Chapter 2

Foundations of U.S. Health Care Delivery

INTRODUCTION

From an economic perspective, curative medicine seems to yield decreasing returns on health improvement while health care expenditures increase (Saward & Sorensen, 1980). There is increasing recognition of the benefits to society that can result from the promotion of health and the prevention of disease, disability, and premature death. Although the financing of health care has primarily focused on curative medicine, slow progress continues toward an emphasis on health promotion and disease prevention. The progress has been slow due to the insurance system, cultural values, and medical practice that emphasize disease rather than health. The common definitions of health, as well as measures for evaluating health status, reflect similar inclinations.

This chapter explores the different aspects of what health is, main determinants of health, contrasting theories of market justice and social

justice as they apply to health care delivery, and public health interventions to improve population health. Beliefs and values ingrained in the American culture have been influential in laying the foundations of a system that has remained predominantly private, as opposed to a tax-financed national health care program. In recent years, however, societal values have slowly shifted toward a social justice mind-set, and the expectations of many Americans suggest that a gradual departure from traditional American values of self-reliance may be giving way to greater dependence on the government. Passage of the Affordable Care Act (ACA) presages a gradual shift from market justice to social justice in the U.S. health care system.

WHAT IS HEALTH?

In the United States, the concepts of health and health care have largely been governed by the medical model or, more specifically, the biomedical model. Under the *medical model*, health is defined as the absence of illness or disease. It emphasizes clinical diagnosis and medical intervention to treat disease or its symptoms. The implication is that optimal health exists when a person is free of symptoms and does not require medical treatment. Thus, when the term *health care delivery* is used, it actually refers to the delivery of medical care or illness care. Accordingly, prevention of disease and health promotion are relegated to a secondary status; a measure that is often used to indicate lack of health in a population is mortality or death (see **Figure 2.1** for death rates by age and cause in the United States).

Medical sociologists have gone a step further by defining health as the state of optimal capacity of an individual to perform his or her expected social roles and tasks, such as work, school, and household chores (Parsons, 1972). A person who is unable (as opposed to unwilling) to perform his or her social roles in society is considered sick even though many people continue to engage in their social obligations despite suffering from pain, cough, colds, and other types of temporary disabilities, including mental distress. Hence, a person's engagement in social roles does not necessarily signify that the individual is in a state of optimal health.

An emphasis on both the physical and mental dimensions of health is found in the definition of health proposed by the Society for Academic Emergency Medicine (SAEM). This organization defines health as "a state

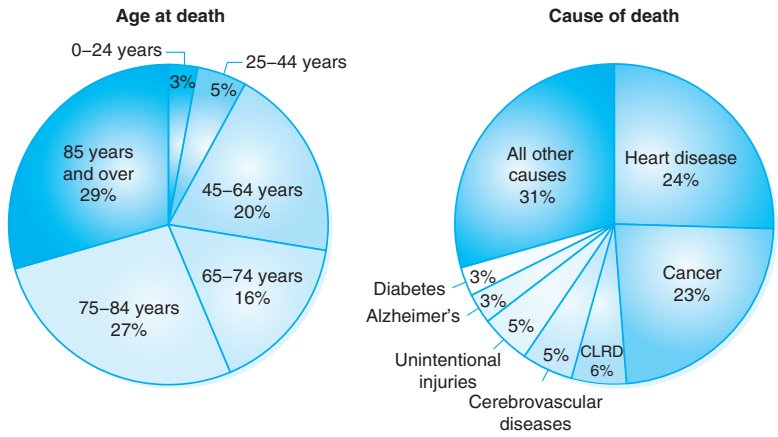

Figure 2.1 Deaths for All Ages, 2010

Note: CLRD: chronic lower respiratory diseases. Centers for Disease Control and Prevention, National Center for Health Statistics. Health, United States, 2013, Data from the National Vital Statistics Systems.

of physical and mental well-being that facilitates the achievement of individual and societal goals" (SAEM, 1992, p. 1386).

The World Health Organization's (WHO's) definition of health is most often cited as the ideal that health care delivery systems should try to achieve. WHO (1948) defines *health* as "a complete state of physical, mental, and social well-being, and not merely the absence of disease or infirmity" (p. 100). This definition includes physical, mental, and social dimensions, which constitute the biopsychosocial model of health. WHO has also defined a *health care system* as all of the activities aimed at promoting, restoring, or maintaining health (McKee, 2001). As this chapter points out, health care should include much more than medical care.

