

Contents

New to This Edition	xiii
Acknowledgments.....	xv
About the Author	xvi
Introduction	xvii
Three Major Tasks of Economics	xviii
<i>Descriptive Economics</i>	xviii
<i>Explanatory Economics</i>	xviii
<i>Evaluative Economics.....</i>	xix
Tools Used In Economic Analysis	xix
<i>Economic Variables</i>	xx
<i>Relationships Between Economic Variables.....</i>	xx
<i>Graphic Representation of Relationships</i>	xxi
<i>The Direction of Relationships.....</i>	xxi
<i>The Slope of Relationships.....</i>	xxii
<i>The Position of Relationships</i>	xxiii
<i>The Shape of Relationships.....</i>	xxiv
<i>The Nature of Economic Propositions.....</i>	xxv
Outline of Contents	xxvi
How to Use This Book.....	xxix
Bibliography	xxix
PART I: DESCRIPTIVE ECONOMICS	1
Chapter 1: Output of the Healthcare Sector	3
Objectives.....	3
1.1 Introduction	3
1.2 Medical Care	4
1.3 Risk Shifting and Health Insurance	8
1.4 Health Status	10
1.4.1 Concepts.....	10

1.4.2 Measures of Individual Health	10
1.4.3 Population Health Measures	12
1.4.4 Outcome	15
1.5 Consumption and Investment Output	17
Exercises	19
Bibliography	20

Chapter 2: Economic Dimensions of the Healthcare System..... 25

Objectives.....	25
2.1 Introduction	25
2.2 Economic Units and Economic Flows	26
2.2.1 Economic Units	26
2.2.2 Flows Between Units	27
2.3 Cost of Activities	37
Exercises	43
Bibliography	44

PART II: EXPLANATORY ECONOMICS..... 49

Chapter 3: Demand for Medical Care: A Simple Model..... 51

Objectives.....	51
3.1 The Concept of Demand	51
3.2 Individual Demand: The Price-Quantity Relationship.....	52
3.2.1 Demand and Quantity Demanded	52
3.2.2 Changes in Demand.....	55
3.3 Deriving the Demand Relationship.....	57
3.3.1 Tastes	58
3.3.2 Income	59
3.3.3 Prices of Other Goods and Services	59
3.3.4 Behavioral Assumption: Utility Maximization.....	60
3.3.5 Predictions	60
3.4 Market Demand	61
3.5 Measuring Quantity Responsiveness to Price Changes	62
3.6 Insurance, Out-of-Pocket Price, and Quantity Demanded.....	67
3.7 Elasticity of Demand Estimates	70
Exercises	73
Bibliography	75

Chapter 4: Additional Topics in the Demand for Health and Medical Care..... 79

Objectives.....	79
4.1 Introduction	79
4.2 Implications of Health Care for Life and Health.....	80
4.3 External and Social Demand for Medical Care.....	82
4.4 Influence of Quality on the Demand for Medical Care	84
4.5 Time and Money Costs	85
4.6 The Demand for Health	86

4.7 Agency Theory and Supplier-Induced Demand	88
4.7.1 Demand Under Uncertainty: The Demand for Health Promotion	90
4.7.2 Limitations of the Model	92
4.7.3 Discounting Future Values	93
Exercises	95
Bibliography	96

Chapter 5: Healthcare Production and Costs..... 101

Objectives.....	101
5.1 Introduction.....	101
5.2 Production: The Input–Output Relationship	102
5.2.1 Basic Relationship.....	102
5.2.2 Shifts in the Relationship.....	106
5.2.3 Substitution Among Inputs	108
5.2.4 Volume–Outcome Relationship	109
5.3 Short-Run Cost–Output Relationships	110
5.3.1 Production and Cost.....	110
5.3.2 Total Cost.....	112
5.3.3 Marginal Cost.....	113
5.3.4 Average Cost	113
5.4 Cost Curve Position	116
5.5 Economies of Scope	118
5.6 Long-Run Cost Curves	119
5.7 Empirical Estimation of Cost Curves.....	121
5.7.1 Background.....	121
5.7.2 Group Practices	123
5.7.3 Hospital Marginal Costs	124
5.7.4 Hospital Economies of Scale	125
5.7.5 Nursing Home Costs	126
5.7.6 Health Insurance Costs	127
Exercises	127
Bibliography	131

