

Medical Need, Equality, and Uncertainty

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ABSTRACT: Many hold that distributing health care according to medical need is a requirement of equality. Most egalitarians believe, however, that people ought to be equal on the whole, by some overall measure of well-being or life-prospects; it would be a massive coincidence if distributing health care according to medical need turned out to be an effective way of promoting equality overall. I argue that distributing health care according to medical need is important for reducing individuals' uncertainty surrounding their future medical needs. In other words, distributing health care according to medical need is a natural feature of health care insurance; it is about indemnity, not equality.

This paper concerns the justification of what I will call the medical need principle, or the principle that health care should be distributed according to medical need. Many theorists have defended this principle on egalitarian grounds.¹ I argue that an egalitarian derivation of this principle is more difficult

¹ A. Buchanan et al. 2000. *From Chance to Choice*. New York, NY: Cambridge University Press: 73f; N. Daniels. 2008. *Just Health*. New York, NY: Cambridge University Press: chapter 2; R. Dworkin. Justice in the Distribution of Health Care. *McGill Law J* 1993; 38: 883-898; J. Rawls. 2001. *Justice as Fairness: A Restatement*. Cambridge, MA: Belknap: 173-175; M. Walzer. 1983. *Spheres of Justice*. Basic Books: 86-91; R.M. Veatch. 1991. Justice and the

than philosophers have appreciated. It is true that the medical need principle has some egalitarian implications; it entails, for example, that no one should be denied care due to inability to pay. However, the medical need principle also requires many other things that are incidental or even opposed to equality, as I will show, and so on the whole cannot be justified by appeal to equality.

I offer an alternative justification for the medical need principle. I argue that distributing health care according to medical need is a natural feature of health care insurance, the function of which is to reduce individuals' uncertainty surrounding their future health care needs. The importance of providing individuals with security against health risks best justifies distributing health care according to medical need.

My argument proceeds in five sections. Section I defines the medical need principle more precisely. Sections II & III argue against the view that the medical need principle follows from a commitment to equality. (I address the possibility that the medical need principle might be justified on prioritarian or sufficientarian grounds in a footnote.²) Section IV shows that the medical need principle follows an insurance logic rather than an egalitarian logic. Section V rejects the hybrid view that, while insurance justifies the distribution of health care according to

Right to Health Care: An Egalitarian Account. In *Rights to Health Care*. T.J. Bole III & W.B. Bondeson, eds. Dordrecht: Kluwer: 83-102; B. Williams. 2005. The Idea of Equality. In *In the Beginning Was the Deed*. G. Hawthorn, ed. Princeton: Princeton University Press: 97-114.

² A full consideration of prioritarian or sufficientarian defenses of the medical need principle is beyond the scope of this paper. I would say, however, that prioritarian views will generally be vulnerable to the same objections I raise here against egalitarian views. As well, the considerations raised in section III will apply with much the same force to sufficientarian views; to ensure that everyone can access a decent minimum of health care, it is not necessary to distribute all or even most health care according to medical need.

medical need, equality justifies the universal provision of health care insurance.

I. THE MEDICAL NEED PRINCIPLE

A health care intervention is medically necessary, or meets a medical need (I use the two phrases interchangeably), when it is reasonable and effective by the accepted standards of medical practice for the prevention, diagnosis, treatment, or amelioration of some disease, injury, or disability.³ For brevity's sake, though, I will speak of medically necessary care simply as 'care that is effective for the treatment of disease or disability'. Medical need is a standard of clinical effectiveness; an intervention is medically necessary in virtue of being an appropriate clinical response to some pathological condition. I follow Norman Daniels in endorsing Christopher Boorse's position that pathology is any departure from normal species functioning, but nothing I say here hangs on that.⁴

The term 'medical need' evokes the idea of a basic need, or at any rate a morally very weighty need, but it is important to see that these ideas are not necessarily connected. Medical need is a clinical concept, not a moral one. The concept of medical need applies whenever a particular treatment is an effective response to a particular condition, regardless of how serious the underlying

³ This is the American Medical Association's definition, for instance. American Medical Association (AMA). 2011. *Statement of the American Medical Association to the Institute of Medicine's Committee on Determination of Essential Health Benefits*. Washington, DC: AMA: 3. Available at: <https://iom.nationalacademies.org/~media/8D03963CAEB24450947C1AEC0CAECD85.ashx> [Accessed 31 Oct. 2015]. It is also the definition found in the US Medicare Act. 42 USC §1395y(a)(1)(A). Norman Daniels also employs this definition in his influential account of justice in health care. Daniels, *op. cit.* note 1, pp.42-46. For a discussion of the concept of medical necessity and its history, see E.H. Morreim. *The Futility of Medical Necessity. Regulation* 2001; 24: 22-26.

