



ISSUE BRIEF

The Massachusetts Health Policy Forum

Protecting Public Health and Preparing for the Next Pandemic

Wednesday, January 26, 2022

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Executive Summary

Local public health departments carry significant and increasing responsibilities in the Commonwealth. However, there is wide variation in local health departments' capacity to meet growing public health needs and a relative lack of infrastructure to support them. The 351 local public health departments in Massachusetts are tasked with meeting their municipalities' public health needs in several key domains: monitoring the health status of the population; determining and addressing threats to population health; providing the public with health-related information; creating policy that addresses health issues, including through legal and regulatory actions; ensuring equitable access to health care services; supporting a diverse public health workforce; undertaking evaluation, research and quality improvement; and developing and sustaining public health infrastructure. A Special Commission on Local and Regional Public Health was convened in 2016 to investigate and develop recommendations for improving the local public health system in Massachusetts. The resulting report, *Blueprint for Public Health Excellence Recommendations for Improved Effectiveness and Efficiency of Local Public Health Protections*, prompted the State Action for Public Health Excellence (SAPHE 1.0) legislation to be signed into law in April 2020. SAPHE 1.0, which was intended to be a 'first steps' piece of legislation, created a system of state-funded grants and trainings that aimed to support local public health departments' efforts to meet their communities' needs. The COVID-19 pandemic accelerated drafting of legislation currently under consideration, SAPHE 2.0, which aims to address ongoing gaps by:

- **Ensuring minimum public health standards for every community,**
- **Increasing capacity and effectiveness by encouraging municipalities to share services,**
- **Creating a uniform data collection and reporting system, and**
- **Establishing a sustainable state funding mechanism to support local boards of health and health departments**

A review of efforts by other states suggests that state-level mandates for public health standards have generally increased accreditation rates for local health departments. The successful mandates have been supported by state funding, staffing, and by provision of resources to local health departments. Voluntary models' success has been directly tied to the resources and incentives provided by the state, such as increasing funding for accredited boards, only funding boards with full-time staff, or creating funding structures for counties rather than towns. Currently, the Massachusetts model utilizes a competitive grant-based system. Additional strategies that have proven successful in other states that were seeking to

improve local public health infrastructure included cross-jurisdictional sharing, implementation of annual performance reporting, workforce credentialing support, and increasing performance-based funding.

Recommendations based on the research conducted for this policy brief include:

- Enact further comprehensive public health legislation building off of SAPHE 1.0
- Use a needs-based funding formula to disburse state funds to local health departments
- Provide matched or guaranteed state funding to incentivize excellence
- Establish pathways to local public health careers and continuing education

Introduction

The Commonwealth of Massachusetts is recognized as a leader in both health care innovation and public health vision. In 1799, the first board of health and health department in the United States was formed in Boston, with Paul Revere as its first health officer.¹ Massachusetts was an early leader in smallpox vaccination and in collecting vital statistics and other health-related data. Today, however, the Commonwealth is an outlier in a different way: the local public health system is one of the most decentralized in the nation. The local public health system in Massachusetts is comprised of 351 independent municipal public health departments. The municipality-based highly decentralized system in Massachusetts is almost entirely funded by town or city property taxes. This approach has contributed to extensive variation in local public health capacity to meet the needs of communities. While larger, wealthier municipalities may flourish, smaller, rural, poorer areas fall behind. Over time, the scope of practice for local public health departments (LPHDs) has expanded from primarily environmental protection and infectious disease control and prevention to emergency preparedness, and other responsibilities. At the same time, the variation in capacity across health departments and the gap between required services and the ability to provide them have grown.

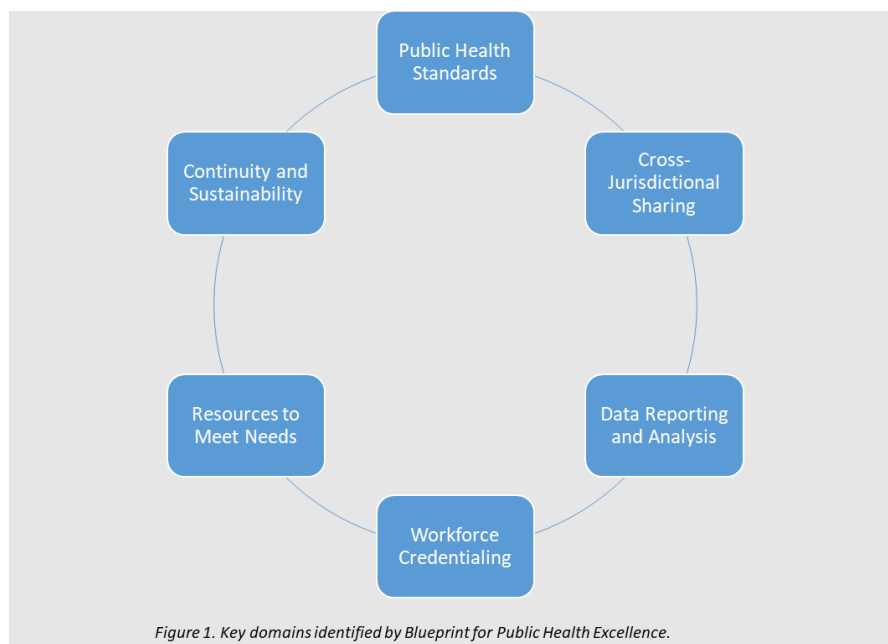
The Special Commission on Local and Regional Public Health was established in 2016 to address challenges to meeting the Commonwealth's public health needs through the system of municipality led LPHDs. The Commission investigated the Massachusetts public health system and compiled its findings in a policy briefing presented to state legislators in June of 2019 entitled *Blueprint for Public Health Excellence Recommendations for Improved Effectiveness and Efficiency of Local Public Health Protections*. The Commission found that many cities and towns have been unable to meet the most basic statutory requirements and national public health standards. It highlighted six areas that required attention to address the problem. The COVID-19 pandemic increased the sense of urgency to reduce disparities and increase capacity. As a first step, An Act Relative to Strengthening the Local and Regional Public Health System, known as the State Action for Public Health Excellence (SAPHE) Act was passed in April 2020.²

