

高等院校双语教材・经济系列

HE ECONOMICS OF HEALTH AND HEALTH CARE (Sixth Edition)

卫生经济学

(第六版)

舍曼·富兰德 (Sherman Folland)

艾伦·C·古德曼 (Allen C. Goodman) 著

迈伦·斯坦诺 (Miron Stano)

四中国人民大学出版社



高等院校双语教材·经济系列

HE ECONOMICS OF HEALTH AND HEALTH CARE (Sixth Edition)

卫生经济学

(第六版)

舍曼·富兰德 (Sherman Folland)

艾伦・C・古徳曼 (Allen C. Goodman) 著

中国人民大学出版社

图书在版编目(CIP)数据

卫生经济学:第6版:英文/富兰德,古德曼,斯坦诺著;一北京:中国人民大学出版社,2011 高等院校双语教材·经济系列

ISBN 978-7-300-13175-7

I.①卫··· Ⅱ.①富···②古···③斯··· Ⅲ.①卫生经济学-双语教学-高等学校-教材-英文 Ⅳ.①R1

中国版本图书馆 CIP 数据核字 (2010) 第 248139 号

高等院校双语教材·经济系列 卫生经济学 (第六版)

舍曼・富兰德

艾伦·C·古德曼 著

迈伦•斯坦诺

Weisheng Jingjixue

出版发行 中国人民大学出版社

杜 址 北京中关村大街 31 号 邮政编码 100080

电 话 010~62511242 (总编室) 010~62511398 (质管部) 010~82501766 (邮购部) 010~62514148 (门市部)

010-82501766 (邮购部) 010-62514148 (门市部) 010-62515195 (发行公司) 010-62515275 (盗版举报)

网 址 http://www.crup.com.cn

http://www.ttrnet.com(人大教研网)

经 销 新华书店

印 刷 涿州市星河印刷有限公司

规 格 203 mm×255 mm 16 开本 版 次 2011 年 1 月第 1 版

字 数 841 000 定 价 68.00 元

出版说明

中国的入世,使其真正融入到经济全球化的浪潮中。中国政府"引进来,走出去"战略,使得中国经济的发展需要大量的"国际化"人才储备。这就对我国一般本科院校多年来所采取的单一语言(母语)教学提出严峻挑战,财经院校涉外经济类专业实行双语教学改革迫在眉睫。

顺应这一潮流,中国人民大学出版社携手众多国际知名的大出版公司,如麦格劳-希尔、培生教育出版公司等,面向大学本科层次,遴选了一批国外最优秀的经济类原版教材,包括宏观经济学、微观经济学、计量经济学、金融学等经济类专业课程。

我们在引进出版过程中,注重把好质量关,每一本书都经过该学科领域的专家审核 选题和内容,争取做到把国外真正高水平的适合国内实际的优秀教材引进来。本套教材 主要有以下特点:

第一,体系设计完整。本套教材精选了一批国外著名出版公司的优秀教材,基本上涵盖了经济学专业的核心课程。

第二,保持英文原版教材的特色。本套教材根据国内教学需要,部分图书进行了一定的改编,主要删减了一些不适合和不符合我国国情的内容,但体系结构和内容方面都保持原版教材的特色。

第三,內容紧扣学科前沿。本套教材在原著选择上紧扣国外教学的前沿,基本上都选择国外最流行教材的最新版本,有利于老师和学生掌握国外教学研究的最新发展趋势。

第四,篇幅合理,价格适中。为适应国内双语教学内容和课时上的实际需要,本套教材在篇幅上更为合理。同时,考虑到学生实际的购买能力,我们采取低定价策略,这样,读者既能领略原版图书的风貌,又避免了高额的购买费用。

第五,提供强大的教学支持。依托国外大出版公司的力量,本套教材为教师提供了配套的教辅资料,如教师手册、PPT课堂演示文稿、试题库等,并配套有内容丰富的网络资源,从而使教学更为便利。

本套教材既适合高等院校经济类专业的本科教学使用,也适合从事经济类工作和研究的人员阅读和培训使用。我们在选书、改编过程中虽然全面听取了专家的意见,做到尽可能满足读者的需求,但由于各教材的作者所处的政治、经济和文化背景不同,书中内容仍可能有不妥之处,我们真诚希望广大读者提出宝贵意见和建议,以便我们在以后的版本中不断改进和完善。

PREFACE

This is the sixth edition of a book conceived in 1990 and first published in 1993. The world of health economics has changed since 1990. Our first edition made but a single reference to "managed care."

