

Syllabus Module 208 Minor A. Evaluation of Public Health Programs

Module : 208	Evaluation of public health programs
UE coordinator	Dr Martine Bellanger
Dates	November 7 th to 10 th 2016
Credits/ECTS	3 (1 ECTS = 30 h student's work)
Duration	Number of days: 4
UE description	<p>This course is designed to introduce students to major issues related to assessment of public health strategies, interventions and their impact.</p> <p>The course is recommended for students who have an interest in better understanding how evaluation of public health programs may be used as a tool to set priorities when resources are scarce in both developed and developing countries. These may cover a range of cases from prevention of vector-borne diseases to the introduction of a new drug or a technology as well as influenza vaccination, or improvement of quality of life for senior practicing physical activity.</p> <p>The course will introduce students to some basic measures and sources of data used to study population-based programs or sample-based interventions. The course will also explore some economic and statistical methods that are commonly used to evaluate such strategies and programs.</p>
Prerequisites	Core curriculum in Social and Behavioral sciences and in biostatistics of MPH1 and intermediate modules of SBSPH
Course learning objectives	<p>At the completion of the module, the students should be able to:</p> <ul style="list-style-type: none"> - Identify the basic concepts that are used to evaluate strategies and programs and valuing health and quality of life - Use appropriate statistical techniques to answer empirical questions. - Be able to use and interpret basic measures, including, cost benefit ratio, Quality adjusted life year (QALY), incremental cost effectiveness ratio (ICER). - Be able to use mix methods for assessing public health projects/programs - Develop an awareness of contemporary social and contextual issues as they are covered in the press and on the internet (e.g. vaccination, prevention). - Make connections between evaluation, social consequences and policy implications.
UE Structure (details of sessions title/spaeker/date/duration)	<p>Session 1: Evaluation, concepts methods & purposes & decision analysis model, M. Bellanger, Public Health decisions related to health technologies: Martine Bellanger, Nov 10, 8H</p> <p>Session 2: Evaluation of PH programs in developing countries, & statistical methods for evaluation, Josselin Thuilliez, Nov 10, 8 hours</p> <p>Session 3: Mix Method for research and program evaluation, Jan Osterman, Nov 12, and Nov 13, 8 Hours</p> <p>Session 4: Decision analysis, Cost Benefit and Cost Effectiveness, Martine Bellanger, Nov 12 & Nov 13, 8 Hours</p> <p>Paper reading, Database analysis/case studies are part of the sessions.</p>
Course requirement	Students are expected to attend all lectures and make individual & group works. The class format will include some presentations, either individually or by groups. Students will be expected to prepare class, participate actively and discuss some issues related to methods studies and their application.

Grading and assessment	Class participation and individual work: 40% of the final grade Final Exam on Nov 28 th : 60% of the final grade
Location	George Sand EHESP Campus
Readings	<p>Books: recommended Economic Analysis in Health Care, Stephen Morris, Nancy Devlin, David Parkin, John Wiley & Sons, Editor, 2007</p> <p>Articles Martine Audibert, <u>Enjeux, approches et contraintes de l'évaluation dans les pays à faible revenu</u>. - Comptes Rendus Biologies, 2008. <u>Blundell, Richard, and Monica Costa Dias</u>. 2009. "Alternative Approaches to Evaluation in Empirical Microeconomics." Journal of Human Resources 44(3): 565–640. Michael P Kelly & David McDaid, Economic Appraisal of Public Health Interventions, Briefing paper, Health Development Agency (HAD) NHS, 2005 (Pdf to be downloaded) Luke S Acree, Jessica Longfors, Anette S Fjeldstad, Cecilie Fjeldstad, Bob Schank, Kevin J Nickel, Polly S Montgomery & Andrew W Gardner, Physical activity is related to quality of life in older adults, Health and Quality of Life Outcomes, 2006 4:37 (Open Access).</p> <p>Website: Students are also encouraged to peruse and explore on-line news and data sources, including (but not limited to) the following: OECD http://www.oecd.org/topicstatsportal/html DHS: http://www.measuredhs.com/ WHO : http://www.who.int/topics/en/ WHO: http://www.who.int/research/en/ NICE : http://www.nice.org.uk/ .</p>