¹ Boston University. (2015, October 1). *A Brief History of Public Health*. MPH Modules. Retrieved December 9, 2021, from <https://sphweb.bumc.bu.edu/otlt/mphmodules/ph/publichealthhistory/publichealthhistory8.html>

² An Act Relative to Strengthening the Local and Regional Public Health System, <https://malegislature.gov/Laws/SessionLaws/Acts/2020/Chapter72>; see also Kimani, K. (Ed.). (2020). [Fact Sheet]. SAPHE Fact Sheet. Massachusetts Public Health Association. Retrieved from: <https://www.mahb.org/saphe-fact-sheet/#:~:text=The%20SAPHE%20bill%20was%20finalized,Governor%20Baker%20for%20his%20signature>

The acute public health needs highlighted by the pandemic led to an acceleration in advancing the next legislative steps to improvement, which resulted in the draft legislation known as SAPHE 2.0.

This issue brief: (1) provides a brief overview of the 2019 *Blueprint for Public Health Excellence* report, (2) summarizes SAPHE 1.0 and the current draft of SAPHE 2.0 legislation, (3) provides analysis of policy actions to improve local public health infrastructure in other states, (4) describes key stakeholders' perspectives on next steps for improvement that may be accomplished through SAPHE 2.0, and (5) makes recommendations based on these findings. This brief is based on a review of relevant reports and legislation in Massachusetts, a review of related policies in other states, and analysis of semi-structured interviews conducted with seven key stakeholders.



Blueprint for Public Health Excellence Recommendations

The 2019 Blueprint for Public Health Excellence³ acted as a guiding framework for Massachusetts legislators as they began to draft potential legislation. The Commission analyzed the system holistically and developed evidence-based recommendations for improvements that could be made. The report identified six key elements to improve the local public health system, shown in Figure 1 and detailed below.

³ Special Commission on Local and Regional Public Health. (2019). *Blueprint for public health excellence: recommendations for improved effectiveness and efficiency of local public health protections*. Boston, MA.

Public Health Standards:

The Centers for Disease Control and Prevention described 10 essential public health services almost 25 years ago (see Figure 2).⁴ The Commission found that many cities and towns in Massachusetts are ill-equipped to meet both these national standards and the state statutory requirements and currently lack the capacity to meet or maintain them. The *Blueprint* recommended first ensuring that the departments can, at a minimum, achieve and maintain current statutes and regulations, and then to bring departments into alignment with the Foundational Public Health Services (FPHS), a set of seven cross-cutting capabilities and five program areas (see Figure 3).

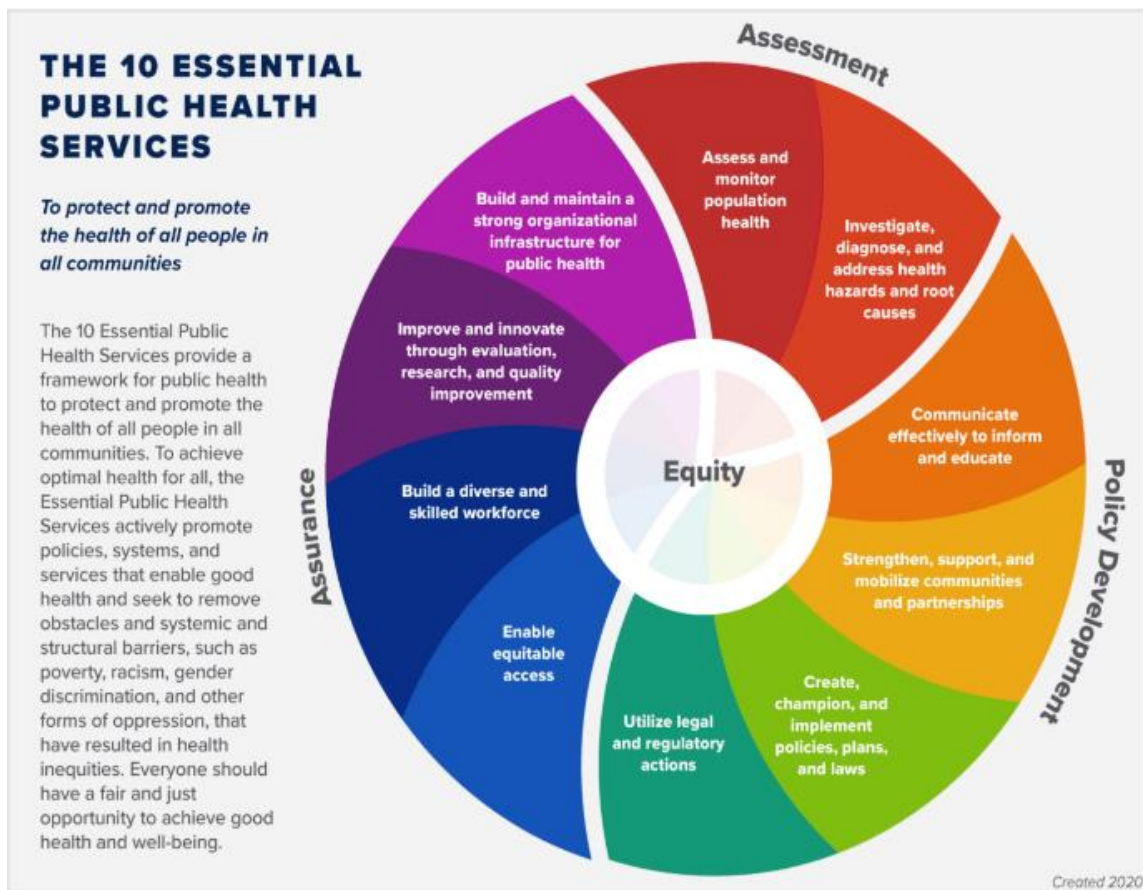


Figure 2: 10 Essential Public Health Services

⁴ Centers for Disease Control and Prevention. (2021, December 6). *Public Health Systems & Best Practices*. Public Health Professionals Gateway. Retrieved December 9, 2021, from <https://www.cdc.gov/publichealthgateway/bestpractices/index.html>.

