

# Securing Support for Public Health Services and Systems Research

## Results from an Environmental Scan

December 2023

### Introduction

The COVID-19 pandemic has brought heightened attention to the value of public health and opened a window of opportunity to create a “reimagined” public health system that will have the capacity, resources, competencies, and evidence needed to effectively address future emergencies and health inequities.<sup>1,2</sup> Absent from most discussions about how to enhance the public health system, however, is the need for evidence to guide and evaluate these system improvements.<sup>3</sup> New funding to bolster public health’s infrastructure must include resources to assess lessons from the pandemic and build the evidence needed to improve the public health system. Public health leaders, practitioners, and policymakers need current, relevant, and reliable research to inform public health practice strategies capable of meeting this moment and achieving a public health system transformed for success in the 21<sup>st</sup> century.

Funding and support to strengthen the evidence base for creating a stronger public health system, monitoring its progress to make real-time adjustments, and demonstrating its value are critical to creating a high performing “reimagined” public health system and advocating for sufficient and stable federal and state funding.<sup>4</sup> With funding from Kaiser Permanente, AcademyHealth worked with leaders in public health research, policy, and practice on a priority-setting initiative to set the agenda for Public Health Services and Systems Research (PHSSR)—the field that produces evidence needed to strengthen public health.

Drawing on previous PHSSR research agendas, published in 2006<sup>5</sup> and 2012,<sup>6</sup> the *Ensuring an Evidence Based Approach to [Re]building the Public Health System* initiative developed a renewed research agenda to ensure strong focus on the most pressing issues facing public health leaders today. This agenda-setting exercise will be foundational to creating a robust evidence base as a tangible mechanism to recenter and reinvigorate PHSSR experts, reflect on research priorities in the wake of the COVID-19 pandemic, and develop a roadmap to address

research gaps on public health system performance and strengthen efforts to advocate for dedicated federal PHSSR funding.

To inform the project, AcademyHealth sought to:

- Analyze reasons for the lack of sustained investments in research to support public health; and
- Identify conditions needed to create the environment that will drive support for and investment in refreshed research agenda.

The strategy for investigating those topics included the following activities:

1. Review prior research agendas and related documents;
2. Perform a non-systemic search of published peer-reviewed and grey literature;
3. Conduct key informant interviews (KIIs); and
4. Engage the project’s Guiding Council—a multistakeholder group of 16 individuals representing research, policy, and practice as well as government, academia, philanthropy, and industry.

This document describes the process for and results from those activities and lays the groundwork for the *Ensuring an Evidence Based Approach to [Re]building the Public Health System* initiative.

### Process

This analysis draws on two data collection efforts conducted in early 2023: a review of the literature, including previous research agendas, and key informant interviews. Guiding Council members shared feedback on high-level KII findings during a virtual meeting lasting 1.5 hours in March 2023 and via email following the meeting.

### Literature Review

To identify literature that might inform the project, AcademyHealth conducted a non-systematic hand search of peer-reviewed and grey literature, examined adjacent research agendas, and gathered recommendations from the Guiding Council.

## Public Health Services and Systems Research

PHSSR is the field of study that examines the organization, financing, and delivery of public health services within communities, and the impact of these services on public health. Public health systems are commonly defined as “all public, private, and voluntary entities that contribute to the delivery of essential public health services within a jurisdiction.”

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Articles were categorized into four groups:

- Commentaries; including Calls to Action stemming from the COVID-19 pandemic and seminal papers from National Academies of Science, Engineering and Medicine and other thought leaders;
- Research articles;
- Practice articles; and
- Research agendas.

## Key Informant Interviews

To identify potential interviewees, the project team first determined categories of relevant perspectives: PHSSR researchers; previous, current, and/or potential future public and private funders of PHSR; and users of PHSSR. The project team determined the top three individuals/organizations in each category. The categories were not mutually exclusive. An invitation to participate was sent to five individuals; they all agreed to take part in a key informant interview. All five interviews were conducted in February 2023 and captured each of the stakeholder perspectives, including:

- PHSSR researchers (n=4);
- Previous, current, and/or potential future public and private funders of PHSSR (n=3); and
- Users of PHSSR findings (n=3).

Interviews lasted approximately 45 minutes in duration and were conducted via Zoom, with video and audio recorded for notetaking purposes.