From the beginning, we have sought to assist instructors in conveying a clear, step-by-step understanding of health economics to their students. We have also believed it important for instructors to demonstrate what health economics researchers are doing in theory and in empirical work. The book synthesizes contemporary developments around a set of economic principles including maximization of consumer utility and economic profit, and it makes these principles accessible to undergraduate as well as to graduate students. Rather than focusing on institutions specific to the health care economy, we have chosen to emphasize core economics themes as basic as supply and demand, as venerable as technology or labor issues, and as modern as the economics of information. We have constantly tried to improve accessibility to the book for the wide range of health services students and practitioners.

Students must have a working knowledge of the analytical tools of economics and econometrics to appreciate the field of health economics. Some students may be ready to plunge directly into Chapter 5, "The Production of Health" upon completion of the introductory Chapter 1. However, Chapters 2 through 4 allow the students and their instructors to develop or to review needed analytical concepts before tackling the core subject matter. In Chapter 2, students with as little as one semester of microeconomics may review and study how economists analyze problems, using examples that are relevant to health economics. Chapter 3 provides a review of core statistical tools that characterize modern economic and health services analyses. Chapter 4 completes the core economic concepts by reviewing the concept of economic efficiency, and showing how cost-benefit and cost-effectiveness analyses fit into the general economic framework.

Consistent with an emphasis on clear exposition, the book makes extensive use of graphs, tables, and charts. As in all previous editions, we require no calculus. Discussion questions and exercises help students master the basics and prompt them to think about the issues. We also include features on up-to-date applications of theory and policy developments, as well as occasional tidbits containing purely background information.

We caution that some chapters, such as those on insurance, although developed without advanced mathematics, are logically complex and will require considerable effort. No painless way is available to appreciate the scope of the contributions that scholars have made in recent years. More advanced students of the health care economy who seek further challenges can utilize a comprehensive references section, with over 1,000 sources, so that their (and our) work can be enriched through referral to the original sources.

WHAT'S CHANGED IN THE SIXTH EDITION?

Major changes in this edition have focused on the health policy arena.

Chapter 1 adds a section on what health economists do, and it updates the immediacy of health care costs and health insurance coverage in 2009!

Chapter 8 presents John Nyman's path-breaking health insurance analysis. Nyman argues that we should view insurance payoffs as income transfers from those who remain healthy to those who become ill. Rather than producing welfare-reducing moral hazard, these income transfers generate additional consumption of medical care and potential increases in economic well-being. What healthy consumer, asks Nyman, would purchase a coronary bypass procedure just because insurance is available and the price has dropped to zero? Prices to consumers may fall for all who buy insurance, but only those who are ill will respond to the reduction. Because only the ill are responsive, price reduction is the vehicle by which income is transfered from the healthy to the ill.

Chapter 21 (Social Insurance) presents the most up-to-date evaluations of the Medicare Part D drug benefit. It also introduces a graphical analysis of the Medicaid program. Further, it discusses

work on the inherent conflicting incentives between the Medicare and Medicaid programs that may jointly lead to inefficiencies in the provision of health services for the elderly and/or poor.

Chapter 22 presents new and exciting work by Dave and June O'Neill that compares the U.S. and Canadian health care systems. This research concludes that the two systems provide similar patient results. U.S. respondents ages 18 to 64 were more fully satisfied (51.5 percent versus 41.3 percent) with health service and were more likely to rank quality of care as excellent (40.4 percent versus 37.7 percent). The authors note, however, that satisfaction and quality of care may relate to expectations as well as to objective measures.

