## **Cost Effectiveness and Resource Allocation**



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# Separate spheres and indirect benefits

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#### **Abstract**

On any plausible account of the basis for health care resource prioritization, the benefits and costs of different alternative resource uses are relevant considerations in the prioritization process. Consequentialists hold that the maximization of benefits with available resources is the only relevant consideration. Non-consequentialists do not reject the relevance of consequences of benefits and costs, but insist that other considerations, and in particular the distribution of benefits and costs, are morally important as well. Whatever one's particular account of morally justified standards for the prioritization of different health interventions, we must be able to measure those interventions' benefits and costs.

There are many theoretical and practical difficulties in that measurement, such as how to weigh extending life against improving health and quality of life as well as how different quality of life improvements should be valued, but they are not my concern here. This paper addresses two related issues in assessing benefits and costs for health resource prioritization. First, should benefits be restricted only to health benefits, or include as well other non health benefits such as economic benefits to employers from reducing the lost work time due to illness of their employees? I shall call this the Separate Spheres problem. Second, should only the direct benefits, such as extending life or reducing disability, and direct costs, such as costs of medical personnel and supplies, of health interventions be counted, or should other indirect benefits and costs be counted as well? I shall call this the Indirect Benefits problem. These two issues can have great importance for a ranking of different health interventions by either a cost/benefit or cost effectiveness analysis (CEA) standard.

#### Introduction

On any plausible account of the basis for health care resource prioritization, the benefits (less the harms, though for simplicity I shall often simply refer to the benefits in what follows) and costs of different alternative resource uses are relevant considerations in the prioritization process. Benefits and costs are relevant at all levels of resource prioritization: the prioritization of health care versus non health goods, such as highways and education; the prioritization of different health programs and interventions, such as prenatal care and renal dialysis; the prioritization of different candidates for a scarce health resource, such as patients in need of a liver transplant or in need of expensive drug treatments for AIDS when not all in need can be treated. Consequentialists hold that the maximization of benefits with available resources is the only relevant consideration. Non-consequentialists do not reject the relevance of consequences and of benefits and costs, but only insist that other considerations, and in particular the distribution of benefits and costs, are morally important as well; for example, many persons believe justice requires some special priority for the worst off, but this priority is not plausibly absolute, and so benefits for the worst off must be balanced against producing greater benefits for those who are better off. Whatever one's particular account of morally justified standards for the prioritization of different health interventions, we must be able to measure those interventions' benefits and costs.

There are many theoretical and practical difficulties in that measurement, such as how to weigh extending life against improving health and quality of life as well as how different quality of life improvements should be valued, but they are not my concern here. This paper addresses two related issues in assessing benefits and costs for health resource prioritization. First, should benefits be restricted only to health benefits, or include as well other non health benefits such as economic benefits to employers from reducing the lost work time due to illness of their employees? I shall call this the Separate Spheres problem. Second, should only the direct benefits, such as extending life or reducing disability, and direct costs, such as costs of medical personnel and supplies, of health interventions be counted, or should other indirect benefits and costs be counted as well? I shall call this the Indirect Benefits problem. These two issues can have great importance for a ranking of different health interventions by either a cost/ benefit or cost effectiveness analysis (CEA) standard. Some health interventions have indirect and/or non health benefits that are very large and that can even swamp their direct health benefits; for example, successfully treating substance abuse improves the health related quality of life and extends the lives of substance abusers, but it also returns them to productive work and reduces the economic, social, and psychological burdens of their substance abuse on family members. Advocates typically give great weight to these indirect and/or non health benefits in urging higher priority and increased funding for substance abuse treatment programs. Should public or private health policy makers and resource allocaters treat them as relevant or irrelevant?

The Separate Sphere's and Indirect Benefits problems do not just arise in health care resource prioritization. They are issues for any summary measure of the burden of disease, such as that employed by the Global Programme for Evidence in Health Policy at WHO, as well. The use of Disability Adjusted Life Years (DALYs) to measure the burden of disease restricts the burdens measured to the impacts of disease on an individual's life expectancy and/or health related quality of life; it ignores other non-health and indirect burdens or adverse impacts of disease on an individual or others from the individual's disease. It would be a mistake to assume that the Separate Spheres and Indirect Benefits problems take exactly the same form in the meas-

urement of the burden of disease as in health resource prioritization, although the issues are closely related, since the nature and aims of these two activities are different. I shall focus for the most part on the context of health resource prioritization; the two problems are most pressing there since prioritizing the health needs of, and health interventions for, different individuals and groups raises issues of fairness that are not always present in the measurement of disease burdens. However, to a significant extent the issues are the same for health resource prioritization and the measurement of disease burden.

