

## Health Care Economics

**Course Title:** Health Care Economics

**Course Number:** GPHSC 584

**Semester:** Fall 2002

**Credits:** 3.0

**Course Hours:** Four contact hours per week for ten weeks. Some class hours will be devoted to a practicum involving exercises such as debates and discussion of issues in the literature.

**Course Description:** This course is specifically designed to foster an understanding by the student of the economic principles that drive the demand for and supply of medical care in the United States. After completing this course, the student should be adept at deducing the logic behind decisions made by physicians, hospitals, managed care organizations, and government as well as the choices made by consumers on individual and aggregate levels. The ultimate goal is for students to become better equipped at becoming effective decision-makers, themselves. Emphasis will be placed throughout the course on empirically sound and well-grounded economic theory, however applications of such theory in real situations that have occurred and/or predicted to occur in the future will be illustrated.

### Required Materials:

Philip Jacobs, John Rapoport. **The Economics of Health and Medical Care, 5<sup>th</sup> ed.** Gaithersburg, MD; Aspen Publishers, Inc., 2002.

There will be other materials, particularly articles from journals such as *Health Affairs*, *Medical Care*, *Inquiry*, *The Milbank Memorial Quarterly*, *JAMA*, *Social Science and Medicine*, and *New England Journal of Medicine* that will be distributed in class. Students are responsible for information in all required materials on the examinations and class exercises. Students will also be required to retrieve other materials relative to the completion of class assignments.

### Recommended Materials:

S. Charles Maurice, Christopher R. Thomas, Charles W. Smithson. **Managerial Economics, 4<sup>th</sup> ed.** Boston, MA; Richard D. Irwin, Inc., 1992. An EXCELLENT reference for applied microeconomics. Many examples from background lectures will be obtained from this text. Students having difficulty with microeconomic theory should consult this text, which will be placed on reserve in the library.

Charles E. Phelps. **Health Economics, 2<sup>nd</sup> ed.** Reading, MA; Addison-Wesley, Inc., 1997. One of the nation's premier health economists, Phelps provides very insightful and in-depth theoretical discussion to the concepts discussed in class, and MORE. This text will be placed on reserve in the library.

James W. Henderson. **Health Economics and Policy.** Cincinnati, OH; South-Western College Publishing, 1999. Henderson. A more simplified approach to health economics with numerous interesting insets and graphs that many would find very interesting to read, despite some shortcomings in fully developing the economic theory behind its policy implications. This text will also be placed on reserve in the library.

### **Behavioral Objectives**

1. Define the following terms: demand, supply, law of demand, law of supply.
2. Differentiate between changes in “demand” and changes in “quantity demanded” and identify factors which may facilitate changes in either.
3. Define and describe the effects of price floors and price ceilings.
4. Define the following terms: marginal benefit, marginal cost, net benefit, total benefit, total cost. Predict the optimal level of output for a firm.
5. Discuss the concept of utility; draw an indifference curve. Derive a demand curve. Discuss the “income” and “substitution” effects on demand.
6. Define demand elasticity. Calculate a coefficient of demand elasticity. Define cross-price elasticity; discuss the impact on demand and quantity demanded by goods or services that are “substitutes” and “complements”.
7. Differentiate between short-run and long-run production functions. Differentiate between economies of scale and economies of scope.
8. Explain the importance of studying health economics; Identify potential uses for knowledge gained in health economics.
9. Identify unique aspects of the health care market that differentiate it from other markets.
  - a. Understand the role of health insurance in making it unique
  - b. Understand the role of government in making it unique
  - c. Understand the role of uncertainty in making it unique
  - d. Understand the role of externalities in making it unique
10. Demonstrate the ability to treat health as a durable good in an economic sense
  - a. Identify a production function for health
  - b. Modify that production function by considering the role of lifestyle

11. Identify sources of medical inflation; discuss how and why medical inflation exceeds the Consumer Price Index
12. Depict the use of medical care in the creation of “health”
  - a. Define the following terms: marginal productivity, average productivity, extensive margin, intensive margin
  - b. Explain the relationship between medical practice variations on the extensive and intensive margins
13. Identify factors which affect the demand for medical care; predict the effect of certain occurrences (i.e., changes in income, recession, shifts in insurance policy) on the demand for medical care.
14. Evaluate the impact of elasticity on the demand for medical care.
15. Derive a demand curve for the demand for health insurance.
16. Discuss how a consumer chooses a specific type of health plan. Discuss the economic ramifications of moral hazard and adverse selection in the health insurance market.
17. Discuss the output of health care suppliers within an economic context. Describe the marginal product function of a health care supplier.
18. Identify and discuss the relationship between total variable cost, total fixed cost, total cost, marginal cost, and average cost functions for various health care suppliers.
19. Derive a model of supplier behavior in the health care market. Discuss how shifts may occur in supply curves.
20. Differentiate supplier behavior under FFS reimbursement, per-case reimbursement, per capita and salary reimbursement, and RBRVS reimbursement.
21. Discuss the impact of DRGs on hospital supply behavior.
22. Predict changes in the supply of health insurance.
23. Analyze demand and supply information simultaneously in a competitive market situation.
24. Discuss the role of value judgments in the allocation of resources.
25. Define the optimal level of output of medical care
26. Describe conditions related to alternative arrangements in health care delivery such as “free” and unlimited care and competitive markets with no philanthropy.

