Course Introduction & Overview of Health Economics

EE 474 Health Economics

Semester 1/2012

About the Instructor

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- Education:
  - B.A. (Economics), McGill University, Canada
  - M.A. (Economics), University of British Columbia, Canada
  - Ph.D. (Major – Applied Economics, Minor – Health Services Research & Policy Administration), University of Minnesota, USA
- Fields of interest:
  - Health economics (particularly public health insurance)
  - Development economics
  - Population studies
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- Office hours: Wed & Fri, 2-3pm, and by appointment

Students' Background?

- Please introduce yourself:
  - Name & Nickname
  - Which year of the program are you at?
  - What makes you interested in health economics?
  - What do you expect from this class?
  - What's your future plan (particularly for 4^{th}-year students)?
  - Others?

Course Contents

Health
- Supply
- Demand

Health Care
- Demand
- Supply

Issues in Health Care Sector
- Efficiency and Equity
- Market Failures
- Government Intervention
- Economic Evaluation

Selected topics:
- Health and Development

Health Insurance
- Demand & Supply
- Asymmetric Information

Factors of HS Production
- Physicians
- Hospitals
- Health Care Labor
- Pharmaceutical Industry

Health Care at Macro Level
- Health Care Systems
- Health Care Financing
- Health Care Reforms

Course Organization

- Meet every Wednesday and Friday, 9:30 -11 am
- Lectures based style
  - Class participation are highly encouraged.
- Classroom *etiquette*:
  - No cellphone – The number and difficulty level of questions in the exam will increase according to the number of times cellphone rings.
  - Dress code: no shorts, sandals, tank-tops, or other informal wear .

Evaluation

- Quizzes (20%)
- Referee report (10%)
- Midterm exam (30%) - October 5, 2012
- Final exam (40%) – December 19, 2012

Quizzes

- There are 10 quizzes in total.
- For each quiz, there are two questions: one is based on the materials from the previous lecture; another is based on the assigned readings for the current lecture.
- You will be given 15 minutes at the beginning of the class to complete the quiz. No quiz will be accepted after the first 15 minutes of the class.
- The best 9 (out of 10) quizzes will be counted toward your final quiz grade.

Referee Report

- A summary and critique of one article from a list of selected journal articles or working academic papers
  - Summary: Objective, methods, findings, and conclusion
  - Critique: good points, weaknesses, suggestions, and/or comparison & contrast with other related papers
- The length of the report should not exceed 5 pages (double-space, 12 font).