There has been a growing interest in holistic or comprehensive health, which emphasizes the well-being of every aspect of what makes a person whole and complete. *Holistic medicine* seeks to treat the individual as a whole person (Ward, 1995). Holistic health incorporates the spiritual dimension as a fourth element in addition to the physical, mental, and social aspects necessary for optimal health. Hence, the holistic model provides the most complete understanding of what health is (see **Exhibit 2.1** for some key examples of health indicators). A growing volume of medical literature now points to the healing effects of a person's religion and spirituality on morbidity and mortality (Levin, 1994). Numerous studies have

Exhibit 2.1 Indicators of Health

- Self-reported health status
- Life expectancy
- Morbidity (disease)
- Mental well-being
- Social functioning
- Functional limitations
- Disability
- Spiritual well-being

identified an inverse association between religious involvement and all-cause mortality (McCullough et al., 2000). Religious and spiritual beliefs and practices have been shown to positively influence a person's physical, mental, and social well-being—they may affect the incidences, experiences, and outcomes of several common medical problems (Maugans, 1996).

The spiritual dimension is often tied to one's religious beliefs, values, morals, and practices. More broadly, it is described as meaning, purpose, and fulfillment in life; hope and will to live; faith; and a person's relationship with God (Marwick, 1995; Ross, 1995; Swanson, 1995). The holistic approach to health also alludes to the need for incorporating alternative therapies into the predominant medical model.

Illness and Disease

The terms *illness* and *disease* are not synonymous, although they are often used interchangeably, as they are throughout this text. Illness is recognized by means of a person's own perceptions and evaluation of how he or she feels. For example, an individual may feel pain, discomfort, weakness, depression, or anxiety, but a disease may or may not be present; however, the ultimate determination that disease is present is based on a medical professional's evaluation rather than the patient's assessment. Certain diseases, such as hypertension (high blood pressure), are asymptomatic and are not always manifested through illness. A hypertensive person has a disease but may not know it. Thus it is possible to be diseased without feeling ill. Likewise, a person may feel ill, yet not have a disease.

Acute and Chronic Conditions

Disease can be classified as acute, subacute, or chronic. An *acute condition* is relatively severe, episodic (of short duration), and often treatable (Timmreck, 1994, p. 26). It is subject to recovery, and treatment is generally

provided in a hospital. Examples of acute conditions include a sudden interruption of kidney function or a myocardial infarction (heart attack). A *subacute condition* lies between the acute and chronic extremes on the disease continuum, but has some acute features. Subacute conditions can be postacute, requiring further treatment after a brief stay in the hospital. Examples include ventilator and head trauma care. A *chronic condition* is less severe but of long and continuous duration (Timmreck, 1994, p. 26). The patient may not fully recover from such a condition. The disease may be kept under control through appropriate medical treatment, but if left untreated, it may lead to severe and life-threatening health problems. Examples include asthma, diabetes, and hypertension.

Quality of Life

The term *quality of life* is used in a denotative sense to capture the essence of overall satisfaction with life during and after a person's encounter with the health care delivery system. Thus the term is used in two different ways. First, it is an indicator of how satisfied a person was with his or her experiences while receiving health care services. Specific life domains such as comfort factors, dignity, privacy, security, degree of independence, decision-making autonomy, and attention to personal preferences are significant to most people. These factors are now regarded as rights that patients can demand during any type of health care encounter. Second, quality of life can refer to a person's overall satisfaction with life and with self-perceptions of health, particularly after some medical intervention. The implication is that desirable processes during medical treatment and successful outcomes would subsequently have a positive effect on an individual's ability to function and carry out social roles and obligations.

DETERMINANTS OF HEALTH

The *determinants of health* have made a major contribution to the understanding that a singular focus on medical care delivery is unlikely to improve the health status of any given population. Multiple factors determine health and well-being. Hence, a more balanced approach must emphasize health determinants at an individual level as well as broad policy interventions at the population level (**Figure 2.2**).

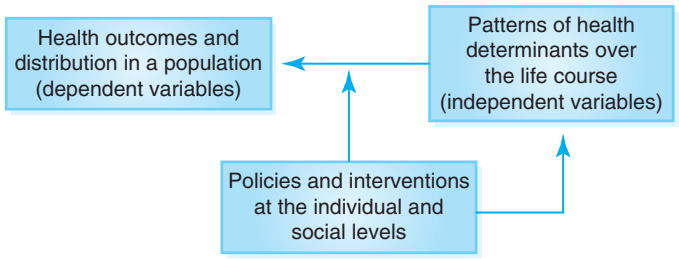

Figure 2.2 Schematic Definition of Population Health
Reproduced from Kindig D, Stoddart G. What is Population Health? Am J Public Health. 2003; 93 (3): 380-833

The leading determinants of health (see examples in **Exhibit 2.2**) can be classified into four main categories: environment, behavior and lifestyle, heredity, and medical care.

