

A Market Failures Approach to Justice in Health

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Abstract

It is generally acknowledged that a certain amount of state intervention in health and health care is needed to address the significant market failures in these sectors; however, it is also thought that the primary rationale for state involvement in health must lie elsewhere, for example in an egalitarian commitment to equalizing access to health care for all citizens. This paper argues that a complete theory of justice in health can be derived from a commitment to correcting market failure, or in other words promoting Pareto-efficiency, in the domain of health. This approach can address familiar problems around access to care, as well as problems related to resource allocation and rationing (including resource allocation between generations), the control of health care costs, and the foundations of public health. Egalitarian theories of justice in health cannot make sense of the depth and pervasiveness of state involvement in health and health care; only a theory rooted in the need to correct market failure can.

Keywords

Health care; public health; market failure; efficiency; egalitarianism; welfare state.

Introduction

It is widely acknowledged that there are significant obstacles to treating health care as an ordinary market good. Patients almost invariably lack the specialized medical knowledge to judge what treatments are appropriate for them, how much such treatments should reasonably cost, or even whether their own physician is able to provide those treatments competently. Moreover, the need for health care is often occasioned by some acute crisis, with the result that patients will not be well-placed physically or mentally to weigh their options deliberately, to shop around for treatments, or to bargain effectively with providers. And physicians themselves have strong professional norms against adopting the posture of ordinary market actors, to the point where many American physicians do not seem to know what they charge for their own services (Arrow, 1963; Cliff, 2016; Gawande, 2009).

On top of all this, medical interventions have become so expensive that the transaction between patient and provider is almost always mediated by insurance, which involves further departures from the normal operation of the market. Both patients and physicians are less likely to be concerned about cost and more likely to overconsume if a third party is paying. For their part, insurers are in some ways even less able to negotiate effectively with providers than patients are (Heath, 2001: 188). And when it comes to the purchase of insurance itself, voluntary private markets for health insurance disproportionately attract the costliest patients, for understandable reasons; this adverse selection problem makes it difficult for others to obtain insurance in the best of circumstances, and it can completely destabilize insurance programs in the worst (Akerlof, 1970; Arrow, 1963).

Most would agree that a certain amount of public-sector involvement in the health care sector is justified by the state's capacity to address these various market failures.¹ It is often felt, however, that the primary rationale for state involvement in health care must lie elsewhere, in a commitment to equalizing access to care, or a sufficientarian concern to provide a decent minimum of care for all (see especially Daniels, 2008; Dworkin, 1993; Satz, 2010; Segall, 2009; Williams, 2005). Some have even suggested that health care forms its own separate "sphere of

justice,” governed by principles of distribution entirely distinct from those that prevail in other domains (Walzer, 1983). The aim of this paper is to show that these additional commitments are unnecessary, and that a complete theory of justice in health and health care can be derived from the commitment to correcting market failures in this sector. Pareto efficiency is the primary norm governing the operations of the public health care system, whereas equality plays only a secondary role, determining how certain benefits and burdens of this system are allocated.

The trouble with egalitarian or sufficientarian accounts of justice in health is that they cannot make sense of the depth and pervasiveness of the state’s involvement in health and health care. To see this, one need only consider the case of food, which like health care is also a basic need. Some state involvement in the food sector is surely needed to ensure that all citizens are able to meet their nutritional needs. But this goal is easily achieved without significant state intervention in the production and distribution of food; for example, we do not see state-run farms or state-run grocery stores distributing food to citizens for free. Instead, the standard arrangement is that the state simply provides the poor with money, in the form of welfare payments, which they use to purchase food from private vendors. Even in the United States, where the federal Department of Agriculture has historically been more involved in distributing food directly to citizens, the current arrangement involves giving individuals vouchers that can be redeemed at private grocery stores. The reason that this arrangement is by-and-large satisfactory, even to egalitarians, is that the market for food – from agriculture, to processing, to distribution, to retailing – is relatively efficient. Thus, the problem of food poverty can be resolved simply by increasing people’s incomes, without the need for direct in-kind aid, much less the nationalization of the entire food industry.

The question is why this does not work in the case of health care. Consider the National Health Service (NHS) in England, which is a vast complex of state-owned organizations employing approximately 1.5 million people, including over 300,000 nurses and more than 130,000 doctors, providing health care that is largely free at the point of use to any resident who needs it (NHS, 2021). The depth of state involvement on the supply side in this sector cannot be explained by principles of egalitarian distributive justice. If market provision of health care were

as efficient as market provision of food, there would be no need for any of this; it would be sufficient for the state simply to provide citizens with money or vouchers.

It is only once we appreciate the many serious market failures plaguing health and health care that the case for NHS-like levels of state involvement in health care becomes apparent. Indeed, as we hope to show, an approach to justice in health organized around correcting market failure is uniquely capable of providing a unified and compelling theory of justice in health – one that addresses not only the familiar problem of universal access to care, but also problems of resource allocation and rationing (including resource allocation between generations), of the control of health care costs, and even of the foundations of public health provision and the just distribution of the social determinants of health. While in a paper such as this we can only sketch the outlines of a market failures approach to justice in health, we do hope to show along the way that the market failures approach has significant advantages over rival egalitarian views.

I. Markets and market failure.

The aim of this paper is to sketch the outlines of a theory of justice in health based in the value of efficiency. The kind of efficiency that concerns us in this paper is efficiency in the sense of Pareto, which is to say, non-aggregative maximization of human welfare. The principle of Pareto efficiency says that one social state is to be preferred to another if in it at least one person is better off and no one else is worse off (Gibbard, 1984: 262; Heath, 2011: 24). The Pareto principle is essentially a no-waste principle; it says simply that we ought not to leave welfare gains on the table.

While it might seem obvious that we ought not accept arrangements under which some people are worse off than they might otherwise be, without anyone being thereby made better off, all kinds of situations arise in everyday life where individuals are rationally inclined to do just that. These situations are known as collective action problems: situations where the outcome of individual rational choice is Pareto-inferior to at least one other possible outcome (Taylor,

1987: 19). If we take the Pareto principle as our guide, then it seems clear that the design of social institutions ought to be particularly sensitive to the kinds of collective action problems that particular institutional forms are capable of resolving, and which they are prone to exacerbating (Heath, 2011: 23-26).

From this point of view, the significance of the market as an institution is not just that it is effective at generating Pareto-improvements, in the form of gains from trade, but also that it is remarkably resilient against many common collective action problems. For example, anyone who has ever been a part of a workgroup or team will probably have noticed the collective action problems that arise when the returns to work and effort are pooled; in practically any team endeavor, shirking or free riding will often prove an individually rational although collectively sub-optimal strategy. It is in hopes of combating these sorts of problems that team leaders invest so much time and energy in cultivating an ethos of team spirit and dedication (effort which is waste from a social point of view). Rather than hectoring team members to “give 110%,” it can sometimes be more efficient simply to move productive activities away from teams and toward the market. In the market, it is possible to bargain with specific individuals for specific “deliverables,” eliminating the temptation to shirk and thus the need for costly team building and effort-monitoring activities (Miller, 1992: 19-35).