Readings

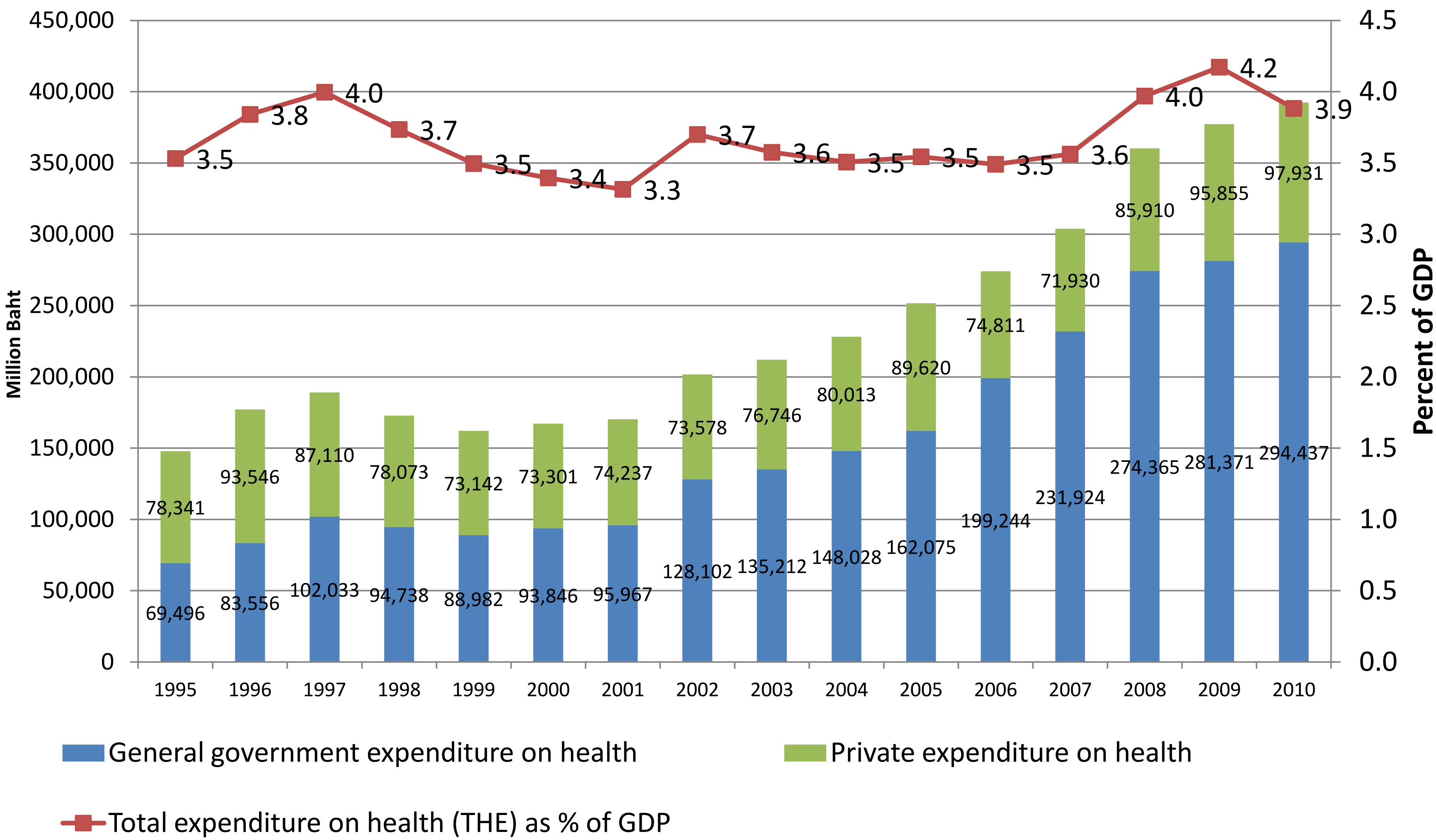
- Textbooks
  - Folland, S., Goodman, A. C., and Stano, M. (2012). *The Economics of Health and Health Care*, Seventh Edition. Pearson.
  - Phelps, S. (2010). *Health Economics*, Fourth Edition. Pearson.
  - Santerre, R.E., and Neun, S. P. (2007). *Health Economics: Theories, Insights, and Industry Studies*, Fourth Edition. Thompson.
- Other readings will be uploaded on B.E. Moodle.

Topics for Today's Lecture

- Why health economics?
- What is health economics?
- What do we study in health economics?