Since non health benefits of health interventions are typically indirect benefits as well, it is important to understand that the Separate Spheres and Indirect Benefits' problems are distinct, even if related. Two simplified examples will make the point most succinctly. First, the Indirect Benefits problem. Suppose that we must choose between using scarce medicine to save two patients lives or instead to save one patient who is a surgeon and will save five other patients lives if she is saved [1]. The five additional lives the surgeon will save are an indirect benefit of our saving her, but they are a health benefit. The Indirect Benefits problem is whether the additional five lives that the surgeon would save justify giving him priority over the other two patients who need the medicine. Second, the Separate Spheres problem. Suppose that two patients, A and B, need treatment for the same disease but we have medicine enough only to treat one; if we give the medicine to A we will cure his disease, but if we give it to B it will cure his disease and, by a process we do not understand, impart great wisdom to him. The wisdom would be a direct, but non health, benefit of treating B. The Separate Sphere's problem is whether the additional benefit of the wisdom to B justifies treating him instead of A. In practice, if benefits of health interventions are indirect they are usually non health as well, and vice versa, so that in most real cases the benefits in question are both indirect and non health. It remains important, however, to distinguish the two problems because the moral issues they raise are distinct, even if related, and the moral objections to counting non health benefits are not entirely the same as those to counting indirect benefits.

There are three central issues that are raised by the Separate Spheres' and Indirect Benefits' problems that I will address in turn: First, how are indirect and direct benefits, and the proper sphere of health care as opposed to other spheres, distinguished? Second, what are the moral arguments for and against taking account of indirect or non health benefits in health care priority setting? Third, what is the moral significance for the Indirect Benefits' and Separate Spheres' problems in health care priority setting of who the decision makers are and the levels or contexts in which decisions are made?

# The Proper Sphere of an Activity and the Distinction Between Direct and Indirect Benefits

Let me begin with clarifying the notion of separate spheres. In its simplest form, the idea is that different activities have different distinct purposes. The purpose of the system of criminal punishment is to secure personal security and justice by convicting and punishing violators of the criminal law. The purpose of a democratic electoral system is to enable citizens to select their governmental leaders and to hold them accountable. The purpose of social gatherings is to allow friends to come together to enjoy each others' company. And, the purpose of the health care system is to promote people's health. The purposes of these activities determine their proper sphere and so the proper basis for distributing the different distinctive goods each produces. Criminal punishment should be given only to convicted lawbreakers, not, for example, to other bad persons. The right to vote should be given to all adult citizens of the country, not to foreigners or only to male citizens. Invitations to a social gathering should go to those friends the host freely chooses to invite, not to others who may be more in need of friendship and social life. And medical care should be distributed on the basis of medical need and potential for medical benefit [2]. (These are, of course, sometimes in conflict but that is not important for my purposes now.)

The purposes of these activities are determined by the actual purposes of those engaged in them, but also in part conventionally by the social meanings they have in a community. For example, in a non democratic caste society, political elections have a different social meaning than they do in democracies, and so the right to vote would be distributed differently. But what purpose an activity of a particular nature can be said plausibly to have is limited by the nature of the activity. The purpose of health care could not plausibly be to produce great literature and to suppress bad literature because what health professionals do in providing health care has no significant causal relationship to promoting great and suppressing bad literature. A different way of putting the point is that these various activities have the form they do because they are organized in order to produce particular goods, and if their purpose was to produce radically different sorts of goods, they would have been organized very differently.

Moreover, because complex social activities require the cooperation in different roles of many persons in the service of a shared goal, particular individual participants cannot at will change the nature and purpose of the activity; for example, a criminal court judge who wants and sets out to use the criminal justice system to punish his enemies cannot thereby or at will make that the purpose of the criminal justice system. For the various participants in complex activities such as these to be engaged in a com-

mon activity requires a shared understanding of its nature and purpose. This is not an essentialist view of social practices or professions – their nature and purposes are determined by the shared understandings of them and of their purposes by their participants and others – but reasonable goals of particular activities are limited by the nature of the activities and the causal outcomes they produce. The health care system is organized to achieve health.

Suppose someone is sympathetic to the separate spheres position, but also wants to give weight to a non health consequence of the prioritization or distribution of health care resources, such as the economic benefits to employers of treating their employees' substance abuse. Could he reasonably argue that the purpose of the sphere of health care should be more complex than just health, and should include reducing the economic costs of illness and disease as well? It might be objected that this would be a mistake because what health care treatments are directly used for and do is to improve patients' health, and they only indirectly have the effect of creating these economic benefits. But this would be to change the argument from a separate spheres argument to one for excluding indirect benefits, and we will consider that second sort of argument later. If activities such as a health care system are at least in significant part conventionally defined by those participating in them, and if health care often does have the causal consequence of producing substantial economic benefits, then this proponent of taking account of economic benefits in health care resource prioritization would be urging the members of his society to revise their understanding of the nature and purpose of the health care system to include two goals - improving the health of the society's members and strengthening the society's economy.