Chapter 6: Behavior of Supply..... 139

Objectives.....	139
6.1 Introduction.....	139
6.2 A Model of Supply Behavior: An Individual Investor-Owned Company	140
6.2.1 The Basic Model	141
6.2.2 Nonpatient Revenues	146
6.2.3 Shifts in the Supply Curve	147
6.3 Market Supply	148
6.4 Supply Behavior of Tax-Exempt Agencies: The Output Maximization Hypothesis	149
6.5 Supply Decisions Involving Quality	152
6.6 Supply Behavior of Tax-Exempt Agencies: The Administrator-as-Agent Model.....	155
Exercises	157
Bibliography	160

Chapter 7: Provider Payment	165
Objectives.....	165
7.1 Introduction.....	165
7.2 Principal-Agent Relationships Among Payers and Providers	166
7.3 Physician Payment.....	167
7.3.1 Fee-for-Service Payment.....	167
7.3.2 Per Case Payment	169
7.3.3 Per Capita and Salary Payment	170
7.3.4 Agency Theory and Physician Payment.....	171
7.3.5 A Resource-Based Relative Value Scale	172
7.4 Hospital Payment.....	174
7.4.1 Alternative Bases of Payment	174
7.4.2 Agency Theory and Hospital Payment.....	175
7.4.3 Other Hospital Payment Issues	176
7.5 Diagnosis-Related Groups	177
7.6 Long-Term Care Facility Payment	181
7.7 Health Maintenance Organizations.....	183
7.8 Provider Supply Under Managed Care	184
7.8.1 Agency Theory and Incentive Contracts.....	184
7.8.2 Management of Provider Behavior.....	188
Exercises	189
Bibliography.....	190
Chapter 8: Competitive Markets.....	199
Objectives.....	199
8.1 Introduction.....	199
8.2 The Competitive Model: Assumptions	201
8.3 The Competitive Model: Predictions.....	202
8.3.1 Overview.....	202
8.3.2 Market Price.....	202
8.3.3 Price and Quantity Movements Caused by Demand Shifts	203
8.3.4 Price and Quantity Movements Caused by Supply Shifts	204
8.3.5 Simultaneous Demand and Supply Shifts	206
8.3.6 Shortages	208
8.3.7 Surpluses	209
8.3.8 Multimarket Analyses	210
8.4 Evidence For and Against the Competitive Model.....	211
8.4.1 Overview.....	211
8.4.2 Excessive Profits	212
8.4.3 Fee Differences Among Patients	212
8.4.4 Quality of Care	213
8.4.5 Restricting Competitive Behavior	213
8.4.6 Consumer Ignorance and Supplier-Induced Demand	213
8.5 Competitive Bidding.....	214
8.6 Supplier-Induced Demand	217
8.6.1 A Pedagogic Model	217
8.6.2 Supply	218

8.6.3 Objectives	219
8.6.4 DOCPOP and Physician Fees: A Positive Relationship?	220
Exercises	222
Bibliography	225
Chapter 9: Market Power in Health Care	231
Objectives.....	231
9.1 Introduction	231
9.2 Monopolistic Markets	232
9.2.1 Simply Monopoly	232
9.2.2 Demand	232
9.2.3 Cost.....	234
9.2.4 Objectives	234
9.2.5 Price Discrimination	236
9.2.6 Physician Pricing and Supply in Public Programs	237
9.2.7 Nursing Home Markets and Public Rates.....	239
9.3 Monopsony—Buyers' Market Power	240
9.4 Market Structure and Its Determinants	242
9.4.1 Measuring Market Concentration.....	242
9.4.2 Determinants of Market Structure	243
9.4.3 Economies of Scale.....	243
9.4.4 Pricing Policies	244
9.4.5 Input Prices and Taxes	245
9.4.6 Regulation	245
9.4.7 Market Power in the Market for Physician Services	246
9.5 Nonprice Competition and Market Power	250
9.5.1 Overview.....	250
9.5.2 Monopolistic Competition	250
9.5.3 Monopolistic Competition and Preferred Provider Organizations	252
9.5.4 Increased Concentration	254
9.5.5 Nonprice Competition	255
Exercises	255
Bibliography	258
Chapter 10: Health Insurance	267
Objectives.....	267
10.1 Introduction	267
10.2 Role of Insurance	268
10.3 Demand for Health Insurance	269
10.3.1 Individual Demand for Insurance	269
10.3.2 Limitations of the Theory	273
10.3.3 The Market Demand for Insurance	274
10.3.4 Moral Hazard	275
10.3.5 Demand Responsiveness to the Price of Health Insurance	278
10.3.6 Choice of Health Plan	279
10.4 Supply of Health Insurance	281
10.4.1 Supplier Behavior	281
10.4.2 Risk and Size of the Insured Population.....	282