Chapter 23, new to this edition, carefully analyzes the process of health system reform. It notes that the most serious obstacle to reform (using the United States as a prime example) is the fundamental divide in philosophy. Should policies expand the government's role through mandates, additional regulations, and tax subsidies or should they rely increasingly on markets through deregulation and tax changes that neutralize the current bias toward subsidized, employer-based insurance?

Finally, Chapter 25, "Epidemiology and Economics: HIV/AIDS in Africa" updates a popular chapter that we introduced in the fourth edition and revised in the fifth edition. The constant revision shows the enormous changes in treatment cost and delivery that have occurred since the initial presentation in 2003.

ADDITIONAL SOURCES

The Internet now contains tables and charts that were once available only in book form, and then only after several years. We have chosen to focus on those sites that we believe to be both long lasting and reliable.

Bureau of the Census, for health insurance, (www.census.gov/hhes/www/hlthins/hlthins.html)

Centers for Disease Control and Prevention (www.cdc.gov)

Centers for Medicare and Medicaid Services, for research, statistics, data, and systems (www.cms.hhs.gov/home/rsds.asp)

Kaiser Family Foundation (www.kff.org), specializing in studies of health insurance

National Institutes of Health (www.nih.gov)

Organization for Economic Cooperation and Development, for international data (www.oecd.org) Social Security Administration, for research and analysis (www.ssa.gov/policy/research_subject .html)

Health-related journals are increasingly accessible both in print and on the Internet. Most health economists make a point of browsing *Health Affairs*, an up-to-date policy journal. *Health Economics* and *The Journal of Health Economics* have emerged as the leading technical journals that specialize in health economics. As one can see from our reference section, there are also many other specialized journals to address readers' needs. University-affiliated professionals and their students will often discover that their libraries have extensive electronic access to a wide range of journals. In the popular press, the *New York Times* and the *Wall Street Journal* also provide excellent health economics coverage.

The Handbook of Health Economics, a two-volume set published in 2000, emerged as an invaluable source for specific topics, with more detail and more mathematic rigor than any text, including this one. The Elgar Companion to Health Economics, published in 2006, provides both useful updates and important new topics. We believe that our text provides a valuable supplement to both Handbook and Companion offerings.

ALTERNATIVE COURSE DESIGNS

The economics of health and health care encompasses an evolving literature, and there is no single "correct" order for the course design. U.S. economists typically organize topics through markets, with government roles coming much later. International health economists and public health

ijj

students and scholars often assign the governmental sector far more importance; it is "public" health, after all. No matter how it is put together, a text is necessarily linear in that one chapter must follow another.

The Economics of Health and Health Care offers instructors considerable flexibility. We have divided the 25 chapters into six parts:

- I. Basic Economics Tools (Chapters 1–4)
- II. Supply and Demand (Chapters 5-9)
- III. Information and Insurance Markets (Chapters 10–13)
- IV. Key Players in the Health Care Sector (Chapters 14–17)
- V. Social Insurance (Chapters 18-23)
- VI. Special Topics (Chapters 24–25)

The categories are not entirely exclusive. Chapter 8, looking at the demand and supply of insurance, is as important to Part III on insurance as it is to Part II on demand and supply of goods.

From front to back, we follow an "economics" model in which we first examine consumers and firms in a world without government and governmental policies. As a result, explicit discussions of government policies do not come until Chapter 19, although regulation, licensing, and mandates are discussed in reference to other topics much earlier. Many economics instructors may wish to follow the chapters in the book's order.

Instructors with public health or policy interests may wish to "tool up" on some of the earlier analyses and then skip directly to Part V, in which we look at social insurance, health care regulation, and health care reform. After that, they may wish to browse selected topics. Although some analyses build on one another within chapters, we seek to minimize cross-referencing among chapters.