⁴ Daniels, *op. cit.* note 1, p.36-40; C. Boorse. *On the Distinction Between Disease and Illness. Philos Public Aff* 1975; 5: 49-68.

condition may be. In other words, medical need does not tell us how urgent or important it is, morally speaking, to treat a particular condition. And this is as it should be; moral judgments cannot be based on considerations of clinical effectiveness alone. We cannot offload difficult questions about what we owe to each other onto medical science.⁵

Because medical need refers to clinical effectiveness rather than moral urgency, the medical need principle in fact radically underdetermines the distribution of care. The problem is that medical need alone does not tell us how to set health care priorities, and we must set health care priorities; it is unreasonable if not impossible to meet all medical needs without regard to their moral importance or cost-effectiveness.⁶ Thus we need some further account of which medical needs are most urgent or important to meet in order to arrive at anything approaching a complete account of justice in health care.

While the medical need principle does not point to a particular distribution of health care as most just, it does constrain the distribution of health care in certain ways. It is a bit like if I gave you some money and instructed you to distribute it among a certain group of people ‘according to height,’ without saying anything more about what I intend—without saying how you are supposed to ‘prioritize’ different increments of height, so to speak. Even though my instructions leave the final distribution quite open, certain things are clearly ruled

⁵ Buchanan et al., *op. cit.* note 1, p.120.

⁶ Gopal Sreenivasan. 2012. Why Justice Requires Rationing in Health Care. In *Medicine and Social Justice*, 2nd Edition. R. Rhodes, M. Battin, & A. Silvers, eds. New York, NY: Oxford University Press: 143-154. It is worth noting that the AMA has specifically resisted incorporating considerations of cost-effectiveness into the definition of medical necessity. AMA *op. cit.* note 3, p.3.

out, like giving different amounts of money to people of equal height. Something similar can be said about distribution according to medical need. Even though it does not determine a unique distribution of health care, the medical need principle constrains the distribution of care in at least two significant ways.

First, the medical need principle restricts the sorts of considerations that may properly influence the distribution of health care. The medical need principle asserts that care ought to be distributed according to medical considerations, i.e. considerations of clinical effectiveness. A corollary is that non-medical considerations ought not influence the distribution of care (except perhaps in very special cases, such as to break ties). The medical need principle is sometimes glossed as the requirement that care should not be distributed according to ability to pay, but in fact it rules out much more than that. The medical need principle rules out distributing care according to any facts about people's lives outside the examination room, such as their overall levels of welfare, neediness, usefulness, or desert.

Second, the medical need principle restricts the sorts of purposes for which health care may be deployed. The concept of medical need is tied to the treatment of disease and disability; by definition, interventions that do not effectively treat disease and disability do not meet medical needs. Thus the medical need principle rules out the provision of care that is merely cosmetic, elective, or experimental, regardless of how much such care may benefit a patient or how much a patient may want it.

The constraints implied by the medical need principle should not be

understood as absolute, of course. For one thing, there may be overriding reasons to provide certain kinds of health care services despite the fact that they do not meet medical needs. For example, non-therapeutic abortion and contraceptive services are not medically necessary—pregnancy is not a disease—yet many people feel that justice requires the provision of such services.⁷ For another, it seems reasonable that citizens should be free to purchase elective and cosmetic procedures from their own resources, even if such services should not be guaranteed to all citizens on the grounds that they do not meet medical needs. For these reasons (and perhaps others), the medical need principle is most charitably interpreted as a *pro tanto* principle of distributive justice, one that speaks in favor of a certain pattern of distribution but not decisively.

While the medical need principle is not the whole story of justice in health care, it is nonetheless an appealing principle. Many people are strongly attached to the idea that decisions about their health care should be kept between them and their doctors, and they are appalled by the suggestion that care might be distributed according to bureaucratic determinations of desert or social usefulness; the medical need principle honors this sentiment.⁸ Moreover, the medical need principle preserves the distinct role of doctors as professionals bound by duties of care rather than mere technicians ready to provide any service the patient might request.⁹ It also allows doctors to serve as gatekeepers to the health care system,

⁷ Daniels, *op. cit.* note 1, p.41.