Environment

Environmental factors encompass the physical, socioeconomic, sociopolitical, and sociocultural dimensions of life. Physical environmental factors such as air pollution, food and water contaminants, radiation, and toxic chemicals are easily identified as factors that can significantly influence health; however, the relationship of other environmental factors to health may not always be so obvious. For example, socioeconomic status is related to health and well-being. People who have higher incomes often live in areas where they are less exposed to environmental risks and have better access to health care. The association of income inequality with a variety of health indicators such as life expectancy, age-adjusted mortality rates, and leading causes of death is well documented (Kaplan et al., 1996;

Exhibit 2.2 Examples of Health Determinants

- Physical activity
- Overweight/obesity
- Tobacco use
- Substance abuse
- Responsible sexual behavior
- Mental health
- Injury and violence
- Environmental quality
- Immunization
- Access to health care

Kawachi et al., 1997; Kennedy et al., 1996; Mackenbach et al., 1997). The greater the economic gap between the rich and poor in a given geographic area, the worse the overall health status of the population in that area will be.

The relationship between education and health status is also well established. Less educated Americans die younger than their better educated counterparts. One possible explanation for this relationship is that better educated people are more likely to avoid risky behaviors such as smoking and drug abuse.

The environment can also have a significant influence on developmental health. Neuroscientists have found that good nurturing and stimulation during the first 3 years of life—a key period for brain development—activate the brain's neural pathways and may even permanently increase the number of brain cells. Early childhood development has an enormous influence on a person's future health.

Behavior and Lifestyle

Individual lifestyles or *behavioral factors* include diet, exercise, a stress-free lifestyle, risky or unhealthy behaviors, and other individual choices that may contribute to significant health problems. Heart disease, diabetes, stroke, sexually transmitted diseases, and cancer are just some of the ailments with direct links to individual choices and lifestyles.

Heredity

Heredity is a key determinant of health because genetic factors predispose individuals to certain diseases. There is little anyone can do about the genetic makeup he or she has already inherited, but engaging in a healthy lifestyle and health-promoting behaviors can significantly influence the development and severity of inherited disease in those predisposed to it, as well as the risk for future generations.

Medical Care

Although environment, behavior and lifestyle, and heredity are more important in the determination of health, well-being, and susceptibility to premature death, access to medical care is nevertheless a key factor influencing health. Both individual health and population health are closely

related to access to adequate preventive and curative health care services. Medical care alone, however, cannot ensure optimum health. Even preventive interventions are not adequate unless individuals take responsibility for their own health and well-being.

CULTURAL BELIEFS AND VALUES

A value system orients members of a society toward defining what is desirable for that society. The traditional cultural beliefs and values in America have been based on conservative principles that leaned toward market justice, with social justice principles (discussed in the next section) taking a secondary place. In recent years, the American society has been increasingly defined by several different subcultures that have grown in size because of a steady influx of new immigrants from different parts of the world. Such diversity promotes sociocultural variations in how people view their health and people's attitudes and behaviors concerning health, illness, and death (Wolinsky, 1988, p. 39). Driven by changing demographics, the foundational beliefs and values in the United States are in a state of flux. For example, the American Community Survey: 2009–2013 by the U.S. Census Bureau found that today's young adults—referred to as the millennial generation[1] by sociologists—differ considerably from previous generations, referred to as generation X and the baby boomers. Compared to previous generations, a much higher proportion of the millennials are foreign born, one in four speaks a language other than English at home, and one in five lives in poverty even though a higher proportion than previous generations have college degrees (U.S. Census Bureau, 2014). The millennials are more inclined toward social justice than the preceding generations. For example, the millennials, as well as minority groups in the United States, view the term *socialism* more positively than the general population; the same groups view the term *capitalism* negatively (Pew Research Center, 2011). A gradual shift in the traditional American beliefs and values is already at work in changing the way Americans will receive health care services in the future.

[1]The millennial generation, or millennials, commonly refers to those born between 1982 and 2000, and it numbers approximately 73 million.