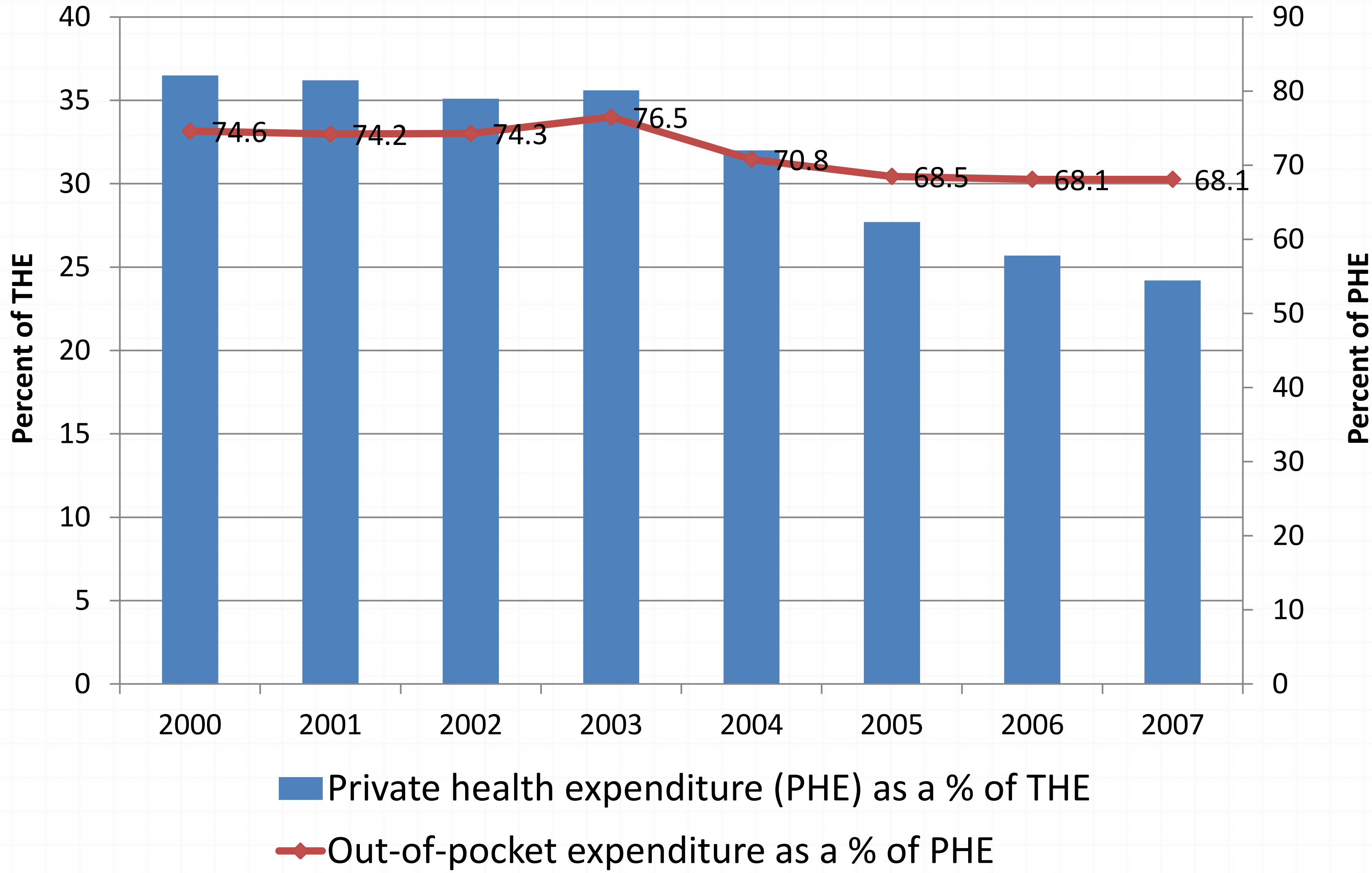
Why Health Economics?