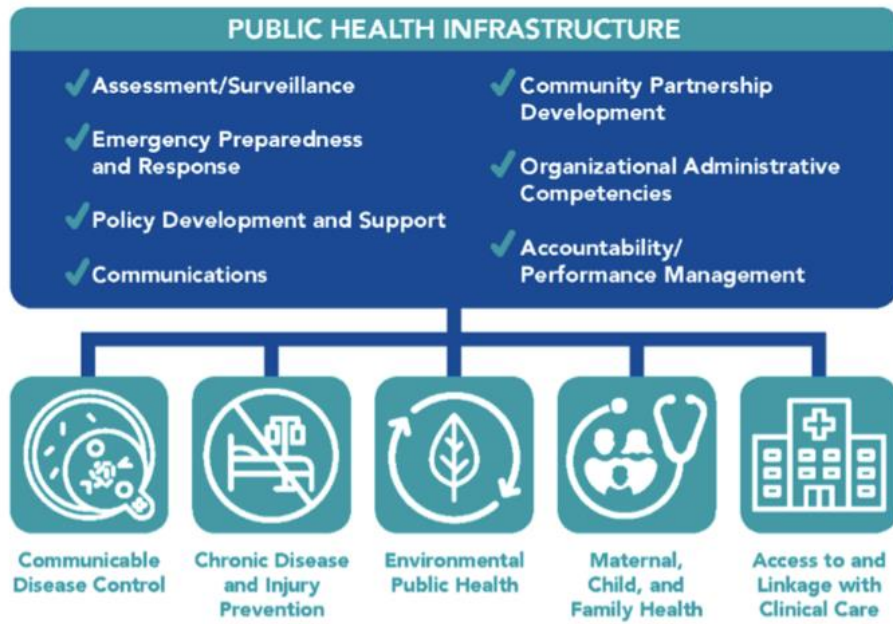


Figure 3: Foundational Public Health Services <https://phnci.org/national-framework/fphs>

Cross-Jurisdictional Sharing:

The *Blueprint* emphasized the need for greater cross-jurisdictional sharing of public health responsibilities, where multiple cities and towns jointly share responsibility for providing public health services.⁵ The limited implementation of cross-jurisdictional sharing in Massachusetts increases burdens placed on individual departments and exacerbates inequities across municipalities. Although prior initiatives have incentivized increased cross-jurisdictional sharing, at the time of the report, only 23% of the Massachusetts population receives one or more public health services through fifteen groups that include two or more municipalities.⁶

Data Reporting and Analysis:

The report uncovered significant gaps in data collection essential for public health evaluation and innovation. Despite requirements, many public health departments are not collecting data on inspections, immunizations, court filings, meetings, or the data is incomplete. Local health departments neither have the technological or workforce capability to maintain reporting standards. This makes it difficult to assess

⁵⁵ The Center for Sharing Public Health Services. (2021, November 16). *Cross-jurisdictional sharing helps public health departments do their work better*. Center for Sharing Public Health Services. Retrieved December 9, 2021, from <https://phsharing.org/>.

⁶ Office of Local and Regional Health (OLRH) Resources. (2021). *Public Health Shared Services*. Mass.gov. Retrieved December 9, 2021, from <https://www.mass.gov/service-details/public-health-shared-services>

the health and safety of the state and provide proper support for local health departments. The *Blueprint* recommended the adoption of a standardized integrated public health reporting system, with the goal of strengthening the data collection capabilities of the local public health departments, and increasing the ability of state departments to use this information.

Workforce Credentialing:

Local health departments, particularly in small and rural communities, are having a hard time finding and retaining qualified public health professionals. Limited qualification requirements also lead to great variation in personnel capacity across the state. With limited budgets, many departments find it challenging to attract individuals with necessary public health training and knowledge. Moreover, the current public health workforce is aging and retiring. A subcommittee investigation focused on workforce issues, including credentialing and staffing, found that local public health departments have few incentives or penalties for ensuring a qualified staff. Further, the staff themselves had minimal incentive to continue their education. The Commission recommended adopting national public health workforce standards, increasing access to continuing education opportunities, and putting a data collection system in place to monitor workforce credentials.

Resources to Meet Needs:

Local public health departments are continually underfunded, largely due to a lack of dedicated state funding. This leaves LPHDs to compete for limited municipal funds against other municipal priorities such as schools, police and fire departments and public works. Local funding leads to substantial disparities between communities based on income and size. Half of Massachusetts towns have populations of 10,000 people or fewer. These funding disparities exacerbate public health issues and impacted people of color and those living with low socioeconomic status the hardest. To address these issues, the *Blueprint* recommended state funding for all departments through annual appropriations, alongside increased cross-jurisdictional sharing and the creation of multi-municipal districts with pooled resources to improve efficiency and the effectiveness of service delivery.

SAPHE 1.0

SAPHE 1.0 was an initial step towards addressing the action steps outlined in the *Blueprint* toward increasing the efficiency and effectiveness of local public health services. Provisions of the legislation and correspondence with the priority areas from the Blueprint are detailed in Table 1. The legislation established a State Action for Public Health Excellence program to encourage higher performance standards for boards of health, increase cross-jurisdictional service sharing, improve data reporting and analysis, establish workforce standards, and to create professional development opportunities. The Department of Public Health was to provide training courses for public health officials in locations across the state, at no charge, to local boards of health. SAPHE 1.0 also created a new grant program to support collaboration across municipalities to deliver public health services, or for planning and capacity building in regional collaboration, with a specified proportion of grants going to lower-income municipalities. The Department of Public Health and the Special Commission were to develop a set of minimum standards for foundational public health standards. Public hearings were to be held across the state to identify further strategies for improving local public health services. Finally, the legislation declared that the Special Commission on Local and Regional Public Health would be revived and continued.