⁸ Recall that this was the concern former Governor of Alaska Sarah Palin tapped into in 2009 when she stirred up public outrage over so-called ‘death panels,’ which she (falsely) alleged were to be established under the US Patient Protection and Affordable Care Act.

⁹ R. Schwartz. Autonomy, Futility, and the Limits of Medicine. *Camb Q Healthc Ethics* 1992; 1: 159-164.

making sure that people do not consume wasteful or ineffective care, thus possibly keeping overall costs down.¹⁰ Finally, many people have the intuition that meeting medical needs is simply more important or more urgent, morally speaking, than providing elective or cosmetic care; the medical need principle reflects this intuition.¹¹

II. THE INSTRUMENTAL EGALITARIAN PICTURE

Many argue that the medical need principle follows from a commitment to equality.¹² Yet it is more difficult to justify this principle on egalitarian grounds than philosophers have appreciated. This is because most egalitarians believe that people ought to be equal on the whole, by some overall measure of well-being or life-prospects, such as resources, welfare, or capabilities. This sort of view treats health care as merely instrumental to an ideal of equality specified independently of health care. But if health care is merely instrumental to equality on some overall measure, it is difficult to see why health care should be distributed in any other way than so as to directly promote equality by that measure.

If health care is treated as merely instrumental to some independent account of equality, then the medical need principle, which appears primarily as a set of *constraints* on the distribution of health care, becomes particularly difficult

¹⁰ In a system where doctors are compensated on a fee-for-service basis, this role creates certain perverse incentives. See Joseph Heath. Forthcoming. Ethical Issues in Physician Billing under Fee-for-Service Plans.

¹¹ T.M. Scanlon. Preference and Urgency. *J Philos* 1975; 72: 655-669; Daniels, *op. cit.* note 1, pp.31-36.

¹² See note 1 above.

to justify on egalitarian grounds. We cannot derive a set of constraints on the pursuit of a certain goal from consideration of that goal itself (unless perhaps those constraints have more than merely instrumental significance to the goal, a possibility I return to in section III). On a purely instrumental picture, the medical need principle might at best have the status of a rule of thumb, a rough-and-ready approximation of what true equality requires which suffices for most practical purposes. I would suggest that even that is unlikely.

To see this, consider Norman Daniels' landmark account of health care justice. Many theorists follow Daniels in holding that health care falls under institutions charged with protecting fair equality of opportunity.¹³ Daniels summarizes his position as follows:

- (1') Since meeting health needs promotes health (or normal functioning), and since health helps to protect opportunity, then meeting health needs protects opportunity.
- (2') Since Rawls's justice as fairness requires protecting opportunity, as do other important approaches to distributive justice, then several recent accounts of justice give special importance to meeting health needs.¹⁴

According to Daniels, health care is important to equality of opportunity because disease and disability reduce the range of opportunities available for individuals

¹³ Daniels, *op. cit.* note 1; see also N. Daniels. 1985. *Just Health Care*. New York, NY: Cambridge University Press; N. Daniels. Justice, Health, and Healthcare. *Am J Bioeth* 2001; 1: 2-16. Others who follow Daniels include D. Brock. Children's Rights to Health Care. *J Med Philos* 2001; 25: 163-177; Buchanan et al., *op. cit.* note 1; L.A. Jacobs. 2004. *Pursuing Equal Opportunities*. Cambridge: Cambridge University Press: chapter 7.

¹⁴ Daniels, *op. cit.* note 1, p.30.

to form and pursue their life plans.¹⁵ By preventing and treating disease and disability, health care services keep people functioning normally and thus protect the range of opportunities people have available to them. Because many theories of justice, including Rawls', require us to protect equality of opportunity, these theories of justice can be understood to attach special importance to meeting people's health needs.

Daniels takes himself to be providing an argument for distributing health care according to medical need, but in fact Daniels' position cannot support either of the constraints implied by the medical need principle identified in section I. I take up each constraint in turn.

The medical need principle implies, first, that the health care a person receives should depend on her medical condition alone, not on non-medical considerations such as her ability to pay or her overall level of neediness or desert. This restriction is puzzling from the point of view of equality of opportunity. If our aim is to promote equality of opportunity overall, would we not do better by distributing care according to *opportunity* need rather than medical need? Would we not do better, in other words, by prioritizing care for those with the worst opportunities overall?

