

## Intelligence and Transparency in Health Technology Assessment

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Abstract:	<p>Current thinking about the methodology of HTA seems to be dominated by two fundamental tensions: [1] between maintaining a tight focus on quality-adjusted life-years and broadening its concern out to pay attention to a broader range of factors, and [2] between thinking of the evaluative dimensions that matter as being objectively important factors or as ones that are ultimately of merely subjective importance. In this paper, I will argue that health is a tremendously important all-purpose means to enjoying basic human capabilities, but a mere means, and not an end. The ends to which health is a means are manifold, requiring all those engaged in policy making to exercise intelligence in a continuing effort to identify them and to think through how they interrelate. Retreating to the subjective here would be at odds with the basic idea of HTA, which is to focus on certain objectively describable dimensions of what matters about health and to collect empirical evidence rigorously bearing on what produces improvements along those dimensions. To proceed intelligently in doing HTA, it is important to stay open to reframing and refashioning the ends we take to apply to that arena. The only way for that to happen, as an exercise of public, democratic policy-making, is for the difficult value questions that arise when ends clash not to be buried in subjective preference information, but to be front-and-center in the analysis.</p>

**Title: INTELLIGENCE AND TRANSPARENCY IN HEALTH TECHNOLOGY ASSESSMENT**

*Short title: Intelligence and transparency in HTA*

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## Abstract

Current thinking about the methodology of HTA seems to be dominated by two fundamental tensions: [1] between maintaining a tight focus on quality-adjusted life-years and broadening its concern out to pay attention to a broader range of factors, and [2] between thinking of the evaluative dimensions that matter as being objectively important factors or as ones that are ultimately of merely subjective importance. In this paper, I will argue that health is a tremendously important all-purpose means to enjoying basic human capabilities, but a mere means, and not an end. The ends to which health is a means are manifold, requiring all those engaged in policy making to exercise intelligence in a continuing effort to identify them and to think through how they interrelate. Retreating to the subjective here would be at odds with the basic idea of HTA, which is to focus on certain objectively describable dimensions of what matters about health and to collect empirical evidence rigorously bearing on what produces improvements along those dimensions. To proceed intelligently in doing HTA, it is important to stay open to reframing and refashioning the ends we take to apply to that arena. The only way for that to happen, as an exercise of public, democratic policy-making, is for the difficult value questions that arise when ends clash not to be buried in subjective preference information, but to be front-and-center in the analysis.

**Key words:** concept of health; final ends; capabilities; subjective preferences; deliberative democracy.

*The pragmatic theory of intelligence means that the function of mind is to project new and more complex ends—to free experience from routine and from caprice.... Action restricted to given and fixed ends may attain great technical efficiency; but efficiency is the only quality to which it can lay claim. Such action is mechanical (or becomes so), no matter what the scope of the pre-formed end.... But the doctrine that intelligence develops within the sphere of action for the sake of possibilities not yet given is the opposite of a doctrine of mechanical efficiency. Intelligence as intelligence is inherently forward-looking; only by ignoring its primary function does it become a mere means for an end already given (1).*

In this paper, I offer some observations and arguments about how to think about the contribution of health technology assessment (HTA) to policy-making.<sup>1</sup> To this outsider, current thinking about the methodology of HTA seems to be dominated by two fundamental tensions: between maintaining a tight focus on quality-adjusted life-years (QALYs) and broadening its concern out to pay attention to a broader range of factors, and between thinking of the evaluative dimensions that matter as being objectively important factors or as ones that are ultimately of merely subjective importance. I hope to show how these tensions can be put to productive use. Doing so, I will argue, will require practitioners of HTA to remember that health is a means, not an end, and that the ends to which health is a means are manifold, thus requiring all those engaged in policy making to exercise intelligence in a continuing effort to identify them and to think through how they interrelate.

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<sup>1</sup> I am grateful to Nir Eyal, Gert Jan van der Wilt, and Sridhar Venkatapuram for many useful comments on an earlier draft.