It should be clear from the foregoing that, when we say “the market,” we do not mean just the private sector; rather, by “the market” we intend a system whereby social resources are allocated through voluntary contracting, according to the workings of the price system. The opposite of the market in this sense is not the state, but rather one form or another of planning, where resources are directed according to the conscious designs of some authority (as happens for example within a team). The key difference between the kind of planning that goes on within a private firm and the kind that goes on within the bureaucracy of the state is that participation in firms remains in an important sense voluntary, a point we return to below.

Ronald Coase (1937) observes that these two elementary institutional forms—contracting and hierarchy, markets and planning—are the only two effective ways of organizing large-scale social cooperation between multiple individuals. From the point of view of economic efficiency,

the significant differences between them lie in the kinds of collective action problems that each is vulnerable to, and that each can resolve. Since there are only two, what matters is their performance relative to one another: typically, the market is favored where hierarchy fails, and vice versa.

It is a familiar point by now that market efficiency suffers when property rights are incomplete, when market participants lack full information, or when competition is imperfect (Mas-Colell et al., 1995: 549-550). All three of these familiar sources of market inefficiency are, at bottom, sources of collective action problems. Incomplete property rights create the possibility of positive or negative externalities, unpriced benefits or costs to third parties, which in turn can lead to public goods problems of various sorts. When asymmetries of information are present, people do not necessarily know what they are bargaining to, which generates principal-agent problems as well as problems of adverse selection and moral hazard (which we discuss at length below). And imperfect competition allows individuals to exploit their market power to their own private advantage, enabling various forms of rent-seeking on the part of price makers (Heath, 2011: 25).

When these collective action problems are present, we say that the market “fails,” in the sense that it does not realize all possible Pareto-improvements. Of course, if the standard is full optimality, then the market always fails, because the requirements of market efficiency are never fully satisfied in the real world; as Coase (1937: 390-391) puts it, there are always costs associated with using the price system. Significantly, however, sometimes the market falls so far short of optimality – we might say that the market fails *so egregiously* – that it will be possible to achieve a more efficient result through some form or other of planning. This is what happens within a corporation, where production is directed by the “visible hand” of management rather than the invisible hand of the price system; sometimes it is less costly simply to hire people and tell them what to do, rather than contracting for their goods in the market.² Manufacturers will sometimes find, for example, that their dependence on a particular supplier for unusual or complex parts creates serious vulnerability, such that it is more efficient simply to bring the supplier inside the firm and produce the part themselves, rather than be exploited by a monopolist (Heath, 2011: 25).

Thus, from the point of view of the Pareto principle, the role for hierarchically-structured firms is to resolve certain collective action problems with less waste than can be done in the market – just as *mutatis mutandis* the role of the market is to solve certain collective action problems more cheaply than can be achieved hierarchically. The specific role of the state comes in to view when we consider that, because corporations are voluntary associations, there are some free-riders they are unable to control and thus some significant collective action problems that they are unable to resolve. The state can use its coercive power to compel even the most stubborn free-riders, solving those problems handily. This is most obvious in the case of state provision of pure public goods like external defense and internal security; while it may not be strictly impossible, it would obviously be very costly to organize the provision of these goods through voluntary contributions (Anomaly, 2015). Significantly for our purposes here, there are also serious collective action problems that emerge in the market provision of certain kinds of insurance products. This is essential to understanding the role of the state in the provision of health care.

II. Sources of market failure in health and health care

The standard analysis of market failure – why it matters, what causes it, and how it can be resolved – is straightforward enough. In applying this framework to the analysis of health and health care, however, things quickly become confusing. The first problem is that the provision of health care is subject to multiple market failures, not just one, and different institutional arrangements have arisen in response to different market failures. The second problem is that many of the institutions that have arisen in response to specific market failures are nevertheless still private. In other words, the mere existence of market failure does not automatically require or evoke a public-sector response. Similarly, “the market” must not be equated with “the private sector.” For example, a managed care organization such as Kaiser Permanente in the U.S. is best understood as a private-sector response to problems that arise in the health insurance sector. Structurally, these managed care organizations are quite similar

to the NHS, and they rely upon the same mechanism to produce efficiency gains, but it is not always necessary to have public ownership in order to achieve these benefits.

Thus a market failures analysis of the health care sector must be developed in a rigorous fashion, in order to avoid lapsing into confusion. In the discussion that follows, we begin by describing the five “core” sources of market failure that arise in the market for health care services. This will be followed by a description of the solutions to these problems that have arisen in the private sector (which is to say, through voluntary contracting and institutional innovation). Only then will we turn to an analysis of the problems that remain outstanding, or that cannot be resolved through purely private initiatives, which call for public-sector response.

1. *Information asymmetry in provision.* If one examines the market for medical services in the late 19th century, the most obvious problem with it is that it was dominated by *quackery*. Patients are notoriously unable to assess the value of many medical interventions. Of the thousands of “patent” medicines sold in the U.S. in the late 19th and early 20th century, with the exception of aspirin and a few other analgesics, not one was subsequently shown to have any medicinal value (Carpenter, 2010: 78). Since that time, medical care has become vastly more specialized and knowledge intensive. This gives rise to an obvious problem, which is that unscrupulous providers will exploit vulnerable patients by providing low-quality products or services. The less obvious problem is that high-quality providers, being unable to differentiate themselves from low-quality providers, will not be able to charge more for their services, and thus, will lack the incentive to make the investments necessary to improve the quality of these services. Thus there would also be systematic underinvestment in medical education and research.
2. *Market power in provision.* There are serious barriers to the development of competition in the provision of health care services or the prevention of anti-competitive practices. This is most obvious in the case of emergency services, or when a complex batch of services are bundled together (such as a hospital in-patient procedure, where there is no choice but to purchase physician, nursing, orderly, and even meal services from the same provider). Furthermore, the most expensive purchases are

typically once-in-a-lifetime, which prevents the sort of comparison shopping that is a normal feature of more competitive consumer markets such as food. Finally, individuals facing serious mortality risk assign very low marginal utility to money, which can create enormous returns for those able to exploit market power.

