

SPH 276
Critical Assessment in Health Policy and Economics
2017 Winter Quarter
(as of February 12, 2017)

CRN Number: 41316

Credit: 2 units

Grade: Letter

Time: Monday 3:50-5:40pm

Location: MS1c, Room 130

Course Director: Byung-Kwang (BK) Yoo, MD, MS, PhD,
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Office hours: By appointment

Teaching assistant/Guest lecturer: None

Prerequisite: None

Course overview

This course aims to develop critical reading skills of the health policy and health economics literature, mainly following the microeconomic paradigm and analytical techniques. To develop these skills, students are expected to submit a critique of a paper, using a 1-page peer-review template (attached at the end of this proposal), as homework for six sessions. Some basic concepts of micro economic theory will be explained in the class to help critique the literature.

The objectives of the course are:

1. To be able to systematically critique the literature in health policy, particularly that in health economics.
2. To learn the major findings of classical papers and recent papers in health policy and health economics.
3. To understand the basic concepts of micro economics in application to health policies.
 - These concepts include diminishing rate of return, marginal benefits, marginal cost, opportunity cost and theory of supply and demand.

Each class consists of the instructor's lecture (1 hour) followed by a discussion (1 hour) lead by the instructor. Students are required to submit their critique of paper(s) prior to each class. In class, students are expected to discuss (a) how valid other students' critiques are and (b) how policy implications of each paper impact health care system reform.

All students will be expected to read all the required readings. Additional recommended readings are also listed.

Required textbook and recommended books

Required Textbooks:

None

Recommended Textbooks:

Health Economics:

- Sherman Folland, Allen C. Goodman, Miron Stano. The Economics of Health and Health Care: Pearson New International Edition, 7th Edition, Routledge, 2012, ISBN-10: 0132773694, ISBN-13: 978-0132773690
- Charles E. Phelps. Health Economics, 5th Edition, Routledge, 2012, ISBN-10: 0132948532 ISBN-13: 978-0132948531

Cost-effectiveness/benefit analysis:

- Drummond MF. et al. Methods for the economic evaluation of health care programmes. 4th ed. New York: Oxford University Press; 2015. ISBN-10: 0199665885; ISBN-13: 978-0199665884 (*required text book for spring course SPH 274 Economic Evaluation in Health Care*)
- Gold MR, Siegel J, Russell L, Weinstein M. Cost-effectiveness in health and medicine. New York: Oxford University Press; 1996, ISBN 0-195-10824-8

Public Finance:

- Gruber J, Public Finance and Public Policy 5th Edition, Publisher: Worth Publishers; 2015; ISBN-10: 1464143331; ISBN-13: 978-1464143335

Microeconomics theory:

- Hal R. Varian. Intermediate Microeconomics: A Modern Approach, 9th Edition, W.W. Norton & Company, 2014, ISBN-10: 0393123960, ISBN-13: 978-0393123968
- Kevin Wainwright, Alpha Chiang. Fundamental Methods of Mathematical Economics, 4th Edition, McGraw-Hill Education, 2004, ISBN-10: 0070109109, ISBN-13: 978-0070109100

Course Requirements

(1) Homework: Brief critique of a required-reading paper (form attached at the end of this syllabus; (updated February 6, 2017: please submit as PPT format (not PDF) available in SmartSite) due 3pm on the day before Session #3 - #8 (60%)

(2) Final paper due March 20 (Mon) 5pm (20%)

(3) Participation in class discussion (20%).

(NOTE) If you miss 3 or more sessions, you are required to write additional full critique of papers covered in the missed sessions, following the format of the final paper.

(NOTE: updated on January 24, 2017) Missing 1/30 or 2/27 is equivalent to missing 2 sessions

Detailed instruction on Homework and Final paper

(1) Homework:

- Please email your critique sheet to the instructor due 3pm on the day before Session #3 - #8.
- Also, please bring (a hard copy of) your critique sheet for a class discussion.
- Your critique is expected to list at least one strength and one limitation, and to apply the tools covered in the “past” session(s) of this course. I.e., there is no need to learn new economic theory/econometrics by yourself outside this course’s past sessions in writing your critique.
- Please be concise – do not exceed one page WITHOUT changing the form critique formats, e.g., Arial 11 font size.

(2) Final paper due March 20 (Mon) 5pm:

- Please submit your final paper through emailing to the instructor.
- Your final paper critiques one of papers in option (a) or (b)
 - (a) those listed as “Suggested Reading” (excluding Yoo BK, et al.. (2006) “Self-selection and Evaluation of Influenza Vaccination Effectiveness among Elderly.” Vaccine 24: 6374-75)

- (b) obtain the instructor's permission by March 13 (Mon) 4pm for a paper selected by you among original empirical studies published after 2007 in the following four journals: *Health Affairs*, *Health Services Research*, *Health Economics*, and *Journal of Health Economics*.
- Format
 - Font/Margin: 11 font Arial, 1 inch margin
 - Cover page: Name and Title of the critiqued paper
 - Critique sheet (summary): 1 page (single-spaced; bullets)
 - Main text details your critique sheet (summary) in 600-1,200 words (double-spaced) using the concepts covered in this course.

