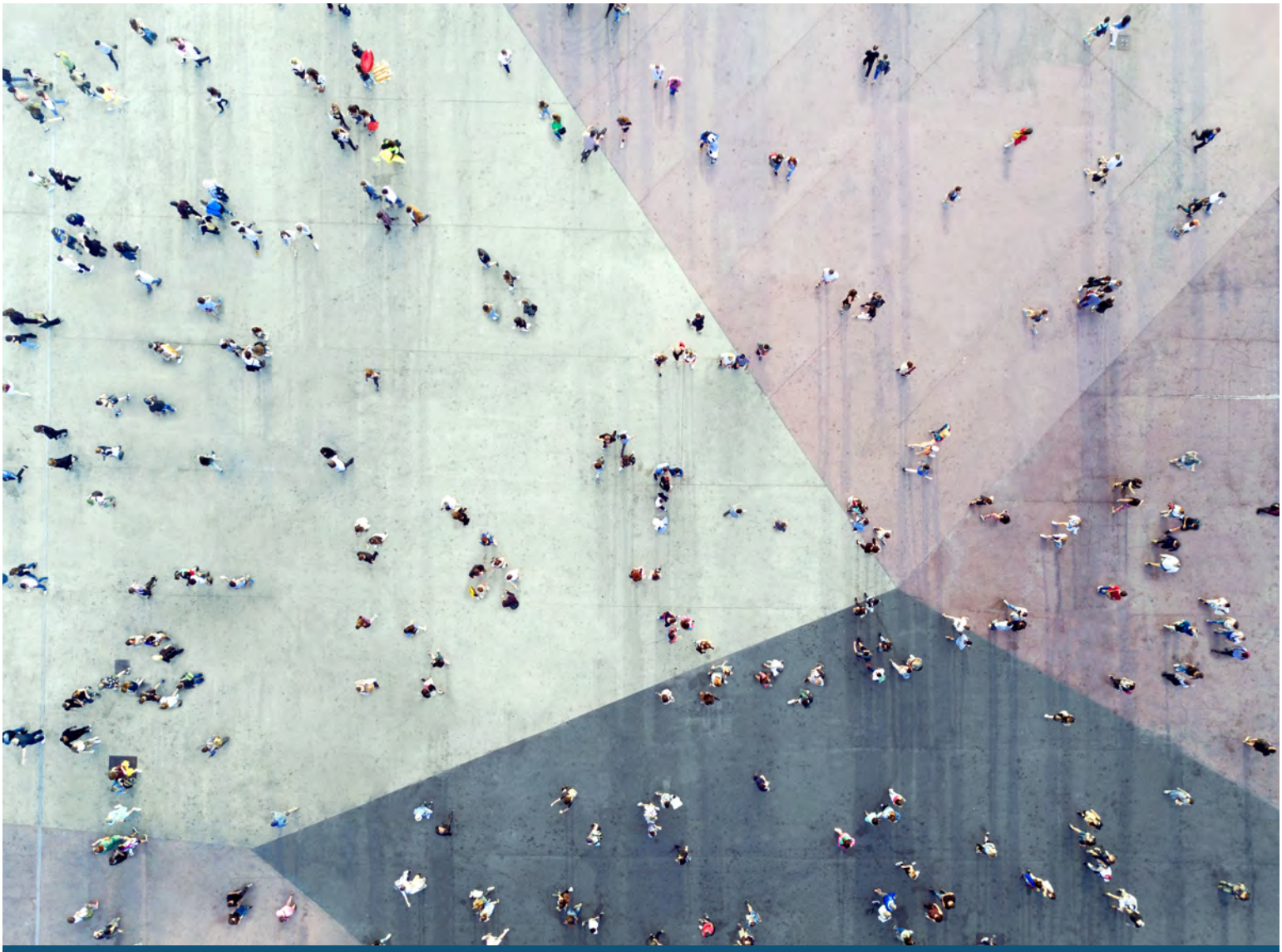

# MEETING AMERICA'S PUBLIC HEALTH CHALLENGE

## Recommendations for Building a National Public Health System That Addresses Ongoing and Future Health Crises, Advances Equity, and Earns Trust

The Commonwealth Fund Commission on a National Public Health System

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The Commonwealth Fund

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# EXECUTIVE SUMMARY

More than 1 million Americans have died from COVID-19, a toll that exceeds the total number of U.S. combat deaths from all wars since the nation's founding. The United States is also failing to protect millions of people from growing health challenges, such as overdoses, diabetes, and maternal mortality. The scale of these challenges justifies the development of a national public health system to save lives every day and better prepare for future emergencies. The Commonwealth Fund Commission on a National Public Health System finds that:

- *Public health efforts are not organized for success.* Despite dozens of federal health agencies and nearly 3,000 state, local, tribal, and territorial health departments, there is no single person or office at the U.S. Department of Health and Human Services to lead and coordinate the nation's public health efforts.
- *Public health funding is not sufficient or reliable.* The chronic underfunding of public health has left behind a weak infrastructure, with antiquated data systems, an overworked and stressed workforce, laboratories in disrepair, and other major gaps.
- *Expectations for health agencies are minimal.* Funding is not tied to a set of basic standards for the capabilities of state, local, tribal, and territorial health departments.
- *The health care system is missing opportunities to support health improvement.* It is difficult to convert collaboration with public health agencies during emergencies into sustainable work to address day-to-day health challenges.
- *The public health enterprise is facing a crisis in trust.* This crisis relates to experiences with racism and discrimination, ideological opposition, and misinformation.

The United States should build a national public health system to promote and protect the health of every person, regardless of who they are and where they live; implement effective strategies with others in the public and private sectors; respond to both day-to-day health priorities and crises with vigor and competence; and, in the process, earn high levels of trust. In this report, the Commission provides a detailed set of recommendations to achieve this vision, which include the following:

**Congress should:**

- Establish a position, such as an undersecretary for public health at the U.S. Department of Health and Human Services (HHS), to oversee and coordinate the development of the national public health system.
- Provide adequate and reliable public health infrastructure funding, paired with expectations that states, localities, tribes, and territories meet standards for protecting their communities.
- Fund a modern public health information technology system and provide HHS with the authority to make it work.

**The Administration should:**

- Set parameters for use of available funds to systematically build public health infrastructure, with an initial focus on workforce and data systems.
- Support revision of accreditation standards for state, local, tribal, and territorial health departments to focus on basic capabilities for public health protection.
- Establish a council to coordinate federal public health action with states, localities, tribes, and territories.
- Reconvene the National Prevention and Public Health Council to guide an all-of-government approach to the drivers of health.
- Embrace ethics, integrity, and transparency in decision-making in public health.

**States, localities, tribes, and territories should:**

- Assess the structural and policy changes needed to provide foundational capabilities for all their residents.
- Build connections between the health care system and public health to strengthen day-to-day health improvement efforts and better prepare for emergencies.
- Involve community partners in decision-making about public health.

Modernizing public health in the United States is not a simple task, but it cannot be ignored. The window for change is open, and the moment of opportunity is now.

## INTRODUCTION AND OVERVIEW

More than 1 million Americans have died from COVID-19, a toll that exceeds the total number of U.S. combat deaths from all wars since the nation's founding. The scale of this catastrophe demands a commensurate response: the development of a national public health system to protect millions more from ongoing health crises and future emergencies.

Why have so many Americans died? The answer lies not just in the biology of the coronavirus but also in the nation's lack of preparedness for a pandemic. Particularly in the early critical months of the coronavirus pandemic, there were significant gaps in tracking the disease related to delays in getting tests to people who needed them and to archaic approaches to aggregating data. There were struggles to develop timely guidance and to communicate accurate information amid a torrent of falsehoods, some spread deliberately. There was insufficient information about the effectiveness of the health care system's response, and little reliable information about what resources were needed. Longstanding inattention to high rates of chronic illness and glaring health inequities exposed millions of people to higher risk of getting sick or dying.

Instead of coming together to fight a common enemy, many Americans came to distrust their government and each other.

The country's remarkable scientific achievements, and the diligence and commitment of our public health and health care workforces, are commendable. Safe and effective vaccines were developed in record time. These vaccines, together with authorized treatments and the tireless work of health care providers, saved hundreds of thousands of lives. Nonetheless, the United States experienced a historic number of deaths. As of May 2022, the United States ranks third in the mortality rate among the most affected countries, and 62nd in the world in vaccination coverage.

A basic fact underlies these grim statistics: The United States lacks a national public health system capable of protecting and improving health, advancing health equity every day, and responding effectively to emergencies. While the public health systems of other nations led coordinated responses with strong data systems, networks of advanced laboratories, effective communications, and teams of outreach workers, the U.S. response splintered, leading to widely disparate outcomes across the country. (**See box, "Key Definitions."**)

### KEY DEFINITIONS

***Public health*** is "what we as a society do collectively to assure the conditions in which people can be healthy." (Institute of Medicine, 1988) The term encompasses a broad range of activities from the neighborhood to the national level that protect the health of individuals, families, and communities.

***Health equity*** means that everyone has a fair and just opportunity to be as healthy as possible regardless of race, ethnicity, religion, income, geography, gender identity, sexual orientation, or disability.

The ***national public health system*** represents the organized efforts of federal, state, local, tribal, and territorial governments to improve public health and achieve health equity. A national public health system should promote and protect the health of every person, regardless of who they are and where they live; implement effective strategies for doing so with others in the public and private sector, including those who can address the drivers of health; respond to day-to-day health priorities and crises with vigor and competence; and, in the process, earn high levels of trust.