Sessions 1 & 4	Concepts, methods, purposes & Synthesis for decision analysis model
Speakers	Dr. Martine M Bellanger Professor, Head of the MPH Programs, EHESP martine.bellanger@ehesp.fr
Session Outline	The session comprises two sub-sessions. The first is used for introducing students to basic principles of evaluation and complementary methods. The second sub-session is dedicated to use simple economic decision model as a tool for setting priority or choosing among health interventions/Strategies. Overview of the different types of program evaluation & applications Foundations of economic evaluation: classical welfarism versus extra welfarism Well being & valuing quality of life Cost calculations Modeling decision via decision tree and applications Sen's capability approach for resource allocation All sessions include individual or 2 by 2 students in class application of methods learnt
Learning Objectives	At the end of the sessions, students will be able to: <ul style="list-style-type: none"> - Identify the basic concepts used to evaluate strategies and programs and valuing health - Recapitulate economic evaluation in health care - Identify the nature of the incremental cost effectiveness ratio (ICER) - Apply ICER for decision making - Make simple model decision process related to economic evaluation and interpret findings - Identify and use costing methods and quality of life measurement - Use no welfare economic approach, such as capability-based approach to evaluate public health programs
Duration	2 sessions of 7,5 hours
Dates	Monday November 7 th and Thursday November 10 th 9:00 -1:00 pm & 2:00-5:45
Training methods	Lecture In class applications
Reading	Books: Morris, S., Devlin, N., Parkin, D. 2012 Economic Analysis in Health Care 2 nd Edition. John Wiley & Sons: Chichester Drummond, M.F., Sculpher, M.J., Torrance, G.W. O'Brien, B., Stoddart, G.L. 2005 Methods for the Economic Evaluation of Health Care Programmes. 3rd ed. Oxford University Press: Oxford Articles: Sen A, Human Rights & Capabilities, Journal of Human Development 2005, Vol. 6, No. 2. Impact/Outcome evaluation methods Gertler PJ, Martinez S, Premand, et al. Impact Evaluation in Practice, Interactive textbook 2010 available at http://www.worldbank.org/pdt Valente, T. Evaluating Health Promotion Programs. 2002. Oxford University Press: New York. p.87-162.
Validation	None (at the end of the Module)

Session 2	Evaluation of Public Health Programs in Developing countries: an overview
Speakers	Josselin Thuilliez, Research Fellow in Economics, CNRS, Centre d'économie de la Sorbonne, Université Paris 1 Josselin.Thuilliez@univ-paris1.fr
Session Outline	Basic concepts for strategies and program evaluation in developing countries Impact analysis & evaluation in developing countries: Methods & practice
Learning Objectives	At the end of the sessions, students will be able to: <ul style="list-style-type: none"> - Identify the main challenges of evaluation in developing countries. - Draw the main steps of impact analysis and evaluation. - Read critically an impact analysis. - Use retrospective surveys.
Duration	4 hours + Practices during case studies and computer lab sessions
Dates	
Training methods	Lecture In class applications
Reading	Blundell, Richard, and Monica Costa Dias. 2009. "Alternative Approaches to Evaluation in Empirical Microeconomics." <i>Journal of Human Resources</i> 44(3): 565–640. <u>Enjeux, approches et contraintes de l'évaluation dans les pays à faible revenu</u> . M Audibert - Comptes Rendus Biologies, 2008. Methods for the Economic Evaluation of Health Care Programmes, Third Edition, by Michael F.Drummond et al, Published by Oxford University Press.
Validation	None (at the end of the Module)

Session 2- bis	Evaluation of Public Health Programs in Developing countries: (ctd)
Speakers	Josselin Thuilliez, Research Fellow in Economics, CNRS, Centre d'économie de la Sorbonne, Université Paris 1 Josselin.Thuilliez@univ-paris1.fr
Session Outline	Overview of statistic methods used for evaluation
Learning Objectives	At the end of the session, students will be able to: <ul style="list-style-type: none"> - Identify when to use the different appropriate statistic methods when Selection biais exist - Conduct difference in difference analysis for measuring program impact
Duration	4:00 hours
Dates	
Training methods	Lecture In class applications & lab sessions
Reading	McClellan, M., B. McNeil and J. Newhouse, Does More Intensive Treatment of Acute Myocardial Infarction Reduce Mortality?. <i>JAMA</i> , 272(11):859-866, Sept. 1994. Sachs and Gallup (2001), The economic Burden of Malaria. <i>AJTMH</i> .
Session 3	Mixed-Method (MM) Evaluations

