# Guidelines to conducting guality economic evaluation

#### Carol Levin, Ph.D.

Clinical Associate Professor, Global Health, University of Washington Senior Health Economist, Disease Control Priorities Network

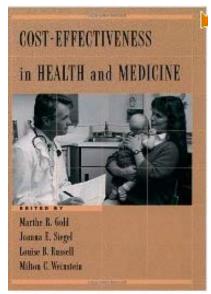


# Generating quality evidence for decision making

- Economic evaluations should be...
  - Robust
  - Transparent
  - Transferable
- Guidelines or standardized approaches can...
  - Improve the quality of evaluations
  - Increase comparability and transferability of results
  - Benefit policy makers and funders

#### Pathways to Quality

- Guidelines for conducting CEAs in high-income countries
  - i.e. UK National Institute for Health and Care Excellence (NICE)
  - US Panel on Cost-Effectiveness in Health and Medicine (1996 panel and upcoming edition)
- Increasing number of CEAs being conducted in LMIC
  - Economic evaluations increasingly supported by donor funds in global health



#### Methods for Economic Evaluation Project (MEEP)

- NICE International (UK) and partners
- Project aims to support economic evaluations funded by the Bill and Melinda Gates Foundation
  - Explore use of a standardized methodology
  - Recommend measures to improve the generalizability of studies across settings
  - Recommend the introduction of a "Gates Reference Case" (Gates-RC)

#### What is a reference case?

- A reference case sets out the principles, methodological specifications and reporting standards that support high quality and comparable analyses.
- The Gates-RC is currently at recommendation stage: it will undergo testing, discussion with stakeholders and necessary modifications before it is incorporated into BMGF funding processes

### Statement of Principle

1	An economic evaluation should be <b>communicated clearly and transparently</b> to allow the decision maker to <b>interpret</b> the methods and results to make a fully-informed decision
2	The <b>comparators</b> against which costs and effects are measured should be an accurate reflection of the decision problem.
3	An economic evaluation should consider all available evidence that is relevant to the decision problem
4	The <b>measure of health outcome</b> should be appropriate to the decision problem, should capture measurement of both length of life and quality of life, and should be generalisable across disease states
5	All differences in the expected <b>resource use and costs</b> of delivering interventions to the target population(s) should be incorporated into the evaluation.

#### Statement of Principle

6	The <b>time horizon</b> used in an economic evaluation should be of sufficient length to capture all costs and effects <b>relevant to the decision problem</b> ; an appropriate <b>discount rate</b> should be used to discount cost and effects to a present value
7	Non-health effects and costs that do not fall on the health budget should be identified where relevant to the decision problem. All costs and effects should be disaggregated, either by sector of the economy or by who incurs them.
8	The effect of the intervention on sub-populations within the decision problem should be explored and the implications appropriately characterized
9	The <b>uncertainty</b> associated with an economic evaluation should be appropriately characterized
10	The impact of implementing the intervention on health budget and on other constraints should be clearly and separately identified.
11	An economic evaluation should explore the <b>equity implications</b> of implementing the intervention.

#### Quality of stand alone cost studies

- Multiple methods
- Lack of standardized methods
- No gold standard
- Difficult for comparing results
  - May lead to unfair comparisons
  - Flawed program or policies
- Critically assess cost studies using a quality check list.

#### Quality checklist for costing studies

- 1. Are the costing objectives clearly identified?
- 2. Does the methodology selected match the objectives of the costing study?
  - a. Is the methodology suitable for calculating marginal or average costs?
  - b. Does the methodology address opportunity costs or just accounting costs?
- 3. Does the study clearly (explicitly) state the perspective of the costing?
- 4. Does the study define the time horizon (time span) of the costing study?
- 5. Are appropriate data collection methods used?
- 6. Does the methodology account for overhead costs?
- 7. Does the methodology correctly apportion joint costs?
- 8. Does the methodology distinguish between fixed and variable costs?
- 9. Does the methodology distinguish between recurrent and capital costs?
- 10. Does the costing study take advantage of all data sources?
- 11. Are all the assumptions clearly and explicitly stated and realistic (plausible)?
- 12. Are all the assumptions realistic and/or plausible?
- 13. Were sensitivity analyses undertaken to test the robustness of the assumptions?
- 14. Were the resource utilization, unit costs and results separately presented, in a well tabulated form

## Thank you.