Primary Care and Public Health – Both Essential for National Health Security and Population Health

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The COVID-19 pandemic was a stress test that revealed critical weaknesses in the foundation of the US health care delivery system, which left unresolved will ultimately lead to catastrophic population health consequences. Primary care and public health are the most fragile and important parts of that foundation. Collapse of either of these disciplines would lead to cascading failures harming the health of individuals and the health security of the nation. Primary care and public health are inextricably entwined as the cornerstones of health security and population health, and there is an urgent need to adequately fund both.

As policy makers debate the importance of enhanced funding for either primary care or public health it would be good to consider the ways in which these disciplines are critical to securing the health of the nation as well as the ways in which they complement one another. Funding for both opens the door for greater integration that could build on the nascent synergies resulting in even stronger, more efficient and more sustainable foundation for the overall health care delivery system. Every day and in every corner of the world primary care and public health are already relying on each other in many ways. However, this relationship most often functions without formal acknowledgment. To better understand this intimate relationship, it is useful to first describe the core components of each. (J Am Board Fam Med 2024;37:S8–S11.)

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Public health traditionally focuses on serving large populations and has its roots in addressing the social determinants of health such as clean air and water, safe food, active transport, education, housing, and social welfare, recognizing that intersectoral action is required to advance population health outcomes. The Center for Disease Control and Prevention (CDC) defines "The 10 Essential Public Health Services" as a framework for public health to protect and promote the health of *all people in all communities*.[1]

Many of these core functions of public health overlap substantially with those of primary care which is described as a community-based, first-contact service delivery platform that provides longitudinal relationship-based care at the patient level with a focus on prevention and disease management embodied in Barbara Starfield's 4 C's: continuity, coordination, comprehensiveness, and first contact.[2]

As social and environmental contexts evolve public health has broadened its focus to include issues related to behavioral health crisis, climate change, forced displacement, opioid death epidemic, and the tsunami of chronic diseases of obesity, diabetes, and hypertension and the looming specter of future pandemics. In a parallel manner primary care has progressively broadened the horizons to include the responsibility of serving defined

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attributed populations and expanding their attention to the behavioral health and social needs of their patients. It is not hard to see how the margins of these 2 infrastructure disciplines are progressively overlapping. Nor is it hard to imagine the powerful synergies that can come from working in greater collaboration. Both sectors are engaged with the work of health promotion, disease prevention, evidence-based management, surveillance and research. They commonly share responsibility for delivering services like vaccinations and smoking cessation; share data around disease surveillance and screening uptake; and feed into joint health needs assessments and service planning activities.

A number of contemporary publications have highlighted the continuing synergies between primary care and public health, including a 2015 position article from the American Academy of Family Physicians (AAFP) and a 2012 detailed report by the IOM.[3,4] The AAFP focused on a call to action for primary care providers to embrace "community oriented primary care" to incorporate the upstream elements of living conditions and exposures that impact health, equity and longevity into their care delivery. AAFP points out that this can be accomplished through awareness of public health issues, advocacy, incorporating the social determinants of health screening and education The 2012 IOM report defines integration as "the linkage of programs and activities to promote overall efficiency and effectiveness and achieve gains in population health" and goes on to make 5 recommendations including Federal agency funding for integration, research, workforce development, Center of Medicare and Medicaid Innovation (CMMI) development of integration models, and the broader Centers for Medicare & Medicaid Services (CMS) role taking the lead in a national strategy for primary care – public health integration.

