THE COST PER QALY IS USEFUL FOR MAKING DRUG COVERAGE DECISIONS?

The debate continues......

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Basic premise of the QALY
Updating Cost-Effectiveness — The Curious Resilience of the $50,000-per-QALY Threshold

Peter J. Neumann, Sc.D., Joshua T. Cohen, Ph.D., and Milton C. Weinstein, Ph.D.

Cancer and hepatitis C — it is useful to reexamine what the ratio means, why it persists, and how it might be applied more reasonably to inform resource-prioritization discussions in today’s health care and economic climate.

The $50,000-per-QALY ratio has murky origins. It is often attributed to the U.S. decision to mandate Medicare coverage for patients with end-stage renal disease (ESRD) in the 1970s: because the cost-effectiveness ratio for dialysis at the time was roughly $50,000 per QALY, the government’s decision arguably endorsed that cutoff point implicitly.\(^1\) However, the link to dialysis is inexact — and even something of an urban legend, given that the cost-effectiveness ratio for dialysis was probably more like $25,000 to $30,000 per QALY, the ESRD decision was controversial, and even at the time Medicare was covering some treatments costing more than $50,000 per QALY.\(^1\)
Is The United States Ready For QALYs?

Each society must determine how it will make judgments about the allocation of health care resources. QALYs are one important tool.

by Peter J. Neumann and Dan Greenberg
The German institute is comparable to HTA bodies in other countries but follows its own self-formulated "methods" (version 1.0 of March 2005, to be found on the institute's website). First of all, cost-benefit assessment of pharmaceuticals is not one of the IQWiG's tasks, although one might come to this conclusion reading the terms “Economic Efficiency” in the IQWiG title. Hence, IQWiG will not consider QALYs (Quality Adjusted Life Years) within its evaluation and there is currently no need for health economic modeling.
If not QALYs, then what?

HALYs and QALYs and DALYs, Oh My: Similarities and Differences in Summary Measures of Population Health

Marthe R. Gold¹, David Stevenson², and Dennis G. Fryback³
PAPER 95-4

HEALTHY YEARS EQUIVALENTS (HYEs) AND DECISION TREES:
A SIMPLE, TWO-STAGE, LOTTERY-BASED ALGORITHM

Amiram Gafni
Stephen Birch
Bernie O'Brien
It’s not hard to make decisions once you know what your values are.

~ Roy E. Disney
Multiple-criteria decision analysis

From Wikipedia, the free encyclopedia

"MCDM" redirects here. For the use in cosmology, see meta-cold dark matter.

Multiple-criteria decision-making or multiple-criteria decision analysis (MCDA) is a sub-discipline of operations research that explicitly considers multiple criteria in decision-making environments. Whether in our daily lives or in professional settings, there are typically multiple conflicting criteria that need to be evaluated in making decisions. Cost or price is usually one of the main criteria. Some measure of quality is typically another criterion that is in conflict with the cost. In purchasing a car, cost, comfort, safety, and fuel economy may be some of the main criteria we consider. It is unusual to that the cheapest car is the most comfortable and the safest one. In portfolio management, we are interested in getting high returns but at the same time reducing our risks. Again, the stocks that have the potential of bringing high returns typically also carry high risks of losing money. In a service industry, customer satisfaction and the cost of providing service are two conflicting criteria that would be useful to consider.
MCDM Methods

- Aggregated Indices Randomization Method (AIRM)
- Analytic hierarchy process (AHP)
- Analytic network process (ANP)
- Best worst method (BWM)\(^{30}\)
- Characteristic Objects Method (COMET)\(^{31}\)
- Data envelopment analysis
- Decision EXpert (DEX)
- Disaggregation – Aggregation Approaches (UTA\(^*\), UTAlt, UTAP\(^*\))
- Dominance-based rough set approach (DRSA)
- ELECTRE (Outranking)
- Evidential reasoning approach (ER)
- Goal programming
- Grey relational analysis (GRA)
- Inner product of vectors (IPV)
- Measuring Attractiveness by a categorical Based Evaluation Technique (MACBETH)
- Multi-Attribute Global Inference of Quality (MAGIQ)
- Multi-attribute utility theory (MAUT)
- Multi-attribute value theory (MAVT)
- New Approach to Appraisal (NATA)
- Nonstructural Fuzzy Decision Support System (NSFDSS)
- Potentially all pairwise rankings of all possible alternatives (PAPRIKA)
- PROMETHEE (Outranking)
- Superiority and inferiority ranking method (SIR method)
- Technique for the Order of Prioritisation by Similarity to Ideal Solution (TOPSIS)
- Value analysis (VA)
- Value engineering (VE)
- VIKOR method\(^{32}\)
- Fuzzy VIKOR method\(^{33}\)
- Weighted product model (WPM)
- Weighted sum model (WSM)
Bernie O’Brien

“What the economists say:”

“It works in practice. So what! Does it work in theory”? 
Be it resolved:

• The cost per QALY is useful for making drug coverage decisions?