Physicians in training have a broad range of subjects they must study and in which they must train and develop proficiency. The scope of a doctor’s expertise, however, must not be limited to an immediate practical knowledge of anatomical structures or the pathology of a given disease. As medical advances accelerate, physicians are increasingly being called upon not simply to practice medicine in a one-on-one relationship with a patient, but to provide a voice of professional and scientific authority in informing the public about the nature and value of medical developments. In this article, we explore the underpinnings of the physician’s authority and the evolution of the relationship between the physician and society, and touch upon contemporary social issues within the purview of physician advocacy. We also consider important questions that arise from that evolving relationship: What are acceptable topics on which a physician may offer a professional opinion? How does a doctor disentangle his or her personal and professional views on a contentious topic? Can a physician ethically “speak for the profession” if there is no medical consensus on a given topic?

FOUNDATIONS OF PHYSICIAN AUTHORITY: LEGITIMACY AND DEPENDENCE

Medicine in the United States crystallized in its modern form after two centuries of contentious infighting in a fractured scene of quackery, medical sectarianism, and pre-scientific revolution medical practice. While today we take for granted the social authority and esteem enjoyed by the physician, these were not always in evidence. For example, the father of J. Marion Sims, one of the pioneers of nineteenth-century surgery, reacted disapprovingly when informed of his son’s chosen profession: “If I had known this, I certainly should not have sent you to college. . . . [Medicine] is a profession for which I have the utmost contempt. There is no science in it. There is no honor to be achieved in it.”

Ultimately, the professional institution of “allopathic” medicine as we know it was able to secure a claim on legitimacy in three ways: through a commitment to evidence-based practice, a rigorous certification system that polices itself to maintain a body of competent practitioners, and a value orientation that prioritizes public health over personal economic gain. Training, self-regulation, and service orientation thus help define medicine as a profession.

Practical legitimacy, however, does not by itself convey a broader social authority. Physicians may be legitimate with regard to their professional practices, but they are unable to compel the public to heed their counsel on broader social issues. Authority is realized through the trust the public has placed in the medical profession for official duties such as treating diseases, healing ailments, prescribing medications, writing sick notes, and performing clearance physicals. Many of these roles are governed by legal regulations, but the professional authority of the physician is ultimately drawn from public trust.

The public’s dependence on physicians can also be understood as a reliance on their expertise. Medicine’s complexity and the gap in understanding between the laity and medical professionals were already evident by 1889, well before the era of modern medicine, when the U.S. Supreme Court, while justifying states’ rights to provide medical certification, asserted that “comparatively few can judge of the qualifications of learning and skill which [a doctor] possesses” (Dent v. West Virginia, 1889). Patients trust that diagnoses and treatments decided upon by physicians represent an accurate, objective distillation of the current aggregated knowledge in the medical field—the conclusions that patients would themselves come to if they had received the same level of training as their physicians. The expertise of the doctor is a “shortcut to rationality (Starr, 1982), an informed extension of the patient’s own decision-making capability into scientific and medical matters. For many people, regardless of their social standing or level of education, the medical professional is their principal liaison to the realm of the biological sciences. Physicians may be the only people with professional scientific training with whom many people will ever interact. It is from their responsible use of knowledge and expertise that physicians ultimately derive their authority to dispense professional opinions to individual patients and to society.

PROFESSIONAL RESPONSIBILITY AND THE PUBLIC INTEREST

The American Medical Association (AMA), American medicine’s oldest professional society, has set forth a code of ethics. Founded in 1847, the AMA was medicine’s first successful attempt at creating a professional society in the United States, and it remains the country’s preeminent medical body. The code of ethics is extensive and addresses the
particulars of many issues. It begins with a statement of principles, three of which are particularly relevant to the question of how physicians should engage with public policy.