If others came to agree with him, would they have made any conceptual, as opposed to moral, mistake and have misunderstood the nature and purpose of a health care system? I think not. If it is insisted that they have misunderstood the meaning of health care and the purpose of a health care system, which is only health, then they could respond that they are putting into place a new system that has these dual purposes, call it what you will, in place of the health care system [3]. Indeed, the first attempt to create a universal health care system in Germany in the 19th Century was motivated not just by a desire to prevent or reduce the harms of suffering, disability, and loss of life to patients from illness and disease, the direct benefits of health care, but also by a desire to strengthen the state by creating a healthier workforce. The purpose of a health care system is not fixed by any essential nature, meaning, or purpose of health care, but by the shared purposes and understandings of those who provide and receive care in that system. If the health care system should serve only the goal of health we will then need an independent normative argument for that.

Indeed, I believe that in the United States and, perhaps to a lesser extent, in many other countries as well, the last few decades have seen at least an implicit rejection of health and life as the fundamental goals of medicine and health care. Suppose the health of biological organisms is understood, albeit extremely crudely, as something like the species typical or normal biological functioning of the organism, and disease as conditions causing adverse deviations from normal functioning. The health of a species like human being then has an objective basis or definition that can be derived from the biological sciences, and what will best promote health by treating a particular patient's disease will in turn be an empirical matter for medical science. But physicians have come increasingly to appreciate that what best promotes a patient's health, understood in this way, may not always best serve a patient's overall interests and well-being; health is only one component of well-being, which sometimes can conflict with other components, and so patients sometimes reasonably choose treatment options that do not best promote their health, but do best serve their overall well-being and interests. In this view, the goal or purpose of medicine and health care is for health care professionals to use their capacities to treat or prevent disease in the manner that best serves patients' overall well-being and interests.

In fact, it is widely acknowledged that there is a further fundamental moral constraint on the use of health care to promote patients' well-being, namely that it must be done consistent with respecting patients' self-determination or autonomy; thus, health care that would best serve a patient's health or well-being can only be rendered with that patient's informed consent. Individual patients already evaluate and prioritize health care by its effects on their overall well-being, that is for its non health effects as well as its health effects. If health is not all that properly guides physicians' and patients' evaluations and choices of treatments, then we cannot simply insist on separate spheres to rule out consideration of non health effects in other contexts of health care decision making and resource prioritization. When prioritizing care for more than one patient, of course, distributive and equity concerns can arise that typically do not arise in treatment decision making with individual patients, and they may support independent separate spheres arguments not based on the purpose of health care.

How is the distinction between direct and indirect benefits to be made? It should be drawn in a way to make clear why the economic savings to their employers of treating substance abusers and the additional five patients saved by the surgeon if she is saved in the Surgeon case are both

indirect benefits, though one is a non health benefit and the other is a health benefit. Sometimes we speak of the direct consequences of some action or event. The deaths were a direct consequence of the earthquake; the resignation of the cabinet minister was a direct consequence of the government's military aggression against its neighbor. In each of these cases it is a causal relation that links the first event or action with its direct consequence, and it seems to be the closeness in the causal relation between the first event or action and the subsequent event that it caused that makes the latter a direct consequence of the former; since causal closeness is a matter of degree, there will be no sharp distinction between direct and indirect consequences understood in this way. The precipitating event need not be a human action, as shown by the case of the earthquake; the direct consequence of an action need not be intended by the agent, as when the minister's resignation is no part of the intent of the other officials who launched the military aggression. For natural events, the direct/indirect distinction applies to benefits as it does to consequences. While a consequence of a natural event will only be a benefit of that event if it is appropriately related to some human interest or purpose, its directness still seems to rest on causal closeness.

When the direct/indirect benefit distinction is applied to purposive human activities, I believe it is often understood differently than it is with natural events. In purposive activities directness seems to be tied not to causal closeness, but rather to the purpose of the activity. In this understanding, the direct benefits of opening a large, new primary care clinic are the improved primary health care that residents of the area now receive, but the consequence that the hospital's cafeteria is no longer unprofitable because of the increased number of patients is an indirect benefit, even if it may be as closely causally related to the opening of the clinic as is the improved patient care. Moreover, in a complex activity like health care in which the intended aim will only be achieved by a complex casual process that often takes considerable time to play out, the direct benefits of the activity may not be closely causally related to what is done. On this account, in the Surgeon case the five additional patients that she would save if we use our scarce medicine to save her is an indirect benefit because the purpose of giving medical care to the surgeon is to cure her, but our treating the surgeon does not cure the surgeon's five patients, except indirectly by enabling the surgeon to live and to treat her patients. I have spoken here of the aim or purpose of an activity, but Kamm in developing what I believe is roughly the same distinction speaks of the "outcome for which our resource is specifically designed" [1], which in the Surgeon case would be curing the disease of the surgeon to whom we give our medicine, and of whether the patient "directly needs our resource," as the surgeon does, or only

needs it indirectly, as the surgeon's five patients do in the sense that they need the surgeon to get the resource so the surgeon can in turn save them.