27. Identify specific goals that must be met for optimal health policy to be enacted.
28. Identify problems in the public health insurance model (i.e., Medicare, Medicaid). Predict the effects of various potential remedies for such problems (i.e., increased cost-sharing, capitation, Medigap premium taxes, etc.).
29. Discuss the impact of the following: antitrust legislation, mergers, monopolizations, integrated networks.
30. Describe the significance of market power for buyers, sellers, and third parties involved in the delivery of medical care.
31. Compare and contrast monopolistic markets with competitive markets in terms of price competition and nonprice competition.
32. Describe a model of supplier-induced demand for medical care.
33. Identify methods used to regulate suppliers of medical care. Evaluate the impact of regulation on the market for health care.

**Assignments and Evaluation:**

There will be a total of two examinations. Examinations may be comprised of essay questions, short answer, problems, graphing, and/or true/false questions. Students will complete one assignment designed to facilitate the learning process in this course, a formalized debate over a medical care delivery issue. Student teams will be assigned a topic and a position from which to base their case. All arguments and points made during the debate should be derived from basic economic theory and principles and supplemented by examples from the literature. The debate will be structured with timed opening arguments, points, counterpoints, and closing arguments. Specific details concerning group size, specific topics, and debate structure will be provided at a later time.

Students will also be assigned readings from the required text and from journal and newspaper articles. Students are expected to discuss them in an open forum during the subsequent class meeting. Students will be penalized for not participating in discussion. Additionally, all assigned readings are "fair game" on examinations.

**Grading:**

Grades for this course will be based on a total of 240 points that have been allocated to various course activities as follows:

<u>Examinations</u>		
Exam #1	=	65 points
Exam #2	=	65 points
<u>Assignments</u>		
Debate	=	75 points
<u>Class participation</u>	=	35 points*
<u>Total</u>	=	240 points

Final course grades will be based upon the following percentages:

A	=	89.5-100%
B+	=	84.5-89.4%
B	=	79.5-84.4%
C+	=	74.5-79.4%
C	=	69.5-74.4%
F	=	<69.5%

\*Class attendance and participation are REQUIRED. Based on participation in class, students will be assigned to one of five levels of class contribution:

1. Outstanding Contributor (90-100%)

Contributions in class reflect exceptional preparation. Questions and answers are insightful and indicate thoughtful analysis of the issues. The quality of the course would be greatly diminished without this person.

2. Good Contributor (80-90%)

Contributions in class reflect thorough preparation. Questions and answers usually provide some insight and are typically well thought-out. The course quality would be reduced significantly without this person.

3. Adequate Contributor (70-80%)

Contributions in class reflect minimally adequate preparation. Questions and answers reflect some thought but rarely provide any major insight. Without this person the quality of the course might be diminished slightly.

4. Unsatisfactory Contributor (60-70%)

Contributions in class, when presented, reflect little or no preparation. Questions and answers provide little insight. Without this person the quality of the course would be unchanged or might actually improve.

5. Non-Contributor (<60%)

This student does not contribute enough to make evaluation possible. If this person were not a member of the class, no one would even notice.

Any student who misses more than one class with an unexcused absence will automatically have their participation score reduced by 10 points.

## Tentative Schedule of Classes and Assignments

Sept. 11	Class policies and procedures; A review of micro-economics.	Introductory graphs, recommended readings from Maurice; J&R, Ch. 02, if necessary
Sept. 18	An overview & analysis of med care mkts; Transforming med care into health; Demand for med care	J&R, Ch. 03 and 10 Bonarens (pp71-8), Janicke et al., Fiscella et al., Diehr et al.
Sept. 25	Demand for medical care cont'd; special special topics and other applications	J&R, Ch. 04 Bausell et al; Motheral & Fairman; Berndt; Brook et al.
Oct. 02	The behavior of health care costs	J&R, Ch. 05 Schondelmeyer & Schafermeyer; Shireman & Kreling; Berk & Monheit
Oct. 09	Supply-side considerations	J&R, Ch. 06 & 07 Hemenway & Fallon; Fick et al.; Landon et al.; Fuchs & Sox
Oct. 16	<b>Midterm exam due</b> Concurrent consideration of supply & demand; the concept of market power	J&R, Ch.s 8.1-8.4 & 9 Jambulingam and Kreling
Oct. 23	Market power applications Incorporating value judgments	J&R, Ch. 12 Ile; Frank; Ubel et al.
Oct. 30	More on value judgments and health care reform	Butler; Schwartz; Safire; Woolhandler & Himmelstein; Mechanic
Nov. 06	<b>Class Debates</b>	
Nov. 13	Prescription drug policy	Huskamp et al.; Desselle; Burton et al.; Reinhardt
TBA	<b>Final Exam Due</b>	

## Readings

Bonnarens JK. The Consumer Price Index and prescription drug prices: Is there a relationship? *J Res Pharm Econ.* 1998; 9(2):71-81.