Instructor Resource Center

The Economics of Health and Health Care is connected to the Instructor Resource Center available at www.pearsonhighered.com/folland. Registration is simple and gives you immediate access to new titles and new editions. As a registered faculty member, you can download resource files. The following supplements are available to adopting instructors:

- Instructor's Manual with Test Item File
- · Power Point Slides

S. F.

Rochester, Michigan

A. C. G.

Detroit, Michigan

M. S.

Rochester, Michigan

目 录

第1部分	经济学基本知识		
第1章	引言 2		
第2章	应用于卫生经济学的微观经济学工具20		
第3章	卫生经济学中的统计工具 48		
第4章	经济效率和成本—效益分析64		
第2部分	供给与需求		
第5章	健康的生产		
第6章	卫生保健的生产、成本和技术105		
第7章	卫生资本需求		
第8章	健康保险的需求与供给143		
第9章	消费者选择与需求 167		
第3部分 信息和保险市场			
第 10 章	章 非对称信息和代理		
第 11 章	章 健康保险市场的组织 ······ 204		
第 12 章	章 管理保健 230		
第 13 章	章 非营利机构		
第4部分	卫生服务机构的主要角色		
第 14 章	章 医院与长期保健 280		
第 15 章	章 医生的行为 299		
第 16 章	章 劳动力市场和职业培训		

第 17 章	制药业	342
第5部分	社会保险	
第 18 章	公平、效率和需求	366
第 19 章	卫生保健市场的政府干预	389
第 20 章	政府管制:主要的管制机制	406
第 21 章	社会保险	436
第 22 章	卫生保健体系比较	467
第 23 章	卫生体系改革	493
第6部分	专题	
第 24 章	危害健康的行为的经济学	512
第 25 章	传染病学和经济学:以非洲的艾滋病为例	530
专业术语 …		546
参考文献 …		553

.

CONTENTS

Part I Basic Economics Tools 1

Chapter 1 Introduction 2

What Is Health Economics? 3
The Relevance of Health Economics 4
Economic Methods and Examples of Analysis 10
Does Economics Apply to Health and Health Care? 12
Is Health Care Different? 14
Conclusions 16

Chapter 2 Microeconomic Tools for Health Economics 20

Scarcity and the Production Possibilities Frontier 21
Practice with Supply and Demand 24
Functions and Curves 27
Consumer Theory: Ideas Behind the Demand Curve 29
Individual and Market Demands 33
Elasticities 34
Production and Market Supply 35
The Firm Supply Curve Under Perfect Competition 41
Monopoly and Other Market Structures 43
Welfare Losses 44
Conclusions 46

Chapter 3 Statistical Tools for Health Economics 48

Hypothesis Testing 49
Difference of Means 50
Regression Analysis 54
Multiple Regression Analysis 58
Statistical Inference in the Sciences and Social Sciences 61
Conclusions 61

Chapter 4 Economic Efficiency and Cost-Benefit Analysis 64

Economic Efficiency 64

Cost-Benefit Analysis: Background 67

Cost-Benefit Analysis: Basic Principles 67

Valuing Human Life 73

Cost-Effectiveness Analysis 76

Cost-Utility Analysis, QALYs, and DALYs 77

QALYs Revisited: Praise and Criticism 79
Conclusions 80

Part II Supply and Demand 85

Chapter 5 Production of Health 86

The Production Function of Health 86

The Historical Role of Medicine and Health Care 89

The Production of Health in the Modern Day 94

How Does Health Care Affect Other Measures of Health? 98

The Role of Schooling 102

Conclusions 103

Chapter 6 The Production, Cost, and Technology of Health Care 105

Production and the Possibilities for Substitution 106
Costs in Theory and Practice 109
Technical and Allocative Inefficiency 116
Technological Changes and Costs 121
Diffusion of New Health Care Technologies 123
Conclusions 125

Chapter 7 Demand for Health Capital 128

The Demand for Health 128
Labor–Leisure Trade-Offs 130
The Investment/Consumption Aspects of Health 132
Investment over Time 134
The Demand for Health Capital 135
Changes in Equilibrium: Age, Wage, Education, and Uncertainty 136
Empirical Analyses Using Grossman's Model 139
Conclusions 140

