## Public intervention in health care.

Public intervention in health care. Folland *et al* Chapters 18 and 19

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March 14, 2012

## Chap 18: Equity, efficiency and need.

Redistribution. The Second Bes Extra-welfarism "Need."

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#### Chapter 19

### Stuff in the textbook we're skipping.

Chapter 16: Health care labor markets and professional training.

Chapter 17. The pharmaceutical industry.

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Efficiency. Redistribution. The Second Best Extra-welfarism "Need." Health inequality

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- Why do governments intervene in health care markets? Should governments intervene in health care markets?
- ▶ When do markets do well and when do they do poorly?

#### Efficiency.

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- Recall positive analysis attempts to discover the way the world works. Normative analysis tells us what we ought to do.
- e.g. "Rent controls will reduce the supply of housing" is a positive statement. "...therefore, we ought not impose price controls" is a normative statement.
- Most economic analysis is positive. Here, we will more formally explore some of the normative reasons for government intervention.

#### Efficiency.

- ▶ Recall we refer to a situation as *Pareto efficient* if there is no way to make anyone better off without making at least one person worse off.
- ► This is a "no money left on the ground" type argument: we do not have to make interpersonal comparisons to define such states.
- the First fundamental theorem of welfare **economics** states that if markets are competitive, then the market equilibrium is Pareteo efficient.

- ► The Second fundamental theorem of welfare economics says that any Pareto efficient outcome can be achieved as a competitive equilibrium given an appropriate endowment.
- ▶ Loosely: the First Theorem says markets will not leave money lying on the sidewalk—all gains from trade will be exhausted. But we could reach one of infinite different equilibria depending on where we start. The Second Theorem says that in principle we can deal with matters of social justice through redistribution programs and otherwise leave the market alone.
- (graph: utility possibility frontier)

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- This is a powerful result since it suggests we can pursue policies which increase efficiency ignoring the distributive aspects.
- Example: a new technology increases production but puts some workers out of jobs. So long as, in principle, the winners could compensate the losers and still be ahead, government should not attempt to quash the technology.
- ▶ Example: one way to try to help the poor would be to subsidize the goods the poor tend to consume. The welfare theorems imply that that is a poor way to try to redistribute: if different people face different prices the outcome will not be efficient, so we are leaving money on the sidewalk. Better to just transfer income to the poor and let the market find prices.

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- ▶ A problem with this argument is that we cannot costlessly shuffle endowments around ("no lump sum taxes.") It costs the government more than a dollar to raise one dollar in tax revenue.
- ► There is, then, usually a tradeoff between equity and efficiency: if we try to redistribute the pie more equitably, we will make the pie smaller.

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- We have strong reasons to believe that the conditions under which the welfare theorems hold are wildly violated in health settings. The two most important failures are:
  - Information problems (uncertainty and asymmetric information) are prevalent in health care, as we have seen
  - 2. Externalities are common, e.g., communicable disease.

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- ▶ Difficult result: suppose we consider an idealized world in which the two welfare theorems hold. We then go into one of the many markets in the economy and introduce some distortion, for example, firms in this market generate pollution, a negative externality.
- Now consider any other market in this economy. Suppose we correct a problem in this market. Given that the other market is distorted, it is generally not true that this "correction" will improve welfare.

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- ► Example: we break up an auto workers union which had been holding wages artificially high. This lowers the marginal costs of the firm, which produces more pollution while making more cars.
- ▶ Upshot: we cannot assume that a policy which makes a given situation look more like a competitive market will improve welfare overall. We need to try to take the whole system into account.

- ▶ We have seen that insurance markets will sometimes work very badly due to information problems.
- ► Those problems may be enough to justify large scale intervention in health care.
- It may also be the case that there are external effects of health care consumption.
- e.g., suppose relatively wealthy people simply get a "warm glow" when the poor consume health care:
- Since the poor do not take the "warm glow" into account when choosing health care, there will be too little health care provided.
- (graph—positive externalities in health care)

- ► The preceding discussion is conventional neoclassical economic theory, which presumes that social outcomes can always be reduced to the behavior of individuals (which is not to say that individual behaviors cannot combine to produce emergent phenomena at the social level), and that individuals are the best judges of their own welfare.
- ➤ Some health economists and other analysts reject this presumption. They argue that social outcomes cannot be understood in terms of individual behavior, and/or that people are irrational and are not the best judges of their own welare.
- ▶ This is an "extra-welfarist" argument.

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#### "Need."

- Some people argue that government should provide the amount of health care people "need."
- ▶ But what do we mean by "need"? Need cannot be determined by physiology alone. beginenumerate
- ▶ Does it mean MB=0? MB=MC? Some minimum level of health care?
- We should change health care patterns when costs change.
- ► There will generally be many different ways of achieving a given health goal. Which way do we select?