A more recent report by the Johns Hopkins Center for Health Security reflecting on missed opportunities for integration note "The findings of this study demonstrate that the failure to bring primary care providers into a frontline role as responders, alongside public health, resulted in many missed opportunities to provide better quality care, faster testing, more effective contact tracing, greater acceptance of vaccination, and better communication with patients."[5]

The American Academy of Family Physicians "urges its members to become informed about the importance, value, and movement toward integrating primary care with public health" and "also urges all national, state, federal, and private sector institutions to partner with primary care and public health entities to ensure a more integrated care delivery system that improves population health. Bold initiatives throughout the health sector are necessary for successful integration" These programs, although limited in scope and duration, provide credible evidence for the value of integration and credence to the vast potential.[3]

A recent example of the value of integrating public health and primary care is found in the evidence generated by the Maryland Primary Care Program (MDPCP) during the COVID-19 pandemic.[6] The Maryland Total Cost of Care contract between the state and CMMI includes a statewide primary care (MDPCP) and hospital payment reform and delivery transformation components. Practices participating in the program were required to adopt many activities, that bolstered their ability to provide population health including the use of the state Health Information Exchange (HIE) (CRISP) for data visualizations, on premise care management, behavioral health integration and social needs screening.

Within this program there were many important ways in which this relationship between primary care participants and the State Health Department worked together to incorporate public health resources and correspondingly many ways in which the state Health Department's mission for health security was aided by the ability of primary care to deliver care at the community level and gather data for surveillance.

The state provided all practices with a data portal on the state designated HIE (CRISP) with a data display to assist practices in identifying high needs patients. The portal also served as the trusted and familiar source of pandemic sensitive data such as patient level COVID-19 Vulnerability Indices and immunization status.

The state provided free COVID-19 POC tests and a platform on the state Health Information Exchange (CRISP) for reporting test results to the state for ongoing epidemiologic awareness. The state also provided a vaccine tracker on CRISP allowing practices to efficiently identify patients who are in need of vaccines.

With the technical, funding and data support provided by the state the practices provided the Department of Health with the "boots on the ground" pandemic support to the population at large. The state gained data on COVID-19 cases at the community level, an established efficient and

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reporting community-based immunization program, and a broad, well informed, trusted and effective network of immunizers and therapeutics prescribers for COVID-19 and future emerging threats.

The power of this integration is demonstrated in the reported successful reductions in the rate of hospitalization and deaths of COVID-19 on the Medicare beneficiaries served under the MDPCP compared with a matched control population.[7]

The beneficial effects of greater integration of primary care and public health go beyond the response to COVID-19. As the integration between primary care and public health matures it expands to include the broader issues that cannot be addressed by either discipline alone such as the crises in behavioral health and substance abuse, chronic diseases, obesity, and the pervasive disparities in health outcomes driven by underlying social and demographic factors. The likelihood of future and potentially more consequential pandemics remains a strong possibility there is an existential need to build a health care delivery system that is capable of responding. It is impossible to see how that can happen without significant integration of the foundational portions of the delivery system.

Closing

It is well established that both primary care and public health are underfunded. These disciplines are essential and foundational to the health security of the nation and to addressing the overall health of the population. There is also evidence that integration of these elements can be synergistic toward achieving both of these goals. The seminal WHO Declaration on Primary Health Care calls out the foundational role of strong primary care and essential public health functions as the foundation of any good health system. As policy makers and others work to improve the health care delivery and payment system, they should pay particular attention to making sure that the foundation of the US health care system is adequately funded to do the important work and as tightly integrated as possible to ensure the maximum effect from the available funding.[8] The most cost-effective way to improve health system efficiency and performance is joint investment in public health and primary care.

Recommendations

1. The Federal government can use the broad authorities of HHS and CMMI to implement well-funded state centered primary care programs in alignment with states willing to provide support and engage their Departments of Health resources to support primary care public health integration to serve the sustainable interests of health security and the best health possible for all. The newly released CMMI AHEAD state focused model offers an opportunity for states to include levels of integration into their planning and execution of healthcare transformation.
2. The Federal government should desist from moving funds out of public health to shore up the underfunded primary care system. In the alternative new Federal funding should be secured for the important investments in primary care along with making adjustments that strengthen primary care in the Medicare Physician Fee Schedule.
3. The Federal government should fully fund the CDC public health requests with the knowledge that the Federal funding is also the underpinning of state public health programs.
4. Additional research should be encouraged and funded for models of public health and primary care integration.

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