

The Future Of The Public's Health: Vision, Values, And Strategies

U.S. population health has taken a backseat to other political interests for too long.

by **Lawrence O. Gostin, Jo Ivey Boufford, and Rose Marie Martinez**

PROLOGUE: For decades, those charged with the task of devising strategies for improving population health indicators in the developing world have feuded over how best to leverage limited resources to maximum benefit. In *Health Affairs*, May/June 2004, Lesley Magnussen and colleagues chronicle how the rhetoric of practicality and fiscal limitation propelled movement away from the high-minded philosophy for improving global health that called for transformations in socioeconomic status, resource redistribution, and a focus on building health systems toward a more limited, “disease-centered” model. The authors interpret the data as proving that such “siloed” models centered on temporary fixes “are not sufficient to greatly alleviate the overall burden of disease in developing countries.”

A domestic analogue to this long-standing global debate has emerged with respect to the U.S. public health enterprise. Through its 1988 report, *The Future of Public Health*, and its 2002 report, *The Future of the Public's Health in the Twenty-first Century*, the Institute of Medicine (IOM) articulated a broad U.S. public health vision that assigned to public health agencies the enormous task of ensuring population health. This vision, much like its international counterpart, pits those advocating on behalf of an expansive public health philosophy grounded in fundamental socioeconomic and cultural transformation against critics in and outside of the public health community charging that such an ethos moves far beyond public health's conventionally understood purview.

In this paper Lawrence Gostin, Jo Ivey Boufford, and Rose Marie Martinez answer the critics and provide a justification for the IOM's expansive construct, while proposing strategies to get us there. Gostin is the John Carroll Research Professor of Law at Georgetown University; a professor of public health at the Johns Hopkins University; and director of the Center for Law and the Public's Health at both universities. Boufford served as dean of the Robert F. Wagner Graduate School of Public Service at New York University; as principal deputy assistant secretary for health in the U.S. Department of Health and Human Services; and as U.S. representative on the executive board of the World Health Organization. Martinez is director of the IOM's Board on Health Promotion and Disease Prevention.

ABSTRACT: The expansive vision of modern public health, “healthy people in healthy communities,” is politically charged. This paper offers a justification for this broad vision and offers concrete proposals. By pointing to the poor condition of public health agencies; urging a transition to an intersectoral public health system; promoting the adoption of bold changes in U.S. physical, social, and economic conditions; and endorsing a values shift to a commitment to collective interest in healthier communities, we hope to take a dramatic step toward achieving these aspirations for “healthy people in healthy communities.”

THE MODERN PUBLIC HEALTH SYSTEM is undergoing a remarkable transition, moving from discrete interventions to address infectious diseases to broad social, cultural, and economic reforms to address the root causes of ill health.¹ This transition is embodied in two foundational reports of the Institute of Medicine (IOM). The first, *The Future of Public Health* (1988), defined public health as the obligation of organized society to assure the conditions for people to be healthy. The second, *The Future of the Public’s Health in the Twenty-first Century* (2002), went further by proposing the following ambitious strategies for health protection and promotion: (1) strengthen the governmental public health infrastructure; (2) encourage major private-sector actors to promote the health of their members and surrounding communities; and (3) improve the broad determinants of population health.² The vision of modern public health, then, is expansive: “healthy people in healthy communities,” with public health agencies primarily responsible and accountable for assuring the health of the population.³

This broad vision is politically charged. Critics express strong objections: Why should health be a primary social undertaking when compared with other competing priorities? Why should private actors take responsibility for the public’s health? Are public health agencies going beyond their legitimate scope by supporting fundamental changes in the socioeconomic environment? These are legitimate and challenging questions. The goals of public health are too often assumed or simply asserted, rather than cogently explained and justified.

This paper has several interrelated purposes and is intended to fill a gap in the literature. First, it sets out a framework for safeguarding and improving the public’s health, with detailed recommendations. Second, it offers a justification for a broad public health vision, while acknowledging that the issues are complex and the appropriate social responses deserve robust political debate. Rather than simply asserting the salience of population health, we address, head-on, the major critiques posed by scholars and politicians who prefer a narrow scope for public health action. Our hope is to leave the reader with a robust conception of the public health enterprise, including governmental public health, public/private partnerships, and favorable conditions for healthy populations.

