Title of Course: Healthcare Economics

Catalog Description and Credit Hours of Course:

This course analyzes the markets for health care and health insurance from the perspective of an economist. Health economics is an area of study within the field of applied microeconomics and places emphasis on the importance of individual choice among buyers and sellers, the role of prices as a rationing mechanism, the structure of market competition, and the possible inefficiencies associated with market and government failures. 3 credit hours

Prerequisites: Completion of EC215

Purposes or Objectives of the Course:

Upon completion of this course the student should be able to:

A. Understand how rational individuals make decisions regarding their demand for health and health care.

B. Understand how rational individuals choose the optimal amount of health coverage in the presence of uncertainty.

C. Understand the economics of the supply-side of health care as it relates to physicians and hospitals.

D. Discuss how market failures can cause inefficient outcomes in health care and health insurance markets.

E. Evaluate the level of competitiveness among health care providers and its implications on the prices paid by patients.

F. Describe the key features of the Medicaid and Medicare programs and be familiar with the findings of empirical studies regarding their effectiveness on insurance coverage and health care utilization.

G. Explain the key features of the private health insurance industry in the United States.

Student Learning Outcomes:

Upon completion of this course the students will be able to:

A. Use the Grossman model to explain how an individual’s demand for medical care is derived from his or her demand for health capital.

B. Using a theoretical framework and previous empirical studies, explain how health insurance affects an individual’s demand for medical care. The student’s discussion of previous studies must include the RAND Health Insurance Experiment.

C. Explain the different types of market structure and their implications on the price and quality of medical care as hospitals compete for patients, physicians, and contracts.
D. Explain the main details of the Medicare and Medicaid programs and discuss what past studies have observed regarding their impact on health insurance coverage, healthcare utilization, health outcomes, and labor force participation.

V. Expectations of Students:

A. Normal expectations, including two hours of time spent outside of class for each one hour in class

B. Periodic access to a microcomputer terminal for assigned activities

C. Complete a significant research project/paper if enrolled for graduate credit

VI. Course Content or Outline:

I. Introduction to health economics. (3 hours)
   1. General overview of the US healthcare system.
      a. The composition of health insurance coverage by type of coverage and age group.
      b. A brief description of the Medicaid and Medicare programs.
      c. A brief description of managed care organizations.
      d. The growth in US health spending over time.
      e. A comparison of the US with over countries.
   2. Important aspects of health economics (from the standpoint of an economist).
      a. The scale of government intervention.
      b. Risk/uncertainty in decision making.
      c. Asymmetric information between consumers and suppliers of healthcare services.
      d. Externalities.

II. The production of health capital. (3 hours)
   1. The production function for health capital.
   2. The marginal efficiency of investment in health capital.
   3. The optimal level of health capital.
   4. Quantifying health capital.
      a. Mortality-based measures.
      b. Morbidity-based measures.
   5. Empirical studies on health production functions.

III. The demand for medical services. (4.5 hours)
   1. Basic elements.
      a. The demand for medical services as a derived demand.
      b. Determinants of the demand for medical services.
      c. The price elasticity of demand.
   2. The effect of health insurance on the demand curve for medical services.
      a. Copayments.
      b. Deductibles.
      c. Maximum payment limits.
   3. The RAND Health Insurance Experiment
      a. General overview.
      b. Key empirical findings.
   4. Other empirical studies on the demand for medical services.

IV. The supply of medical services. (4.5 hours)
   1. The labor market for physicians.
      a. The physician as an entrepreneur
b. The physician as a worker
c. The aggregate supply of physicians
d. The physician labor market in an open economy

2. Physicians in the marketplace.
   a. Physician location decisions.
   b. Consumer search and market equilibrium.
   c. Advertising and the cost of information.
   d. The role of licensure.

3. Hospitals as suppliers of medical services.
   a. The structure of the hospital services industry.
   b. The hospital as an organization.
   c. A model of the profit-maximizing hospital.
   d. A model of the private not-for-profit hospital.
   e. Discussion: Do nonprofit hospitals behave differently from for-profit hospitals?

V. The demand and supply of health insurance. (4.5 hours)
1. Risk and insurance.
   a. Expected values.
   b. The marginal utility of wealth and risk aversion.
   c. Actuarially fair premiums.
2. The demand for insurance.
   a. The optimal level of insurance.
   b. The effect of premium changes.
   c. The effect of changes in expected loss.
3. The supply of insurance.
4. Adverse selection.
5. Moral hazard.

VI. Medical care and market structure. (4.5 hours)
1. Brief review of market structure.
   a. Perfect competition.
   b. Monopoly.
   c. Monopolistic competition.
   d. Oligopoly.
2. Competition among hospitals.
   a. Competing for patients.
   b. Competing for physicians.
   c. Competing for contracts.
4. Discussion: Does competition among hospitals raise or lower costs?

