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Subjective well-being and the measurement of quality in healthcare

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ABSTRACT

Quality continues to be placed at the heart of discussions about healthcare. This raises important questions about precisely what quality care is, and how it should be measured. An overall measure of subjective well-being (SWB) that assesses and joins up different stages of the treatment process, and the different people affected, could potentially be used to capture the full impact of quality care throughout the entire treatment process. This article presents a temporal model through which SWB links all stages in the treatment and care process, thus allowing the overall quality of care to be determined and valued according to its direct effect on people's lives. Drawing on existing medical and behavioural studies, we populate this model with evidence that demonstrates how SWB is affected at different points along the patient pathway. SWB is shown to have an effect on outcomes at all stages of the treatment experience and improved health and quality outcomes are shown to consistently enhance SWB. Furthermore, SWB measures are shown to be a suitable method to value the impact of healthcare on the families and carers of patients and, in this way, can join up health outcomes to show wider effects of treatment on patients' lives. Measuring an individual's SWB throughout his or her treatment experience can enable a full appraisal of the quality of care that they receive. This will facilitate service improvements at the micro level and help value treatments for resource allocation purposes at the macro level.

Introduction

Concerns about the quality of healthcare have existed for almost as long as healthcare itself, but there is now a renewed vigour at making quality the organising principle (Darzi, 2008; Department of Health, 2010a; Hurtado, Swift, & Corrigan, 2001). This quality movement has its roots in initiatives first discussed over a decade ago (Coye & Detmer, 1998) and continues to be at the forefront of the healthcare agenda in developed countries. Measuring for quality improvement in healthcare has inherent benefits in terms of individual and population health improvement, evaluation and enhancement of treatments, and appraisal and valuation of services (Berwick, James, & Coye, 2003).

Despite enthusiasm and acknowledgement for the need to measure quality, there is as yet no clear consensus on how this can be achieved (Mayer, Chow, Vale, & Athanasiou, 2009). Part of the problem is that quality means different things to each of the many stakeholders in healthcare (Chilgren, 2008). The chief concerns of a patient may surround accessibility and familiarity; a physician may place more emphasis on cancer excision margins and evidence-based practise; a manager might place premiums on cost effectiveness and service delivery initiatives.

There have been significant efforts to encapsulate the important facets of care contributing to a quality service into a template from which to consider care pathways (Donabedian, 1966; Hurtado et al., 2001; Maxwell, 1984; Schiff & Rucker, 2001; Sitzia & Wood, 1997), but creating successful policy initiatives on the back of this work has had variable results (Davies, Powell, & Rushmer, 2007; Valderas et al., 2008). Progress has been made at strategic levels in many countries with the implementation of national quality programs (Agency for Healthcare Research and Quality, 2008; Australian Commission on Safety and Quality in Health Care, 2008; Department of Health, 2008) but continued efforts are required before a culture of quality becomes pervasive.

Hurtado (Hurtado et al., 2001, p. 232) defines quality as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge" but such broad definitions can have limited direct applications. A more useful definition of quality considers it to be measured over six domains (Leatherman & Sutherland, 2003), effectiveness, access and timeliness, capacity, safety, patient centeredness, and equity. Within each of these domains it is possible to measure different elements, and so from this a picture of the quality of care within a service can

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be outlined. The main criticism of many measures used to assess these domains is that there is too great an emphasis on easy to capture throughput or process measures, such as staffing levels of infection rates. These can be poor proxies for many attributes of care quality (Mayer et al., 2009). There is a consistent lack of focus on the patient, with many of these measures, and the impact that the quality of care has on individuals and their families is only given attention in one of these domains. This does not seem right.

Patient reported outcome measures (PROMs) elicit the patient's evaluation of their condition in the context of a given healthcare intervention or treatment (Browne et al., 2007; Valderas et al., 2008). PROMs go some way towards involving the patient in assessing the quality of their care, but are focused only on specific conditions and can fail to capture the global impact of the healthcare intervention on the patient's life as a whole. This represents a deficiency in the current methodology of quality outcome measurement. A further criticism, and a major motivation for this paper, is that current outcome measurement largely ignores the experiences of patients before and during their treatment, which are often the times that are associated with the most pain and suffering.

Measures of health related quality of life (HRQoL) are increasingly being used to measure the benefits of treatments and interventions. The most widely used are the EQ5D, SF-12 and SF-36 metrics and are often used alongside PROMs to measure the benefits of treatment for both individual patients and more widely for resource allocation decisions (Dolan, 1997; Giacomini, 2005). They are designed to pick up changes in certain health related domains that are deemed important, however these domains may not necessarily be the right ones, meaning that these measures may fail to pick up the real impact of healthcare in the experience of patient's lives (Dolan, Lee, King, & Metcalfe, 2009).

