

Syllabus Module 208. Evaluation of Public Health Programs

Module: 208	Evaluation of public health programs
UE coordinators	Julien MOUSQUES
Dates	From December 4 th to 8 th 2023
Credits/ECTS	3 (1 ECTS = 30 h student's work)
Duration	Number of days: 5
UE description	<p>This course is designed to introduce students to major issues related to the evaluation of public policy (EPP) or intervention/program/strategies applied to Health Policy, Health Care Delivery, Health Technology, and Public Health particularly the evaluation of their impact.</p> <p>The course is recommended for students who have an interest in better understanding why and how EPP may be used and run, and those who will use the results of such evaluations in their work. We will talk about resource allocation and utilization, opportunity costs, efficacy and effectiveness, efficiency and others.</p> <p>This course aims to equip students with basic methodological knowledge and research skills to be able to critically appraise evaluation research. In the context of the rise of evidence-based policy and call for accountability, the course is designed to extend students' abilities to use evaluative knowledge carefully and critically.</p> <p>The course will mainly focus on Impact Evaluation based on positivist logic models (experimental and quasi-experimental designs) but will also give a broader perspective with other significant contributions coming from social sciences based on other models such as the realist model, that cross or combine qualitative and quantitative framework (Mixed Methods).</p> <p>The course will introduce students to some basic definitions, concepts, and design models. The course will also explore some economic and statistical methods that are commonly used to evaluate such policies, interventions or programs, notably experimental (RCT, regression discontinuity) and quasi experimental designs (group control and matching procedures, random and fixed effects, difference-in-differences estimates, instrumental variables).</p> <p>Examples from the fields of health policy, public health, and health economics will be used throughout the lectures, and students own paper reading.</p> <p>Example based on application with stata/r packages will also be part of the courses.</p>
Prerequisites	Core curriculum in Information Sciences and Biostatistics and in Epidemiology.

	Basic knowledge of Stata© or R statistical software.
<p>Course learning objectives</p>	<p><u>Competencies</u></p> <p>We follow the Who/Aspher Competencies in Public Health Document: https://www.euro.who.int/_data/assets/pdf_file/0003/444576/WHO-ASPHER-Public-Health-Workforce-Europe-eng.pdf</p> <ul style="list-style-type: none"> • 1.3 Uses vital statistics and health indicators effectively to increase knowledge and generate evidence about population health, including within at-risk and vulnerable groups • 1.4 Knows how to retrieve, analyse and appraise evidence from all data sources to support decision-making • 1.7 Designs and conducts qualitative and/or quantitative research that builds on existing evidence and adds to the evidence base for public health practice, involving relevant stakeholders in this process • 1.8 Evaluates local public health services and interventions, applying sound methods based on recognized evaluation models • 8.10 Performs health economic evaluation and assessment of a given procedure, intervention, strategy or policy <p><u>Learning objectives</u></p> <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 policies, interventions, programs and strategies and valuing health and quality of life • Identify the strengths and weaknesses of research designs for the evaluation of interventions and policies • Critically appraise evaluation reports, research articles, and evaluation study protocols • Assess the strength of a body of evidence and its potential policy implications
<p>UE Structure</p>	<p>Session 1: Definition, Concepts, Methods and Purposes of Evaluation of Public (or intervention/program) Policy (EPP) applied to Health</p> <p>Session 2: Causal inference methods for Evaluation of Public Policy: Experimental & quasi-experimental design</p> <p>Session 3: Causal inference methods for Evaluation of Public Policy: Experimental & quasi-experimental design: difference-in-differences design DID</p> <p>Session 4: Causal inference methods for Evaluation of Public Policy: Experimental & quasi-experimental design: instrumental variables (IV), regression design (RD)</p>