Table 1. Correspondence of areas from the *Blueprint* and SAPHE 1.0 and SAPHE 2.0 provisions.

Areas Identified in <i>Blueprint</i>	SAPHE 1.0 provisions	SAPHE 2.0 provisions
Public Health Standards	DPH to develop minimum standards	Uniform minimum local public health performance standards developed by DPH, Special Commission, and other stakeholders Biennial report on ability to meet standards
Cross-Jurisdictional Sharing	Grant program established providing funds for collaboration	Standards can be met either through local boards of health or through service sharing arrangements
Data Reporting and Analysis	--	Unified standard public health reporting system created by DPH and DEP
Workforce credentials	DPH trainings provided free of charge	Training and technical assistance provided by DPH, using state funding
Resources to Meet Needs	--	Dedicated state funding for boards of health that are compliant with standards
Continuity and Sustainability	--	Cost estimate established annually by DPH
Other		
Stakeholder engagement	Public hearings in diverse locations	Stakeholders to be included in development of standards
Online systems	--	Online permitting and inspection system for use by local boards of health created by DPH

SAPHE 2.0

SAPHE 2.0, which is currently under consideration in the Massachusetts legislature, would provide further support to increase the efficiency and effectiveness of the local public health system in Massachusetts, most notably by allocating state funding to boards of health. The bill would have the Department of Public Health work with stakeholders and members of the Special Commission to create minimum local public health performance standards, including workforce training and credentialing, standards for reporting data through a unified public health reporting system, and minimum performance standards in areas such as inspections and permitting. These standards could be met either through local boards of health or through cross-jurisdictional service sharing. Boards of health must submit an annual report to the Department of Public Health to demonstrate compliance with these standards. The Department of

Public Health and Department of Environmental Protection are to create a unified standard public health reporting system. The Department of Public Health is to report biennially on the local public health system and the extent to which it can meet the new standards. Local board of health funding is contingent on compliance with the standards. The Department of Public Health and Department of Environmental Protection are to offer training and technical assistance for public health personnel for them to meet workforce standards. The Department of Public Health is tasked with creating an estimate of the total statewide funding needed for the other provisions. The established standards will only be enforceable if sufficient funding is made available to local boards of health. Finally, the Department of Public Health is to create a comprehensive online permitting and inspection system to be made available to boards of health statewide.

At this time, SAPHE 2.0 will provide three parallel funding streams to help support local public health systems. The grant-based system established with SAPHE 1.0 will be continued, with the goal of competitive grants incentivizing service sharing. However, the grant program will also be expanded to include need-based grants, with priority given to towns and cities in need of urgent help. There will also be annual non-competitive funding to help ensure that all municipalities are able to reach local standards. This funding will be distributed using a formula based on population, levels of cross-jurisdictional sharing and sociodemographic data. Finally, \$200 million of federal funds from the American Rescue Plan Act (ARPA) received by the Commonwealth has been allocated to supply funding for SAPHE 2.0.

State Policy Actions to Improve Public Health Infrastructure

Public Health Standards

Several states have adopted Foundational Public Health Service guidelines, or similar robust standards into their legislation or planning. Between 2007 and 2015, Colorado, Kentucky, North Carolina, Ohio, Oregon, Washington, Texas, and North Dakota are relevant states who have documented standardization.⁷ Formal accreditation is the most common way of achieving public health standards. Other states have had success where municipal, state, and community organizations and offices collaborate on accreditation efforts, where the state department of public health provides resources and materials to assist local efforts, and where there are already a set of minimum standards which local health departments are expected to adhere to. Research suggests that accreditation can increase the

⁷ Special Commission on Local and Regional Public Health. (2019). *Blueprint for public health excellence: recommendations for improved effectiveness and efficiency of local public health protections*. Boston, MA.

ability to conduct quality improvements, increase staffing levels, and the quality and diversity of staff. A cross sectional study of Public Health Accreditation Board (PHAB) applications showed that local health internship programs are significantly related to higher Public Health Accreditation Board scores.⁸ Another study of all fifty states determined that state-led quality improvement capacity was significantly associated with Local Health Department accreditation. Rurality is associated with lower accreditation readiness, and staffing levels were associated with increased accreditation readiness.⁹

States have taken a variety of pathways to encourage accreditation of local health departments, with approaches varying through their use of requirements, incentives, and voluntary action. Table 2 summarizes state actions related to accreditation and standardization and the associated results. One key factor impacting the success of accreditation initiatives is the dedication of state resources. Relevant state resources can include state health department assistance as well as direct funding of accreditation fees or efforts. For example, Ohio incentivized accreditation by doubling state funding for qualified departments, and local efforts were buttressed by the state, who paid all accreditation fees and coordinated the process through trainings. This led to Ohio achieving an accreditation rate of about 30% currently, compared to 1% in 2014.¹⁰ Other states have used a more voluntary approach with a more limited provision of state resources. Kentucky, for example, provided accreditation guides to county health departments.¹¹ As shown in Table 2, 17 of 59 county health departments in Kentucky are currently accredited. The success of voluntary models tends to be impacted by the extent to which the state addressed resource-related barriers. Financial and staffing concerns were identified as the top two reasons for LHDs not seeking accreditation from a national survey.¹²

⁸ Yeager, V. A., Wharton, M. K., & Beitsch, L. M. (2020). Maintaining a Competent Public Health Workforce: Lessons Learned From Experiences With Public Health Accreditation Domain 8 Standards and Measures. *Journal of public health management and practice: JPHMP*, 26(1), 57–66. <https://doi.org/10.1097/PHH.0000000000000750>

⁹ Gregg, A. , Bekmuratova, S. , Palm, D. , VanRaemdonck, L. , Pezzino, G. , Chen, L. & Manetta, P. (2018). Rurality, Quality Improvement Maturity, and Accreditation Readiness: A Comparison Study of Colorado, Kansas, and Nebraska Local Health Departments. *Journal of Public Health Management and Practice*, 24 (6), E15-E22. doi: 10.1097/PHH.0000000000000678.

