Extended cost-effectiveness analysis (ECEA)

Stéphane Verguet

Email: verguet@hsph.harvard.edu

IHEA Webinar, May 19, 2020
Outline

Motivation
Taking a new perspective on the economic evaluation of health interventions toward UHC & SDGs

Extended cost-effectiveness analysis (ECEA)
1. Including financial risk protection & health inequality reduction into economic evaluations
2. Reducing impoverishment & inequalities cost-effectively

Priority setting
Using ECEA to enable pro-poor prioritization toward UHC
Sustainable Development Goals

“End poverty in all its forms everywhere”

“Achieve UHC, including financial risk protection for all”
Major objectives of health systems

• Improve the level of health and reduce health inequalities in the population

• Financial risk protection: prevent impoverishment from out-of-pocket (OOP) medical expenditures

World Bank’s flagship course on health sector reform and sustainable financing
WHO’s health system performance framework
WHO’s Making fair choices on the path to UHC
Health policy questions

• **Question 1:**
  how to reduce medical impoverishment?

• **Question 2:**
  how to redress health inequalities?

“**Efficiently**” or “**cost-effectively**”
**Approach**: health policy assessment including medical impoverishment & health inequalities

**Extended Cost-Effectiveness Analysis (ECEA)**

1. **Financial risk protection**: quantify household medical impoverishment averted by policy
2. **Health inequalities** across population sub-groups (e.g. income, wealth) averted by policy

**Per budget expenditure** ($ spent on policy)

ECEA focus 1: “cost-effective” purchase of financial risk protection

Assess efficient purchase of financial risk protection
Per policy, quantify poverty cases averted per $ spent

Financial risk protection (poverty cases averted)
Three steps involved

Assess:

1. Burden of illness-related impoverishment

2. Cost & effectiveness of interventions to reduce impoverishment burden

Value for money: cost ($) per poverty averted for each intervention
Goal: Identify “best buys” in financial risk protection

ECEA focus 2: “cost-effective” purchase of pro-poor health gains

Assess efficient purchase of inequality reduction
Per policy, quantify health gains among the poor per $ spent

- Health inequality reduction (gains among bottom wealth quintile)
- Cost ($)

Policy 1
Policy 2
Policy 3
Policy 4
Final ECEA output: health & financial risk protection gains, per SES

Chang, Riumallo-Herl, et al. Health Affairs 2018
ECEA use: pro-poor prioritization toward UHC

Verguet, Murphy, et al. Vaccine 2013
ECEA use: pro-poor prioritization toward UHC
ECEA use: pro-poor prioritization toward SDGs, **beyond** health sector

Estimate cost-effective purchase of poverty reduction by policies: **poverty cases averted per policy $ invested**

Allows **intersectoral comparison** by Ministries of Finance
ECEA teaching pack

https://repository.chds.hsph.harvard.edu/repository/collection/teaching-pack-extended-cost-effectiveness-analysis/