

What is health  
economics?

Health behavior.

Economic analysis.

# INTRODUCTION TO HEALTH ECONOMICS

(Hurley, Chapter 1)

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Economics 317

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# What is health economics?

- ▶ Best answered by a breakdown of what (U.S.) health economists do.
  - ▶ 50% study the behavior of individuals
  - ▶ 34% study the behavior of firms
  - ▶ 50% study government policy
  - ▶ 48% study health insurance
  - ▶ 50% study outcomes research
  - ▶ 31% study other issues
- ▶ Similar in Canada and elsewhere, with less emphasis on firms.

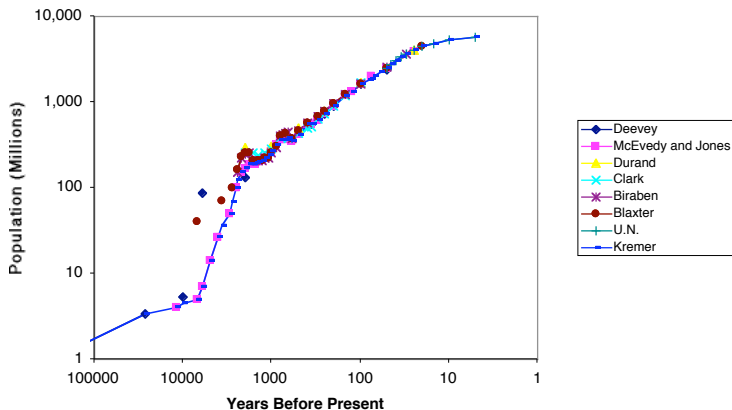
# Who cares?

- ▶ Health economists study issues fundamental to human welfare:
  - ▶ how do we make decisions which affect our length and quality of life?
  - ▶ what government policies could we use to change behavior which affects health?
  - ▶ how could we better provide health care?
  - ▶ what other government policies affect health?
  - ▶ how does health in turn affect our well-being in other ways, for example, our incomes?

# Why are some people healthier than others?

- ▶ Why are some Canadians in 2014 healthier than other Canadians?
- ▶ Why are we healthier in Canada now than in 1713, or 1913?
- ▶ Why is the average Japanese person healthier than the average Canadian?
- ▶ We will think about *private* (e.g., smoking, health care) and *social* (e.g, income, education) determinants of health.

# Historical Human Populations



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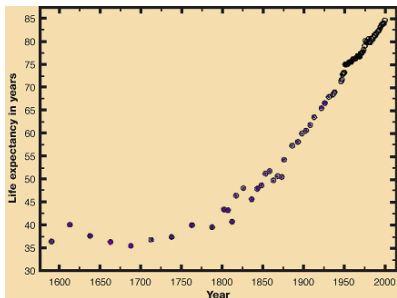
Economic analysis.

Lecture 1:  
Introduction to  
health economics

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# Economics of health care systems.

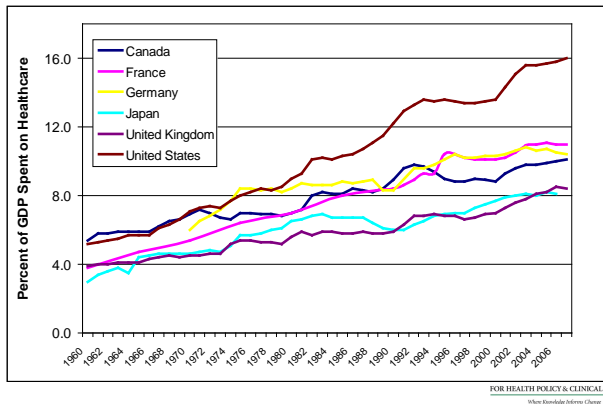
- ▶ How do markets for insurance work (or not work)?
- ▶ Why is health care and/or insurance usually provided by government?
- ▶ Why is health insurance so ubiquitous, and what effects does insurance have on behavior?
- ▶ How should we pay physicians and other actors in the health care system?

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## Health Care Expenditures as a Fraction of GDP: Selected Countries



Source:

*Cheng and Kenkel, 2010*



Chapter 2

**Table 2.1: A Comparison of Health Care Spending and Health Care Utilization in Selected OECD Countries, 2006**

	Total Health Care Spending (per capita, USD)	Total Health Care Spending (% of GDP)	Physician visits per capita	Acute care hospital days per capita
Australia	3,336	8.7	6.1	1.0 <sup>a</sup>
Canada	3,920	10.0	5.9 <sup>a</sup>	0.9 <sup>a</sup>
France	3,937	11.0	6.4	1.0
Germany	3,718	10.6	7.0 <sup>b</sup>	1.7
Switzerland	5,877	11.3	3.4	1.1
United Kingdom	3,332	8.4	5.1	0.9
United States	6,714	15.3	4.0 <sup>a</sup>	0.7