State Of The Nation’s Health

The health of the U.S. public continuously improved throughout the twentieth century. By every measure, Americans are now healthier, live longer, and enjoy

lives that are less likely to be marked by injury, ill health, or premature death. During the past century, for example, infant mortality decreased, and the average life span rose from forty-five years to nearly eighty.⁴ Public health achievements include safer foods, fluoridation of drinking water, control of infectious diseases, fewer deaths from heart disease and stroke, motor vehicle safety, and safer workplaces.⁵

The public's health still has room to improve. Although the United States has one of the highest levels of per capita gross domestic product (GDP) in the world, Americans' health status is poor compared with the health status of populations that have similar levels of economic development. Although the United States has the third-highest GDP of the thirty member countries of the Organization for Economic Cooperation and Development (OECD), it ranks twenty-third in infant mortality (7.1 deaths per 1,000 live births) and eighteenth in life expectancy at birth (76.7 years for both sexes).⁶ The World Health Organization (WHO) ranks the United States thirty-seventh among global health systems, reflecting concerns about access to and cost of health care, relatively poor health indicators, and sizable racial and socioeconomic disparities.⁷

The relatively poor U.S. health status is even more noteworthy because of high U.S. health spending—\$4,373 per capita—which is the highest in the world and more than double the OECD median of \$2,000.⁸ Approximately 14 percent of U.S. GDP (\$1.4 trillion in 2001) is directed toward health, compared with 9.2 percent in Canada, 7.4 percent in Japan, and 7.1 percent in the United Kingdom.⁹

Although identifying the pathways between investment and health outcomes requires further research, several trends appear important. More than 95 percent of U.S. federal and state health spending is directed toward personal health care and biomedical research; only 1–2 percent is directed toward prevention.¹⁰ These governmental funding priorities, consistent for decades, do not reflect scientific understandings of population health. There is strong evidence that access to medical care is a less important determinant of health than behavior and environment, which are responsible for more than 70 percent of avoidable deaths.¹¹ This history of investment skewed toward personal health care offers a political strategy that is unlikely to achieve a maximum impact on the public's health.

Strategies For Improving The Public's Health

If current policies do not ensure the highest attainable health for the U.S. population, then what strategies would be more effective? The IOM's 2002 report offers at least three core strategies. Here we offer concrete proposals that go beyond this report.

■ **Strengthen the governmental public health infrastructure.** Government has primary authority and responsibility for assuring the conditions in which people can be healthy. Yet public health agencies are structurally weak in each of their core components, which led the IOM to conclude that the agencies are largely in dis-

array. Numerous other reports have drawn attention to the lack of public health preparedness.¹² The Centers for Disease Control and Prevention (CDC) concludes that despite recent improvements, the public health infrastructure “is still structurally weak in nearly every area.”¹³ Indeed, structural deficiencies exist in each of the major components of the public health system, including outdated statutes; a poorly prepared workforce; lack of state-of-the-art information and communications systems (to improve surveillance, outbreak investigations, program evaluations, and interventions); and inadequate laboratory capacity.¹⁴

The recent emphasis on bioterrorism preparedness and influx of federal funds could strengthen the public health system if the resources enabled agencies to protect against both bioterrorism and other health threats. Public health professionals, however, express concern about substitution effects, in which bioterrorism funds detract from ongoing programs.¹⁵ An independent evaluation using major indicators such as response plans demonstrated continued lack of preparedness for public health emergencies.¹⁶ Also, public health agencies face severe cuts because of the current state budget crisis, which may cause preparedness to deteriorate further.¹⁷

To address these weaknesses, we offer the following recommendations.

Recommendation 1: Congress should establish a national Public Health Council (PHC). The PHC, comprising the secretary of the Department of Health and Human Services (HHS) and state health commissioners, with representative local health officials and outside experts, would (1) collaborate on action to achieve national health goals as articulated in *Healthy People 2010*; (2) advise the HHS secretary on financing, policy, and regulations affecting the public’s health; (3) develop a funding system to sustain the public health infrastructure; and (4) evaluate the impact of domestic policies on national health outcomes and reductions of health disparities. It would improve collaboration among levels of government, provide a forum for strategic planning and monitoring progress, and elevate the status of public health within government.

Recommendation 2: HHS should report annually to Congress on the state of the nation’s health. The HHS secretary should be accountable for assessing the state of the nation’s public health system and its capacity to provide the essential public health services to every community. The assessment should include a systematic evaluation of progress in meeting national health goals (for example, leading health indicators); funding and technical assistance for public health agencies to ensure sustainability; and identification of strengths and gaps in system capacity. Such assessments are needed to keep Congress and the public informed and would play an important role in policy development.

