



Contents

Preface	<i>page</i> xv
Acknowledgments	xix

Part I Patients

1 How Economists View Human Behavior	3
Things Humans Want	3
Costs	5
Accounting Costs	5
Sunk Cost	5
Cash Out-of-Pocket	6
Economic Costs	6
Time Cost	6
Travel Cost	7
Discomfort	7
Social Status	8
Opportunity Cost	8
Optimizing	9
Perception and Choice	9
Misinformation	9
Uncertainty and Risk	10
The Future	10
Self-Assessment	11
Supplement. Practical Economist Skills: How to Use Price Indexes	13
 2 Where Does Health Come From?	 15
The Health Production Function	15
Marginal Changes	16
The Flat of the Curve	19
Illness and Injury	20
Lifestyle Choices	20
Genetics	21
Age	21
Environmental Factors	22

Interactions within the Health Production Function	22
Connecting Back to Individual Decision-Making	24
End of Chapter Notes	25
Self-Assessment	25
Supplement. Apples to Apples Comparisons of Health	27
3 Demand for Medical Care	29
Why Not Study Demand for Health?	30
Elasticity	30
Price Sensitivity	30
What Is Elasticity?	32
Price Elasticity of Demand	33
Demand Shifters	35
Shifters for Demand for Medical Care	35
Complements and Substitutes	37
Cross-Price Elasticity	38
Income	39
Income Elasticity	39
Engel Curves	40
Consumer Surplus	41
Individual vs. Market Demand	43
Self-Assessment	43
Supplement. Practical Economist Skills:	
How to Calculate Elasticities	44
4 Health Insurance and Demand for Medical Care	45
Cost Sharing	45
Copays	45
Indemnity	48
Coinsurance	49
Spending Triggers	51
Deductibles	51
Payment Limits	53
Spending Triggers and Timing	53
Example of Spending Triggers: Medicare Part D	54
Other Plan Characteristics	55
Direct Payments/Rebates	55
Red Tape	56
Self-Assessment	56

	Contents	vii
5 Evaluating Evidence	57	
Types of Quantitative Evidence	58	
Associational Evidence	58	
Latent Variables	59	
Reverse Causality	60	
Randomized Experimental Evidence	61	
Places Where Problems Arise in Experiments	62	
Placebos	62	
Blinding	63	
Sample Size	64	
External Validity	64	
Examples of Randomized Experimental Evidence:		
The Effect of Health Insurance	65	
The RAND Experiment	65	
The Oregon Experiment	66	
The IRS Experiment	66	
More on Experimental Evidence: Medicine and Public Health	67	
Quasi-experiments	67	
Self-Assessment	68	
Supplement. Ethics in Human Subjects Research	69	
Part II Providers		
6 Provider-Firms and the Market	73	
A Typical Firm	73	
Provider-Firms	75	
What Is Being Produced?	75	
What Are a Provider-Firm's Inputs?	76	
Physician Labor and Production Efficiency	77	
Gains from Specialization	78	
Learning by Doing	78	
Reducing Task Switching	79	
Substitutes for Physician Labor: "Practice at the Top of Your License"	79	
Factor Substitution for Physician Labor: Evidence from a Randomized Study	79	
Supply	80	
Market Equilibrium and Perfect Competition	82	
Breaking Perfect Competition	83	
Price Distortion	83	

Uncertainty	84
Market Power	84
Externalities	85
Asymmetric Information	85
Government Intervention	86
Imperfect Markets and the Healthcare Sector	86
Self-Assessment	86
Supplement. A Brief Rant on “Broken” Healthcare Markets and Economics	88
7 The Healthcare Labor Force	89
How Much Labor Is Available?	89
Intensive Margin Changes	90
Extensive Margin Changes: Inflows	91
Extensive Margin Changes: Outflows	92
Stocks, Flows, and Orders of Magnitude	92
The Decision to Become Part of the Healthcare Labor Force	93
The Economic Environment	94
Income Isn’t Everything	95
Uncertainty	95
Where Does Labor Locate?	95
Amenities	96
Local Labor Shortfalls	96
Brain Drain	97
Licenses	97
The Labor Market	98
Market Concentration	99
Monopsony	100
Self-Assessment	100
Supplement. Practical Economist Skills: Calculating Market Concentration	101
8 Providers and Incentives	102
How You Pay People Matters	102
Fee for Service vs. Salary	103
Selection into Jobs	104
Evidence on Provider Pay Schemes	104
Other Payment Schemes	105
Size of the Firm	105
Induced Demand	107
The Principal–Agent Problem	107

	Contents	ix
Induced Demand as a Principal–Agent Problem	107	
Evidence on Induced Demand	108	
Fee Splitting	109	
Self-Referral	110	
Self-Assessment	111	
Supplement. Cognitive Biases and Behavioral Economics	112	
9 Hospitals	113	
For-Profit and Not-for-Profit Hospitals	113	
Day-to-Day Operation of a Hospital	114	
Who Has Influence over Resource Allocation?	115	
Hospital Leadership	115	
The Medical Staff	116	
The Line Staff	117	
Patients	117	
Investors	119	
Donors	119	
Hospital Size and Efficiency	120	
Economies of Scale	120	
Diseconomies of Scale	121	
Economies/Diseconomies of Scope	122	
Growing Despite Diseconomies?	122	
Hospital Competition	122	
Price Competition	122	
Quality Competition	123	
Strategic Specialization	123	
Hospital Systems	124	
Self-Assessment	124	
Part III Health Insurers		
10 Health Insurance as a Product	129	
Insurance	129	
Risk Aversion	130	
Desire for Insurance	130	
What Does Health Insurance Protect?	131	
Health Insurance as Wealth Insurance	132	
Bankruptcy as Health Insurance	133	
A Very Quick Math Lesson	133	
Insurance Companies	134	
How Insurance Companies Make Money	135	
Correlated vs. Uncorrelated Risk	136	