## Results

The literature search and key informant interviews pointed to several reasons for the lack of sustained investments in research to support public health, and conditions that might support an environment that will drive investment in, support for, and action on the refreshed research agenda. Results are described below.

### Lack of Sustained Investment

Key informants were asked directly: *What do you think are the reasons for the lack of sustained investments in the field?* The literature was also reviewed to identify potential reasons for unstable funding. Results from both the key informant interviews and the literature review point to three overarching themes: (1) funding; (2) relevance and impact; and (3) branding and advocacy.

Table 1. Reasons for the lack of sustained investment.

Key Concept	Relevance to PHSSR
Funding	Lack of federal support Need for diverse funding streams, including public and private funders Misreporting on public health spending
Relevance and Impact	Lack of scalability, actionability, and consensus on the field’s impact Need to ensure research results are accessible to and translatable by health departments
Branding and Advocacy	Unclear and ambiguous definition results in lack of enthusiasm and inability to attract stakeholders Lack of coordinated advocacy campaign

## Funding

Chronic underfunding of public health was brought up by all five key informants. For instance, informants mentioned the ‘bust and boom’ and ‘crisis to complacency’ cycle of support—whereby public health receives temporary attention and investment because of disaster (i.e., COVID-19, 9/11). They further cited the ‘cultural norm’ in the U.S. to invest in health care versus public health despite longstanding acceptance that medical care is estimated to account for only 10-20 percent of the modifiable contributors to healthy outcomes for a population.<sup>7</sup>

Furthermore, the literature documents trends in underinvestment as well as misreporting on public health spending. For example, Orr et al. warn that the federal government’s inaccurate impression of governmental public health expenditures, based on lack of standardization and accountability, has likely reduced policy makers’ willingness to increase federal investments in this area.<sup>8</sup>

Four of the five key informants specifically identified the lack of federal support for PHSSR as cause for lack of sustainability. Two of those informants suggested the National Institutes of Health (NIH) should be funding this field. More broadly, AcademyHealth’s **PHSSR Interest Group** leaders, Drs. Erika Martin and Betty Bekemeier, published a commentary one year into the COVID-19 pandemic suggesting that “long-term and stable federal allocations supporting the never-funded research activities promised in the Prevention and Public Health Fund are critical to revive and grow this important area of study. Earmarking funds for PHSSR in federal COVID-19 relief packages could catalyze the development of much-needed evidence.”<sup>9</sup> Three of the key informants expressed dissatisfaction at the lack of support for research in the new **CDC Infrastructure grants**.

Funding cannot come from one source alone, either. Martin and Bekemeier, as well as the key informants, cited the Robert Wood Johnson Foundation’s (RWJF) early support as critical to developing the field but called it “unreasonable to expect a single foundation to largely shoulder the weight of an entire field.”<sup>10</sup> There is consensus across the literature and the informants that diverse public and private funding streams are vital for sustained investment. Additionally, leaning on a small group of funders, as the field did in the past, subjects it to the strategic priorities of a few institutions, often with narrowly framed mission impact foci and/or narrowly defined priorities, which can lead to funding instability that comes from the cyclical nature of strategic planning processes.

PHSSR stakeholders have been calling for increased support long before the COVID-19 pandemic. For AcademyHealth’s 2010 needs assessment for data and methods in PHSSR (“2010 needs assessment”), 73 percent of survey respondents reported funding was the main barrier to advancing methods in PHSSR. The report also identified a pipeline problem, echoed more than a decade later by two key informants who noted that, without secure, long-term support, they are wary of directing students to the field.

Lastly, key informants considered competition for resources. One suggested that the increased focus on health equity may be drawing resources from public health, noting that “investing in the social determinants of health is not the same as investing in the public health system.” Others referenced enthusiasm around ESG (environmental, social, and corporate governance) and justice (i.e., social, health, environmental, reproductive), which may lead to greater health equity but may not improve the governmental public health system.

