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Addressing misconceptions in valuing health

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“...policy should seek to help people to feel as good as they can for as long as they can. This over-arching goal can easily get lost in a world of national targets, performance benchmarks and healthcare league tables.”

Imagine two individuals who are the same in every way except for their health. One has ‘some problems in walking about’ and the other has ‘moderate anxiety or depression’. Now, imagine a treatment for each that could alleviate these problems completely and that both treatments cost the same. Now, for the tricky bit: there is only enough money to treat one of the two people. Which one would you treat, and why? Your answer must surely depend on who has most to benefit from treatment. But how would you go about judging who has most to benefit? More than 2000 years of ethical argument have given us three ways of answering this question [1]. The person who has most to benefit is the one who: 1) needs the treatment the most; 2) desires it the most; or 3) feels best from getting it.

The individual with greatest need for treatment is determined by an external judgment about who benefits most. A doctor could decide based on his assessment of which of these two problems – walking about and anxiety/depression – creates the biggest loss, or we could look at what philosophers consider to be the most important determinant of the good life [2]. In our example, different doctors and philosophers will have different views about who should win the race for scarce resources. I suggest that a good life is only good for these individuals if it allows them to satisfy more of their desires or if it makes them feel better.

So, the first misconception – health should be valued using the external assessments of experts. It should not.

We could simply ask each individual to say just how much they desire the treatment. In markets, this is done through observing each individual’s willingness to pay for treatment. Where markets do not exist, such as publicly funded healthcare systems, economists have developed methods that elicit willingness to pay values from hypothetical questions. Because of ethical and methodological problems in attaching monetary values to health, health economists have developed methods that elicit willingness to pay using different metrics, such as the risk of death (the standard gamble method) and reduced life expectancy (the time trade-off [TTO] method) [3]. Due to the concerns about values elicited from patients themselves, such as the possibility of responses being influenced by self-interest, health economists have elicited standard gamble and TTO values from members of the general public, asked to imagine what it would be like to experience a range of health states.

TTO-based general population values for the EQ5D health state classification system are now being used by the NICE in the UK to value the health benefits associated with new therapies. The EQ5D defines health in terms of five dimensions: mobility (including some problems walking about), self-care, usual activities, pain or discomfort and anxiety or depression (including moderate anxiety or depression), leading to a total of 243 combinations of health states [4,5]. As things stand, some problems walking about are considered to be about 85% of full health

and moderate anxiety or depression slightly higher [6]. So, in our example, the individual with problems walking about would marginally win the race for scarce resources.

Preference (desire)-based valuations, however, suffer from a major problem: the values elicited reflect imaginations about the impact of those states when people are focusing attention on that impact. That is to say, the 15% loss associated with some problems walking about is the loss associated with some problems walking about when those problems are the focus of attention. So, they are not especially useful in saying how severe different conditions are when they drift in and out of attention in the day-to-day experiences of life. This matters because some conditions are more attention seeking than others. Moderate anxiety or depression attracts more attention more of the time than some problems walking about. It is little wonder, then, that the former has about ten times as much of an impact on happiness than the latter [7]. By the way, things are not much better if we ask hypothetical questions only of those with direct experience of the specific health problems: a person with problems walking, who is asked to imagine having their walking restrictions alleviated, will inevitably imagine actively enjoying the freedom of normal walking, which they will quickly take for granted.

So, the second misconception – health should be valued using preferences elicited from the general public or from patients. It should not.

So, we must value health benefits according to the impact that treatments have on how people feel. We must directly measure happiness. We have made enormous advances in the last couple of decades in developing measures of happiness and we now know quite a lot about the causes and consequences of happiness. For one thing, we can be pretty confident that the individual who has anxiety or depression has more to gain in terms of better feelings from treatment than the person with some problems walking.

We also know that people adapt to obesity, so, there is little hedonic incentive to shed the pounds [8]. If we want to understand and change health-related behaviors, we need a better understanding of the feedback loop between what we do and how we feel about it. Moreover, it is now firmly established that happiness causes longer lives and better health [9,10].

As of April 2011, the Office for National Statistics in the UK has included happiness questions in some of its largest national surveys. Happiness measures are now also part of the UK Treasury's Green Book on economic appraisal and, as a consequence, they are increasingly being used to evaluate interventions in many areas of public policy [11]. This will allow us to compare the effectiveness of healthcare relative to other uses of public money. The knowledge we have about happiness measures can be readily and more widely applied in health – for example, by assessing happiness before and after key stages of a treatment to consider the impact of that treatment on people's lives. NICE is currently reviewing their guidelines, which are still predicated on the preferences approach to valuing health benefits [5]. The review is, therefore, an opportunity to consider the use of happiness measures in economic evaluations.

There are a number of ways in which happiness can be measured. The questions being used by the Office for National Statistics are a good place to start [12]. While assessments of life, overall, provide useful additional information about how well life is going, I would like to see more research efforts devoted to measuring happiness as the experience of feelings over time [13], which should include the feelings of purpose that we get from our daily lives as well the pleasure and pain [14].

I have no doubt that policy should seek to help people to feel as good as they can for as long as they can. This over-arching goal can easily get lost in a world of national targets, performance benchmarks and healthcare league tables. Happiness measures can now provide us with a robust metric that focuses our eyes firmly on the ultimate prize of better lives.

So, the final conception – health should be valued using reports of happiness.

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References

- Parfit D. *Reasons and Persons*. Oxford University Press (1984).
- Aristotle. *The Nicomachean Ethics*. Filiquarian Publishing, LLC (2007).
- Dolan P. The measurement of health-related quality of life for use in resource allocation decisions in health care. In: *Handbook of Health Economics*. Culyer AJ, Newhouse J (Eds). Elsevier, Oxford, UK, 1723–1760 (2000).
- Brooks RG. *Health Status and Quality of Life Measurement: Issues and Developments*. Swedish Institute for Health Economics, Lund, Sweden (1991).
- NICE. *Guide to the Methods of Technology Appraisal*. National Institute for Health and Clinical Excellence, London, UK (2008).
- Dolan P. Modeling valuations for EuroQol health states. *Med. Care* 35(11), 1095–1108 (1997).
- Dolan P, Metcalfe R. Valuing health: a brief report on subjective well-being versus preferences. *Med. Decis. Making* 32(4), 578–582 (2012).
- Bradford WD, Dolan P. Getting used to it: the adaptive global utility model. *J. Health Econ.* 29(6), 811–820 (2010).
- Cohen S, Doyle WJ, Turner RB, Alper CM, Skoner DP. Emotional style and susceptibility to the common cold. *Psychosom. Med.* 65(4), 652–657 (2003).
- Steptoe A, Wardle J. Enjoying life and living longer. *Arch. Intern. Med.* 172(3), 273–275 (2012).
- HM Treasury e-Communications Team. *The Green Book: Appraisal and Evaluation in Central Government*. The Stationary Office, London, UK (2011).

- 12 Dolan P, Metcalfe R. Measuring subjective wellbeing: recommendations on measures for use by national governments. *J. Soc. Policy* 1(1), 1–19 (2012).
- 13 Dolan P, Kahneman D. Interpretations Of utility and their Implications for the valuation of health. *Econ. Journal.* 118(525), 215–234 (2008).
- 14 White MP, Dolan P. Accounting for the richness of daily activities. *Psychol. Sci.* 20(8), 1000–1008 (2009).

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