Outline

• Course overview
• Is the market for health care different?

Special thanks to Amanda Kowalski and Jonathan Kolstad for his role in developing this course. Materials are used with permission.
Course Overview

1) Introduction
2) Health Care Cost, Quality, and Production
3) Economics of Demand:
   a) Health Care
   b) Health Insurance
4) Economics of Supply: Health Care
   a) Labor market of physicians/ nurses
   b) Competition, Pricing, and Quality
   c) Technology/ Innovation
   d) Pharmaceuticals
5) Health Reform and Public Health
Course Objectives (1)

....by the end of the course you should be able to:

• Specify how health differs from other markets
• Understand how economic factors impact the supply and demand for health and health care at the individual and firm/organization level
• Know how health insurance influences healthcare delivery (both in theory and in practice)
Course Objectives (2)

....by the end of the course you should be able to:

- Explain how hospitals, physicians and other important suppliers of health (pharmaceuticals) function and respond to economic incentives
- Have a well-developed, economically sound view on policy issues related to healthcare (health care reform, HC spending, etc)
Course Objectives (3)

....by the end of the course you should be able to:

• Apply toolkit of methods to address policy challenges in health economics
  – Analytic skills
  – Derive policy recommendations
General Approach of Course

• **Theory**: Use microeconomic theory to predict behavior under a set of assumptions (health care specific) → hypotheses that can be tested empirically
  – Take institutional details seriously
• **Evidence**: Summarize the descriptive and analytical evidence → consistent with which theory?
• **Application**: In light of the evidence, consider benefits / costs of different policy options.
## Course Evaluation

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Format</th>
<th>Contribution to Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm in class (05/08)</td>
<td>Multiple choice, essay question, analytical questions</td>
<td>35%</td>
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<tr>
<td>Final 06/09</td>
<td>Multiple choice and essay questions, analytical questions</td>
<td>55%</td>
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<tr>
<td>3 Problem Sets</td>
<td>Analytical Problem Sets</td>
<td>10%</td>
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</tbody>
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Other Logistics

• Office Hours
  – 9357 Bunche Hall or **Bunche 1221a before PS/exams**
  – Mondays 3:00-4:50 PM

• Optional Textbooks:
  • Bhattacharya, Hyde, and Tu. “Health Economics”
  • Folland, Goodman, and Stano, *The Economics of Health and Health Care* (7th ed.).
  • Comic Book: Gruber: “Health Care Reform”
  • Cutler “Your Money or Your Life”
Outline

• Course overview
• Is the market for health care different?
What makes health care different?
Unique feature #1:
Nature of medical care

• Name a typical product or service.
• How is medical care different in demand?
• In supply?
Differences

Demand

• Notion that health is a “right” at some level, fundamental component in human dignity (philosophers and ethicists)
• Health is a component of utility (economists)
• Equity is an important consideration.... but how much should we redistribute and at what cost to efficiency
Differences

Demand

• The demand for health services and goods is “derived” from underlying desire to have good health....so that we can work, play, go running pain-free, etc.

• Agency: “without an MD how do I know what I need?” vs. “how do I know my doctor did the right thing?”

• Insurance: “I’m not paying for it” vs. “everyone has a right to insurance”
Differences

Demand

• Life and death matters: it does, but other goods also affect survival probability, and we do make tradeoffs of probability of life for money at the margin. Side air bags?

• Willingness to pay to go from certain death to certain life is presumably high (infinite?)
Differences

Supply

• Local markets determine health care
• Regulated prices, quality regulations
• High fixed costs
  – Hospital machinery, Pharmaceutical R&D
    (intellectual property rights???)
Unique feature #2: Magnitude

Total National Health Expenditures, 1980 – 2005


Source: Centers for Medicare & Medicaid Services, Office of the Actuary
The 3 Trillion Dollar Question(s)

• Why are increases in medical care spending viewed as “worse” than increases in other kinds of spending in other industries?
• What differences between medical care and other goods and services account for these different views?
• ....more next week!
Unique feature #3: Uncertainty and Information Asymmetries

• **Multiple levels of Uncertainty:**
  – For each individual / patient:
    • Uncertainty over onset / severity of disease
    • Uncertainty about diagnosis
    • Uncertainty about efficacy of therapy for the particular patient
  – For MDs
    • Uncertainty over appropriateness of treatment
      – Variation across geographies / within geographies(!)
  – Insurers
  – Payers
Asymmetric Information

• Differences in information (or relative uncertainty) between key stakeholders:
  – Patients and physicians
    • Physicians know a lot more about your condition, diagnosis than individual
    • Reputation may or may not be possible to accurately incorporate in evaluating MD performance
      – Perhaps 25% of goods are bought in certain, informed, private settings—e.g., routine middle class pediatric care
    • Principal-Agent problem (general to economics)
      – Similar to mechanic working on your car (in some ways)
Asymmetric Information

- Differences in information (or relative uncertainty) between key stakeholders:
  - Patients and Managed Care / Insurers
    - Patients *may* know more about their health status (even if insurers attempt to screen)
    - Insurers try to synchronize benefits and premiums to appropriately sort patients
  - Almost any group in legal relationship has some sort of informational asymmetry – potential for inefficiency
    - Institutions develop to help address the info asymmetry problems
      - e.g. Physician ethical standards / quality standards
Unique feature #4: 
Role of Insurance

• Actually many other industries rely on insurance
  – Auto / Home / Life
• Insurance can improve welfare
  – People are risk averse
  – Health care cost is “heavy tailed”
  – Pool risk to spend a little for sure instead of a lot with low probability
• Comes at a cost
  – Moral Hazard (post-contract behavior shifts)
  – Adverse Selection (pre-contact behavioral sorting)
Unique feature #5: Externalities and Government Involvement

• Clinical Externalities
  – Vaccines and Herd Immunity
    • Social Net Benefit < or > Private Net Benefit

• Financial Externalities (Risk Pooling)
Unique feature #5: Externalities and Government Involvement

- **Government Financing**
  - Many systems in developed countries, government spends 90%+ share of total
  - Even in US—Almost 50%
    - Medicare: Government funded system addresses increased potential for adverse selection and resultant inefficiency
    - Medicaid: Transfer for low-income

- **Government Regulation**
  - Physicians: Licensing
  - Hospitals: Capital investment, Entry/Exit/Mergers
  - Supplies: Pharmaceutical FDA trials
  - Insurers: Mandates for coverage
Unique feature #6: 
Role of Non-profits

- 78% of **private** community hospitals are non-profit (not taxed)...this percentage shifts over time with closures and conversions due to regulatory incentives.

- Non-trivial numbers of health insurers, nursing homes, etc...

- Economics relies heavily on assumptions of profit maximization so these institutions require a unique perspective

Source: Statistical Abstract of the United States 2007