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- We can define and measure health or health care inequality in much the same way we define income inequality.
- (graph-health inequality index)

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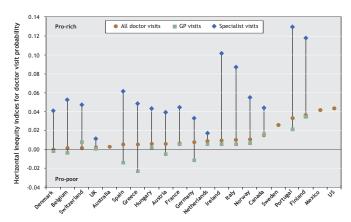


Fig. 4: Horizontal inequity (HI) indices for the annual probability of visiting a doctor in 21 OECD countries. Countries are ranked by HI for doctor visits. German general practitioner (GP) and specialist indices reflect data obtained in the 1996 ECHP.

#### Chapter 19

- ▶ This chapter provides and overview and summary of the main rationales for government intervention in health care.
- ▶ This builds on our previous discussion, and in most cases rehashes material from Econ 103.
- Recall: (1) governments spend tremendous amounts of money producing or financing health care delivery and (2) health care is heavily regulated. Why? Should governments be this deeply involved?

- Recall: A monopoly is thought to be inefficient because the monopolist produces too little. Does not have to be literally one seller; most forms of oligopoly also involve deadweight loss.
- ▶ In health care, we observe powerful monopolistic organization even in our, and the U.S.'s, heavily regulated and socially financed systems:
  - physician "unions" (AMA, CMA)
  - health care providers are licensed, which is a barrier to entry
  - many pharmaceutical products are patented, which is a government-mandated monopoly
  - ▶ large insurers (e.g. Blue Cross) may have monopoly power.

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#### Chapter

# Monopoly. Public goods. Externalities. Merit goods.



on my consumption).

Public goods.

(Note that a public good is NOT a good provided by the government, although it may be the case that such goods do wind up under government provision.)

▶ Recall: a *public good* is a good which is not excludable (cannot stop someone from consuming it if they refuse to pay) and non-rival (your consumption has no effect

Such goods will not be provided in efficient quantity by the market.

► Health care is not a public good: it is rival (e.g., if you use a physician's time, there is less of her time left for me) and excludable (you can be stopped from consuming health care).

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- ▶ But some aspects of health care could be considered public goods:
  - Some types of **information** could be considered public goods or nearly so. When you learn something it does not prevent me from learning that thing, and it might be costly to prevent others from learning that thing. Private markets may then provide too little information. Government can fund research or directly provide information (e.g., health effects of smoking).
  - Redistribution has public good aspects. Suppose all wealthier people feel happier when the poor have access to health care. Then 'the poor having access to health care' is like a public good and will be underprovided by a free market. Possible that everyone will be better off if the well off are taxed to provide health care for the poor.

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Aonopoly.

- Recall an externality occurs when A takes an action which involuntarily affects B but A neither compensates nor is compensated by B.
- ▶ This is NOT NOT NOT the correct definition:

  Nature pollinates all of the flowering plants, it is nature that decays material, returns it to the earth. It creates soil, participates in the nitrogen cycle, the carbon cycle, and the water cycle. All of these are economically valuable services performed by nature but economists called them externalities, by which they mean that they are not in the economic equation. David Suzuki

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#### Externalities cont

- In health, possibly the most important class of externalities arise from communicable disease.
- Any action you take which increases the probability you catch a communicable disease is a negative externality on me.
- Vaccination is an important example: if you fail to get vaccinated, you increase the probability I get sick. The market will provide too few vaccinations. (graph)
- Other behaviors which affect disease transmission. similarly have external effects. e.g., optimally, people would use more condoms and have fewer sexual partners than they do, because anything you do which increases the probability you catch a STD induces a negative externality.

Externalities.



consume more.

► This is paternalistic. We are claiming that someone would be better if with A rather than B even if the person chooses B over A.

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- e.g., government provides subsidies to the fine arts and not to Justin Bieber
- e.g., certain types of irrational behaviors create "internalities" and people may be better off if the government paternalistically alters their behavior ("I can't stop smoking by myself, thank you for raising tobacco taxes.")

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- We can explain, albeit perhaps not condone, many policies as responses to perceived merit goods.
- e.g., Drug prohibition and heavy tobacco and alcohol regulation may in part be a response to the idea that people cannot by themselves make the right decisions with respect to the consumption of alcohol and other drugs.

Government in the market

- ► Taxes and subsidies. Pigouvian taxes/subsidies can correct externalities and other problems.
- Public provision of health care and/or health insurance.
- Transfer programs.
- Regulation.

- ▶ A lot of economic theory looks something like: 'We have decided that the private market will provide Q=10, but that the efficient level is Q=15. If the government does something or other just right, like impose a tax of t=1.34, then we will get to the efficient level. So the government should intervene.'
- This would only follow if we had good reason to believe that if the government does intervene, it will intervene in just the right way.
- ▶ But we rarely have reason to believe that government will do everything just right.
- ► Therefore, we should at least consider what we expect government to *actually* do if it intervenes rather than prescribing intervention whenever we see a market failure.

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