Before I can come to these arguments, I need to say a bit about where I am coming from and about how I am understanding the idea of an end. I offer these points, not as an expert in HTA, but as a philosopher who has spent his career working on practical deliberation, centrally including public deliberation in democratic settings (2). Although I also work on moral theory, and although moral or ethical questions are important in HTA, I here set aside specifically moral or ethical questions in order to make some broader suggestions about how to think about HTA's contribution to public decision-making about policies related to health and health care. It is of course true that concern about efficiency needs to be supplemented by concern about equity (3). This has long been recognized by defenders of cost-benefit and cost-effectiveness analysis. It also true that many special and difficult moral questions arise with regard to the wide range of technologies<sup>2</sup>, protocols, and organizational systems assessed by HTA (4;5). Nonetheless, I forego discussing these important issues of equity and ethics in order to develop and defend my main message, about the importance to HTA of recognizing that health is a means, not an end.

How can I say that health is a means, not an end? Is it not standard to *define* "health technology assessment" as a set of techniques oriented by the "ultimate goal [of] health gain" (6)? In response, a distinction is called for. The term "end" admits both of a sense in which it contrasts with the idea of a means and a sense in which it does not. In some tension with the eloquent description of practical intelligence that frames this paper, the pragmatist philosopher John Dewey (7) argued that ends and means lie on a continuum, with the boundary between them constantly shifting. Rather than drawing an absolute contrast between ends and means,

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<sup>2</sup> In what follows, I will generally talk only about "technologies"; but the term may be understood in a wide sense.

he focused on the simple idea that actions are undertaken with an “end in view or a purpose” (7, p. 33). To illustrate this by reference to HTA, we may note that health is the end-in-view of those professionals using health-care technology and that empirically establishing how and to what extent health-care technologies contribute to health is the end in view of HTA professionals. Thus, indirectly, one might say, health is the end-in-view of HTA. I have no quarrel with that claim.

A mere end-in-view, however, is not an appropriate basis for serious normative assessment. For example, an office worker’s end-in-view, in getting the report in on time, might be to curry favor with the department chairman. Here there is no implication that the department chairman’s favor is sought or is worth seeking for its own sake. Who knows why the worker might care about that? The sense of the term “end” that matters in serious normative assessment is one that contrasts ends worth seeking for their own sakes—sometimes called “final ends”—with mere means (8). My message in this paper is that, since health is not properly thought of as worth seeking for its own sake, those assessing health-care technologies must keep an eye on the ends for the sake of which health is worth caring about. In saying this, I am using the term “end,” not in Dewey’s non-contrastive sense, but in a more traditional sense that contrasts ends, which are choiceworthy for their own sakes, with mere means, which are not. Starting out with this idea of what it would mean for health to be an end does not beg any questions, for nothing about how HTA is usually defined or understood implies that health must be thought of by HTA as the one relevant end worth seeking for its own sake. Thus, to recap: the core job—the central end-in-view—of HTA is to assess the effectiveness of technologies in promoting health. The question, though, is how agencies

charged with carrying out HTA should think about the value of health and its relation to what is worth seeking for its own sake in order to carry out this job not only effectively but also intelligently. Now to take up this question, I return to the two tensions within HTA that I mentioned at the outset.

The first of these two tensions—between focusing narrowly on QALYs and recognizing a broader range of factors—is well illustrated in the following paragraph from the 2013 methodological guide published by the U.K.'s National Institute for Health and Care Excellence (9):

[1] The concept that underlies the Committee decision-making [that culminates the Institute's health-technology assessments] is that of the opportunity cost of programmes that could be displaced by the introduction of new technologies. This way, NICE seeks to maximize the health benefit gained from a fixed NHS budget. [2] This principle is correct if the sole purpose of the health service is to improve health. While this may be the primary purpose of the NHS, it is acknowledged that care delivered by the NHS could have other benefits that are considered socially valuable but are not directly related to health and are not easily captured in a cost per QALY basis. [3] Techniques exist to consider the trade-off between health benefits and non-health benefits quantitatively. These techniques require that all the relevant criteria are identified in advance, quantified, and then weighted to reflect aspects of social value in a way that regarded as legitimate by all stakeholders. [4] At present the introduction of such techniques into the Committee's decision-making is considered unsuitable. [5] Therefore the Committee will take non-health objectives of the NHS into account by considering the extent to which society may be prepared to forego health gain in order to achieve other benefits that are not health-related.