DISTRIBUTION OF HEALTH CARE

In a perfect world, the production, distribution, and subsequent consumption of health care will have an equal impact on all members of a society. Unfortunately, no society has found a perfectly equitable method to distribute limited economic resources; in fact, any method of resource distribution leaves some inequalities. Societies, therefore, try to allocate resources according to some guiding principles acceptable to each society. Such principles are guided by a society's values and belief systems. It is generally recognized that not everyone can receive everything that medical science has to offer. The fundamental question that deals with distributive justice or equity is how a health care system can make essential services available to all members of society. The broad concern about equitable access to health care services is addressed by theories referred to as *market justice* and *social justice*.

Market Justice

The principle of market justice proposes that market forces in a free economy can best achieve a fair distribution of health care. Within such a system, medical care and its benefits are distributed on the basis of people's willingness and ability to pay (Santerre & Neun, 1996, p. 7). In other words, people are entitled to purchase a share of the available goods and services that they value. They must purchase these valued goods and services by using the financial resources acquired through their own legitimate efforts. This is how most goods and services are distributed in a free market. The free market implies that giving people something they have not earned would be morally and economically wrong. The principle of market justice is based on the following key assumptions:

- Health care is like any other economic good or service and, therefore, can be governed by the free market forces of supply and demand.
- Individuals are responsible for their own achievements. When individuals pursue their own best interests, the interests of society as a whole are best served (Ferguson & Maurice, 1970).
- People make rational choices in their decisions to purchase health care products and services to rectify their health problems and restore their health.

- People, in consultation with their physicians, know what is best for themselves. This assumption implies that people place a certain degree of trust in their physicians.
- A free market, rather than the government, can allocate health care resources in the most efficient and equitable manner.

Under market justice, the production of health care is determined by how much consumers are willing and able to purchase at prevailing market prices. It follows that in a free market system, individuals without sufficient income or who are uninsured face a financial barrier to obtaining health care (Santerre & Neun, 1996, p. 7). Thus prices and ability to pay combine to ration the quantity and type of health care services people consume. Such limitations to obtaining health care are referred to as *demand-side rationing* or price rationing. The key characteristics of market justice and their implications are summarized in **Table 2.1**.

Market justice emphasizes individual, rather than collective, responsibility for health. It proposes private, rather than government, solutions to the social problems of health.

The principles of market justice work well in the allocation of economic goods when their unequal distribution does not affect the larger society. For example, based on their individual success, people live in different sizes and styles of homes, drive different types of automobiles, and spend their money on different things; however, market justice principles generally fail to rectify critical human concerns such as crime, illiteracy, and homelessness, which can significantly weaken the fabric of a society. Many Americans believe that health care is also a social concern.

Social Justice

The idea of social justice is at odds with the principles of capitalism and market justice. According to the principle of social justice, the equitable distribution of health care is a societal responsibility. This goal can best be achieved by letting a central agency—generally the government—take over the production and distribution functions. Social justice regards health care as a social good—as opposed to an economic good—that should be collectively financed and available to all citizens regardless of the individual recipient's ability to pay for that care. Most industrialized countries long ago reached a broad social consensus that health care was a social good (Reinhardt, 1994). Public health also has a social justice orientation

Table 2.1 Comparison of Market Justice and Social Justice

Market Justice	Social Justice
Characteristics	
• Views health care as an economic good	• Views health care as a social resource
• Assumes free market conditions for health services delivery	• Requires active government involvement in health services delivery
• Assumes that markets are more efficient in allocating health resources equitably	• Assumes that the government is more efficient in allocating health resources equitably
• Production and distribution of health care are determined by market-based demand.	• Medical resource allocation is determined by central planning.
• Medical care distribution is based on people's ability to pay.	• Ability to pay is inconsequential for receiving medical care.
• Access to medical care is viewed as an economic reward of personal effort and achievement.	• Equal access to medical services is viewed as a basic right.
Implications	
• Individual responsibility for health	• Collective responsibility for health
• Benefits are based on individual purchasing power.	• Everyone is entitled to a basic package of benefits.
• Limited obligation to the collective good	• Strong obligation to the collective good
• Emphasis on individual well-being	• Community well-being supersedes that of the individual.
• Private solutions to social problems	• Public solutions to social problems
• Rationing based on ability to pay	• Planned rationing of health care

(Turnock, 1997). Under the social justice system, an inability to obtain medical services because of a lack of financial resources is considered unjust. The principle of social justice is based on the following assumptions:

- Health care is different from most other goods and services.
- Responsibility for health is shared. Individuals are not held totally responsible for their ill health because they do not control

factors such as economic inequalities, unemployment, unsanitary conditions, or air pollution.