3. *Unpredictability of expenses.* It is extremely difficult for individuals to predict their own future health-care needs. Average lifetime health care spending in the U.S. is \$316,600, more than half of which occurs after age 65 (Alemayehu and Warner, 2004). As a result, individuals must *save* in order to meet their health care needs. Expenditure, however, generally follows the 80/20 rule, which states that 20% of the population accounts for 80% of the spending. This makes it extremely difficult for individuals to know how much to save, because saving an amount equal to one's expected needs, based on population averages, is almost guaranteed to be too much or too little. Furthermore, because expenditure is so highly concentrated in end-of-life care, and debts are discharged upon death, individuals cannot normally access credit markets in order to finance their health care needs.
4. *Duty of rescue.* There is a very powerful moral norm that prohibits denying medical care to individuals in emergency situations or facing death. This makes the threat of non-provision in the event of non-payment, tacitly wielded by suppliers in every market, non-credible in the case of many health care services. While many people express abhorrence at the specter of the poor being turned away from emergency rooms because they cannot afford payment, the opposite state of affairs, in which the poor are *not* turned away, despite being unable to afford payment, creates problems of its own.
5. *Positive externalities.* Finally, it is worth noting that the provision of certain health services provides benefits not only for the recipient, but for others in the community as well. The most obvious instance of this is vaccination, or more generally the control of communicable disease. But there are a number of other health-related interventions that produce highly diffuse third-party benefits as well, such as pest control, water purification, sewage treatment, and air pollution control. Goods and services involving significant positive externalities will normally be underproduced by markets.

These five characteristics of health care make it easy to see why the market for health care services is fundamentally different from the market for ordinary commodities, such as food, and therefore why problems of access cannot be resolved simply by giving people money or vouchers. The most obvious difference is simply that markets for health care are extremely complex. Much of this complexity is due to institutional arrangements that have been adopted to mitigate or work around these market failures. There is, in every case, significant state intervention. Prior to this, however, there are several private arrangements that have been adopted that are aimed at overcoming these market failures. Thus the public interventions that do occur are interventions into a market that has already been restructured in various ways aimed at mitigating market failure. This makes the economic analysis necessarily complex.

There are at least four different institutional arrangements that have been adopted in the private sector aimed at preventing the market failures listed above:

1. *Professionalization*. Information asymmetries create a trust problem, with in turn impedes the ability of parties to engage in mutually beneficial transactions. In the case where certain suppliers of a service possess superior ability, it is in their interest to find ways of sending a credible signal of this ability to potential consumers. The creation of a professional association is one way of doing this. By imposing onerous entrance requirements (e.g. examinations), as well as a system of peer evaluation of complaints, the association is able to provide reasonable assurances that its members will provide high-quality service (Pouryousefi, 2013). Thus doctors most visibly, and to a lesser extent nurses and pharmacists, have all developed credentialing systems aimed at overcoming the trust problem. In this way, health care, even when delivered by the market, is typically not provided as a commodity, but rather as a professional service. This means that it is governed, not only by commercial and civil law, but also by the more demanding regulations of the professional association.
2. *Non-profit governance*. Because the sick and injured are in a highly vulnerable state, there is a reasonable distrust of the profit motive in the provision of health care. While professional associations are able to overcome this to an adequate degree with respect to providers – and so physician services are often provided on a fee-for-service basis,

and thus with a for-profit motive – other components of the health care system, such as hospitals, are often organized as non-profit corporations. Sectors that are more competitive, such as laboratory testing, are often dominated by standard business corporations. But in areas where competition is less plausible, and thus market power is greater, private medical provision is typically organized through non-profits.

3. *Insurance.* The unpredictability of health-care expenditures gives individuals a strong incentive to pool their savings with other similarly situated individuals. Through the “large numbers” effect, this brings the actual expenditures of the group closer to the *expected* expenditure (Heath, 2016: 322-324). This is typically achieved through the purchase of health insurance – although this nomenclature is slightly misleading, since it is actually “medical expenditure insurance.” The development of health insurance has an enormous effect upon the market for health care services, to the point where in many jurisdictions almost every transaction between patients and medical providers is mediated through insurance. Most question of “health policy” become, in actuality, questions of “health insurance policy.”
4. *Gatekeeping.* Because of the difficulty that many health care providers experience with turning away patients in need, the market for health care has developed a set of complex gatekeeping structures. As a result, even in the most private of systems it is typically not possible to walk in off the street and purchase most health care services. Access to hospital services, as well as specialist care, is controlled through a system of referrals and “access privileges.” The exception to this is emergency room services, which by their very nature must be provided to any and all who show up. Because of this – and thanks to the legal requirement that all patients who enter through emergency be treated – many U.S. hospitals have closed their emergency rooms, so that only patients with referrals can be admitted to the hospital. Thanks to these gatekeeping structures, the marketing and choice of health care services occurs primarily through physician networks, and not through direct appeal to consumers.

These institutional arrangements help to explain why, even in places where health care provision is primarily private, the market for health care services is extremely anomalous. To

make things even more complicated, the secondary market for health insurance that develops is itself also subject to market failure. Insurance arrangements are most efficient when the event that is being insured against is completely outside the control of the parties to the insurance arrangement. While most sickness is involuntary, decisions that individuals make will have a variety of effects on their probability of developing various ailments. More importantly, the level of *expenditure* associated with a particular episode of ill health can be significantly influenced by decisions taken by both patient and health care provider. As a result, the sale of health insurance creates a number of perverse incentives that can undermine the efficiency of the market. This in turn leads insurance companies to adopt rules and constraints, aimed at mitigating these incentive effects, that increase the complexity of markets. As a result, most individuals are no more able to walk in off the street and purchase health insurance than they are able to walk in and purchase health care services. In systems that have a significant private sector, most people acquire insurance collectively, typically through a group plan purchased by their employer.

These private-sector arrangements are an extremely important feature of all health care systems, but there is no case in which they have proven sufficient to resolve all the problems that arise. As a result, health care provision is subject to additional state intervention. Again, these occur in complex configurations, with some countries opting for public arrangements where other have private, and vice versa. At a high level of abstraction, however, public-sector involvement can be classified under four broad headings:

1. *Regulation.* Information asymmetries are often addressed through regulatory law, in ways that either supplement or replace professional self-regulation. The right to practice medicine, for example, is sometimes granted by a professional association of physicians, but in other jurisdictions is granted through a state licensing bureau. Sale of pharmaceuticals, by contrast, is subject to much stricter regulatory constraint, in addition to the gatekeeping power of physicians. Conditions in hospitals and care facilities are also subject to rigorous regulation and inspection.
2. *State ownership.* Non-profit ownership is subject to numerous limitations, including the absence of an incentive to expand supply in response to increased demand. Thus states

often acquire direct ownership and operation of health care services and facilities – with the NHS being the most well-known example, but also the network of CLSCs (*Centre local de services communautaires*) in Quebec. These institutions often change the status of physicians, so that rather than being self-employed professionals they become state employees, often paid on salary.