## Relevance and Impact

The second theme which emerged involved the relevance and impact of PHSSR. A formative assessment of the field, conducted in 2013, described PHSSR as “at the end of its beginning” and “on the map, certainly among researchers, increasingly also among thought leaders, as on IOM panels, and to some extent among federal policy makers” while also outlining shortcomings and challenges, including lack of scalability and actionability.<sup>11</sup> A decade later, our public health practitioner key informants also pointed to this challenge, citing variation across public health systems and the challenge of adapting research findings to fit them. At a recent event, Centers for Disease Control and Prevention Director, Rochelle Walensky impelled the research community to “make sure questions are action oriented,” and challenged researchers with anticipating the questions of tomorrow.<sup>12</sup> Echoing the need for action, one key informant suggested that this initiative define an *action* agenda rather than a *research* agenda.

A challenge for the field is to ensure research results are accessible to and translatable by research users. For findings to influence public health practice, health departments must understand their perceived importance and be skilled in “challenging the latest evidence for its applicability in their setting and population.”<sup>13</sup>

To date, consensus is lacking regarding the field's impact. Some key informants struggled to identify even one study or finding while other informants were able to cite specific results and bodies of work. One informant pointed to the extensive evidence base supporting a return on investment (ROI) for public health interventions.<sup>14</sup> Another pointed to the recent media coverage around the Public Health Workforce Interest and Needs Survey (PH WINS) which found that between 2017-2021, half of the state and local public health workforce left their jobs, with higher rates for younger and less experienced workers. This “wake up call for policymakers on the need to prioritize workforce recruitment and retention” has been credited with informing the CDC's new infrastructure grants.<sup>15</sup> Martin and Bekemeier contend that PHSSR findings informed the development of the public health department accreditation process and the formulation of the ten essential services.<sup>16,17</sup>

### Branding and Advocacy

The final theme regarding lack of sustained support is branding and advocacy. There has long been debate and confusion about the definition of the field and its scope. For instance, key informants from the 2010 needs assessment suggested that the lack of a clear definition of PHSSR was the field's “own worst enemy,” noting that re-framing PHSSR could be very helpful if the field were to respond

to the “huge interest in ‘community determinants of health’” with a pitch that reflects these issues.<sup>18</sup> Participants in the 2013 formative assessment found PHSSR to be “vague” and “uninteresting.” Reiterating those concerns, one of our informants pointed to a lack of enthusiasm, stating “we don't have people saying, ‘I want to do *that*’ about PHSSR.” Another informant was critical of the field's identification as a ‘sister discipline’ to health services research (HSR), suggesting that its position under HSR's umbrella was limiting its research methodologies.

Regarding advocacy, one informant argued that: “we didn't court sustained investment” and was critical of both the field's dependence on RWJF funding and its lack of foresight to identify and develop sustained funding streams.

### Enabling Conditions Needed

Key informants were asked directly: *What conditions are needed to create the environment that will drive investment in, support for, and action on the research agenda?* The literature was reviewed to identify additional conditions and confirm those identified by the informants. Results from both the key informant interviews and the literature review point to conditions that are top-down, bottom-up, and bidirectional.

Table 2. Conditions needed for a successful research agenda environment.

Condition	Relevance to PHSSR
<b>Top-down</b>	
Federal-level leadership/ Congressional “champion”	Drive long-term support and action on a research agenda
Agile federal funding	Support long-term, interdisciplinary, systems-level public health research
Demand for evidence	Mobilize action on a research agenda
<b>Bottom-up</b>	
Culturally responsive, equitable, and anti-racist community engagement	Include voices of people experiencing health inequities in all work Encourage and reward community knowledge and community engagement
Research friendly environments in public health departments	Increase evidence seeking behaviors among public health practitioners
Health equity data analysis, research, and evaluation skills	Improve public health practitioners' awareness of and confidence to address health equity, social determinants of health, and social determinants of equity
<b>Bidirectional</b>	
Trust and communication	Depolarize and depoliticize public health Build trust by listening to and engaging with community members, leaders, and trusted messengers
Leadership	Engage in participatory decision making, access and share information widely and promptly, and encourage the use evidence based public health
Better, newer, faster, more interconnected data	Improve data to guide programs, respond to emergencies, and address health inequities Facilitate community inclusion, ownership, and governance
Acceptance and greater use of systems lens	Implement all-of-government and health in all policies approaches

### Top-down

Key informants agreed that **federal-level leadership** is needed to drive long-term support for and action on a research agenda. One informant pointed to Senator Tom Harkin's support for the Prevention and Public Health Fund, established under Section 4002 of the Patient Protection and Affordable Care Act (2010), as instrumental to appropriations for public health infrastructure and noted the lack of a current "congressional champion."<sup>19</sup> Another informant suggested that agency leaders with a public health lens—versus health care—could guide decision-making toward greater public health support.