Thailand's National Health Accounts



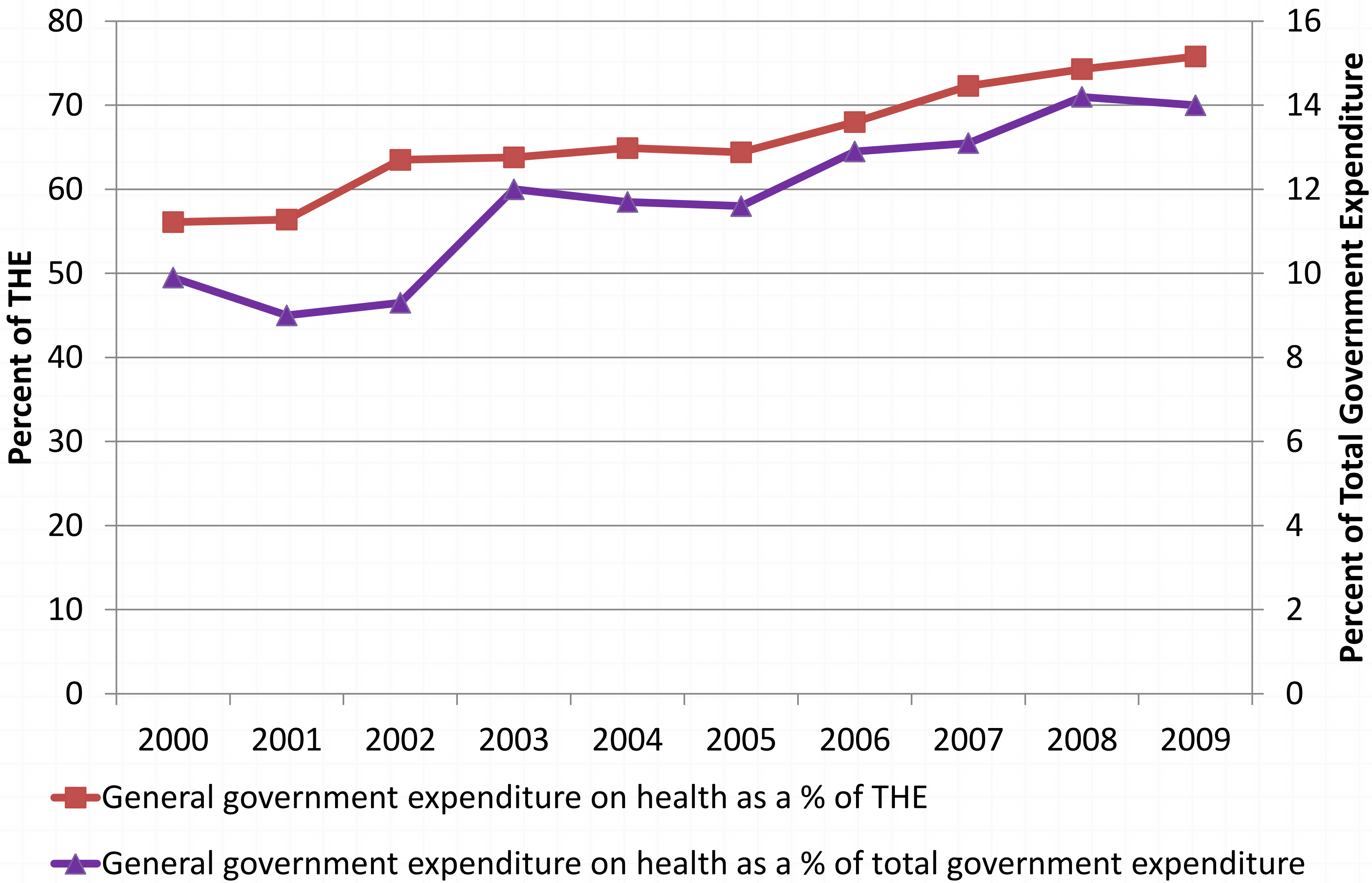
Source: WHO

Private Health Expenditures



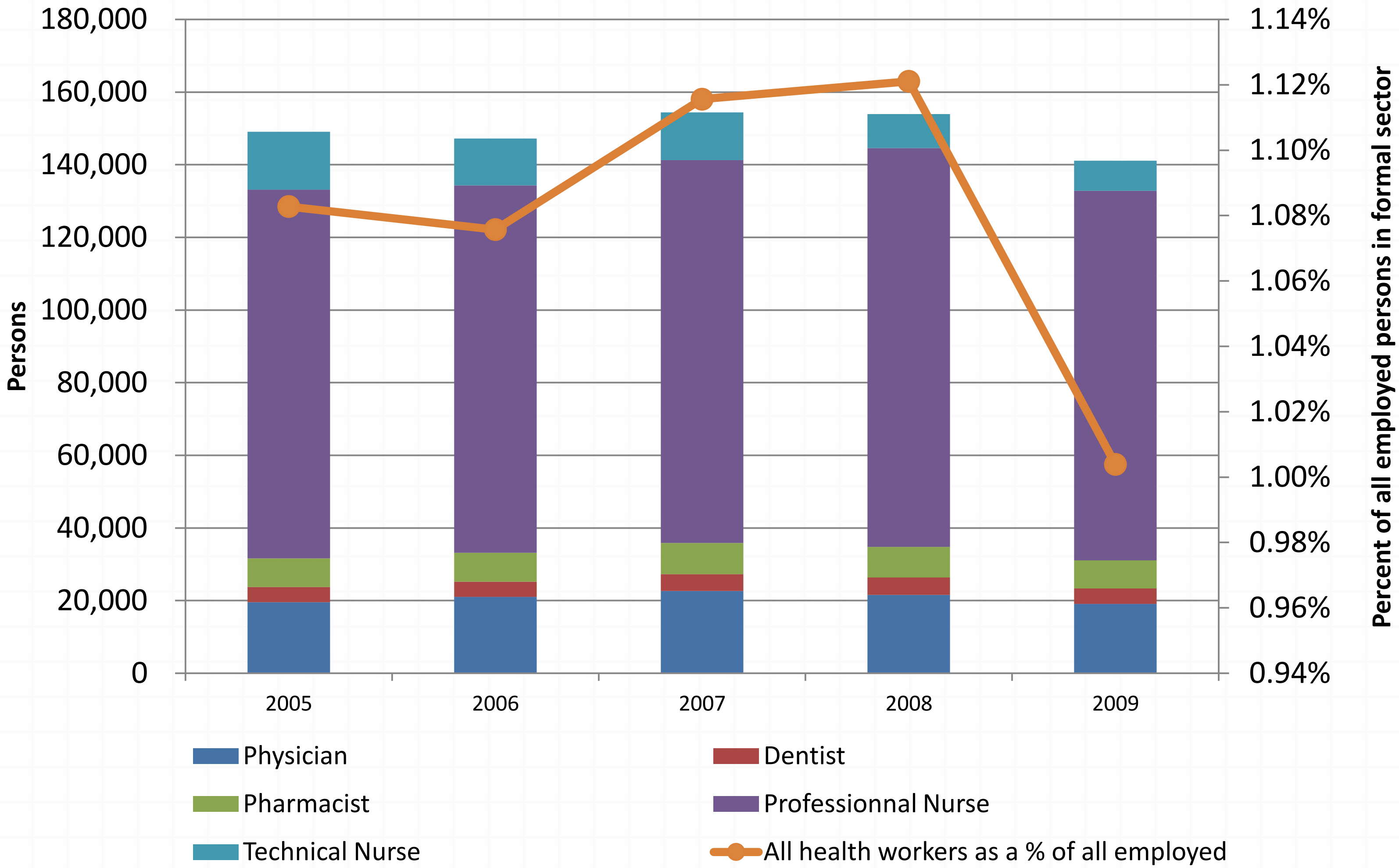
Source: WHO

Government Expenditure on Health



Source: WHO

Health Care Workers



Sources: - Office of the Permanent Secretary for Public Health, Ministry of Public Health
- NESDB

The Relevance of Health Economics

- Size and contribution of the health sector in the overall economy
  - Large proportion of the GDP
  - Important employment sector
  - Importance in personal spending
- National policy concerns
  - Large share of total government expenditure
- The economic side to other health issues
  - Health care treatment choice
  - Individual health seeking behavior
  - Government's role
  - Etc.

