

School of Social Sciences

Department of Economics

MSc Economic Evaluation in Health Care

ECM203 Economic Evaluation

Thursday 6 January 2005

1000 - 1300

Answer any 3 questions from the six provided. Each is worth 100 marks.

Students should be provided with one answer book.

Calculators are not permitted.

Foreign language dictionaries are not permitted.

External Examiner: Professor Stirling Bryan Internal Examiner: Professor Nancy Devlin

- 1. Critically assess the advantages and limitations of Cost Utility Analysis as a method of assessing value for money in health care.
- 2. Draw a cost effectiveness plane, and use it to illustrate and explain each of the following:
 - (a) The distinction between average cost effectiveness ratios and incremental cost effectiveness ratios. [20 marks]

(b) Treatment dominance.

[20 marks]

(c) The cost effectiveness ceiling ratio.

[20 marks]

- (d) The 'kinked' cost effectiveness threshold i.e., where society's value of a Quality Adjusted Life Year is different for gains than losses. [20marks]
- (e) The ellipsoid confidence region, given variance in costs and effects.

[20 marks]

3. Answer each of the following:

(a) Explain the notion of positive time preference.

[25 marks]

- (b) Explain and demonstrate the way in which discounting calculations are used to translate future values into present values. [25 marks]
- (c) What is the 'paralysing paradox'? Why has it been suggested not to be relevant in many real decision-making contexts? [25 marks]
- (d) What are the current UK Treasury and National Institute of Clinical Excellence requirements with respect to discounting of costs and effects? To what extent are these supported by the economics literature on discounting?

[25 marks]

- 4. The National Institute of Clinical Excellence stated in 2004 that, in cost effectiveness evidence submitted to it, the most relevant perspective for costs is that of the National Health Service and Personal and Social Services. Critically examine the case for and against NICE instead requiring a societal perspective for all economic evaluation evidence used to inform its decision-making.
- 5. In Cost Utility Analysis, a QALY gained is typically given the same value, regardless of the characteristics of the person who gains it. What equity concerns might be associated with the equal weighting of QALYs? What challenges are encountered by attempts to allow unequal weighting of QALYs?
- 6. What types of uncertainty might arise in performing an economic evaluation, and what methods are available to address these?