Uniting Public Health and Primary Care for Healthy Communities in the COVID-19 Era and Beyond

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No conflicts disclosed

Word Count – 1630

Key words – public health, primary care, community health

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Abstract

The COVID-19 pandemic has laid bare the dis-integrated healthcare system in the United States. Decades of inattention and dwindling support for public health, coupled with declining access to primary care medical services have left many vulnerable communities without adequate COVID-19 response and recovery capacity. Health is a Community Affair is a 1966 effort to build and deploy local communities of solution that align public health, primary care, and community organizations to identify healthcare problem sheds, and activate local asset sheds. After decades of independent effort, the COVID-19 pandemic offers an opportunity to reunite and align the shared goals of public health and primary care. Imagine how different things might look if we had widely implemented the recommendations from the 1966 report? The ideas and concepts laid out in Health is a Community Affair still offer a COVID-19 response and recovery approach. By bringing public health and primary care together in community now, a future that includes a shared vision and combined effort may emerge.

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America's Health in a Dis-integrated Health System

The COVID-19 pandemic lays bare the profound inadequacy of the US health system for addressing the country's acute health needs, our chronic disease crisis, and the root causes of health inequities, e.g., structural racism and classism.[1,2,3,4,5,6,7,8]

For decades, we have failed to invest in two of the cornerstones of our communities' health and wellness: primary care and public health, and their integration into a single system of community care.[9,10,11] Primary care, where millions of Americans go for comprehensive, continuous, preventive and personal healthcare, has been relegated to one of the dozens of "service lines" in a giant profitable healthcare industrial complex, undermining the healing effects of the relationship between patients, personal physicians and care providers, and their teams.[12,13,14] Meanwhile, public health, which focuses on population health, disease prevention, upstream drivers of inequity, wellness, behavioral health, and emergency preparedness, is chronically underfunded.[15,16,17] Healthcare is not alone it its ineffective response to COVID-19 and our underlying social structure. Other factors impacting health such as public education, law enforcement, social services, environment and climate change are also suffering from inadequate attention and resources.

Primary care and public health share vital common ground and synergistic goals.[18] There is overwhelming evidence that their life-saving, cost-effective efforts prevent disease and injury, improve community conditions and quality of life for those with chronic conditions, and provide crucial disaster preparedness.[17] They are natural partners and leaders in robust and lasting population health efforts. This paper presents a vision of a comprehensive, collaborative system of community care that simultaneously responds to the challenges exposed by COVID-19 and positions the US to address future epidemics while producing health, containing costs, and relieving inequities.

An Integrated Approach

A powerful proposal for a healthcare system that engages primary care leadership within a broad community-public health framework was developed in the 1966 report, "Health is a Community Affair[19]," and updated in 2012.[20] The report (often referred to as the Folsom Report for its chair Marion Folsom) was the result of a 3-year study of healthy communities framed on the notion of "communities of solution," an approach to health care issues defined by problems to be solved rather than geographic locales, specific delivery systems, or governmental agencies. A community of solution is comprised of people who come together to address an important problem or seize an opportunity to improve health. In addition to community members, primary care clinicians, and public health professionals, communities of solution include an array of public and private partners and community-based organizations depending on the nature of the problem and the community.

While amazingly prescient, the 1966 report's visionary recommendations were only temporarily embraced and not widely implemented. Now, however, "Health is a Community Affair" has new relevance as we work to solve the seemingly intractable problems that confront the American health care system. It offers a roadmap for local planning, organization, and delivery of health services without the barriers of complex political and administrative structures. Within its framework, primary care is united with public health and behavioral health (a core component of primary care services) in education, practice, and policy. Together, these sectors create and work in partnerships, assist in data sharing with community organizations, and achieve the highest level of coordinated community care. It is a flexible framework that can, for example, incorporate community health workers into the health care team to support its broader community-engaged approach and address the interface of social, public health, and medical care needs within specific communities. The goal of a Community of Solution is to identify the problem shed - that region, population, group of people with a common experience, suffering from a health problem - and then engage and activate the local asset shed - the primary care, public health, community organizations available to address the problem. Additionally, it is crucial for local community to have access to state and national assets as well. This requires a thoughtful plan that provides flexibility and innovation in how local communities may access state and national resources.