10.4.3 Insurer Costs.....	283
10.4.4 Insurer Revenues	283
10.4.5 Predictions about Supply	283
10.5 Adverse Selection in Health Insurance Markets	284
10.6 Violations of Insurance Conditions.....	286
Exercises	287
Bibliography.....	289
Chapter 11: The Labor Market.....	297
Objectives.....	297
11.1 Introduction.....	297
11.2 Demand for Labor.....	298
11.2.1 Demand for Labor by the Individual Firm.....	298
11.2.2 Market Demand for Labor	302
11.3 Labor Supply	302
11.3.1 Individual Labor Supply	302
11.3.2 Health Insurance Benefits and Labor Supply	304
11.3.3 Market Supply of Labor	306
11.4 The Competitive Labor Market.....	306
11.4.1 Assumptions	306
11.4.2 Predictions	307
11.5 Market Power in Labor Markets	309
11.5.1 Buyer's Market Power	309
11.5.2 Unions as Monopoly Sellers of Labor.....	311
Exercises	312
Bibliography.....	314
PART III: EVALUATIVE ECONOMICS.....	323
Chapter 12: Economic Evaluation of Health Services	325
Objectives.....	325
12.1 Introduction.....	325
12.2 The Purposes of Economic Evaluation	326
12.3 Steps in Economic Analysis	326
12.4 Selecting the Right Type of Analysis.....	328
12.5 Guidelines for Conducting a Cost-Effectiveness Analysis.....	330
12.5.1 Perspective	332
12.5.2 Time Horizons	332
12.5.3 Outcomes.....	333
12.5.4 Efficacy and Effectiveness	336
12.5.5 Costs	337
12.5.6 Discounting Future Costs and Benefits	339
12.5.7 Cost-Effectiveness Ratios	340
12.5.8 Sensitivity Analysis	340
12.5.9 Interpreting the Results	341
12.6 Benefit-Cost Analysis.....	342
12.6.1 Valuation of Outcomes	343
12.6.2 Human Capital.....	343

12.6.3 Risk Preference	344
12.6.4 Contingent Valuation	344
12.6.5 Techniques of Valuation	345
12.6.6 Benefit–Cost Ratio	345
Exercises	346
Bibliography	348
Chapter 13: Value Judgments and Economic Evaluation	357
Objectives.....	357
13.1 Introduction.....	357
13.2 Values and Standards in Economic Evaluation	358
13.3 Efficient Output Levels	360
13.3.1 Individual Valuations of Goods and Services or Activities	360
13.3.2 Values in a Selfish Market	360
13.3.3 The Socially Optimum Quantity of Medical Care	363
13.3.4 Optimal Output with Altruism	364
13.3.5 Alternative Delivery Arrangements.....	366
13.4 Optimal Health Insurance	369
13.5 Extra-Welfarism.....	371
13.6 Concepts of Equity.....	373
13.7 Goals of Health Policy	375
13.7.1 Environmental Conditions.....	375
13.7.2 Efficiency.....	375
13.7.3 Equity.....	376
13.7.4 Public Financial Constraints	377
13.7.5 Health Status of the Population	377
Exercises	377
Bibliography	378
Chapter 14: Financing Health Care	385
Objectives.....	385
14.1 Introduction.....	385
14.2 Insurance Terminology	386
14.3 Financing Means and Burdens in the United States	388
14.4 Economic Analysis of Alternative Payment Sources	390
14.4.1 Private Health Insurance	391
14.4.2 Taxation	395
14.5 The Implications of Alternative Types of Healthcare Financing.....	398
14.6 The Administrative Cost of Alternative Types of Healthcare Financing.....	401
Exercises	402
Bibliography	403
Chapter 15: Public Health Insurance	409
Objectives.....	409
15.1 Introduction.....	409
15.2 Public Health Insurance.....	410

