

## Economics of Health Course

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(with gratitude to 13 years of amazing Johns Hopkins University undergraduates in Economics 180.289)

UNIT	UNIT TITLE	LECTURE PARTS	DESCRIPTION
1	Introduction	<a href="#">Introduction</a>	Overview of course on health economics. Why health is different from other economic topics. What you will learn. Why I love health economics.
2	Health Systems	<a href="#">Health Economics in Economics Systems</a>	Health economics describes rational choices of actors in economics systems. This lecture explains what a system is and how it is governed by rules called institutions. Agents ensconced in units are motivated by these institutions (rules) to work together. They "adjust" their behavior day to day to help themselves and their unit and the system achieve goals. Every few years or decades the whole system has to undergo major "adaptation" of the basic institutions (rules) in response to emerging glitches or new opportunities.
3	Economics Models in Health Systems	<a href="#">Economic Models and Health Systems: Health production, demand, factor input demand, profit, cost</a>	Health economics definitions can help you be very clear about how health happens. Individual people "produce" it. Their "demand" determines how much health they produce. "Input demand" determines how many pills, doctor visits and workout sessions to buy. Input sellers decide how many health goods to produce to maximize "profit" and minimize "cost". Each term in quotes has a crisp and precise definition--don't be sloppy. Learn to say what you mean.
4	Role of government in health systems	<a href="#">Role of Government in Health Part 0: Introduction</a>	To precede a discussion of the role of government in health, this short preamble discusses a typology of governments to distinguish the normative ideas of what governments should do from descriptive realities of what ends up happening. In theory governments of modern liberal societies should simultaneously extend freedom while circumscribing the oppression and violence that free citizens impose on each other. In practice, power and weird foibles of the humans who govern can divert the practice of government.
<a href="#">Role of Government in Health Part 1 Welfare Economics</a>		The first and second theorems of welfare economics offer the foundation for justifying private markets AND justifying government intervention in private markets. The first theorem (1WT) says that a competitive equilibrium is Pareto Optimal. We discuss why that is nice, but also insufficient as a principle for societal organization. Second theorem shows how redistribution can play a role in achieving other goals. These theorems are developed mathematically and by illustration.	
<a href="#">Role of Government in Health Part 2 Public Goods</a>		Defines public goods, merit goods, club goods, private goods. The role of the government in health can be seen as helping steward the effective creation of public goods without disrupting the citizen's creation and acquisition of private goods. A social welfare function can help bring a balance.	
<a href="#">Role of Government in Health Part 3 Solving Public Goods Problems</a>		Collective actions guard the safety of air, water, food, streets, housing and health systems. These are public goods and markets are not able to coordinate and produce them in sufficient quantity. We may have come to an age where vote-grubbing politicians govern an electorate that is more interested in an identity of hating collective action than in having an environment that helps their families not die. Economics stays stuck with a model of government by altruistic social planners incentivized to make life better. With apologies, this lecture spells out strategies for such mythical political leaders.	

5	Demand for Health Insurance	<a href="#">Demand for Health Insurance Part 1 Purpose of Insurance</a>	<p>Describes the motivation for why a consumer would want to be insured. This motivation is rooted in risk aversion and emerges from diminishing marginal utility of consumption. Our healthy richer selves do not value increments to consumption as much as our poorer sicker selves--so they look for ways to transfer resources from the healthy state to the sick state. People are polarized about the mechanisms of modern insurance because it does involve moving funds laterally from groups of healthy people to groups of sick people--even though the same people at some time are healthy and some time are sick. Myopia makes some mistakenly believe they will never be sick and wanting to benefit from an insurance contract.</p>
<a href="#">Demand for Health Insurance Part 2 Basic Insurance Concepts</a>		<p>Defines basic elements of an insurance contract: premium, indemnity, actuarial fair premium, cost of insurance. Presents the fundamental no loss condition and defines the profit of an insurance company.</p>	
<a href="#">Demand for Health Insurance Part 3 Moral Hazard</a>		<p>A deadweight loss ensues when insured consumers see subsidized prices that make commodities appear far cheaper than the cost of producing them. Moral hazard is emerges from the unavoidable incentive to consume more of a subsidized product.</p>	
<a href="#">Demand for Health Insurance Part 4 The Role of Grouping</a>		<p>Risk pools are the heart of how insurance spreads risk from sick to healthy across the population. It is important that risk pools gather for reasons unrelated to the probability of disease.</p>	
6	Demand for Health	<a href="#">Demand for Health Part 1</a>	<p>The Grossman model of the demand for health can be depicted graphically on a four quadrant diagram.</p>
<a href="#">Demand for Health Part 2</a>		<p>The Grossman model of the demand for health has theoretical implications embedded in the solution. The marginal efficiency of capital curve drives the demand for health upwards with higher education and downward with successive insults to health. The model actually explains health disparities as emerging from more fundamental social deprivations. One cannot solve health disparities solely by changing health care prices--one must address root causes that make people rationally choose to be less healthy.</p>	
<a href="#">Demand for Health Part 3</a>		<p>Models of the demand for health were tested in the Rand Health Insurance Experiment. The demand for health care is indeed sensitive to price. Higher co-pays are associated with less utilization.</p>	
7	Adverse Selection	<a href="#">Adverse selection Part 1 A Model of Health Insurance</a>	<p>Develops a stylized model of insurance products calibrated by their premium and indemnity in a world where there is either a sick state or a well state. This is the set up for models of adverse selection into insurance developed by Rothschild and Stiglitz</p>
<a href="#">Adverse selection Part 2 Death Spirals</a>		<p>The Rothschild Stiglitz model of adverse selection predicts the possibility of separating equilibria where different groups can sustain different combinations of premium/indeminty. Pooling equilibrium are also possible where different groups can remain together in a single premium/indemnity. The stability of these equilibria can be threatened if the products offered do not exactly match the risk profile of the consumers. The real world has seen many cases of death spirals where the insurance market falls apart as healthier patients are skimmed off into lower priced risk pools.</p>	