If the direct/indirect benefit distinction is understood in this way, then the Separate Spheres' and Indirect Benefits' problems are less distinct than it may have seemed and than I indicated at the outset of the paper. In the case above in which a scarce medicine would cure A's disease, or cure B's disease plus impart great wisdom to him, I claimed that the wisdom would be a direct, though non health, benefit. But if the direct/indirect distinction is understood not in terms of causal closeness, but rather in terms of the intent or purpose of the action or activity, then B's new wisdom would be an added indirect, not direct, benefit of treating his disease. In this account, all indirect benefits may also be non health benefits, but the Surgeon case makes clear that not all health benefits need be direct benefits. There is more, but not complete, overlap between the Separate Spheres' and Indirect Benefits' problems when the direct/indirect distinction in an activity like health care is understood in terms of intent or purpose, not causal closeness.

# The Moral Significance of Separate Spheres and Direct Versus Indirect Benefits

The separate sphere's argument has been used to somewhat different effect by different of its prominent proponents, such as Michael Walzer and Frances Kamm [1,4]. Since in most cases benefits from health care resource allocations that are outside of the sphere of health are also indirect benefits of those uses of the health resources it is often difficult to sort out which objection critics intend, or whether they intend both. But before considering the arguments in support of the separate spheres restriction and against weighing indirect benefits, I want to state briefly the central argument against both of these positions and in support of taking account of all benefits and costs, whether health or non health and whether direct or indirect, of alternative resource allocations in health care. That argument is grounded in the straightforward point that non health and indirect benefits and costs are no less real benefits and costs for being non health and indirect. As I noted earlier, both Consequentialists and non Consequentialists agree that the good and bad consequences of actions and social institutions are typically relevant for their moral evaluation. We often use indirect means to accomplish our ends; for example, we help one group of persons so that they will be able to help others. We often have multiple ends in view in particular activities, ends not plausibly delineated by a single particular sphere of activity; for example, a high school student may devote great effort to developing his abilities in football both for the sense of accomplishment and pleasure he receives from excelling in competition in the sport and also in or-

der to win a scholarship to college. When we are concerned with the consequences of actions, social practices, and institutions, it seems a reasonable presumption that we should consider all of their consequences. Failure to do so will result in our sometimes judging actions or practices to have better consequences than some alternatives when, taking all their consequences into account, they do not in fact have better overall consequences. When consequences are morally relevant and we seek to produce better consequences rather than worse, then only if we take all consequences into account will we know which alternative actions or practices will in fact produce better consequences. If there is what Shelly Kagan has called a pro tanto reason to promote the good, that requires attending to all good and bad consequences of what we do [5]. This is not to say that the presumption in favor of attending to all consequences and acting to promote the good cannot in particular circumstances be rebutted or overridden. There may be good moral reasons why specific consequences should not be counted when we make particular assessments of outcomes; to take an example unrelated to my concerns here, many would say that the sadistic pleasure one person gets from the suffering of another counts as no reason whatever against relieving that suffering, even if in most cases pleasure is a good to be promoted. So the question here is whether there are comparable reasons for ignoring the non-health or indirect benefits of health care resource allocations.

It is important to understand that non consequentialists face a version of the Separate Spheres' problem even when not assessing the goodness of outcomes; for example, when they determine how to give priority to the worse off in health care resource allocation [6]. There the Separate Spheres problem takes the form of whether the worst off are those with the worse overall well-being, or those with the worse health. (Even the idea of those with the worse health is in several important respects ambiguous; for example, are they those with the worse health now, at the time we are allocating resources, those who will be in worse health if they are not treated, or who will have the worse lifetime health if not treated, but I shall not pursue these important details here.) Applying a separate sphere's view and considering only whose health is worse now in determining who should receive special concern in health care allocations would sometimes increase overall inequality by giving special concern and health benefits to those who are overall better off; this will occur when those with worse health are sufficiently better off than others in other important aspects of well-being to make them overall better off than those others. Here, I believe the separate spheres' proponent needs to provide a reason to overcome the presumption that the special concern justice requires for the worse off should focus on people's overall levels of well-being, their lives as a whole, not on only a limited

domain of well-being. We often assume that people being worse off than others in some respects, or in some domains of well-being, can be compensated for by their being better off in other respects or domains. Why shouldn't that also be true when we are determining what special concern for the worse off justice requires? It is not just in the assessment of the outcomes of actions, practices or institutions, and the determination of which alternatives will produce the best outcomes, that the Separate Spheres' problem arises.