Speakers	Dr. Jan Osterman, PhD Associate Research Professor, Dule University, Global health Institute, USA jan.ostermann@duke.edu
Session Outline	Quantitative and qualitative methods have different strengths and there is an intuitive appeal to evaluation designs that combine what each have to offer. This session aims to familiarize students with the use of mixed methodology in research and in program evaluation. Mixed methods can be used to propose an evaluation design for a complex program.
Learning Objectives	At the end of the case study, students will be able to: <ul style="list-style-type: none"> - Identify the main conditions for using mixed methods within evaluations: i.e. recognize the appropriateness of the “fit” between the nature of the problem being assessed and the particular method - Illustrate how a mixed method approach can be used and both qualitative & quantitative data collected - Recognize the stages of the evaluation at which mixed methods are used - Discuss its application in a given case: strengths and challenges
Duration	8 hours
Dates	Wednesday November 9 th and Thursday November 10 th , 4 hours each session
Training methods	Lecture In class applications
Reading	<p><u>Articles:</u> Bamberger M, Rao V & Woolcock M. Using Mixed Methods in Monitoring and Evaluation: Experiences from International Development, The World Bank Development Research Group Poverty and Inequality Team, March 2010. Tashakkori A, Creswell JW. Mixed methodology across disciplines. Journal of Mixed Methods Research 2008;2(1):3-6.</p> <p><u>Books:</u> Creswell, J. W. & Plano Clark, V. L. (2011). Designing and conducting mixed methods research. (2 ed.) Thousand Oaks: SAGE Publications. Tashakkori, A. & Teddlie, C. (2011). Current developments and emerging trends in integrated research methodology. In A.Tashakkori & C. Teddlie (Eds.), SAGE Handbook of mixed methods in social & behavioral research (2 ed., pp. 803-826). Thousand Oaks: SAGE Publications.</p>
Validation	None (at the end of the Module)

Session (included in each day)	Cases studies,
Speakers	Martine M Bellanger, Josselin Thuilliez, Jan Osterman martine.bellanger@ehesp.fr Josselin.Thuilliez@univ-paris1.fr jan.ostermann@duke.edu
Session Outline	This session aims to give students cases to study and include: <ul style="list-style-type: none"> - Concepts and measurement issues - Use of data through examples and case studies, using STATA software - Interpretation of findings in terms of outputs and outcomes - Discussion
Learning Objectives	At the end of the case study, students will be able to: <ul style="list-style-type: none"> - Identify the research question/problem to be studied - Identify the right data & information - Use the right statistic methods for analyzing data - Identify the relevant health outcome measures - Develop an awareness of contextual issues influencing outcomes - Make connections between evaluation, resource allocation and public decisions
Duration	8 hours
Dates	Monday, Tuesday, & Thursday
Training methods	Group work, Computer lab, presentation when required
Reading	<p>Articles:</p> <p>Barrington, J., et. al., 2010, SMS for Life: a pilot project to improve anti-malarial drug supply management in rural Tanzania using standard technology, <i>Malaria Journal</i>, 9: 298</p> <p>Eisele, T. P., et. al., 2010, Protective efficacy of interventions for preventing malaria mortality in children in <i>Plasmodium falciparum</i> endemic areas, <i>International Journal of Epidemiology</i>, 39: 88–101</p> <p>Luke S Acree, Jessica Longfors, Anette S et al. Physical activity is related to quality of life in older adults; <i>Health and Quality of Life Outcomes</i> ; 2006 4:37</p> <p>Or Z. and Bellanger M.M, France: Homogeneous patient groups in a heterogeneous hospital market, in Reinhard Busse, Alexander Geissler, Wilm Quentin, Miriam Wiley (Eds) <i>Diagnosis Related Groups in Europe: Moving towards transparency, efficiency and quality in hospitals</i>, Open University Press 2011. .</p>