement and impact of services; the ability to build and maintain relationships with clients especially if they began after COVID; retention of clients; reduced ability to do adequate in-home assessments; and lacking collaboration between normal partners as each organization is overwhelmed.

Second, their organization's ability to deliver services is heavily reliant on the capacity of their staff. Among the respondents' comments were the proportion of their staff that have been reassigned;

many MCH staff members who were working in core MCH programs have resigned and/or retired; unable to fill staff vacancies due to nurse shortages; inability to fill vacant positions due to budget challenges; and overall staff are experiencing increased stress, virtual fatigue, and burnout while trying to balance MCH and COVID duties. Respondents also noted that they anticipate additional duties for their staff with the upcoming need of vaccine distribution. Prenatal, labor and delivery, and newborn services were also named, alongside home-visiting services, as being significantly impacted, delayed, or halted.

The virtual delivery of services was identified as a third theme. Respondents reported difficulties in ability to assess family situations; delivering school-based services as schools switched to remote learning; client's willingness/ability to disclose important confidential information virtually; and clients not having access to reliable internet or equipment to receive virtual services.

Despite the number of challenges that many respondents faced during the COVID pandemic, there were many positives shared in their responses. Positive impacts that have risen from the pandemic include: working with new partners from minority populations and refugee/immigrant sectors; the Black Infant Health virtual platform has allowed for more women to attend and will likely continue to offer virtual attendance; ability to provide supportive services and resource linkages; implemented several quality improvement strategies, streamlined services for organization; and some have seen an increase in attendance for some clients as convenience has increased.

Concerns about MCH Outcomes Due to the Short- and Long-term Impacts of COVID

Respondents were asked to comment on their concerns about MCH outcomes due to the shortand long-term impacts of COVID. Overwhelmingly respondents marked mental health and related issues as their concern. Comments included: increased need for mental health; adolescent suicide; impacts on social emotional well-being; exacerbation of anxiety, depression, isolation, and parental stress; increased ACEs; increased allostatic loads particularly for African American families; generational impacts (biologically, socially, epigenetically); and the impacts of trauma from this pandemic. Out of 49 open comments, 24 noted mental health and related issues such as ACEs, trauma, or increased stress as their concern about MCH outcomes. In relation to mental health, substance use was commonly noted as a concern for MCH outcomes, too.

Second to mental health concerns, nearly half of the respondents commented on their concerns for MCH outcomes regarding funding sustainability; decreased budgets; difficulty in meeting grant and contract deliverables; staff burnout and retention issues; and the challenge of finding balance between COVID duties and MCH duties. Additionally, these respondents commented on their concerns regarding access to services, delivery of services, and related challenges. Comments on service provision impacts on MCH outcomes included: challenges on tracking individuals due to pandemic conditions, decreased participation in WIC; decreased access to Medicaid enrollment; in-person testing and screenings falling behind for services such as lead testing and immunizations; decreased use for preventative services for children and adults; reduction in number of referrals from partner organizations, and delay in/inability to receive health care and PH services. Concern for safety was also noted about when in-person services do return.

A dozen respondents stated concerns for outcomes related to reproductive health or services. For example, multiple comments noted that prenatal, newborn, and well-child visits have decreased. Respondents also marked that they are experiencing or anticipate higher pre-term births. Comments on reduced access to pregnancy testing and family planning services were made, as well as concerns for an increase in unintended pregnancies.

Following these major themes, multiple other themes of concern were found in reviewing the respondents' comments. First, the economic impacts on MCH outcomes were expressed numerous times including financial stability, decreased housing stock, and anticipated growth in economic inequities. Social determinants of health were noted, too, including increased poverty, joblessness, housing crisis, evictions, access to safe transportation, food insecurity, and public funding cuts. Education, especially for children, was a reoccurring concern found in the responses. Another theme that was found was concern for increase in violence ranging from increased gun violence, child abuse, domestic violence, and intimate

partner violence. Finally, there was concern expressed about a decrease in childhood immunization rates and both the short and long-term impacts that will have on MCH outcomes.

What they Anticipate for Emerging MCH Outcomes or Needs Due to the Short- and Long-term Impacts of COVID

Respondents were asked, "Thinking about the short- and long-term impacts of COVID, what, if any, do you anticipate for *emerging* MCH outcomes or needs?" Out of 51 total respondents 49 left comments on what they anticipated for emerging MCH outcomes or needs. Six major themes were drawn from the open comments' analysis.