To summarize this passage somewhat tendentiously, using the numbers I have introduced, NICE is saying that [1] QALY-improvement maximization would be an appropriate standard for HTA if [2] the only benefits worth considering were health itself, but this is not so. [3] If these other benefits could be integrated into a more broadly-based comparative measure, that would be good, but [4] that is not feasible at this time, so [5] we will resort to considering the necessary trade-offs on an ad hoc basis. Because it recognizes that health is importantly valuable for the sake of what it enables yet sets this point aside, this passage articulates an inherently unstable position about how these policy judgments should be made. Indeed, as I shall argue, what I have just said understates the extent of the instability, for health is not worth seeking for its own sake.

The second tension is that between the subjective and objective elements in HTA's presumed bottom line. There are many ways of characterizing the basis of value judgment as subjective. One might look to the idea of desire-satisfaction or to individually variable conceptions of happiness. In orthodox welfare economics, the normative bottom line is the more plainly subjective one of preference satisfaction. Central to HTA, however, is marshalling empirical evidence that bears on specific kinds of improvement to health. In order for this attempt to marshal evidence to be tractable, it must bear on a relatively small number of objectively definable dimensions, such as are set out in EQ-5D. This is to give a certain objective importance to these dimensions, as far as health goes. Nonetheless, in order to translate information about them into QALYs, the way they are weighted and combined into a single index must be determined on the basis of subjective preferences. Hence, a subjective-objective tension is built into the very idea of HTA.

On top of that, how to think about the selection of the dimensions of health and health-related quality of life that should matter has become controversial. In their systematic review of assessment measures applicable to mental health, Brazier and colleagues describe this situation as follows, as it pertains to the “Q” in “QALY” (10):

A tension exists in quality-of-life measurement over whether it should have a subjective or objective orientation. A more objective approach may place its emphasis on income, living conditions, access to resources, participation in occupational and social roles, or the presence or absence of a medical condition or symptom. While objective measures have an important place in the broader quality-of-life literature, within health there has been an increasing emphasis on the importance of the patient’s perspective and this has been assumed to imply a move away from objective measures. This has been partly because many of the commonly used objective indicators like income have been found to be only weakly related to well-being. It is also because objective indicators, by their nature, take a top-down, paternalistic approach, rather than reflecting what individuals might perceive to be important to their quality of life.

The last sentence, here, introduces what I think is a confusion. Bottom-up approaches, such as the use of focus groups and qualitative interviews, can be used to support a new conception of what dimensions matter, objectively, and how much.

More importantly, I call your attention to an element, here, that deliciously mixes the objective and the subjective. (Since, for reasons of space, I cannot deal separately with the main variants of subjective conceptions of value, I will here treat them together.) I take it that the conception of well-being to which Brazier and his co-authors are referring is that of self-reported, or subjective well-being, either as pertaining at a moment in time (in the form of pleasure or desire-satisfaction) or retrospectively (in the form of life-satisfaction). Well-being, so conceived, *consists in* subjective mental states. No doubt, the degrees of pleasure and of

life-satisfaction can be objectively measured and provide information that is distinct from preference-based information, as claimed in by Kahneman, Walker, and Sarin (11). But we must ask: what reason there is to think that well-being, understood as reducible to pleasure or life-satisfaction, or some combination of the two, is the only end worth seeking for its own sake? There are important reasons to think it is not. John Stuart Mill (12) provocatively wrote that it is “better to be Socrates dissatisfied than a fool satisfied.” Mill perhaps spoiled his point by picking an elitist-sounding example. Consider, then, the result of the “backwards elimination” performed by Paul Anand and colleagues (13), who first deployed some sixty indicators designed to capture the ten “basic human capabilities” described by Martha Nussbaum (14), and then suggested eliminating all those indicators that were not significantly correlated with self-reported life-satisfaction. In the process, they eliminated the indicators related to making and meeting up with friends, exercising one’s religion, expressing one’s political views or otherwise engaging in politics, using one’s imagination, being educated, caring for other species, and enjoying recreation.<sup>3</sup> To be sure, elitism is a danger; but do we really think that individual pleasure or desire-satisfaction and self-satisfaction are all that matter—that none of these eliminated items name ends worth seeking for their own sakes? I submit not. Mill’s valid point was that furthering important causes, promoting the happiness, well-being, or capabilities of others, and experiencing a moment of well-executed skill can each be worth seeking for their own sakes, as elements of a complex conception of happiness, even if they do not contribute to one’s own life-satisfaction more narrowly understood.

