

# A 2020 Vision for Educating the Next Generation of Public Health Leaders

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**Abstract:** To meet the dynamic and evolving challenges of public health in the 21st century, our society should foster the next generation of public health leaders. We offer a vision for doing so, by introducing prevention literacy and education from the earliest possible starting point and then broadening these concepts throughout the educational ladder. Making this societal commitment now to nurture such future leaders should make the country healthier by 2020 and beyond.

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Who will keep the public healthy? That poignant question, posed regularly over time and most pointedly by the IOM in 2003, now looms over us with greater urgency than ever before.<sup>1</sup> Acute, modern-day threats such as H1N1 influenza and earthquakes threaten to destabilize fragile public health advances while deepening a gnawing sense of vulnerability. Chronic threats such as tobacco addiction, obesity, environmental pollution, and lack of access to care riddle the public health landscape, exacerbated by profound health inequities. Many could easily succumb to a sense of hopelessness in the face of such broad challenges. But these challenges also present us with rewarding opportunities to implement effective population-level and policy solutions to protect the gift of health. Moreover, we envision a new cadre of informed, prepared professionals committed to solving these and other increasingly complex problems. Our collective responsibility is to focus our 2020 vision on educating the next generation of public health leaders and ensure that they are armed for success. As noted in this volume, we can nurture them at an early age, foster a commitment to prevention, and motivate them with the promise of our field for the next decade and beyond.

## Understanding Prevention Through Healthy People 2020

Crystallizing such a 2020 vision begins by imbuing in all students the fundamental value of the relationship between individual health and community health. Indeed, the “health of the individual is almost inseparable from the health of the larger community.”<sup>2</sup> Everything is inter-

connected and we are all interdependent. Or, as Wallack<sup>3</sup> has noted, “We are not only individuals, we are also a community and a body politic, and . . . we have shared commitments to one another and promises to keep.” These concepts, the heart and soul of public health, increasingly resonate with the more globally minded students of the future.

Healthy People—a time-honored, comprehensive, national health promotion and disease prevention planning process—truly celebrates this intersection of individual and community health. Since its origin in 1979, Healthy People has served as the nation’s compass for aligning and prioritizing goals in prevention and wellness. It not only provides science-based, national health objectives for each decade but also helps the country track progress over time. For its fourth iteration, Healthy People 2020 tentatively proposes four key overarching goals:

1. Achieve health equity, eliminate disparities and improve health for all groups.
2. Eliminate preventable disease, disability, injury, and premature death.
3. Promote healthy development and healthy behaviors across every stage of life.
4. Create social and physical environments that promote good health for all.<sup>4</sup>

Of note, the last goal highlights the social-determinants approach for health in the 21st century, that is, the conditions in which people are born, grow, live, work, and age.<sup>5</sup> In other words, for 2020 and beyond, health is too important to be left solely in the hands of those working in the health sector. True sustainable improvement in the nation’s health that promotes the power of prevention will most likely arise from an interdisciplinary strategy of “health in all policies.”<sup>6</sup>

Also of note, Healthy People 2020 not only spans traditional focus areas (such as access to quality health ser-

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vices, tobacco use, heart disease and stroke, family planning) but also offers ambitious new efforts supporting public health education from the earliest possible starting point. Targets call for increasing the proportion of preschools and Head Start programs that provide health education; the proportion of elementary, middle, and senior high schools that have health education goals in alignment with the National Health Education Standards; and the proportion of college and university students who receive education in priority health-risk behavior areas.<sup>4,7</sup> Additionally, Healthy People 2020 proposes an increase in the proportion of institutions offering public health majors and/or minors consistent with the core competencies of undergraduate public health education (for 4-year colleges/universities) or offering public health or related associate degrees and/or certificate programs (for 2-year colleges).

## **K–12: Foundations of Health**

Achieving these objectives by 2020 will entail implementing the Healthy People Curriculum Task Force's Education for Health Framework, which communicates a coherent approach to health literacy and curricular consistency throughout the complete educational continuum.

First, the formative early years of education can encourage students not only to adopt healthy behaviors for themselves but also to begin to nurture a broader perspective. Beginning as early as elementary and middle school, a Foundations of Health curriculum not only encourages risk-reduction behaviors for kids but also delivers basic health promotion and disease prevention concepts. Even the youngest students can understand basic concepts of service and community that involve helping families and neighbors, as well as themselves. The National Health Education Standards and the accompanying curricular models offered through CDC's School Health Education Resources offer some examples. For instance, Pre-K through Grade 2 students can use lessons on the spread of "germs" and hand washing to begin to identify that healthy behaviors affect personal health.<sup>7,8</sup> And Grade 6–8 students can learn how to influence and support others to make positive health choices through lessons ranging from healthy relationships to preventing tobacco use. Nurturing the public health dialogue at these early stages of life not only builds a foundation for future health leaders but also truly fosters the creation of an educated citizenry.<sup>9</sup> Even at an early age, the central tenets of health promotion, disease prevention, and health literacy can be considered essential to good citizenship.