<i>15.2.1 Medicare</i>	410
<i>15.2.2 Medicaid</i>	414
<i>15.2.3 Paying the Providers</i>	418
15.3 Uncovered Care.....	420
15.4 Some Trends in Public Health Insurance.....	420
<i>15.4.1 Disbursements of the Hospital Insurance Trust Fund</i>	420
<i>15.4.2 Medicare's SMI Revenues and Expenditures</i>	421
<i>15.4.3 Out-of-Pocket Expenditures for Medicare Enrollees</i>	422
15.5 Goals of Medicare	423
15.6 Policy Alternatives for Medicare	424
<i>15.6.1 Economic Analysis and Alternative Solutions</i>	424
<i>15.6.2 The Scope of the Program</i>	425
<i>15.6.3 Insurance Premiums</i>	425
<i>15.6.4 Copayments, Coinsurance, and Deductibles</i>	425
<i>15.6.5 Provider Payments</i>	426
<i>15.6.6 Managed Care and Competition</i>	426
15.7 Policy Alternatives for Medicaid.....	429
<i>15.7.1 Scope of the Program</i>	429
<i>15.7.2 Copayments</i>	430
<i>15.7.3 Provider Payments</i>	430
<i>15.7.4 Competitive Bidding by Suppliers</i>	430
<i>15.7.5 Managed Care</i>	430
15.8 Pay-for-Performance Initiatives	431
Exercises	433
Bibliography.....	433
Chapter 16: Reform of the Healthcare Market	443
Objectives.....	443
16.1 Introduction.....	443
16.2 Insurance Market Reform	444
<i>16.2.1 The Need for Reform</i>	444
<i>16.2.2 The Basic Model</i>	445
<i>16.2.3 Information Asymmetry and Adverse Selection</i>	447
<i>16.2.4 Underwriting and Group Rating</i>	447
<i>16.2.5 Subsidies</i>	448
<i>16.2.6 Cooperative Pools</i>	449
<i>16.2.7 Community Rating and Biased Selection</i>	449
<i>16.2.8 Mandates</i>	451
<i>16.2.9 Risk Selection Limitation and Risk Adjustment</i>	452
16.3 Managed Care	453
<i>16.3.1 Introduction</i>	453
<i>16.3.2 Types of Managed Care Organizations</i>	454
<i>16.3.3 Control of Resource Use</i>	455
<i>16.3.4 Empirical Evidence: Resource Use, Quality of Care, and Satisfaction</i>	456
<i>16.3.5 Managed Care in the Market</i>	458
16.4 Information and Consumer Choice	460
16.5 Consumer-Focused Health Care	462

16.5.1 Patient-Centered Medical Homes	462
16.5.2 Accountable Care Organizations.....	464
Exercises	466
Bibliography.....	466

Chapter 17: Regulation and Antitrust Policy in Health Care 477

Objectives.....	477
17.1 Introduction.....	477
17.1.1 The Concept of Economic Regulation	478
17.1.2 Regulation of Health Care	478
17.1.3 Regulation as a Means of Correcting Market Failure	478
17.1.4 Regulation as a Political Good	479
17.2 Regulation of Health Care	480
17.2.1 Regulation of Hospitals and Long-Term Care Facilities	480
17.2.2 Regulation of Hospital Quality	480
17.2.3 Supply-Side Regulation of Hospitals	481
17.2.4 Demand-Side Regulation of Hospitals	482
17.2.5 Regulation of Long-Term Care Facilities.....	482
17.2.6 Regulation of Physician Services	482
17.2.7 Regulation of Physician Quality and Utilization.....	483
17.2.8 Regulation of Physician Pricing.....	483
17.2.9 Regulation of the Pharmaceutical Industry	483
17.2.10 Food and Drug Administration Regulation of Drugs	484
17.2.11 State Regulation of Pharmacists.....	484
17.2.12 Regulation of Health Insurance and Managed Care	484
17.3 Antitrust Policy	485
17.3.1 Conceptual Framework.....	485
17.3.2 The Structure of Healthcare Markets	488
17.3.3 Antitrust Policy: History and Institutions	489
17.3.4 Price Fixing and Conspiracy in Restraint of Trade in Healthcare Markets	491
17.3.5 Mergers in Healthcare Markets.....	491
17.3.6 Antitrust Policy: Monopolization	495
17.3.7 Quality Competition and Antitrust Policy	496
17.3.8 Antitrust Issues Related to Managed Care	497
17.3.9 Federal Antitrust Policy Guidelines	498
Exercises	499
Bibliography.....	500

Chapter 18: Evolving Issues in Health Care..... 507

Objectives.....	507
18.1 Introduction.....	507
18.2 Issues Facing the Healthcare System.....	507
18.2.1 Contributions of Technology	509
18.2.2 Hospital Contributions	510
18.3 Financing Mechanisms	512
18.3.1 Pay for Performance	512
18.3.2 Bundled Payments	513
18.3.3 Value-Based Purchasing	514

xii CONTENTS

18.4 Consumer Engagement.....	514
18.5 Summary and Conclusions.....	515
Exercises	516
Bibliography.....	516
Appendix A: Glossary of Health Economics Terms.....	525
Appendix B: Answers to Odd Numbered Questions.....	575
Index.....	589