The consequences of these deficiencies reach far beyond the current pandemic and undermine the nation's ability to respond to ongoing and pressing health challenges: the pandemic exacerbated a national mental health crisis, especially among millions of children and young adults who have been knocked off their life trajectories. More than 100,000 Americans died last year from drug overdoses, the most ever. The HIV epidemic continues to claim thousands of lives, despite bipartisan efforts to end it. Maternal mortality is rising, with Black women three times more likely to die from a pregnancy-related cause than white women. Far too many people suffer from preventable cancers or receive care too late for the most effective treatment. And as a cumulative result of these failures, life expectancy in the United States now ranks below that of more than 60 other nations.

Our public health approach to addressing these challenges is haphazard at best. More than a dozen federal agencies have major roles in public health, including multiple agencies within the Department of Health and Human Services (HHS). However, these agencies are not sufficiently coordinated, and collaboration, when it does occur, is usually based on temporary arrangements that dissolve when the urgency of the moment subsides.

Thousands of dedicated public health professionals lead and staff state, local, tribal, and territorial health departments. Yet most of these health departments are chronically underfunded, understaffed, and easily overwhelmed by competing demands. And the federal government sets few expectations for the capabilities of these departments, leaving jurisdictions unaware of what is needed to support their success.

The pandemic exposed these fundamental weaknesses of the U.S. approach to public health and highlighted the urgent need for the nation to do much better.

## The Commonwealth Fund Commission on a National Public Health System

The Commonwealth Fund Commission on a National Public Health System takes the tragedy of this current coronavirus pandemic and some of the concerns it raised as the starting point for reform. In this report, we set out a vision for a robust and sustainable public health system led by the federal government, in partnership with state, local, tribal and territorial public health agencies, and in collaboration with the health care system, other sectors, and community partners.

We identify four principal areas the nation must focus on to achieve such a system:

- *The federal government should lead a strong and capable national public health system.* HHS should have the lead responsibility for developing a strategic vision and providing support for the work of federal, state, local, tribal, and territorial public health agencies every day and during emergencies. The department needs a single focal point for these overarching activities. Congress should create a new position, such as an undersecretary for public health, to elevate this function and more closely mirror the structures of other large federal departments. In the near term and under existing authorities, the HHS Secretary should reconfigure the role of the Assistant Secretary for Health and appropriately resource and staff this role. The key priorities are to strengthen the nation's public health infrastructure, including data systems, workforce, laboratories, and procurement, and to bring together state, local, tribal, and territorial health departments to promote coordination. Because enhancing health and well-being requires programs and policies beyond the reach of HHS, the President should bring together leaders and resources from the White House and across the government in a reconvened National Prevention and Public Health Council.

- *Congress should provide stable support matched with expectations for states, localities, tribes, and territories to protect the health of their populations.* Current levels of support are not commensurate with the public health challenges these jurisdictions face. While the federal government typically provides additional funding to public health agencies during emergencies (including the pandemic), these resources have not been sustained when the crisis passes. To end this "boom and bust" cycle, the federal government should fund health departments to develop and maintain core capabilities to protect their communities. In exchange for this support, the nation's public health departments should be expected to meet basic standards for delivering these core capabilities as assessed through a revised accreditation process.

- *The health care system should work closely with public health agencies in normal times and during emergencies.* Some of the greatest successes in the U.S. pandemic response came about when health care systems rallied to defend their communities, sharing their workforce, data, and communications platforms to advance public health efforts. The national public health system should formalize and support these connections and put them into action to address everyday health challenges.

- *Public health agencies should work to earn the public's trust.* Many people lost confidence as a result of real and perceived weaknesses in the response to the coronavirus pandemic. Others had little trust in public health efforts to begin with, based on

experiences with racism and discrimination. The national public health system should promote diversity and broaden community representation in key federal efforts, share decision-making with communities, support community-based organizations, communicate more effectively in the face of misinformation, and commit to ethics, integrity, and transparency.

Corresponding to these recommendations, we have organized the report into four sections. The first centers on how the federal government can support a national public health system, with a particular focus on how HHS needs to strengthen its leadership and coordination role. The second sets out how the federal government can support public health in states, localities, tribes, and territories. The third details ways to integrate a national public health system with the U.S. health care system. The fourth and final section lays out essential steps the public health system should take to earn public trust.

To support these recommendations, we propose that approximately $8 billion in new investments be dedicated to improving information technology (IT) and public health infrastructure each year — an amount that pales in comparison to the trillions of dollars lost as a result of the inadequate public health response to the pandemic. These recommendations also include initial, short-term steps that can be taken under current authority and with current resources.

## ABOUT THIS REPORT

This report focuses on the steps needed to build a national public health system. It draws from many studies and analyses of public health in the United States, including large consensus studies and reports by the National Academies of Science, Engineering, and Medicine, as well as other recent reports, such as *Public Health 3.0: A Call to Action for Public Health to Meet the Challenges of the 21st Century*, the Bipartisan Policy Center's *Public Health Forward: Modernizing the U.S. Public Health System*, the Black Coalition Against COVID's *The State of Black America and COVID-19*, *HHS's Presidential COVID-19 Health Equity Task Force: Final Report and Recommendations*, and Robert Wood Johnson Foundation's *Charting a Course for an Equity-Centered Data System*. We also received more than 100 comments from the public; met with more than 100 current and former federal, state, local, tribal, and territorial, public health officials, researchers, and policy experts across the political spectrum; and consulted with legal experts on potential recommendations.

This report includes recommendations for many federal agencies, recognizing that multiple agencies have important responsibilities and provide essential funding to state, local, tribal, and territorial health agencies. We appreciate the vital and often unique roles that the U.S. Centers for Disease Control and Prevention (CDC) plays in the nation's public health efforts. But the scope of this report is much broader and does not overlap with an evaluation of the CDC that was initiated by the agency's leadership in April.

This report is not an after-action report on the coronavirus pandemic. While it discusses the challenges that impeded the U.S. response, it focuses on remedying systemic failures that undermined the response to the pandemic, and on the need for new approaches, rather than attempting to assign blame to individuals or organizations. The report also does not delve into details of how individual agencies should be organized or run.

Moreover, the report does not address all potential questions related to public health and pandemic preparedness. For example, it does not cover the development of medical countermeasures, such as new vaccines, medications, and tests, and the need for further research. Nor does it address broader reforms regarding health care payment, insurance coverage, and the health care delivery system or concerns such as the global response to public health challenges. While such matters are also vitally important, an effective national public health system can significantly reduce the burdens on the health care system by preventing illness or mitigating the impact of disability on achieving the highest attainable level of health. We focus on an often-overlooked precondition for the United States to reach its full potential: the need for an effective national public health system.

## RECOMMENDATIONS

# A. The Federal Government Should Lead a Strong and Capable National Public Health System

A national public health system requires federal leadership. The agency most fit for this leadership role is the Department of Health and Human Services (HHS), home to the largest share of the federal agencies and legislative mandates pertinent to public health. Because of weaknesses in its structure, authority, and funding, however, HHS has struggled to mount consistent responses to the coronavirus pandemic and other major national health challenges. These weaknesses must be addressed for the department to leverage resources and support collaboration to more successfully deal with such challenges, whether routine or emergent. In addition, effective leadership from HHS requires support from and coordination with a variety of other federal entities, including the White House and its Office of Management and Budget (OMB), and multiple other cabinet departments.

Unlike the Departments of State and Homeland Security (among other federal departments), HHS lacks undersecretaries that oversee complementary aspects of its mission. There is also no organizational home that is currently structured and resourced to provide leadership on a wide range of public health issues. Instead, this job is left to the HHS Secretary and Deputy Secretary, both of whom are stretched thin across many different policy and operational responsibilities, within HHS and among other federal entities. Administrations have tried to fill this gap by charging senior officials or offices with coordinating public health efforts. However, these attempts have not created a sustainable, functioning capability to fulfill the federal government's public health responsibilities.[1]

Absent an official or office to lead public health efforts, HHS has had difficulty coordinating the work of the large and powerful agencies that are essential to public health, both within the department and elsewhere in the federal government, and with nonfederal partners.[2]

The responsibilities of HHS agencies, defined by statute and historical practice, intersect and overlap. For example, the CDC, the Health Resources and Services Administration (HRSA), and the Food and Drug Administration (FDA) are all engaged in supporting state and local public health workforce efforts, but there is no plan coordinating their work. Mechanisms for coordination are often ad hoc, either pursued through new committees or working groups that are created to address specific health topics or through emergency response structures for crisis management. The Office of the Assistant Secretary for Health convenes many of these groups around topical issues and serves in an advisory role for the department's annual budget planning process, but it lacks the authority to direct implementation or funding.

A related structural challenge for HHS is a gap in how the federal government is organized. While the drivers of health are fundamental and diverse, the federal government lacks a permanent cross-governmental structure to coordinate the range of programs that significantly affect health. Meanwhile, most other federal departments lack public health knowledge and expertise. As a result, HHS struggles to guide broader and cross-governmental efforts.

Compounding these structural gaps is HHS's inadequate statutory authority in key areas. For example, federal law requires HHS to establish standards for "an integrated system or systems of public health alert communications and surveillance networks" and develop requirements for the sharing "of essential information concerning bioterrorism or another public health emergency."[3] However, HHS, including the CDC, does not have the authority to set generally applicable data standards and require collection of timely and essential information from across the country. Limitations on procurement and lack of transparency of the supply chain have also prevented HHS from supporting states, localities, tribes, and territories with key resources when they are most needed, from medical products to personal protective equipment to information technology (IT) systems.[4] And restrictions on use of funds and on the ability to transfer funds between budget lines prevent HHS overall, and the CDC in particular, from shifting resources quickly to get a jump on emergency response.

## RECOMMENDATIONS

HHS should lead the development, implementation, and sustained work of a national public health system across the federal government and across states, localities, tribes, and territories. This effort requires: 1) coherent federal strategies to address core areas of data, workforce, laboratories, and procurement; 2) an individual who is empowered to lead federal efforts for a national public health system; 3) coordination across the federal government through a reconvened National Prevention, Health Promotion, and Public Health Council; and 4) accountability for outcomes.