- Society has an obligation to the collective good. An unhealthy individual is a burden on society; a person carrying a deadly infection, for example, poses a threat to society. Society is obligated to eliminate (cure) the problem by providing health care to the individual because doing so benefits the society as a whole.
- The government, rather than the market, can better decide through rational planning how much health care to produce and how to make it available to all citizens.

In a social justice–based system it is recognized that no country can afford to provide unlimited amounts of health care to all its citizens. Hence, the government must find ways to limit the availability of certain health care services by deciding, for instance, how technology will be dispersed and who will be allowed access to certain types of high-tech services, even though basic services may be available to all. This concept is referred to as *planned rationing* or *supply-side rationing*. The main characteristics and implications of social justice are summarized in **Table 2.1**.

Justice in the U.S. Health Care System

It is important to recognize that the current U.S. health care system is not a market justice–based system because American health care delivery does not follow free-market principles. A significant shift away from market justice began in 1965 with the creation of Medicare and Medicaid. Since then the move toward social justice has been gradual and ongoing, most recently espoused in the ACA. Currently, a little less than half of the financing for health care services in the United States comes from the government. The government also plays a major role in exercising a significant degree of control over the system through various policies governing insurance, payment to providers, availability of new drugs and procedures, mandating the use of information systems, funding for medical research, and quality initiatives, to name a few.

In the United States, the principles of market justice and social justice complement each other. Private, employer-based health insurance—mainly for middle-income Americans—is driven by market justice. Publicly financed Medicaid and Medicare coverage for certain disadvantaged groups and workers' compensation programs for those injured at work are based

on social justice. The two principles collide, however, when a significant number of uninsured still cannot afford health insurance and do not meet the eligibility criteria for Medicaid, Medicare, or other public programs.

STRATEGIES TO IMPROVE HEALTH

Healthy People Initiatives

Since 1980, the United States has undertaken a series of 10-year plans outlining certain key national health objectives to be accomplished during each of the 10-year time frames. These initiatives have been founded on the integration of medical care with preventive services, health promotion, and education; integration of personal and community health care; and increased access to integrated services. Healthy People has established benchmarks and monitored progress over time in order to (1) encourage collaborations across communities and sectors; (2) empower individuals toward making informed health decisions; and (3) measure the impact of prevention activities (Office of Disease Prevention and Promotion, 2015a).

The *Healthy People 2010: Healthy People in Healthy Communities* initiative was launched in January 2000. Its objectives were defined in the context of changing demographics in the United States, reflecting an older and more racially diverse population. *Healthy People 2010* specifically emphasized the role of community partners such as businesses, local governments, and civic, professional, and religious organizations as effective agents for improving health in their local communities.

The current initiative, *Healthy People 2020*, was launched in December 2010 and builds on the strength of *Healthy People 2010. Healthy People 2020* takes into account some of the achievements made over the previous decade, such as increased life expectancy and a decreased death rate from coronary heart disease and stroke, and identifies other areas for improvement over the next decade. *Healthy People 2020*'s objectives include identifying nationwide health improvement priorities; increasing public awareness and understanding of the determinants of health, disability, and disease; providing measurable objectives and goals that are applicable at all levels; engaging multiple sectors to take action to strengthen policies and improve practices that are driven by the best scientific evidence and knowledge; and identifying critical research, evaluation, and data collection

methods. *Healthy People 2020* will assess progress through measures of general health status, health-related quality of life and well-being, determinants of health, and disparities (U.S. Department of Health and Human Services [DHHS], 2011).

The overarching goals of *Healthy People 2020* include the following:

- Attaining high-quality, longer lives free of preventable disease, injury, and premature death
- Achieving health equity, eliminating disparities, and improving the health of all groups
- Creating social and physical environments that promote good health for all
- Promoting quality of life, healthy development, and health behaviors across all life stages (Office of Disease Prevention and Promotion, 2015a)

The graphic framework for *Healthy People 2020* is presented in **Figure 2.3**.

Four foundational health measures serve as an indicator of progress toward achieving the aforementioned goals. These are general health status, health-related quality of life and well-being, determinants of health, and disparities among the population (Office of Disease Prevention and Promotion, 2015a). Overall progress includes fewer adults smoking cigarettes, fewer children exposed to secondhand smoke, more adults meeting physical activity targets, and fewer adolescents using alcohol or illicit drugs (U.S. DHHS, 2014).