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<sup>3</sup> I discuss this study by Anand and colleagues in slightly greater length in (15).

This discussion of capabilities brings me to the idea of health. Readers of this journal will have been weaned on debates on the question, what is health? Since my main claim is about health not being a final end, I should at least say what I mean by “health.” For reasons I have explained elsewhere (16), I am largely persuaded by the kind of approach to this question taken by Sridhar Venkatapuram (17). This approach builds on but improves the conception of health developed by Nordenfelt (18; 19), which involves the idea of a person’s “vital goals,” defined as necessary conditions of a person’s “long-term minimal happiness.” Venkatapuram replaces this idea of vital goals with Nussbaum’s list of basic capabilities (minus the capability of bodily health, to avoid self-referential paradox). He does so by proposing that health is a metacapability: “an overarching capability to achieve a cluster of basic capabilities to be and to things that make up a minimally good human life in the contemporary world” (17; p. 20; emphasis added). The capabilities on Nussbaum’s list are “basic,” not in the sense of being elementary, but in the sense of representing categories taken to be evaluatively fundamental: playing a Chopin etude is a way of realizing the basic capability of using one’s senses, imagination, and thought. As a metacapability, health both supports the basic capabilities when one has them and gives one a route to restoring the ones that are threatened or lacking. Nordenfelt (18) objects that this reference to basic capabilities leaves too little room for individuality in the goals served by health. To the contrary, an advantage of looking at capabilities (as opposed to functionings) is that one can have reason to be able to carry heavy loads (his example), even if one’s chosen employment goal is being a teacher rather than a servant or a manual laborer. As Amartya Sen (20) has eloquently argued, we should acknowledge that capabilities are valuable because of what they make us free to do, while

recognizing that different people will choose to use their capabilities differently. For this reason, a definition of health that avoids Nordenfelt's reliance on the elusive idea of happiness and instead appeals to Nussbaum's basic capabilities seems well placed to incorporate a useful degree of objectivity while nonetheless leaving ample room for individual variation.

Health is crucial to facilitating engaging in all of the basic human capabilities Nussbaum lists, including the ones Anand's proposal eliminates and all the rest, such as enjoying bodily integrity, having a flourishing emotional life, enjoying robust social sources of self-respect, and being able to plan one's life. I believe that this conception of health is more defensible than the statistically based one connected with longevity and reproduction that had been defended by Boorse (21). Simplifying Venkatapuram's suggestion in a way that he might well not accept, I suggest that, put in plainer and more traditional terms, it comes to this: health is a crucial, necessary means to the basic human capabilities. It is not the only such all-purpose means. Resources are another, and education (another overarching metacapability) is a third. Health is the crucial, bodily-function-related means to the basic human capabilities.<sup>4</sup>

To say that health is a means to the basic human capabilities is not to imply that health is not rightly considered to be an end, worth seeking for its own sake. Nonetheless, I suggest that it is inappropriate to think of health, so conceived, as worth seeking for its own sake. There are individuals who seem to pursue health as an end in itself, obsessively treating their bodies as temples or fetishizing their fitness. Once we factor out the elements of these attitudes that overlap with some of the basic capabilities, however, by registering some of these devotional attitudes under the heading of religious conceptions of purity and others of

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<sup>4</sup> For further defense of this understanding of health, see (16).