Later, in high school, an introduction to public health milestones—such as development of the polio vaccine,

seat belts, penicillin, fluoridation, and lead removal—can convey the breadth, excitement, and everyday impact of the field to students. Intriguing historic case studies presenting the 1918 influenza, cholera in London, and scurvy can promote curiosity about public health at home and abroad. Such examples also demonstrate the values of connection, community, and interdependence, as well as the need for collaborative decision making.

## **Undergraduate Education: General Education Public Health Core, Public Health Studies**

Of note, the aforementioned 2003 IOM Report concluded that "all undergraduates should have access to education in public health."<sup>1</sup> Fortunately, colleges have already begun to address this charge, with momentum accelerating rapidly. To date, approximately one in every six 4-year institutions offers a major, minor, or concentration in public health or a similar field.<sup>10</sup> Moreover, today's college students are arguably more internationally sophisticated than ever before, studying abroad at earlier ages, and eager to find a niche in the global public health community. A General Education Public Health Core and Public Health Studies curricular focus can capture the value of experiential learning opportunities in the field while also promoting skills such as oral and written communication, critical and creative thinking, intercultural competence, ethical reasoning and action, and interdependent teamwork. In many ways, this represents a model for liberal education. In fact, preparing students for local and global engagement is the goal of the Association of American Colleges and Universities' new Educated Citizen in Public Health initiative. This initiative, which is endorsed by the American Public Health Association, aims to bring undergraduate study of integrative public health to all higher education institutions and foster interdisciplinary and interprofessional collaboration.<sup>9,11,12</sup>

However, simply expanding the numbers of 4-year institutions offering comprehensive public health education may not be sufficient to meet future workforce needs. Community colleges, which currently educate over half of the nation's new nurses, can also recruit new professionals.<sup>13</sup> Such colleges are often able to offer flexibility, availability, and affordability, which are particularly attractive to students wanting to further their education closer to home, maintain full-time jobs while in school, or return from the workforce for new training. For example, specific certificate programs for defined areas, such as health information technology associate degree programs, can readily address a tangible public health need. Moreover, community colleges are a gateway to higher

education, which can offer upward mobility for the public health workforce.

### **Graduate Education: Clinical Prevention and Population Health, Interprofessional Training**

Similarly, professional schools, traditionally viewed as the source for future public health leaders, can do more. Currently, most of the public health workforce does not have a formal graduate public health degree. In addition, not infrequently, many physicians, nurses, and other health professionals graduate with little to no grounding in prevention, population health, or the social-determinants approach to preventing disease. Medical students, for example, may sit through numerous lectures on the pathophysiology of obesity without learning about nutrition policy, use of the built environment to encourage physical activity, access to parks, or menu labeling. All providers have lost patients to cigarette smoking but few understand how to design, promote, or implement a multi-level, evidence-based public health strategy to counter this addiction, which ranks as the leading preventable cause of death worldwide.

Going forward, all health professional schools—medicine, nursing, pharmacy, dentistry, and physical therapy, to name a few—can reaffirm the priority of population health and interdisciplinary learning. Evidence-based thinking approaches in both discipline-specific and public health graduate programs can also gently push students to consider the social determinants in all aspects of their work. Such schools can foster the passion and commitment of individuals who are eager to adopt a broader approach. Generating interdisciplinary opportunities can also nurture what should be a natural alliance between the realms of public health and health care.<sup>14</sup> Nursing students can work with occupational therapists and pharmacists during training, whereas medical students can learn at health centers with community health workers, social workers, and promotoras. Such experiences appropriately blur the lines between a personal service ethic and a public service ethic.<sup>1</sup>

### **Understanding Public Health Leadership**

The 2020 vision sees a new generation of public health leaders who not only are willing to be responsible but are also response-able. They accept that public health inherently has a nonhierarchical structure involving seemingly limitless numbers of stakeholders.<sup>15</sup> They understand that public health necessarily involves the unfamiliar, the

ambiguous, and the paradoxical but also grasp the nuances required to thrive in a field of partial knowledge and uncertain outcomes.<sup>16</sup> They welcome the challenge of the social-determinants approach to prevention, stretching their minds and souls in almost unimaginable ways.<sup>17</sup>

Public health starts with a foundation of science but inevitably requires moving into the dynamic realms of social strategy, political will, and interpersonal skill.<sup>16</sup> Public health leaders can begin to harness these talents from the beginning of their education, cultivate interdependence, and grow over time to hone their perspective, wisdom, and mission. Doing so helps them revitalize their community and advance the overarching goals of Healthy People 2020.

### **The Future 2020 Vision**

Several decades ago, the IOM<sup>14</sup> wrote: “the health problems now facing the public are complex, challenging, and diverse . . . they demand superior personal and environmental health services; and . . . they involve preventive, therapeutic, and rehabilitative intervention.” Since then, the complexity of public health challenges has only mushroomed. Keeping the public healthy in the 21st century will require a heightened and sustained national commitment to educating the next cadre of public health professionals, nurturing the spirit and potential of young people as early as possible. This realized vision sees a new generation of public health leaders, educated from a young age, that can mobilize people, promote prevention, and change the paradigm from “no hope” to “new hope” for the future.

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