Healthy People Consortium is a diverse group of organizations committed to promoting and implementing *Healthy People 2020*. As of March 2015, there were 2,411 consortium organizations. Consortium members work to ensure that Healthy People meets the needs of their region, state, or community; share how their organization implements the program, champion the goals and objectives, and participate in the program (Office of Disease Prevention and Health Promotion, 2015b).

The National Association of County & City Health Officials (NACCHO) established a partnership with *Healthy People 2020* to support and increase the use of the program among local health departments, nonprofit hospitals, and other organizations related to community health assessment and improvement planning (NACCHO, 2015). NACCHO activities include identifying barriers and challenges, assessing uptake

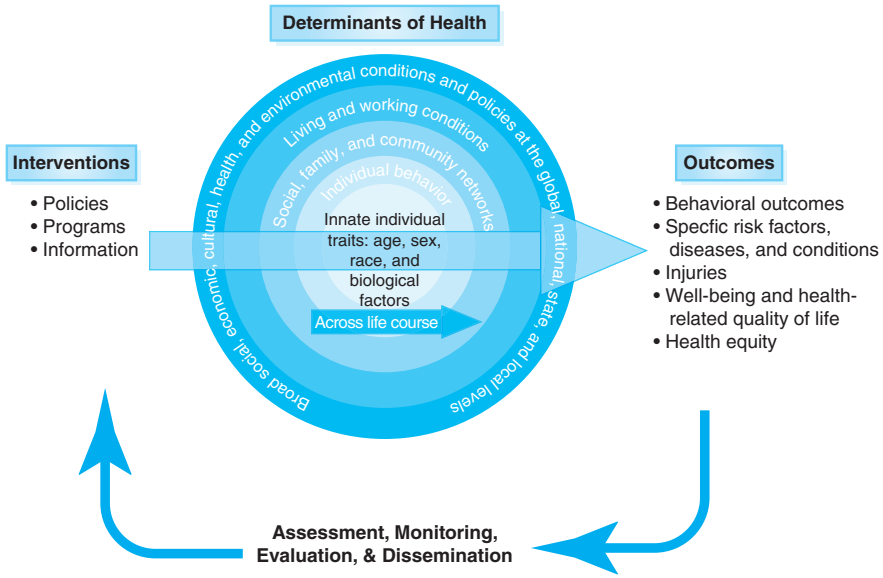

Figure 2.3 Action Model to Achieve *Healthy People 2020* Overarching Goals
Secretary's Advisory Committee on Health Promotion and Disease Prevention Objectives for 2020. Phase I report recommendations for the framework and format of Healthy People 2010, p. 8, Exhibit A. http://www.healthypeople.gov/2010/hp2020/Advisory/Phasel/Phasel.pdf.

at the local level, sharing examples of local use, promoting use through webinars and other means, offering training and technical assistance, and encouraging collaborative efforts (U.S. DHHS, 2012).

Public Health

In contrast to individual health, *public health* focuses on improving the health and well-being of the total population. As a prime example of social justice, government plays the central role in developing and enhancing the public health infrastructure—at the national, state, and local levels—through tax dollars. In evaluating the effectiveness of public health, indicators are developed along with a national surveillance system to consistently track the health indicators. Determinants of population health play a major role in evaluating a public health system.

Focus on Determinants

To improve the nation's health and minimize disparities among its vulnerable populations, development of a framework embodying social and medical determinants is warranted. This framework, presented in **Figure 2.4**, puts a balanced emphasis on both social and medical care