them under the heading of athletic play, we are left with little reason to think of health as worth seeking for its own sake in the way that the basic, first-order human capabilities generally are. Actually functioning in a healthy way—breathing deep the crisp air as one hikes up the mountain or making good progress in one’s physical therapy—can be worth seeking for its own sake; but if health is, as Venkatapuram has persuasively argued, a meta-capability, as opposed to a mode of functioning, it is better classed as an all-purpose means. (Vigorously hiking in the mountains is perhaps an activity worth undertaking for its own sake. As such, it is one of the things for the sake of which one might seek health.) For the purposes of this brief discussion, then, I conclude that health is a tremendously important all-purpose means to enjoying basic human capabilities, but a mere means, and not an end. That is the first main point I wanted to make.

If this is correct, that complicates the picture of HTA somewhat, since it implies that it is a mistake to judge the effectiveness of health technologies as if they were all serving a single final end, health. Might we appropriately brush off this point by saying that HTA should judge the comparative effectiveness of technologies at providing us with the all-purpose means, health? This will not do. In the case of the all-purpose means, money, that approach would work. Since money is fungible, it does not matter whether it is generated by wage labor, stock-market speculation, or writer’s royalties. All different methods of making money can be perfectly well compared without paying the least attention to what the money might be used for. About that, it is natural to say what the economists say: how people use their money is a matter of subjective preference. The situation is quite different with health. Health is not homogeneous. Unlike money, its units are not fungible. Health is ineliminably

multidimensional. A replacement hip serves a person's capability of movement. An anti-anxiety medication serves a person's peace of mind and his or her capabilities of interacting with others and working effectively. One might be tempted to retreat to a fully subjective account of the normative bottom line at this point, arguing for instance that our only recourse is to preference-based weightings. As I have suggested, retreating to the subjective is at odds with the basic idea of HTA, which is to focus on certain objectively describable dimensions of what matters about health and to collect empirical evidence rigorously bearing on what produces improvements along those dimensions. A more general reason to avoid the retreat to the fully subjective is that public policies should be justified by their serving important purposes. To retreat to a preference-satisfaction or other fully subjective conception of the normative bottom line is to give up on the crucial task of publicly articulating the relevant ends or purposes.

Accordingly, it is more in keeping both with the idea of HTA as contributing to evidence-based medicine and with the importance of public justification in a democracy to articulate the ends for the sake of which health is sought and to take account of these in assessing health technologies. If, as I have argued, health is properly understood as an all-purpose means of great importance, what we want is an assessment of the comparative effectiveness of technologies in getting us that for the sake of which we seek health.

Now, as the passage from the NICE methodological guide that I quoted above seems to be pointing out, some ends promoted by health are rather distant from it. In the context of HTA, which paradigmatically serves national health services, it makes sense to delimit the set of relevant ends to patient-centered ones. Effective battlefield wound treatments might enable

the U.S. Army better to succeed in promoting democracy around the world, which might be a goal worth pursuing for its own sake. In that scenario, however, the health of a soldier is treated as a means to an end that is not connected to the flourishing of that soldier. It is not the business of HTA to concern itself with such non-patient-centered ways that health can serve important ends. Rather, it seems appropriate that it focus solely on the ends of or pertaining to the individual whose health is to be served.

If, as Venkatapuram has suggested, we think of health not simply as a bodily-function-related all-purpose means, but as a bodily-function-related all-purpose means to an individual's attaining and exercising the basic human capabilities, that will help us focus things in just this way. Whether or not we accept Venkatapuram's idea as a definition of health, we can use it to orient policy decisions about health technologies. Because health is merely a means, is inherently multidimensional, and is not expressible in terms of fungible units, we have reason, in assessing the comparative effectiveness of health technologies, to look *through* the bare idea of health to the functionings and capabilities it supports. As I see it, EQ-5D already does this: rather than *defining* health abstractly, via a mere five dimensions, it provides a way of *assessing* health via a list of valuable functionings and states. It is a generic measure; but the point I was making by contrasting hip replacements with anti-anxiety medication has already been taken on board by the HTA community, which has recognized the need for specialized ways of characterizing the functionings and capabilities that are specifically relevant to the technologies under assessment, as I will now explain.