	<p>Session 5: Q&A and Mixed Method Design (MMD) for Policy Evaluation based on own research example:</p> <p>15 hours of lectures and 15 hours on commented key pPaper reading, case studies; and problem sets using Stata statistical software are part of the sessions</p>
Course requirement	<p>Students are expected to attend all lectures and engage in both individual & group work.</p> <p>Students will be expected to prepare class, participate actively and discuss some issues related to methods studies and their application.</p>
Grading and assessment	<p>Final test 100%.</p>
Location	<p>EHESP Building 20 Avenue George Sand, 93210 La Plaine Saint Denis (Greater Paris)</p>
Course policy	<p>Attendance & punctuality</p> <p>Regular and punctual class attendance is a prerequisite for receiving credit in a course. Students are expected to attend each class. Attendance will be taken at each class.</p> <p>The obligations of attendance and punctuality cover every aspect of the course: - lectures, conferences, group projects, assessments, examinations, as described in EHESP Academic Regulations http://mph.ehesp.fr EHESP Academic Regulation Article. 3).</p> <p>If students are not able to make it to class, they are required to send an email to the instructor and to the MPH program coordinating team explaining their absence prior to the scheduled class date. All supporting documents are provided to the end-of-year panel.</p> <p>Students who miss class are responsible for content. Any student who misses a class has the responsibility for obtaining copies of notes, handouts and assignments. If additional assistance is still necessary, an appointment should be scheduled with the instructor. Class time is not to be used to go over material with students who have missed class.</p> <p>Lateness: Students who are more than 10 minutes late may be denied access to a class. Repeated late arrivals may be counted as absences (See http://mph.ehesp.fr EHESP Academic Regulation Article. 3 Attendance & Punctuality)</p> <p>Maximum absences authorized & penalty otherwise</p> <p>Above 20% of absences will be designated a fail for a given class. The students will be entitled to be reassessed in any failed component(s). If they undertake a reassessment or they retake a module this means that they cannot normally obtain</p>

	<p>more than the minimum pass mark (i.e. 10 out of 20)</p> <p>Exceptional circumstances</p> <p>Absence from any examination or test, or late submission of assignments due to illness, psychological problems, or exceptional personal reasons must be justified; otherwise, students will be penalized, as above mentioned. Students must directly notify their professor or the MPH academic secretariat before the exam or before the assignment deadline. Before accepting the student's justification, the professor or the MPH academic secretariat has the right to request either a certificate from the attending physician or from a psychologist, or from any other relevant person (See http://mph.chesp.fr EHESP Academic Regulation Article 4 Examinations).</p> <p>Students are required to conduct themselves according to professional standards, eating during class time is not permitted during class time, such as course or group work.</p>
Valuing diversity	<p>Diversity enriches learning. It requires an atmosphere of inclusion and tolerance, which oftentimes challenges our own closely-held ideas, as well as our personal comfort zones. The results, however, create a sense of community and promote excellence in the learning environment. This class will follow principles of inclusion, respect, tolerance, and acceptance that support the values of diversity.</p> <p>Diversity includes consideration of: (1) life experiences, including type, variety, uniqueness, duration, personal values, political viewpoints, and intensity; and (2) factors related to "diversity of presence," including, among others, age, economic circumstances, ethnic identification, family educational attainment, disability, gender, geographic origin, maturity, race, religion, sexual orientation and social position.</p>
Course evaluation	<p>EHESP requests that you complete a course evaluation at the end of the school year. Your responses will be anonymous, with feedback provided in the aggregate. Open-ended comments will be shared with instructors, but not identified with individual students. Your participation in course evaluation is an expectation, since providing constructive feedback is a professional obligation. Feedback is critical, moreover, to improving the quality of our courses, as well as for instructor assessment.</p>

Sessions 1	<p align="center">Concepts, Methods and Purposes of evaluation research of program/intervention/policy applied to Health Policy and, Health Care Delivery</p>
Speakers	<p>Julien Mousquès, PhD, Economics,</p>