### Recommendation #1:
**HHS should develop and coordinate strategies to address core areas of public health infrastructure: data, workforce, laboratories, and procurement.**

*Data.* Accurate information is the lifeblood of a public health system, facilitating everything from the timely recognition of key health threats to the accurate assessment of whether efforts to address them are working. HHS should develop a comprehensive approach to public health data, joining traditional and novel data sources. This effort should encompass:

- Modernizing traditional public health surveillance led by the CDC.
- Including data from federal payers, beginning with CMS and HRSA.
- Improving state, local, tribal, and territorial health data systems.
- Integrating data from the health care system and other nongovernmental private entities.
- Including innovative data sources, such as wastewater monitoring.
- Using advanced analytic and modeling approaches, drawing from best practices in artificial intelligence and machine learning.
- Implementing a dedicated effort to visualize data to increase their accessibility to the public.
- Establishing an open data effort that makes datasets accessible to researchers and the public, with appropriate safeguards for privacy.

Support from Congress is essential for this public health data effort to succeed. Specifically:

- Congress should grant HHS and its agencies the authority to establish and enforce standards and implementation specifications for data collection, interoperability, and exchange with and among state, local, tribal, and territorial health authorities and private health care entities.[5] With this authority, for example, CDC should be able to access and analyze important, consistent, and timely data on the evolving pandemic from across the country, as well as data to monitor key health issues outside of emergencies.[6]
- Congress should provide necessary funding to support a modern public health IT system. The Healthcare Information Management Systems Society has estimated that $36.7 billion over 10 years is needed to support digitizing core public health data functions; creating interoperability among health care systems and public health systems; and transforming the data capacities of state, local, tribal, and territorial health departments.[7]
- As part of its work on public health data, HHS should tap the expertise of the CDC, the Office of the National Coordinator for Health Information Technology (ONC), the Centers for Medicare and Medicaid Services (CMS), other agencies, and the private sector. Consistent with the recommendations of a recent Government Accountability Office (GAO) report,[8] HHS should develop clear and transparent metrics and timelines for creating a modern public health data infrastructure.[9] In addition, for all programs supported by the department, HHS should require the collection of data on race, ethnicity, and geography, including from states, localities, tribes, and territories.[10]

*Workforce.* A well-trained and diverse public health workforce is essential to make progress on urgent health challenges such as the rise in addiction, overdoses, and maternal mortality. And that workforce must be ready for emergencies. HHS should oversee the development of a comprehensive workforce strategy consisting of investments in the state, local, tribal, and territorial public health workforce (as described in **Section B**) and several fundamental workforce initiatives.

- HHS should expand and modernize its workforce programs to make it possible to detail more federal staff to state, local, tribal, and territorial agencies. This effort should include the Epidemic Intelligence Service and the U.S. Public Health Service Commissioned Corps. Its dual goals should be to expand the workforce and expertise available to health departments while improving the development, coordination, and implementation of federal programs as these staff rotate back to their HHS agencies. HHS should promote diversity in this effort, alongside training on effective community engagement strategies. A companion program should bring state, local, tribal, and territorial personnel to the federal government.

- HHS should support efforts, such as community health worker programs that broaden the roles and career paths for local community members who are eager to contribute to health improvement (discussed further in Section D). These efforts should include collaboration with Department of Labor training programs.

- HHS should establish a national continuing education and training system for public health, in coordination with schools and programs of public health and together with state, local, tribal, and territorial health partners. To promote multisector collaborations, this system should also address education of personnel in agencies outside the traditional boundaries of public health such as education, housing, and criminal justice. Over time, health departments could use this system to credential individuals for particular roles.

- HHS should promote engagement of health care personnel in public health efforts. These are discussed later in this report in Recommendation 9.

*Laboratories.* As the pandemic has shown, effective testing programs serve individuals and inform communities about emerging and present health challenges. HHS should lead the establishment of a modern public health laboratory system, outlining key roles for the CDC, FDA, CMS, other agencies, private laboratories, and, critically, state public health laboratories. This laboratory modernization program should define the minimum capabilities for public health laboratories; a framework for collaboration and coordination with academic and private laboratories; and a set of expectations about data sharing, linkage to clinical data, and collaboration across the system.[11] To support this effort:

- Congress should provide HHS, through the FDA, with the authority to regulate novel technologies for home testing.[12] The goals should be to support a robust and transparent market in innovative, high-quality products and ensure that key information is available for essential public health purposes including emergency response.

- HHS should develop a genomic pathogen database that is accessible to state and local public health laboratories and relevant to emerging respiratory diseases as well as responsive to other challenges such as food safety. The database should combine sequences with clinical and other data to allow for much greater understanding of the risk and spread of these threats. Such a database might be housed at National Institutes of Health (NIH), with the CDC, as leader of the nation's public health laboratory system, developing key specifications and coordinating planning with other federal, state, local, and private laboratories.

*Procurement.* Implementation of effective public health strategies requires the ability to purchase and distribute key supplies quickly and at reasonable cost. To improve procurement, HHS should make it easier to purchase key supplies across the federal government, states, localities, tribes, and territories. It should also take steps to prevent competition for scarce resources among these entities, which has previously led to maldistribution and higher prices. To support this effort:

- HHS should create a federal procurement schedule that permits health departments (if they so choose) to procure personal protective equipment and other high-quality products at lower cost when needed.[13] (Health departments would need the ability to purchase these products under their governing statutes to take advantage of this opportunity.) This schedule should also include equipment and software that meets HHS standards to facilitate data modernization.

- Congress should authorize HHS to establish a reliable process for identifying and distributing equipment that is vital to meeting public health threats.[14] Such a supply chain program, for example, would allow personal protective equipment, ventilators and essential medications to be moved to parts of the country where health care systems are being overwhelmed.

### Recommendation #2:
### HHS should designate a leader for the national public health system.

The critical tasks of a national public health system require a focal point for responsibility and accountability within HHS. Congress should create a new position, such as an undersecretary for public health, to elevate this function and more closely mirror the structure of other large federal departments. However, given the urgency of developing a national public health system, HHS should, under existing statutory authority, reconfigure and support the position of Assistant Secretary for Health to serve in this role.[15] (For clarity, this report refers to the Assistant Secretary for the role of leading the national public health system.) To be successful, the Assistant Secretary will need:

- *Clear scope of authority.* The Assistant Secretary's role should be to oversee and coordinate issues that deeply involve the national public health system. It should not be operational or extend to all the work of HHS's agencies. For example, this role would not oversee the FDA's routine regulatory reviews or the CDC's efforts to investigate outbreaks.
- *Transparency and accountability.* The Assistant Secretary's role should be visible and accountable, providing timely explanations of ongoing work and measurement of progress. Key projects should be clearly defined and articulated and should have timelines for completion and reporting (within and outside HHS).
- *Freedom from inappropriate political interference.* To maintain trust in public health agencies that serve the nation, the Assistant Secretary should focus on efforts that advance public health. To achieve this goal, policies should be established that prevent inappropriate interference, as recently recommended by the GAO and discussed further in **Section D** of this report.
- *Appropriate staff and resources.* Within one year, the Office of the Assistant Secretary should be fully resourced and staffed to meet its new responsibilities. Until such time, HHS should detail staff with expertise in these issues and support their work across the department.
- *Access to flexible and emergency funding.* Congress should provide reserve funding for HHS that can be immediately available in case of a public health emergency, as well as mechanisms to reallocate existing funding for the duration of the crisis. The HHS Secretary should rely on the Assistant Secretary to move resources consistent with available transfer authority to support critical public health projects, such as the urgent monitoring of emerging threats.
- *Budget review.* Leadership requires the ability to direct resources. The Assistant Secretary should review and approve agency budget components that pertain to coordination of the core areas of data, workforce, laboratories, and procurement, as well as other cross-cutting priorities. Agencies should be held accountable for their execution, so that critical strategies are funded and implemented, and redundancy is minimized. To accomplish these tasks, the Assistant Secretary should work with the HHS agencies and the Assistant Secretary for Financial Resources, rather than unilaterally shift resources among agencies. This effort should be coordinated with OMB's efforts to track resources devoted to public health across the government, as discussed in **Recommendation 3** below.

The Assistant Secretary should establish a national council, with broad representation from state, local, tribal, and territorial health departments, to coordinate with federal public health efforts. Supported by the HHS Office of Intergovernmental and External Affairs, the council should be a forum for developing policy and addressing key implementation issues in a national public health system. For example, the council could coordinate state and local public health efforts on maternal health with payment policy at CMS, maternal and child health programming at HRSA, and surveillance at the CDC.

The council should seek input from other constituency groups as appropriate and coordinate its efforts with the Secretary's Tribal Advisory Committee, a mechanism for HHS to engage with Indian Tribal Governments on all issues under the department's purview.[16]

The role of the Assistant Secretary should complement those of the Assistant Secretary for Preparedness and Response and the Surgeon General. Consistent with existing statutes, in the event of a public health emergency, the Office of the Assistant Secretary for Preparedness and Response should lead the response. The

response should benefit from a strengthened public health infrastructure, as well as other assets such as the U.S. Public Health Service Commissioned Corps. The Surgeon General, as the "nation's doctor," would continue to lead the Commissioned Corps and play a lead role in bringing together scientific information and communicating with the public.

