ACE–PREVENTION PAMPHLETS

PAMPHLET B: ACE APPROACH TO PRIORITY SETTING

1.   INTRODUCTION

To aid priority setting in prevention, the Assessing Cost-Effectiveness in Prevention Project (ACE-Prevention) applies standardised evaluation methods to assess the cost-effectiveness of 100 to 150 preventive interventions, taking a health sector perspective. This information is intended to help decision makers move resources from less efficient current practices to more efficient preventive action resulting in greater health gain for the same outlay.

This briefing paper is one of several designed to communicate the methods and results of the ACE-Prevention project. In this paper the ACE approach to priority setting and the associated economic evaluation methods are summarised.

2.   BACKGROUND

The decision context for ACE-Prevention evaluations is to inform policy makers about the most cost-effective bundle of interventions, given available resources.

Two aspects of the ACE approach to priority setting should be re-assuring to decision-makers and the broader community:

i)   that it is underpinned by an explicit and detailed attempt to define what constitutes an "ideal" approach to priority setting; and

ii)   that as evidenced by the funding of a series of previous ACE studies, the approach has appealed to both academic peers (NHMRC grant funding) and to government (commissioned work) 1.

The checklist below (Box 1) which identifies the ideal characteristics of priority setting models is based not only on guidance from economic theory, but also on ethics and social justice, lessons from empirical experience and the needs of decision-makers. The checklist is important because it is the first time that criteria from such a broad range of considerations have been brought together in a framework for priority setting that endeavours to be both realistic and theoretically sound. The checklist places importance on rigour in the economic appraisals, sound modelling approaches and the use of best available evidence; but places this technical analysis within a broader setting that has regard to the concerns of decision-makers.

The ACE approach, summarised in Figure 1 below, reflects our wish to strike a balance between technical rigour (that matters to academics) and relevance/due process (that matters to stakeholders). Using resources wisely to optimise health outcomes is important, but respecting community concerns for social justice and fairness in the ways decisions are taken is also vital, particularly if decisions are to have legitimacy for patients, providers and the general public.

3.   UNIQUE FEATURES OF THE ACE MODEL

The key characteristics of the ACE evaluation methods are:

• the rationale for the selection of interventions is discussed and clearly specified;

• the evaluation methods are standardised, documented and open to scrutiny;

• the setting, context and comparator are common to all interventions;

• Australian data are used, wherever possible, for health system costs and demographic and epidemiological disease parameters;

• cost-utility analysis (CUA) is used to develop incremental cost effectiveness ratios (ICERs) based on economic/ epidemiological modelling techniques that utilise best available data on effectiveness of interventions (usually based on systematic reviews);

• ICERs, total costs and DALYs are reported as a range (around point estimates) reflecting explicitly the uncertainty of cost, process, outcome and value estimates;

• the ICERs are placed within a broader decision-making framework that includes considerations about 'equity', 'strength of evidence', 'feasibility of implementation', 'acceptability to stakeholders' and other study-specific considerations. We refer to these as the '2nd stage filters'; and

• information is assembled by a multi-disciplinary research team, preparing briefing papers to a standardised format agreed by a Steering Committee of stakeholders who are involved throughout the study.

Figure 1: Overview of steps in the ACE approach to priority setting
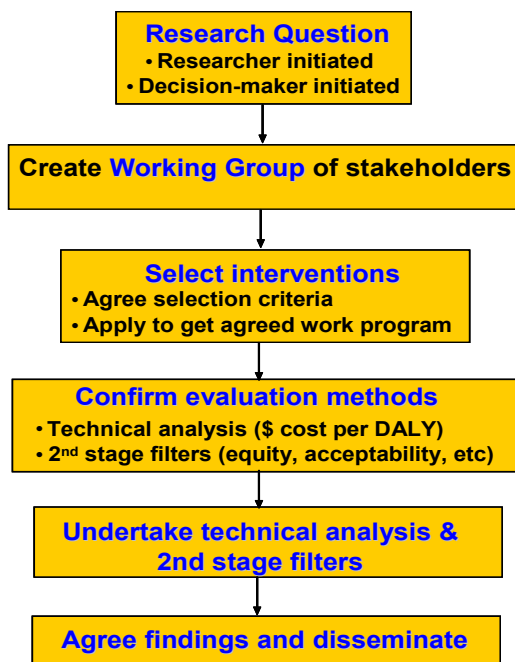
ACE Steering Committees generally consist of topic experts, clinicians and practitioners, relevant community organisations and policy-makers. The Steering Committee in ACE studies has an important role in selecting the interventions for evaluation, as well as achieving balance between the technical analyses and due process. On the technical side members contribute in areas of their expertise and discuss issues of method and evidence. On the 'due process' side, members ensure stakeholder interests and views are articulated; facilitate sensible interpretation of the technical analysis; assist with 'value' judgement aspects of the 2nd stage filter analysis; help ensure transparency throughout the project; and assist in the promulgation of the results to policy makers.

In applying the 2nd stage filter criteria the Steering Committee considers a common core set of filters. The main outcome of the 2nd stage filter analysis is a table for each intervention in which these broader issues are flagged and a qualitative judgement made explicit about each of the criteria and their impact. Issues raised under the 'equity filter' or the 'acceptability to stakeholders' filter, for example, are briefly described and then a summary entry made under a *'Decision point'* heading (such as 'not a key issue'; 'possible concerns, needs attention'), which are then all brought together under a *'Policy considerations'* heading that combines both the ICER and 2nd stage filter information. The 2nd stage filter analysis can lead to recommendations about the need for pilots prior to widespread implementation; about the need for intervention re-design to address equity concerns; and/or the need for ongoing evaluation/research to improve the evidence base.

