PMC3

ECONOMIC EVALUATION IN LATIN AMERICA

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OBJECTIVES: As part of the Thematic Network on the Economic Evaluation of Healthcare Programmes and its Applications to Decision Making in Latin American Countries (NEVALAT), funded by the European Union, we sought to identify economic studies applicable to the region. **METHODS:** We searched the OHE-IFPMA Health Economic Evaluations Database (HEED), which contains detailed reports on economic evaluations and other types of cost analysis of health care interventions. We searched for studies classified as being applicable to any of 18 Latin American countries, as well as those categorised as relevant to "Latin America" and "South America". Searches were conducted in mid-2004. **RESULTS:** A total of 116 studies were found, the earliest from 1991 and the most recent published in 2003. The highest number of publications in any year was 20 for 1997. Ninety-four of the 116 studies (81%) were applied studies, providing some original analysis of costs and outcomes, comparative costs of alternative interventions or costs of illness. Amongst applied studies, cost consequences analysis was the most frequent category of evaluation (50%), followed by cost-effectiveness analysis (26%) and cost analyses (16%). Only four cost utility analyses and one cost benefit analysis had been performed. By disease area, nearly one third of applied studies related to infectious and parasitic diseases (ICD-9 chapter one). Over half of applied studies were drug evaluations, of which one third were of general anti-infectives for systemic use (ATC chapter J). Of the total sample of 116 studies, 54 were relevant to more than one country and 62 were single country studies. **CONCLUSIONS:** A number of Latin American countries are becoming interested in the use of economic evaluation for decision making in health care. The paucity of studies identified here suggests that a substantial investment in economic appraisal capacity is required to bring this about.

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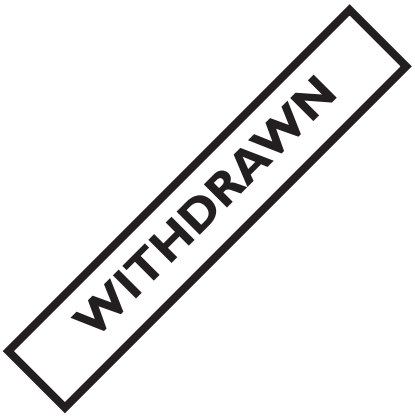

PMC4

CAN ECONOMIC EVALUATIONS BE MADE MORE TRANSFERABLE?

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OBJECTIVES: The present study aims to answer the following questions: 1) Can the results of economic evaluations be considered transferable from France to the UK, and vice versa?; 2) What are the main reasons for any lack of transferability?; 3) What could be done, in future studies, to increase the transferability of results?; and 4) How can international databases of economic evaluations, such as the European Network of Health Economic Databases (EURONHEED), help the users of studies assess the level of generalisability in findings? **METHODS:** Economic evaluations covering all health technologies and involving the UK and France were located using searches of the UK's NHS Economic Evaluation Databases (NHS EED) and the French Connaissances et Décision en ÉConomie de la Santé (CODECS) database. Studies were then analysed using an NHS EED/CODECS-specific checklist. This approach determined the degree to which results could be interpreted in the context of both countries. **RESULTS:** The cost-effectiveness results for France are generally more favorable than those for the UK. The main reasons for the lack of transferability are the absence of country-specific effectiveness data in multinational studies and incomplete reporting regarding cost measurements. **CONCLUSIONS:** Detailed reporting of study populations, costs and effectiveness data are important in assessing the transferability of the results of studies conducted in other settings. The results are informative for international databases such as EURONHEED in assessing and reporting the generalisability of economic evaluations.

PMC5

ARE THE BEST AVAILABLE, MOST APPLICABLE CLINICAL EFFECTIVENESS DATA USED IN ECONOMIC EVALUATIONS OF DRUG THERAPIES?

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OBJECTIVES: In economic evaluations, failure to use the best available evidence for the estimates of clinical effect has attracted little attention, but may lead to biases in study results. This is a particular concern in the evaluation of pharmaceuticals, given the industrial sponsorship in many studies. Therefore, the objective was to investigate whether economic evaluations of drug therapies use the best available clinical effectiveness evidence, appropriate to the population likely to receive the drug. **METHODS:** A random sample of 50 economic evaluations of drug therapies published in 2001/2002 was selected from the NHS Economic Evaluation Database. Study design, reporting quality and external validity of the clinical data were assessed using methodological checklists. To judge the applicability of the effectiveness data, participants and settings were compared with standard clinical practice. For each therapy, alternative, high quality sources of clinical effectiveness data were sought in the Cochrane databases. **RESULTS:** Approximately half of the studies utilised estimates of clinical effect from randomised controlled trials. Quality of reporting was good, but measures of external validity were uniformly poor. There were potential problems with the applicability of half the studies, in particular

limited data on settings, use of specialised centres and inappropriate gender balance. Relevant, potentially usable systematic reviews were identified for 27 (54%) of the economic evaluations in the sample, although none had been used. The use of data from systematic reviews would change the size of reported cost-effectiveness ratios. **CONCLUSIONS:** These findings suggest that critical appraisal of the clinical data underlying economic evaluations is needed before they are used in health care decision-making. Best available clinical evidence is not being utilised and further research is indicated to quantify the implications of using poor quality, or selective effectiveness data in economic evaluations.

PMC6

THE IMPORTANCE OF ACCOUNTING FOR THE PORTFOLIO EFFECTS IN COST EFFECTIVENESS ANALYSES

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OBJECTIVES: In recent years, a number of health economists have introduced the potential of using portfolio theory as a basis for resource allocation in health. Portfolio theory is concerned with the optimal investment strategy, based on both return and risk, and demonstrates the potential benefits from pooling different investments into a single portfolio. Furthermore, portfolio theory can be modified to allow for synergies between interventions. Given that in public health we often need to implement multiple health care interventions with a single, fixed health budget, portfolio theory is of benefit both theoretically, and practically. **METHODS:** Using both theoretical and simulation modelling this paper demonstrates the importance of using a modified portfolio theory framework when evaluating a number of health interventions from the perspective of a representative individual. This is done by varying the level of correlation and synergy between two programs and focusing on stylised portfolio consisting of equal resource shares of each of the programs. **RESULTS:** The paper demonstrates the importance of taking a portfolio approach in considering the resource allocations made in the presence of risk. Risk can be reduced by combining programs, given that they are not perfectly correlated. If one allows for non-linearities through the inclusion of synergies, then portfolio theory is important for those who are even risk neutral. **CONCLUSIONS:** While portfolio analysis in health care is theoretically appealing, there are a number of pragmatic reasons for using it. Portfolio theory emphasizes the trade-offs required by a fixed budget and the importance of taking a global perspective, rather than piecemeal one, in the evaluation of health care interventions. A number of limitations in the portfolio approach exist, but many of these concerns are found in all forms of economic evaluation in health care.

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