For example, the poor typically enjoy worse opportunities than the rich. To ensure equality of opportunity between rich and poor, should we not aim to give the poor better access to care than the rich? This would introduce non-medical

¹⁵ Ibid: 35

considerations into the distribution of health care, and so it would violate the medical need principle. Yet it would also bring the overall shares of opportunity enjoyed by rich and poor closer to equality, and so equality of opportunity would seem to require it.¹⁶

Daniels does not argue for the specific claim that protecting equality of opportunity requires distributing health care according to medical need rather than according to opportunity need. He may be supposing that, because access to health care is a determinant of opportunity, protecting *equality* of opportunity requires *equal* access to health care (where equal access is understood to mean equal access among those with equal needs). But this is a fallacy of division; it does not follow from the fact that people should enjoy equality of opportunity overall that they must also enjoy equal shares of each of the particular determinants of opportunity. Indeed, far from requiring equal access to health care, protecting equality of opportunity overall would not even permit equal access, except on the condition that access to the other, non-health care determinants of opportunity is also equal. If the other determinants are not equal, then insisting on equal access to health care would only maintain or worsen existing inequalities.

And of course the non-health care determinants of opportunity will never be equal. With respect to some, it is probably impossible to guarantee everyone equal shares. Early childhood upbringing, for instance, is a significant determinant of opportunity, but it is not possible to equalize childhoods across

¹⁶ Shlomi Segall. 2010. *Health, Luck, and Justice*. Princeton, NJ: Princeton University Press: 31.

persons. (Or even if it is possible, perhaps through the communal raising of children as in the *Republic*, it would require unjust interference with parents' rights.¹⁷) And then of course there is the unequal distribution of wealth in liberal societies, which also affects people's opportunities. Since some of the determinants of opportunity will always be unequal, equalizing people's total opportunity shares will always require offsetting these inequalities with unequal shares of the other determinants of opportunity, such as health care.

A second implication of the medical need principle is that health care provision should be limited to those interventions that effectively treat disease and disability. This restriction, too, is puzzling from the point of view of equality of opportunity. If a medical intervention can bring about a more equal distribution of opportunities, why should it matter whether it does so by way of treating disease or disability or in some other way? Why not deploy medical interventions to bring about equality in any way we can?

This problem asserts itself in the debate concerning the priority of treatment over enhancement. 'Enhancement' is a catch-all term for any biomedical intervention that improves a person's functioning beyond that person's natural baseline. Enhancements range from mundane interventions that increase a child's projected height to futuristic genetic interventions that raise intelligence or perception to super-human levels. Because enhancements do not treat disease or disability but instead enhance non-pathological traits, they do not by definition

¹⁷ J. Rawls. 1999. *A Theory of Justice*, Revised Edition. Cambridge, MA: Belknap: 64

meet medical needs; thus the medical need principle speaks against them. And there appears to be fairly broad agreement among liberal egalitarians, including Daniels, that treatment should be prioritized over enhancement, on the grounds that meeting medical needs is more urgent, morally speaking.¹⁸

The problem for Daniels is that, from the point of view of equality of opportunity, the distinction between treatment and enhancement appears to be arbitrary. If someone suffers an inequality of opportunity that can be corrected through medical intervention, why should it matter whether that correction takes the form of a treatment for disease or disability or whether it takes the form of an enhancement which corrects for simple bad luck in the genetic lottery?

An example of Daniels' own might sharpen the problem:¹⁹ Imagine two children, Billy and Johnny, each with a projected adult height of 160cm (5'3). The only difference between them is that Billy's short stature is caused by human growth hormone deficiency, a disease, whereas Johnny's is not. Providing synthetic HGH would increase both their adult heights, but providing it to Billy would count as treating a disease, thus as meeting a medical need, whereas for Johnny it would be the enhancement of a non-pathological trait. Height significantly affects opportunity in our heightist society, so equality of opportunity would seem to require that we provide HGH in both cases.

Daniels does not deny that in certain special cases justice may require

¹⁸ See for example Daniels, *op. cit.* note 1, pp. 149-155; Buchanan et al., *op. cit.* note 1, pp. 119-151. In this section I treat chapter 4 of Buchanan et al. as well as Daniels' *Just Health* as representing Daniels' own view. The introduction to Buchanan et al. names Daniels as the primary author of chapter 4.