The Assistant Secretary should be an experienced public health leader. And whenever new people are considered, HHS should ask a respected scientific authority, such as the National Academies of Science, Engineering, and Medicine, to review and assess the qualifications of candidates. Only individuals who are highly qualified, based on public health expertise and management experience at health agencies, should be considered.[17]

**Recommendation #3:**
**The President should reconvene the National Prevention and Public Health Council to coordinate cross-governmental efforts to advance health and equity.[18]**

This council, which was established in statute but is not operational, brought together the relevant federal departments and offices to address the drivers of health, including the Domestic Policy Council, the Office of National Drug Control Policy, and OMB.[19]

The goal of the reconvened National Prevention and Public Health Council should be to make use of the full range of federal programmatic levers to address priority public health issues. The council membership should be expanded to include the National Security Council, the Office of Science and Technology Policy, and the National Economic Council.[20] During national emergencies, the council will be well positioned to support all-of-government response mechanisms led by the National Security Council and supported by the Federal Emergency Management Agency (FEMA) within the Department of Homeland Security. Outside of national emergencies, the council can oversee periodic, in-depth reviews of different areas of policy to identify opportunities to better align with health improvement and health equity.

Collectively, the White House Policy Councils and OMB should support HHS by ensuring there is consistent, rather than episodic, federal coordination of a national public health system. As part of this coordination effort, HHS should work with other federal departments and agencies to ensure there is sufficient public health expertise within those entities and coordination of key efforts.

In support of the National Prevention and Public Health Council's work, and to highlight the contributions of multiple federal agencies to public health, OMB should develop a "cross cut" that tabulates public health expenditures within the federal budget, including those corresponding to top public health priorities and core infrastructure areas. This can help identify key areas for closer coordination at the federal level and at the grantee level and should be a focus of the OMB director's budget review.

**Recommendation #4:**
**HHS should be transparent and accountable in its leadership of a national public health system.**

HHS should identify key public health priorities, articulate prioritized strategies to address them, set measurable goals, and publicly report metrics, drawing on the Healthy People process as appropriate. A respected third party, such as the National Academies of Science, Engineering, and Medicine or the GAO, should evaluate and publicly report on these efforts, including by seeking input from state, local, tribal, and territorial partners.

## B. Congress Should Provide Stable Support Matched with Expectations for States, Localities, Tribes, and Territories to Protect the Health of Their Populations

The pandemic illuminated the underappreciated role of state, local, tribal, and territorial health departments. These agencies respond around the clock to a broad

range of health threats, develop and implement programs to address priority health goals such as improving birth outcomes or reducing overdoses, and tailor national, state, and local resources and strategies for effective local implementation. During the pandemic, public health staff worked extraordinary hours under unprecedented circumstances to track COVID-19 cases, establish contact tracing programs, communicate with their communities, and establish testing and vaccination programs. These efforts are the bedrock of public health in the United States.

Unfortunately, today, this bedrock needs reinforcement. Most health departments have insufficient resources to support core capabilities that are central to providing the basic services needed to protect the public. Having these core capabilities makes it possible for health departments to control outbreaks of infectious disease, reduce injuries, prevent chronic illness, enhance access to the health care system, protect the health of families and children, and respond to emergencies. A 2015 study found that less than half of Americans live in an area in which "a broad array of the recommended public health activities [is] available in the community."[21]

Several major gaps undermine the effectiveness of state, local, tribal, and territorial health departments:

- *Gaps in capacity.* The capacity of the nearly 2,800 local health departments across the country varies considerably, with wide ranges in size, scope of authority, and abilities. And there is no mechanism to compensate for that variability. For example, according to the National Association of County and City Health Officials, more than 60 percent of local health departments serve fewer than 50,000 people.[22] Yet, staffing patterns show that, as a matter of practice, health departments do not employ an epidemiologist, a position critical to investigate diseases, until the population served reaches between 100,000 and 250,000 people (and even then, this is typically a half-time position).[23]

- *Gaps in workforce.* Many departments lack sufficient staff, including public health nurses, laboratory scientists, and environmental sanitarians. The Public Health National Center for Innovations Staffing Up project estimates 80,000 new state and local positions are needed nationwide to meet foundational public health services. Many of these positions may require a different set of skills than the public health workforce currently possesses, such as community engagement and data management.[24] Departments also need greater capacity to increase staffing during emergencies.

- *Gaps in funding.* Government funding for core public health functions is grossly insufficient. Several studies have attempted to estimate the funding needed for state and local health departments to provide basic services. The most detailed estimate suggests the United States should spend at least $32 per capita for these services.[25] However, average per capita spending is currently $19, producing an overall shortfall of $4.5 billion annually. What's more, these figures are an underestimate, as they are based primarily on personnel and do not include other aspects of core infrastructure such as material, equipment, or training.

  Unfortunately, federal funding for state, local, tribal, and territorial public health functions has only minimally supported core infrastructure and is instead focused on programmatic or disease-specific functions. In addition, the "boom and bust" cycle of public health budgeting, with surges in federal funding in response to emergencies followed by budget retrenchments, makes it hard for state and local public health agencies to invest in long-term capacity building. While during the pandemic period the federal government increased its support for public health, this support represents a fiscal cliff. New hires become the financial responsibility of local public health after funding sunsets. As a result, state and local health officials are hesitating to invest in workforce expansion.

- *Gaps in data and information technology (IT).* Enormous gaps exist in data and information technology systems. As a recent review in the *New England Journal of Medicine* found:

  > Although information technology and data capacity are key to public health capacity, much of state and local public health work remains based on paper, with large gaps in the ability of health departments to obtain, analyze, and share information expeditiously. More than one third of local health departments are unable to access an electronic surveillance system with data from local emergency departments, which could facilitate early identification of illnesses of concern, including foodborne illness. Only 3

percent of local health departments reported that their information systems are all interoperable, a limitation that hampers both daily prevention work and coordinated responses.[26]

There is also a gap in collection of critical data that are needed to track disparities and advance equity, such as data on race, ethnicity, and geography.

- *Gaps in coordination*. Many departments lack sufficient capacity to coordinate resources and public health responses within their jurisdictions and with the federal government. State, local, tribal, and territorial health departments receive multiple federal and state funding streams, each with its own expectations and reporting requirements. Coordination challenges can be most evident during emergencies. For example, city, county, and state health departments struggled to understand their roles and coordinate with each other and the federal government during the launch of the coronavirus vaccination effort.

  On top of all these challenges, the pandemic has produced a storm of vitriol directed at state, local, tribal, and territorial health leaders. Thousands have been harassed or threatened,[27] and hundreds have left their jobs.[28] In several states, legislatures have stripped health agencies of basic authorities needed to protect the public during emergencies, including in some instances the basic ability to quarantine patients with infectious tuberculosis.[29]

The cumulative result of these problems is inadequate protection for millions of people across the country. But with a national public health system, solutions are possible. At the core of such a system is mutual recognition of the importance of state, local, tribal, and territorial public health to the federal government and to each other.

## RECOMMENDATIONS

Supporting state, local, tribal, and territorial health departments is an essential role of a national public health system. Our recommendations are guided by three key concepts:

1. Where you live should not determine how well your health department protects you from public health threats. That is not the case today, and no basic standard has been set for public health capabilities. Indeed, setting minimum standards for public health across the country is essential, as environmental and infectious threats do not recognize state borders.
2. The federal government should ensure that funding for all jurisdictions meets an established standard. Today, fiscal resources available to health departments vary across and within states, localities, tribes, and territories, and the federal government's financial support for health departments does not cover implementation of foundational public health capabilities.
3. The federal government should hold states accountable for ensuring that all residents are served by a public health system that meets core standards. There are multiple models for how public health is organized at the state, local, tribal, and territorial levels. Core standards should apply regardless of whether a state has a single state health department that covers counties or multiple county health departments run at the local level.

The national public health system envisioned in this report is based on the concept of "foundational public health capabilities," which are the basic tools that public health departments use to protect the health of their communities.[30] (**See box on page 13.**) These capabilities include assessment and surveillance, which is the ability to collect and analyze data about the community's health. They also include emergency preparedness and response, policy development, communications, and community partnership development, which is essential for public trust. (See **Section D** of the report.) The capabilities are central to a comprehensive approach to public health and form the foundation of any programmatic efforts a health department may undertake.

Having foundational capabilities is now a prerequisite for state and local health departments to achieve accreditation through the Public Health Accreditation Board. However, there is no mechanism to guarantee that the combined efforts of health departments in a state assure that every resident is served by these capabilities.

## FOUNDATIONAL PUBLIC HEALTH CAPABILITIES

A list of foundational public health capabilities was developed in 2013 by the Public Health Leadership Forum and was updated in 2022 by the Public Health National Center for Innovations to identify a "minimum package of public health capabilities and programs that no jurisdiction can be without." Together, these capabilities compose a powerful toolkit enabling health departments to respond to a broad array of health challenges.

The eight foundational public health capabilities are:

- *Assessment* (including surveillance, epidemiology, and laboratory capacity): The ability to track the health of a community through data, case finding, and laboratory tests with particular attention to those most at risk.
- *Community partnership development:* The capacity to harness and align community resources and actors to advance a community's health.
- *Equity:* The ability to strategically address social and structural determinants of health through policy, programs, and services as a necessary pathway to achieve equity; and to systematically integrate equity into each foundational capability.
- *Organizational competencies*, such as leadership and governance: The ability to lead internal and external stakeholders to consensus and action.
- *Policy development and support:* The ability to serve as a primary and expert resource for establishing, maintaining, and developing basic public health policy recommendations that are evidence-based and legally sound.
- *Accountability and performance management* (including quality improvement, information technology, human resources, financial management, and law): The ability to apply business practices that ensure efficient use of resources and foster a continuous learning environment.
- *Emergency preparedness and response:* The capacity to respond to emergencies of all kinds, from natural disasters to bioterrorist attacks.
- *Communications:* The ability to translate public health science into appropriate policy and regulation.