One informant, a former agency leader, cited **agile federal funding mechanisms** as crucial to support long-term, interdisciplinary, systems-level public health research.

Key informants also highlighted the need to increase thirst for evidence among the public health practice community, with one posing the question: "Are we creating supply for a demand that does not exist?" Increasing **demand for evidence** among policymakers and public health practice leaders could certainly mobilize action on a research agenda. The literature suggests prioritizing and accelerating implementation of the Foundations for Evidence-based Policymaking Act of 2018, which was established to advance evidence-building in the federal government by improving access to data and expanding evaluation capacity.<sup>20</sup> The National Commission to Transform Public Health Data Systems suggests that accelerating the law's implementation would provide federal momentum for an equity-oriented data system.<sup>21</sup>

### Bottom-up

Several informants cited the need for **culturally responsive, equitable, and anti-racist community engagement**. Previous recommendations salient to the PHSSR community are: (1) include voices of the people experiencing health inequities in all stages of program and policy development and create meaningful opportunities for community engagement and evaluation;<sup>22</sup> and (2) train the next generation of public health practitioners and researchers to meaningfully partner with local stakeholders, and to value lived experience and community expertise as much as formal training.<sup>23</sup> A pandemic-related commentary further called for community knowledge in addition to community engagement: "Disease investigation efforts are likely to be more effective if they are built on substantial local knowledge of a community and acceptance by community members."<sup>24</sup>

The National Association of County and City Health Officials report, *Building Capacity to Apply Patient-Centered Outcomes Research and Comparative Effectiveness Research Findings Through Local Health Departments*, noted that local health departments (LHDs) tend not to prioritize research, especially those that are underfunded and understaffed. However, the report declares that LHDs are well-positioned as research partners given the often established relationships with their communities. These relationships thus enable LHDs to: provide researchers with contextual knowledge about the applicability of research to their community, inform the strengths and limitations of the research approach, encourage community engagement in research, and support the packaging and messaging of results so they are useful and accessible to public health practitioners.

Another common theme in the literature and in key informant interviews was the need to develop and foster **research friendly environments in public health departments**. Related to one of the potential causes for the lack of sustainability of the field—health departments' inability to access and translate PHSSR—a condition required to *create the environment that will drive investment in, support for, and action on the research agenda* is certainly an increase in evidence seeking behaviors among public health practitioners. The recent **PH WINS survey data** show 28 percent of respondents reported that data-based decision making is highly important to their day-to-day work but their proficiency as low.

Relatedly, capacity building for health department staff to improve and advance their **health equity data analysis, research, and evaluation skills**, was mentioned in the literature.<sup>25</sup> Researchers using data from PH WINS 2021 to assess the governmental public health workforce's awareness of and confidence to address health equity, social determinants of health, and social determinants of equity in their work found that employees are aware of equity-related concepts but lack confidence to address them.<sup>26,27</sup>

### Bidirectional

The issues of **trust** and **communication** arose during the key informant interviews and many published COVID-19 related commentaries. One report warns "the politicization of public health and public health mandates has weakened the public health infrastructure and minimized public health effectiveness."<sup>28</sup>

The literature suggests that outreach is needed from both public health researchers and practitioners. One paper suggests "for the academic and practice communities, better communication with key stakeholders will be needed to advocate rebuilding public



health systems and advancing evidence-based policies. We already know that researchers are adept at communicating with other researchers but less skilled in reaching non-research audiences. Skilled spokespersons are needed.”<sup>29</sup> Relatedly, a former city health officer suggests that “the use of community leaders and credible messengers to amplify messages from public health leaders has the dual purpose of expanding reach and increasing the likelihood of acceptance of the message by leveraging the trust they have with the public.”<sup>30</sup>

Brownson and colleagues found that “**leadership** is the most common determinant in promoting the use of evidence in practice and policy.”<sup>31</sup> They cite recent research showing at least three actions from leaders in public health agencies that may increase the use of scientific information in decision making: (1) participatory decision making, (2) accessing and sharing information widely, and (3) encouragement to use evidence based public health.<sup>32</sup> Key informants further suggested that momentum, energy, and enthusiasm could also support action on a research agenda.