¹⁹ Buchanan et al., *op. cit.* note 1, p.115.

biomedical enhancement (although not in Johnny's).²⁰ But he insists that the 'primary rationale' for meeting health needs appeals to the importance of treating disease and disability.²¹ His primary positive argument is that this makes for better public policy. He points out that whether a condition is pathological can be determined using the objective, publicly verifiable methods of medical science, whereas it is less clear how to determine whether a particular person's capability set amounts to an opportunity deficit. Moreover, all developed countries agree on the importance of providing treatment, but few offer enhancements. Indeed, offering enhancements might undermine support for just health care generally, if people see others receiving (medically) unnecessary care at public expense.²²

In the end, Daniels himself admits that the treatment-enhancement distinction is both morally and metaphysically arbitrary.²³ Arguably it is the job of the moral philosopher to move public opinion against arbitrary distinctions. There is a clear tension between explaining the moral significance of health care in terms of opportunity and then treating equal limitations on opportunity differently, as in the case of Billy and Johnny.²⁴ If we can remove two equally significant impediments to opportunity through medical intervention, and there is agreement that we owe the intervention that counts as treatment but not the one that counts as enhancement, on what basis can we conclude that a commitment to *equality of*

²⁰ Ibid: 140-1; Daniels, *op. cit.* note 1, pp.152-154

²¹ Buchanan et al., *op. cit.* note 1, p.121

²² Ibid: 141-144; Daniels, *op. cit.* note 1, pp.151-155.

²³ Daniels, *op. cit.* note 1, p.155.

²⁴ N. Holtug. Equality and the Treatment-Enhancement Distinction. *Bioethics* 2011; 25: 137-144: 142.

opportunity underlies our agreement? ²⁵

My discussion has focused on Daniels' influential account of justice in health care, but the problems identified here will trouble any view that sees health care as merely instrumental to some overall metric of equality, such as welfare, resources, or capabilities. This is because, first, whether an inequality is due to pathology is arbitrary from the standpoint of these overall metrics, so there is no egalitarian reason to privilege treatment over enhancement in the distribution of care. And second, medical considerations *per se* are not of any special significance from the point of view of these metrics, so there is no egalitarian reason to think that such considerations alone should determine the distribution of care. Egalitarians should favor distributing care so as to promote equality, not (necessarily) so as to meet people's medical needs. It would be a massive coincidence if distributing health care according to medical need turned out to be the optimal way, or indeed even a particularly effective way, of promoting equality on one of these overall metrics.

²⁵ Another important thread in Daniels' argument for prioritizing treatment over enhancement appeals to Rawls's account of fair equality of opportunity, on which equality is already understood to be relative to natural talent. Rawls' principle of fair equality of opportunity requires only that people with roughly equal levels of talent should enjoy roughly equal life chances, and this appears to speak against enhancing non-pathological traits in the name of equality of opportunity. This is not the place for a complete evaluation of Rawls's account of equality of opportunity, but it is worth pointing out that, from the claim that people with equal talents should enjoy equal life chances, nothing follows about what is owed to people with unequal talents. Moreover, Rawls's argument against redressing natural inequalities appears to proceed on the assumption that such redress would take the form of compensation rather than correction via enhancement; his argument may have to be reconsidered in light of other possibilities. Rawls, *op. cit.* note 17, pp.63, 86-7; See also Daniels, *op. cit.* note 1, pp.44-45.

III. A NON-INSTRUMENTAL RATIONALE?

Someone might suggest that my argument in the previous section errs in supposing that distributing health care according to medical need has merely instrumental significance for equality. Perhaps it matters *intrinsically* or *constitutively* for equality, in the way that equal voting rights, say, are not merely a means to the promotion of equality but a constituent part.

I would start by saying that it's not clear that a society is inequalitarian just in virtue of violating either of the requirements of distribution according to medical need isolated here. Would it be intrinsically inequalitarian for a society to introduce non-medical considerations into the distribution of care? Arguably, it depends on what those considerations are. Distributing care according to race or religious belief would be inequalitarian, of course, but distributing care to raise the welfare of the least-advantaged is not obviously so. Would it be intrinsically inequalitarian for a society to provide enhancements as well as treatments? It would depend on the kind of enhancements and their consequences, I think, but that is just to say that it would not be *intrinsically* inequalitarian.

I suspect that many of those who see the medical need principle as constitutive of equality are conflating two superficially similar but in fact quite different ideas: the idea that health care should be distributed *according to* medical need and the idea that people should be able to *meet* their medical needs. These two ideas are so far from being identical that I do not even think they appeal to the same notion of 'need'. As I pointed out in section I, the sense of need at work in the medical need principle is one of clinical effectiveness. By

contrast, the sense of need at work in the proposition that people should be able to *meet* their medical needs must be a moralized sense of need, something like the idea of a ‘basic need.’ Those who urge that people should be able to meet their medical needs are not charitably interpreted to mean that people should receive all beneficial medical care regardless of urgency or cost-effectiveness; they mean that people should be able to meet their *basic* medical needs.