¹⁰ Yeager, V. A., Ye, J., Kronstadt, J., Robin, N., Leep, C. J., & Beitsch, L. M. (2016). National Voluntary Public Health Accreditation: Are More Local Health Departments Intending to Take Part?. *Journal of public health management and practice : JPHMP*, 22(2), 149–156. <https://doi.org/10.1097/PHH.0000000000000242>

¹¹ Yeager, V. A., Ye, J., Kronstadt, J., Robin, N., Leep, C. J., & Beitsch, L. M. (2016). National Voluntary Public Health Accreditation: Are More Local Health Departments Intending to Take Part?. *Journal of public health management and practice : JPHMP*, 22(2), 149–156. <https://doi.org/10.1097/PHH.0000000000000242>

¹² Yeager, V. A., Ye, J., Kronstadt, J., Robin, N., Leep, C. J., & Beitsch, L. M. (2016). National Voluntary Public Health Accreditation: Are More Local Health Departments Intending to Take Part?. *Journal of public health management and practice : JPHMP*, 22(2),

Table 2. State PHAB or Other Standardization Actions

State	Action/ Implementation	Benefits/outcomes
OH	<ul style="list-style-type: none"> • Mandated PHAB accreditation • Doubled funding for accredited LHDs • Paid all accreditation fees 	<ul style="list-style-type: none"> • As of 2021, 56 of 180 LHDs had been accredited.
KY	<ul style="list-style-type: none"> • Uses a voluntary model • State Health Department provides roadmaps and other resources 	<ul style="list-style-type: none"> • By 2021, 17 of 59 county health departments have been accredited
NC	<ul style="list-style-type: none"> • Developed accreditation program in 2003 • County and local funding assisted efforts 	<ul style="list-style-type: none"> • Accreditation resulted in more quality improvement projects • Increased LHD diversity, and improved relationships with local stakeholders (e.g., hospitals) and municipal stakeholders (e.g., county commissioners) • As of 2021, 3 of 75 LHDs are accredited
OR	<ul style="list-style-type: none"> • Set voluntary standards using FPHS guidelines in 2013 HB 2348 • Created legislative commission on local health 	<ul style="list-style-type: none"> • Measurement against national standards • Quality improvement opportunities • As of 2021, 17 of 32 LHDs are accredited
WA	<ul style="list-style-type: none"> • Uses voluntary grant-based system 	<ul style="list-style-type: none"> • As of 2021, 6 of 35 LHDs are accredited
TX	<ul style="list-style-type: none"> • Local organizations led accreditation • State level buy in was sought 	<ul style="list-style-type: none"> • As of 2021, 8 LHDs are accredited
ND	<ul style="list-style-type: none"> • State health department accredited in 2016 	<ul style="list-style-type: none"> • Increased community partnership developments • As of 2021, the state department is the only accredited board
CO	<ul style="list-style-type: none"> • Uses a voluntary model based off FPHS guidelines 	<ul style="list-style-type: none"> • As of 2021, 6 of 53 LHDs are accredited

Sources: Davis, M. V., Cannon, M. M., Stone, D. O., Wood, B. W., Reed, J., & Baker, E. L. (2011). Informing the national public health accreditation movement: lessons from North Carolina's accredited local health departments. *American journal of public health, 101*(9), 1543–1548. <https://doi.org/10.2105/AJPH.2011.300199>

Special Commission on Local and Regional Public Health. (2019). *Blueprint for public health excellence: recommendations for improved effectiveness and efficiency of local public health protections*. Boston, MA.

Oregon Health Authority. (2021). Public health accreditation. Public Health Accreditation and Quality Improvement: Public Health Division. Retrieved December 9, 2021, from <https://www.oregon.gov/oha/ph/PROVIDERPARTNERRESOURCES/PUBLICHEALTHACCREDITATION/Pages/AccreditationResources.aspx#faq>

Public Health Accreditation Board. Who is Accredited? Accessed December 9, 2021. <https://phaboard.org/who-is-accredited/>

Cross-Jurisdictional Sharing

Regionalization means that funding and delivery of public health services are organized into broader districts, rather than locally. Cross-jurisdictional sharing encompasses a continuum of arrangements, from regionalization through consolidation of local departments to other collaborative arrangements in which local health departments share staff, resources, or knowledge while maintaining some or all autonomy.¹³ Within Massachusetts, there are formalized service sharing agreements like the Berkshire Public Health Alliance, as well as town-to-town assistance, but 75 percent of local public health offices are not in such arrangements.

Impacts of service sharing may differ depending on the level of resources shared. A study of Connecticut and Massachusetts local health departments, shared or independent, determined that sharing services enabled local health departments to invest nearly twice the amount of money into health food access at around \$120 per 100 people.¹⁴ Sharing departments also had higher quality food inspections, despite having fewer staff per 1,000 population. Independent health departments reported an ability to react quickly to local needs, and smaller jurisdictions reported difficulties meeting state mandates. Benefits to service sharing extend to the diverse network of coalitions and aid agreements in Massachusetts.

Massachusetts can learn from the cross jurisdictional sharing efforts of other states, including CO, NJ, WA, OH, and CT, described in Table 3.

¹³ Centers for Disease Control and Prevention. Cross-Jurisdictional Sharing of Public Health Services. Available at; <https://www.cdc.gov/publichealthgateway/cjs/index.html>. Accessed Dec. 3, 2021.