"Health is a Community Affair" is also the basis for new approaches to resource allocation.[21] A comprehensive, multidisciplinary approach to care requires payment models that incorporate primary care, behavioral health, and public health in a shared funding bucket. On a local level, a community of solution that can address problems within context will require local assets drawn from public health, primary care, and the broader community. Such partnerships grounded in local context and built on trusting relationships enable systems-level interventions along with programmatic work to tackle multifaceted causes of health inequities that are impossible to remedy in one isolated sector.[22] Implementing such partnerships requires funding and development of new enabling infrastructure as well as engagement of a wide variety of people, agencies, and practices, rather than single organizational entities.[23]

COVID-19 Response and Recovery

> ### A Community of Solution Invests in Relationships
>
> In 2015, the Health Improvement Partnership (HIP)-Cuyahoga, a cross-sector equity-grounded community health improvement movement, declared eliminating structural racism its top community health priority in greater Cleveland. Building on Place Matters work since 2009, representatives of public health, health care, policy, social services, and the community came together to understand how historical policies have resulted in contemporary inequities in place-based health outcomes. HIP-Cuyahoga partners have employed collective impact and community engagement to build trusting relationships and align partnerships, expertise, data, and resources to affect systems and policy change toward a shared goal of racial equity. As COVID-19 unfolded, this collaborative was poised to rapidly work together in new ways. They co-created pragmatic response strategies, including equity-grounded community testing, and facilitated organizational and municipality level declarations of racism as a public health crisis. HIP-Cuyahoga's partnership is aligned in a nimble way that enables pivoting to address the most pressing health needs of the community and, as a result of long-term investment in relationships, allows partners to create outcomes beyond what could be created working separately.

The COVID-19 pandemic demands a comprehensive community asset engagement effort and highlights the need to work across boundaries.[24,25,26] The community of solution roadmap in "Health is a Community Affair" is the pole star for such efforts (see Table 1). A community-based COVID-19 mitigation plan can be implemented in real-time building on prior investment in trusting and trustworthy relationships and involving public health professionals, primary care clinicians, behavioral health professionals, allied health partners, community members and institutional leadership. Communities of solution are already forming in response to the pandemic as towns, regions and

states cross boundaries of geography and discipline to share resources, provide emotional support, and plan for the future,[27] with community members emerging as essential colleagues in the process. Other emerging ideas, such as a rapidly scalable workforce for contact tracing, a Community Health Worker Corps, and a WPA-style Health Force are examples of how communities of solution could operate on a national scale.

A community approach to COVID-19 provides an opportunity to address other crucial health care needs as well. Contact tracing, for example, demands an immediate robust workforce that can include trained public health workers, primary care clinicians and staff, medical and nursing students, and community health workers. Because no single health sector has the mission or capacity for comprehensive pandemic recovery, co-training these individuals would be a tangible shared effort. Adding training in basic preventive medicine, behavioral health screening, and referral training would broaden this work, allowing contact tracers to identify preventive health needs and help prevent and treat behavioral health challenges exacerbated by COVID-19. This will also create the long-lasting workforce necessary for future efforts Partnerships with medical, nursing and other health professions' training institutions are essential to such efforts. Public health and primary care must also pool their expertise to assure equitable access to and delivery of these services, particularly as we prepare for mass serological testing and immunization.