Recommendation 3: Congress should establish a stable funding mechanism, such as a “trust fund” to support state and local public health agencies. Agencies suffer from two interrelated problems: lack of adequate funding to support ongoing services, and inflexible sources of funds. When the federal government does support public health

services, it is frequently for specific purposes (for example, bioterrorism preparedness) or to serve specific constituencies (for example, people with HIV/AIDS), and funding streams are often time limited. This form of “silo” or “stovepipe” funding cannot sustain a permanent infrastructure and discourages evidence-based planning, policies, and programs.¹⁸ The PHC should advise Congress about the level of financial support necessary for the trust fund and develop a formula to allocate resources that assures adequate state and local cost sharing.

Recommendation 4: Congress should set conditions for receipt of funds based on states’ progress toward and adherence to quality standards. HHS, through the PHC, should establish national standards of quality and hold states accountable for meeting them. Innovative work is already taking place to establish objective measures of public health effectiveness and identify qualifications for the public health workforce.¹⁹ If agencies are charged with improving the public’s health and receive adequate funding, they should be held accountable under these quality standards.

■ **Engage nongovernmental actors in partnerships for public health.** Although the duty to safeguard the public’s health has been assigned historically to government, through the work of national, state, tribal, and local health agencies, no single agency can assure all of the conditions for the public’s health.²⁰ Public health agencies can act as a catalyst for action by other government departments and nongovernmental actors. The intersectoral public health system includes many important entities, but the 2002 IOM report focused on five: health care institutions, the community, businesses, the media, and academe.

(1) Institutions: Health care is important because personal health is a value in itself and contributes to population health.²¹ However, health care services are not fully accessible to many people. Approximately 14.6 percent of the population, or forty-three million people, lack health insurance; racial and ethnic minorities and the poor are disproportionately burdened.²² Also, health plans often do not cover many services for prevention, mental health, substance abuse treatment, and dental health.²³ Health care providers can play an important role in promoting health through patient care, attention to the health of their own workers, and investments in promoting the health of the communities they serve.

(2) Community: Although the term “community” is often imprecise, many local entities such as churches, civic organizations, and health advocacy groups can contribute to the health of their neighborhoods. Community involvement in and promotion of health action can be effective.²⁴ Community organizations are well placed to assess needs, inventory resources, formulate collaborative responses, and evaluate outcomes for community health improvements. They can also promote healthy behavior and lifestyles and can facilitate social networks.

(3) Businesses: Businesses play a major role in the health of their employees and the population through their effects on natural and built environments, workplace conditions, and relationships with communities. The cost-effectiveness of prevention and health promotion efforts for an employer’s workforce and the

value of corporate action to promote broader community health have been demonstrated.²⁵

(4) Media: The news and entertainment media shape public opinion and influence decision making, with potentially critical effects on population health. Yet public health activities often attract little media coverage, perhaps because journalists and public health officials do not understand each other's perspectives and methods. Ongoing dialogue and educational opportunities could improve media coverage of public health. In addition, the media should consider increased airtime for public health messages.

(5) Academe: Academe provides degree programs and continuing education to the current and future public health workforce. However, changes are needed in curricular and financial incentives to link curricular content and teaching methods more closely to the practice needs of the public health workforce. New investments and academic reorganization are needed for community-based prevention research that evaluates the effects of interventions on population health.

To ensure that health system partners contribute to the public's health, we propose the following governmental programs and incentives.

Recommendation 5: The federal government should lead a national effort to achieve stable health care coverage for every person residing in the United States. This coverage should include age-appropriate preventive services and oral health, mental health, and substance abuse treatment. The uninsured have difficulty getting care, and the services they receive may not be timely, appropriate, or well coordinated.²⁶ Insurance coverage is associated with better health outcomes for children and adults.²⁷

Recommendation 6: Federal and state governments should support community-led public health efforts. Community organizations are close to the populations they serve and therefore are a crucial part of the public health system. Public health agencies should provide adequate funding and technical assistance to, and engage in partnerships with, communities. This could enable communities to inventory resources, assess needs, formulate collaborative responses, and evaluate outcomes for community health improvement and reduction of health disparities.

