Session 6: Guidelines to conducting quality economic evaluation

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HEIST Workshop: Introduction to Economic Evaluation in Global Health



Why set standards in cost or cost-effectiveness?

- Improving the nature and extent of use of cost data:
 - Systematic reviews of costs suggest a wide variety of costing methods and metrics
 - Poor quality may lead to poor decisions but how to judge poor quality
- Improving the production of cost data
 - Inefficiency what is important?
 - Limited use of current guidelines
 - Limited capacity in costing



What do we want to achieve?

Two characteristics of a good estimate:

- Precision
- Accuracy

But how accurate and precise is good enough?

Depends on the decision to be made using the cost



Other characteristics

Generalisability

- Can we apply the cost to other settings?
- More important to be relevant to context?

Comparability

- Are cost estimates comparable with on another?
- Standards or standardisation?



The 'reference case' approach

- 1. Set of 'acceptable' principles
- 2. Methodological guidance on how to achieve those principles (theory and evidence based)
- 3. Standardisation for specific interventions with additional guidance where available
- 4. Reporting standards



Resources to improve economic evaluation in LMIC

- Reference case approach
 - iDSi Economic Evaluation for Global Health
 - Global Health Cost Consortium (GHCC)
 Reference Cases for Global Health Costing
 - Harvard Benefit Cost analysis guidelines— any sector (agriculture, health, education)
- Published literature
 - Search on your topic email HEIST
 - General guidance



Guidance: Economic Evaluation

- Drummond, Michael F., Mark J. Sculpher, Karl Claxton, Greg L. Stoddart, and George W. Torrance. Methods for the economic evaluation of health care programmes. Oxford university press, 2015. Chapter 4 in particular.
- Jamison, DT. "Cost effectiveness analysis: concepts and applications." in R. Detels, J. McEwen, R. Beaglehole, H. Tanaka (eds) Oxford Textbook of Public Health: Volume 2, The Methods of Publich Health, fifth edition. 2009. pp. 767-782
- Ramsey et a. "Good Research Practices for CEA Alongside Clinical Trials: The ISPOR RCT-CEA Task Force Report. Value in Health. Vol 8(5). 2005. pp. 521-533



Guidance: Costing

- Vassall et al. GHCC Reference Case for Global Health Costing, Version 3, unpublished, 2017 online at https://ghcosting.org/
- Creese, Andrew, and David Parker. Cost Analysis in Primary Health Care. A Training Manual for Programme Managers. WHO Publications Center USA, 49 Sheridan Avenue, Albany, NY 12210, 1994.



Other sources

Costing concepts (YouTube videos)

- Purpose and short/long run: https://www.youtube.com/watch?v=sPQ4bvTJNTA;
- Depreciation: https://www.youtube.com/watch?v=OrBNusmnDxQ;
- Opportunity cost: https://www.youtube.com/watch?v=hR5E7Y4Dxuc;
- Sampling bias: https://www.youtube.com/watch?v=p52Nep7CBdQ

Guidelines

- London School of Hygiene and Tropical Medicine. 2013. Rapid Syphilis Test Toolkit: available at http://www.idc-dx.org/resources/the-rapid-syphilis-test-toolkit
- World Health Organization. 2002. Guidelines for cost and cost-effectiveness analysis of tuberculosis control: available at http://apps.who.int/iris/handle/10665/67728
- Beck, E. 2011. Manual for Costing HIV Facilities and Services: available at: http://www.unaids.org/en/resources/presscentre/featurestories/2011/may/20110523manualcosting
- Creese A, Parker, D. Cost Analysis in Primary Health Care. A Training Manual for Program Managers.
 WHO Publications Center USA, 49 Sheridan Avenue, Albany, NY 12210 1994.
- Drummond M, Schulpher M, Claxton K, Stoddart G, Torrance G. 2015. Methods for the Economic Evaluation of Health Care Programmes. Oxford University Press, United Kingdom.

Economic evaluation

 Wilkinson, Thomas et al. The International Decision Support Initiative Reference Case for Economic Evaluation: An Aid to Thought. Value in Health, Volume 19, Issue 8, 921 – 928





The RC Checklist

https://ghcosting.org/pages/standards/appendices/ principles_and_methods_reporting_checklist

GHCC Cost Estimate Methods Reporting Checklist

Explain the study design:

- Describe the purpose and intervention
- ☐ Justify the perspective
- Define the type of costIdentify the 'units'
- ☐ Determine the time horizon

☐ BE TRANSPARENT Outline the methods to:

- Determine the scope of inputs
- ☐ Measure resource use
- ☐ Measure 'units'
- ☐ Sample the costing sites☐ Time data collection
- ☐ Identify price data sources
- ☐ Value capital inputs
- ☐ Use shadow prices
- Discount, inflate, and convert prices

Present the analysis:

- Examine differences in costExplore cost functions
- ☐ Outline uncertainty
- Report costs, quantities, and prices

The RC Glossary

https://ghcosting.org/pages/standards/glossary

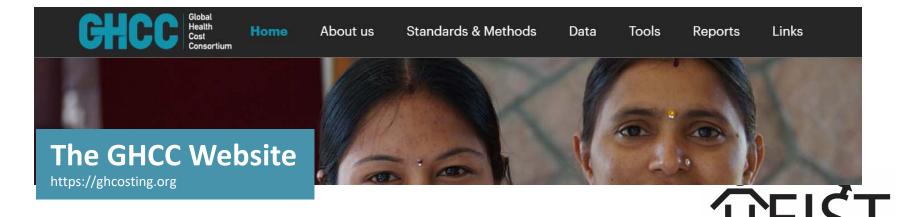
Glossary

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Capital costs are one-time costs for items that have a useful life of over one year – such as buildings, vehicles or medical equipment.

Cost is a general term that refers to the value of resources/inputs used to produce a good or service. This can refer to financial, economic, unit or average, or other types of costs depending on the ingredients included (see below). Costs may be incurred by health care providers

Health Economic Impact Studies for Translation



Thank you!