Course Structure

1/9/17 (M): Introduction of the course.
(#1) Health System Reform 1: Do health economists know how to control total health expenditures?

Suggested Readings:

Hsiao W, Kappel S, Gruber J. (2011) "Act 128: Health System Reform Design. Achieving Affordable Universal Health Care in Vermont." *Montpelier, Vermont, Vermont Legislature Joint Fiscal Office*.

Hsiao WC. (1994) "Marketization'--the illusory magic pill." *Health Econ* 3(6): 351-7.

Concepts of Economic Theory

What is the goal of economics?

What is public finance?

1/16/17 (M): Holiday (No class)

1/23/17 (M): Basic skills to critique a paper.
(#2) Determinants of health expenditure growth 1 – what are major determinants?

Required Readings:

Newhouse JP. (1992) "Medical Care Costs: How Much Welfare Loss?" *Journal of Economic Perspectives* 6(3): 3-21.

Suggested Readings:

Di Matteo L. (2005) "The macro Determinants of health expenditure in the United States and Canada: assessing the impact of income, age distribution and time." *Health Policy* 71(1): 23-42.

Smith S, Newhouse JP and Freeland MS. (2009) "Income, insurance, and technology: why does health spending outpace economic growth?" *Health Aff (Millwood)* 28(5): 1276-1284.

(*Not applicable for Final-paper critique*) Yoo BK, Grosse S and Frick K. (2006) "Self-selection and Evaluation of Influenza Vaccination Effectiveness among Elderly." *Vaccine* 24(40-41): 6374-75.

Basic skills to critique a paper

Criteria to distinguish major limitations from minor ones

Solutions for typical limitations

Methods in Economics

Assumptions of regression analysis (1)
Macro data analysis vs micro data analysis

1/30/17 (M): **NOTE: 2 homework critiques due on January 29 (for sessions #3 and #4)**
(#3) Determinants of health expenditure growth 2 – aging effect and prevention paradox

Required Readings:

Spillman B, Lubitz J. (2000) “The effect of longevity on spending for acute and long-term care.” *N Engl J Med.* 342: 1409-15.

Suggested Readings:

Lubitz J, Cai L, Kramarow E, Lentzner H. (2003) “Health, life expectancy, and health care spending among the elderly.” *N Engl J Med.* 349: 1048-55.

(Not applicable for Final-paper critique) Cutler DM. (2003) “Disability and the future of Medicare.” *N Engl J Med.* 349: 1084-5. *(Critique of the paper above)*

Baumgardner JR et al., (2012) “Cigarette taxes and the federal budget--report from the CBO,” *N Engl J Med.* Nov 29;367(22):2068-70

Garber AM, MaCurdy TE, McClellan MB. (1998) “Diagnosis and Medicare Expenditures at the End of Life.” Chapter in NBER book *Frontiers in the Economics of Aging*, David A. Wise, editor: 247-274.

Methods in Economics

Simulation analysis

Administrative data vs survey data

1/30/17 (M): **Determinants of health expenditure growth 3 – insurance effect**
(#4)

Required Readings:

Manning WG, Newhouse JP, Duan N, Keeler EB, Leibowitz A. et al. (1987) “Health insurance and the demand for medical care: evidence from a randomized experiment.” *Am Econ Rev.* 77: 251-77.

Suggested Readings:

Brook RH, Ware JE, Jr., Rogers WH, Keeler EB, Davies AR. et al. (1983) “Does free care improve adults' health? Results from a randomized controlled trial.” *N Engl J Med.* 309: 1426-34.

Concept in Economic Theory

Moral hazard

2/6/17 (M): **Determinants of health expenditure growth 4 – income effect**

(#5)

Required Readings:

Getzen TE. (2000) "Health care is an individual necessity and a national luxury: applying multilevel decision models to the analysis of health care expenditures." *J Health Econ.* 19: 259-70.

Suggested Readings:

Newhouse JP. and the Insurance Experiment Group. *Free for All? Lessons from the Rand Health Insurance Experiment.* Cambridge, Massachusetts, London, England: Harvard University Press; 1993; 208-211.

Concept in Economic Theory

Income elasticity

Price elasticity

2/13/17 (M): Determinants of health expenditure growth 5 – Is “physician-induced demand” serious enough?

(#6)

Required Readings:

Fisher E, Goodman D, Skinner J, Bronner K. (2009) "Health Care Spending, Quality, and Outcomes: More Isn't Always Better." *The Dartmouth Institute for Health Policy and Clinical Practice.*

Suggested Readings:

He D, Mellor JM. (2012) "Hospital volume responses to Medicare's Outpatient Prospective Payment System: evidence from Florida." *J Health Econ.* 31(5): 730-743.

Escarce JJ. (1992) "Explaining the association between surgeon supply and utilization." *Inquiry.* 29(4): 403-415.

