

Comparing and Contrasting Utilities and Willingness to Pay

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I. Introduction

Generalizations:
Both approaches assess preferences for health outcomes
Both rely mainly on stated preference rather than revealed preference
Utilities: Conventional Scale, 0.00 = Dead; 1.00 = Perfect Health; Use Preference Scores to construct index, QALYs
Report: Incremental net Cost per QALY gained
WTP uses Pecuniary Scale
Report: \$ value of Benefits - \$ value of Costs; net benefits in \$

II. Scope of Evaluation
III. Objective Function

(1) $U = U(C, HS)$

where U is the utility function;
 C = composite final consumption good;
 HS = health status.

(2) $HS = HS(C, T_{hs}, MC, GE, PE, SE)$

where T_{hs} = time devoted to the production of health status;
 MC = medical care;
 GE = genetic endowment;
 PE = physical environment;
 SE = social environment.

WTP allows C and HS to vary; assesses value, in pecuniary terms, ΔU associated with ΔMC (or ΔPE) in \$
HRQL approach holds C constant; assesses ΔU associated with ΔHS on the dead = 0.00 – perfect health = 1.00 scale

Source: Feeny 2000.

IV. Information Requirements/Cognitive Burdens for Respondents

QALYs – Base Estimate of HRQL effects on information from patients (perhaps using community preferences) - - the experts on HRQL effects

Obtain information on Effectiveness and Pecuniary matters from other “experts” (Meta-analyses; economists; accountants, etc.)

WTP – Base estimates of HRQL **and** pecuniary effects on information from patients (or general population)

V. Assessing Preferences for Use in Individual and Societal Decision Making

Predictive Validity? - - limited evidence
Immunization for influenza; prenatal diagnosis

Rules for Aggregation:

QALYs – one person, one vote

WTP – one \$, one vote

VI. Getting the Right Functional Form

QALYs: Direct Utility Assessment (e.g., Standard Gamble) or Multi-Attribute Utility Functions (MAUFs): EQ-5D, HUI, SF-6D, QWB

WTP: Discrete Choice Experiments

Most MAUFs and WTP estimates rely on Linear Additive Functional form

But the Evidence from a number of MAUFs challenges the appropriateness of the linear additive form:

HUI1; HUI2 (GPP, PofP; U.K.); HUI3 (Canada, France, Spain); Disease Specific: Rhinitis; Asthma

VII. Summary and Conclusions

Circumstances in which QALYs and WTP likely to provide estimates of similar scope: benefits are mainly HRQL

QALY approach while less comprehensive may be more practical in some circumstances; may better exploit complementary expertise

But Circumstances in which QALY approach may be incomplete

VII. Summary and Conclusions, cont'd

Approaches share many characteristics/challenges:

Importance of method of preference elicitation: what and how you ask matters a lot

Importance of high quality study conduct

Over reliance on simple functional forms

Given similar issues, scope for more productive dialogue

Both rely on behavioural and normative judgment that patient values matter
