

The Role of Preventive Medicine in Improving Societal Health

Tista Ghosh, MD, MPH,¹ Pablo Buitron de la Vega, MD, MSc,² Manijeh Berenji, MD, MPH, FACOEM,³
Hunter Jackson Smith, MD, MPH, MBE⁴

INTRODUCTION

In the U.S., many equate health with health care. Yet, they are not equivalent. Although the U.S. spends the majority of its healthcare dollars on the healthcare system,¹ studies demonstrate that health care represents only 10–20% of what determines a person's health.² Disregarding genetic factors, nearly 80% of an individual's health depends upon social, environmental, and behavioral factors. These factors are known as social and structural determinants of health (SDOH). Health happens primarily outside the doctor's office — where people live, work, and play. Preventing illness relies on these societal factors.

Impacting SDOH can involve a wide variety of approaches from raising wages, to increasing equitable access to education and health insurance, reforming tax structures, building affordable housing, reducing the prices of healthy foods, and more. Many of these methods require multi-sectoral collaboration, linking disparate groups across health, social, and political arenas. In this article, we focus on the role that preventive medicine physicians can play in improving SDOH, both within the healthcare system and beyond it.

SOCIAL DETERMINANTS AND THE ROLE OF THE HEALTHCARE SYSTEM

Physician offices have increasingly recognized the role of SDOH. Screening for social, economic, and environmental factors that may affect health — including safe housing, affordable transportation, access to nutritious foods, and income-based eligibility for government services or prescription discounts — has become more widespread in clinical systems.³ However, in many places, clinicians undervalue SDOH screening or face barriers to doing so, such as lack of training, time, or knowledge of available resources for referral.⁴

Addressing these barriers begins with medical education. Medical students must learn the fundamentals of SDOH, including the historical context in which they develop, and preventive medicine residents should be

taught how to screen and connect patients to available resources. Health systems must focus on building partnerships with local community organizations and developing directories of resources for clinicians.

Unfortunately, at the health systems level, accountable care organizations often do not receive enough incentives to invest in prevention and address SDOH, or they lack the data to appropriately do so.⁵ Meanwhile, in parts of the country, safety-net institutions continue to struggle with Medicare's "value-based" purchasing model, intended to compensate based on quality rather than volume of care, due to disadvantages with process measures. Studies have found that increased weighting to mortality rather than process indicators would reduce the disadvantage faced by safety-net hospitals.⁶ Value-based reimbursement programs that penalize hospitals may impede the transition to addressing SDOH issues for their community. Systems may need to redefine "value" to incentivize attention to SDOH relative to process measures.⁶

Policies that support safety-net institutions in the transition to value-based care are urgently needed, as are the expansion of policies that reward healthcare providers who address SDOH. The Centers for Medicaid and Medicare Services (CMS) should include SDOH as part of reimbursement and provide incentives for clinicians and institutions to improve the health of their patient population, particularly those of limited means. Additionally, state and federal guidelines need to be adopted to supplement the Affordable Care Act's "community benefit" requirement for non-profit hospitals, which has been a struggle for many.⁷ Creating structured guidelines promoting evidence-based approaches that can impact SDOH in the community could positively impact community health.

Restricting efforts to address SDOH by keeping them tied to the healthcare system is not enough. To move the needle on SDOH, changes must be made across all

From ¹Edwards Life Sciences; ²Boston University School of Medicine; ³Boston Medical Center; and ⁴Walter Reed Army Institute of Research
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sectors of society. Preventive medicine physicians, the healthcare world's "specialists in prevention," are poised to help make such changes happen. Preventive medicine physicians — some of the only healthcare professionals trained in both clinical medicine and in public health — can bridge health systems, clinical settings, and the social environments that impact health.

Unfortunately, many in the policy world are unaware of this specialty, and preventive medicine residency programs are often [under-supported](#).⁸ Increasing funding to build awareness of these programs would certainly improve the specialty's standing. Preventive medicine residencies should also look to expand their scope of training by offering rotations in education, housing, transportation, policing, food access, built environment, planning and zoning, workplace benefits and wellness programs, and other sectors. By embedding residents in those areas, they gain experience themselves in SDOH and can generate ideas in how to improve SDOH and integrate such ideas across disparate sectors. These sectors may then understand the vital role they play in health, opening the door to additional collaborative strategies that impact societal health and wellbeing.