The role of traditional health metrics in safeguarding and standardising patient care is undisputed, yet central goals of making the patient feel better for longer can be easily lost in a world of national targets and healthcare league tables. This is true for both patients and health care professionals, who can feel confused and ambivalent about initiatives intended to drive up quality for a number of reasons (Haslam, Keenan, Dean, & Bardsley, 2008). What is needed is a method and a measure to join up the experiences that patients and their families and carers have during all their interactions with health services.

Subjective well-being (SWB) is a measure of the overall 'wellness' of an individual, and as such has the potential to be used as this global marker for how treatments affect people in the experience of their lives. SWB is 'a broad category of phenomena that includes people's emotional responses, domain satisfactions (e.g. health, work, social relationships), and global judgements of life satisfaction' (Diener, Suh, Lucus, & Smith, 1999) which correlate predictably with many objective circumstances (Lyubomirsky, King, & Diener, 2005). A detailed discussion of the origins of the origins and roots of wellbeing are well described elsewhere (Dolan, Peasgood, & White, 2008), but it is useful to briefly describe the different uses of SWB in a policy setting. There are three principle accounts of wellbeing (Dolan, Layard, & Metcalfe, 2011b) that have been considered for policy purposes. The "objective list" account was argued by Sen (Sen, 1999) supports the use of a list of human needs and rights that are required for individuals to flourish. Addressing such rights such as housing, education and minimum wages has been the foundation for many government policies. The second, the "Preference satisfaction" account, is often likened to the economist's view of wellbeing, where the maximisation of an individuals wants or desires is held as the marker of wellbeing. For this reason income, or gross domestic product as a proxy for income, is used as a surrogate marker for SWB because income has been perceived at a policy level to enable preferences to be satisfied. Criticisms abound for this account due to our innate ability to "miswant" and act against our better judgement.

The third account of wellbeing is SWB, and its consideration as such has led to its increased popularity as a tool in policy circles. Recent refinements of the meaning of SWB have been in considering SWB in terms of three categories: evaluations (e.g. life satisfaction), experiences (e.g. happiness yesterday), and a eudomonic domain (e.g. worthwhileness of life) (Dolan, Layard, & Metcalfe, 2011a). Together these paint a full picture of the SWB of an individual, and include the traditional notions of overall life satisfaction that are most commonly associated with SWB measures as well as picking up the mental state account of SWB that has its roots in the Benthamite view of wellbeing. The inclusion of a "worthwhileness" account is also something that has particular relevance to the health setting, where people often make judgements regarding the purposefulness of their lives. Considerations regarding measuring SWB are discussed later in the paper.

In various guises, SWB has had a long tradition in healthcare (Bowling, 1997; Fitzpatrick et al., 1992; Gill, 1984) and is increasingly being considered as a suitable metric for policy analysis (Dolan et al., 2011a; Dolan & White, 2007; van Praag, Frijters, & Ferrer-i-Carbonell, 2003). There is a robust positive association between physical health states and SWB (Pressman & Cohen, 2005), which strongly supports its application in the field of health outcomes. In its most frequently measured form, SWB can be measured by asking individuals about their overall life (or domain) satisfaction either in an interview or self completed measure.

There is presently inadequate overall appraisal of the impact of healthcare on patients' lives as a whole, and as such there are clear motivations for exploring the associations between patient experience and SWB. In the current state of play PROMs are mainly used at a micro level to evaluate new treatments or as part of limited service appraisals, and for most conditions they are not routinely used in clinical practise. Measures of HRQoL, on the other hand, are primarily used to guide resource allocation and technology appraisal decisions, having a more macro role in existing practise. In this respect, more needs to be done to join-up PROMs at the micro level with HRQoL measures at the macro level, and we suggest that measures of SWB provide one way of doing this.

SWB measures allow for generalisability across conditions and treatments, across patients and non-patients, and over time in ways that existing measures, designed for different purposes, do not. The "currency" of SWB also allows us to place health conditions and healthcare in their appropriate context, without focussing respondents' attention on the things we as researchers or practitioners think they should focus on. Measures of SWB have great potential to provide data on the 'epidemiology of experience' in different clinical areas, and as such hold considerable promise as measures of what really matters to those experiencing healthcare.

In practical terms measures of SWB have direct relevance when considering all aspects that contribute to the overall quality of a service. Whilst they cannot and should not replace key health metrics such as reoperation rate or mortality rates, there is a role for them at every stage when considering other contributing determinants of quality care. In this way the overall aim of having a positive impact on the health of patients does not get lost or denigrated by the array of other, sometimes less tangible markers of performance. It is also the case that initiatives that improve performance in other domains such as reductions in nosocomial infections, will have a direct positive impact on the SWB of patients through reductions in complications and hospital length of stay, for example.

In line with these considerations, we propose a new definition of quality in terms of *the impact of an experience of healthcare on a*