What is Health Economics?

*"**Health economics** … studies the supply and demand of health care resources and the impact of the health care resources on a population."*

The Mosby Medical Encyclopedia (1992, p.361)

Issues/Problems in Health Economics

- Examples:
  - What contributes to high infant mortality rates in some countries?
  - What are the impacts of private hospital mergers?
  - How does a certain national health policy affect the income distribution of the population?

- *Main Goal*:
  - To better understand the economic aspects of health care problems in order to provide corrective health policies

Health Economics Studies

Microeconomics

- Study the behavior of agents in the health economy
  - Demand and supply of health and health care
  - Price determination of health care resources
  - Demand for health insurance

Macroeconomics

- Look at the overall health economy
  - National Health Accounts
  - Health Care Financing

4 Basic Questions

1. What combination of health care and other goods and services should be produced in the economy?
2. What specific health care goods and services should be produced in the health economy?

} Allocative efficiency

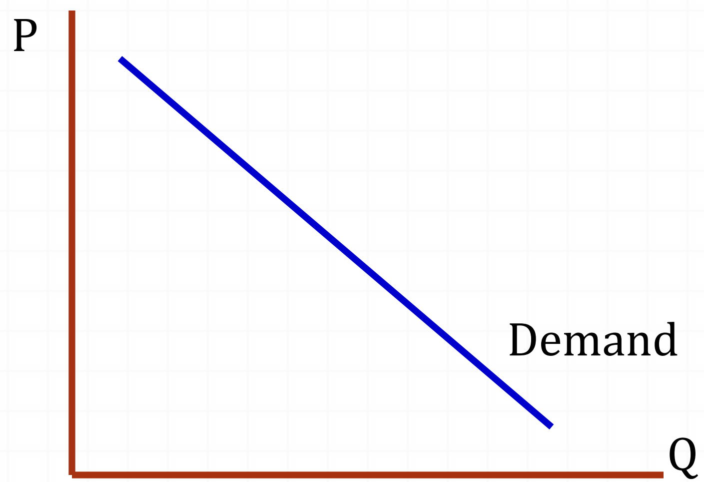
3. What specific health care resources should we use to produce the chosen health care goods and services? → Production efficiency
4. Who should receive the health care goods and services that are produced? → Pareto efficiency

Efficiency

- Allocative efficiency
  - Producing a level of output where the cost of producing the last unit of output equals to its values (i.e. MC=MB).
- Production efficiency
  - Achieved when the maximum level of output is being produced from a fixed amount of inputs.
- Pareto efficiency
  - A condition in which *no one can be made better off without making someone else worse off*.

Economic Analysis: Economic Models

- Simplify a complex problem in the real world
- Describe hypothesized relation between two or more variables
- Could be descriptive, graphical, or mathematical form
- Ex: $Q^d_{cigarette} = f(\text{Cigarette price})$



Economic Analysis: Empirical Tests

- Empirical testing of health economic theories
  - Use statistical techniques, *e.g. econometric analysis or multiple regression analysis*, to verify or quantify the magnitude of the relation among economic variables
  - Ex: $Q^{d}_{cigarette} = a + b*cigarette\_price + c*income + ...$
    - Empirical studies are used to determine the *sign* and *magnitude* of the parameter *b*.

2 Types of Analysis

- Positive Analysis
  - What is? What was? What happened?
  - Examples:
    - How much would a 10% increase in the price of cigarettes reduce the number of cigarettes consumed?
    - Does the universal health coverage policy reduce the income inequality in Thailand?
- Normative Analysis
  - What should be? What ought to be? Which is better?
  - Examples:
    - Should the government increase tax on cigarettes to prevent people from smoking?
    - Should Vietnam adopt a national health insurance program?

Topics for Next Class

Health and health care from health economists' perspective:

- How to measure health?
- How health care is different from other goods and services?