¹⁴ Humphries DL, Hyde J, Hahn E, et al. Cross-Jurisdictional Resource Sharing in Local Health Departments: Implications for Services, Quality, and Cost. *Front Public Health*. 2018;6:115. Published 2018 Apr 26. doi:10.3389/fpubh.2018.00115

Table 3. State Service Sharing Practices

State	Action/ Implementation	Benefits/outcomes
CO	<ul style="list-style-type: none"> Has different service sharing agreements, from informal to formal 	<ul style="list-style-type: none"> Increased grant writing capacity, fewer service interruptions due to staffing Salary increases Timely environmental health responses
NJ	<ul style="list-style-type: none"> Has staff sharing agreements 	<ul style="list-style-type: none"> Guaranteed nursing coverage during an infectious disease outbreak
WA	<ul style="list-style-type: none"> Formed public health service sharing districts, moving to a regionalized model in May 2021 	<ul style="list-style-type: none"> Limited outcome information is available
OH	<ul style="list-style-type: none"> Has informal agreements and full health districts 	<ul style="list-style-type: none"> Service sharing led to a reported 90% accomplishment of cost saving and service improvement goals Consolidation resulted in a 13% decrease in per capita spending
CT	<ul style="list-style-type: none"> 107 towns have voluntarily joined a shared services district 	<ul style="list-style-type: none"> Sharing LHDs tended to have directors with graduate education in public health

Sources: Stanak, M., Filla, J, Hoornbeek, J. Consolidation of Local Health Departments in Ohio: Motivations and Impacts. (2013). Retrieved December 21, 2021, from: <https://www-s3-live.kent.edu/s3fs-root/s3fs-public/file/Policy%20Brief%20Consolidation%20of%20Local%20Health%20Departments%20in%20Ohio.pdf>
 Center for Sharing Public Health Services. Interactive Map of Cross-Jurisdictional Sharing. Accessed December 21, 2021 at: <https://phsharing.org/interactive-map-of-cross-jurisdictional-sharing/#!/colorado>
 WA H. 1152, 2021 Regular Session. Ch. 205, Laws of 2021. (Was.2021). Comprehensive Public Health Districts.

Data Reporting and Analysis

Local health departments in Massachusetts are responsible for maintaining their own records of sanitation, communicable diseases, permitting, and other areas. MAVEN, a statewide online database, is used to track and manage vaccination records, but before the pandemic many local health departments did not comply with the mandate to use it. Gaps in local public health data collection include what information is mandated to be reported to the Department of Public Health, and a lack of consistent data standards; these gaps inhibit performance evaluation and quality improvement. No central system is used to document the delivery and scope of services of local health.

One solution is to mandate annual, publicly available public health reporting. A handful of states require these reports. Connecticut requires reporting and an impressive 95% of its health districts and 73% of its full-time health departments have conducted program evaluation and quality improvement, built upon their own reporting. In Kansas, shared service districts have more informatics capacity, and the public

health informatics workgroup has used their findings to create leadership roles in municipal and state government to drive LHD informatics capacity.¹⁵

Workforce Credentialing

Many states require certification or in some cases graduate education for public health officials. Massachusetts requirements vary by local health department and there are few formal requirements by state law, yet other municipal positions like librarians do require licensure.¹⁶ Massachusetts does have voluntary certifications like the community health worker certificate. Overall, inconsistent experience and credentialing leads to inconsistent delivery of services which can adversely impact public health. There is limited information on the outcomes of different credentialing structures. Notably, within Massachusetts, shared service districts tend to have more credentialed employees than standalone LHDs.¹⁷

Table 4. State Credentialing Practices	
State	Action/ Implementation
CO	<ul style="list-style-type: none"> Developed credentialing system where applicants enroll in a training program recognized by the state department of public health
CT	<ul style="list-style-type: none"> Requires environmental health officers to be licensed Licensed community health workers, and sanitarians Shared service districts must have a director with graduate public health education
NJ	<ul style="list-style-type: none"> Requires health officer, environmental health, and specific educational requirements for LHD staff
OH	<ul style="list-style-type: none"> Requires some LHD positions to be licensed with an emphasis on environmental health
TX	<ul style="list-style-type: none"> Requires some LHD positions to be licensed as well as sanitarians

Source: Special Commission on Local and Regional Public Health. (2019). *Blueprint for public health excellence: recommendations for improved effectiveness and efficiency of local public health protections*. Boston, MA.
 State of New Jersey Department of Health. Workforce Development Program. Accessed December 9, 2021, at: <https://www.nj.gov/health/lh/professionals/workforce-development-program/>

¹⁵Kansas Public Health Informatics Workgroup. Final Workgroup Report. (2017). Available at: <https://www.khi.org/assets/uploads/news/14779/kansaspublichealthinformaticsworkgroupfinalworkgroupreport.pdf>

¹⁶ Special Commission on Local and Regional Public Health. (2019). *Blueprint for public health excellence: recommendations for improved effectiveness and efficiency of local public health protections*. Boston, MA.

¹⁷ Special Commission on Local and Regional Public Health. (2019). *Blueprint for public health excellence: recommendations for improved effectiveness and efficiency of local public health protections*. Boston, MA.

Resources to Meet System Needs

Funding structures vary by state. The Commonwealth of Massachusetts does not directly provide aid to LHDs, which are funded by local taxes or grants. Public health competes alongside other municipal priorities leading to inconsistency in funding and capacity. Connecticut and Ohio are potential models for providing resources within decentralized systems of LHDs. Connecticut creates an incentive model by funding full-time departments and departments which have the highest ability to meet rigorous public health standards. Ohio uses a matched funding model to encourage prioritization of public health at the local level.