Group Insurance	136
Experience Rating	137
Moral Hazard	137
Self-Assessment	138
Supplement. A Math-Based Way to Show Desire to Purchase Insurance	139
11 Adverse Selection	141
Uninsurable	141
Who Is Uninsurable?	142
Public Health Insurance and the Likely Uninsurable	142
The Remaining Uninsurable	143
The Adverse Selection Problem	143
Avoiding the Adverse Selection Problem: Single Payer Systems	146
Avoiding the Adverse Selection Problem: Market-Based Systems	147
An Aside on the General Strategy of the ACA	147
Single Payer vs. Market-Based Insurance: Which Is Better?	148
Self-Assessment	149
Supplement. Why Do the US and UK Have Different Health Insurance Systems?	150
12 Prices	151
Prices in Healthcare	152
Prices Felt by Patients	152
Prices Felt by Providers	153
The Lifecycle of a Medical Bill	153
The Chargemaster	153
Medical Bills and Insurers	154
Arriving at Allowed Amounts via Negotiation	155
Denial of Payment	156
A Sample Medical Bill	156
Medical Bills and the Uninsured	157
Where the Chargemaster Comes From	158
Prices, Search, and Competition	159
Shopping Based on Quality	159
Price Transparency	160
Self-Assessment	161

	Contents	xi
13 Managed Care	163	
MCO Structure	164	
Health Maintenance Organization	164	
Preferred Provider Organization	165	
Point of Service	165	
Tools used by MCOs	166	
Everyone: What Is Covered (and Denial of Payment)	166	
Everyone: Prior Authorization	167	
Everyone: Behavioral Interventions	168	
Patients: Gatekeepers	168	
Patients: Second Opinion Programs	169	
Patients: Cost Sharing Manipulation	170	
Providers: Choice of Providers to Interact With	170	
Providers: Payment Manipulation	171	
Providers: Capitation	171	
Providers: Bonuses and Holdbacks	172	
MCO Control and Patient Choices	172	
Self-Assessment	173	
14 Public Insurance	174	
How Big Are These Programs?	174	
Medicare	175	
Part A	175	
Part B	176	
Part C (Medicare Advantage)	176	
Part D	177	
Gap Plans	177	
Medicaid	178	
The Federal-State Partnership	178	
Variation in What Is Covered	179	
Variation in Who Is Covered	179	
How Providers Are Paid by Medicare and Medicaid	180	
Inpatient Payments	180	
Outpatient Payments	180	
Quality Incentives	181	
Other Public Insurance	181	
VA and CHAMPVA	181	
TRICARE	182	
CHIP	182	
COBRA	182	
IHS	182	
Self-Assessment	183	

Part IV The Sector at Large

15	Pharmaceuticals	187
	Intellectual Property	187
	Why Are Patents Useful?	188
	How a New Drug Is Approved in the US	189
	Preclinical and Phase 0 Trials	189
	Phases I–III	190
	New Drug Application	190
	Post-market Observation	191
	Market Exclusivity	191
	The Double-Edged Sword of Patents and	
	Market Exclusivity	192
	Generic Drugs	192
	Defensive Behavior	193
	Evergreening	193
	Strategic Pricing and Advertising	193
	Self-Assessment	194
	Supplement. International Intellectual	
	Property Agreements	195
16	Externalities	196
	What Is an externality?	196
	Positive Externalities	196
	Negative Externalities	197
	Risk Externalities	197
	Correcting externality problems	198
	Taxes and Subsidies	198
	Regulation	199
	Property Rights	199
	Examples: Risky Health Behaviors	201
	Smoking	201
	Drunk Driving	201
	Examples: Contagion	202
	Social Stigma as a Tax	202
	Contagion and Severe Illnesses	203
	Vaccines	203
	What Is the Correct Amount of Intervention?	
	Cost and Benefits	204
	Self-Assessment	205

	Contents	xiii
17 Medical Malpractice	207	
Basic Anatomy of a Tort Case	207	
Goals of the Medical Malpractice System	207	
Compensate Injured Parties	208	
Create an Incentive for Providers to Practice Appropriately	208	
Detailed Anatomy of a Medical Malpractice Case	209	
Economic Damages	209	
Non-economic Damages	209	
Punitive Damages	209	
Trial	210	
Appeal	210	
Settlement	210	
Example: Cases Closed in Texas in 2012	211	
The Heart of a Medical Malpractice Case: Negligence	212	
Informed Consent	212	
Legal Test for Negligence: The Learned Hand Rule	212	
Imperfect Application of the Learned Hand Rule	213	
Consequences of Imperfect Application of the		
Learned Hand Rule	213	
Evidence	214	
Goals of the Medical Malpractice System Revisited	215	
Self-Assessment	216	
 18 Inequality	 217	
The Veil of Ignorance	218	
Income, Race, Gender, and Health Outcomes in the		
United States	219	
Why Do We See Inequality in Health Outcomes?	222	
Inequality in Medical Care	222	
Inequality in the Local Environment	224	
Intergenerational Persistence	224	
Urban and Rural Differences	225	
Inequality for the Healthcare Workforce	225	
Self-Assessment	225	
 19 International Comparisons	 227	
Comparing OECD Countries	227	
Theories That Fit the Facts	231	
Lifestyle Choices	231	

xiv	Contents	
	The Flat of the Curve	231
	Cost Differences	232
	Systemwide Differences	233
	The Bismarck Model	233
	The Beveridge Model	234
	Nationalized Health Insurance	234
	You're on Your Own Model	234
	The United States	234
	Final Thought: The Devil Is in the Details	235
	Self-Assessment	235
	References	237
	Index	245