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Swiss School of Public Health+: International Doctoral courses in Health Economics and Policy

### **Microeconomic Topics in Health Economics**

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Concept:	The course is intended for PhD students and other researchers interested in microeconomic topics in health economics. It consists of lectures complemented by discussions, solutions of problem sets and presentations.
Objectives	<ul style="list-style-type: none"><li>• To give students understanding of microeconomic models in health economics</li><li>• To make students competent in principle-agent models</li><li>• To motivate students to conduct their own microeconomic research</li></ul>
Evaluation and Credits	Three (3) credits (ECTS) can be obtained for this course. Students are assessed on <ul style="list-style-type: none"><li>(i) their presentation and discussion of a paper during the course,</li><li>(ii) by solving a take-home examination or by writing a paper developing a new microeconomic analysis or by applying the theory presented in the course to a data set.</li></ul>

#### **Outline**

0. Introduction
1. Optimal Health Insurance Contracts
2. Selection in Health Insurance
3. Physician Behavior and Payment
4. Provider Competition

#### **Course Description**

Microeconomic analysis is an important tool for health economics. This will be demonstrated for four selected topics which are at the core of health economics. For each topic, the lecture gives an overview. With the help of problem sets and presentations, more detailed aspects will be discussed. Participants should be familiar with microeconomic theory at an intermediary level. The course relies on research papers and the textbook

Zweifel, P., F. Breyer and M. Kifmann (2009). *Health Economics*, 2<sup>nd</sup> edition. Springer, New York et al.

## Contents

### Part 1: Optimal Health Insurance Contracts

This part of the course builds on Chapter 6 of Zweifel et al. (2009). We cover the theory of optimal health insurance with and without moral hazard. The aim is to characterize the optimal insurance contracts, in particular to what extent deductibles and coinsurance are optimal. Important papers are:

Chernew, M.E., Encinosa, W.E. & Hirth, R.A., 2000. Optimal health insurance: the case of observable, severe illness. *Journal of Health Economics*, 19(5), pp.585–609. Available at: <https://doi.org/10.1016%2Fs0167-6296%2800%2900061-8>.

Ma, C. -t. A. & Riordan, M.H., 2002. Health insurance, moral hazard, and managed care. *Journal of Economics & Management Strategy*, 11(1), pp.81–107.

Zeckhauser, R. (1970). Medical Insurance: A Case Study of the Tradeoff between Risk Spreading and Appropriate Incentives. *Journal of Economic Theory*, 2: 10-26.

### Part 2: Selection in Health Insurance

In health insurance markets, selection issues can appear in a number of ways. We review the theory of adverse selection and discuss the problem of advantageous selection. Furthermore, we present models dealing with selection issues in markets with community rating. Important papers are:

De Meza, D. & Webb, D.C., 2001. Advantageous selection in insurance markets. *RAND Journal of Economics*, 32(2), pp.249–262. Available at: <http://www.jstor.org/stable/2696408>.

Einav, L. et al., 2013. Selection on moral hazard in health insurance. *American Economic Review*, 103, pp.178–219. Available at: <http://dx.doi.org/10.1257/aer.103.1.178>.

Glazer, J. & McGuire, T.G., 2000. Optimal Risk Adjustment in Markets with Adverse Selection: An Application to Managed Care. *American Economic Review*, 90, pp.1055–1071.

Rothschild, M. & Stiglitz, J., 1976. Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information. *Quarterly Journal of Economics*, 90(4), pp.629–649. Available at: <https://doi.org/10.2307%2F1885326>.

### Part 3: Physician Behavior and Payment

This part of the course examines several agency problems of physician behavior. We consider physicians' role in cost control, quality provision, patient access and referral decision. For each scenario, we examine the implications for the design of optimal payment. Important papers are:

Barham, V. & Milliken, O., 2015. Payment Mechanisms and the Composition of Physician Practices: Balancing Cost-Containment, Access, and Quality of Care. *Health Economics*, 24(7), pp.895–906.

Chalkley, M. & Malcomson, J.M., 1998. Contracting for Health Services when Patient Demand Does Not Reflect Quality. *Journal of Health Economics*, 17, pp.1–19.

Eggleston, K., 2005. Multitasking and Mixed Systems for Provider Payment. *Journal of Health Economics*, 24, pp.211–223.

Emons, W., 2013. Incentive compatible reimbursement schemes for physicians. *Journal of Institutional and Theoretical Economics*, 159, pp.605–620. Available at: <http://www.ingentaconnect.com/content/mohr/jite/2013/00000169/00000004/art00003>.

Garcia Mariñoso, B. & Jelovac, I., 2003. GPs' payment contracts and their referral practice. *Journal of Health Economics*, 22(4), pp.617–635. Available at: <https://doi.org/10.1016%2Fs0167-6296%2803%2900008-0>.

Kaarbøe, O. and L. Siciliani (2011). Multi-tasking, quality and pay for performance. *Health Economics*, 20, 225-238.

Liu, T. & Ma, C. -t. A., 2013. Health insurance, treatment plan, and delegation to altruistic physician. *Journal of Economic Behavior & Organization*, 85, pp.79–96. Available at: <http://dx.doi.org/10.1016/j.jebo.2012.11.002>.

#### Part 4: Provider Competition

The market for health care and health insurance does not conform to the textbook model of perfect competition. Furthermore, competition often takes place in regulated settings, e.g., in the market for health insurance in Germany and Switzerland. In the hospital sector, the DRG system can be regarded as a form of yardstick competition. We discuss models of competition and their implications. Important papers are:

Brekke, K.R., Siciliani, L. & Straume, O.R., 2011. Hospital competition and quality with regulated prices. *The Scandinavian Journal of Economics*, 113(2), pp.444–469.

Glazer, J. & McGuire, T.G., 1993. Should Physicians Be Permitted to “Balance Bill” Patients? *Journal of Health Economics*, 11, pp.239–258.

Kifmann, M. & Siciliani, L., 2017. Average-Cost Pricing and Dynamic Selection Incentives in the Hospital Sector. *Health Economics*, 26(12), pp.1566–1582.