Table 5. State Actions to Support Public Health Systems	
State	Action/ Implementation
CT	<ul style="list-style-type: none"> • Does not fund part time local health • Reimburses districts at a higher rate to encourage service sharing • Service capacity determines funding
OH	<ul style="list-style-type: none"> • Gives performance-based funding • Reliant upon municipal matched funding and compliance with health services domains

Source: Special Commission on Local and Regional Public Health. (2019). *Blueprint for public health excellence: recommendations for improved effectiveness and efficiency of local public health protections*. Boston, MA. Dube, N. OLR Research Report: Connecticut’s Local Health Departments (n.d.). Retrieved December 9, 2021, from: <https://www.cga.ct.gov/2016/rpt/2016-R-0024.htm>
Ohio Department of Health. Local Public Health. Accessed December 9, 2021 at: <https://odh.ohio.gov/wps/portal/gov/odh/about-us/Local-Health-Departments>

Methods and Analysis:

We conducted semi-structured interviews with seven key stakeholders to understand their perspectives on what SAPHE 1.0 was able to accomplish and further needs for improving local public health structures in Massachusetts. Special Commission members and others with detailed knowledge of LPHDs in Massachusetts were invited to participate in an interview. Key themes from the interviews included: (1) *Local governance and oversight are a vital part of cross-jurisdictional sharing arrangements*, (2) *grant-based funding contributes to the perpetuation of inequity between departments*, (3) *a robust data collection system is necessary to capture epidemiological as well as credentialing information*, (4) *there is a need for an enforced credentialing system to ensure a competent workforce*, and (5) *state funding is essential to reduce inequities within the system*. These themes are described in greater detail below with supporting quotations.

Theme 1: Local governance and oversight are a vital part of cross-jurisdictional sharing arrangements

Interviewees discussed the strengths of the current public health system, noting great value in having local leaders who are attuned to community needs involved in public health decision-making. One commented,

“The only benefit of where we're at is that the decisions that are made are... closest to the people in the local cities and towns, so that you truly feel like you have an understanding of what you need in your community.”

Our interviews showed strong support for continued municipal-level representation in governance of shared public health districts, and a lack of support for consolidating the governing Boards. Having key stakeholders and community members involved in the process in the health departments helps ensure that they are receiving services that are attuned to their specific needs. This sentiment is explained in the following quote,

“You have communities that have been... really focused on providing their specific level of service for their communities [...].”

Some believed that the loss of this local community-based governance would also mean that smaller towns and municipalities in the state would be left by the wayside and their specific needs would be ignored. Interviewees' comments suggested that newer systems of cross-jurisdictional sharing should be implemented in a way that preserves local autonomy. This solution will allow towns to remain independent while also benefiting from being a part of a more regionalized system.

Theme 2: Grant-based funding perpetuates inequity

The key component of SAPHE 1.0 legislation was the implementation of a grant system. The legislation authorized grant funding to health departments on a competitive basis. The State Action for Public Health Excellence grant program was put in place after the SAPHE act was passed in 2020. The program was established to provide funding to ten groups of cities and towns who planned to expand their cross-jurisdictional sharing. Though in theory this would help accomplish goals put forward by the Blueprint for Public Health Excellence, we heard that this grant system may have only increased disparities between departments. The following quote expresses a perspective common across several interviews:

“[...] we happen to have a little bit larger staffing, [than the] surrounding communities and so we're able to compete for some of these larger grants, but the smaller communities, you know it's much more difficult for them to compete with these for these grants... every time you give out one grant to a community that means that the several other communities that did not get that grant [...].”

This interviewee explains that departments who were already receiving higher levels of funding were better equipped to write, compile, and submit grants to the state. This meant that smaller towns who possessed fewer staff and less funding were not equipped to apply for these grants and therefore did not benefit from the program.

“It helped ensure that money was being received by programs who were already well resourced. Moreover, due to a lack of workforce credentialing, we observed that SAPHE 1.0 grant money was not necessarily implemented in an effective way.”

This level of inequitable fund sharing was the reason some interviewees gave for the push to accelerate further legislation, resulting in the drafting of SAPHE 2.0:

“I think that the rush to [SAPHE] 2.0 came [when] they recognized that the shortcomings in the first iteration and that the grant-based resources wasn't the way to go [...].”

Theme 3: Need for a robust data collection system

The most consistent topic discussed throughout the interviews was the importance of a robust data collection system. The cornerstone of any successful public health system is the ability to conduct thorough program evaluation to make evidence-based decisions. Currently the Commonwealth of Massachusetts uses the MAVEN system to conduct infectious disease case management and reporting. However, it is underutilized and covers only communicable disease reporting, not housing, food, pool, or private well or septic systems work. As explained in the following quote there is no way for the state and individual departments to share statistical information:

“[...] so, a data system that not only collects but also disseminates data appropriately in a way that we could use it.”

The one-way nature of data reporting is also a barrier, where LHDs report infectious disease cases to the Department of Public Health but data is not shared back in a timely manner. Without the ability to examine data collected from each town and city it is hard to determine how they are doing:

“[...] And then, lastly, we need sort of data systems to tie things together, and that that roll up data from the local level to help us understand what's happening, and help us benchmark, identify areas of strength and weakness and improve the system over time.”

Providing the ability for data to be shared and accessed rapidly will help public health workers and policy makers develop targeted evidence-based solutions for community based and statewide problems. It was also suggested that this new data reporting system should encompass management and tracking of credentials of public health employees. This would help to ensure that well-trained staff are working in local health departments and that each department across the state is able to maintain a high level of service. Some believed that having a public reporting system that shows credentialing would hold towns and cities accountable for providing continuing education to maintain standards and credentials.

“We are going to need some kind of report card system, and that is going to make some people look bad.”

Theme 4: Establishment of a credentialing system to maintain workforce standards

Unlike many other occupations in the Commonwealth of Massachusetts, unless and until the SAPHE 2.0 bill passes and is implemented, being a public health worker requires no formal training or credentialing. There are some public health officials who have been elected or appointed simply because they have connections within the town, city or state. This phenomenon was captured in the following quote,

“[...] The way people are elected, the way people take on roles that are within city and government sometimes is because their expertise, sometimes it's because they know someone. The previous executive director of X health department had no health, public health or health related skill sets. None whatsoever. And so, he was learning on the job [...].”