Baker LC, et al. (2014) "Patients' preferences explain a small but significant share of regional variation in Medicare spending." *Health Affairs.* 33(6): 957-963

Shih YC, Tai-Seale M. (2012) "Physicians' perception of demand-induced supply in the information age: a latent class model analysis." *Health Economics.* 21(3):252-269

Shigeoka H, Fushimi K. (2014) "Supplier-induced demand for newborn treatment: evidence from Japan." *Journal of Health Economics.* 35:162-178.

van Dijk CE, van den Berg B, Verheij RA, Spreeuwenberg P, Groenewegen PP, de Bakker DH. (2013) "Moral hazard and supplier-induced demand: empirical evidence in general practice." *Health Economics.* 22(3):340-352.

(Not applicable for Final-paper critique) Yoo BK, Grosse S and Frick K. (2006) "Self-selection and Evaluation of Influenza Vaccination Effectiveness among Elderly." *Vaccine* 24(40-41): 6374-75.

Methods in Economics

Assumptions of regression analysis (2)

2/20/17 (M): Holiday (No class)

2/27/17 (M): (#7) NOTE: 2 homework critiques due on February 26 (for sessions #7 and #8) Determinants of health expenditure growth 6 – Does “long-term care” differ from “acute care”?

Required Readings:

Yoo BK, Bhattacharya J, McDonald KM, Garber AM. (2004) "Impacts of informal caregiver availability on long-term care expenditures in OECD countries." *Health Serv Res.* 39: 1971-92.

Suggested Readings:

Hurd MD, Martorell P, Delavande A, Mullen KJ, Langa KM. (2013) Monetary costs of dementia in the United States. *New England Journal of Medicine.* Apr 4 2013;368(14):1326-1334

Rabiner DJ, Stearns SC, Mutran E. (1994) The effect of Channeling on in-home utilization and subsequent nursing home care: a simultaneous equation perspective. *Health Serv Res.* 1994 Dec;29(5):605-22.

Concept in Economic Theory

How to assign monetary values for non-market goods/services

2/27/17 (M): (#8) Determinants of health expenditure growth 7 – How to measure the impact of the technology advancement on the medical expenditure?

Required Readings:

David M. Cutler and Mark McClellan
"Is Technological Change In Medicine Worth It?"
Health Affairs 20, no.5 (2001):11-29

Suggested Readings:

Cutler, David M., 2007. "The lifetime costs and benefits of medical technology," *Journal of Health Economics*, vol. 26(6), pages 1081-1100

Concepts in Economics

Cost-benefit analysis

Benefit to-cost-ratio (BCR) = Return on investment (ROI)

Discount rate 1

3/6/17 (M): Introduction of cost effectiveness/benefit analysis (Spring course SPH 274: Economic Evaluation in Health Care) (#9)

Required Readings:

Tengs TO, Adams ME, Pliskin JS, Safran DG, Siegel JE, Weinstein MC, Graham JD. (1995) "Five-hundred life-saving interventions and their cost-effectiveness." *Risk Analysis* 15(3): 369-390.

Concepts in Economics

Cost-benefit analysis vs cost-effectiveness analysis

Cost-effectiveness analysis

Incremental cost-effectiveness ratio

Discount rate 2

3/13/17 (M): Health System Reform 2: What kind of public policy do you recommend for the US health system reform based on what you learned in this course? Course evaluation (20+ min) (#10)

Required Readings:

Hsiao W, Kappel S, Gruber J. (2011) "Act 128: Health System Reform Design. Achieving Affordable Universal Health Care in Vermont." *Montpelier, Vermont, Vermont Legislature Joint Fiscal Office*. (also listed in Session #1)

Suggested Readings:

Gitterman D, Spetz J, Fellowes M. (2004) "The Other side of the ledger: Federal health spending in metropolitan economies." *A Discussion Paper Prepared for The Brookings Institution Metropolitan Policy Program* September 2004

Hsiao WC. (1994) "Marketization'--the illusory magic pill." *Health Econ* 3(6): 351-7. (also listed in Session #1)

Yoo BK, Kim M, Lin TC, Sasaki T, Ward D, Spetz J, (2016) "The effect of prior healthcare employment on the wages of registered nurses," *BMC Health Services Research*;16(1):412.

Yoo BK, Lin TC, Kim M, Sasaki T, Spetz J, (2016) "Effect of prior health-related employment on the registered nurse workforce supply," *Nursing Economics*; 34(1):25-34

Yoo BK, Kim M, Sasaki T, Ward D, Spetz J, (*in press*) "The impact of economic recession on registered nurse workforce supply in California," *Nursing Economics*

3/20/17 (M): Due: Paper submission 5pm

Form of a critique

SPH 276: Critical Assessment in Health Policy and Economics

Session #:

Name:

Your critique is expected to list at least one strength and one limitation, and to apply the tools covered in the “past” session(s) of this course.

SECTION 1. Overall decision as a peer-reviewer (please select one):

REJECT	MAJOR REVISION	MINOR REVISION	ACCEPT

SECTION 2. Major strength

1)
2)

SECTION 3. Major limitation(s) and their solution(s)

Major limitations	Solution(s) for limitations
1)	1)
2)	2)