

Overview of the ACE approach

[ACE: Assessing Cost Effectiveness]

- Background:
 - International literature on priority setting
- Essence of the ACE approach
- Why ACE as preferred approach?

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International literature on priority setting

- There is a growing international literature
 - The need for priority setting is widely accepted but the preferred approach is strongly debated
 - Debate fuelled by significant attempts at priority setting in a range of countries and settings
 - Oregon, Nordic countries, Netherlands, New Zealand, WHO, World Bank
 - as well as disease/risk factor specific attempts (including Australia)

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International literature on priority setting

- Attempts to develop theoretical base for priority setting
 - Particularly within economics discipline, but also other disciplines (philosophy, behavioural science, epidemiology)
- Four key issues emerge from the literature
 - 1) Choice between "implicit" & "explicit" approaches
 - 2) How "explicitness" should be achieved
 - "technical school" verses "due process school"
 - **appeal of combined approach** (reflecting economic theory, empirical experience, social justice)

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International literature on priority setting

- 3) With increasing recognition of need for judgement came focus on consultation
 - appreciation that "decision rules" can rarely be followed automatically
 - questions arise such as "who to consult"; "about what"; "what is the appropriate process for consultation"?
- 4) Levels of the health care system where priority setting decisions take place
 - "macro", "meso", "micro"
 - decision context important

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Preferred approach?

- One that combines rigorous technical analysis with "due process"
- One that is capable of translating best available evidence into relevant policy advice
 - may involve both scientific method and "balance of probabilities" approach
- One that is multi-disciplinary and acceptable to non academics
- One that is tractable
- One that recognizes decision context

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Tried to achieve this with ACE studies

1. Clear rationale & process for selection of interventions
2. Minimize methodological confounding by
 - Use and documentation of standardised methods
 - Evaluation conducted as integral part of priority setting exercise (not collation of CEA studies from literature)
3. Evidence-based approach with extensive uncertainty & sensitivity testing (recognition of need for judgement)
4. Information assembled by multi-disciplinary research team, working to expert Working Group
5. Involvement of stakeholders in Working Group
6. Careful thought given to concept of "benefit" and its measurement

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Essence of ACE approach

- Answers economic question: Are we maximising “benefit” with the resources available?
 - Note this question is budget neutral
- Does so through the application of marginal analysis:
 - If we take resources from program ‘x’ and give them to program ‘y’, will the net benefit be higher or lower? If the net benefit is higher, then we have an economic case for making that change.
- It follows then that key issues are:
 - the selection of the options for change
 - how “benefit” is defined
 - procedures for assessing benefit/benefit forgone

Selection of Options for Change

- Typical selection criteria have been
 - Size of the problem addressed (BoD; COI; concern)
 - Relevance to current policy decision-making
 - Availability of “evidence” that interventions work
 - Ability to specify intervention in clear concrete terms
 - Interventions across the full disease pathway
 - Indications that additional expenditure involves significant health gains or decreased expenditure involves minimal reduction in health gain
 - Development of a coherent strategy/program

Concept of Benefit: An Example

- The Cancer Study, for example, started with the 7 criteria that reflected the aims and objectives of Australia’s National Cancer Strategy, viz
 1. Size of the problem (i.e. where can the biggest difference be made?)
 2. Efficacy/effectiveness of the intervention (i.e. quality and nature of the available evidence)
 3. Capacity to reduce inequity in health status
 4. Efficiency of the intervention (i.e. value-for-money)
 5. Cost of the intervention (i.e. affordability)
 6. Acceptance by stakeholders, particularly the general community
 7. Likelihood of successful implementation (i.e. feasibility issues)

From policy aims to measurement of “benefit”

- Two-stage approach was adopted
 - Stage One, a measure of health gain in relation to resources consumed
 - Stage Two, broader considerations not easily reflected in “decision rules”
- Objectives of efficacy/effectiveness and efficiency can be picked in the “Cost per QALY/DALY” ratio (Stage One measure)
 - Considered equity weights, but could not be completed in time
- Stage Two picked up the other objectives (strength of the evidence base; size & importance of the problem addressed; acceptability & feasibility; equity)
 - Applied as judgement (accept/reject; alter ranking)
 - But options are available using decision theory for more formal integration into an index score

Why ACE as the priority setting approach?

- **Relevance:**
 - Enables focus on relevant options for change
 - evaluation conducted as part of priority setting process
 - use of Australian data (demography; COI; BoD; risk factors; etc)
 - ability to use variety of evidence
- **Rigour:**
 - applies key economic concepts
 - “opportunity cost” (has clear process for option selection; focus on costs and outcomes);
 - “marginal analysis” (interventions compared to current practice)
 - “clear concept of benefit” (linked to policy objectives)
 - avoids methodological confounding
 - extensive sensitivity/ uncertainty testing

Why ACE as the priority setting approach?

- **Due process:**
 - involves stakeholders and explicit role for judgement/values
 - recognises broader issues that impact on priority setting
 - encourages multi-disciplinary approach
 - consensus-based, with “deliberative judgements”
- **Tractable:**
 - task can be managed in a sensible manner (interventions; data bases)
 - can be institutionalised to develop current data bases
- **Proven approach:**
 - previous ACE studies in cancer; heart disease; mental health

Role of evidence in ACE

- Approach to evidence permeates ACE
 - from selection of interventions
 - to choice of methods, data collection and analysis of interventions
 - sensitivity and uncertainty analysis must match the evidence base
 - to presentation of results (range or point estimates; arithmetic plus description; probability that certain C/E ratio achievable)
 - to confidence in results
 - rigour of technical analysis
 - balanced by "due process"