

Discussant Comments:
Valuing Nonfatal Health Risk Reductions
in Global Benefit-Cost Analysis
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Responses to Questions to Discussants

- Commendable effort to develop guidelines for valuing reductions in nonfatal health risks for global BCA
- Technically accurate
- Practically applicable
- Clearly written

Problem and Proposed Solution

- Estimates of benefits of reduced nonfatal health risks could contribute to more efficient resource allocation
- But estimates of WTP are sparse relative to the diversity of nonfatal health risks & populations affected
- Paper proposes to approximate benefits based on VSLY and an index of health-related quality of life
 - Both measures are based on individual preferences

Benefit measure

$$\textit{Benefit Estimate} = \textit{VSLY} \times \Delta(\textit{QALY})$$

(or use $\Delta(\textit{DALY})$)

1. QALYs inconsistent with theory and empirical evidence on health preference (see p. 12)
2. Constant VSLY not consistent with theory and empirical research (see p. 13)
3. Product of a constant and change in a life year measure not consistent with preference-based measure of benefit (Hammitt, *J Risk Uncert* 2013)

QALYs

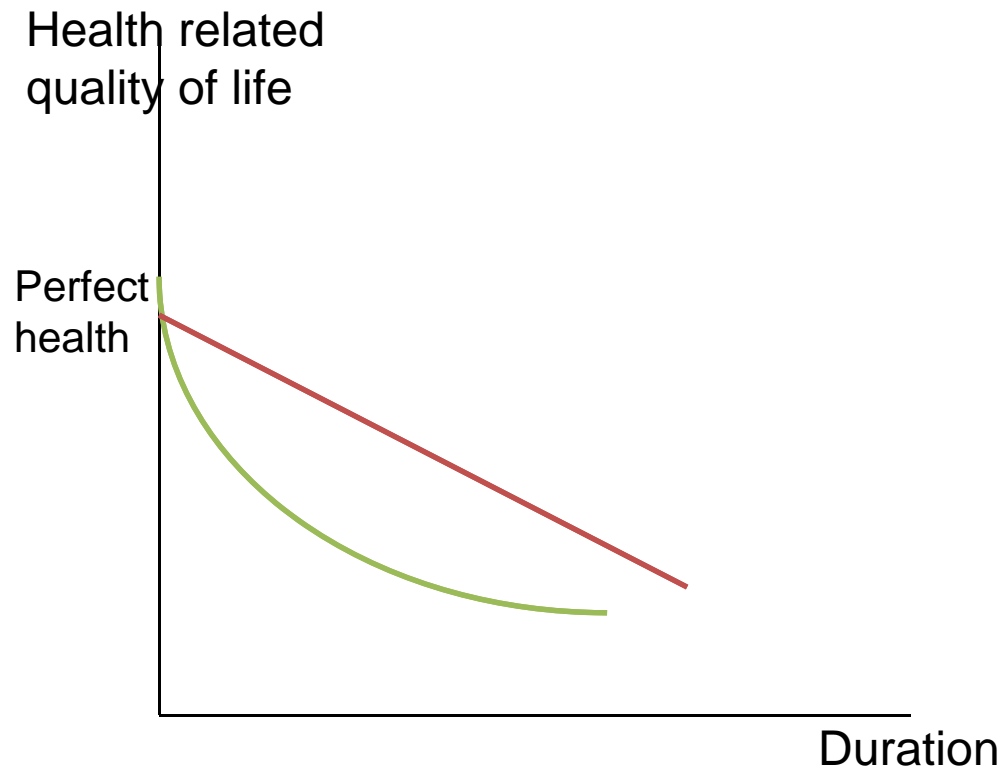
$$\textit{Benefit Estimate} = \textit{VSLY} \times \Delta(\textit{QALY})$$

- QALYs inconsistent with theory and empirical evidence on health preference

1. Marginal value of health state is constant
2. Marginal value of duration is constant

(Independent of health state, duration, consumption)

No diminishing marginal utility; no diminishing MRS



Benefit measure

$$\textit{Benefit Estimate} = \textit{VSLY} \times \Delta(\textit{QALY})$$

- Two measures that are inconsistent with theory and evidence on individual preferences
- A way of combining the measures that is inconsistent with theory of individual preferences
- How well is this going to work?
 - What is the standard of comparison?

Assessment & future research

$$\textit{Benefit Estimate} = \textit{VSLY} \times \Delta(\textit{QALY})$$

- The realistic alternative is the human capital or illness cost approach
- An alternative standard is the “true” WTP or a primary estimate of it
 - Primary research
 - Theoretical simulation
- Other approaches to reduce dimensionality of illnesses?
 - None will be as simple
 - Attribute-based approach (e.g., Cameron & DeShazo 2013)
- Research on WTP for QALY or DALY – how useful?