**Supplementary File B**

#### SSurvey B1. Questions to Universities’ graduate program

**SResult B2. Overview of MSc courses in HTA offered in 2016/2017 and their aims.**

**SResult B3. Overview of competencies covered in the MSc courses**

#### SSurvey B1. Questions to Universities’ graduate program

1. What is the name of the HTA program?
2. Please provide the website address of the program.
3. What is the duration of the course?
4. In your course, which domains of HTA are covered?
5. What are the aims of the course?

#### SResult B2. Overview of courses offered in 2016/2017 and their aims.

**MSc COURSES IN HTA, ORGANISERS, DURATION, DIMENSIONS COVERED**

| **Title** | **Organiser and country** | **Duration** | **Clinical** | **Economical** | **Ethical** | **Legal** | **Social and Cultural** | **Organisational** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MSc in International Health Technology Assessment, Pricing and Reimbursement | University of Sheffield  <http://www.sheffield.ac.uk/scharr/prospective_students/masters/ihtapr>  UK | 3 modules  2 years | x | x | - | - | - | Partially |
| Ulysses Program | Four Universities (Montreal, Barcelona, Rome and Toronto)  <http://www.ulyssesprogram.net/careers.html>  Canada, Italy and Spain | 8 courses divided in 4 modules  2 years | x | x | x | - | X | Partially |
| MSc in HTA | University of Glasgow <http://www.gla.ac.uk/postgraduate/taught/healthtechnologyassessment/>  UK | 12 months full-time; 24 months part-time | X | X | - | - | Partially | X |
| Public Health (Health Technology Assessment) MPH/PG Diploma/PG Certificate | University of Birmingham  <http://www.birmingham.ac.uk/postgraduate/courses/taught/med/public-health-tech-assessment.aspx>  UK | 1 year full-time, 2 years part-time, up to 5 years flexible | X | x | - | - | - | Partially |
| MSc in HTA | University Medical Center Radboud Nijmegen. <http://msc-hta.eu/programme/programme.asp?page=Programme>  The Netherlands | At least 1 year after BSc  5 modules | X | X | X | - | - | X |
| MSc in HTA | University of Alberta  <http://uofa.ualberta.ca/public-health/programs/msc-programs/msc-health-technology-assessment>  Canada | A minimum of two years The maximum time permitted or completion of the program is four years ( | x | x | Partially | - | - | Partially |
| Master of Science Program in Health Technology Assessment, Evidence-Based Healthcare and Decision Science | UMIT  <https://www.umit.at/page.cfm?vpath=departments/public_health/studium&studium=8231&abschluss=mag>  Austria | 13 weekly units (modules), an internship and the master thesis (total workload: 120 ECTS) | X | X | X | Partially | X | Partiallly |
| Health technology assessment - HTA La valutazione delle tecnologie in sanità | Universita degli Studi di Padova  <http://www.unipd.it/health-technology-assessment-hta-la-valutazione-delle-tecnologie-sanita>  Italy | 60 credits  Stimated 380 hours + 500 hours of Master thesis | X | X | X | X | X | X |