Recommendation 7: Public health agencies should create incentives for (and, if necessary, regulate) businesses to strengthen health promotion and disease and injury prevention for their employees and communities. Government should provide incentives through the tax code and conditional spending to encourage the private sector to engage in health-promoting activities. Monetary incentives can greatly affect corporate behavior. There is also a role for governmental regulation to ensure that businesses act responsibly. Thus, the state must strengthen regulations relating to occupational health and safety, sanitary food and living conditions, and the environment, among other areas.

Recommendation 8: The media should increase the time devoted to public service announcements and contribute to a well-informed public on matters of health. An ongoing dialogue and collaborative efforts between public health agencies and the media would

benefit the public's health. Consideration of stronger regulations regarding public service announcements (for example, more airtime in "prime time") is warranted, as is increased inclusion of health messages in popular entertainment media.

Recommendation 9: Academic institutions should increase interdisciplinary learning opportunities for public health students, strengthen and expand their training of the current public health workforce, and reward faculty for both basic and applied public health research. Academic institutions are critically important in the education and training of the public health workforce and in providing a science base for public health policy. The federal government should increase funding for investigator-initiated research relating to public health prevention and practice.

■ **Improve the multiple conditions for the public's health.** Thus far we have made the case for strengthening the governmental public health infrastructure and forming public/private partnerships. However, much controversy persists as to the appropriate scope of public health action. We support a broad emphasis on the conditions in which people can be healthy. To achieve population health, it is necessary to transform national health policy, with its traditional dominant investments in personal health care and biomedical research to treat disease after it happens, to a more balanced policy that invests in the multiple determinants of societal health.

The multiple determinants of health encompass the physical or built environment, the natural environment, the informational environment, the social environment, the economic environment, and the work environment.²⁸ This finding is embedded within an influential ecologic theory that characteristics of places and even nations carry with them health risks for the people who live there.

Perhaps the two farthest-reaching, and therefore most controversial, determinants of health relate to the "built" and socioeconomic environments. Public health has a long history of designing the built environment to reduce injury (workplace safety, traffic calming, and fire codes), infectious diseases (sanitation, zoning, and housing codes), and environmentally associated harms (lead paint, asbestos, and toxic emissions). The United States is facing an epidemiological transition from infectious to chronic diseases such as cardiovascular disease, cancer, diabetes, asthma, and depression. The challenge is to enable communities to facilitate physical and mental well-being. Although research is ongoing, we know that environments can be designed to promote more active lifestyles, improve nutrition, decrease the use of harmful products (such as cigarettes and alcoholic beverages), reduce violence, and increase social interactions (helping neighbors and building social capital).²⁹

A strong and consistent finding of epidemiological research is that socioeconomic status (SES) is correlated with morbidity, mortality, and functioning.³⁰ SES is a complex phenomenon based on income, education, and occupation. The relationship between SES and health often is referred to as a "gradient" because of the graded and continuous nature of the association; health differences are observed well into the middle ranges of SES. These empirical findings have persisted across

time and cultures and remain viable today.³¹

Some researchers go further, suggesting that the overall level of socioeconomic inequality in a society affects health.³² That is, societies with large disparities between the rich and poor tend to have inferior health status. The validity of these studies has been challenged recently.³³ However, some claim that from an ethical perspective, “social justice is good for our health.”³⁴ Government can take active steps to improve the built and socioeconomic environments in several ways.

Recommendation 10: State and local governments should engage in land-use planning to encourage healthier lifestyles and habitats. Government has available numerous tools to make the physical environment more conducive to healthy living: economic incentives to encourage green spaces and recreational facilities; building and housing codes to reduce toxic exposures; zoning to increase availability of wholesome foods and products; and school requirements to serve healthy foods and promote exercise among students. Scientific data on the kinds of designs and land-use arrangements that promote health would at least ensure that policymakers and planners carefully take account of the community’s health and safety.

Recommendation 11: The federal government and the states should adopt more comprehensive strategies to reduce health disparities. Health policymakers have documented major health disparities within the population and have set a goal of reducing them.³⁵ Federal and state governments should direct policies and programs designed to reduce health disparities.³⁶ Priority should be given to those with greatest need, such as the poor and racial minorities. Disparities can be reduced through targeted public health interventions to serve these populations and general improvements in access to essential services such as income support, education, and health care.

Justifications For An Expanded Vision Of Public Health

Critics have argued powerfully against the foregoing proposals for achieving a healthier population.³⁷ In this section we respond to these challenges, recognizing that the questions posed are incisive and deserve careful scrutiny.