Fiscella K. Skepticism toward medical care and health care utilization. *Med Care.* 1998; 36(2):180-189.

Diehr P, Madden CW, Cheadle A, et al. Will uninsured people volunteer for voluntary health insurance? Experience from Washington State. *Am J Pub Health.* 1996; 86(4):529-32.

Janicke DM, Finney JW, Riley AW. Children's health care use—A prospective investigation of factors related to care-seeking. *Med Care.* 2000; 39(9):990-1001.

Bausell RB, Lee WL, Berman BM. Demographic and health-related correlates of visits to complementary and alternative medical providers. *Med Care.* 2001; 39(2):190-196.

Motheral B, Fairman KA. Effect of a three-tier prescription copay on pharmaceutical and other medical utilization. *Med Care.* 2001; 39(12):1293-1304.

Berndt ER. The U.S. pharmaceutical industry: Why major growth in times of cost containment? *Health Affairs.* 2001; 20(2):100-114.

Brook RH, Ware JE, Rogers WH, et al., and Newhouse JP. Does free care improve adults' health? *New Eng J Med.* 1983; 309(23):1426-34.

Schondelmeyer SW, Schafermeyer SW. Pharmacists' value-added services: What are their costs? *Burroughs Wellcome Co.* 1991:CE2-CE10.

Shireman TI, Kreling DH. Impact of third-party penetration and competition on community pharmacies' profits. *J Res Pharm Econ.* 2000; 10(1):7-28.

Berk ML, Monheit AC. The concentration of health care expenditures, revisited. *Health Affairs.* 2001; 20(2):9-18.

Hemenway D, Fallon D. Testing for physician-induced demand with hypothetical cases. *Med Care.* 1985; 23(4):344-349.

Fick DM, Waller JL, Maclean JR, et al. Potentially inappropriate medication use in a Medicare managed care population: Association with higher costs and utilization. *J Manage Care Pharm.* 2001; 7(5):407-413.

Fuchs VR, Sox, Jr. HC. Physicians' views of the relative importance of thirty medical innovations. *Health Affairs.* 2001; 20(5):20-42.

Landon BE, Zaslavsky AM, Beaulieu ND, et al. Health plan characteristics and consumers' assessments of quality. *Health Affairs*. 2001; 20(2):274-286.

Jambulingam TJ, Kreling DH. Relationship between the number of firms and generic price competition. *J Res Pharm Econ*; 1995. 6(3):39-59.

Ile MI. When health care payers have market power. *JAMA*. 1990; 263(14):1981-2,1986.

Frank RG. Prescription drug prices: Why do some pay more than others do? *Health Affairs*. 2001; 20(2):115-128.

Ubel PA, Baron J, Nash B, Asch DA. Are preferences for equity over efficiency in health care allocation "all or nothing"? *Med Care*. 2000; 38(4):366-373.

Butler SM. A tax reform strategy to deal with the uninsured. *JAMA*. 1991; 265(19):2541-44.

Schwartz LL. The medical costs of America's social ills. *The Wall Street Journal*.

Safire WS. Give the geezers their pills—But don't base future Medicare payouts on today's flush budgets. *Pittsburgh Post Gazette*, 1999.

Woolhandler S, Himmelstein DU. Paying for national health insurance—and not getting it. *Health Affairs*. 2002; 21(4):88-98.

Mechanic D. Disadvantage, inequality, and social policy. *Health Affairs*. 2002; 21(2):48-59..

Huskamp HA, Rosenthal MB, Frank RG, Newhouse JP. The Medicare prescription drug benefit: How will the game be played? *Health Affairs*. 2000; 19(2):8-25.

Burton SL, Randel L, Titlow K, Emanuel EJ. The ethics of pharmaceutical benefit management. *Health Affairs*. 2001; 20(5):150-163.

Desselle SP. Consumer preferences for pharmacy benefits design and methods to fund a Medicare prescription drug benefit. *J Manage Pharm Care*. 2002; 1(3):15-35.

Reinhardt UE. Perspectives on the pharmaceutical industry. *Health Affairs*. 2001; 20(5):136-149.