But regardless of whether these two propositions appeal to different concepts of need, they have quite different meanings. The proposition that people should be able to meet their (basic) medical needs articulates a certain moral goal or ideal, one that could plausibly be called egalitarian or perhaps sufficientarian. To say that health care should be distributed *according to* medical need, on the other hand, urges a very specific set of constraints on the distribution of health care. The former may well be constitutive of equality, but it is the latter that concerns us here.

It is worth noting that, in general, embracing the idea that people’s needs should be met in a certain area does not move us to the conclusion that the relevant goods must be distributed on the basis of need. For example, while it is true that people should be able to meet their nutritional needs, we do not conclude from this that food must be distributed according to nutritional need. Grocery stores do no wrong when they distribute food according to ability to pay, our egalitarian or sufficientarian obligations notwithstanding. If some people do not have enough money to meet their nutritional needs, that problem is easily solved by giving them money. Redistributing wealth is not only more efficient than

providing goods in kind; it is also more egalitarian, as providing goods in kind will inevitably privilege certain conceptions of the good over others.²⁶

It is difficult to see why the medical need principle should be regarded as constitutive of equality when nothing of the sort can be said of the nutritional need principle or the housing need principle or the clothing need principle. If equality does not require the distribution of basic needs like food and shelter according to need, it does not require it of health care, either.

IV. UNCERTAINTY, INSURANCE, AND MEDICAL NEED

If we are seeking a justification for distributing health care according to need that will not extend to other basic needs like food and shelter, we ought to look at what makes health needs different from these other needs. Here is one candidate: in the United States in 2010, just 5% of the population accounted for nearly 50% of all health care spending, while at the other end of the distribution, half of the population combined to account for less than 3% of such spending.²⁷ The conventional way of framing these figures is to focus on their ex post inequality, but another way—perhaps a more promising way—might be in terms of their ex ante uncertainty. That is, when it comes to medical needs, it is often difficult or impossible to say ahead of time on which end of the need spectrum a

²⁶ J. Heath. Political Egalitarianism. *Soc Theory Pract* 2008; 34: 485-516: 500; R. Dworkin. 2000. *Sovereign Virtue*. Cambridge, MA: Harvard University Press: 147f.

²⁷ S.B. Cohen & N. Uberoi. 2013. *Differentials in the Concentration in the Level of Health Expenditures across Population Subgroups in the U.S., 2010*. Statistical Brief #421. Rockville, MD: Agency for Healthcare Research and Quality. Available at: http://meps.ahrq.gov/mepsweb/data_files/publications/st421/stat421.shtml [Accessed 23 June 2015].

particular person will fall, whether she will need lots of expensive care or no significant care at all. This uncertainty generates problems of its own.

One thing people will want to do, even in an egalitarian utopia, is to save for their future health needs. But how much to save? I might know that my health care costs are expected to be around \$5000 per year, but the great variation we observe in health care expenditure means that knowing my *expected* health care costs does not necessarily tell me very much about what my *actual* health costs will be, either this year or even over my whole life. Saving \$5000 per year is almost certain to be either too much or too little to meet my health needs going forward.

I can reduce the uncertainty surrounding my health needs by pooling my health risks with a large and representative number of other people.²⁸ This is possible because of a phenomenon that statisticians refer to as the ‘law of large numbers:’ increasing the number of trials of an experiment causes the average result to converge on the expected value.²⁹ Thus even though one person with expected health care costs of \$5000 per year is quite unlikely to require exactly \$5000 in actual health care in a given year, the average health care costs of hundreds or thousands of similarly-situated people in a given year is likely to be very close to \$5000 indeed. Thus by pooling their health risks with others, the law of large numbers makes it possible for individuals to convert a statistical expectation into an equivalent certainty (less of course the costs of administering

²⁸ Assuming of course that the risks are independent of one another.

²⁹ I. Hacking. 2001. *An Introduction to Probability and Inductive Logic*. New York, NY: Cambridge University Press: 189f.

the scheme).³⁰ This arrangement is beneficial because people tend to be risk-averse; most people prefer the certainty of a \$5000 loss to a gamble with an expected loss of \$5000.