Principle III imparts a responsibility to seek changes in laws that run counter to “the best interests of the patient” (in terms of health). Principle V calls for a commitment to education, including that of the patient. Principle VII requires a commitment to public health (American Medical Association, n.d.). Additional published opinions examining this code concern advocacy for change in law and policy, giving physicians the freedom to decide whether to participate in legally permissible activities they feel are warranted, as long as the motivation maintains the priority of the patients’ best interests.

Medicine and public health have not always been unified; through much of the history of medical practice, medicine was seen exclusively as a service performed by a doctor for an individual patient. In the traditional narrative, physicians passively await patients—the clients—to seek them out before taking action on a particular problem. By assuming an active role in line with the service orientation of the profession, organized medicine has accepted the responsibility of guiding public policy in the name of public health. While this seems a significant addition to the mission of the physician, it is a logical extension of the role physicians play as guardians of and advocates for patients’ health. The historical line separating public-health efforts from individual treatment through medicine was principally a consequence of our limited knowledge about the nature and spread of infectious diseases, but the widespread acceptance of germ theory in the nineteenth century played an important role in connecting the health of individuals with their place in society.

Rather than dealing strictly with pathologic issues and delivery of medical treatment, the physician’s domain has expanded to include the mission of public health and relevant policy. Conceptually, this is a shift from focusing on the health of an individual patient to considering the health of a particular population as a whole. The practice of medicine should maintain the perspective of bringing broad benefits to society as a whole, rather than to a specific individual in the context of a specific medical case. Social issues that have public-health effects must be brought into the fold—meaning that medical practitioners should stay informed and receive training throughout their careers about public-health issues.

SOCIAL MEDICINE: EXTENDING THE DOMAIN OF PUBLIC HEALTH

During the mid-nineteenth century, Karl Marx and other social theorists significantly influenced the medical establishment, bringing to the forefront the impact of social conditions on disease. The rise and success of germ theory and evidence-based medicine swept such ideas into the realm of politics and “social medicine,” a field seemingly separate from clinical medicine. Epidemiology was the first area of medicine where the inherent interconnectedness of individuals’ health was really appreciated. While there had been previous attempts to understand the spread of diseases in populations, the “father” of modern epidemiology is considered to be Dr. John Snow, who studied the spread of cholera in nineteenth-century London. Through a careful cataloguing of disease incidence in particular neighborhoods, he determined that contaminated water supplies (and specifically one contaminated water pump), rather than some amorphous airborne “miasma,” were responsible for the spread of cholera (Vachon, 2005). Although his views encountered resistance from his contemporaries, his findings did help prompt the eventual development of modern urban plumbing and waste-disposal systems. Germ theory and the development of modern vaccines in the late nineteenth century served to underscore how critical it was to understand the spread of infectious diseases and appropriate means to control them not just on an individual level, but at the level of the population as a whole.

The impact of the group on the health of the individual goes beyond the direct transmission of pathogens. The actions and interactions of people within society can themselves drive the development of individual health risks and maladies. Dr. Jack Geiger, a great community-health pioneer of the 1960s, explained his work’s significance thus: “The determinants of health lie in the social order, not in the medical process” (Rogers, 1970). Many of the maladies the medical field fights are rooted in social determinants; race, class, and gender have significant effects on medical outcomes. The doctor’s aim is to improve health outcomes using evidence-based intervention; if evidence shows that social ills contribute to clinical maladies, how can those topics lie outside the realm of medicine? Consider the risk factors associated with release from prison. In the two weeks immediately following prisoners’ release, their adjusted death rate is 12 times that of the general population. The greatest causes of death after release from prison are drug overdose, suicide, cardiovascular disease, and homicide (Binswanger et al., 2007). Factoring in the disproportionately high incarceration rate of African Americans (one in 13 between the ages of 30 and 34), the outcome of health disparity as a function of social disparity becomes clear. If an identifiable virus or environmental pollutant were responsible for a similar death rate, this would be considered a national epidemic necessitating urgent government action. But due to political and social realities in this country, some people reject the notion that prison policy can play the role of the proverbial “contaminated water pump,” and will insist that prison policies remain outside the domain of medicine.