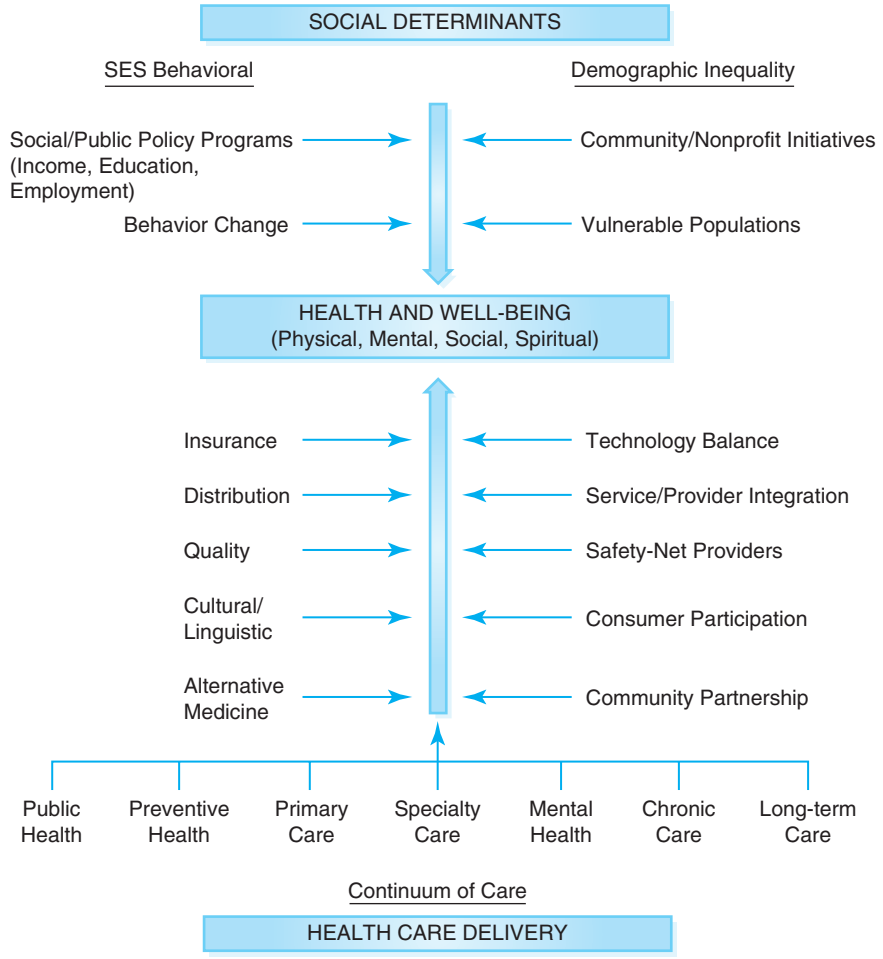

Figure 2.4 Social Determinants of Health

determinants because it is the combination of these factors that ultimately shapes health and well-being. This model synthesizes multiple health influences and highlights points for intervention. Health in this model is not just a state of being free of disease and disability, but also includes the positive concept of well-being and encompasses the physical, mental, social, and spiritual aspects of health.

Social Determinants of Health

The framework presented in **Figure 2.4** acknowledges the effects of demographics, socioeconomic status, personal behavior, and community-level inequalities and their defining influence on health. Personal demographics (e.g., race/ethnicity or age) directly contribute to vulnerability levels. Social and income inequalities have also been shown to contribute to disparities in health. Whether socioeconomic status is defined by education, employment, or income, both individual- and community-level socioeconomic status have independent effects on health. The health impact of personal behaviors—such as smoking or exercise—is rarely isolated from the social and environmental contexts in which choices are made. Accordingly, the WHO Commission on Social Determinants of Health (2007) concluded that the social conditions in which people are born, live, and work are the single most important determinant of one's health status.

Medical Care Determinants of Health

Although social determinants influence people's health status, the medical care system primarily focuses on treating illness or poor health. Preventive care is an exception to this rule, but understanding the influences of medical care on health should also take into consideration disparities that exist in basic health care access and quality. The framework includes a broad spectrum of medical care services and interventions to improve health. Whereas some services (preventive and primary care) contribute to general health status, others are more influential in end-of-life situations (hospice and long-term care). As patients move across the spectrum, they are likely to contend with issues of fragmentation, poor continuity of care, and insufficient coordination of care for multiple health needs. The Pan-American Health Organization (PAHO) and WHO have updated their primary health care strategy to focus on

improving a country's capacity to implement coordinated, effective, and sustainable strategies. Based on the concept of universal coverage and access to services, these strategies aim to sustainably improve the health of populations and reduce health inequalities (PAHO, 2015). Services relating to mental health and chronic diseases are included in the primary health care framework (PAHO, 2015).

The relative value of each health service in the spectrum should be evaluated in determining health policy. For example, should equal investments be made in each service, or are some investments better than others (e.g., primary versus specialty care)? How can we optimize the medical system's potential for eliminating disparities with limited resources (e.g., focusing on primary care for all versus higher levels of technology care for certain populations)? Other health care factors, such as the quality of care, access to alternative therapies, and technology, will further affect a patient's health care experience and health outcomes.

Social and Medical Points of Intervention

Considering that social and medical determinants are responsive to numerous outside forces, the framework highlights important points for intervention. Dramatic reductions in health disparities are obtainable through interventions in both the social and medical domains and are grouped according to four main strategies: (1) social or public policy interventions, (2) community-based interventions, (3) health care interventions, and (4) individual interventions.