An Enduring System of Community Care

The multidisciplinary approach in "Health is a Community Affair," as well as initial community-based approaches to mitigating COVID-19, are the foundations of an enduring system of community-based care (see Table 2). Working together, rather than competing as interest groups, can result in new ways of understanding and improving health - incorporating such factors as public education, law enforcement, social services, environment and climate change. In the long term, however, linking primary care, public health, oral health, behavioral health, and community health into a unified team will require substantial policy and culture shifts.[28,29,30] The historical divide and diverse funding streams applied to public health, primary care, community health worker programs, and behavioral health are critical issues that must be addressed. Funding streams from HRSA, CDC, and public and private insurance are crucial to

the development of a community care approach. Long term efforts also require rethinking how Schools of Medicine, Public Health, Behavioral Health, and other allied health programs can be structured to enable communities of solution. By considering creative methods to support population health efforts and a combined workforce, funders can help disciplines and fields move beyond their separate silos to build communities of solution and the infrastructure and conditions to improve health and foster equity, so that everyone has an opportunity to reach their full health potential.

With over 290,000 workers in public health and over 225,000 physicians in primary care, all of whom face significant systemic challenges[31], creating unified teams will require sustained effort.[32][33] For example, retirements in both workforces are leading to concerns about whether there are enough workers to meet the country's needs.[34,35] Both sectors are transforming workflows to adapt to the value-based payment models created by the Affordable Care Act.[36] Both are investing in training and programs to address rising mortality from chronic diseases, substance use, and suicides.[37] And both are struggling to exploit data in electronic health records to improve health care and health.[38,39]

Despite these challenges, there is a foundation that a unified workforce can build on: shared language, knowledge base, and mission. In parallel, public health and primary care teams address similar concerns by engaging similar types of health professionals.[40] While this overlap may contribute to friction, it can also facilitate communication and connection. With the release of the National Academy of Medicine report on integration and the expansion of value-based payment, bridges across these siloes are emerging.[9] A move away from the dominant medical fee-for-service payment model may be a crucial step towards shared efforts and collaboration.[41] In a survey of over 17,000 public health workers, half reported that integrating with primary care was part of their daily work.[33] One model that allows public health workers to collaborate with their counterparts in primary care is the community health team. Consisting of community health workers, public health specialists, social workers, and behavioral therapists, these teams coordinate with primary care practices, provide enhanced services, and connect patients with community organizations and public health departments.[42,43] In Vermont, private payers partnered with Medicaid to pay for these teams, and ultimately, this investment generated

savings.[44] This blueprint highlights the feasibility of creating unified teams and the impact of scaling them to address current and future crises.

In the face of COVID-19, we have an opportunity to begin the slow dance of working together[45] to build a structure and workforce that meet the needs of individuals and their communities. It is a task that no organization or discipline can accomplish alone, and it requires a long-term commitment. It is an opportunity to bring public health and primary care together in a unified effort to protect people from COVID-19[46]; prevent, identify, and treat behavioral health issues exacerbated by unemployment and isolation; increase preventive services; manage acute and chronic conditions; and tackle upstream drivers of health inequities. We can begin immediately to work together to address the acute COVID-19 pandemic, allowing time for the necessary policy changes related to revenue, capital, and financing.[47] Through ongoing efforts initiated today, we begin to build the trust and trustworthiness so crucial for this community of solution effort. Because health is a complex condition, not all health outcomes will pass through the combined efforts of a local community of solution. Many social drivers of health such as unemployment, inequitable educational opportunities, and racism must also be addressed through additional local, state, and federal efforts.

We can ensure that the massive COVID-19 response and recovery efforts result in a new way of addressing population health by joining the best of public health with the best of primary care. By building robust local communities of solution, both during and after the pandemic, we can truly improve and maintain the health and well-being of our communities—together.

Table 1. COVID-19: Immediate Community Needs

	Needs	How Public Health and Primary Care Can Collaborate
Testing, tracking, and tracing	Isolate cases and quarantine contacts to reduce transmission	• Expand and link public health and primary care testing • Provide patient identification, supportive treatment, and resource support for isolation • Establish contact identification and tracing and provide resource support for quarantine
	Identify patients who have had COVID-19 infections	• Develop protocols for interpreting and implementing serologic testing • Conduct multi-system analyses on the impact of COVID-19 infection on functional, behavioral, and financial impairment
	Identify, investigate, and manage clusters	• Using electronic health and public health records, identify the locations and mechanisms of infection transmission • Identify equity-grounded strategies to address clusters
Recovery	Plan for mass immunization	• Stratify risk to inform vaccine distribution • Deliver vaccine education by leveraging community partnerships • Distribute vaccines • Identify immunization locations (e.g., public health departments, points of dispensing, pharmacies, schools, community centers/YMCAs, and community health centers, long-term care facilities, shelters)

Community identification, creation and engagement.
 	