One central moral objection to giving weight in health care resource prioritization to indirect non health benefits (I leave open for now whether this objection applies to non health, indirect, or both kinds of benefits) is grounded in fairness. It is unfair when prioritizing health care resources, it might be argued, to favor one group of patients over another, or some health care needs over others, solely because treating them is instrumentally valuable in producing indirect non health benefits for third parties. If people's health needs are of equal importance and their treatment would be equally effective, then, all other things being equal, they have equal moral claims to have those needs met; they and their health needs deserve equal moral concern and satisfaction. Neither should receive priority over the other and if we cannot treat them all, then all should have a fair chance of receiving treatment; if there are no other morally relevant differences between the groups, then a fair chance for all should be an equal chance for all.

Why would it be unfair to take the fact that treating one group will produce additional indirect non health benefits for third parties to be another morally relevant difference between them? For example, suppose that two groups A and B have the same disease with the same degree of severity and will suffer the same level of disability for the same period of time; the only difference between them is that the members of A are still of working age and employed, whereas the members of B are retired and no longer in the workforce. Treating group A will have significant economic benefits in restoring them to productive jobs and reducing lost work time for their employers that will not be gained from treating group B. The example might seem more pressing still if the members of A would suffer a less serious and lengthy disability than the members of B, but when the additional indirect non health benefits of treating A are added in there would be greater overall benefits from treating them.

The developers of the Disability Adjusted Life Year (DA-LY) measure stated as one general concept guiding its formulation that the only characteristics of the individual affected by a health outcome that should be considered in calculating the associated burden of disease were age and

sex. This was justified as treating like health outcomes alike and as fitting their conception of equity or social justice. Christopher Murray and colleagues offered specific arguments for taking account of sex and age, but much less argument for why no other properties are relevant (see Endnote section, Note 1 on age-weighting of DALYs). Intuitively, it seems correct that a measure of the burden of disease should not depend on factors like the wealth of the persons suffering from a disease; a patient's wealth does not affect the health burden of a disease for the patient. It is not uncommon in many policy contexts, however, to emphasize indirect non health burdens as well, and in particular the economic costs of particular diseases or health problems. If one but not another disease and health burden creates substantial additional economic burdens for the society, those additional burdens consume resources that could have been used to meet other health or non health social needs. If those other needs have a legitimate claim on the society's attentions and resources, then why wouldn't it be justified to give priority to meeting the health need that will bring with it an economic benefit allowing us to meet additional health or non health needs as well?

John Broome distinguishes between claims to a commodity, such as health care, by which he means "a duty owed to the candidate herself that she should have it" [7] and other moral reasons why a person should or should not get a commodity. Broome writes, "claims, and not other moral reasons, are the object of fairness. Fairness is concerned with mediating between the claims of different people. If there are reasons why a person should have a commodity, but she does not get it, no unfairness is done her unless she has a claim to it" [7]. This leaves open what considerations ground claims either in general, or to health care in particular. But suppose, as many believe, that people's medical needs give rise to moral claims to the health care resources necessary to meet those needs, that equally urgent needs give rise to equal moral claims, and that more urgent needs give rise to stronger moral claims. Then the working age and retired patients in the example above have equal claims to the treatment they need, and fairness requires that their claims be equally satisfied. That treating the employed patients will produce indirect economic benefits for their employers may be a reason favoring treating them, but it does not ground any claim of them to be treated. No obligation is owed to them to treat them because doing so would produce these indirect non health benefits to others. That is why preferring to treat the employed patients because doing so would produce these benefits would be unfair; it fails to recognize and satisfy the equal claims to treatment of the retired patients. If scarcity prevents us from satisfying the claims of all who have equal claims, we can use a lottery to give all an equal chance of having their equal claims

satisfied. The good for others produced by treating the employed patients or treating the surgeon in the surgeon case, could be great enough to outweigh the unfairness of doing so, and so could all things considered justify treating them; but this would not remove, only override and thereby justify, the unfairness. This last point illustrates that if the reason for separate spheres and for ignoring indirect benefits in health care resource prioritization is grounded in this way in fairness, other moral reasons such as utility could be sufficiently weighty in some cases to justify counting indirect non health benefits despite the unfairness of doing so.

