The public vs. private value of health, and their relationship

(Review of Daniel Hausman's *Valuing Health: Well-Being, Freedom, and Suffering*)

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1. Introduction

We sometimes wonder how health is distributed in our society. How much healthier, for example, are the rich than the poor? Are urban or rural populations healthier, on average? We may also want to know about the efficiency of different health programs. Are cancer or blood pressure screenings a better healthcare value? Which public health measures promise the greatest overall improvements in health? It can be hard to know how to go about answering questions like these, in large part because the varieties of ill health are heterogeneous, as are their consequences. In order to know whether cancer or blood pressure screenings are a better value, we need to know how to compare cancer to high blood pressure, and it is not at all clear how to do that. The solution that health economists have long adopted is to appeal to *summary* or *generic measures of health*, such as the quality-adjusted life year (QALY), which attempt to put all types of ill health on the same scale.

In *Valuing Health: Well-Being, Freedom, and Suffering*, Daniel Hausman works from the assumption that we have reason to want a scalar measure like the QALY. He subjects existing techniques for generating such measures to a thorough critique, ultimately concluding that significant methodological changes are needed, if those measures are to succeed in measuring what they claim to. Next, drawing on work in political philosophy, Hausman argues that the conception of health most relevant to public policy is different from the conception of health most relevant to individual decision-making. He calls the former the *public value of health*, and describes a novel approach to measuring it. He then concludes by discussing how a measure of health's public value could be incorporated into policy-making.

Though the individual arguments Hausman offers are admirably clear, he doesn't spend much time taking a bird's-eye view, or discussing the lessons of the book as a whole. In this review, therefore, I will begin by giving an overview of the book, making a special effort to situate Hausman's proposal to measure health by its public value within the broader literature on QALYs and social values. I'll then go on to offer a few thoughts on how Hausman's argument, if it succeeds, complicates matters for health measurement even more than it may appear to.

2. An overview of *Valuing Health*

After an introductory chapter — which I'll discuss below — chapters two and three defend a naturalistic account of the nature of health, according to which the health of an organism is determined by the efficiency with which its parts and processes function. Although some of the claims made here figure in later arguments, these chapters can probably be read quickly by those whose primary interests lie in the questions concerning measurement and ethics which are the book's focal points.

Next, in chapter four and portions of chapter five, Hausman asks what it is that generic measures of health seek to quantify. Initially, we might think "X is healthier than Y" means that X possesses *more* health than Y. Though this view is defended by some, Hausman convincingly argues that it is incorrect. Health itself cannot be measured, at least in any policy-relevant way: there is no important sense in which a person with a cold literally has *more* health than someone with tuberculosis. Instead, Hausman argues (in line with most health economists) that we should take "X is healthier than Y" to mean that X is in *better* health than Y, or that X's health state is *preferable* to Y's.

Health, then, can't itself be measured, but its value — how good or bad it is — potentially can be. And so in chapters five through twelve, Hausman critically examines the ways in which health economists seek to measure the value of health, either by measuring the impact of health on well-being ("health-related quality of life") or by determining people's preferences for health states. The arguments in these chapters are careful and nuanced, so I won't attempt to do them justice here. The key claim Hausman argues for is that well-being is a complex notion, which isn't directly connected to preferences

or subjective experience in the way many economists suppose (*cf.* Hausman 2012). Consequently, the existing techniques health economists use to assign values to health states are seriously flawed. Ultimately, Hausman acknowledges that despite the challenges in doing so, there is probably good reason to have a measure that values health by its contribution to well-being, and he provides a list of concrete suggestions which he argues would constitute an improvement on current practice (pp. 151-2).

In chapters thirteen and fourteen, which expand upon an earlier article (Hausman 2010), Hausman changes direction, offering an argument that is largely independent of the previous chapters.[1] The basic point is quite simple, and, it seems to me, correct. Most political philosophers today accept some version of liberalism. According to the standard understanding of liberalism, the primary aim of a liberal state should not be to promote the well-being of its citizens, nor to satisfy its citizens' preferences. Instead, a liberal state should aim to enhance its citizens' liberty and freedom, giving them the opportunity to live a range of valuable lives, and (Hausman later adds) to prevent certain kinds of suffering. If we accept this version of liberalism, then measures of health grounded in well-being or preferences are not of direct relevance to policymakers in a liberal state.[2] What a liberal government needs is a measure of the impact that health has on opportunity. Hausman, accordingly, distinguishes the *private value* of health — its value to each of us, as individuals — from the *public value* of health — its value, given the aims of a liberal state. Traditional measures, which value health by its contribution to well-being or its effect on preference satisfaction, may give an adequate account of the private value of

[1] Some commentators view this argument as depending upon the arguments concerning measurements of well-being from chapters 5-12 (Alexandrova 2016), or as the focal point of the book (Nielsen 2016). As I will explain below, this doesn't seem to me to be the best way of reading the text. The approach to health measurement Hausman describes in chapters 13-14 should not be understood as replacing or competing with existing well-being or preference-based measures. Instead, it should be developed and deployed alongside them.