**Source:** OECD Health Data (2008); <sup>a</sup>Data from 2005; <sup>b</sup>Data from 2004

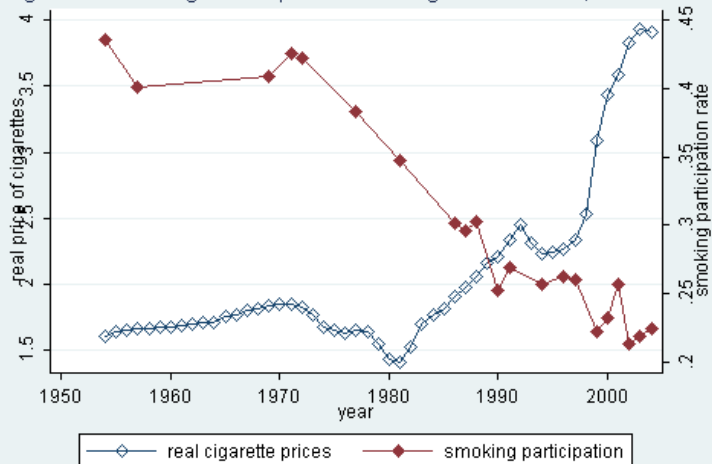
Comparing differences across countries in health care spending and health care utilization highlights the distinction between monetary measure of activity and real levels of activity and resources. Both the U.S. and Switzerland are the highest spending countries but their citizens receive fewer physician and hospital services than do citizens of other countries. The reason for this discrepancy is prices, which are higher in the U.S. and Switzerland. Although they spend more, they do not necessarily get more.

## A Tale of Two Cities: Excess mortality in Nevada vs Utah,

	1959-68	
Age	male	female
< 1	42%	35
1-19	16	26
20-39	44	42
30-39	37	42
40-49	54	69
50-59	38	28
60-69	26	17
70-79	20	6

Source: Fuchs, 1974

Figure 2: Smoking Participation and Cigarette Prices, 1954-2004



Source: Cheng and Kenkel, 2010

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# Health behavior cont.

- ▶ Why has the distribution of body weight changed over time? (slideshow)
- ▶ Why do people smoke even when everyone knows smoking harms health?
- ▶ Would raising alcohol taxes reduce accidents? Violence? STDs?
- ▶ Would taxing sugared beverages reduce obesity?
- ▶ What is the government's role in these decisions?

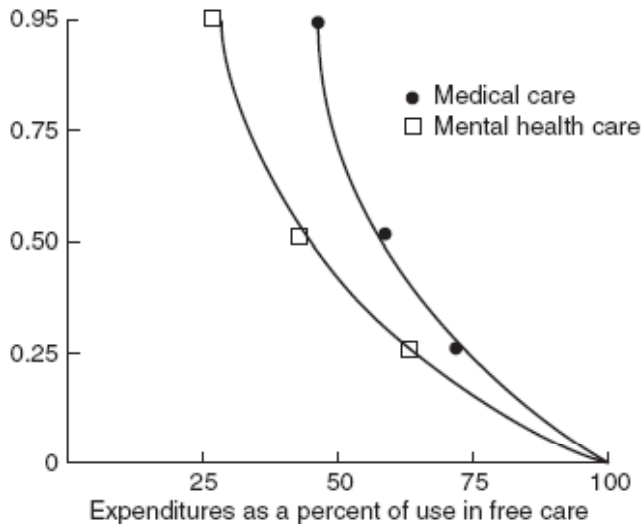
# Characteristics of economic analysis.

1. Emphasize **tradeoffs**. We cannot have everything we want.
2. Usually assume rationality (jargon!) in models.
3. Think at the margin. Example: efficacy of health care system.
4. Use of models to understand complex systems.
5. Heavy use of statistical evidence. Challenge: observational data.

# Example: RAND Health Insurance Experiment.

- ▶ What is the effect of price of care on quantity of care consumed?
- ▶ Price depends on insurance.
- ▶ Cannot just look at the correlation between insurance purchases and quantity.
- ▶ Experiment: randomize proportion of price paid by patient (“coinsurance rate”)

## Coinsurance rate



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# Why is health different?

- ▶ Uncertainty.
- ▶ Asymmetric information, e.g., your doctor knows more than you about treatments.
- ▶ Non-profit firms, government price setting.
- ▶ Restrictions on competition and other regulations.



# References.

- ▶ Cheng, K. and D. Kenkel (2010) "U.S. cigarette demand: 1944–2004," *B.E. Journal of Economic Analysis and Policy* Vol 10, Issue 1.
- ▶ Fuchs, V. (1974) *Who Shall Live? Health, Economics, and Social Choice*. New York: Basic Books.