3. *Social insurance.* No private health insurance system functions entirely without public involvement. In many cases, however, states have taken over whole segments of the insurance system (e.g. coverage for the elderly) or even the entire market (e.g. “single payer” arrangements). When the insurance system is financed out of general tax revenue, payroll taxes, or non-actuarial premiums, the arrangement is known as “social insurance,” or as part of the “social safety net.”
4. *Public health.* In certain areas the state provides health care services directly, on the model of a standard public good such as roads or schools. Vaccination is the most straightforward example, although there are a number of indirect programs that are important to public health, where the state provides services directly. Water purification and monitoring along with sanitation are perhaps the most important (Cutler and Miller, 2005). Pest control and garbage disposal are also both important in controlling the spread of communicable diseases. During the COVID-19 pandemic, states also assumed direct responsibility for a wide variety of public health measures, including enforcement of social distancing and quarantine measures (Baylis et al., 2008).

One can see that there is considerable heterogeneity in the public-sector involvement in health care provision. In our view, the key to understanding it all remains the focus on correcting market failure. It is, however, important to recognize that there are multiple sources of market failure in private markets, as well as several different private responses to those failures, which result in existing markets having a very non-standard structure.

Our focus, in most of the discussion that follows, will be on the failures that occur in the market for health insurance. The reason is that, in the vast majority of health-care systems, almost all transactions between patients and health care providers are mediated by insurance. As a result, major questions about the allocation of health care services and access to care amount to

questions about the organization of these insurance systems. There are certain noteworthy exceptions to this, such as the NHS, which essentially abolishes health insurance and puts a state provider in direct relation to the patient. The more standard arrangement is one in which the state is heavily involved in the insurance sector and is therefore able to rely more upon private mechanisms for the provision of care. This is why the provision of health insurance typically follows an egalitarian logic, but the provision of health care follows what François Ewald (1986) refers to as *une logique assurentielle*.

III. Universal access and adverse selection

Most existing theories of justice in health care are built on the value of equality (Daniels, 2008; Dworkin, 1993; Satz, 2010). This is intuitive, as disease and disability, as well as the financial costs associated with treating them, are naturally seen as a kind of unfair or undeserved disadvantage, and equality is supposed to require, at least in part, the redress of unfair or undeserved disadvantage. However, it is worth noting that this line of thinking does not actually justify providing health care to any citizen who might need it. For it to be the case that ill health must always or necessarily amount to an unfair disadvantage, which equality requires us to redress, it would have to be true that a state of equality obtained prior to the onset of illness; otherwise, the provision of care may only serve to restore a previously unequal state of affairs. Thus Shlomi Segall (2018: 466) observes that, in the real world, a commitment to promoting equality through the health care system might require among other things that we aim to give the poor *better* access to care than the rich. In that way, the overall gap in well-being between rich and poor might thereby be narrowed and a more equal society overall might be achieved.

The general problem here is that equality is, by definition, a comparative notion; equality has to do with how one person fares *relative to others* (Temkin, 2017: 44). Yet the idea that the organizing goal of the health care system should be, not to *improve* people's health and well-being, but rather to make them as healthy or well-off *as others are*, is deeply counterintuitive to say the least. It is true that treating disease sometimes promotes equality in that it brings a sick person back up to the level of well-being enjoyed by others (though that is actually rather

odd as an account of *why* we should provide the treatment – would we have any less reason to provide the treatment if everyone else were equally sick?). But we should also be concerned about the various ways we might use the health care system to promote equality, not by raising up the worse off, but by allowing those who are better off to languish. Indeed, there is not only the possibility of denying certain treatments to those better off, as Segall mentions, but also the possibility of actively injuring or impairing them. Alternatively, we might raise up the worse-off, not by treating their illnesses, but by enhancing their non-pathological traits – making them smarter, stronger, or better-looking. The fact that even most egalitarians are reluctant to endorse these possible equality-promoting health care interventions should make us doubt the plausibility of equality as the foundational value of the health care system.³

We would suggest that some of the appeal of the value of equality in theorizing about justice in health care stems from the superficial similarity between the logic of equality and the logic of insurance. Both are concerned with the redress of undeserved (or at least unexpected) misfortune, but there are important differences between them. The redress of misfortune that goes on within an insurance scheme is part of a cooperative strategy for managing risk. The misfortune that insurance redresses is not the misfortune of being worse off *than another*, but the misfortune of being worse off *than before*. Moreover, it is not the misfortune of being worse off *overall* or *in general*, but rather the misfortune of being worse off *due to a specific loss*. In cases where the “assurential” logic of insurance diverges from the logic of equality – as when an already better-off individual needs expensive medical care, for example, or when greater equality can be achieved through enhancing or impairing a non-pathological trait – even most egalitarians seem to favor the outcome recommended by insurance (Horne, 2016; Segall, 2018).

It is helpful to think about insurance as a way of saving collectively for costly and uncertain needs like health care. Saving individually for these kinds of needs would be highly inefficient. Consider that in the US in 2016, for instance, those in the 95th percentile of health care expenditure were spending \$21,682 or more per year (Mitchell, 2019). Crudely, this means that a person saving on her own could set aside \$20,000 for her own health care needs over the year and would still face a more than five percent chance of being unable to pay her medical

bills. However, if she were instead to pool her health savings and associated health risks with a large number of other people, she could simultaneously put aside *less* money for her own health care while being *more* confident of her ability to meet her own health needs over the year.

This is possible thanks to the law of large numbers, which tells us that increasing the number of trials of a gamble generates a convergence between the average result and the expected value – for example, with more and more flips of a fair coin, the percentage of “heads” observed will tend to converge on 50% (Hacking, 2001: 189f.). People can take advantage of this “large numbers” phenomenon to manage health risk more effectively, simply by spreading those risks over a large group of similarly-situated individuals.⁴ In that way, instead of having to plan based on their own highly individual health costs, which are at least as unpredictable as a single toss of the coin, each person can plan around the much more stable average costs of the group – and those average returns, like the average of thousands of coin tosses, are bound to be quite close to the expected value. Insurance thus allows a person to save the expected value of her health care costs without having to worry about unpredictable health needs overwhelming her budget. This is beneficial to people insofar as they are risk averse (e.g. if they prefer the certain loss of a \$5,000 premium to a risky gamble with an expected loss of \$5,000).⁵

A lot of redistribution goes on within a health insurance pool, from the lucky many who are not suffering adverse health events at any given moment to the unlucky few who are. But we should not be fooled into thinking that this redistribution operates according to an egalitarian logic; rather, health insurance schemes are systems of cooperation for managing risk that are Pareto-improving *ex ante* (as evidenced by the fact that people will voluntarily buy insurance). As risk-pooling schemes, they are quite indifferent to forms of disadvantage that fall outside the categories of covered losses, such as poverty or even a poor endowment of natural talents. They also provide individuals with indemnity only against categories of loss that involve some uncertainty, and so do not cover enhancements or other clearly optional medical procedures. We might say that a health insurance pool involves an agreement to treat health care expenditure as a kind of “separate sphere,” or in other words, an agreement to cordon off people’s health care expenditures from the rest of their household budgets. But this is not in

order to equalize health outcomes, much less to reflect social or democratic ideals about the value of health, but simply to reduce individuals' uncertainty related to health expenditure (Horne, 2017).