Frances Kamm has suggested a different reason why giving priority to treating some patients, those in group A in the example above, because doing so will produce indirect non health benefits for third parties would be wrong - it would violate the Kantian requirement that persons always be treated as ends in themselves and never solely as means [1,8]. As she points out, preferring group A on these grounds would not be treating them solely as means since in their own right they need the scarce resource as much as those in B. Moreover, the charge of treating persons solely as means is typically an objection to harming or disadvantaging them in some way while failing to give weight to their interests and status as rational and autonomous agents; it is an objection to using them for the benefit of others without their consent. But the members of A are benefited, not harmed or disadvantaged, by receiving priority over group B; they are not being used for the benefit of others or treated in a way to which they do not consent; indeed, they want to be given priority over B for treatment. It is the members of B who are being treated solely as means and not as ends in themselves. But how can that be when we treat the members of A and do not treat the members of B? Members of B are treated solely as means and not also as ends in themselves because they are denied treatment, or a fair chance to receive treatment, solely because they are not a means to the economic benefits that will come from treating members of A instead.

The objection to preferring group A in order to gain indirect economic benefits can also be put in terms of equality, the equal moral worth of persons, and specifically the equal concern and respect morally owed to all persons. Treating group A has social value and social benefit – indirect economic benefits – that treating group B does not have. But giving weight to individuals' different social value to others in this way can be argued to violate the equal moral worth of all persons, and the claim to equal moral concern that all individuals have just as persons; the equal health needs of the members of B, and in turn treating those needs, is considered less important and of less value or worth because doing so is is not socially useful to others. It is a personal characteristic of the members of A, the

fact that they are employed and economically productive, not simply their medical needs and our ability to meet them, which is the basis for favoring them over B. This introduces an element of the human capital approach to valuing lives that has been widely rejected in the health sector, as well as in many other contexts, as assigning worth to individuals and to individuals' lives on the basis of their social and instrumental value to others.

Kamm has questioned whether choosing to use health resources in a way that will produce additional indirect benefits should always be condemned as unfair and as violating the Kantian injunction against treating people solely as means [1]. She imagines a case where we have a scarce drug that A, B, and C each need to save their lives. We can give the drug to A or we can give it to B, but if we give it to B who is a fast runner he can get a share of it to C, whereas A cannot do so. Is it unfair to choose to give our drug to B for this reason? Kamm claims that the benefit of saving C would be produced only indirectly by saving B, who in turn would get a share of our drug to C. Moreover, we would be preferring B over A solely because of a personal characteristic he has that A lacks; he can run fast and get a share of our drug to C whereas A cannot. Kamm argues that "the fact that B and C have as great a direct need for what we have to distribute as A does is, I believe, crucial in making it not unfair to save B because of his skill." This shows "that someone's personal characteristic if it helps better distribute what we have may be taken into account in deciding whom to aid, although a personal or nonpersonal characteristic that produces more utility in some other way should not be taken into account." But, she adds, "there is a more general background limit on our goal: we do not do with our resource whatever will result in as much good as possible. Rather we try to achieve the best outcome for which our resource was specifically designed." As she also puts it, "we limit the sphere in which an item can maximize good" [1] (see also Endnote section, Note 2).

Now if I was correct at the end of the last section that in the case of human activities like the provision of health care the direct/indirect benefit distinction is to be understood in terms of the aim or purpose of the activity, not in terms of causal closeness, then Kamm is mistaken that when B gets a share of our drug to C, C's being saved is an indirect benefit of our giving the drug to B. Instead, the aim or purpose of giving our drug to B was for it to be used to save both B and C, and so both B's and C's being saved are direct benefits of what we do with our drug. Likewise suppose A is on one island and B and C are on another; we can send our drug to A or to B with instructions to her to administer part of it to C who is a very young child; if we send it to B, saving both B and C would be direct benefits of what we do with our drug.

If B would not get a share of our drug to C, however, but is instead a Doctor who would himself save C if we save him, that is the Surgeon case, then Kamm argues that it would be unfair to A to prefer B for this reason. Kamm believes that in each case we achieve the additional benefit indirectly through saving B who is then able to save C. If that is correct, it remains true that when B gets some of our drug to C we use our drug for the purpose for which it is specifically designed, to treat both B's and C's disease, whereas in the Surgeon case we save C with our drug only indirectly and not by using it for the purpose for which it is designed. In the Surgeon case, C does not need and does not get our drug; rather, he needs our drug at most indirectly, that is he needs B to get our drug so that B can then save him. Kamm takes these cases to show that preferring one person over another because the first has a personal characteristic that enables us to indirectly produce an additional benefit need not be unfair when the benefit is produced by our resource being used directly for the purpose for which it is intended, that is when B gets a share of our drug to C. If Kamm is correct that saving C in this case is an indirect benefit of our saving B, then because the drug is used for the purpose for which it is directly intended, it should be understood as not violating an indirect benefits restriction. Alternatively, if I am correct that C's being saved is a direct benefit of our use of our drug when we give it to B who will get some of it to C, then no indirect benefit restriction applies. In either case, the Kantian requirement that persons be treated as ends in themselves and not solely as means permits giving weight to C's being saved in this case, but not in the Surgeon case. The distinction between these two cases should be understood as clarifying the nature of the indirect benefits restriction. The Kantian injunction and the equal worth of persons provide moral bases for excluding consideration of indirect benefits in health care resource prioritization.