The COVID-19 pandemic brought to light the significant disarray of the public health data infrastructure. Any seminal report from the last decade, as well as most of the new recommendations stemming from the pandemic, implores stakeholders to **invest in modernizing the public health data system**. Pleas range from the need to strengthen the collection of timely and actionable public health data to guide programs, respond to emergencies, and address health inequities, to investing in data sharing between public health departments and health care entities.<sup>33</sup> Some call for federal investment to ensure a totally integrated, high-speed, networked health system—from laboratories to health care facilities to public health data.<sup>34</sup> While others call for data democratization so that communities who have been historically excluded from shaping their own population narratives around racial identity, gender identity, disability, and sexuality can drive community agency in data systems with the most impact on their daily lives.<sup>35,36</sup>

The final condition which arises across both the academic literature as well as policy-related calls to action is the **acceptance and greater use of a systems lens**. Recommendations include integration of health considerations into policy and decision-making across all government sectors and reconvening the National Prevention and Public Health Council to guide such an all-of-government approach.<sup>37,38</sup> It is suggested that investing in public health system evaluation could illustrate the social and economic impact of allocations and investments at the state, territorial, and local levels.<sup>39</sup>

In a 2009 commentary published out of Oxford University, the author proposes that “Leaders in public health...need to be equipped with the insights and skills which will enable a complex adaptive systems improvement approach.” Perhaps in foreshadowing the public health response to the pandemic, they declare that “leaders in improving health and wellbeing therefore need to be both politically aware and skilled in systems thinking. Failure to appreciate the significance of either of these elements is likely to end in disappointment.”<sup>40</sup> Brownson and Fielding assert that new skills are often needed to identify and implement evidence-based interventions that are multilevel, policy-oriented, and consider a complex set of system-level factors. Summing up many of the conditions identified in this document, they state that the capacities and skills needed among practitioners for implementing complex interventions cut across and go beyond traditional specializations of public health training (e.g., epidemiology, environmental health, health education) to other areas including systems thinking, new methods of communication, and policy analysis.<sup>41</sup>

## Conclusion

AcademyHealth conducted a literature review, performed key informant interviews, and engaged the Guiding Council for the *Ensuring an Evidence-Based Approach to [Re]building the Public Health System* initiative in order to analyze reasons for the lack of sustained investments in research to support public health; and identify conditions needed to create the environment that will drive investment in, support for, and action on a refreshed research agenda. There was significant consistency in themes across sources, with traditional peer-reviewed literature supporting key informant responses and recent commentaries and recommendations reports.

This report provided background for the initiative’s Deliberative Dialogue, a convening of diverse, multistakeholder, and multidisciplinary public health experts, researchers, policymakers, and federal, state, and local public health leaders. It was also used to inform the identification of enabling and restraining forces that might influence the uptake, adoption, and implementation of the research agenda.

**About the Authors:** Kate Froeb, MPH, is Consultant, AcademyHealth. Sarah Weinberg and Aiyah Adam are Research Assistants, AcademyHealth. Elizabeth Cope, PhD, MPH, is Vice President, AcademyHealth.

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## Endnotes

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- 26 Note: A useful tool with proposed practices to help local health departments systematically address power imbalances, racism, and other forms of oppression which are at the root of health inequities is the Health Equity Guide, located at <https://healthequityguide.org>. The CDC Foundation's Principles for Using Public Health Data to Drive Equity provide a framework for a shift in thinking about how equity-mindedness throughout the entire data life cycle can shape and create more equitable data systems. It is located at <https://www.cdcfoundation.org/data-equity-principles?inline>. And the Community Information Exchanges (CIE)\* Data Equity Framework is a strategic visioning tool for institutions and initiatives that are undertaking the critical work of creating more equitable, inclusive systems that support health outcomes, located at [https://healthleadsusa.org/wp-content/uploads/2021/11/Equity\\_Framework\\_v12.pdf](https://healthleadsusa.org/wp-content/uploads/2021/11/Equity_Framework_v12.pdf).
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