PUN018 Cost-effectiveness Analysis for Healthcare

[NEW UNIT]

Credit Points:	12
Prerequisite(s):	Nil
Corequisite(s):	Nil
Antirequisite(s):	Nil
Equivalent(s):	Nil
Other Requisite(s):	Nil
Assumed Knowledge:	Familiarity with Microsoft Excel, broad understanding of the Australian health system
Teaching periods:	Semester 1, Semester 2
Year of offer:	2018
First year unit:	No
WIL unit:	No
Grading scale:	1-7
Field of Education:	080313 Public and Health Care Administration

Synopsis

In this unit, you will develop applied skills in cost-effectiveness analysis that can be used to inform decision making in healthcare. Evaluating the costs and health outcomes of innovations in healthcare are important steps in allocating scarce healthcare resources. You will attend a five-day intensive block learning program consisting of lectures, practical computer exercise, and group assessment items. On completing the unit, you will have a thorough understanding of the principles and techniques of cost-effectiveness analysis to conduct evaluations in health services.

Rationale

Healthcare systems globally are facing increasing demand yet increases to funding are slowing. In this situation, choices must be made about what services to fund, how they should be delivered and to whom they should be provided. Economic analyses can be applied to these questions; and the wider goal is to allocate scarce health care resources efficiently. The findings from economic analyses should be easy to interpret and should signal how funding might be optimally distributed. This unit is aimed at healthcare professionals and individuals in public, commercial and academic organizations interested in healthcare resource allocation and innovation. It will improve understanding of priority setting and expose participants to the methods of cost-effectiveness analysis for a healthcare innovation.

Aim

The aim of the unit is to develop knowledge of the principles and practice of cost-effectiveness analysis in healthcare and provide experience in using the methods via computer-based exercises. It will enable you to evaluate the efficiency of healthcare innovations.

Learning Outcomes

At the completion of this unit you will be able to:

1. Understand and apply the principles of priority setting in healthcare
2. Construct and evaluate an economic model using appropriate software
3. Present and interpret the findings of a cost-effectiveness analysis
4. Analyse the value of economic evidence within frameworks for decision making

Content

This unit introduces cost-effectiveness analysis including what it is and why we do it, how to measure costs and health benefits and how to interpret the results from these analyses. It then progresses to cover the tasks of building and evaluating cost-effectiveness models, including how to structure models, how to present the results, and how to capture uncertainty inherent in the data used in decision making.

Approaches to teaching and learning

This unit will be available to internal students only. It will be delivered through an intensive learning program consisting of lectures and practical computer-based activities. The block program will be conducted over five days – the first three days will involve taught material and on the following two days you will work in groups to complete the first two assignment tasks including a class presentation. There is a focus on application of principles to real situations. To maximise learning outcomes you are strongly encouraged to attend the block program.

Assessment

There will be three items of assessment for this unit. The first and second assessment items involve group work and will be prepared during the block teaching program, with assessment item 2 completed on day five of the block teaching program. The third assessment item will be completed individually. Criteria sheets will support your achievement of the learning outcomes in your assessment items.

Feedback

Problem based exercises, online activities and lectures will provide opportunities for formative assessment. Assessment items will be spaced to provide the opportunity for feedback during the preparation of drafts and will build on each other to allow an incremental approach to learning.

Assessment Submission and Extensions

Assessment items submitted after the due date without an approved extension will not be marked and will receive a grade of 1 or 0%. If special circumstances prevent you from meeting the assessment due date, you can apply for an extension. If you do not have an approved extension you should submit the work you have done by the due date and it will be marked against the assessment criteria. QUT's assessment submission requirements reflect the expectations of professional practice where you need to meet deadlines.

Assessment Item No. 1
Assessment type: Project (applied)
Assessment name: Economic model
Description: You will choose information for, program and evaluate a model to analyze the cost-effectiveness of a novel healthcare intervention. A specific intervention with supporting evidence and data will be provided.
Relates to learning outcomes: 2 and 3
Weight: 40%
Internal or external: Internal
Group or Individual: Group
Due date: End of semester

Assessment Item No. 2
Assessment type: Presentation (oral, individual or group)
Assessment name: Oral pitch
Description: You will prepare an oral summary of your findings from the economic model developed in assessment item 1 in order to make a recommendation to a health service executive as to the likely efficiency of the proposed intervention.
Relates to learning outcomes: 3 and 4
Weight: 10%
Internal or external: Internal
Group or Individual: Group
Due date: Day five of learning block

Assessment Item No. 3
Assessment type: Report
Assessment name: Written report
Description: You will critically evaluate evidence used in the economic model developed in assessment item 1, interpret the economic model results and comment on the usefulness of economic evaluation in decision making.
Relates to learning outcomes: 1, 3 and 4.
Weighting: 50%
Internal or external: Internal
Group or Individual: Individual
Due date: End of semester

Academic Integrity

QUT is committed to maintaining high academic standards to protect the value of its qualifications. To assist you in assuring the academic integrity of your assessment you are encouraged to make use of the support materials and services available to help you consider and check your assessment items. Important information about the university's approach to academic integrity of assessment is on your unit Blackboard site.

A breach of academic integrity is regarded as Student Misconduct and can lead to the imposition of penalties.

Resource Materials

There is no prescribed text.

Useful resources available in the library include:

Gray A.M., Clarke, P.M., Wolstenholme, J.L. (2011). *Applied Methods of Cost-effectiveness Analysis in Healthcare*. Oxford University Press.

Drummond, M.F., Sculpher, M.J., Torrance, G.W., O'Brien, B.J., Stoddart, G.L. (2005). *Methods for the Economic Evaluation of Health Care Programmes*.(3rd ed.). Oxford University Press.

Briggs, A., Sculpher, M., Claxton, K. (2006). *Decision Modelling for Health Economic Evaluation*. Oxford University Press.

Risk Assessment Statement

There are no out of the ordinary risks with this unit, apart from those associated with this with substantial computer-based work. You should ensure that you take regular rest breaks when engaging in prolonged computer-based work.