A risk-pooling arrangement like this is known colloquially as an insurance scheme, and it is worth emphasizing that it is not primarily an egalitarian arrangement. It works by redistributing losses over a large group—from those who do not get sick to those who do, for example—but at its core insurance is fundamentally *expectation-preserving*.³¹ In other words, looking at the matter *ex ante*, insurance does not alter a person's expectations; it merely secures what she already has against risk. For this reason, the logic of risk-pooling is better described as solidaristic rather than egalitarian; by agreeing to share one another's fate in certain ways, the members of the risk pool can each reduce their exposure to uncertainty and thus advance their own interests more effectively.³²

I would suggest that the importance of providing individuals access to security against health risks best justifies distributing health care according to medical need.³³ In the rest of this section I aim to show that a risk-pooling arrangement for health care would naturally distribute health care according to medical need in the two senses isolated earlier, and for reasons that have nothing to do with equality. I return in Section V to the question of why such a risk-

³⁰ R. Goodin. 1988. *Reasons for Welfare*. Princeton, NJ: Princeton University Press: 159; J. Heath. The Benefits of Cooperation. *Philos Public Aff* 2006; 34: 313-351: 322-324.

³¹ Goodin, *op. cit.* note 30, p.159.

³² T.-K. Lehtonen & J. Liukko. Producing Solidarity, Inequality, and Exclusion Through Insurance. *Res Publica* 2015; 21: 155-169.

³³ For an account of why protection against risk, including health risk, matters to political philosophy, see <redacted for blind review>.

pooling arrangement should be universal.

But to forestall misunderstanding, I should point out here that I do not mean to imply that equality has no place in health care justice. I believe we have good reasons—good *egalitarian* reasons—to subsidize the health care of the poor and of those with unusually expensive health needs. But those reasons are distinct from the reasons that underlie the medical need principle. The medical need principle follows from the importance of protecting people against health risks; it follows from the insurance side, not the egalitarian side, of health care justice.³⁴

It is worth saying by way of beginning that the legal doctrine of medical necessity emerges from insurance law. It did not begin as a medical concept. The phrase ‘medical necessity’ began appearing in private insurance contracts in the U.S. in the 1960s as a way of controlling costs, by refusing to pay for ‘unnecessary’ care.³⁵

It is easy to see why the idea of medical necessity would play a prominent role in insurance law. Insurers need some way of determining which claims to compensate. They cannot simply take patients' claims of need at face value, for fear of encouraging what is known as ‘moral hazard’. Moral hazard occurs because an individual who has insured against a certain loss now has reduced incentive to avoid that loss. If the loss in question is subject to human control,

³⁴ I do not mean to suggest however that health care provision must be organized explicitly as an insurance scheme. It is possible to see systems of socialized medicine like Britain's NHS as indirect ways of pooling health risks (analogously to the way that some theorists are inclined to see national health insurance schemes as indirect ways of delivering socialized medicine).

³⁵ Morreim, *op. cit.* note 3, p. 22.

then the reduced uncertainty that insurance provides can yield an increase in the objective probability of the loss.³⁶ This is a sort of collective action problem. Because with risk-pooling each person pays for only a small fraction of her own health care costs, each has little incentive to forgo care for herself; the bulk of the cost will be borne by the other members of the pool. But if every person reasons in that way, total liabilities grow, and everyone winds up paying much more for their insurance.

Providing care only in cases of medical need is a natural way of limiting moral hazard. By paying only for such care as is reasonable and effective in the judgment of the medical community, the total liabilities of the pool are limited. Importantly, total liabilities are limited in a way that does not undermine the overall purpose of health care insurance, which is to reduce individuals' uncertainty surrounding their future medical needs. Looking at the matter from the point of view of the insurance pool as a whole, the medical need principle is an obvious way of limiting access to health care to ensure the sustainability of the pool going forward.

This justifies the priority of treatment over enhancement in the distribution of medical care. This priority is hard to justify on egalitarian grounds, because the line between inequalities due to disease and those due to other factors is arbitrary from the point of view of equality. But the difference is not arbitrary from an insurance point of view. The purpose of health insurance is to reduce people's uncertainty with respect to their future medical needs, and so medical need is a

³⁶ Heath, *op. cit.* note 30, p.332

natural basis for distributing care. To the extent that individuals' desires for enhancement are subject to their own control while their medical needs are not, there are good reasons for insurance to cover only the latter.

The other requirement of the medical need principle, that care be distributed according to medical considerations alone, also fits naturally with the function of health insurance. People buy health insurance to reduce the uncertainty surrounding their future medical needs. An insurer distributing care according to non-medical criteria would not reduce that uncertainty; arguably it would only increase it.

