

The Hebrew University of Jerusalem

Syllabus

Health Economics - 95248

Last update 21-11-2024

HU Credits: 2

Degree/Cycle: 2nd degree (Master)

Responsible Department: Public Health - International Prog.

Academic year: 0

Semester: 1st Semester

Teaching Languages: English

Campus: Ein Karem

Course/Module Coordinator: Dr Gary Ginsberg, ex-Israeli ministry of health, WHO HQ and New York state Health Department.

Coordinator Email: gmginsberg@gmail.com

Coordinator Office Hours: By appointment

Teaching Staff:

Dr. Gary Ginsberg

Course/Module description:

The course is a basic course in health economics and is included in most curriculums in health management and economics programs. The course is intended for non-economists, and is based on a quantitative (and ethical) approach integrating the disciplines of economics and epidemiology an intuitive understanding. The reading materials are largely taken from medical and health services research journals.

Course/Module aims:

This course will provide an overview of the economics of health care systems. It will focus first on microeconomic analysis of the behavior of providers and consumers of health care. Secondly, the role of planning versus markets in health will be discussed. Finally, economic and epidemiological tools to prioritise potential health service interventions will be taught, based on measuring benefits that are monetarisable and those that improve quality of life.

Learning outcomes - On successful completion of this module, students should be able to:

- i) Understand the fundamentals of Health Economics, of how economic incentives affect the demand and the supply of health services as well as their impact on the health status of individuals and society.
- ii) Integrate Health Economics with applied aspects of health services evaluation and planning.
- iii) Apply Health Economics as a decision- making tool and as a promoter of efficiency in Health Services.

Attendance requirements(%):

100%

Teaching arrangement and method of instruction: Live or Zoom Lectures

Course/Module Content:

Need and Demand for Health services. Grossmans Model of Demand For Health.

Classical Economic consumer theory, Marginal Utility theory. Elasticity of Demand with respect to prices, income and time. Planning vs the Free Market. Cost-Effectiveness Analysis. Discounting. Net Present Value. Introduction to Cost-utility analysis. Cost-Benefit Analysis. Valuation of Human Life. Health Status Measurement. Resource Allocation Between Regions. Utilization of Health Services. Alternative Methods of Remunerating Physicians and Hospitals.

Required Reading:

*** Ginsberg GM.. *Assessing Evidence- The strengths and weakness of various ways of assessing outcomes, Cost-Effectiveness Analysis. In Assessing Evidence to improve population health and well-being (ed Aceljas C), Learning Matters , Exeter, UK, Chapter 7. 91-111, 2011.*

Recommended (non essential) Optional Reading:

*** Drummond M et al. (1987) *Health economics: An introduction for clinicians. Annals of Internal medicine, 107, 1, 88-92.*

*** Cullis J. & West P. (1979) *The Economics of Health, Martin Robertson.*

*** Drummond M et al. (1987) *Health economics: An introduction for clinicians. Annals of Internal medicine, 107, 1, 88-92.*

*** Ginsberg G.M. *Cost Effectiveness Analysis, Cost Benefit Analysis and the Value of life in Health Care and Prevention; in Costs and Benefits in Health Care and Prevention (eds: U.Laaser et al.), pp 6-19, Springer-Verlag Berlin, 1990.*

** Chisholm D, Baltussen R, Evans DB, Ginsberg G, Lauer JA, Lim S, Ortegón M, Salomon J, Stanciole A, Tan-Torres Edejer T. *What are the priorities for prevention and control of non-communicable diseases and injuries in sub-Saharan Africa and South East Asia? BMJ2012;344:e586*

** Ginsberg GM, Lauer J, Zelle S, Baeten S, Balthussen R. *Cost effectiveness of strategies to combat breast, cervical, and colorectal cancer in sub-Saharan Africa and South East Asia: mathematical modeling study. BMJ 2012;344:e614*

Additional Reading Material:

GENERAL TEXTS:

** *Web Reference for WHO Choice: www.who.int/evidence/cea*

*** Mills Anne (1985). Economic Evaluation of Health Programmes. Application of the Principles in developing Countries. World Health Statistics Quarterly, 38, 368-382.*

*** Fuchs Victor, Who shall Live ?, Basic Books. OR*

*** Abel Smith Brian (1979). Value for Money in the Health Services, Heinemann.*

*** Drummond M.F. and Stoddart, G.L. (1985) Principles of Economic Evaluation of Health Programmes. World Health Statistics Quarterly, 38, 355-367.*

HEALTH ECONOMICS LESSON I:

Grossmans Model of demand For Health

A macro -overview as to how environment, individual behaviour and use of health services can effect the health of a population.

Introduction to course --- What is economics?, what is health?, what is health economics? Can we measure health?

SUBSEQUENT LESSONS: (Order might change slightly)

Health Status Measurement.

Health Status indices and their construction, equivalence method, time trade off and standard gamble techniques.

Elasticities of Demand.

How utilization of health services varies with respect to income, prices and time taken for visit from both theoretical and empirical aspects.

Need for Health services.

Identifies various types of needs for health services - including normative, felt, comparative and expressed needs.

Demand for Health Services.

Description of the classical economic model of demand as applied to decisions to purchase or utilize health services.

Classical Economic Theory.

