

A Different Approach to Health State Valuation

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This is a summary of the presentation by Professor Daniel Kahneman, Eugene Higgins Professor of Psychology and Professor Public Affairs at the Woodrow Wilson School, Princeton University, Princeton, NJ, USA, given at the ISPOR “Building a Pragmatic Road: Moving the QALY Forward” Consensus Development Workshop, as a continuation of the discussion on an experience-based approach to health state valuation, as presented on May 2005 at the ISPOR 10th Annual International Meeting First Plenary Session, “Determinants of Health Economic Decisions in Actual Practice: The Role of Behavioral Economics” at: <http://www.ispor.org/meetings/Invitational/Plenary%20Presentation%20by%20D%20Kahneman.pdf> [1,2], and debated at the Invited Issue Panel, “Will the QALY Survive” [3,4] at the ISPOR 11th Annual International Meeting, May 2006.

Upon further examination of the role of experience-based utility in the assessment of health states [5], I have come to the conclusion that it is not going to happen within the quality-adjusted life-year (QALY). It could complicate the QALY; if we start asking very different questions, then we try to integrate these responses into the QALY framework. This argument is similar to a debate that I had with a group of economists who do contingent valuations of the environment. Survey techniques are used; people’s responses to these survey techniques are expected to obey the axioms of utility theory, similar to those in developing a QALY. People, however, do not obey the axioms of expected utility. It is easy to show inconsistencies: when we look for inconsistencies, we find them. So, a technique that is essentially built on the denial of inconsistencies has a problem.

Consider the possibility that the utility used in developing the QALY may be wrong but that those trying to test it cannot do so from within QALY framework. As an analogy, imagine that you are a physicist. It is the 19th century. People believe in ether. You have been developing a measure for the viscosity of the ether. Now, breakthroughs in physics are unlikely to come from your deliberations, because you are committed to the assumption that there is ether, but you are having measurement problems that you acknowledge but see only as measurement problems. An alternative hypothesis that there may not be ether is a very alien idea. You should not even expect that you are going to come to it, but you know it is a problem. This is one of the issues with QALYs.

Another issue, with respect to experience-based utility, is that all perspectives are valid—what people want, what satisfies them, and their experiences, but, because of adaptation, there may be different values depending on whether you are measuring an experience or measuring a preference by an “experienced” person. For example, patients with colostomy think they are happy with the colostomy, and they expect to be happy again without it. But when it is removed, they remember their previous state as absolutely horrible; and, in terms of preferences, they are willing to pay a great deal, including life-years, to get rid of that state [6]. But there is an immediate problem from this reversal in perception in that it seems impossible to generate a number that decision-makers will take seriously. And this is another troubling

point of similarity between contingent valuation and QALYs. In both cases, there is a tacit collusion between the researchers and the decision-makers, that the researchers will provide the decision-makers with a number that is simple. In contingent valuation, it is dollars. Here, it is QALYs. It is generated in such a way that it is almost impossible to question. The inconsistencies are within the QALY calculation. It is not that you can go back and reanalyze and show within your data that there are inconsistencies. It is very difficult to do. Similar to contingent valuation, it is impossible to find the inconsistencies. You have to ask questions that they do not get routinely asked. The moment you ask them, the QALY breaks apart. But within their guidelines or the questions they are asking, you will never catch the problem. It is my impression that it is hard to question QALYs from the “inside”; and that is one major problem with the QALY. In a way, the QALY has to be designed so that the decision-maker will recognize its value.

The question is: is there any other way? Life is extremely complicated, and we do need something like QALYs, but we need to speak to decision-makers in simple terms. That might suggest a completely different approach to the measurement of health states. A suggestion that I also gave to economists working with contingent valuations of the environment is to establish juries of citizens with varied membership (economists, health statisticians, patients), and examine in detail six to ten health states spanning the range from very severe to relatively mild, and assign them relative values. In so doing, encounter all relevant problems, but admit that we are looking for one number that will help health-care decision-makers allocate health-care resources efficiently. Then, when such a scale is built, develop a procedure that, when another health state is considered, the question gets narrowed to where it is on the scale, between 1 and 2 or between 3 and 4 or between 5 and 6. Develop procedures for making these secondary judgments. Set up one scale facing all the complexities of the data, the internal inconsistency, philosophical issues, the relative weight of experience, and other ways to look at utilities. But think of that, and then use that scale, which would be a scale that decision-makers could use, as a scaffolding, to build a more detailed understanding and a more detailed way of looking at all health states. I consider this a practical proposal that would be simple to implement. It would generate one scale and it would generate one set of numbers. They may or may not be similar to those used in the QALY. They could be very different numbers, perhaps better numbers.

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