Imagine that you were in a car accident, and your automobile insurer insisted on an investigation to determine whether you truly needed their assistance before they would pay for repairs—not just whether your car needed repairs, as it obviously does, but whether *you* were truly needy in some absolute sense. It's not just that such an investigation would be galling (although it would be). More than that, an insurance arrangement like this would not actually do much to reduce your total uncertainty. It would simply replace uncertainty about your automotive needs with uncertainty about how sympathetic you will be found in the eyes of your insurer.

From an egalitarian point of view, this restriction, too, was puzzling. To ignore considerations of overall well-being or advantage in the name of promoting equality in overall well-being or advantage is unwise, bordering on self-defeating. But if the aim is to reduce people's uncertainty regarding their

future medical needs, then the restriction makes sense. Bringing non-medical considerations into the distribution of care would undermine insurance's very function. Thus it is clear that individual members of the pool would insist that their insurer look only at medical considerations in determining which claims to compensate.

We have seen that the medical need principle fits with health care insurance in two directions. From the point of view of the pool as a whole, refusing to pay for medically unnecessary care limits moral hazard and serves to keep liabilities (and thus premiums) down, thus protecting a substantial source of cooperative benefits. From the point of view of individual members of the pool, distributing care according to medical criteria alone is an important part of reducing their uncertainty surrounding their medical needs. The medical need principle is not, therefore, a response to egalitarian concerns; it is a response to the uncertainty surrounding health needs.

V. UNIVERSAL HEALTH CARE INSURANCE

While I hope to have shown that the medical need principle follows the logic of insurance, not equality, it is open to the egalitarian to argue that we must appeal to equality to explain why everyone must have health care insurance. Something like this seems to be Dworkin's view.³⁷ This hybrid view would still give equality a foundational (though indirect) role in the justification of the

³⁷ Dworkin, *op. cit.* note 1; Dworkin, *op. cit.* note 26, chapter 2.

medical need principle. The problem with this view is that it is possible to equalize security from health risks at any level; it is not clear that a situation where everyone has no insurance is therefore less equal than a situation where everyone has adequate or even maximal insurance, even though such a situation would clearly be worse in other ways. Indeed, when pressed, Dworkin himself ultimately appeals to paternalism to justify universal insurance.³⁸

I believe the logic of insurance provides a better argument for universal coverage, one that appeals to the problem of adverse selection.³⁹ At any given price, high-risk persons are more inclined to buy health care insurance than low-risk persons. Over time, this ‘adverse selection’ of risks can cause the per capita liabilities of the insurance pool to rise, which in turn may drive up premiums. This increase in price can cause more low-risk individuals to drop out of the pool, driving up average costs (and thus premiums) even further. Left unchecked, this dynamic can drive premiums up to the point that the pool prices itself out of existence—the dreaded ‘adverse selection death spiral’.⁴⁰

Adverse selection is a kind of collective action problem that can undermine a significant source of cooperative benefit. Preventing it provides a non-egalitarian (and non-paternalistic) argument for universal health care

³⁸ R. Dworkin. *Sovereign Virtue Revisited*. *Ethics* 2002; 113: 106-143: 114-115. For a recent discussion of the relationship between insurance and equality, see X. Landes & P.-Y. Néron. Public Insurance and Equality: From Redistribution to Relation. *Res Publica* 2015; 21:137-154.

³⁹ G.A. Akerloff. The Market for 'Lemons'. *QJEcon* 1970; 84: 488-500; K. Arrow. 1971. *Essays in the Theory of Risk-Bearing*. Chicago, IL: Markham Publishing: 177-211.

⁴⁰ For a vivid account of the death spiral in action, see D.M. Cutler & R.J. Zeckhauser. 1998. Adverse Selection in Health Insurance. In *Frontiers in Health Policy Research*, Volume 1. A.M. Garber, ed. Cambridge, MA: MIT Press: 1-31.

insurance. The most effective solution to the problem of adverse selection may be to force the good risks back in to the pool, that is, to force everyone to carry health care insurance. The alternative to forcing people to carry health insurance may well be that insurance is not available at all for many people, and where it is available, it will be on very unfavorable terms. Universal coverage is thus one way of ensuring the sustainability of the insurance system.

I've argued that the distribution of health care according to medical need is better justified on insurance grounds than equality grounds. What makes health care different from other basic needs is their uncertainty. Uncertainty means that people will want health care insurance to see to their future health needs more effectively. Health insurance distributes care according to medical need, not to make people more equal but to reduce uncertainty. Distributing health care according to medical need is about indemnity, not equality.

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