We thus have reason, in assessing the effectiveness of health technologies, to look *through* the bare idea of health to the functionings and capabilities it supports. What, more

concretely, does that imply about the methodology of HTA? Attending to the different sorts of benefits offered by different types of health technology will suggest new dimensions to take account of, as will the use of such interactive qualitative techniques as ICECAP (22). There is powerful pressure to re-incorporate any additional objective dimensions identified by such means into a QALY-based analysis by developing condition-specific preference-based measures (CSPBMs). This is done by engineering a preference-based measure that closely matches the non-preference based one by matching its validity and remaining sensitive to the same distinctions (23). The reasons for doing so are well stated in NICE's 2008 report on "Social Value Judgments." Understatedly observing that some of the social value judgments that would be involved in aggregating multidimensional information "may be very difficult to make," the report also notes, more positively, that "[t]he QALY ... provides a 'common currency' which allows different interventions to be compared for different conditions. This allows NICE to make its decisions consistently, transparently, and fairly" (24).

There is something to this claim; but these advantages of using QALY's as the common currency of health-policy decisions should not be exaggerated. The fairness of this measure is compromised by its insensitivity to distributive issues, and in particular by its insensitivity to the background distributive injustice that characterizes almost every modern society. As to transparency, it is a virtue that is especially important to policy-making in a democracy. The use of QALY's perhaps seems transparent to economists and HTA experts; but surely it is not transparent to the public how multiple, distinct dimensions of health are traded off by gathering individuals' responses to standard gambles or time trade-offs. Finally, having a consistent, uniform, and commensurating basis of comparison (one adequately expressible in

terms of a single dimension) is a bureaucratic imperative in all large organizations (25).

Consistency of this sort we might reasonably regard as an unfortunate necessity rather than a virtue.

On the other side, we should avoid overstating the difficulty of dealing in a rational and consistent way with multiple, distinct final ends, each incommensurable with the other. There is much, here, that might be learned from the context of evaluating economic development. In that context, innovative ways have been developed of generating single-valued indexes based on multiple, distinct dimensions without presupposing or constructing trade-off ratios among them. Examples include the multidimensional approaches to measuring economic progress and deprivation developed by the Stiglitz-Sen-Fitoussi Commission (26) and by Alkire and Foster (27, 28). Such an approach provides a uniform basis without turning to preference-based measures and without falsely suggesting that objectively important dimensions of value can be adequately commensurated on the basis of subjective preferences. With regard to transparency, instead of seeking a single uniform basis of decision, it might be worth emulating the “dashboard” approach that has become popular in various agencies that rate various nations’ progress in economic development. These dashboards are online portals that are fed by the raw, multidimensional data and that allow the user—who might be a policymaker or a member of the public—to customize the dimension-aggregation process in many different ways. These help make transparent that the policy decisions in an area such as economic development, as in the arena of health-care technologies, are indeed dependent on many difficult value judgments; but they do so in a way that facilitates rational dialogue.

These methods that respect multidimensionality are nonetheless compatible with constructing single-valued indices that reflect an overall partial ordering of the alternatives. In the medium and long run, however, as I will now argue, the importance of this possibility is diminished by the ways in which we are rationally called upon to continue distinguishing and ramifying the number of dimensions that matter for their own sakes, thereby unsettling our earlier orderings.

Thus, in closing, I would like to commend the importance of an additional desideratum for public decision-making, one to put alongside consistency, transparency, and fairness: the desideratum that policy be made intelligently. I take the term “intelligence” from John Dewey. Whether we define “ends” in Dewey’s way, as simply the purposes one has in view when acting, or in mine, as what we take to be worth seeking for its own sake, we should recognize, with Dewey, that a distinctive and invaluable human trait—the one he calls “intelligence”—is our ability to rethink and refashion our conception of our ends when practical difficulties call for our doing so. Cultural changes and changes in technological possibility constantly call upon us to rethink the ends for the sake of which we value health. We have seen such rethinking take place about the ends served by cochlear implants: our understandings of these has undergone an important transformation in response to eloquent assertions of the value of deaf culture. Our intelligence is enabling us to redefine the ends served by hip replacements, as we adapt to our greater longevity and the rise of the senior athlete. As I have argued elsewhere (28), a crucial disadvantage of using preference-based measures as the normative basis of policy decisions is that they block the kind of rethinking of ends in relation to problems encountered that is the mark of practical intelligence. The reason they do so is that their

normative bottom line has a fixed normative basis, in preferences elicited before the policy-making problem arises.