Furthermore, embedding preventive medicine residents in rotations with school boards, departments of education, and teacher training organizations may influence the health curriculum of students across the country. Similar rotations in police departments, affordable housing organizations, food access organizations, city planning and workplace benefits/wellness programs could impact the conversation around health in those settings. Prior to such rotations, residents should be trained in health communications to understand how to effectively reach audiences with different backgrounds — whether that be people of different professions, [racial/ethnic](#) groups, geographies, or education levels.⁹ Preventive medicine residents should also receive instruction in how to educate these audiences not just orally, but using [social media](#) and other [platforms](#) that are impactful in influencing the public's knowledge and behaviors.^{10,11}

INFLUENCING HEALTH BEYOND THE HEALTHCARE SECTOR

Creating and maintaining good health and wellness requires the ability to obtain, understand, and act on basic health information. This is known as health literacy. Unfortunately, the U.S. has poor rates of health literacy. According to the Department of Education, which conducted the country's only [national survey](#) on health literacy in 2006, only 12% of U.S. adults had "proficient" health literacy.¹² This is supported by [international adult health literacy surveys](#) which have found low rates of

literacy, numeracy, and problem solving skills among U.S. adults, all of which are essential components of health literacy.¹³

This extraordinary lack of health literacy has a cost. Whether it is in skyrocketing rates of [obesity](#), diabetes, and heart disease, or in uncontrolled viral spread and disproportionately high [COVID death](#) tolls, low health literacy prevents people from doing what's best for their health.^{14,15} One [report](#) estimated that the cost of low health literacy to the U.S. economy was between \$106 billion to \$238 billion annually due to lost wages, medication errors, unnecessary emergency room visits, avoidable hospitalizations, etc.¹⁶

In this age of social media and disinformation, higher levels of health literacy can protect individuals and communities from dangerous health myths. One recent study that asked over 1,500 U.S. adults to distinguish between true and false COVID-19 headlines found that higher health and scientific knowledge was associated with lower belief in false headlines.¹⁷ Higher health literacy can protect more than the individual, it can protect that individual's family or community as well. Low health literacy among adults can greatly impact their [children's health](#) and create a generational cycle of poor health. Children of adults with low health literacy often have poorer nutrition and health behaviors, higher rates of childhood obesity, and more emergency room visits.¹⁸ Higher rates of health literacy can reduce the likelihood that an individual will engage in behaviors that are harmful to the health of others in their community; for example, by exposing others to [secondhand tobacco smoke](#) or inadvertently spreading infectious diseases.¹⁹

To create more health literate generations, we need a multidisciplinary approach to education that incorporates science, history, sociology, political science, and civics. Students must understand the history of health, such as what transpired during previous pandemics. They need to grasp societal factors that affect health, such as poverty, housing, transportation, food access and discrimination. They must understand how racism and other pervasive social and structural discrimination has disadvantaged communities. They should also understand how government policies influence health and how their actions (e.g., smoking, distracted driving, or vaccinations) can impact both their own health and their community's. Teaching this information in schools alone is not enough. It must be reinforced across the lifespan, in workplaces, community centers, and other settings.

These efforts are just the beginning. Preventive medicine physicians must exert a stronger voice at the state and federal policy levels. This should involve a regular, structured approach to educating policy makers on preventive medicine and SDOH and encouraging the

inclusion of preventive medicine physicians in key committees and roles. Preventive medicine societies should seek the audience of foundations and corporate charity programs outside the health sector (namely, those that focus on poverty, housing, education, food, corrections, transportation, the built environment and discrimination) to forge broader partnerships and resources to tackle SDOH. We must systematically identify, educate, and assess attitudes of key influencers in different sectors who exert their own sway to promote needed policy changes that improve societal health.²⁰

CONCLUSIONS

In conclusion, SDOH are prominent factors that drive health. Major policy changes that affect multiple sectors of society are needed to truly impact SDOH, and preventive medicine physician participation is vital to ensure the success of such efforts and align efforts at the individual, community, and policy level. Thus, improving the training and visibility of these physicians, both within the healthcare system and beyond, is essential to impacting societal health.

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