The Kantian objection to the surgeon case could, however, be challenged. It could be argued that it is not our drug that we must decide how to use in the surgeon case, but rather medical resources generally. In an earlier commentary, James Griffin has suggested that "if that is taken to include doctors themselves, then we get a different answer in this case. Save B, the doctor, who over the years will go on to save scores of other people's lives. What is the justification for limiting attention to this particular drug alone?" Griffin is correct that if we take this more global perspective saving the surgeon does further the purpose of medical resources of saving lives, and so in that respect the lives the surgeon saves are a direct health benefit of giving our drug to her. Whether this is the correct perspective for our decision about what we should do with our life saving drug in the surgeon case is questionable. But in any case, saving the surgeon because she will then operate on and save C would be unfair. A,B the surgeon, and C all have equal moral claims to be saved by us. B has no greater claim to be saved because if she is, she can operate on and save C; if we cannot save them all fairness requires that we give each a fair chance to be saved, which I believe would require giving proportional chances to A versus B and C. So even if Griffin is correct that the Kantian objection does not apply to the surgeon case, which as I said above is questionable, the fairness objection grounded in the claims of the individuals does apply.

Quite different pragmatic, not moral, considerations may often be important as well for why physicians or health planners and policy makers should not give weight to non health or indirect benefits. These other effects are often extremely difficult to calculate or predict with any confidence or accuracy, more difficult than predicting direct health benefits, which itself is often laced with great uncertainty. The professional training of physicians, as well as of health planners and administrators, gives them expertise in the evaluation of the health benefits of different health treatments and programs. But physicians and other health administrators and planners typically have little or no training or expertise in estimating the indirect non health benefits of health interventions, nor has much systematic research gone into doing so. This is not to say that we have no such knowledge. I have already cited the example of substance abuse for which there are estimates, albeit rough, of its economic costs; these economic estimates provide at least some limited and incomplete knowledge to health planners.

Restricting benefit assessment to direct health benefits has the practical advantage of substantially limiting the scope of the assessment. Once we begin giving weight to the indirect non health benefits of health interventions there is no obvious stopping point stretching out in time and in non health domains beyond which we need not go. The more extensive the consequences to which we give weight the more tenuous and unreliable our estimations of them are likely to be. We risk soon finding ourselves giving significant weight in health care allocation and prioritization choices to effects whose nature, size, and probability are highly uncertain.

Furthermore, once we move beyond the direct health benefits to other social and economic impacts of meeting the health needs of some rather than other persons or groups, the potential increases appreciably for bias, prejudice, stereotypes, and self or group interest to creep, albeit often unintentionally, into the assessments. For example, feminist social theory and social critics have made us increasingly aware of the extent to which the economic and social value of work done in the home, typically by women, is undervalued in comparison with work typically done by men in the market economy. This gender prejudice would

almost certainly affect any estimation of the indirect social and economic benefits of health interventions that differentially serve men and women. In the absence of rigorous measures of these indirect non health benefits, many such biases, prejudices, and stereotypes may infect any attempt to take account of them in the prioritization of health care

Finally, in many contexts it may simply not be worth the added effort, time, and expense in decision making costs to attempt to incorporate non health indirect effects into the prioritization and allocation process; the necessary data may be too difficult and costly to obtain and the decision makers too poorly positioned to use it reliably. These various pragmatic considerations are not in themselves morally decisive against weighing indirect non health effects in all cases, but if they apply to most cases it would be inconsistent and in turn unfair to use them only selectively, although this unfairness might not be morally decisive in all cases.

### The Importance of Context and Social Role

Does the context in which prioritization and allocation choices are made and the social and professional role of those who make them matter for the Separate Spheres and Indirect Benefits problems? I shall argue that they do for at least three distinct reasons. First, the decision making context can affect the alternatives from which decision makers must choose; for example, legislators must choose between health and non health aims in allocating resources to the health sector, whereas a health ministry or health plan must choose between alternative health care programs to meet the needs of its different patients. Second, the decision making context can determine the nature of what is to be prioritized or allocated; for example, a health ministry or administrators of a health plan must typically allocate money to programs that would meet different health needs, whereas a transplant program must allocate scarce organs between different patients in need of them. Third, the different social and professional roles of those making prioritization and allocation decisions can have different responsibilities and commitments that affect which considerations are relevant to their decisions; for example, legislators deciding what resources will be allocated to the health care system are responsible to the electorate, whereas physicians are typically responsible to the individual patients for whom they are caring. Let me explore each of these points in a bit more detail.