Sources: RESOLVE, "Public Health Leadership Forum," n.d.; Public Health National Center for Innovations, "Home Page," n.d.; and Karen DeSalvo et al., "Developing a Financing System to Support Public Health Infrastructure," *American Journal of Public Health* 109, no. 10 (Oct. 2019): 1358–61.

### Recommendation #5:

**Congress should provide an adequate and reliable source of federal public health funding to states, localities, tribes, and territories to support a modern public health infrastructure. This funding, estimated at an additional $4.5 billion annually beyond the IT investments discussed earlier, should be sufficient for every person to be protected by a public health system that delivers on the foundational public health capabilities. Existing funding should be raised to this level over a multiyear period as health departments build their capacity.**

- Congress should provide this funding in a form that is guaranteed year to year and should be "mandatory" rather than "discretionary." Without a predictable source of funding for this infrastructure, health departments are unable to recruit and retain appropriate personnel and make other critical multiyear investments.
- HHS should require states to share a certain percentage of federal public health infrastructure funds with local health departments that are not directly funded by the federal government. This percentage should be commensurate with population size, adjusted for appropriate measures of social vulnerability and equity.
- The federal public health infrastructure funding should be distributed directly to local jurisdictions above a certain size (for example, 500,000 people) with expectations of coordination among state and local grantees.
- A maintenance of effort should be required: Funding should not supplant current federal, state, local, tribal, or territorial investments investments in public health.

### Recommendation #6:

**In exchange for increased congressional funding for public health infrastructure, states should meet revised accreditation standards and performance requirements demonstrating that foundational capabilities protect every resident.**

- The revised accreditation standards for states should ensure that every resident in the state is served by these foundational capabilities, regardless of the division of labor between the states and localities, and regardless of whether local health departments themselves are accredited.
- States should follow best practices regarding the size and scope of effective health departments in their jurisdictions to enhance efficiency and reduce duplication in the delivery of public health services. This process should involve setting minimum population size and staffing levels for local health departments to ensure viability in delivering foundational capabilities, as well as to resolve overlapping geographic coverage.[31]
- States should coordinate public health capabilities and resources across jurisdictions within their borders and gather support from different sectors to achieve critical health goals.
- The accreditation process should assess the legal authority of state and local health departments. Accreditation should be accompanied by a statement of whether states have necessary authority to protect the public during emergencies, as well as whether state health departments have the authority to remediate deficiencies when local health departments are unable to achieve accreditation.
- Through performance requirements that are associated with federal public health infrastructure funding (and other relevant grants), the federal government should also set specific expectations and measurable outcomes with regard to core elements of the national public health system. For example, through grant requirements, HHS can ensure modern IT connectivity and the ability to collect, link, and transfer essential data in a standardized way. It can also require that data on race, ethnicity, and geography be collected as a condition of federal funding.

### Recommendation #7:

**HHS should use multiple funding mechanisms to support and incentivize states, localities, tribes, and territories to move toward, and ultimately achieve, this revised accreditation standard.**

For example:

- HHS should give recipients of infrastructure funding three years to achieve accreditation under the revised standards. Following the transition period, which would include the provision of training and technical assistance to support health departments in achieving accreditation, HHS should condition additional public health infrastructure funding for health departments on accreditation, unless the funds are used under a supervised remediation plan designed to achieve accreditation. HHS should study approaches for remedying deficiencies in the instance that a health department does not adopt or successfully implement a remediation plan.
- HHS should provide state, local, tribal, and territorial grantees that are accredited with greater flexibility in how they spend all categorical federal public health funds, across its agencies.
- HHS should also provide special funding opportunities for accredited health departments, including through set asides for innovative efforts within existing programmatic funding.
- HHS should permit state, localities, tribes, and territories, as part of their accreditation process, to contract with third parties (such as academic institutions, public health institutes, or other nonprofits) to deliver some of the foundational capabilities. For example, health departments can use such contracts when a government agency cannot hire new staff quickly enough, or when a department wishes to contract with an academic institution for epidemiology capacity.

- HHS should consider accreditation status when granting CMS waivers and plan amendments that relate to population health goals, including Section 1115 waivers.
- HHS should offer increased federal medical assistance payment through Medicaid and the Children's Health Insurance Program (CHIP) for states that have accredited health departments. The additional funding should be used to coordinate these two health coverage programs with public health efforts to achieve population health goals. CMS should provide a path for Medicare to participate in these efforts.

## C. The Health Care System Should Work Closely with Public Health Agencies in Normal Times and During Emergencies

The health care system and the related entities that pay for care are often bystanders when it comes to the work and performance of the public health system. But their interdependence has rarely been as clear as it has been during the coronavirus pandemic.

When COVID-19 cases surged in 2020 and 2021, many parts of the health care system, particularly hospitals, dialysis centers, long-term care facilities, and their workforces, were pushed to the limit, and, in some cases, past their limit. The dedication and commitment of the health care workforce saved many lives under extraordinary conditions. At the same time, that workforce suffered from exhaustion and burnout.[32] For low-income employees, this was compounded by the stress of greater risk of contracting COVID-19 in their daily lives. Health care facilities incurred substantial financial losses, leading to layoffs and necessitating large infusions of federal funds. Health care spending increased by hundreds of billions of dollars.[33]

In many cases, hospitals, health systems, and health centers — led by physicians, nurses, and others — stepped up to share in public health work, such as by testing, vaccinating, treating, and educating their communities. Community health centers drew upon their reservoirs of trust to build essential links between the response effort and heavily affected communities. Health care organizations were often able to bill for these services while health departments were not. Indeed, the pandemic made clear that the health care system has important human resources to protect the public in a large-scale emergency, and that especially when financial resources are available, health care organizations can pivot to collaborate with public health systems to meet community needs.

Although it was often late, fragmented, and transmitted via fax, the data provided by the health care system was critical in supporting the pandemic response. These contributions included data for monitoring use of emergency departments, hospital beds, intensive care units, respiratory isolation, and other levels of care. If these data could become timely and more standardized, they would better support the states and federal government in the rational management of health care resources, guiding where to direct ventilators, dialysis machines, and personal protective equipment in an emergency. Moreover, as gaps in data on race and ethnicity are closed, data from the health care system can be linked to information on geography and social vulnerability and used to support efforts to promote equity.

Other roles the health care system played included conducting clinical research and tracking the uptake, safety, and effectiveness of vaccines and treatments. This potential has been most evident outside of the United States, in countries such as the United Kingdom and Israel, whose health care systems contributed substantially to the understanding of vaccine safety and effectiveness and the merit of various therapeutics.

The potential benefits of coordination between the health care and public health system extend beyond the pandemic response. Health care personnel, knowledge, and data can help address surges in drug overdoses or preterm births, as well as increases in hospitalization for lung issues related to poor air quality. Health plans in the National Health Plan Disparities Collaborative, an early initiative to address equity, combined their data to map Medicaid patients with poorly controlled diabetes. This helped plans begin to collaborate with one another and with the public health system, to develop and implement population level interventions. The Medicaid programs of North Carolina, Oregon, and Washington

have demonstrated the potential of routine collaboration between the health care and public health systems.

Unfortunately, opportunities for health care organizations to support public health activities have been inadequately developed and implemented. Gaps include:

- *Inadequate attention to health care data.* Much of the focus of the CDC's Data Modernization Initiative is on reportable diseases and laboratory tests. Yet, other parts of HHS and the health care system use or maintain data that are relevant to both the day-to-day and crisis response functioning of the public health system. These include data from payers including CMS, electronic health records (EHR) systems, and health information exchanges on visits, hospitalizations, medications, and outcomes.
- *Lack of standardization.* Hospitals, clinics, and EHR vendors often shared data during the pandemic. However, they were often not standardized, not linkable across data systems, used different definitions, and were transmitted in different ways (for example via fax or spread sheets). In addition, it was often difficult for recipients of the data at either the state or federal level to receive, aggregate, link, and completely analyze them.
- *Inadequate authority to obtain national data in an emergency.* In some areas, data sharing allowed public health departments to understand critical issues in the pandemic response. In others, however, data sharing was less successful. The federal government is limited in its ability to set data requirements, even in an emergency, and it is unrealistic to expect the government to aggregate and analyze data in a timely fashion if it performs this function only during national emergencies.
- *Insufficient training.* During the pandemic, health care workforces and public health departments alike struggled to identify personnel with sufficient training to execute needed responsibilities. In non-emergency times, both the health care and public health sectors could leverage one another's assets to enhance workforce effectiveness.

A national public health system must address these gaps to realize the potential of collaboration with the health care system for broad health improvement and emergency response.

## RECOMMENDATIONS

As the pandemic has illustrated, the health care system must be a vital partner to the public health system. Progress requires data sharing, engagement of the workforce, and establishing expectations for integration into public health efforts.

### Recommendation #8:

**HHS should lead a comprehensive initiative to share health care data for public health purposes, with strong privacy protections, working through CMS and other agencies.**

For this effort:

- HHS should share de-identified data for public health planning and assessment.[34] Hospitalization and diagnostic data from CMS programs are available almost in real time, contain information about race and ethnicity, and can be made available with strong privacy protections as neighborhood level local maps.[35]
- HHS should facilitate sharing of reportable public health data from electronic health record (EHR) systems to accredited health departments.[36] Taxpayer dollars have already been put toward considerable investments in EHR systems, and HHS has established criteria and incentives for their meaningful use and interoperability[37] to improve the quality of care. HHS should make the most of these investments by establishing additional criteria and incentives for aggregating such data at the geographic level. HHS should also develop mechanisms to share these aggregated data with health departments and health care providers to support prevention efforts, population health improvements, and emergency response.
- HHS should generate capacity for sharing identifiable health data between health care providers and state, local, tribal, and territorial health departments (with strong privacy protections) to accomplish public health goals with the support of local communities. Through enhanced federal medical assistance payment and other incentives, HHS should support state development of health information exchanges and all-payer claims databases. These efforts should

have robust governance processes that permit the sharing of data with state, local, tribal, and territorial health departments for legitimate public health purposes. For example, in the EmPOWER program,[38] CMS provides protected, personally identifiable data to health departments to deliver lifesaving interventions (for example, moving people who use a ventilator at home to safety during a natural disaster). As part of this effort, HHS should support technical assistance and training of state, local, tribal, and territorial health departments in effective analysis, protection, and use of health care data.