Thinking that is directly guided by direct consideration of the multiple ends that are what really matter—for example, those indicated by the basic human capabilities—does not block intelligent thought of this kind. When ends clash in a given case—as when, for instance, cooperating with elderly athletes’ quest for performance conflicts with enhancing their life expectancy—we are spurred to formulate more specific and nuanced statements of the ends in question. As we do so, we can refine our shared understandings of the normative bottom line. When thinking directly in terms of multiple ends, we may also consider how they might themselves be ordered on the basis of the fact that some of them, though being worth seeking for their own sakes, are also aptly sought for the sake of others. For instance, a capacity for a flourishing emotional life, while worth seeking for its own sake, also is surely worth seeking for the sake of supporting affiliation with friends and family. Such a tiered understanding could well be applied to the mental health field, in which the patients’ emotional states need to be considered not only in themselves, but in terms of their effects on the patients’ interactions with those near and dear to them.

I have argued that health is properly understood as an important, bodily-function-related means to central, objectively important human ends and that the assessment of health technologies should take account of this fact. Properly taking account of this fact will require HTA to look *through* health to the underlying dimensions of value. Many of the existing measures used in HTA implicitly do that, but then veer away from a consideration of a multiplicity of distinct ends and revert to commensuration on the basis of elicited preferences.

That might be an unavoidable way of proceeding when it comes to certain short-term prioritization tasks, but it cannot in general serve as an intelligent way to make policy with regard to health-care technologies. To proceed intelligently in doing health technology assessment, it is important to stay open to reframing and refashioning the ends we take to apply to that arena. The only way for that to happen, as an exercise of public, democratic policy-making, is for the difficult value questions that arise when ends clash not to be buried in subjective preference information, but to be front-and-center in the analysis. To return to the paragraph from NICE's methodological guide that I quoted above: *if the sole justifying purpose of a national health service were to promote health, then it would be appropriate to proceed by using QALYs. But since promoting health cannot be properly thought of as the ultimate normative concern even of a national health service, some other way of proceeding must be found.*

This conclusion has radical implications for the methodology of HTA. It implies that attempts wholly to ground HTA in subjective preferences should cede ground to multidimensional objective measures of success, often tailored to specific contexts, that can continue intelligently to be refined and ramified. The emphasis on generating a uniform and consistent basis for determining which treatments and procedures will be covered by a national plan needs to be tempered and complemented by paying more attention to what aspects of their results matter for their own sakes. This would mark a major shift in HTA. As a philosopher, all I can do is make the argument for it; I cannot map out how it should go.

Radical as this conclusion may be, it may sound even more radical than it is. It may sound as if I am counseling, paradoxically, that HTA forget about health. That is not so. HTA

can and should continue to assess the ways in which individuals' health can be promoted. That is its business and its end-in-view. My example, above, of patching up wounded soldiers so as to get them back to combat was meant to support the claim that HTA should take health to be the primary benefit of health care. Promoting democracy and fighting terrorism are ends that should be left to other analysts to worry about. So I am not arguing that HTA should change its name, let alone its focus on health. Rather, I am arguing that health should be understood as a multidimensional panoply of abilities or capacities whose value lies, not in themselves, but in the valuable activities and ways of being that any given configuration of this panoply of abilities and capacities allows. Accordingly, properly to assess the value of a health outcome, we need to understand the valuable activities and ways of being that it affords. It is thus the very effort to concentrate on health that will, if taken seriously, require the assessor to take account of the multiple beings and doings for the sake of which health is objectively worth seeking. Doing so well requires the sort of flexible openness to respecifying ends that Dewey called "intelligence."

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