Chapter 8 Demand and Supply of Health Insurance 143

What is Insurance? 143
Risk and Insurance 145
The Demand for Insurance 148
The Supply of Insurance 151
The Case of Moral Hazard 154
Health Insurance and the Efficient Allocation of Resources 157
The Income Transfer Effects of Insurance 162
Conclusions 164

Chapter 9 Consumer Choice and Demand 167

Applying the Standard Budget Constraint Model 168

Two Additional Demand Shifters—Time and Coinsurance 172 Issues in Measuring Health Care Demand 176 Empirical Measurements of Demand Elasticities 178 Impacts of Insurance on Aggregate Expenditures 183 Other Variables Affecting Demand 183 Conclusions 185

Part III Information and Insurance Markets 189

Chapter 10 Asymmetric Information and Agency 190

Overview of Information Issues 191
Asymmetric Information 191
Application of the Lemons Principle: Health Insurance 194
The Agency Relationship 197
Consumer Information, Prices, and Quality 197
Conclusions 201

Chapter 11 The Organization of Health Insurance Markets 204

Loading Costs and the Behavior of Insurance Firms 204
Employer Provision of Health Insurance: Who Pays? 206
Employer-Based Health Insurance and Labor Supply 213
The Market for Insurance 215
The Uninsured: An Analytical Framework 218
Technological Change, Higher Costs, and Inflation 225
Conclusions 227

Chapter 12 Managed Care 230

What Is the Organizational Structure? 231
What Are the Economic Characteristics? 232
The Emergence of Managed Care Plans 233
Development and Growth of Managed Care—Why Did It Take So Long? 237
Modeling Managed Care 239
How Does Managed Care Differ?—Empirical Results 244
Growth in Spending 248
Competitive Effects 250
The Managed Care Backlash 253
Conclusions 255

Chapter 13 Nonprofit Firms 258

An Introduction to Nonprofits 258
Why Nonprofits Exist and Why They Are Prevalent in Health Care 259
Models of Nonprofit Hospital Behavior 264

The Relative Efficiency of Nonprofits Versus For-Profits 274 Conclusions 277

Part IV Key Players in the Health Care Sector 279

Chapter 14 Hospitals and Long-Term Care

Background and Overview of Hospitals 280 Hospital Utilization and Costs 283 Closures, Mergers, and Restructuring 288 Quality of Care 290 Nursing Homes 291 Hospice, Home Health, and Informal Care 295 Conclusions 296

Chapter 15 The Physician's Practice

A Benchmark Model of the Physician's Practice 300 Physician Agency and Supplier-Induced Demand 302 Diffusion of Information and Small Area Variations Other Physician Issues and Policy Puzzles 312 Conclusions 314

Chapter 16 Health Care Labor Markets and Professional Training 317

The Demand for and Supply of Health Care Labor 317 Factor Productivity and Substitution Among Factors 322 Health Manpower Availability and the Meaning of Shortages 323 Medical Education Issues and the Question of Control Licensure and Monopoly Rents 334 Other Physician Labor Issues 337 Conclusions 339

Chapter 17 The Pharmaceutical Industry

Structure and Regulation 344 The Production of Health and Substitutability 348 Drug Pricing and Profits 352 R&D and Innovation 355 Cost Containment 359 Conclusions 362

Part V Social Insurance 365

Chapter 18 Equity, Efficiency, and Need

Efficiency and Competitive Markets 367 Deviations from the Competitive Model in the Health Care Sector 372 Promoting Competition in the Health Care Sector 373

An Economic Efficiency Rationale for Social Health Insurance 374
Need and Need-Based Distributions 375
Horizontal Equity and Need 381
Theories of Social Justice 384
Conclusions 386

Chapter 19 Government Intervention in Health Care Markets 389

Economic Rationale for Government Intervention 389
Forms of Government Intervention 394
Government Involvement in Health Care Markets 396
Government Failure 399
Conclusions 403

