

NSW Consortium for Training Economists in Health

Career Opportunities in Health Economics

Why become a health economist?

Health economists are in demand!

Health economics is a rapidly expanding field. This is a result of the continuing drive to reform health care systems and the growing importance of economic evaluation in health policy. This has led to a steadily increasing demand for trained health analysts with an economics background.

Health economists look at how resources are allocated to and used in different health systems. Working both in the public and private sector they are trained to apply the concepts and tools of economic evaluation analysis to health and health care, including the functioning of health care markets and the economic evaluation of health care programs, policies and interventions.

This prospectus gives a summary of health economics courses currently offered by NSW tertiary institutions.

What sorts of job prospects are there for health economists?

Apart from health care delivery organisations such as hospitals, potential employers of health economists include: academic centres and universities, health insurance companies, pharmaceutical companies, governments, regulators, consultancy firms as well as local or international organisations with a health agenda (such as lobby groups, community organisations, the World Health Organisation (WHO), the Organisation for Economic Co-operation and Development (OECD) and World Bank). All of these provide interesting and challenging places to work.

You could work in:

- **Private Industry:** the opportunities in the private sector are very diverse. For example, you could work in pharmaceutical companies, biotechnology companies or private health insurers.

Working in a pharmaceutical or biotechnology company you may be responsible for a particular product or technology and be required: to evaluate its potential value; develop a strategy for its launch and marketing and/or design studies that produce clinically and economically relevant information.



Health economist, a major private pharmaceutical company

Rina has obtained a Masters in Economics and a BA (Honours) in Economics and Business from the University of New South Wales.

She is currently one of four health economists for a large pharmaceutical company in Sydney. Her position is responsible for the planning and preparation of clinical and economic evaluations for optimal reimbursement, cost-effectiveness and listing of new drugs as well as providing health economic support to all areas of the business.

Prior to working in the private industry, Rina spent three years undertaking research and consultancy work in a University health economics department where she gained the skills required to perform cost-effectiveness analyses and decision analytical modelling. Here she developed several cost-effectiveness models for use by the pharmaceutical industry. She also spent 18 months in a health economics research centre performing economic evaluations of health care interventions.

- **Government:** You could work for a health related department in either the Federal or a State government. A major focus for government is the evaluation of policy to ensure health care options are of high-quality, safe, cost, effective, sustainable, safe and equitable.

You may be asked to: evaluate a submission for the inclusion of services in the Medical Benefits Schedule; commission a consultant's report and then clearly translate their findings for use by policy-makers; or determine the cost effectiveness of population health interventions to inform policy on health promotion.

Health economist, Federal government department

Brad joined a Federal government department as a cadet after completing his Bachelor of Economics.

In his first year he completed a postgraduate diploma in Health Economics and Evaluation during which time his course fees were paid whilst receiving a small salary. The diploma required a 3 month work placement on a health economics related project which he completed at the Department.

To complete his cadet training, Brad worked on one 6-month placement and two 3-month placements in various areas of health economics at the Department. His projects included the evaluation of public health interventions and pharmaceuticals.

Brad has now been with this department for over four years and is in a middle management position. He currently works in the Population Health Division and his key responsibilities include assisting the Division with program evaluations and managing consultancies for health economic projects

- **Research:** As a researcher you may be involved in: collecting and analysing cost and quality-of-life data for clinical trials; studying physician and patient decision making; conducting an economic evaluation of a public health program or conducting health services research into, for example, the ethics of managed care.

A number of new and interesting areas of research have recently emerged including the economic and policy implications of recent advances in genetics, genomics and gene therapy.

Health economics researcher, a health economics research centre at a NSW based University

Patrick has obtained a Bachelor of Economics, Bachelor of Arts and a Masters of Economics all from Macquarie University and to date has divided his career between research and policy.

He started in health as a graduate officer with the then Commonwealth Department of Health and Human Services. A few years later he joined a NSW State government department's Economics Training Program - a three year program consisting of one-year fulltime education and two years of work placement within the NSW health system. During this time, Patrick participated in a new priority program - the Telemedicine Initiative where he worked on a variety of projects related to telehealth funding.

Patrick now works at a health economics research centre in NSW based University and has worked on a variety of research projects including an economic evaluation of hospital-in-the-home, the Australian health care workforce and the economics of public health interventions. He is currently working on the cost and outcomes of a randomised control trial of positron emission tomography, cancer funding and the Medicare Safety Net. His main research interests are economic evaluation of health care interventions and programs.

Patrick has also worked for a NGO in Paris where his research focus was an international comparison of the use of economic evidence in resource allocation decisions.

- **Consulting:** A number of specialist consulting firms employ graduates into their health economics units. As a consultant, your work may include: economic consulting and research; modelling and macroeconomic forecasting. Typical clients could include governments, major corporate firms, industry associations and superannuation funds.

Health economics consultant, international consultancy firm

Joseph has a Bachelor of Business (Economics) from the University of Technology as well as a Master of Economics (Hons) from the University of Sydney. He is currently undertaking a PhD in the area of Health Economics at the University of New South Wales.

Joseph is now working as a senior consultant for the Sydney office of a large international consultancy company. He was initially employed to undertake microeconomic research for the firm's senior management on various projects for the Commonwealth and a number of State governments. Joseph is now employed as a senior economist consultant with key responsibilities including identification of new projects for the firm, project management, developing economic forecasting models and client liaison. His position also requires regular overseas travel primarily to Asia to evaluate programs implemented through aid agencies such as the United Nations, World Bank, Asian Development Bank (ADB) and AusAID.

Prior to working in the field of health economics, Joseph worked extensively as an economist in both the private and public sectors in Australia and the United Kingdom.

