AT WHAT COST? A REVIEW OF DRUG ACQUISITION COST ISSUES IN MODELLED ECONOMIC EVALUATIONS.
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OBJECTIVE: Payers are increasingly using economic evaluation methods in their decision-making process for new health technologies. Payers often only have the results from short-term clinical trials at their decision time point. For new drugs for chronic diseases/conditions such as hypertension, diabetes mellitus & multiple sclerosis, they may want to see how these benefits translate into long term outcomes via a model (i.e. a modelled economic evaluation). The appropriate time horizon for some modelled evaluations may be greater than the drug’s remaining patent life. In a situation where the acquisition cost of a new drug is the major cost driver, the use of an adjusted acquisition cost after patent expiry could have a major effect on the modelled cost-effectiveness ratio. We set out to review issues associated with the acquisition costs of (new) drugs in modelled economic evaluations.

METHODS: We reviewed the latest published versions of the guidelines of the major drug reimbursement agencies (PBAC, NICE, DQTC, AMCP) and health economics reference text books (Gold, Drummond, Bootman) as well as modelled economic evaluations of drugs published in ISPOR Value in Health in 2003 & 2004 to see how others have dealt with this issue.

RESULTS: Although we could find frequent citations on the discounting of the acquisition cost of drugs if the time horizon of an evaluation is greater than 12 months, we found very little discussion on the merits of the adjustment of drug acquisition costs post patent expiry. CONCLUSION: The concept of adjusting the acquisition costs of (new) drugs after their patent expiry in modelled economic evaluations is under-developed. The merits & demerits of the concept will be discussed in more detail in the poster.

USING MARKOV MATRICES TO INTEGRATE RISK/BENEFIT CONSIDERATIONS OF HEALTH CARE INTERVENTIONS EVALUATED USING HEALTH-RELATED QUALITY OF LIFE INSTRUMENTS
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OBJECTIVES: To show how Markov matrices can be used to quantify and integrate the risks and benefits of health care interventions when these are measured using health-related quality of life (HRQOL) instruments. To provide an example of this type of evaluation for an HRQOL measure which uses Likert scales for the response options. METHODS: A brief theoretical explanation of the nature and purposes of Markov matrices will be followed by practical examples of their potential in the field of outcomes research using the COOP-WONCA charts in a hypothetical longitudinal study. RESULTS: Markov matrices defining between-state transition probabilities (HRQOL dimension score at each measurement time point) are developed and use of the matrices will be illustrated by providing quantitative definitions and interpretations of the probabilities associated with the principal sub-matrices (main diagonal, upper and lower triangles, upper and lower linear bounds, and simple elements). CONCLUSIONS: The use of theoretical definitions and practical examples will be useful in introducing and discussing the application of Markov matrices as a means of integrating risk and benefit considerations associated with health care interventions measured using HRQOL instruments.