For more information on this topic area, please visit: **www.sph.uq.edu.au/bodce-ace-prevention**

PRIORITY SETTING MODEL CHECKLIST

For each criterion the letters in square brackets indicate the relevant rationale, viz: economic theory [T]; ethical rationale [E]; pragmatic rationale [P]; & user considerations [U].

Criterion One: Is There A Well-Defined Research Question? [T; P; U]

Does the model specify a well-defined research question in answerable form? Is the model adaptable to variations in decision context and setting? If not, are the general settings and purposes for which the model is appropriate specified? Is the model appropriate to the specific research question of the decision-maker(s) and the context in which it occurs?

Criterion Two: Is There A Clear Concept of Benefit? [T; E; U]

Does the model have a mechanism or process to define benefit in a way that captures the perspective & objectives of the decision-maker? Does the model establish a clear logical connection between the concept of benefit, the research question and the priority setting objectives? Are the ethical values underlying the concept of benefit made explicit?

Criterion Three: Is There An Acceptable Process for Generating the Options for Change? [T; U; P]

Does the model have an explicit mechanism for generating options for change? Do the options generated pay specific regard to the choice problem of the decision-maker(s) and the legitimate interests of stakeholders? Do the options for change meet the following criteria: comprehensiveness [important alternatives are not omitted; inclusion of both increments and decrements]; relevance [to choice problem and decision-maker needs]; evidence-based [including a process for establishing and dealing with the evidence base of options for change]; defined in concrete terms so that the pathway of activities can be clearly determined; and manageable [the evaluation task is tractable in the time available])?

Criterion Four: Is Marginal Analysis An Integral Component? [T]

Does the model utilize incremental analysis in comparing the options for change? Does it operationalise the measurement & analysis of costs & benefits associated with the options for change through marginal analysis? Does the marginal analysis cover: the scale & scope of the interventions; the target/user groups; or mode of service delivery?

Criterion Five: Are The Decision Rules Clearly Specified? [T, E]

Does the model clearly articulate the decision rules by which the options for change are ranked (maximization through equating marginal cost and marginal benefit; maximization with equity weights; maximization subject to constraints; two stage decision process, etc)? Does the model specify how any multiple dimensions of benefit are weighted and aggregated? If outcomes are weighted for equity, are the equity principles, data sources and methods clearly specified?

Criterion Six: Is the Role of Judgement Recognised? [E; P; U]

Does the model check the need for judgement in the specification, application & interpretation of the technical analysis, particularly in relation to underlying assumptions & values? Does the model make explicit the basis on which judgement impacts on the technical results?

Criterion Seven: Are the Data Needs Tractable? [P; U]

Does the model have a mechanism for making the data needs of the evaluation process tractable?

Criterion Eight: Is the Need for Due Process Recognised? [E; P; U; T]

Does the model check the need to place the technical analysis within a process for decision-making that contributes to the legitimacy of the decisions & their acceptability to stakeholders? Is this process characterised by: transparency and openness; accountability; fairness & reasonableness [unbiased; consideration given to all relevant factors; disregarding of irrelevant factors; accessing of relevant information]; involvement of key stakeholders; consistency in decision-making; with an appeal or review mechanism?

Criterion Nine: Do the Measurement Methods Demonstrate Appropriate Rigour? [T; P; U, E]

Does the model involve a clearly specified evaluation protocol & standardised evaluation methods appropriate to the research question? Does the measurement of costs & benefits strike a reasonable balance between expense, difficulty & timeliness? Is there sensitivity analysis of key design parameters & evaluation assumptions? Is there rigour in the implementation of both efficiency and equity objectives; recognition that the choice of outcome measures has important ethical implications?

Criterion Ten: Reporting/Implementation? [U; P; E]

Does the reporting address issues of likely concern to decision-makers, including: ethical implications; feasibility of implementation; acceptability to stakeholders; importance of the problem addressed; financial implications? Is the reporting format designed to assist with judgements on what weight might be placed on the results, including: generalisability to other settings & contexts; consultation processes adopted; strengths and weaknesses of the technical analysis, including comparison with similar evaluation studies in the literature?

ACE−PREVENTION PAMPHLETS

4.   REFERENCES

1. Carter R, Vos T, Moodie M, Haby M, Magnus A and Mihalopoulos C. (2008) "Priority Setting in Health: Origins, Description and Application of the Australian Assessing Cost Effectiveness (ACE) Approach", Expert Rev. of Pharmacoeconomics & Outcomes Res, 8 (6) 593-617.

PAMPHLETS IN THIS SERIES

Methods:
A.   The ACE-Prevention project
B.   ACE approach to priority setting
C.   Key assumptions underlying the economic analysis
D.   Interpretation of ACE-Prevention cost-effectiveness results
E.   Indigenous Health Service Delivery

Overall results
1.   League table
2.   Combined effects

General population results
1.   Adult depression
2.   Alcohol
3.   Blood pressure and cholesterol lowering
4.   Cannabis
5.   Cervical cancer screening, Sunsmart and PSA screening
6.   Childhood mental disorders
7.   Fruit and vegetables
8.   HIV
9.   Obesity
10. Osteoporosis
11.   Physical activity
12.   Pre diabetes screening
13. Psychosis
14. Renal replacement therapy, screening and early treatment of chronic kidney disease
15. Salt
16. Suicide prevention
17. Tobacco

Indigenous population results
1. Cardiovascular disease prevention
2. Diabetes prevention
3. Screening and early treatment of chronic kidney disease

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