[2] This may not follow so quickly if we adopt a utilitarian justification for liberalism, which says that the reason governments should aim to enhance and respect individual liberty is because doing so is the best way to promote well-being. The utilitarian justification for liberalism, though, is a minority view among political philosophers (even if it is more popular among economists). See also (Hausman 2016, pp.167-9).

health, but they do not capture the public value of health. Thus, Hausman argues, we need a completely new measure of health.[3]

He then goes on to give a (very rough) sketch of how such a measure might be constructed, valuing health states by the limitations they impose on activity and the pathological distress they involve ("limitation/distress pairs"). The details are very interesting — in particular Hausman's reliance on normative reasoning, rather than population surveys, to assign specific values to limitation/distress pairs. I will pass over those details here, though, because they strike me as less important than the broad proposal. As Hausman acknowledges, his arguments about the specific aims of the liberal state are brief and not fully defended (pp. 152, 159n), leaving it to other political philosophers to more carefully describe and justify the role of a liberal government. And the specific values Hausman assigns to health states are meant more as proof-of-concept than as serious, well-researched proposals (pp. 179, 183). We should not, then, put much stock in the health state valuations he proposes, or even in the method of valuing health states by limitation/distress pairs.[4] Hausman's real contribution is in distinguishing the public from the private value of health, and in showing how the former is, at least given a liberal political philosophy, fundamentally different from the latter.

I want to pause here to clarify what is, and what isn't, novel about Hausman's proposal. Political philosophers and bioethicists have long discussed what perspective the state should take concerning health, and many have concluded that its aim should not be to promote well-being. Norman Daniels, for example, whose views Hausman draws upon, has prominently argued that the political importance of health lies in its impact on opportunity (Daniels 1985, 2007). Similarly, proponents of the Capabilities Approach claim that health is not to be valued by its contribution to individual well-being, but by its impact on human capabilities (Venkatapuram 2011). So, when Hausman proposes that the liberal state

[3] On certain theories of well-being, part of what makes for a good life may be freedom or opportunity. Proponents of such views may end up endorsing a measure of health that looks similar to Hausman's, but the similarity would be a superficial one. Hausman's opportunity-based measure is not in any direct way grounded in well-being, because Hausman believes that the liberal state should not take the promotion of well-being as its goal.

[4] Indeed, Hausman notes that there are a range of different ways one could value health, other than by its effects on well-being or preference satisfaction (pp. 47, 145-7).

should set health policy with the aim of promoting opportunity as opposed to well-being, he is making a claim familiar from the philosophical literature. Further, Hausman is not the first to bring the distinction between public and private value to health measurement. Many health economists have incorporated "social values" into health measurement systems, in order to account for factors like fairness, age, severity, and distribution, which may not contribute to individual well-being. (A fairer or more equal distribution of health outcomes does not lead to a greater sum of individual well-being, but it nevertheless is an important factor for policy-makers to consider.)

What is distinctive about Hausman's view is his conception of the relationship between the public and private value of health. Existing approaches to measuring public value view it as grounded in private value. The following proposal from Erik Nord and colleagues describes what most economists have in mind:

> One can then envisage a two step procedure for constructing a societal [i.e. public] value model. The first step consists of measuring the severity of different health states in terms of utility… The second step is to assign weights to different utility gains, taking into account for instance societal concerns for the severity of the patients' initial condition, the patients' potential for health, their age or whatever other factors the public might consider to be of importance in an overall judgement of societal value. (Nord *et al*. 1999, p.31)

The same basic picture is implicit in Nord's recent criticism of Hausman's book:

> But the question is whether it is the most sensible thing to do to try to develop something completely new, as Hausman does, *rather than to build on existing evidence on individuals' valuations of health states, societal distributive concerns and existing models for incorporating both of these in economic evaluation*. (Nord 2016, p.2; emphasis added)

If Hausman's understanding of liberalism is correct, though, it doesn't make sense to adjust existing models to account for social concerns. That is because the state's job is not to promote well-being or to satisfy preferences — even if well-being or preferences have been adjusted to account for factors such as fairness. The state's job is not to achieve a fair distribution of well-being. Instead, the liberal state should be focused on an entirely different thing — promoting opportunity — which values health in a fundamentally different way.

The remaining three chapters of the book look at how measurements of the public value of health should be used by policy-makers. Much of the discussion focuses on familiar ethical objections to the use of cost-effectiveness analyses in decision-making — that, for example, cost-effectiveness analyses discriminate against the disabled.[5] Hausman argues that these objections take on a different character when the public (instead of private) value of health is used, and that in some cases the objections become easier to answer.

3. A plurality of health measures

Hausman's proposal for measuring the public value of health will, justifiably, be the focal point for most discussions of the book. In the remainder of this review, though, I would like to note one implication of Hausman's argument as a whole, which, though perhaps not surprising, is nevertheless important, and shows how Hausman's proposal is even more revisionary than it might initially appear.