Policy Interventions Product safety regulations, screening food and water sources, and enforcing safe work environments are just a few of the ways in which public policy directly guards the welfare of the nation. With fewer resources at their disposal, however, vulnerable populations are uniquely dependent on social and public policy to develop and implement programs that address basic nutritional, safety, social, and health care needs.

As an example of policy intervention, in 1970, the Occupation Safety and Health Act was passed, which created the Occupational Safety and Health Administration (OSHA). The goal of OSHA is to protect employees of companies from the potential dangers of an unsafe environment that may exist at the workplace. OSHA established the Injury and Illness Prevention Program that requires employers to implement a system that would ensure

employees' compliance with a safe and healthy work environment. This is part of an overall effort to more effectively identify hazards in the workplace to protect employees who otherwise may be working in dangerous work environments (U.S. Department of Labor, 2011).

Community-Based Interventions Many of the sources of health disparities may be addressed at the community or local level. Neighborhood poverty, lack of local health and social welfare resources, and societal incohesion are all likely to contribute to inequalities in a community. An understanding of the multidimensional risks and needs in a particular community can better equip local agencies responsible for designing interventions to successfully address health disparities in their communities (see the examples in **Exhibit 2.3**). Because community partnerships reflect the priorities of a local population and are often managed by members of the community, they minimize cultural barriers and improve community buy-in to the program.

Addressing disparities using community approaches has several other advantages. For example, local businesses and other partners often have a stake in contributing to local health causes that help needy members of the community. Community leaders can play a central role to help plan and manage strategies for health improvement. Community solutions also benefit from participatory decision making in which members of the community are involved. Moreover, many community programs are run by nonprofit organizations, and in exchange for providing services, these organizations are subsidized through federal, state, or local funds and receive tax exemptions. Thus they are able to offer services at lower cost than private health organizations that are obligated to their shareholders to price their services competitively.

As an example, in an effort to counteract the rise in childhood obesity rates, many schools are beginning classroom-conducted nutritional programs.

Exhibit 2.3 Strategies to Improve Health and Reduce Disparities

- Nutrition programs
- Work/environment safety efforts
- Community-based partnerships
- Culturally appropriate care
- Patient safety/medical error reduction
- Prevention-oriented effort
- Coordinated care for chronically ill persons

These multicomponent nutritional interventions involve administrators, food services staff, teachers, parents, and students. Teaching students about proper nutrition in the classroom while concurrently educating parents increases the possibility of the program's success in fighting childhood obesity (DeMattia & Denney, 2008).

Health Care Interventions As an example, interventions such as integrated electronic medical records systems can potentially improve patient care while also reducing waste in the health care system (Dorman & Miller, 2011; Hillestad et al., 2005; Sperl-Hillen et al., 2011). Electronic health records also hold the promise of improved quality through better coordination and integration of care among various providers. Coordinated and integrated care is particularly important in light of the increasing burden of chronic disease. For example, coordination of care and counseling for type 2 diabetes has been shown to improve blood glucose management in patients.

Individual-Level Interventions Individual-level initiatives are critical in counteracting the effects of negative social determinants on health status. Altering individual behaviors that influence health (e.g., reducing smoking and increasing exercise) is often the focus of these individual-targeted interventions, and numerous theories have been promulgated to identify the complex pathways and barriers to eliciting changes or improvements in behavior. The integration of behavioral science into the public health field has been a valuable contribution, providing a toolbox of health-related, behavior-changing strategies.

CONCLUSION

Health and its determinants are multifactorial. Although important, medical care is only one factor that contributes to health and well-being. Factors such as physical, social, cultural, and economic environments; behaviors and lifestyles; and heredity play a large role in determining health and well-being for both individuals and populations. The delivery of health care is primarily driven by the medical model, which emphasizes illness rather than wellness. Even though

major efforts and expenditures have been directed toward the delivery of medical care, they have failed to produce a proportionate impact on the improvement of health status. Holistic concepts of health care, along with integration of medical care with preventive and health promotional efforts, should be adopted to significantly improve the health of Americans; but such an approach would require a fundamental change in how Americans view health. It would also require taking individual responsibility for one's own health-oriented behaviors, as well as forging community partnerships to improve both personal and community health. An understanding of the determinants of health, health education, community health assessment, and national initiatives such as *Healthy People 2020* is essential for accomplishing such goals. Over the years, the U.S. health care system has been gradually transitioning toward social justice, yet not all Americans have equal access to health care services. To improve the nation's health and resolve disparities among its vulnerable populations, it is critical to address both the social and medical determinants of health.

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