

Economics of **Health** and **Medical Care**

SEVENTH EDITION

Lanis L. Hicks, PhD

Professor Emerita

Department of Health Management and Informatics

School of Medicine

University of Missouri, Columbia



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Cover Image (Title Page, Part Opener, Chapter Opener):
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Printing and Binding: McNaughton & Gunn
Cover Printing: McNaughton & Gunn

Library of Congress Cataloging-in-Publication Data

Names: Hicks, Lanis L., author.

Title: Economics of health and medical care / Lanis L. Hicks.

Description: Seventh edition. | Burlington, MA: Jones & Bartlett Learning, [2021] | Includes bibliographical references and index. |

Summary: "Health Economics is a required course in almost every graduate program in Health Admin, though there are health econ courses (often electives) across disciplines; for example, public health, respiratory care, pharmacy, and nursing. Because of the role economics plays in finance and policy, it can also be adopted in those courses. This book is not discipline-specific, so it covers a wide breadth"—Provided by publisher.

Identifiers: LCCN 2019055950 | ISBN 9781284183535 (paperback)

Subjects: MESH: Economics, Medical | United States

Classification: LCC RA410.5 | NLM W 74 AA1 | DDC 338.4/73621—dc23

LC record available at <https://lccn.loc.gov/2019055950>

6048

Printed in the United States of America

24 23 22 21 20 10 9 8 7 6 5 4 3 2 1

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Introduction

Why Health Economics?

The healthcare sector is a major component of the economy of the United States. As expenditures on health care approach almost one-fifth of the gross domestic product (GDP) of the United States (CMS 2018), there is increasing pressure to lower costs by improving efficiency and effectiveness in the healthcare industry. As pressures mount, decision makers have to make increasingly hard decisions about how their limited resources will be used. As a result, economics, a discipline that focuses on the efficient allocation of scarce resources, has an expanded role to play at all levels of decision making in health care (Wilensky, 2010).

In this text, an examination of the factors leading to the greater involvement of economics in health care is presented, and the role, theories, models, and tools of economics as they apply to health care are discussed. As decisions are made regarding the volume and composition of healthcare goods and services produced, economics can be used to assist making these decisions more explicit and transparent. Economics can be used to facilitate a comparison among alternative uses of limited resources and make explicit the consequences associated with each of these alternatives.

The fundamental role of health economics is to provide systematic information about the costs and consequences of the available opportunities in the provision of healthcare goods and services. This role is becoming more and more crucial as focus on value-added outcomes intensifies in health care (Reinhardt, 1985). Keep in mind, value added does not always refer to its contribution to the bottom line, but may also include more intangible things, like quality and social welfare.

As health care consumes more and more resources, there is a growing recognition that there are limited resources available to society, and that as more of these resources go to the healthcare sector, there are fewer resources available for other goods and services. As a result, decision makers at all levels are seeking

ways to maximize the value obtained from the use of their resources. Economics provides a mechanism to assist in making decisions regarding the use of these limited resources.

The basic objective of this text is to provide an introduction to the tools, models, and theories of economics, and to show how economics can be used to improve decision making in health care. In this world of increased pressure, all providers, support staff, suppliers, policymakers, and consumers are being asked to justify their roles in the provision of healthcare goods and services. Pressure is being placed on all participants in health care to justify why more resources should be allocated to the provision and consumption of healthcare goods and services. As participants are asked to justify their roles, economics can be used to assist in quantifying the additional value the participant brings to the healthcare system (Debrand & Dourgnon, 2010).

For example, should the local health department hire another public health worker or use its limited budget for something else, such as a mobile mammogram program? While it used to be sufficient for public health workers to simply say they do “good,” this is no longer enough. Now, decision makers are asking public health workers to tell them how much “good” they do, as the decision makers try to determine whether they could get more “good” from some other use of their resources. While economics can provide important information about alternative uses of resources to decision makers, it cannot provide all the answers. It can, however, systematically contribute important information to the decision-making process.

As you read this text, the role of economics in the healthcare sector of the economy will become clearer. It will also become clearer how economics can be used by individual decision makers at all levels in healthcare organizations and the healthcare system to improve the delivery of cost-effective, high-quality health care to the population (Hicks & Boles, 1984). Hopefully, by the end of this text, you will come to appreciate the value of economics in the decision-making process in health care.

Outline of Contents

In the Introduction, why there is a need for health economics is explored. A brief explanation is provided on the increasing role of economics in decision making in the healthcare system.

In Chapter 1, this text introduces the analysis of healthcare economics in the context of three tasks: description, explanation, and evaluation. It also contains an introduction to the tools used in economics. Part I, which consists of Chapters 2 and 3, describes the output of the healthcare sector and the economic dimensions of the healthcare field. Part II, consisting of Chapters 4–11, presents explanatory analyses of a number of health-related issues. Part III, which consists of Chapters 12–17, develops evaluative analyses of several important aspects of healthcare resource use. The analyses in this text focus on three distinct markets: the medical care market, the health insurance market, and the labor market. Throughout the text, tools are developed to analyze the economic behavior of all three markets.

Chapter 2 contains a discussion of the output of the healthcare sector. Three types of output are identified: (1) health and/or medical care, which consists of activities designed to improve health; (2) health itself; and (3) health insurance coverage. Types of input, such as the hiring of healthcare personnel, are also discussed. Measurements of each type of output are presented. In Chapter 3, economic dimensions of the healthcare sector are identified and some measures of these dimensions are presented. In particular, economic flows of the various components of the healthcare system are described, and the concept of cost is analyzed.