	<p>Lecturer-Researcher, Health Economic, EHESP, julien.mousques@ehesp.fr</p> <p>Director of Research, Health Economic, IRDES, mousques@irdes.fr</p>
Session Outline	<p>The session comprises two sub-sessions. The first is used for introducing students to basic principles of evaluation of public policy (and intervention or program) and related methods in the field of social sciences.</p> <p>Issues related to the evaluation of public policy (EPP) or intervention/program/strategies applied to health</p> <p>Main analytical models in the social science field</p> <p>Focus on the positivist and logic models</p> <p>The contribution from other model (realist model, constructivist,...)</p> <p>Add value of Mixed Method design</p> <p>The second sub-session is dedicated to active reading, and Q&A of important paper in the filed</p>
Learning Objectives	<p>At the end of the sessions, the students should be able to:</p> <ul style="list-style-type: none"> • Identify the basic concepts that are used to evaluate policy, intervention, programs and strategies • Identify the strengths and weaknesses of research designs for the evaluation of interventions and policies • Critically appraise evaluation reports or articles or design evaluation studies protocol • Assess the strength of a body of evidence and its potential policy implications
Duration	1 sessions of 6 hours
Dates	December 4
Training methods	Lectures and reading
Validation	Final exam

Reading	<p>Raftery J, Hanney S, Greenhalgh T, et al. Models and applications for measuring the impact of health research: update of a systematic review for the Health Technology Assessment programme. Southampton (UK): NIHR Journals Library; 2016 Oct. (Health Technology Assessment, No. 20.76.)</p> <p>Skivington al. (2021), A new framework for developing and evaluating complex interventions: update of Medical Research Council guidance. BMJ, 374: n2061. 30 Sep. 2021, doi:10.1136/bmj.n2061</p> <p>Alkin, M. C., & King, J. A. (2017). Definitions of Evaluation Use and Misuse, Evaluation Influence, and Factors Affecting Use. American Journal of Evaluation, 38(3), 434-450. https://doi.org/10.1177/1098214017717015</p> <p>Pawson, R., & Manzano-Santaella, A. (2012). A realist diagnostic workshop. Evaluation, 18(2), 176-191. https://doi.org/10.1177/1356389012440912</p> <p>Additional suggested reading</p> <p>Rossi PH, Lipsey MW, Henry GT (2019). Evaluation – A systematic Approach, Sage, 8th Edition, 342 pages.</p> <p>Pawson R. (2013). The science of evaluation – A realist Manifesto, Sage, 216 p.</p> <p>Bamberger, et al 2006, RealWorld Evaluation, Sage. World Bank, 2016, Impact Evaluation in Practice.</p>
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Session 2-3-4-5	Causal inference methods for Evaluation of Public Policy: Experimental & quasi-experimental design
Speakers	<p>Julien Mousquès, PhD, Economics, Lecturer-Researcher, Health Economic, EHESP, julien.mousques@ehesp.fr Director of Research, Health Economic, IRDES, mousques@irdes.fr</p>
Session Outline	<p>Program evaluation: distinction between experimental and quasi-experimental design</p> <p>Presentation of the canonical models and difference indicators</p> <p>Randomization</p> <p>Conditional independence</p> <p>Matching</p> <p>Difference-in-differences</p> <p>Instrumental variables</p> <p>Regression discontinuity</p>