Four major themes were identified that were related to the MCH workforce and service provision: challenges or changes to MCH service provision; concerns for the MCH workforce capacity and emerging duties of the workforce; use of telehealth for delivery of services; and funding sources, including the policies outlining the use of those funding sources.

Two major themes directly related to the populations served and MCH outcomes were identified: increased capacity and support for mental health and related issues such as substance use, trauma, isolation, violence, and social emotional well-being; and heightened disparities and inequities in MCH outcomes.

Many additional comments were made that fell outside of these categories including: impact on foster care, the need to restore confidence in medical systems, food insecurity, housing, education and educational gaps, unemployment continuing to increase, impacts of virtual learning, decreased rates of health insurance, overall lack of access to care, prenatal and newborn development impacts, delays in bonding and attachments between mothers and babies due to COVID infection, among others.

Final Comments on Any of the Topics Mentioned in the Scan and any Additional Comments.

At the end of the survey, respondents were provided with an opportunity to leave final comments on any of the mentioned topics in the scan, or any additional comments. Three major themes were pulled from their comments. First, comments on the challenges and/or barriers they or MCH faced during the pandemic; second, what they anticipate for the future about MCH outcomes and/or the workforce; and third, comments on the needs of and recommendations to consider for the future of MCH and the workforce.

Respondents shared additional challenges that they faced during the COVID pandemic including projects stalling; unable to follow-up with families due to 80% of [MCH] staff being deployed; persistent health disparities for communities of color and impacts of COVID-19 following the same patterns; and proposed benefits for staff were rejected by administration. Multiple respondents commented on what they anticipate for the future of MCH including: staff morale and shortages having a sustained impact; a growing concern for MCH workforce, such as the pandemic driving up retirements and discouraging new entries into field; and a large concern for MCH funding amidst competing needs. Finally, respondents shared their comments on what the needs of MCH are including the need for a greater emphasis on the Well Woman Visit and a discussion about including MCH populations and programs in future emergency preparedness planning and debrief roles that some MCH programs played and the salience of MCH skills and relationships for effective public safety. Respondents also left recommendations to consider for the future, such as: any funding directed to core public health staff on the front lines will help sustain staffing, explore technological advances for virtual monitoring of pregnant women (i.e. blood pressure monitors, fetal monitors, etc.); consider adopting the "catching up" immunization platform for those age 16; provide opportunities for funding and program development for people of color; create new systems led by communities of color; and consider how the benefits of remote work can be integrated into future MCH work.

Chapter 5 – Discussion

The discussion chapter will provide a summary of the major findings of the *CityMatCH MCH Workforce Scan on the Impacts of COVID* assessment. Second, strengths and limitations of our assessment will be discussed. These will be followed by recommendations based on the desired outcomes of the assessment and the findings of the assessment. Resource implications will also be noted to inform recommendations and, finally, next steps will be outlined.

Summary

The COVID-19 pandemic significantly impacted the MCH workforce and their ability to deliver services. First, nearly half of the responding health departments experienced at least 50% of their MCH staff, or more, being removed from their MCH duties and reassigned to COVID duties. In addition, nearly 40% of respondents (38.2%) do not anticipate that their MCH staff will return to pre-COVID numbers and capacity within the next 12 months. These high levels of reassignments and uncertainty of MCH staff returning to their MCH duties is concerning due to the increased need for MCH services, leaving the field with weakened capacity to meet those needs. Moreover, 70% of respondents were unable to carry out key components of services, 61.8% reported increased difficulty engaging with community members, and 58.2% reported that services rendered were/are delayed. These rates showcase the need for awareness of, and, more importantly, the need to strategize our response to the long-term ripple effects of the pandemic and its impact on both MCH populations and the public health infrastructure. On a positive note, respondents did report that the pandemic positively impacted their ability to create a new mode of delivering the same services (70.9%), ability to do some services virtual and some in-person activities with safety precautions (50.9%), and now everything they do is virtual (40%). These positive experiences affirm the potential of innovative strategies in delivering MCH services in the future.