For our purposes, however, this is only the beginning of the story. While health insurance is a form of cooperation for mutual advantage, private markets in health insurance are subject to serious market failure. This is due to familiar collective action problems rooted in the dynamics of adverse selection and moral hazard, as well as significant knock-on costs associated with market-based attempts to control these problems. In the absence of these collective action problems, for all we have said so far, the concern for justice in health might well be limited to an egalitarian concern that all citizens should be able to afford a decent health insurance policy, an objective that could be realized through tax rebates, vouchers, or the simple redistribution of wealth. It is these collective action problems that necessitate the far more extensive involvement of the state in the health care and health insurance sector that we see throughout the developed world – where, at a minimum, private health insurance companies are regulated like public utilities, to the point that they are not normally allowed to set their own reimbursement rates, compete with one another for the healthiest customers, or define their own package of benefits (and private individuals are not normally allowed to refrain from buying health insurance). It is even more common to see, not just sweeping regulation, but complete state administration of the insurance or health care industry. A mere concern for equality of access justifies none of this, but a concern for efficiency does.

The problem of adverse selection arises because patients often know more about their own future health expenses than insurance companies do. Because individuals know more about their future health expenses than insurance companies, insurance transactions tend to be systematically skewed in one direction: towards patients who receive more in care than they pay in premiums. (Consider that no patient who *knows* that he will have more than \$5,000 in insurable health expenses per year would voluntarily turn down an offer of insurance for a premium of \$5,000 per year, at least not if he could afford it; but many patients who know or suspect their costs will be lower might well decline such an offer.) Private insurance companies cannot operate at a loss indefinitely, so eventually they will have to raise their premiums to

cover the higher costs associated with this adverse selection of risks. This in turn “prices out” more low-cost consumers, who find that insurance is no longer an attractive deal for them, even as costlier patients continue to be “priced in” (Akerlof, 1970: 492-494). Past a certain tipping point, this can lead to a “death spiral,” where the cycle of rising costs and rising premiums cannot be stopped before the plan prices itself out of existence (Cutler and Zeckhauser, 1998). Of course, there are market-based responses to the problem of adverse selection, such as medical screening and underwriting to identify costly patients, or the use of waiting periods and lifetime spending caps to drive them away. But these methods raise the cost of care for everyone, and strictly speaking they are wasteful from a social point of view.⁶

Philosophers sometimes present the problem of adverse selection as one that arises from an egalitarian concern (Menzel, 2012; Voorhoeve, 2018). Since differential expected health care costs amount to unfair or undeserved disadvantages, equality is said to require that individuals should not be made worse off because of them; this in turn requires that insurance companies offer health insurance on the same terms to everyone, regardless of any pre-existing conditions, which in turn leads to adverse selection. Although making price discrimination illegal would certainly exacerbate adverse selection problems in voluntary insurance markets, in fact adverse selection is a collective action problem that is present even in unregulated markets. Though it is individually rational for each person to exploit her private knowledge to maximum advantage in her dealings with insurers, the collective result is Pareto-inferior to an arrangement where no one was able to do this. In adverse selection, “the bad risks drive out the good,” leaving many healthy individuals without insurance, despite the fact that they want it and would be willing to pay for it (Akerlof, 1970: 489-490).

The great advantage of universal health care systems is that they can solve the problem of adverse selection at a stroke. When participation in the insurance system is mandatory in one way or another, low-cost persons are unable to opt out, and the “death spiral” dynamic never gets started (Barr, 1989: 64). Universal systems have the further advantage of eliminating costs associated with private insurers’ attempts to *control* adverse selection, also a considerable source of inefficiencies. Some health care systems solve this problem by making private health insurance mandatory, as in Switzerland and the Netherlands (and briefly in the US, at least for

some citizens, under the Affordable Care Act). Others solve it by having the state provide health insurance directly to all citizens, as in Canada and Taiwan. Still others solve it by eliminating health insurance altogether and providing managed care directly to citizens – the Beveridge model of “socialized medicine,” as in Britain under the NHS, can be understood as an indirect way of controlling adverse selection through mandatory participation in a nationwide HMO. Here the large numbers effect is realized simply by having so many patients, so that those who require very expensive care will be balanced out by those who require less.

This provides an argument for access to care that is *universal* but not necessarily *equal*. The tendency to equality in health coverage, at least from a market failures point of view, is driven by the fact that there are in practice relatively few ways for insurance companies to offer a range of packages catered to the needs and preferences of particular consumers without thereby also re-introducing the possibility of adverse selection dynamics taking hold. For example, if one offers citizens a choice between a more robust health care plan and one that offers only catastrophic coverage, it is easy enough to see which plan would attract the healthiest patients.

To the extent that it is possible to offer consumers a choice of health insurance plans without re-introducing adverse selection problems, people tend not to have strong reactions against it; the public seems to object to two-tiered medicine most when it opens the door to free-riding. For example, when Norman Daniels (2009: 369ff.) considers the justice of so-called “tiered” health care systems (where all citizens have access to an adequate basic insurance package, but more health-conscious or risk-averse citizens have the option to purchase supplemental coverage as well), he concludes that such “tiering” is not unjust as long as the higher tiers do not undermine the basic one either economically or politically. It is hard not to read this as an efficiency concern (Heath, 2003).

IV. Resource allocation and rationing

Once the state has taken over the provision of health insurance in one way or another, then a variety of new questions emerge regarding what kinds of treatments should be covered and for whom. On our view, these questions are best seen, not as *basic* problems of justice in health care, but rather as secondary problems that arise due to the need to correct market failure in health. Consider that there is no need for a general theory of rationing or resource allocation with respect to other basic needs like food, water, clothing, or shelter, at least not in developed countries; instead, once an acceptable distribution of income is achieved, the just allocation of those resources is usually taken to be the one that results from people's voluntary market choices. What makes health care different from these other basic needs is simply that market failure in the insurance sector creates the need for significant public involvement in the insurance industry (either directly, or else indirectly through the provision of managed care), resulting in the imposition of a "one size fits all" health care plan on all or most citizens. This in turn necessitates an answer to the question of what "size" comes closest to fitting all.

For understandable reasons, egalitarian theorists have been inclined to see problems of resource allocation as matters of interpersonal distributive justice: should we provide a certain treatment to patient A, or should we instead use those resources to provide a different treatment to patient B, where they would offer a greater expected benefit (e.g. Daniels, 1994; Bognar and Hirose, 2014: 7-10)? Egalitarianism perhaps primes us to see distributive conflict everywhere. However, once we look at the provision of health care through the lens of insurance, and if we regard insurance as essentially pooled savings, it becomes clear that resource allocation in health care need not involve zero-sum interpersonal competition at all – to the contrary, it presents real opportunities for positive-sum cooperation.