- **Non-Government Organisations (NGOs):** Various organisations such as the WHO and the World Bank employ health economists to research and evaluate of programs run by these organisations or their associated bodies.

Example projects for health economists working within an NGO include:

- undertaking reviews and analysis of macro-economic policies and their effects on scaling up donor aid to various countries. Also how the macro-economic policies and capacities of the health sectors in recipient countries may affect the utilisation of this aid.
- assisting NGO partners/recipient countries to foster the development of equitable, efficient and sustainable forms of health system financing and organisation. This is achieved through policy support to countries, the development of tools and information to feed into the policy process and subsequent implementation, and appropriate capacity building.

Health economist, an international non-government organisation

Sophia has obtained a Bachelor of Economics (Honours), a Masters of Economics and a PhD in the area of Health Economics all from the University of New South Wales.

She is currently a health economics consultant working for a large international non- government organisation (NGO) in Vietnam. Her role includes assembling regional databases on the costs, impact on population health and cost-effectiveness of a number of key public health interventions. This work will help the local government and ministry to identify its public health program priorities and strategies to approach agencies for additional aid funding.

Prior to this position overseas, Sophia worked as a health economics researcher for a NSW based university and also for a private consulting company in health policy program evaluation, efficiency improvements and healthcare industry analysis.

How do I become qualified in health economics?

Health economists usually need as a minimum a Bachelor of Economics (BEc) plus completion of relevant health economics elective subjects (Refer to Table 1).

Table 1: Health economics courses available in NSW

Course	Institution	Degree Title	Typical Duration	Health economics subjects	Core Skills
Undergraduate	Macquarie	Bachelor of Economics – BEc and BEc(Hons)	<ul style="list-style-type: none"> • 3 years (BEc) • 4 years (BEc Hons) 	<ul style="list-style-type: none"> • ECON312: Health Economics (BEc and BEc Hons) • Honours thesis 	<ul style="list-style-type: none"> • Application of microeconomics to health. Knowledge of Australian and International health institutions and practice • Directed research of existing policies and issues in health economics.
	UNSW	Bachelor of Economics (Honours) – BEc(Hons)	<ul style="list-style-type: none"> • 4 years 	<ul style="list-style-type: none"> • ECON6307: The Economics of Health and Medical Care (not available to those doing a BEc without honours) • Honours thesis 	<ul style="list-style-type: none"> • Ability to apply economic methods and carry out basic techniques in economic evaluation • Directed research of existing policies and issues in health economics
Coursework Master of Economics	UNSW and USYD*	Master of Economics – MEc	<ul style="list-style-type: none"> • 1 year 	<ul style="list-style-type: none"> • ECON6307: The Economics of Health and Medical Care • ECON6308: Policy Evaluation Methods (New course starting in 2006) 	<ul style="list-style-type: none"> • Ability to read professional studies and conduct independent research of topics in health economics using existing methodologies
	Macquarie	Master of Economics – MEc	<ul style="list-style-type: none"> • 1 year 	<ul style="list-style-type: none"> • Masters research unit in health economics 	<ul style="list-style-type: none"> • Independent research of topics in health economics using existing methodologies.

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Course	Institution	Degree Title	Typical Duration	Health economics subjects	Core Skills
Master of Business Administration (Health sub-major)	UTS (CHERE)	Master of Business Administration – MBA	<ul style="list-style-type: none"> • 1 year 	<ul style="list-style-type: none"> • Introductory Health Economics • Health Funding Policy and Resource Management 	<ul style="list-style-type: none"> • Broad understanding of the economics of health and health care. Ability to apply analytical economics skills to problems of resource allocation and policy development in the health system. • Understanding of the macro environment in which health funding policy is made and the micro environment in which scarce resources need to be allocated.
PhD	UNSW , USYD, UTS and Macquarie	Doctor of Philosophy – PhD	<ul style="list-style-type: none"> • 4 years (minimum of 3 years) 	<ul style="list-style-type: none"> • Thesis • Specialist PhD coursework training in health economics available at UNSW and UTS 	<ul style="list-style-type: none"> • Original and independent study of topics in health economics including the development of new approaches and techniques • PhD coursework will be tailored to the individual student's needs, building on existing courses offered

* Note: UNSW and USYD have an arrangement so that USYD Master of Economics students can take the health economics courses offered at UNSW

Which course is best for me?

The type and level of course you choose from Table 1 depends on what and how you intend to use your health economics training in the future. To have a comprehensive knowledge of health economics it is recommended that you take at least three semester units.

If you want to have the flexibility to work either as an economist and/or health economist it is recommended that you first enrol in a Bachelor of Economics (preferably with Honours) and take the health economics elective courses.

If you are a graduate from a discipline other than economics and want to undertake a Masters in Health Economics, you will need to complete a bridging course in economics. This course generally contains the core subjects from an undergraduate economics degree plus an economics elective at the second or third level. Bridging requirements may vary depending on the Institution.

What other courses and options exist?

If you do not want to become a fully trained economist and prefer business administration with a health economics component, then a Master of Business Administration with a sub-major in health would give you a good understanding of the economics of health and health funding policy.

If you would prefer a qualification in public health and would like some exposure to health economics then an alternative is the Master of Public Health (MPH) with an elective unit in health economics. This unit will give you an introduction to the basic skills of economic evaluation as a component of priority setting in

health care. The Master of Public Health is a one year postgraduate degree that can be taken at both the Universities of Sydney and New South Wales

Who can I contact for more information about enrolling in health economics courses?

You need to contact the enrolment office at the Institution you are interested in attending and they will direct you to the appropriate person.

The NSW Consortium for Training Economists in Health has been established as a collaboration of tertiary institutions in NSW providing courses in health economics as part of a formal undergraduate or postgraduate degree.