Engaging patients to address ongoing needs
	Identify patients in need of primary care (i.e., continuous, comprehensive, coordinated, and first contact care)	• Provide diagnosis, treatment, and care
		  o In-person
		  o Telehealth
		  o Mobile delivery to homes

	Identify patients with (or at risk of) mental, emotional, or behavioral health problems	• Provide treatment and referrals
		• Deliver suicide prevention interventions
		• Address substance use
		• Target:
		  o Youth and young adults
		  o Elderly
		  o Other at-risk communities including homeless, non-English speakers, refugees, migrant workers, individuals with serious mental illnesses

	Integrate care	• Integrate across multiple domains, including prevention, acute illness, chronic disease management, multiple chronic conditions, mental health, and family care, long-term care, assisted living.

Community leadership development	Create local community medical, public health leadership activities	• Provide opportunities for clinicians (Physicians, NPs, PAs) to meet regularly with public health leadership • Co-create education and community programs that would feature primary care and public health teams • Partner with medical and other health professions educational institutions to educate and train the future health workforce

NP = Nurse practitioner
PA = Physician assistant
COVID-19 = Coronavirus disease 2019

Table 2. Building the COVID-19 Response and Recovery Community Health Infrastructure

Goals	Objectives
Expand the workforce	- Recruit and train (100,000-200,000) a new Community Health Worker Corps comprised of public health workers, primary care practice staff, and members of the community - Introduce community health workers and primary care-public health extension agents[484945,46] to public health settings and primary care practices - Train community health workers to provide community-engaged behavioral health screening, detection, referral, and education - Where available, add public health competencies to community health teams (which consist of social workers, behavioral therapists, and community health workers) - Create a national program for locally based interpretation consortia for individuals of limited English proficiency
Train the workforce	- Develop a core medical school curriculum in primary care-public health collaboration, including a public health rotation - Support inter and trans-disciplinary training "Public health for the local primary care clinician:" Primary care residents and primary care practice staff (nurses, medical assistants, and clinicians) will be trained by local public health staff in testing, contact tracing, and immunity testing. "Primary care for the local public health professional:" Public health professionals and students will be trained by local primary care clinicians in screening, referral, tracking of mental / emotional / behavioral (MEB) health, and other primary care essentials "Public health and primary care for all clinicians:" Provide all health profession students with inter-professional education/training in testing, tracking, tracing, MEB screening, and other primary care essentials
Enhance collaboration	- Create opportunities for data sharing between public health and primary care that maintain confidentiality but also facilitate rapid identification, contact tracing, and intervention - Engage funding agencies and payers to consider how to provide financial support for public health and primary care teams - Establish a responsible federal agency to inspire, help guide, and sustain communities of solution - Engage professional associations and licensing and certification boards to promote transdisciplinary professionalism, scope of practice, quality, and accountability. - Create activities/events for public health and primary care to co-create, co-brand, co-lead, co-operate in local communities. This must include funds to pay primary care clinicians and public health professionals to participate (i.e., replace patient encounter revenue). - Develop and/or enhance robust connections with community-led task forces charged to address and mitigate the health care disparities of minority populations
Conduct ongoing evaluation	- Create and sustain an analytic workforce to assess progress and drive improvement. - Plan, implement, coordinate, and fund clinical research, epidemiological studies, and community-based participatory research to evaluate community of solution functions and interventions - Conduct studies that assess the impact of engagement of those most proximal to the problem in co-creating solutions that foster equity

	• Conduct studies that assess the impact of models of care that bring together public health and primary care • Evaluate the impact of new curricula on professional competencies and behavior • Develop research training programs that support public health and primary care professionals to develop skills that enable them to become independently funded researchers who prioritize team and systems-based approaches to change

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