- HHS should prepare for sharing essential public health data during emergencies.[39] In an emergency, the national public health system should have the authority to require health system data streams to report defined data elements simultaneously to relevant state health departments and HHS.[40] Annually, HHS should test the ability of the health care system to report data through the states to HHS, and, in turn, the public health system's ability to analyze these data and share them with the health care community and more broadly.

### Recommendation #9:
**HHS should promote the engagement of health care personnel in public health efforts.**

With training and support for health care workers, health departments would have additional personnel who can conduct activities such as contact tracing and education, and health care facilities could deploy employee-community members for prevention and education efforts. Such coordination could build on lessons learned during the pandemic and be applied to other pressing health challenges identified at the community level. Specifically:

- HHS should provide support for training, cross-training, and exchanges among public health departments and health care systems to build stronger relationships across entities and strengthen reserve corps for public health emergencies.
- HHS should add flexibilities and incentives to current programs that support graduate education in medicine, nursing, and other health professions to increase education in public health.
- HHS should create incentives to provide training and support to health workers who live in the most socially vulnerable communities so that they can conduct outreach and educate residents.
- To the extent permitted by law, HHS should add requirements for managed care plans in Medicare Advantage, Medicaid, and the Children's Health Insurance Program (CHIP) to have core public health competencies at the leadership level, and to participate in the design and execution of community health needs assessments and follow-on actions.[41]
- HHS should explore ways to use innovative payment mechanisms under value-based purchasing arrangements to encourage health care organizations to partner with their local public health agencies.

### Recommendation #10:
**Health systems, hospitals, community health centers, and other federally supported health care organizations should be expected to contribute to public health activities in normal times and during emergencies.**

To facilitate this engagement:

- HHS should build on successful models of collaboration used during the pandemic and identify a consistent set of expectations for hospitals and health care systems to participate in state and local public health efforts. To the extent permitted by law, these expectations can become requirements for receiving federal reimbursement through Medicare, Medicaid, and CHIP via payment policies or modifications to conditions of participation.
- HHS should build on their critical contributions during the pandemic and establish capabilities and requirements for community health centers and certified community behavioral health clinics to participate in public health activities at the local level. Conditions of receiving funds from the HRSA or Substance Abuse and Mental Health Services Administration (SAMHSA) should include, at a minimum, conducting health needs assessments and emergency preparedness planning.

- HHS should establish a Chief Public Health Officer position within CMS. This position would serve as the principal public health advisor to CMS leadership and to its component centers on public health, and specifically the integration of public health, data, and financing efforts. It could be modeled after a similar role at HRSA.
- To the extent permitted by law, HHS should set requirements for Medicare, Medicaid, and CHIP managed care plans to support state and local public health efforts. Such requirements could be included in managed care contracts. For example, these standards and requirements could include shared mapping of beneficiary needs at the community level and investing in community-based efforts that address those needs, in proportion to their market share. CMS could also incentivize funding of these activities with rules about calculating health plans' medical loss ratios.
- HHS should work with the IRS to clarify requirements for community benefit activities for nonprofit health care systems to maintain their tax-exempt status. This can begin with a requirement that these systems collaborate with their local public health departments in developing a common Community Health Needs Assessment, consistent with the locality's Community Health Improvement Plan. Other opportunities include facilitating shared investments in community health improvement priorities, with a focus on geographies that serve beneficiaries and represent areas of particular population-based needs.

## D. Public Health Agencies Should Work to Earn the Public's Trust

The Institute of Medicine has defined public health as "what we as a society do collectively to assure the conditions in which people can be healthy."[42] At the heart of this vision is trust — trust that permits collective actions such as sharing data, hiring staff, developing strategies, and implementing strategies effectively.

Today, the public health system faces a crisis of trust. In 2009, 43 percent of Americans had a positive view of the nation's public health system. During the pandemic, this figure fell to 34 percent.[43] Behind this overall decline are a range of issues facing communities across the country.

People of color, including members of Indigenous communities, have long had high levels of distrust of health care and public health institutions, and for good reason. Historical abuses such as the Tuskegee syphilis study and J. Marion Sims's gynecological experiments[44] cast a long shadow. During the pandemic, differential access to testing and treatment is demonstrating that those grave health care inequities still exist.[45] In 2020, several high-profile police killings of Black Americans focused the nation's attention on structural racism and discrimination and raised expectations for needed progress in equity.

As the nation embraces the need to address the root causes of health inequities, the need for multisector partnerships that engage community residents has become paramount in building and establishing trust between the public health system and other sectors in the community. These partnerships — across the health care, social services, business, education, transportation, agriculture, public safety, and other sectors — will facilitate more coordinated, comprehensive approaches to day-to-day problems that can be leveraged in responding to a crisis like the coronavirus pandemic. However, public health departments have not consistently established these partnerships, though they have had proven success in mobilizing communities and resources where they exist.[46]

Mistrust in the public health system is also growing in rural and conservative areas, compounding existing geographic barriers to health care. This gap is also reflected in survey results showing that a large partisan difference has emerged: Republicans have much less "confidence in science"[47] than Democrats (45% vs. 79% in 2021).[48] At the federal level, political interference in scientific decision-making during the pandemic became a serious concern. As one example of the impacts of this politicization, political ideology is the strongest predictor of whether someone is vaccinated against COVID-19.[49]

Fueling this distrust is a tsunami of misinformation and, when shared with bad intent, disinformation. Americans are awash in messages, posts, podcasts, and commentary that engender doubt about basic facts in health and science, and about the critical tools needed

to keep people, families, and communities healthy. Misinformation comes in many forms and, while not new, news and social media platforms have made it easier for false, inaccurate, or misleading information to spread widely and rapidly with the potential to "cause confusion, sow mistrust, harm people's health, and undermine public health efforts."[50]

A national public health system can help to earn and maintain trust. Doing so starts with a commitment to community engagement, partnership with multiple sectors, effective communications at every level, and transparency and integrity in decision-making.

## RECOMMENDATIONS

To earn and maintain people's trust, a national public health system should: 1) make communities integral partners in public health efforts; 2) build multisector partnerships to address drivers of health; 3) address misinformation as part of an expanded communications program; and 4) prioritize ethics and integrity in decision-making. These steps will make it possible for a national public health system to develop the right strategies to make progress on health and equity. In turn, measurable improvement will lead to greater trust and confidence in public health.

### Recommendation #11:
**All levels of a national public health system should commit to effective, meaningful, and representative community engagement as a core feature.**

To promote stronger engagement:

- HHS should promote diversity and community representation on all federal health advisory committees, as well as policies for these committees to conduct extensive engagement to understand the perspectives of those who are most affected.
- HHS should provide technical assistance to federal grant applicants from underserved communities[51] under each Notice of Funding Opportunity. This will increase the diversity of the applicant pool and ensure that federal assistance reaches eligible organizations and communities in an equitable manner.[52]
- HHS should provide, as part of core federal public health infrastructure funds, dedicated funding to build and sustain the capacity of community-based organizations to address public health priorities, guide local data collection, and participate in decision-making.[53] One model that states such as Maryland[54] and Rhode Island[55] have successfully implemented and which could be scaled, is health enterprise (or equity) zones, where community-based organizations are funded to implement a comprehensive plan to address health disparities and improve health outcomes within a defined geographic area. Ryan White HIV/AIDS Health Services Planning Councils are another model for inclusive decision-making that could be applied to public health planning and resource allocation.
- HHS should strengthen the definition of "community partnership development" in public health accreditation to require collaboration with community organizations and opportunities for community involvement in decision-making.

### Recommendation #12:
**HHS should promote stronger multisector partnerships to address basic needs related to health.**

For this effort:

- HHS should build into core federal public health infrastructure funds and other relevant grant programs specific program standards or expectations that grantees work across sectors, where appropriate. For example, grant requirements related to maternal mortality can ensure that health departments or community-based organizations have structures or mechanisms in place to collaborate with health care, social services, agriculture, and transportation sectors. Another opportunity would be leveraging grant requirements to ensure that health departments or community-based organizations collaborate with mental health and substance use agencies, Medicaid and CHIP, and education and social service sectors to promote mental health among school-aged children.
- The Office of Management and Budget (OMB) should create mechanisms across HHS grant programs and those of other federal agencies (such as the

Departments of Agriculture and Transportation, and the Environmental Protection Agency) to coordinate grant funding that addresses the drivers of health.

### Recommendation #13:
### HHS should lead an effort to modernize public health communications and address misinformation and disinformation.

For this effort:

- HHS should advance strategic communications approaches that provide coordinated, consistent, accurate, timely, and easy-to-understand messaging about key public health issues across a range of platforms, including social media, to state, local, tribal, and territorial health officials, their community partners, and other trusted messengers. These approaches should follow well-established risk communications principles.[56]
- HHS should provide training and technical assistance for states, localities, tribes, territories, community-based organizations, and trusted messengers on developing effective communications and community engagement strategies. These efforts should include effective methods to explain core scientific concepts and translate public health messages to a broader audience (such as the Public Health Reaching Across Sectors, or PHRASES, initiative).[57] These approaches should draw from evidence of the most effective messages (and messengers) to encourage action that promotes public health goals, whether it is getting a COVID-19 vaccine[58] or recommended perinatal care.

