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PART I

What Is Health Economics?



CHAPTER 1

Overview of the U.S. Healthcare System

LEARNING OBJECTIVES

By the end of this chapter, the student will be able to:

1. Describe the healthcare system.
2. Identify the reason why individuals demand health care.
3. Explain the role of insurance.
4. Distinguish between individual versus population health.

INTRODUCTION

In this chapter, the student will learn to appreciate the complexity of the market-oriented healthcare system of the United States. Many issues involving healthcare delivery, financing, and access are introduced as well as their influence on health status.

SYSTEM ISSUES

The U.S. health system is a complicated relationship among providers, consumers, and financiers of care. The concerns of the system revolve around three issues: cost, quality, and access. Reform efforts have increased exponentially at the national and state levels as fewer Americans have financial access to care, with increased system-level expenditures resulting in nonoptimal health outcomes. One of the most sweeping reforms at the national level is the Affordable Care Act under the Obama administration. These reform efforts attempt to correct the issues of poor access, higher costs for technologically driven care, and variable quality in the most advanced healthcare system in the world.

American healthcare surveys have found that the majority of consumers rate their health care as “excellent” or “very

good.” Those with poorer ratings had, among other indicators, no health insurance and no regular healthcare providers (Chou, Wang, Finney Rutten, Moser, & Hesse, 2010). These survey results are consistent between telephone and online surveys of Americans (Bethell, Fiorillo, Lansky, Hendryx, & Knickman, 2004). However, this high level of satisfaction can be a double-edged sword in that increased consumer satisfaction with care is associated with increased inpatient healthcare utilization and pharmaceutical expenditures, as well as increased mortality (Fenton, Jerant, Bertakis, & Franks, 2012). This implies that the perceived improvements in health care can lead to associated increased healthcare expenditures in the system at the expense of other sectors and economic needs.

On the provider side, U.S. physicians note that they are enjoying higher-quality health care and increased autonomy in many settings but lower job satisfaction due to the primarily profit-driven healthcare system (Scheurer, McKean, Miller, & Wetterneck, 2009; Tyssen, Palmer, Solberg, Voltmer, & Frank, 2013). As the system becomes more strained, providers spend more time and effort not on individual patient needs but on more organizationally driven incentives.

HEALTH CARE

Experts themselves are divided on the cause of rising healthcare expenditures. Of the several drivers of costs, many believe that the push occurs from technologically driven care, while others point to the broader role of insurance and health care in areas previously considered to be social or lifestyle problems (Blumenthal, Stremikis, & Cutler, 2013). Regardless of the causes of rising healthcare expenditures, the United States trails behind many countries in health status measures.



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The health sector is a leading employer in the United States. As seen in 2011, 15.7% of the domestic workforce is in healthcare-related occupations, and spending passed the \$2.7 trillion mark, which is more than 17.9% of the U.S. gross domestic product (Moses et al., 2013). Much of the expenditures—31% overall spending in health care—is a result of administrative waste (Evans, 2013). While spending increases have slowed since 2002 to a rate of 3% per year, the growth of this sector exceeds any other sector of the economy (Moses et al., 2013). This stabilization is due to the very slow increase in use and intensity of care since 2010 (Martin, Lassman, Washington, Cailtin, & National Health Expenditure Accounts Team, 2012).

Due to the increasing size and importance of the healthcare sector, more scrutiny is being placed on the costs, quality of, and access to health care and the resulting health outcomes than ever before.