When a patient is denied a high-cost, low-benefit treatment, while at the same time more cost-effective treatments are being provided to others, it may seem obvious that some kind of interpersonal redistribution is occurring (whether motivated by egalitarian or utilitarian considerations). In particular, it may seem that the first patient is denied the treatment *in order that* those resources might be put to more effective use elsewhere in the system. If this were

so, then there would have to be more than efficiency considerations at work, since the Pareto principle does not rank redistributive outcomes relative to one another. But as Ronald Dworkin (1993) showed, these appearances can be misleading. A person's ex ante insurance choices naturally invoke considerations of cost-effectiveness in ways that have nothing to do with interpersonal trade-offs. When purchasing insurance, a person might rationally decline coverage for treatments that offer a very poor ratio of cost to benefit, not out of a utilitarian concern to maximize overall social benefit, but rather out of a prudential desire to maximize her own *expected* benefit.

In a perfectly efficient health insurance market, people would be able to choose from an infinite array of insurance plans, each offering a specific level of indemnity against a specific set of conditions, all at "actuarially fair" prices – prices where the premium was exactly equal to the patient's expected costs. At the margin, the decision to include or exclude coverage for a specific treatment would increase a person's premium by exactly the amount of that treatment's expected cost – roughly, the cost of the treatment multiplied by the probability of the patient needing it. In an ideal market, many patients would choose to decline coverage for high-cost, low-benefit treatments, such as the current generation of exorbitantly expensive cancer drugs that promise to extend a patient's life by a matter of weeks. If we are thinking of insurance as pooled savings, we might say that many patients would simply decline to contribute to the savings plan for certain drugs, believing perhaps that the promise of a few more weeks of life if they should one day develop terminal cancer would not be worth the thousands of dollars they would need to set aside in premiums (Heath, 2020: 228ff.).

If a patient later came to need one of those drugs, the poor cost-effectiveness of the treatment would obviously play some role in explaining why the treatment was now being denied. But this is not due directly to the fact that scarce health care resources would do more good for others; rather, the treatment is denied because the patient herself was not willing to pay the premiums necessary to cover the drug. The patient, having enjoyed a somewhat higher standard of living over her whole life (thanks to her lower level of health savings, i.e. her lower health insurance premiums), cannot in fairness now turn around and demand to be provided the drug anyway.

In the real world, of course, patients do not get to choose among an infinite array of plans, nor do they get to add or decline coverage for particular drugs or procedures. The costs of drawing up individualized contracts for each patient would be prohibitive, and insurance companies don't have the information needed to determine an actuarially fair premium for each individual consumer. Instead, private insurance companies aggregate preferences over large numbers of people, offering pre-packaged plans providing different levels of indemnity; public insurers have to go further and aggregate over the entire population. But the story about the denial of treatment remains the same: if we are thinking of insurance as pooled savings, there are some drugs that people would not find it rational to save for, given the trade-offs involved. Most people would not want to pay the premiums (or the taxes) necessary to protect themselves against every possible health eventuality.

The upshot of these considerations is that theories of justice in health care have been too quick to see interpersonal competition for scarce resources where there need not be any. The pooling of health savings creates a pot of money, and it is natural to suppose that individuals are forever after in competition with one another for access to these funds. This obscures the insurance function of the pot of money, and it obscures the role of people's prior choices in determining how the pot will be used. To be clear, these considerations are not meant to settle longstanding debates about whether, for example, health care resources should be spent with a single-minded focus on maximum benefit, or whether some weight should be given to considerations of equality or priority for the worse off; it does suggest, however, that those questions are helpfully reframed (and perhaps deflated) as questions about what kinds of insurance protections the typical citizen would most prefer.

There is, of course, a not-insignificant moral hazard problem that arises in these circumstances (Barr, 1989: 73ff.). Even individuals who would not have been willing to pay the taxes required to fund the health care system that would provide ultra-expensive drugs, once they find themselves diagnosed with a condition where they could receive some benefit from one of those drugs, have an incentive to push for them to be financed. Similarly, health care providers have an incentive to provide the maximum level of service, and will often collude with patients

to secure access. In both cases this is because the costs are “externalized” to a third-party insurer. This is one of the factors that drives the increase in health care spending over time.⁷

This moral hazard problem is one that arises with all insurance plans, whether they be public or private. It is in the very nature of an insurance plan that costs are spread across all plan participants; in paying the average costs of the pool each person thereby pays only a tiny fraction of her own actual health care costs. On that basis, each person rationally pursues interventions that she would not seek if she were paying out of pocket. When everyone does this, the result is a total health care expenditure that is much higher than anyone desires.

The state, however, enjoys certain advantages over private insurance companies when it comes to the control of moral hazard. Private insurers sometimes encounter a collective action problem when it comes to claims investigation and adjustment, where no one firm wants to take on the cost of challenging a dubious billing practice, because the benefits would flow primarily to others (Heath, 2001: 188). In this respect, the government has better incentives, as well as greater capacity, to maintain adequate vigilance over health care providers. This manifests itself most clearly in the widespread use of cost-effectiveness analysis to determine whether services should be covered by the public payer. The operations of the UK’s National Institute for Health and Care Excellence (NICE) are exemplary in this regard. Although its approach is often characterized as utilitarian (e.g. Singer, 2009), it is better seen as promoting efficiency by maximizing the ex ante value of the package of publicly insured (or provided) medical services to each citizen.

A similar tendency to see interpersonal redistribution where there need not be any is on display in discussions of intergenerational justice in health care. Superficially, the health care system looks like a machine for funneling resources from younger people to older people, as older people tend to have more (and more expensive) health care needs than younger people. In the US in 2019, for example, people age 55 and older accounted for 56% of all health spending despite being only 30% of the population (Ortaliza et al, 2021). This phenomenon is troubling from an egalitarian point of view, not only because older people tend to be wealthier than

younger people, but also because the old are *per se* advantaged relative to the young just in virtue of having already lived a long time (Persad et al., 2009).

Once we look at the health care system through the lens of insurance, which is to say a system of pooled savings, these concerns dissipate. It is true that, at any given moment in time, working age people are subsidizing the health care of the aged, but this should not be seen as a pure redistributive transfer from young to old; it is better understood as a matter of the young accumulating credits, “saving up,” for their own future health care needs in retirement. This is a common feature of insurance systems, the fairness of which must be assessed over the lifetime of each individual’s policy, and not in terms of a snapshot taken at any given point in time. Indeed, looked at over the lifetime, there need not be any redistribution between generations at all. This should be clear if we imagine a system in which each generation sets aside a pool of funds specifically earmarked for their own future health needs, a pool that they then draw down in retirement – in that case there would obviously be no pure intergenerational transfer at all. Nothing significant changes if the system is reconfigured to a pay-as-you-go arrangement, where the contributions of present workers fund the care of present retirees; the underlying cooperative structure remains the same (Heath, 2013: 48ff.).