		<a href="#">Adverse Selection Part 3 Solutions to Adverse Selection Problems</a>	Describes policies that stabilize health insurance systems against the death spiral that emerges in unregulated private insurance markets. Options are to mandate purchase of insurance for all and to measure and observe the premiums and coverage to detect pricing that is consistent with cherry picking by insurance companies. Human frailty inhibits the execution of these policies when opportunistic politicians capitalize on us-them ism thus gaining votes but costing their voters the ability to have a stable insurance market.
8	Capitation and Prospectivity	<a href="#">Capitation and Prospective Payment in Health Care</a>	This paper explains a model of health care capitation by Thomas McGuire that sets out the role of co-payment and prospective payment as complementary strategies to control costs. However the system sets up an adversarial relationship between provider as gatekeeper and patient as supplicant. Are there costs to this relationship?
9	Health Insurance and Health Costs in Practice in USA	<a href="#">Health Care Costs Part 1 High Costs Rising Costs</a>	The US health care system has high costs and the costs are rising. Trends in these problems show that we can systematically explain cost growth from intensity, prices, aging, and we can do this for inpatient, outpatient, and drug costs.
		<a href="#">Health Care Costs Part 2 Medicare</a>	A short economic history of Medicare and its role in US health care costs
		<a href="#">Health Care Costs Part 3 Medicaid</a>	A brief economic history of Medicaid describes basic design features and impact on costs and outcomes
		<a href="#">Health Care Costs Part 4 Managed Care</a>	Brief history of managed care evolution in USA. Managed care typology defines HMO, PPO, MCO etc. Managed care both "manages care" to control costs and improve health. Like all private insurers they also can indirectly select less costly enrollees. How can economists distinguish?
10	Market Power (Hospitals)	<a href="#">Market Power Part 1 Monopoly theory</a>	A review of basic theory of monopolies and monopsonies sets the stage for understanding bargaining when concentrated groups of sellers negotiate with concentrated groups of buyers.
		<a href="#">Market Power Part 2 Cost Shifting in Health Care</a>	Because there are non-profit suppliers in health care, they do not always charge the maximum fees allowed by their oligopsony power. They may offer marked down fees to Medicaid and Medicare and subsidize from private payers.
		<a href="#">Market Power Part 3 Market Power in Health Systems</a>	US health system has concentrated hospital changes vying with concentrated private health insurers to set prices. A model of monopoly hospital bed-day suppliers bargaining with monopsonist bed-day purchasers predicts room for cross subsidy. Private insurers payments silently pay for shortfalls from Medicaid and Medicare. This hidden "tax" embedded in private premiums is weirdly more acceptable to voters than an overt tax to pay for public insurance. The US's expensive system defies reform.
		<a href="#">Market Power Part 4 Theories about Non Profits</a>	Describe the objective of the non-profit hospital and what it implies for their behavior in setting fees
11	Health Labor Supply	<a href="#">Health Care Labor Supply Part 1 Supply Demand and Wages</a>	Markets for health care workers have variation in supply, demand, and wages. Labor market theory can explain and indicate areas where there may be market failures. We explore why physician wages are so high and how markets respond to shortages.
		<a href="#">Health Care Labor Supply Part 2 Physician Labor Supply</a>	Theory of the firm can explain how physicians behave, but it requires modification to show that physicians balance concern for profit and patient outcomes and their own leisure. The backward bending supply of physician labor and physician induced demand behavior emerge from this theory.

		<a href="#">Health Care Labor Supply Part 3 Nursing Labor Supply</a>	Nursing labor supply is a case where shortages do not automatically lead to wage increases that could remedy shortage. Possible explanations: monopsony buying power of hospitals, pipeline failure because nursing instructors are scarce, of hospitals using low wage offers to select for devoted altruistic nurses?
12	Health Care Quality	<a href="#">Quality of Care</a>	Information asymmetry makes health care markets bad at ensuring quality of health services. Measuring quality is necessary but difficult. Donabedian's framework for quality suggest possible measures. Beyond measures, one needs systems to build workers' incentives for quality. Regulation requires governments to be capable. When governments are not capable, social franchising offers a model--but quality will still cost money and needs to be financed.
13	Malpractice	<a href="#">Malpractice in Health Care</a>	Explains legal and economic definitions of medical malpractice as distinct from medical errors. Coase's theorem can see malpractice and medical errors as an externality in health care and guide policies that try to minimize the harms or medical errors.
14	Pharmaceuticals	<a href="#">Pharmacoeconomics Introduction</a>	Basic principals of pharmacoeconomics--pricing, R and D, and economic evaluation are presented. The misalignment of incentives pricing and R and D to human health needs is an unresolved market failure.
15	Health Equity	<a href="#">Health Equity Part 1: Principles of Justice from Sen and Rawls</a>	Health equity is defined and analyzed starting from an Edgeworth Box that shows the limits of the market to produce equity without social intervention guided by principles of justice such as those forwarded by Amartya Sen and John Rawls. Outcome equity and process equity are described. Part C (next) tests whether process equity like UK's NHS system can lead to outcome equity.
		<a href="#">Health Equity Section 2 Solutions to Health Disparities</a>	Health disparities solutions: A)Find and target disadvantaged groups; B)Do something for everyone that just happens to help the disadvantaged groups more-. The Whitehall study of the UK's NHS shows that sometimes process equity (everybody has access to health insurance) does not actually lead to outcome equity in health. Good news: public health interventions can offer both process and outcome equity.