**SResult B3. Overview of competencies covered in the MSc courses**

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| --- | --- |
| **Master program name** | **Aims** |
| Sheffield University. MSc in International Health Technology Assessment, Pricing and Reimbursement | * Provide participants from health technology providers and assessors with a critical understanding of the entire process of health technology assessment, pricing and reimbursement worldwide. * Provide real knowledge and skills in the principles, techniques and real-world application of developing value propositions, trial design and analysis, systematic review and synthesis of evidence, economic evaluation including patient reported outcomes, and cost-effectiveness modelling in health technology assessment. * Equip graduates with professional-level competency in the design, commissioning, and review of health technology assessments in multiple jurisdictions (globally), and enable them to contribute a health technology assessment perspective in multi-disciplinary contexts such as product development planning, prioritisation of research and government or international health policy planning. |
| Ulysses Programme  Montreal, Barcelona, Rome and Toronto | * Graduates will acquire the skills enabling them to undertake a systematic review and to interpret the results of a metanalysis. * Graduates will be able to identify and apply appropriate critical appraisal tools. * Graduates will have the ability to participate in the elaboration of a protocol of an economic evaluation and contribute to data collection and analysis. * Graduates will acquire the principles of decision modeling and be able to construct simple models. * Graduates will be able to identify the pertinent outcome measures in a wide variety of health interventions and technologies, and formulate a plan for data collection. These include both quantitative and qualitative measures. * Graduates will be able to plan a knowledge transfer project. * (In addition to these analytical skills) Graduates will be familiar with important topics such as: health policy, health management, ethical and social issues, and stakeholder input. |
| University of Glasgow. Health Technology Assessment MSc | * To provide a critical awareness of the broader policy context into which health technology assessment is located as well as a critical understanding of the theoretical underpinnings, principles and techniques of health technology assessment. In addition, the course will provide the opportunity to develop the confidence to apply specialised skills and initiative to translate policy issues into research questions and apply these principles to the assessment of health technologies. * To introduce the fundamental concepts in biostatistics, to provide an awareness of the statistical issues associated with study design and to provide an extensive understanding and practical application of the most common methods of data analysis * To introduce the fundamental concepts of epidemiology, to provide a critical awareness of the principles involved in establishing causal associations and the basic measures of prevalence, incidence, risk ratios, odds ratios, attributable risk and their relationship to health technologies. The major types of epidemiological studies will be explored (ecological, cross-sectional, case-control and cohort) using examples of research conducted in a variety of countries. * To provide a practical understanding of the research process and the skills required to complete a research project. The course will provide the opportunity for students to develop the confidence and skills to translate policy issues into research questions and apply a range of specialised skills to the assessment of health technologies. * To provide a critical awareness of the importance and application of decision analytic modelling within the process of health technology assessment, as well as its values and limitations. It will provide the opportunity to develop the confidence and initiative to apply specialised skills to critically appraise and construct decision analytic models for the assessment of effectiveness and/or cost-effectiveness. * To provide a critical awareness of the role, and an extensive understanding of the application, of economic evaluation within health technology assessment. In addition, the course will provide the opportunity to develop the confidence to apply specialised skills to undertake economic evaluation of health technologies. * To provide an extensive understanding of the application and interpretation of more advanced epidemiological concepts and methods of data analysis. In addition, the course will provide the opportunity to develop the confidence when applying these specialised skills within a health technology assessment setting. * This unit aims to provide students with a basic understanding of health economics, its value and limitations. It will familiarise students with the principles of health economics and the techniques of economic appraisal. * To provide an understanding of the nature and role of management within health care organisations including the processes through which managers make decisions within organisations. In addition, the course will provide a critical awareness of the theories of management, leadership and organisation within a health care setting. * To provide an understanding of the role and importance of qualitative methods in developing the evidence base for health research. In addition, the course will provide a critical awareness of the challenges associated with the application and interpretation of qualitative methods within health technology assessment. |
| University of Birmingham | * Describe the different types of health technologies and demonstrate the different evidence requirements for regulation * Recognise and describe the different stages of the HTA cycle (horizon scanning, prioritisation, evidence assessment, policy making, dissemination and implementation) * Demonstrate an understanding of the information and evidence requirements for healthcare policy making in the context of new and existing health technologies. * Understand the rationale underpinning the need for HTA from a healthcare, economic and societal perspective. * Describe the origins, development, and current status of HTA in England, elsewhere in the UK, and internationally. * Explore critically the current systems for HTA and health care policy making in the UK with particular reference to local commissioning and national decision making (e.g. NICE) * Define a systematic review question and develop criteria for study selection * Plan and undertake a search for high quality evidence relating to a topic of healthcare effectiveness * Recognise the strengths and limitations of different types of healthcare evidence and be able to interpret their findings in the context of study quality * Gain an understanding of the methodological issues and potential biases associated with systematic reviews of different study designs including randomised controlled trials, observational studies, diagnostic test accuracy studies and qualitative research * Understand how to undertake a meta-analysis of a group of clinical trials and related analyses such as indirect and mixed treatment comparisons * Use STATA® and Review Manager (RevMan) software for meta-analysis * Prepare a protocol for a systematic review/health technology assessment |
| University Medical Center Radboud. | * feature a broad approach that includes research into effectiveness, quality-of-life, economic implications, ethics, and organisational consequences * entail interdisciplinary teamwork * be action oriented: to know *and* to change * be tightly interwoven with clinical practice and health care policy * have a strong client focus * yield a visible contribution to health care * 5 modules   + [Policy research](http://msc-hta.eu/programme/module.asp?isis=5HTA4)   + [Health outcome measurement](http://msc-hta.eu/programme/module.asp?isis=5HTA3)   + [Economic analysis in health care](http://msc-hta.eu/programme/module.asp?isis=5HTA1)   + [Advanced modelling in observational research](http://msc-hta.eu/programme/module.asp?isis=5HTA2)   + [Research internship](http://msc-hta.eu/programme/module.asp?isis=5WG20) |
| UMIT | HTA Principles, Methods I & Practice; Biostatistics I; Clinical Epidemiology & Public Health; Literature Search, Systematic Review & Meta-Analysis I; Economic Evaluation in Health Care; Decision Science & Modeling I; HTA Methods II & Specific Aspects; Health Outcomes, Quality of Life & Patient-Reported Outcomes; Health Policy Management, Healthcare Systems, Reimbursement & Country-Specific HTA; Biostatistics & Epidemiology II; Meta-Analysis II; Decision Science & Modeling II; Scientific Writing & Skill Training |
| Universitá degli Studi di Padova | * The aim of the course is to provide professionals the complex of competences: knowledge, tools, methods and skills required by health care companies, manufacturing companies, institutions and organizations to carry out evaluations of health technologies. * The need for these structures is involved in the feedback divers and professionals from the disciplines of health care and provision. It is therefore considered a priority approach is to provide a theoretical / methodological and practical (hospital based) to support the strategic directions and clinical governance, promoting the health of the individual and the community. * The aim will then be to deepen and develop their own reference values of HTA, according to international guidelines and national and regional health plans. |