■ **Why should health be a primary social undertaking?** Critics argue that population health should not necessarily be a primary social undertaking when compared with competing priorities for investment in transportation, energy, education, or national security. Although it is true that the political organs of government decide on national and state priorities, there are good reasons to give special attention to health.³⁸

Every person understands, at least intuitively, why health is vital to well-being. If individuals have physical and mental health, they are better able to socialize, work, and engage in the activities of family and social life that bring meaning and happiness. Perhaps not as obvious, however, is that health is also essential for the functioning of populations. Without minimum levels of health, people cannot fully engage in social interactions, participate in the political process, exercise rights of citizenship, generate wealth, create art, and provide for the common se-

curity. Notably, evidence is emerging that direct investments in health can have positive effects on the economy.³⁹ A safe and healthy population builds strong roots for a country—its governmental structures, social organizations, cultural endowment, economic prosperity, and national defense. Understood in this way, then, population health becomes a transcendent value.

■ **Are fundamental changes in physical, social, and conditions warranted?**

Critics argue that public health agencies overreach and lose their legitimacy when they address the broad determinants of health.⁴⁰ There are, to be sure, political dangers in straying too far from what many consider public health's traditional mandate.⁴¹ Despite these political risks, addressing the broad determinants of health leads to more effective social policy. Discrete interventions cannot create the conditions to promote and protect the public's health because they do not attend to the underlying causes.⁴² Public health agencies must act on scientific research, and a growing body of evidence suggests the importance of physical, social, and economic conditions for the population's health.⁴³ As the main proponent of population health in society, the public health community must call attention to the "upstream" causes of morbidity and premature death and must propose a broad range of social, economic, and behavioral tools needed to make populations healthier.⁴⁴

Critics often dispute the evidence demonstrating a causal relationship between low SES and poor health outcomes and reject social policies designed to lift people out of poverty.⁴⁵ The explanatory variables for the relationship between SES and health are not entirely understood. However, waiting for researchers to definitively find the causal pathways would be difficult and time-consuming, given the multiple confounding factors involved. This would indefinitely delay policies that could powerfully affect people's health and longevity.

Critics similarly offer a stinging assessment of public health efforts to alter the built environment: "The anti-sprawl campaign is about telling [people] how they should live and work, about sacrificing individuals' values to the values of their politically powerful betters. It is coercive, moralistic, [and] nostalgic."⁴⁶ Critiques such as this one fail to take account of history, norms, and evidence.⁴⁷ Historically, government has been actively involved in land-use planning.⁴⁸ It is not a matter of whether the state should plan cities and towns, but how. The evidence demonstrates that organized societies have a remarkable capacity to plan, shape the future, and help populations gain health and well-being.⁴⁹ History, theory, and empirical evidence do not make it inevitable that the state will, or always should, prefer health-enhancing policies. However, government does have an obligation to carefully consider the population's health in its land-use policies.

Assuring The Public's Health: Future Challenges

We are acutely aware that key obstacles await the strategies we have enumerated. Achieving a highly functioning governmental public health system is difficult; the necessary tasks are technically within our reach but require political will.

There are many reasons to question the political commitment to population health—a history of underinvestment, silo funding, and a culture of individualism. In matters of funding, standard setting, and accountability, federalism poses another problem. Which government—federal, tribal, state, or local—holds the power and duty to devote resources and create policy?

The challenges to achieving effective partnerships in public health are equally apparent. The private and voluntary sectors possess no duty to act for the public good, and there is little political consensus about creating incentives and requirements to do so. The government's role vis-à-vis the private sector has always been controversial. Those who support limited government and a broad sphere of economic freedom may oppose partnerships that go beyond the purely voluntary, but the potential value of closer cooperation is becoming more clear.

Finally, and self-evidently, there are deep challenges in creating policy to improve the socioeconomic conditions of health. Socioeconomic determinants evoke images of redistribution of wealth and status, which are unpopular in many circles. However, this is not merely a question of ideology but one of science. The task will be to demonstrate an evidence-based way to reduce socioeconomic disparities and to show that this improves health outcomes.

Given these challenges, we understand that our aspirations for “healthy people in healthy communities” need to compete in the marketplace of ideas. Yet we think that population health does deserve a special place in national debates and priorities, and it has taken a backseat to other political interests for too long.

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The authors are on the Institute of Medicine (IOM) Board on Health Promotion and Disease Prevention (Gostin and Martinez) and Committee for Assuring the Health of the Public (Gostin and Boufford). This paper does not necessarily represent the views of either group.

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