### Recommendation #14:
### HHS should lead in creating conditions for ethics and integrity in public health activities.

Integrity is established through strong processes that resist inappropriate interference, promote transparency, use the best available information and external advice, and adhere to ethical principles. To support integrity:

- HHS should establish an ethics framework for the national public health system that acknowledges past failures and lays a stronger foundation for training, engagement, and collaborative work.
- HHS should charge an independent group, such as the National Academies of Sciences, Engineering, and Medicine, with developing a model law to provide protections for federal, state, local, tribal, and territorial public health leaders in case of inappropriate interference with core public health functions or other actions that demonstrate a lack of integrity in public health activities, and with providing recommendations to prevent such instances.[59]
- HHS should implement recent Government Accountability Office (GAO) recommendations[60] regarding scientific integrity policies and procedures for the HHS Office of the Assistant Secretary for Preparedness and Response (ASPR), CDC, FDA, and NIH, including those related to political interference.
- HHS should improve transparency and communication regarding data and other information that informs key policy decisions, including direct engagement with state, local, tribal, and territorial health departments. This could be part of the council process described in **Section A** and would include opportunities to advance understanding and exchange with public health leaders across the country.

## CONCLUSION

By establishing a truly national public health system, this nation will be better able to save lives during future pandemics and other emerging health crises, address health challenges like overdoses and maternal mortality, improve the quality of life and economic well-being of our nation, and advance equity. While respecting the enormity of the task, we have outlined actions that can be taken immediately to get started. We now call on the administration, Congress, state, local, tribal, and territorial governments, the health care system, and all communities to begin this important work without delay. The window for change is open, and the moment of opportunity is now.

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# APPENDIX: Short-Term Steps Toward a National Public Health System

The comprehensive vision for a national public health system outlined in this report will require new investment and new statutory authority, and it will take several years to achieve. This summary outlines short-term steps that can be taken by Congress and the Biden–Harris administration to move forward.

## Federal Leadership

This report recommends that the federal government lead the development of a strong and capable national public health system. As a first step, Congress should create a new position, such as an undersecretary for public health, to elevate this function and more closely mirror the structure of other federal departments. **[Recommendation 2]** Pending legislation on preparedness could serve as a vehicle for this action, as well as for providing other authorities called for in this report.

In the near term and under existing authorities, the Secretary of the Department of Health and Human Services (HHS) should designate the Assistant Secretary for Health to take on the tasks of leading the national public health system and provide resources and staff for these new responsibilities.

Short-term goals for the Assistant Secretary include identifying key elements of national strategies on public health data, workforce, laboratories, and procurement. **[Recommendation 1]** For example, HHS can rapidly assess the data standards needed for reporting and exchanging information and direct agencies to establish those standards. The Assistant Secretary for Health should also convene a public health coordinating council of federal agencies with state, local, tribal, and territorial representatives. **[Recommendation 2]**

At the same time, the President should reconvene the National Prevention and Public Health Council to support governmentwide efforts to advance health and equity. **[Recommendation 3]** To support this effort, senior White House officials should instruct the Office of Management and Budget (OMB) to tabulate public health expenditures across the whole of the federal government.

## State, Local, Tribal, and Territorial Support

The report recommends securing new, stable, and sufficient funding from the federal government for public health infrastructure efforts at the state, local, tribal, and territorial levels, as well as a 10-year investment in building information technology (IT) capacity. Before such ongoing funding is made available, the Centers for Disease Control and Prevention (CDC) and state, local, tribal, and territorial health departments can use available annual and pandemic funds to make down payments on key investments toward a national public health system. Potentially available funds include:

- $3.7 billion in grants funded by the American Rescue Plan Act and FY 2022 appropriations, which can be spent over five years for "strengthening public health capacity and systems related to the workforce, foundational capabilities, data modernization, physical infrastructure, and support from national public health partners."[61]
- $600 million in the president's FY 2023 budget for a new public health infrastructure and capacity grant.
- $842 million in the president's FY 2023 budget for public health emergency preparedness in states.
- $800 million in anticipated increased resources becoming available from the Public Health and Prevention Fund over the next two years.

The CDC and other federal agencies should use these grants, to the extent possible, to support the development of foundational capabilities and modern IT systems in every funded state and locality. **[Recommendation 6]** For example, the CDC should provide states with a template for determining their current staffing capacity, as well as the tools needed to develop the foundational capabilities and identify and prioritize allocation of resources to address staffing gaps across state, local, tribal, and territorial health departments. Even if grant funds have been awarded, this template can guide states, localities, tribes, and territories that choose to spend their funds in this way.

For their part, states can follow the lead of Indiana and Michigan and learn from how they have designed their public health systems. Even exploratory assessments of the ability to meet public health capabilities will position states to spend core infrastructure dollars wisely. **[Recommendation 6]**

HHS can convene key partners in public health and the Public Health Accreditation Board to reshape accreditation and to align it with developing a national public health system. **[Recommendation 6]**

## Health Care System Integration

At the federal level, the Centers for Medicare and Medicaid Services (CMS) should start regularly mapping and sharing deidentified data for use by other HHS agencies, and by state, local, tribal, and territorial health departments, in ways that inform communities and provide important insights about equity. **[Recommendation 8]** These data can inform not only ongoing coronavirus response efforts, but also efforts to tackle addiction and overdoses, maternal mortality, noncommunicable diseases, and other top national health priorities.

At the state, local, tribal, and territorial levels, health systems and public health departments should build on the momentum created by their unprecedented collaboration during the pandemic. Temporary planning committees can be turned into more permanent structures for coordination, working together on community needs assessments and collaborating in planning how to use community benefit dollars. **[Recommendation 10]**

States should also encourage Medicaid and CHIP managed care organizations and Medicare Advantage plans to embrace public health priorities and participate in statewide strategies to improve health and save lives. **[Recommendation 10]**

## Earning Public Trust

States, localities, tribes, and territories should use available funding to build public trust. Many health departments built new relationships to address the pandemic, which could be leveraged for effective, meaningful, and representative engagement of other sectors and communities in public health efforts. For example, in deciding how to recruit new public health workers using funds from the American Rescue Plan Act, state, local, tribal, and territorial health departments should seek input from coalitions of community partners. **[Recommendation 11]**

HHS should accelerate its work to modernize public health communications. This should include an expanded effort led by the Office of the Surgeon General to counter misinformation and disinformation. **[Recommendation 13]** HHS should also use existing resources to build a robust set of communication tools and explore opportunities, to provide technical assistance and training for states, localities, tribes, territories, community-based organizations, and trusted messengers on effective communications and community-engagement strategies. **[Recommendation 13]** Finally, HHS should launch recommended efforts to promote integrity, ethics, and transparency in public health. **[Recommendation 14]**

## NOTES

1 Institute of Medicine, *HHS in the 21st Century: Charting a New Course for a Healthier America* (National Academies Press, 2009); U.S. Government Accountability Office, *COVID-19: Significant Improvements Are Needed for Overseeing Relief Funds and Leading Responses to Public Health Emergencies*, GAO-22-105291 (GAO, Jan. 2022); National Network of Public Health Institutes, *Challenges and Opportunities for Strengthening the U.S. Public Health Infrastructure: Findings from the Scan of the Literature* (NNPHI, May 2021); Karen DeSalvo et al., "Public Health COVID-19 Impact Assessment: Lessons Learned and Compelling Needs," *NAM Perspectives*. April 7, 2021; and Texas Health Institute and National Network of Public Health Institutes, *The Future of Public Health: A Synthesis Report for the Field* (THI and NNPHI, Nov. 2021).

2 The HHS agencies include the CDC, U.S. Food and Drug Administration (FDA), National Institutes of Health (NIH), Health Resources and Services Administration (HRSA), Substance Abuse and Mental Health Services Administration (SAMHSA), and Centers for Medicare and Medicaid Services (CMS).

3 *See* 42 U.S.C. §§ 247d-4(b)(2)–(3).

4 Mariana P. Socal, Joshua M. Sharfstein, and Jeremy A. Greene, "The Pandemic and the Supply Chain: Gaps in Pharmaceutical Production and Distribution," *American Journal of Public Health* 111, no. 4 (April 2021): 635–39.

5 Although the Office of the National Coordinator for Health Information Technology, a subagency of HHS, is required to promulgate standards and certification criteria for health information technology, HHS lacks the authority to require private entities to adopt or comply with such standards, except when private entities enter into contracts or agreements with federal government-administered or sponsored health care programs under 42 U.S.C. § 17902. See 42 U.S.C. § 300jj-16(a)(1). Additionally, although CDC is required to establish standards for "an integrated system or systems of public health alert communications and surveillance networks" and develop requirements for the sharing "of essential information concerning bioterrorism or another public health emergency" under 42 U.S.C. §§ 247d-4(b)(2)–(3), such standards are binding only with respect to public health emergencies. Accordingly, Congress must grant HHS and its agencies broader statutory authority to establish and enforce generally applicable data standards with respect to private entities and local and state health departments.

6 Such gaps have been recognized by GAO. In 2020, GAO recommended that CDC "determine whether having the authority to require the reporting of race and ethnicity information for cases, hospitalizations, and deaths is necessary for ensuring more complete data, and if so, seek such authority from Congress." See U.S. Government Accountability Office, *COVID-19: Federal Efforts Could Be Strengthened by Timely and Concerted Actions*, GAO-20-701 (GAO, Sept. 2020).

7 Healthcare Information Management Systems Society, *Public Health Information and Technology Infrastructure Modernization Funding* (HIMSS, April 2022).

8 U.S. Government Accountability Office, *COVID-19: Current and Future Preparedness Requires Fixes to Improve Health Data and Address Improper Payments*, GAO-22-105397 (GAO, April 2022).