Classical Economic consumer theory, Marginal utility, Marginal Costs and Benefits.

Planning vs the Free Market

The pro's and con's of allocating health resources through the free market as opposed via a planned system, with special emphasis on the agency relationship and externalities.

Discounting / Net Present Value.

Methods of taking into account time differences of costs and benefits in project appraisal.

Cost Effectiveness Analysis.

Theory and Applied examples of Cost Effectiveness Analysis -including Renal Dialysis, Day Surgery vs Overnight Surgery, HIB vaccinations in Albania.

Cost Benefit Analysis.

Theory and Applied examples of Cost-Benefit Analysis - including vaccinations against hepatitis A.

Introduction to Cost-Utility Analysis

Theory and examples, including for reducing the burden from cervical and colorectal cancer. Actual detailed instructions of how to carry out such analyses form the basis of next terms optional course in □Epidemiological-Economic evaluations of Health Service Interventions.

Value of Human Life.

An exploration of the various ways of valuing human life in health studies including Human Capital and Willingness to Pay methods.

Resource Allocation Between Regions.

Different methods of allocating budgets to health regions, per-diem, fee-for service, by need, RAWP method.

Alternative Methods of Remunerating Physicians and Hospitals.

The advantages and disadvantages of fee-for service, per capita, per capita at risk and salaries are discussed with empirical evidence.

NOTE: IT IS ESSENTIAL TO UNDERSTAND THE POWERPOINT PRESENTATIONS.

□ BIBLIOGRAPHY

Health Status Measurement.

***** Culyer A.J. Need and the N.H.S. Martin Robertson, 1976. Chapter 4, 30-48.**

***** Sackett D.L. & Torrance G.W. (1978) The utility of different health states as perceived by the general public. Journal of Chronic Diseases, 31, 11, 697-704.**

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Kaplan R.M., Bush J.W. and Berry C.C. (1976). Health status: types of Validity and the index of well-being. Health Care Services Research, 11,478-507.

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Gudex C and Kind P. 1988. *The QALY Toolkit. Discussion Paper No.38. Centre For Health Economics, University of York.*

Need for Health services.

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*** Culyer A.J. Need and the N.H.S. Martin Robertson, 1976. Chapters 2 and 3 (part), 11-22.
Cullis and West, Chapter. 2, 24 49.

Grossmans Model of demand For Health

Grossman, M. (1972). *The demand for health: a theoretical and empirical investigation*. New York and London.
Columbia University Press.1972. (INTRODUCTION ONLY)

Grossman M. (1972), On the concept of health capital and the demand for health. *Journal of Political Economy*, 80,2, 223 255.

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*** Culyer A.J. Need and the N.H.S. Martin Robertson, 1976. Chapter 3 (part), 22-29.

** Cullis and West, Chapter. 4, 75 95.

** Ginsberg G., Israeli A., Cohen A. and Stessman J. Determinants of Emergency Room Utilization in Jerusalems 70 year old population. *Israel Journal of Medical Sciences* 1996; 32; 649-64.

Wilensky, G.R. and Rossiter, L.F. (1983). The relative importance of physician induced demand in the demand for medical care. *Milbank Memorial Fund Quarterly*, 61, 2, 252 277.

Elasticities of Demand.

*** Newhouse, J.P., Manning, W.G., Morris, C.N. et al (1981). Some interim results from a controlled trial of cost sharing in health insurance. *New England Journal of Medicine* 305, 25, 1501-1507.

*** Cullis and West, Chapter. 5, 96-111.

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Classical Economic Theory.

*** Cullis and West, Chapter 2, 24-49.

Culyer A. (1974) *The Economics of Social Policy*, Robertson, Chapter 2, 17-41.

7. Planning vs the Free Market

*** Maynard, A. (1979). *Pricing, Demanders and the Supply of Health Care. International Journal of Health Services*, 9, 1, 121-133.

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** Abel Smith Brian, *opus cit* Chapter 3, 32-44.

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*** Piachaud D. and Weddell, J.M. (1972) *The Economics of Treating Varicose Veins*. *International Journal of Epidemiology*, *** 1,3:287 294.

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Discounting / Net Present Value.

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*** Cullis and West, Pages 167 176.

Cost Benefit and Cost-Utility Analysis. (2.5)

*** WHO Guide to Cost-Effectiveness Analysis. Ed Tan-Torres Edejer et al. WHO Geneva 2003.

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*** Ginsberg G. *Cost Utility Analysis of Interventions to Reduce the Burden of Cervical Cancer in Israel Vaccine* 2013, 31S,146-152.

** Obiajunwa, Obichi G, Ginsberg G.M. *Cost-Utility Analysis Of Vaccinating Children Against Rota Virus In Nigeria. Researchjournal* □ *s Journal of Public Health* 2017;3;9:1-19

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Resource Allocation Between Regions.

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Grading Scheme:

Written / Oral / Practical Exam 100 %

Additional information:

The first part of the exam will consist of approximately 10 multiple choice compulsory qualitative and quantitative questions of 6 points each, followed by a choice of 4 quantitative questions from 6 worth 10 points each. Hand calculators will be allowed.

Around the fifth lecture, I will distribute a mock exam paper, so that you can practice answering the questions. During the last lecture, as part of the revision process I will provide model answers.