Chapter 4, the first explanatory chapter, develops a model to explain the demand for health or medical care by consumers. A number of separate factors are identified as influences on the demand for health or medical care. These are incorporated into a single model that allows us to predict the effects of each factor when all other relevant factors are held constant. In this chapter, the demand for medical care is presented as if medical care were an ordinary good or service in the consumer's budget.

However, medical care has characteristics that combine to warrant special treatment. These include the importance of medical care in influencing health status, uncertainty when illness occurs, people's concern about others' health status and healthcare consumption, and the asymmetry in the medical

knowledge possessed by providers and consumers. A number of these characteristics are introduced and analyzed in light of the standard demand model.

Chapters 5–7 focus on the behavior of healthcare providers, such as physicians, hospitals, and laboratories. Chapter 5 discusses the relationships between resource use (inputs) and output, quality of care and output, and cost of care and output. All these relationships are examined with regard to each individual provider. Chapter 6 presents an analysis of the supply behavior of individual providers and of groups of providers (i.e., market supply). The behavior of investor-owned (for-profit) providers and the behavior of tax-exempt (not-for-profit) providers are treated separately, since tax-exempt and government providers play such an important role in the healthcare field. The chapter also considers a model of the supply behavior of health insurers, as well as a model of the demand for labor (which is based on the supply model). Chapter 7 deals with one important aspect of supply analysis in health care—provider reimbursement. In health care, there are many examples of providers being paid by a third party (a health insurer or the government). The important economic concept of the principal–agent relationship is introduced and is used to analyze alternative payment schemes for physicians, hospitals, long-term care providers, and health maintenance organizations. Included here is a discussion of the additional pressures that value-based purchasing brings to health care.

Chapter 8 examines a standard textbook explanation of how the market resource allocation process works. This is the competitive market model, which has drawn a good deal of attention recently, especially in terms of fee differences among patients and quality of care. Included in this chapter is an explanation of a phenomenon that has received considerable attention in health economics: supplier-induced demand. Not all market behavior is competitive. Chapter 9 looks at the concept of market power: how it is acquired by suppliers and demanders, and how its acquisition affects market phenomena (e.g., prices, and quantity and quality of output).

Chapters 10 and 11 consider two types of markets whose functioning is closely tied to health care. Chapter 10 describes the market for health insurance and its implications for efficiency in the healthcare market. Chapter 11 presents an analysis of the labor market and of several variants of this market that are associated with health care. Budgeting and staffing decisions are also presented in this chapter.

The third part of the text focuses on economic evaluation and health policy issues. There is a great deal of controversy over whether healthcare markets can ensure that health care is delivered efficiently to consumers. One way to study this issue is to gauge whether specific interventions improve health status in an efficient way. Cost-benefit and cost-effectiveness analyses are two techniques by which we can judge the economic impact of various interventions and policies on health status. Chapter 12 offers an introduction to these tools.

Chapter 13 introduces the topic of evaluation by identifying several alternative standards that have been used in evaluating resource use in the healthcare field. These standards include efficiency and equity. Two frameworks used to evaluate efficiency are presented: the narrower efficiency framework and the broader “extra-welfarist” framework. A set of specific goals for the healthcare system is derived from these welfare analyses.

Chapter 14 discusses alternative types of healthcare finance: out-of-pocket payment, health insurance reimbursement, and taxation. Discussion also focuses on the issues of charity care and bad debt, especially in hospitals. It uses economic models to identify the burden of each type of financing. Special consideration is given to pay-for-performance initiatives and value-based purchasing.

Chapter 15 discusses two major public insurance programs, Medicare and Medicaid. It presents specific policy problems and, using the explanatory economic models developed in Chapters 3–11, evaluates the effects of policy measures in light of specific policy goals.

The role of regulation and antitrust policy in influencing the performance of the healthcare market is the topic of Chapter 16. Two views of regulation are presented there. According to the first, the public-interest approach, the government establishes regulations to ensure that providers act in the public interest. Evidence of the effectiveness of this approach has not been very convincing. The second view of regulation is based on a wider picture of the market. According to this view, the government is a participant in a marketplace that encompasses both the suppliers and demanders of the traded product as well as politicians and regulators. In this marketplace, various regulations and laws that have an impact on the supply–demand situation are “traded.” The market

outcome is, thus, influenced by regulation. Faced with discontent over the results of traditional market regulation, some observers have proposed that the medical market should be reshaped in the competitive mold. Also included in Chapter 16 is an analysis of antitrust regulation, a topic of considerable policy interest in recent years, and tax reform, which is always a hot political issue.

Chapter 17 focuses on methods to reform health insurance and healthcare markets. It discusses various proposals for restructuring the health insurance market so that the preferred risk selection of the health insurers might discriminate less against high-risk individuals, thereby increasing the equity of these markets. Chapter 17 also introduces the concept of “consumerism.”

How to Use This Text

There is a considerable amount of material in this text, much more than would be included in a typical introductory course in healthcare economics. As a rough guide, a typical student without any prior economics background should be able to cover a chapter a week. In a 14-week course, 13 chapters could be covered comfortably. Although more advanced students could handle more, instructors will probably want to be selective in covering the subjects.

The text could be used as the main text for a basic healthcare economics course for public health students and for a similar course in which the emphasis is more on healthcare administration students or health policy and finance. The following are suggestions for coverage in each kind of course.

Orientation	Chapters
Public health	1–6, 8, 9, 11–15
Health administration/ finance and policy	1–11, 14–17

At the end of each chapter, a set of questions and problems is provided. The student is encouraged to work through these problems, as it is easier to learn and retain the material by doing actual problems and self-testing. At the end of this text, answers to the odd-numbered exercises are provided. The answers to the even-numbered exercises are contained in the instructor’s manual.

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