9 No additional authority is required for HHS to develop internal standards.

10 Such requirement is consistent with the existing statutory obligation that "any federally conducted or supported health care or public health program, activity or survey" must collect and report "data on race, ethnicity, sex, primary language, and disability status for applicants, recipients, or participants." 42 U.S.C. § 300kk(a)(1).

11 Congress must provide statutory funding authorization to establish such a laboratory modernization program.

12 Although the FDA currently regulates medical home testing kits as medical devices, see 21 C.F.R. § 800 et seq., further statutory authorization may be needed for the FDA to impose standards with respect to novel technologies for home testing — particularly those that incorporate mechanisms for reporting public health data.

13 Because the recommended procurement schedule permits, rather than requires, health departments to purchase protective equipment and other products, neither statutory authorization nor administrative rulemaking would be required.

14 Although the enabling statute for the Strategic National Stockpile (SNS) authorizes the Secretary of HHS to "devise plans for effective and timely supply-chain management" of the SNS specifically, see 42 U.S.C. § 247d-6b(a)(3)(E), additional statutory authority would be required for HHS to establish a generally applicable supply chain program.

[15] The Assistant Secretary for Health could be broadly empowered through the delegation of some of the HHS Secretary's authorities to the Assistant Secretary. See, e.g., 42 U.S.C. § 203 (providing that "[t]he Secretary may delegate to any officer or employee of the Service such of his powers and duties under [the Public Health Service Act], except the making of regulations, as he may deem necessary or expedient"). Additionally, the HHS Secretary is free to sub-delegate any of his or her authorities outside of the Public Health Service Act, as long as the relevant statute does not forbid such sub-delegation. See, e.g., Kobach v. U.S. Election Assistance Comm'n, 772 F.3d 1183, 1190 (10th Cir. 2014) ("Absent some indication in an agency's enabling statute that subdelegation is forbidden, subdelegation to subordinate personnel within the agency is generally permitted."). By contrast, conferring such authority on an undersecretary would require new statutory authorization.

[16] This national council need not be a federal advisory committee subject to the requirements of the Federal Advisory Committee Act (FACA). See 2 U.S.C. § 1534(b) (providing that FACA "shall not apply to actions in support of intergovernmental communications where 1) meetings are held exclusively between Federal officials and elected officers of State, local, and tribal governments (or their designated employees with authority to act on their behalf) acting in their official capacities; and 2) such meetings are solely for the purposes of exchanging views, information, or advice relating to the management or implementation of Federal programs established pursuant to public law that explicitly or inherently share intergovernmental responsibilities or administration"); 41 C.F.R. § 102-3.40.

[17] This would be similar to the process for vetting judges of the American Bar Association.

[18] See 42 U.S.C. § 300u-10(a) (providing that the President shall establish a National Prevention, Health Promotion and Public Health Council).

[19] When last convened in 2016, the Council's membership included the Departments of Health and Human Services. Agriculture, Education, Transportation, Labor, Homeland Security, Interior, Justice, Defense, Veterans Affairs, and Housing and Urban Development as well as the Federal Trade Commission, the Environmental Protection Agency, the Office of National Drug Control Policy, the Domestic Policy Council, the Corporation for National and Community Service, the Office of Management and Budget, the General Services Administration, and the Office of Personnel Management.

[20] See 42 U.S.C. § 300u-10(b).

[21] Glen P. Mays, *Defining Comprehensive Public Health Delivery Systems* (University of Kentucky, Feb. 2015).

[22] National Association of County and City Health Officials, *2019 National Profile of Local Health Departments* (NACCHO, 2020).

[23] Ibid.

[24] Public Health National Center for Innovations and De Beaumont Foundation, *Staffing Up: Workforce Levels Needed to Provide Basic Public Health Services to All Americans* (PHNCI, Feb. 10, 2022).

[25] Karen DeSalvo et al., "Developing a Financing System to Support Public Health Infrastructure," *American Journal of Public Health* 109, no. 10 (Oct. 2019): 1358–61.

[26] Megan Wallace and Joshua M. Sharfstein, "The Patchwork U.S. Public Health System," *New England Journal of Medicine* 386, no. 1 (Jan. 6, 2022): 1–4.

[27] Julie A. Ward et al., "Pandemic-Related Workplace Violence and Its Impact on Public Health Officials, March 2020-January 2021," *American Journal of Public Health* 112, no. 5 (May 2022): 736–46.

[28] Michelle R. Smith and Lauren Weber, "Public Health Officials Are Quitting or Getting Fired in Throes of Pandemic," *Associated Press,* Aug. 11, 2020.

[29] Network for Public Health Law, *Proposed Limits on Public Health Authority: Dangerous for Public Health* (NPHL, June 2021).

[30] Public Health National Center for Innovations, *Revising the Foundational Public Health Services in 2022* (PHNCI, 2022).

[31] The Public Health National Center for Innovation will be releasing a calculator in summer 2022 to help health departments determine the staffing level they need for foundational capabilities.

[32] Office of the Surgeon General, "Health Worker Burnout," U.S. Department of Health and Human Services, May 25, 2022.

[33] Centers for Medicare and Medicaid Services, Office of the Actuary, "National Health Spending in 2020 Increases Due to Impact of COVID-19 Pandemic," news release, Dec. 15, 2021.

[34] Under the Privacy Act of 1974, the federal government may share deidentified data about individuals where the recipient of such data "provide[s] the agency with advance adequate written assurance that the record will be used solely as a statistical research or reporting record, and the record is to be transferred in a form that is not individually identifiable." 5 U.S.C. § 552a(b)(5); see also 45 C.F.R. § 5b.9(b)(5).

[35] For example, the federal government has shared with health departments aggregate data on influenza hospitalization and deaths. For emergency preparedness and response, CMS has made maps of Medicare beneficiaries dependent on electrical devices and the frail elderly available to local health departments. CMS data can be supplemented with other federal health care data, including data from the Departments of Veterans Affairs and Defense Department.

[36] Facilitating the sharing of reportable public health data from EHR systems to accredited health departments does not require additional authority or regulations.

[37] HealthIT.gov, "Trusted Exchange Framework and Common Agreement (TEFCA)," March 11, 2022.

[38] U.S. Department of Health and Human Services, "HHS emPOWER Program Platform," 2022.

[39] In the case of a public health emergency, this is permitted under 5 U.S.C. § 552a(b)(8), "if upon such disclosure notification is transmitted to the last known address of such individual."

[40] As described above. HHS has this authority under 42 U.S.C. §§ 247d-4(b)(2)–(3).

[41] To the extent no additional statutory authority is needed, rulemaking may still be required.

[42] Institute of Medicine, *The Future of Public Health* (National Academies Press, 1988).

[43] Robert Wood Johnson Foundation and Harvard T.H. Chan School of Public Health, *The Public's Perspective of the United States Public Health System* (RWJF and Harvard, May 2021).

[44] Deidre Cooper Owens, *Medical Bondage: Race, Gender, and the Origins of American Gynecology* (University of Georgia Press, 2017).

[45] Carol R. Oladele et al., *The State of Black America and COVID-19: A Two-Year Assessment* (Black Coalition Against COVID, March 2022).

[46] Funders Forum on Accountable Health and Milken Institute School of Public Health, *The Power of Multisector Partnerships to Improve Population Health: What We Are Learning About Accountable Communities for Health* (March 2021); and California Accountable Communities for Health Initiative, *ACHs' Critical Role in the COVID-19 Response: Findings from the First 90 Days* (CACHI, Aug. 2020).

[47] Jeffrey M. Jones, "Democratic, Republican Confidence in Science Diverges," Gallup, July 16, 2021. Survey question: "Now I am going to read you a list of institutions in American society. Please tell me how much confidence you, yourself, have in each one — a great deal, quite a lot, some, or very little? How about — science?"

[48] Ibid.

[49] Ashley Kirzinger et al., "KFF COVID-19 Vaccine Monitor: The Increasing Importance of Partisanship in Predicting COVID-19 Vaccination Status," Henry J. Kaiser Family Foundation, Nov. 16, 2021.

[50] Office of the Surgeon General, *Confronting Health Misinformation. The U.S. Surgeon General's Advisory on a Healthy Information Environment* (U.S. Department of Health and Human Services, 2021).

[51] As defined in Executive Order 13985.

[52] U.S. Department of Health and Human Services, *HHS Equity Action Plan* (HHS, April 2022). The Office of Minority Health is well-positioned to assist in this effort.

[53] Thomas Armooh et al., *Public Health Forward: Modernizing the U.S. Public Health System* (Bipartisan Policy Center, Dec. 2021); and Carol R. Oladele et al., *The State of Black America and COVID-19: A Two-Year Assessment* (Black Coalition Against COVID, March 2022).

[54] Darrell J. Gaskin et al., "The Maryland Health Enterprise Zone Initiative Reduced Hospital Cost and Utilization in Underserved Communities," *Health Affairs* 37, no. 10 (Oct. 2018): 1546–54.

[55] State of Rhode Island Department of Health, "Rhode Island's Health Equity Zone (HEZ) Initiative," 2022.

[56] U.S. Centers for Disease Control and Prevention, "Gateway to Health Communication: Risk Communication," Aug. 4, 2020.

[57] The de Beaumont Foundation and the Aspen Institute, "PHRASES (Public Health Reaching Across Sectors)," 2022.

[58] African American Research Collaborative, "American COVID-19 Vaccine Poll," 2021.

[59] Although funding would be needed for this work, HHS could use existing appropriations where available.

[60] U.S. Government Accountability Office, *Scientific Integrity: HHS Agencies Need to Develop Procedures and Train Staff on Reporting and Addressing Political Interference*, GAO-22-104613 (GAO, April 2022).

[61] U.S. Centers for Disease Control and Prevention, *Strengthening U.S. Public Health Infrastructure, Workforce, and Data Systems*, CDC-RFA-OE22-2203 (CDC, May 4, 2022).

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