The view that health care allocation between young and old need not be inherently redistributive is associated with Norman Daniels and his “prudential lifespan account” of justice between generations (Daniels, 1988, 2008: ch. 5). Daniels observes that the fact that we all age makes inequalities between age groups fundamentally different from inequalities based on other ascriptive categories like race or sex; in particular, inequalities between age-groups at a given moment in time need not add up to overall lifetime inequalities between people of different generations or birth cohorts, because everyone passes through each age group in the fullness of time. Thus, Daniels holds that the problem of intergenerational justice in health care can be reduced to the problem of how a single prudent individual would allocate her own fair share of health care resources over a complete life.

If there is a problem with Daniels’s prudential lifespan account, it is only in how uneasily it sits with his broader egalitarian commitments. While the prudential lifespan account entails no ex

ante inequalities between different birth cohorts, significant inequalities are re-inscribed ex post *within* birth cohorts, in particular, between those who live lives of unequal length. As the prudential lifespan account allocates health care resources in order to yield the greatest prudential value over a complete life, it systematically redistributes wealth from those who die young to those who live long, eliminating some inequalities while worsening others.

These points have been advanced recently as an internal criticism of Daniels's claim to have provided an egalitarian theory of intergenerational justice (Lazenby, 2011; Davies, 2018). As internal criticisms they are valid, but those criticisms also reveal the limits of egalitarianism in intergenerational justice. The fact that the health care system redistributes resources from those who die young to those who live long is, as they say, a feature, not a bug; again, it is part and parcel of the system's insurance function. Note that pension plans and life annuities, which are also essentially insurance products, also have the effect of redistributing resources from the short-lived to the long-lived. Yet most people value this redistribution precisely because they do not know exactly how long they will live. The ability to plan (and to save) *as if* one will live a life of average length is a tremendous source of ex ante benefit, even though it is also a source of ex post inequality. To eliminate that aspect of the health care system – for example, to force everyone to accept the present value of their future health expenses at birth, as a lump sum, and prohibit them from re-pooling those funds for the sake of better risk management – would be a way of achieving equality through leveling down. Far from pitting different generations against each other in competition for scarce resources, the intergenerational dimension of health care insurance is best seen as a source of cooperative benefit that makes everyone better off ex ante.

V. Public Health

Though the field of political bioethics has historically been dominated by debates around access to health care, public health measures now appear to be far more significant as determinants of population health. For example, by one oft-cited estimate, advances in medical care may account for as little as one-fifth of the tremendous gains in life expectancy seen over the

twentieth century; the lion's share of those gains were due to improvements in public health measures (Brock, 2000: 31). Broadly speaking, public health concerns the measures we take to protect and promote health at the population level. Classically, the goods of public health include things like clean air and clean water, proper sanitation, vaccinations and other measures to control infectious disease, as well as education about nutrition and other good health practices. Over the last few decades, the field of public health has grown to include also concern with the social determinants of health (the "SDH"), socially controllable factors like poverty, unemployment, social exclusion, and status hierarchies that have a significant impact on population health outcomes, and particularly on inequalities in health outcomes between social groups (Wilkinson and Marmot, 2003).

We have seen that problems of justice in health *care* are often characterized as problems of distributive justice, or in other words, problems about the fair distribution of a given stock of health care resources. We argued in the previous two sections that this appearance is misleading, and in fact the fundamental problems of justice in health care involve positive-sum cooperation to provide a good (namely health insurance) that would not be supplied efficiently by the market. Be that as it may, the field of public health quite obviously involves the provision of a range of goods that would not be provided at all, or would be provided at inefficiently low levels, by the free market. While there are no doubt serious moral questions regarding the fair distribution of the goods associated with public health, it would seem the more foundational questions in public health ethics revolve around why these goods should be provided in the first place.

For reasons like these, though egalitarian accounts of the foundations of public health ethics can be found, they have a certain *prima facie* implausibility. (Note that one way to provide a good like herd immunity equally is to provide it to no one, though that is obviously not desirable all things considered.) For that reason perhaps, in the literature on the foundations of public health ethics, it is much more common to encounter values like utility and solidarity – values that have to do with *raising* people's welfare rather than *equalizing* it (see e.g. Munthe, 2008; Baylis et al., 2008).

In fact, there is already a long tradition in public health ethics according to which public health involves the provision of health-related public goods in the economist's sense – goods that are both non-rival and non-excludable. Many of the classic goods of public health, like clear air and herd immunity against infectious disease, are very clearly public goods in just this sense.

However, the rationale for the focus on public goods is not often articulated as clearly as it might be. Some defenders give the impression that the chief reason to adopt a public goods approach to public health is that it limits the domain of public health in ways that are congenial to partisans of small government (Anomaly, 2011; Epstein, 2004; for critique see Bernstein and Randall, 2020). The market failures approach offers a more powerful (though also potentially more expansive) justification (Horne, 2019).

The best account of why the state must intervene to provide health-related public goods is precisely that such goods are not normally provided efficiently by the market. The reason is primarily that such goods generate positive externalities. Non-excludability can be thought of as a limit case, where the entire value of a good consists in an externality. A good need not satisfy this more demanding criterion in order to justify public provision or subsidization. A vaccination, for example, produces both a private benefit (in the form of immunity) and a positive externality (in the form of decreased risk of transmission to others). Because of this, self-interested choice will produce an inefficient level of vaccination, because the private benefit alone may be insufficient to outweigh the various factors that contribute to “vaccine hesitancy.” The state can solve this problem by lowering the cost of compliance (e.g. making vaccinations freely available), or by increasing the cost of non-compliance (e.g. penalizing those who fail to be vaccinated, or excluding unvaccinated children from public schools). The state thereby ensures the provision of a good that everyone wants to enjoy but that no one has an adequate individual incentive to contribute to. Similar stories can be told about many other classic public health measures, including not only other measures to control infectious disease but also regulations to limit the control of air pollution or interventions to educate the public about good health practices.

Once the view is articulated this way, it becomes clear that the focus on pure public goods is excessively narrow. Many of the classic goods of public health are not public goods, but rather

what economists would refer to as natural monopolies – things like clean water and sanitation. The inefficiencies come not from the inability to exclude, but rather from the costs associated with organizing a competitive market: think of the waste associated with running redundant sewer or water pipes to every home in the community. It is usually more efficient to have a single provider, and to use regulation or state control to limit the problems associated with monopoly provision (Horne, 2019: 289).