Major themes were also identified regarding the impacts of COVID. In responding to measuring the impact on their ability to conduct MCH services, the major themes drawn from their comments

included: challenges in delivering services, capacity of their staff, virtual delivery of services, and notable positive experiences. In responding to their concerns about MCH outcomes due to the impacts of COVID, the major themes were: mental health and related issues; sustainability, funding, budgets, staff burnout and retention issues; and the future of service provision. In responding to what they anticipate for emerging MCH outcomes, the major themes were: challenges or changes to MCH service provision; concerns for the MCH workforce capacity and emerging duties of the workforce; use of telehealth for delivery of services; funding sources and their policies; increased capacity and support for mental health and related issues such as substance use, trauma, isolation, violence, and social emotional well-being; and heightened disparities and inequities in MCH outcomes.

After analyzing the results of the assessment, I found the concern for mental health implications and the future of our MCH workforce to be overwhelming. The impacts on our mothers, children, and families' mental health will be long-lasting. Prior to the pandemic, mental health was a growing concern for each of these populations, and the pandemic has only exacerbated this concern. In conjunction with the increased demand to respond to the mental health needs of our target populations, the concern for our own workforce's mental health has increased. Staff are experiencing high rates of stress, virtual fatigue, lack of work-life balance, and burnout, which may lead them to walking away from the field entirely. However, low retention of our current MCH workforce is only one component of the major concern for the future of our workforce. The future capacity of our workforce is also contingent on funding, the full return of service provision, and improving MCH outcomes – which have all been negatively impacted by the pandemic. The calls to action have been provided by our local and state health departments through their responses to this assessment and, moving forward, CityMatCH and MCHB have an opportunity to respond to these calls to overcome the impacts of the COVID-19 pandemic and to further the field of maternal and child health's mission.

Strengths and Limitations

Strengths and limitations both exist for this online assessment. To begin, a major strength of this program assessment is the strong relationship and trust that CityMatCH has built both with the Maternal Child Health Bureau and their member public health departments. This fostered honest and informative responses in the assessment. Second, although there was an invitation to complete the assessment to a large number (671) of public health representatives, when comparing to our current CityMatCH membership of 170 urban health departments, the survey response rate was 30% (51 responses). This is comparable to previous online assessments and evaluations conducted. In addition, there was representation from all 10 MCHB Title V Maternal Child Health Block Grant Regions in our data.

Our largest limitation was present in our data collection. In our attempt to capture the impacts of COVID-19 from urban health departments, the response rate was low from our initial wave of invitations to complete the assessment. CityMatCH utilized email as the mode of invitation and distribution. Email may have prevented us from reaching a larger number of respondents considering the virtual environment many of our members are still working in and are overwhelmed with. Considering additional modes of communication, distribution, and collection should be considered.

Recommendations

It is recommended that CityMatCH continues their mission in strengthening public health leaders and organizations to promote equity and improve the health of urban women, families and communities through advocacy, technical assistance, connections, and communication.

First, it is recommended that CityMatCH advocates for secured budgets and increased funding for MCH programs in the short and long-term. Sustained investment in these programs will help mitigate the impacts of COVID-19 on our populations. Advocacy for CityMatCH looks like sharing these results with major funders and partners, specifically the Maternal and Child Health Bureau.

As technical assistance (TA) continues to be a core function of CityMatCH, it is recommended to continue to provide this service to health departments who need assistance with workforce training and development. Though, in conjunction to this recommendation, CityMatCH should utilize the needs of the MCH workforce, and their recommendations outlined in these results to craft innovative strategies with health departments to address concerns about current and emerging MCH outcomes and needs.

Next, it is recommended for CityMatCH to continue to serve as the connector between health departments. This includes CityMatCH connecting with each health department and, more importantly, connecting health departments with each other. The continuation of delivering learning opportunities and collaboratives; trainings; and other educational and programmatic resources offered by member public health departments is a crucial component in fostering a strong network for peer-to-peer learning among members.

Finally, updating and improving communication with member health departments will be further discussed in the next section. However, it is recommended that CityMatCH dedicate time to curate and update their list of current membership with their representatives' contact information, including email but expanding to different modes of communication. By routinely updating this list, it will improve response rates for future assessments.

Resource Implications

Our major resource implication was our list of contacts for data collection. CityMatCH utilizes multiple electronic mailing lists from our communication platform, Constant Contact, and a previous working document from a former project coordinator. Once the assessment was distributed to these electronic mailing lists, many emails were returned, signaling that they were no longer current, and delivery had failed. Updating this list on a regular basis, with additional contact information and communication preferences, could strengthen this resource for future data collection projects.