VII. Public health insurance programs in the United States. (4.5 hours)
1. The role of government as a payer.
   a. The rationale for the public provision of health insurance.
   b. Choices in the design of public payment systems.
2. The US Medicare Program
   a. Background.
   b. Hospital payment under Medicare.
   c. Physician payment under Medicare.
   d. Empirical evidence of the effects of Medicare on health insurance coverage, medical care utilization, and health outcomes.
e. Medicare and labor supply decisions.
f. Discussion on future cost projections.

3. The US Medicaid Program
   a. Background.
   b. The choice of Medicaid benefits vs. self-insurance vs. private insurance.
   c. Empirical evidence of the effects of Medicaid on health insurance coverage, medical care utilization, and health outcomes.
   e. Medicaid and labor supply decisions.

4. Other public insurance programs in the United States.
   a. The Veterans Administration and TRICARE.
   b. Examples of state-funded health insurance programs.

VIII. Private health insurance in the United States. (4.5 hours)
1. The structure of the private health insurance industry.
   a. The number, types, and size distribution of health insurers.
   b. Barriers to entry.
   c. Consumer information.
2. The dominant insurer pricing model.
3. Managed-care organizations and insurance premiums.
   a. What is managed care?
   b. Health maintenance organizations (HMOs).
   c. Preferred provider organizations (PPOs).
   d. Point-of-service (POS) plans.
   a. Guaranteed access and renewability.
   b. Portability.
   c. Community rating.

IX. The pharmaceutical industry. (3 hours)
1. Structure and regulation of the pharmaceutical industry.
2. The production of health and substitutability.
3. Drug pricing and profits.
4. Research and development and innovation.
5. Cost containment.
6. Empirical studies on Medicare Part D.

X. The long-term care industry. (3 hours)
1. The nature of long-term care.
   a. The need for long-term care.
   b. The structure of informal care providers.
   c. The structure of the nursing home care industry.
   d. The structure of the home health care and hospice industry.
2. The current state of long-term care financing.
3. The dual market model of nursing home pricing.
4. The performance of the long-term care industry in the US.
   a. Prices and expenditures.
   b. Utilization.
5. Discussion: Why do so few people buy long-term care insurance?

XI. Cost-benefit analysis in medical care. (3 hours)
1. Measuring benefits
   a. The revealed preference approach.
   b. The stated preference approach.
2. Measuring costs.
a. Opportunity costs.
b. Direct and indirect costs.
c. Transfer costs.
d. Future costs.
e. Sunk costs vs. incremental costs.

3. The use of cost-benefit analysis in decision making.

XII. Additional topics (subject to time and student interest). This unit also could be treated as a list of potential topics for student research papers and presentations. (3 hours)
1. The 2006 Massachusetts health insurance reforms.
2. The Patient Protection and Affordable Care Act of 2010 (PPACA).
3. Healthcare systems in other countries (emphasis on Britain, Canada, Germany, and Japan).
4. The war on cancer in the United States.
5. The war on AIDS in Africa.
6. Debate: Should kidneys and other organs be traded in markets?
7. Medical malpractice legislation and the supply of medical care.
8. The economics of obesity.
9. The economics of smoking, drinking, and other addictive behaviors.
10. Labor supply and employer-provided health insurance: Is there job lock?
11. Mental health parity laws.
12. Environmental regulations and health outcomes.

VII. Textbook(s) and/or Other Required Materials or Equipment:

A. Textbook


B. Periodicals

1. *Health Affairs*
2. *Journal of Health Economics*
3. *Health Economics*
4. *Health Services Research*

VIII. Basis for Student Evaluation:

A. Performance on regularly scheduled exams

B. Assignments the instructor considers necessary in meeting the objectives of the course

C. Class participation

IX. Grading Scale

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<th>Undergraduate</th>
<th>Graduate</th>
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<tr>
<td>90 – 100% = A</td>
<td>90 – 100% = A</td>
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<td>80 – 89.99% = B</td>
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<td>70 – 79.99% = C</td>
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<td>60 – 69.99% = D</td>
<td>&lt;70% = F</td>
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The weight of the evaluation criteria may vary according to each instructor and will be communicated at the beginning of the semester.
X. Academic Policy Statement:
Students will be expected to abide by the University Policy for Academic Honesty regarding plagiarism and academic honesty. Refer to:
http://www6.semo.edu/judaffairs/code.html

XI. Student with Disabilities Statement:
If a student has a special need addressed by the Americans with Disabilities Act (ADA) and requires materials in an alternative format, please notify the instructor at the beginning of the course. Reasonable efforts will be made to accommodate special needs.