Where should the line be drawn? Racial laws, eugenics, and human experimentation were products of physician groups hoping to enact social change within the past century. Only in 2012 did the German medical community apologize for its role in the Holocaust (Sharav, 2012). Until 1973, The Diagnostic and Statistical Manual of Mental Disorders continued to list homosexuality as a medical illness; many psychiatrists actively promoted and practiced conversion therapy, now widely discouraged. In retrospect, these “medical” issues would obviously fall outside the accepted AMA ethics guidelines. What strongly held understandings
and beliefs of ours today will one day be looked at in shock? Do we take a risk in taking stances on “value-laden” topics? For example, homosexual behavior, while no longer misidentified as a mental illness, is still a significant risk factor in the acquisition of several diseases, including hepatitis and HIV. Would a physician concerned with public health be ethically correct in encouraging his or her homosexual patients to limit their exposure?

While overstepping is a risk of physician advocacy, the greater hazard lies in silence. In a 2008 address, the AMA apologized to the National Medical Association (the preeminent group of African American physicians in the United States) for the organization’s long history of racism and exclusion of African Americans. During the fight for the passage of the Civil Rights Act of 1964, the AMA remained notably silent. Only in 1968 did it amend its constitution to exclude segregation (Washington, 2008). The issue of segregation may have seemed out of the profession’s purview at the time, but upon reflection, this unfortunate omission on the part of America’s most important professional medical society is a sign to physicians that they must be professionally active in combating laws and policies that promote inequality and injustice, whether or not explicitly health-related.

BEING A MEDICAL ADVOCATE
If the primary goals motivating sex education in public schools are the prevention of sexually transmitted illness and adolescent pregnancy, then sex education clearly falls into the category of public health. Prevention of medically unwanted outcomes through education of the public is a widely accepted goal of public health. Presumably, sex education is such a preventive measure.

Much research has been done to examine the truth of that presumption. In 2009, SIECUS (the Sexuality Information and Education Council of the United States, a national organization devoted to the topic of sex education) reviewed federal, state, and private studies concerning the efficacy of federally funded abstinence-only programs. It found that these programs had been repeatedly determined to be ineffective, demonstrating a lack of improvement in almost any relevant outcome: sexual abstinence, number of sexual partners, rate of vaginal sex, condom use, teen pregnancy, and sexually transmitted disease (SIECUS, 2009). The only program that did validate abstinence-only intervention as effective used a curriculum inconsistent with that demanded by federal criteria; it included only medically accurate information without moralism or disparagement of contraception (Drewweke, 2010).

The question is not whether to advocate against the teaching of abstinence as a part of sex education per se, but instead to advocate against the way it is taught—federal sex education programs should not advise based on inaccurate medical information, nor should they be infused with moral judgment. Such programs have been repeatedly demonstrated to be ineffective. When an effective alternative exists, it is necessary to advocate for it.

Some physicians may be reluctant to engage with public-health questions because of the interconnectedness of health issues with more-provocative social and political issues. In advocacy, careful clarification of positions involves distinguishing clearly what portion of social policy genuinely affects public health. For example, when physicians consider the public-health impact of firearms, an important distinction must be made between the fight against gun ownership and that against gun violence (Mozaffarian, Hemenway, & Ludwig, 2013). Advocacy in sex education could similarly disentangle abstinence as an (arguably) moral virtue from abstinence as a separate birth-control method. The latter would allow for the teaching of abstinence alongside education about other forms of birth control. While an abstinence-only approach is more effective than complete silence on the topic, it must be carefully delivered with the exclusion of scientific falsehoods and social judgment.

A discussion of abstinence-only sex education should be one about the evidence and about the merits of the educational intervention. The merits of advocacy on behalf of that intervention should be clearly recognized. To fulfill their part in the dynamic relationship they have with patients, medical professionals must continue to advocate aggressively for them on all fronts. Engagement with norms that run counter to a physician’s personal convictions is a common struggle. When physicians feel that a change in a “social” matter would benefit public health, they have a professional imperative to act, with assurance that they are within their professional rights to speak up about the matter on a public-policy level.