Dissemination plan

Results from this workforce assessment will be presented in both a written report and an oral presentation to my capstone committee and College of Public Health faculty, staff, and students who have been extended an invitation to attend. Chapter 4 *Results* and Chapter 5 *Discussion* will be shared with CityMatCH internally to guide their work on aligning the needs identified by the MCH workforce to the deliverables in their cooperative agreement with MCHB. Finally, Chapter 4 *Results* in its entirety will be shared with MCHB to inform them of the MCH workforce needs, impacts on MCH service provision, anticipated short- and long-term impacts on MCH outcomes, and identified emerging needs and MCH outcomes from COVID-19 impacts.

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Appendix

Confidential

CityMatCH MCH Workforce Scan on the Impacts of $\textbf{COVID}^{\texttt{Page 1}}$

Please respond to the questions below regarding the impact of COVID on your organization's workforce and service provision. The responses will help us gain an understanding of on-the-ground experiences during the pandemic. Thank you for your time!

What type of health department do you work for?	 Local (City/County) State Other
Please describe your health department or organization type.	
What is your relationship with the local health department? (Please put NA if there is no local health department)	
In what city/county and state do you work?	
During the COVID pandemic, what proportion of MCH staff have been removed from their regular duties and reassigned to COVID duties in your organization?	 ○ Less than 25% ○ 25%-49% ○ 50%-74% ○ 75%-100%
Please elaborate upon your response to the previous question with any details you wish to provide.	
Have MCH staff returned to carrying out their MCH duties?	 100% back to MCH duties Most of their time is back to MCH Splitting time evenly between COVID and MCH Most of their time still with COVID duties 100% still with COVID duties
Please elaborate upon your response to the previous question with any details you wish to provide.	
Do you anticipate that the MCH staff in your organization will return to pre-COVID numbers and capacity within the next 12 months?	⊖ Yes ⊖ No
Please elaborate upon your response to the previous question with any details you wish to provide.	
Do you anticipate that the MCH staff in your organization will return to pre-COVID numbers and capacity for the long-term (beyond 12 months)?	⊖ Yes ⊖ No
Please elaborate upon your response to the previous question with any details you wish to provide.	

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How has COVID *positively* affected your ability to deliver MCH services? Check ALL that apply.

Everything we do is virtual

- We do some virtual and some in-person activities with safety precautions
 We were able to expand the reach of our services
 We increased attendance and engagement

- We created new mode of delivering the same services
 We streamlined the provision of services
 Staff capacity to provide services remained more or less the same
- We were able to increase the quality of services rendered
- Shifted focus from more traditional MCH needs to COVID-specific needs (e.g. seeing the need for masks and sanitizer instead of pack-and-plays)

How has COVID *negatively* affected your ability to deliver MCH services? Check ALL that apply.

- Everything we do is virtual
 Attendance and engagement decreased
- Diminished capacity to provide the same services due to less staff
 Services rendered were/are delayed (e.g. canceled and rescheduled appointments for later date, follow-up is delayed, provision of goods is delayed)
- Reduction in quality of services rendered
 Unable to find alternate ways to meet with clients (e.g. virtual video chatting not an option, unable to find time, etc)
- Unable to carry out key components of services (e.g. seeing the home during a traditional home visit)
 Shifted focus from more traditional MCH needs to COVID-specific needs (e.g. seeing the need for masks and sanitizer instead of pack-and-plays)
- Complete cancellation of certain services
- Increased difficulty engaging with community members (i.e. the general public, people we serve)

Please expand upon your responses to the last two questions, especially if you indicated a reduction in quality of services provided or changes in key components of service.

Please also share any other ways COVID has affected your ability to deliver MCH service, positively or negatively.

Thinking about the short- and long-term impacts of COVID, what concerns, if any, do you have about MCH outcomes?

Thinking about the short- and long-term impacts of COVID, what, if any, do you anticipate for *emerging* MCH outcomes or needs?

Please elaborate on any of the topics mentioned in the scan or add additional comments.