Chapter 20 Government Regulation: Principal Regulatory Mechanisms 406

Do the Laws of Supply and Demand Apply? 406
Objectives of Regulation 408
Regulation of the Hospital Sector 409
Prospective Payment 413
The Theory of Yardstick Competition and DRGs 415
Prospective Payment: Recent Evidence 423
Regulation of Physician Payment 424
Antitrust 426
Conclusions 432

Chapter 21 Social Insurance 436

Social Insurance Policies and Social Programs 436
Historical Roots of Social Insurance 438
Medicare and Medicaid in the United States 441
Public Insurance and Health 451
The Effects of Medicare and Medicaid 454
Criticisms of the U.S. Health Care System 462
Conclusions 464

Chapter 22 Comparative Health Care Systems 467

Contemporary Health Care Systems 467
National Health Programs: United Kingdom and Germany 468
The Canadian Health Care System 477
Different Systems: The Public's Evaluation 485
Differences in Health Care Spending Across Countries 488
Conclusions 490

Chapter 23 Health System Reform 493

Goals of Reform 493
Ensuring Access to Care 496
Competitive Strategies 498
Health System Reform and International Competitiveness 505
Quality of Care 506
Conclusions 508

Part VI Special Topics 511

Chapter 24 The Health Economics of Bads 512

An Introduction to Bads 513

Models of Addiction 515

Rationales for Public Intervention 518

Advertising Restrictions on Cigarettes and Alcohol 519

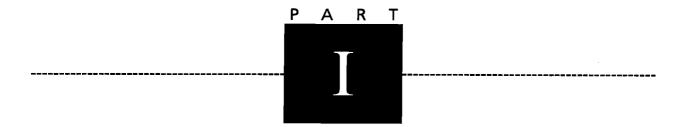
Excise Taxes and Consumption of Cigarettes and Alcohol 523

Conclusions 527

Chapter 25 Epidemiology and Economics: HIV/AIDS in Africa 530

Concepts from Epidemiology 530 Economic Epidemiology 533 Case Study: HIV/AIDS in Africa 537 Conclusions 544

Glossary 546
References 553



Basic Economics Tools

CHAPTER

Introduction

- What Is Health Economics?
- **™** The Relevance of Health Economics
- Economic Methods and Examples of Analysis
- Does Economics Apply to Health and Health Care?
- ™ Is Health Care Different?
- Conclusions

ealth care accounts for one-sixth of the U.S. economy! Forty-six million Americans at any moment in time lack health insurance! Health, health care, and health insurance dominate the economic and political landscape in the United States and many other countries. Health economics studies the allocation of resources to and within the health economy. Because the health care sector has become the largest sector of the U.S. economy, and its share of gross domestic product (GDP) is expected to grow well into the twenty-first century, we should not be surprised that health economics has emerged as a distinct specialty within economics.

Our table of contents provides an overview of the scope of health economics and the emphasis of this text. Demand and supply of specific health services are prominent. Private health insurance markets critically define the U.S. workplace, so we carefully examine insurance markets. Government, through its social programs and power to regulate, receives close attention. Because a hospitalization is in many ways different from a trip to a supermarket, we also concentrate on issues such as information, quality of care, and equity of access. Finally, we look to the health care systems of other countries for information on their practices and for potential insights on the policy issues that dominate the political landscape.

In this first chapter, we provide further background information on health economics and health economists. We follow with a broad overview of the magnitude and importance of the health care sector and with an introduction to some major policy concerns. As our final goal, we seek to promote the theme that economics helps explain how health care markets function. We focus on methods used in economic analyses and address two recurring questions: Is health care different and does economics apply? Despite stressing the distinctive features of health care services and markets, we answer both in the affirmative. With appropriate modifications to conventional analytical tools, economics is relevant and useful. As we shall see throughout the book, while there is continuing controversy on many major issues, health economists have provided insight and solutions to many problems of academic and policy interest.