In the first chapter, Hausman asks why we need a measure of health. He distinguishes three main uses: clinical (e.g. to identify treatment options for a patient), demographic or epidemiological (e.g. to compare health in different regions or over time, or to identify health inequalities), and allocational (e.g. as inputs to a cost-effectiveness analysis). Hausman sets aside clinical uses, and then acknowledges that "it remains questionable whether any single measure can serve the two remaining purposes" (p. 6). He later returns to that question, concluding that "for the purposes of determining the burden of disease, injuries, and risk factors, either epidemiologists should abandon the task of assigning a single value to health states…or they should assign values to health states on the basis of the contributions to well-being" (p. 153). And he then repeatedly describes his own measure of the public value of health as being suitable for "[guiding] health resource allocation decisions" (p. 187, *cf.* 153, 154, 170, 241).

This might suggest the following picture: the private value of health (i.e. its contributions to individual well-being) is the correct measure for epidemiological and demographic uses, while the public

[5] For a good overview, see Brock (2009).

value of health (i.e. its impact on opportunity and pathological distress) is the correct measure for allocational uses. While this picture is pleasingly tidy, a closer look shows that it is not Hausman's view, nor should it be. Hausman acknowledges that his proposal for measuring the public value of health "is tied to a specifically liberal view of the obligations of the state, including its obligations to address the health problems of its citizenry" (p. 152). Non-liberal states, therefore, might appropriately allocate resources on the basis of a different measure of the value of health (p. 153) – perhaps with the aim of promoting well-being or virtue. Similarly, non-state entities (such as charitable organizations) might reasonably have different aims in mind when allocating their resources (p. 163). Indeed, even liberal states may sometimes make use of the private value of health when allocating resources. Arguably, the state's obligation to promote opportunity is directed at its *own* citizens, and accordingly it might be permissible for a liberal state to have different aims (e.g. to promote well-being) with its foreign aid budget. Further, as Hausman acknowledges, there seem to be some situations in which liberal states should aim to promote their own citizens' well-being. When building a public playground or sponsoring a holiday parade, a liberal state should be thinking about what will make its citizens happy (p. 164).

Even, then, if the dominant or most common allocational use of health measurements — e.g. to determine coverage limits for a national health insurance system in a liberal state — requires public values, plenty of other allocational uses will require private values. Similarly, even if we grant to Hausman that the dominant epidemiological and demographic uses of health measurements — e.g. to measure the global burden of various diseases — are best carried out using the private value of health states, there will be other situations where we might want an demographic measure based on public values. A liberal state might want, for example, to compare its own healthcare system to that of another country's, by looking at how ill health has affected opportunity in the two countries.

We therefore have multiple measures of the value of health, useful for different purposes, with no clearly-defined rules saying when each measure is called for. This, by itself, isn't surprising. (Of course different groups with different aims will require different measures!) But its importance is enhanced if Hausman is correct about the relationship between the public and private value of health. According to

the standard economic approach (illustrated in the quotes from Nord, above), there is one basic measure of the value of health — say, its impact on individual well-being. Other measures are then constructed from it, by e.g. varying the discount rate or introducing a weighting factor to account for distributive concerns. On such a view there is thus a sense in which economists can produce a single estimate of *the* burden of disease, or of *the* cost-effectiveness of a health intervention. Individual consumers of that information may need to adjust it to reflect their particular needs (e.g. to account for fairness), but the outputs can be seen as variants on the same underlying measure.

If Hausman is correct, though, there are at least two fundamentally different measures of the value of health. And these measures are built on distinct foundations: one, a measure of opportunity; the other, a measure of well-being. Further, this plurality of measures is not due to uncertainty or disagreement on our part. Even if we all agreed on the correct political theory and on the correct theory of well-being, we would still need multiple measures. Accordingly, it doesn't make sense to talk about *the* burden of disease on a population or *the* cost-effectiveness of a medical intervention.

Though, again, I don't take this to be an especially surprising conclusion, it calls for a substantial change in practice. Health economists and epidemiologists need to be more careful in describing precisely what measure of the value of health they are using. And policymakers and other consumers of health economic studies need to be more careful in determining what information they need. Instead of simply making choices about whether a given measure needs to be adjusted in some way, they must also decide what type of measure to use — and they may find that existing studies simply don't provide them with relevant information. Now, many of these complications could be avoided, or at least minimized, if the different measures turned out largely to coincide or to be systematically related to one another. It isn't implausible to think that, in general, health problems which limit opportunities will also limit well-being, and *vice versa*. Given a predictable relationship between opportunity and well-being, Hausman's measure of health-related opportunity could be estimated, at least approximately, from a measure of health-related well-being. The existence of such a relationship, however, is in need of empirical support,

and phenomena like the "disability paradox", the fact that many people with significant disabilities report surprisingly high levels of well-being, cast doubt on it (Schroeder 2016).

4. Conclusion

Valuing Health is an important book. Hausman's criticisms of preference- and well-being-based health measurement systems are essential reading for any economist or epidemiologist using such measures. His proposal for a new measure of the public value of health, though perhaps not convincing in all its details, has the potential to ground a new research program. And those interested in the ethical issues surrounding the use of QALY-based cost-effectiveness analysis and its role in policy-making will benefit from Hausman's final chapters. Further, the book as a whole illustrates the importance and potential fruitfulness of bringing philosophical insights to bear on economic practice.[6]

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