Biography & CV

Ashleigh Sutphen is a Master of Public Health student at the University of Nebraska Medical Center, College of Public Health. She has a Bachelor of Science in Public Administration from the University of Nebraska at Kearney. Ashleigh was a Public Health Early Admission Student Track (PHEAST) scholar, awarded by the College of Public Health in 2017. Her work experience includes serving as a part-time and full-time wellness coordinator at a local non-profit for over three years, and most recently serving as a graduate project assistant for a national maternal and child health organization at the University of Nebraska Medical Center for one and a half years. In her personal life, she enjoys spending time with her family and closest friends, drinking local coffee, and traveling to Colorado to enjoy the Rockies.

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OBJECTIVE

To utilize my education, training, and skills to improve the health of mothers, children, and families.

EDUCATION

Master of Public Health Maternal and Child Health UNMC College of Public Health, Omaha, NE Graduated: Expected, May 2021 Current GPA: 3.9

WORK EXPERIENCE

Public Health Project Assistant, CityMatCH

- Support CityLeaders through coordination of cohort meetings, resource sharing, and quarterly education and training.
- Facilitate the planning and coordination of the annual Training Course in MCH Epidemiology for 45 epidemiologists.
- Assist with the following internal projects: CityMatCH Board meetings, CityMatCH annual conference, website communications, evaluation of projects and training.

Wellness Coordinator, Buffalo County Community Partners

- Facilitated four community coalitions aimed at improving physical wellness.
- Provided administrative support for three internal organization committees.
- Assisted in grant writing and reporting.
- Conducted a sidewalk audit for the village of Pleasanton, Nebraska.
- Collaborated with Two Rivers Public Health Department in monitoring health outcomes identified in the Community Health Needs Assessments.
- Directed six Diabetes Worksite Screening Fairs
- Oversaw the logic model and deliverables for the Be Well Buffalo County Collaborative.
- Aided in the revision of the Adult Status Questionnaire to monitor the health status of Buffalo County adult residents on an annual basis.
- Coordinated the Kearney Area Nebraska Sports Council Olympic Torch Run

AWARDS AND ACTIVITIES

Treasurer: College of Public Health Student Association

PHEAST: University of Nebraska Medical Center

SKILLS

Communication Organization Volunteer networking Time management Strategy development

Capacity building Certifications: CITI Certified Software: Microsoft Office, Outlook, SurveyMonkey, REDCAP, WordPress

10/ 2019 - Present

University of Nebraska at Kearney, Kearney, NE Graduated:

Bachelor of Science

May 2019

Public Administration

Honorable Mention GPA: 3.6

02/2016 - 07/2019

Pi Sigma Alpha: The National Political Science Honor Society Gold Torch Society

Application of Public Health Competencies

At the center of the capstone project for Master of Public Health students is the application of foundational public health and concentration specific competencies. Preparing for and successfully applying these competencies strengthens the skills of MPH students and provides practical experience that will be needed as the student enters the field. Upon completion of this capstone experience, two public health foundational competencies and two maternal and child health concentration competencies have been identified, applied, and strengthened throughout this project.

First, underneath the *Planning and Management to Promote Health* public health competencies, "Assess population needs, assets and capacities that affect communities' health" was integrated into the capstone project. The selected population is the maternal and child health workforce, and the intent of the workforce assessment was to assess the needs, assets, and capacity of the MCH workforce during the COVID-19 pandemic. Second, underneath the *Evidence-based Approaches to Public Health* set of competencies, an integral step in the capstone project was to "analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate." The data analysis procedures challenged me to learn a new data capturing system, RedCAP, and to utilize skills in biostatistics and applied researched methods, specifically qualitative research. Through thematic analysis.

In addition, two competencies within the maternal and child health concentration were incorporated into the capstone project. The first maternal and child health competency included was, "Examine the historical development of MCH public policies and practices in the US for federal state and local agencies and programs serving MCH populations and analyze the current gaps in MCH services and programs." In conducting the literature review and researching the background of CityMatCH and the Maternal and Child Health Bureau, I was able to gain an understanding of the historical development of key MCH programs, infrastructure, funding, and efforts to identify gaps in MCH services. This competency was directly integrated into the purpose of the assessment, identifying the gaps and needs of MCH services due to COVID-19. The fourth competency that was integrated, and a key component of the capstone project, was the maternal and child health competency, "Identify the key public health issues for MCH populations at the local, state, national and global levels." Though the workforce assessment provided us with primarily local and state data, with the representation of local and state health departments across the nation, the information provided us with significant insight that reflect the national impact as well.