Learning Objectives	<p>At the end of the sessions, students will be able to:</p> <ul style="list-style-type: none"> - Identify the main steps and usual framework of the causal and ex post impact analysis for evaluation, including the assumptions that must be met in order to draw causal conclusions. - Identify the main challenges of impact evaluation - Critically read an impact analysis. - Use retrospective surveys for impact evaluation.
Duration	<p>3 days with 3h each day for lecture and 3 hours of active reading of key papers and application based on open data set and R</p> <p>1 final day with final wrap up and Q&A and illustration of research from the speaker own research</p>
Dates	December 5 to 7 th
Training methods	Lectures alternate with reading and Q&A and R application
Reading	<p>Basu, S., Meghani, A., & Siddiqi, A. (2017). Evaluating the Health Impact of Large-Scale Public Policy Changes: Classical and Novel Approaches. <i>Annual review of public health</i>, 38, 351–370. https://doi.org/10.1146/annurev-publhealth-031816-044208</p> <p>Abadie, Cattanao. <i>Econometric Methods for Program Evaluation</i>. <i>Annual Review of Economics</i>. Vol. 10:465-503 (Volume publication date August 2018) https://doi.org/10.1146/annurev-economics-080217-053402</p> <p>Stokes, J., Shah, V., Goldzahl, L., Kristensen, S. R., & Sutton, M. (2021). Does prevention-focused integration lead to the triple aim? An evaluation of two new care models in England. <i>Journal of health services research & policy</i>, 26(2), 125–132. https://doi.org/10.1177/1355819620963500</p> <p>Rose, T. C., Daras, K., Manley, J., McKeown, M., Halliday, E., Goodwin, T. L., Hollingsworth, B., & Barr, B. (2023). The mental health and wellbeing impact of a Community Wealth Building programme in England: a difference-in-differences study. <i>The Lancet. Public health</i>, 8(6), e403–e410. https://doi.org/10.1016/S2468-2667(23)00059-2</p> <p>Collin, D. F., Shields-Zeeman, L. S., Batra, A., White, J. S., Tong, M., & Hamad, R. (2021). The effects of state earned income tax credits on mental health and health behaviors: A quasi-experimental study. <i>Social science & medicine</i> (1982), 276, 113274. https://doi.org/10.1016/j.socscimed.2020.113274</p> <p>Harrison, J. M., Kranz, A. M., Chen, A. Y., Liu, H. H., Martsolf, G. R., Cohen, C. C., & Dworsky, M. (2023). The Impact of Nurse Practitioner-Led Primary Care on</p>

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Gilles de la Londe, J., Afrite, A. & Mousquès, J. How does the quality of care for type 2 diabetic patients benefit from GPs-nurses' teamwork? A staggered difference-in-differences design based on a French pilot program. *Int J Health Econ Manag*. 03/2023 <https://doi.org/10.1007/s10754-023-09354-z> [CNRS 37: 2 ; HCERES : A]

Duchaine, F., Chevillard, G. & Mousquès, J. (2022). L'impact du zonage conventionnel sur la répartition territoriale des infirmières et infirmiers libéraux en France. *Revue d'Économie Régionale & Urbaine*, o. 5, 2022, pp. 747-777, 12/2022, <https://doi.org/10.3917/reru.225.0747>

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	<p>impact of multi-professional group practice in France. The European Journal of Health Economics. 10/2020. https://doi.org/10.1007/s10198-020-01226-4</p> <p>Loussouarn C., Franc C., Videau Y., Mousquès J. Impact de l'expérimentation de coopération entre médecin généraliste et infirmière Asalée sur l'activité des médecins. Revue d'économie politique. Les 39es Journées des Économistes français de la Santé, vol. 129, n° 4, 489-524, 2019/07-08. https://doi.org/10.3917/redp.294.0489</p> <p>Chevillard G., Mousquès J., Lucas-Gabrielli V., Rican S. Has the Diffusion of Primary Care Teams in France Improved Attraction and Retention of General Practitioners in Rural Areas? Health Policy, Online: 08/03/2019. 2019/03. https://doi.org/10.1016/j.healthpol.2019.03.002</p> <p>Chevillard G., Mousquès J., Accessibilité aux soins et attractivité territoriale : proposition d'une typologie des territoires de vie français. Cybergeog : European Journal of Geography, Espace, Société, Territoire. Article 873, en ligne le 21/11/2018. 2018/11. https://doi.org/10.4000/cybergeog.29737</p> <p>Gertler PJ, Martinez S, Premand, et al. Impact Evaluation in Practice, Interactive textbook 2010 available at http://www.worldbank.org</p>
Validation	final exam