Here again the market failures account fares better than rival views at making sense of the “fine grain” of state involvement in health. For example, water is not just a basic need, but in fact improvements in water filtration and purification (with the associated reduction in water-borne disease) may be the single most significant public health advance of the twentieth century (Cutler and Miller, 2005). The market failures approach can make sense of the fact that this vital human need must be subject to strict social control when it comes into people’s homes through pipes, though not when it is purchased at the store in bottles. It is not about the good per se but about the mechanism of distribution; the pipes constitute a natural monopoly that requires careful public oversight or even public ownership, while bottles of water are paradigmatic “private goods” that can be efficiently delivered by the market (subject of course to regulation concerning purity) (Heath, 2011: 29).

One area of public health ethics that has seen significant contributions from egalitarians has been the literature on the SDH. Factors like unemployment, poverty, social exclusion, and hierarchies of social status seem to make significant contributions, not only to overall population health outcomes, but also and especially to inequalities in health between social groups. Indeed, the current epidemiological consensus seems to be that the unequal distribution of the SDH makes a greater contribution to explaining inequalities in health outcomes than inequalities in access to and consumption of health care (Brock, 2000: 31).

It is worth noting in passing that these findings around the SDH pose far more serious problem for egalitarian theories of justice in health *care* than is commonly appreciated. As Gopal Sreenivasan (2007) has pointed out, if equalizing access to health care does not in fact bring about greater equality in health outcomes, then much of the egalitarian case for universal

health care dissolves. Sreenivasan has argued that, if equalizing the distribution of the SDH is a more effective means of equalizing health outcomes compared to equalizing access to care, as seems to be the case, then it would appear that egalitarians ought to favor *dismantling* universal health care systems around the world, and using those resources to equalize the distribution of the SDH instead. From our perspective, it is a strength of the market failures approach that it offers a defense of universal health care provision that is robust against this sort of objection. Whatever the merits of dismantling national health care systems might be from an egalitarian point of view, their dismantling would also represent a massive unpooling of risk that would leave everyone worse off; in other words, it would be another instance of achieving equality by “leveling down.” That alone seems a compelling reason not to do it.

But what are the implications of these findings around the SDH for a market failures approach to public health? We would note first that many of the most important of the SDH are themselves public goods, or anyway involve significant externalities (e.g., education, neighborhood quality, transportation, and even to a degree employment status). As well, some of the worst effects of others of the SDH will be mitigated by social insurance programs that can be justified on Paretian grounds (e.g., poverty, unemployment, and of course the need of health care). Thus a market failures approach will not be indifferent to the SDH or to their effects.

Whether these findings around the SDH support more robust egalitarian conclusions is another matter. From our perspective, the SDH literature can be seen as an attempt to leverage the concern over equality, which is taken to inform our approach to the provision of health care, into other domains, such as income and opportunity (see e.g. Fishman and MacKay, 2019). This is informed by what seems to be a political calculation, that even if the public does not care much about inequality in other domains, they are committed to equality in the distribution of health -- so if it can be shown that non-health inequalities generate health inequalities, then the public can be convinced to care more about non-health inequalities. If we are correct, however, in showing that the intuitions that prevail in the distribution of health care resources are fundamentally *assuriential*, and not egalitarian, then this political calculation is incorrect. As

a result, egalitarians would be better off making the case for reducing non-health inequality on its own terms, rather than attempting to tie it to the domain of health.

Conclusion

We have argued in this paper that all of the distinctive problems of justice in health and health care can be understood in terms of the need to respond to market failure in areas related to health. State control of the health care and public health systems is not necessary to respond to mere distributive inequality; distributive inequality can be redressed through the simple redistribution of wealth. It is only when we appreciate the challenges associated with organizing a competitive market in health insurance, or in the goods related to public health, that the case for state involvement and provision comes in to view. On the health care side, market failure in health insurance generates a strong case for public provision of insurance, which in turn creates a number of derivative problems around setting benefits and controlling costs. On the public health side, the presence of significant health-related externalities in some areas and natural monopolies in others creates the need for state intervention, in some cases through state ownership and in others through regulation. In each case, the key to it all is the need to correct market failure or promote efficiency.

To the extent that the health care system exhibits egalitarian qualities, these are usually not manifest at the “front end,” in the way that the system allocates care, but rather at the “back end,” in the way the system is *financed* (Heath, 2011: 35). An arrangement such as Canada’s single-payer health insurance system, which is funded from general tax revenue, is financed in a way that is highly progressive with respect to income; the Statutory Health Insurance system in Germany, funded primarily by payroll deductions, is somewhat less so. In both systems, however, because individuals are not charged actuarially fair premiums, there is considerable cross-subsidization, not just between rich and poor, but also between those whose expected health care costs are higher and those whose are lower. Because of this cross-subsidization, neither state is obliged to implement an explicit transfer scheme to ensure that the poor are able to afford health care. It is important, however, not to mistake this secondary egalitarian

(or sufficientarian) effect of the system for its primary rationale. The poor are also able to use public roads and sidewalks without contributing much to their financing, but this does not mean that the state is providing this infrastructure in order to equalize transportation opportunities or freedom of movement; the mere fact that a particular public program promotes equality in some dimension does make it an egalitarian program. Efficiency provides the fundamental rationale for these programs, even though these program, once established, can be used to advance certain egalitarian objectives.

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¹ In the recent philosophical literature, see Braun (2012), Horne (2017), Menzel (2012), and Voorhoeve (2018).

² This is the argument of Coase (1937). The phrase “visible hand” is from Chandler (1977).

³ In other contexts, egalitarians have responded to the “leveling down objection” by reminding us that equality is but one value among many (e.g. Temkin, 2000). Even though equality might support leveling down, other social values like efficiency clearly speak against it; thus, all things considered, leveling down is probably unjust, even though equality recommends it. This is a fair point in the context of an axiological debate about whether equality should be seen as intrinsically valuable, despite its many counterintuitive recommendations. But in the context of a debate about the moral foundations of justice in health, the point is unpersuasive. If non-egalitarian principles

must be brought in to explain why the health care system aims at improving health, that raises serious doubts about the role played by equality in health.

⁴ We assume here the risks are independent of one another.

⁵ For a more detailed account of insurance and how it works, see Heath, 2006: 322ff.; Horne, 2017: 574ff.; Moss, 2004: 27ff.

⁶ For an estimate of administrative costs in the U.S. before the Affordable Care act, and a comparison with Canada, see Woolhandler et al. (2003).

⁷ Contemporary discussion of “individual responsabilization” for health would benefit from distinguishing moral hazard concerns (i.e. efficiency concerns) from luck-egalitarian concerns or concerns related to fairness. See for example Cappelen and Norheim (2005), Brown et al. (2019), and Voight (2013).