Another participant stated,

“We have no workforce standards; we have no credentials for anyone to manage or run a public health department. That makes no sense.”

One way to ensure that qualified individuals are placed within our public health infrastructure is to connect local and state departments with colleges and universities. There is currently no program connecting students to these essential positions. To attract and retain qualified workers departments must provide ample opportunities for continuing education. Maintaining standards of credentials within the workforce is not simply important for the workers but also for the health of the departments and state.

One interview expressed the problem this way:

“You know there's no pipeline for local public health folks and so it's a challenge to get people to think about a career in (public health) particularly in smaller communities”

Another interviewee stated:

“The goal is to get everyone to a certain point, so that we can confidently say that residents in Massachusetts have access to the same level of services.”

It was widely held that that the funding or size of the health department in an area should not dictate the level of services available to the community.

Theme 5: Inequity within our system

There were strong concerns about equity in public health infrastructure model funded primarily upon the tax base of individual towns. This leaves large gaps between those who live in areas of high socioeconomic status and those who do not. This sentiment was powerfully expressed in the following quote,

“The funding mechanism that comes from tax base is just inherently regressive and limits the power of putting positive resources in place for any city or town and that translates into your zip code being the dictator of whether you have good services or bad services.”

Funding based on community resources exacerbates racial and ethnic disparities in access to public health services. Though SAPHE 1.0 attempted to begin to address this problem by implementing a grant program, the problem is that communities with fewer resources are at a disadvantage when competing for these funds. Interviewees also discussed the downsides of having 351 municipal local health departments with limited cross-jurisdictional sharing or regional coordination. Comments included thoughts on how having local health departments may make it easier for them to focus on local issues, but those in positions of power may not always be representative of the communities they serve.

“Home-rule translates to making sure that we kind of still instill a level of structural racism and inequity that continues to persist. Wherever we have systematization through gerrymandering through redistricting that’s even in the news locally today, given the kind of consideration to how we kind of divide and connect towns and other surrounding cities or not, and therefore make sure that you have representative representatives, helping to bring the voice of people to communities and so we have allowed for Home-rule to be inequitable in all kinds of different ways that system is being maintained [...]”

Without proper representation within each health department, it will be impossible to develop programs and policies that help correct disparities. Increasing connections between towns and universities is one way to help increase the diversity of the workforce while also ensuring that local stakeholders are still involved. It may also help improve the quality of services provided at the state and local levels. With a more equitable funding scheme and increased standards across the state it is hoped that a higher level of care can be guaranteed to citizens:

“... every resident of every community of Massachusetts should be guaranteed a minimum set of public health standards and protections, it shouldn't matter whether they live in a poor community in a rich community in a white community and a community of color.”

Recommendations

The analyses conducted for this issue brief led to the following recommendations for improving the local public health system in Massachusetts.

1. Enact further comprehensive public health legislation building off of SAPHE 1.0.

Other states' success with similar strategies and data from key stakeholder interviews suggest that many of the elements SAPHE 2.0 currently under consideration would significantly improve public health infrastructure across the Commonwealth. Many of these provisions are directly responsive to recommendations made in the Blueprint and are essential for long term progress.

2. State funding of local health departments should be based on community health needs assessments or other needs-based formulas.

Key informant interviews suggested that the current grant-based funding from the state may risk perpetuating inequities between municipalities. Needs-based formulas would increase equity in funding by prioritizing LPHDs that have fewer resources. SAPHE 2.0 includes use of a formula that accounts for population size, which could address some of key stakeholders' concerns about rural and urban disparities, but a needs-based system would do more to address inequities that key stakeholders felt may be exacerbated by a competitive grant funding system.

3. A system for matched funding or guaranteed funding will be needed to mitigate inequities across local departments.

A lack of dedicated state funding for local public health was identified in the Blueprint and substantiated by key informant interviews as a barrier to standardization and quality improvements. Review of other states' strategies suggested a variety of effective funding practices, from increasing funding for sharing departments to funding accreditation fees. One model of excellence is state matched funding for local boards of health, which Ohio implemented. SAPHE 2.0 does place the state in a funding role, but questions arose as to the sustainability of the proposed system. Matched funding could guarantee continued prioritization of local public health.

4. Develop pathways to local public health careers and continuous public health education with academic institutions would support SAPHE 2.0's aims.

Workforce development and credentialing was a central theme identified in key stakeholder interviews, as was a drive to diversify the public health workforce. The Academic Health

Department is an existing entity with a mission to build partnerships between the Massachusetts Department of Public Health, colleges and universities, and local health departments. Stakeholders also identified a need for diversity within public health, and the creation of scholarships for public health students would help address this need. Increasing funding of the Academic Health Department with a strategic plan for the Academic Health Department and institutional collaboration to augment LPHDs would also address the overall theme of workforce development needs.

Conclusion

The COVID-19 pandemic starkly illuminated the need for strong local public health departments and the difficulties the current local public health system has in consistently meeting even basic public health standards. The *Blueprint for Public Health Excellence* created an important road map for improving the current local public health system in Massachusetts. The research update conducted for this issue brief supports the need for public policy that facilitates implementation of the road map outlined in the *Blueprint* and additional considerations based on interviews with key stakeholders. SAPHE 2.0 offers an important next step in developing a local public health system that can respond to the public health needs of the Commonwealth. The future health and well-being of members of the Commonwealth depends on investment in understanding how these tools can be applied to optimize public health service provision across the state.

Acknowledgements

The construction of this policy brief became a reality because of the passion and dedication of many individuals. We would like to extend our deepest thanks to them all. We would specifically like to thank local public health officials, the Massachusetts Department of Public Health, Massachusetts Legislature, and others working in public health roles in the state who took time to provide their thoughts and opinions to inform the construction of this policy brief. We also thank the University of Massachusetts Amherst School of Public Health and Health Sciences for its sponsorship of this project.