HEALTH STATUS

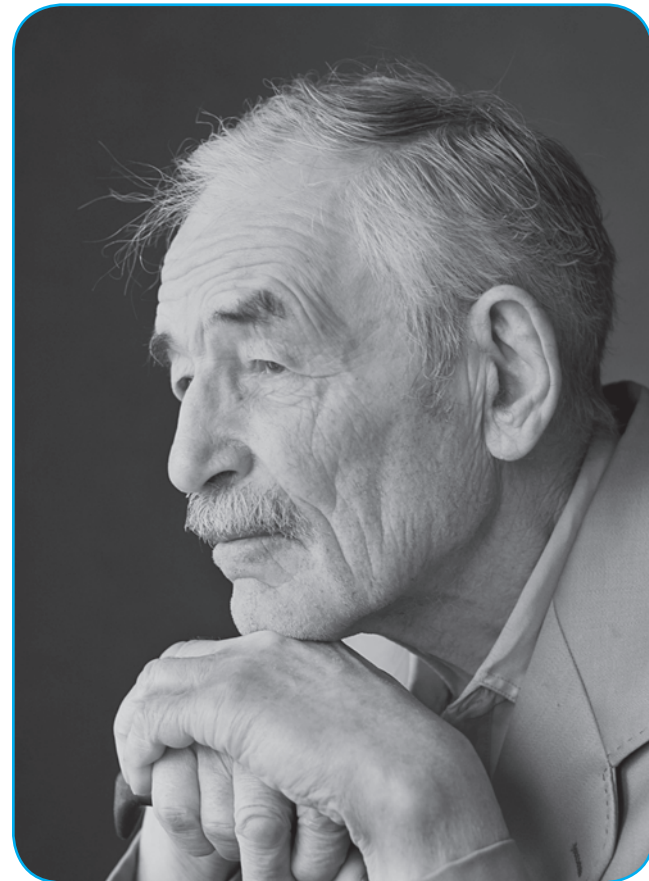
In public health terms, the World Health Organization has defined health as “a complete state of physical, mental and social well-being, and not merely the absence of illness or disease” (Jacobs & Rapoport, 2004, p. 23). **Population health** is a focus of public health that has a very general connotation. Kindig and Stoddart (2003) have defined it as “the health outcomes of a group of individuals, including the distribution of such outcomes within the group” (p. 380). This is an emerging area, with some debate as to whether there is a difference between population health and public health (Kindig, 2007). Regardless of how the population health is defined or measured, the concept is essential for determining and reducing health disparities.

Individual health and population health can be viewed as independent concepts, but they are really more related

than previously thought. For example, individual health status is a function of lifestyle choices, sociodemographics, environmental factors, biology, and medical care. Many of these determinants are shaped by the community and environment in which a person lives (Arah, 2009).

Individual health status can be measured by a physical examination of the person along any of several dimensions, such as the presence of illness, risk factors for mortality or morbidity, and overall health as determined through visual and biological testing. Individual health status may also be measured through individual perceptions on a variety of dimensions, such as physical disability, emotional status, pain assessment, and overall perception of wellness.

On both the population and individual perspectives, the health status of the U.S. population is mediocre, with increasing incidence and prevalence of chronic disease across the life span and relatively high infant mortality rates. These issues also drive the increased interest in reforming the American healthcare system.



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SUMMARY

The goal of this book is to demonstrate how economics can provide insights into the study of human behavior as it is influenced by constraints and financial incentives. As concerns rise over the increasing size of the health economy relative to other sectors, as well as the relatively poor health of the population, economic analysis becomes an increasingly important tool in the study of factors that affect the health and health care of the American public.

KEY WORDS

- **Individual health**
- **Population health**

Questions

1. Specify a relationship between health care and health.
2. What is the difference between individual and population health? Which perspective would a physician use and which perspective would a public health worker use? Explain.

PROFILE: KENNETH J. ARROW

Kenneth J. Arrow was born in New York City in 1921 and pursued his undergraduate education at City College of New York. He graduated in 1940 with a BS in social science and a major in mathematics, which later led to an MA in mathematics from Columbia University in 1941. His subsequent graduate work began in economics at the same university.

Arrow's graduate studies were interrupted from 1942 through 1946 due to his service in World War II, where he was a weather officer in the United States Army Air Corps and worked on research projects. His first published paper was produced at this time, "On the Optimal Use of Winds for Flight Planning."

During the years 1946 to 1949, Arrow was a part-time graduate student at Columbia University, a research associate at the Cowles Commission for Research and Economics at the University of Chicago, and an assistant professor of economics at the University of Chicago. In these years, he focused on Pareto efficiency and social choice theory.

In 1948, Arrow was appointed acting assistant professor of economics and statistics at Stanford University and remained there until 1968, eventually becoming professor of economics, statistics, and operations research. He also held numerous posts at institutions such as the United States Council

of Economic Advisors, Churchill College (Cambridge), and the Institute for Advanced Studies in Vienna.

In 1968, Arrow moved to Harvard University as a professor of economics and remained there until 1979. In 1979, he returned to Stanford University as Joan Kenney Professor of Economics and professor of operations research. In 1991, he retired as professor emeritus.

Most of his research deals with information as an economic variable related to its production and use. In 1963 and in later papers, he showed that special characteristics of health care and health insurance can be explained by differences in information perceived or obtained by providers and patients. His work, which is highly influential in health economics and beyond, has resulted in numerous awards and honors, including the John Bates Clark Medal of the American Economic Association, membership in the National Academy of Sciences, and Fellow of the Econometric Society. Arrow received the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel in 1972.

Data from Nobelprize.org. (2015). *Kenneth J. Arrow: Biographical*. Retrieved April 2, 2014, from http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1972/arrow-bio.html.

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