AFTERWORD: PERSPECTIVES AND QUESTIONS FOR THE FUTURE
The increasing appreciation of the social determinants of disease necessitates the development of a physician’s skill set beyond the direct practice of medicine with individual patients. We live in a world of increasingly interconnected communications. While this has the benefit of opening dialogue and discussion among people, the increased volume of beliefs and judgments threatens to diminish the relative impact of informed opinions. The saying “Everyone is entitled to his own opinion, but not to his own facts” (Daniel Patrick Moynihan) is particularly relevant to this idea. Zeal and volume are no substitute for a firm grasp of underlying facts and a consideration of the “big picture” into which they fit. Take the issue of vaccination, for example. Medical researchers and practitioners have extolled the revolutionary impact of vaccines for more than a century, and the successful eradication of scourges such as smallpox and polio have transformed the landscape of public health. This very insulation of modern people from the ravages of past epidemics, however, is part of what has contributed to the rise in the “anti-vaccination” community, whose members disparage the utility of many vaccinations and seek to implicate them as causes of all sorts of conditions, including autism, autoimmune diseases, and cancers. While no one can compel other people to vaccinate themselves or their children, physicians have a special responsibility to contest the deluge of misinformation about vaccinations. Staying silent and
hoped that poorly informed people are able to come to correct conclusions on their own is a breach of the public trust in physicians, who must be able to engage with laypersons in an open and convincing manner.

Related to the topic of vaccination is the issue of “herd immunity”—the concept of vaccinating or treating people not to safeguard their health, but to protect other people who may be at risk. For example, the recent use of Gardasil (Silgard) as a vaccine against HPV infection in women has proven very efficacious in eliminating the most significant cause of cervical cancer. Males can contract HPV and develop some medical complications, but they do not face a similar risk of cancer or serious disease. Is it ethical to recommend the vaccination of males, not for their own protection, but to prevent them from contracting HPV and infecting future sexual partners? A related issue involves HIV patients who still have relatively high CD4 T cell counts (that would not normally prompt antiretroviral treatment yet) but are given earlier-than-usual therapy to prevent transmission to others. These issues go beyond the traditional value of immunizations or treatments for an individual’s own benefit to prophylactically treating an entire population. At what point does the risk of complications to an individual’s health outweigh the benefits enjoyed by the treated population as a whole?

Vaccination is settled science, but what about questions of public policy for which there is no medical consensus? At what point does a physician cease to speak for the community, and instead speak of his or her personal opinions? Issues of human-tissue cloning, use of embryonic stem cells, and gene patenting are under debate in medical circles; at what point can the public expect a scientific consensus? A similar question concerns the “degrees of separation” between a particular topic and a potential health impact. Taken broadly, public-health issues can include a dizzying array of topics—adolescent obesity, illegal drug use, access to preventive health care, gun control, and the like. A physician may feel much more comfortable discussing the particulars of vaccination education than discussing a “sugar tax” to combat the spread of obesity, for example. The latter issue delves into areas of economics and political policy about which a physician may feel he or she has less expertise. There is no hard-and-fast rule for grey areas such as this; the best course of action is to make an honest assessment of one’s own understanding of an issue, and make an effort to separate personal opinions from professional assessments. Taking such a position is often easier said than done, of course, but the recognition of a potential conflict and a genuine consideration of the nature of one’s own positions is the best starting point toward a satisfactory resolution.

Public-health advocacy is an evolving capacity of physicians, and great care must be taken to address it in a responsible manner. The emphasis, however, should be on engagement and dialogue, rather than on sheltering within the known confines of individual patient care. Physicians may not always have the right answer to every health issue (and they should have the humility to recognize this), but they necessarily play a fundamental and decisive role in informing a public debate along scientific, empirical, and ethical lines.

References
Dent v. West Virginia, 129 U.S. 114 (1889).