Within a public or government health system decisions about the allocation of resources to the health sector as opposed to other non health programs concern the allocation of public tax monies, not health care resources themselves. Thus, any argument that health care resources have the specific aim of producing health, not other goods

like economic benefits, would not apply - what is being allocated is money, a fungible good usable for a wide variety of purposes. It might be argued that even here we should observe separate spheres and attend only to the health benefits of allocations to the health system weighed against the distinct benefits of other public programs such as electric power development, highway transportation, and education. But this example illustrates the difficulty with separate spheres at this level of resource allocation. Bringing electric power to areas without it has a very wide range of benefits, both economic and social, and it would be arbitrary to single out any subset of them as the proper purpose of electric power generation; likewise, a highway transportation system allows individuals and goods to move from place to place for a wide variety of purposes, and facilitates a wide range of economic development and activity. Even education, which might at first seem to have a more distinctive purpose in the way that health care seems to have, in fact is valued for its intrinsic and instrumental benefits to those educated in the development of their knowledge and skills, but also for a wide range of benefits to the economy, culture, and general quality of life of the society. Electric power, highway transportation, and education are each valued for a wide range of purposes and reasons. It would be arbitrary to insist on a separate spheres approach that picks out some subset of the benefits of these activities as their proper benefits when comparing them with other activities and programs to which scarce resources might be devoted. Yet if the full range of their benefits should be considered by government officials or legislators in allocating resources to them, health care would be systematically disadvantaged in that process if only its health benefits are taken into account. Moreover, a society's reasons for supporting a health care system are typically diverse. They of course centrally include the benefits to its individual members of promoting and protecting their health and life, but they include other goals as well such as having a healthy workforce to support a strong economy; even health is largely, if not entirely, an instrumental good allowing people to pursue a wide range of valued activities within their lives, and its value derives largely from the extent to which it serves those other ends.

The legislators and other public officials making this resource allocation decision have a responsibility for the full range of activities and purposes served by public sector activities. This will typically include health, but it will also include other areas like the economy, transportation, and education, with the myriad ends they each serve. These public decision makers are reasonably held responsible for the full effects of their decisions and actions on the various ends and purposes for which government is in whole or in part responsible. Indeed, if government officials ignored, for example, the economic consequences of

a decision about where to locate a highway they could properly be charged with failing to exercise their full responsibilities.

When public officials are making decisions about how to allocate public monies to the health sector versus other non health aims and programs, no one's medical needs are given lower priority than are the medical needs of other persons solely because serving them does not produce other indirect, non health benefits; this is not a choice between the medical needs of different individuals or groups. Thus, I believe no separate spheres nor indirect benefits restriction should apply at the level of allocating public or societal resources to health care versus other non health ends.

In a market system for health care or health care insurance, the proportion of individuals' resources that are allocated to health care versus other goods is determined by their choices about how much to spend on health care or health insurance versus other goods. (In fact, even in countries like the United States that rely to a significant extent on market systems for the purchase of health insurance, individuals typically have little choice between health insurance plans with substantially different levels of coverage and cost.) It is only rational, not morally objectionable, for individuals to consider the full effects on all of their interests of the different alternative uses to which they might put their resources. When individuals are each deciding how to allocate their own resources, no objection grounded in fairness or in the Kantian injunction against treating people solely as means will arise.

Consider now the allocation of resources within the health sector to different health programs and needs; for example, within a public health care program, a private health care plan, or a health facility like a hospital. As in the case of allocations between health and non health sectors, the resources to be distributed will typically be money, and so no direct argument that the distinctive end of what is being distributed is health seems applicable. Nevertheless, it could be argued that the distinctive end to be served by all of the different programs competing for resources in the health sector is health. Moreover, the responsibilities of administrators of public health programs, medical research efforts, or private health plans or facilities are plausibly understood to be health, not other non health benefits. (Even this is more complex, however, because if legislators are deciding whether to allocate funds to a specific health program or need as opposed to non health programs, as they often do, then once again there is no distinctive end served by the money they are distributing and their responsibility is not restricted to health. However, I shall set this case aside here as in fact an instance of the first level of macro allocation where a

general allocation of resources is made between health and non health ends.)

Once funds are allocated to the health system, whether a government research effort or health program like Medicare, a managed care plan, or a hospital, the money is to be used for different health needs, not, for example, for economic development. Important here is what Robert Goodin in an earlier commentary calls the "politics of departmentalization" and the "division of political responsibility". Governments "do business by breaking the task of governing up into several subject-specific portfolios (defense, finance, transportation, health, education, and so on) and assigning responsibility for each portfolio to specific individuals" and departments. When a department exercises discretion in allocating money appropriated to it, as Goodin writes, "it is the Health Minister's job to look after health, and spend her money however best promotes health; any spillovers to non health matters, be they positive or negative, are naturally neglected by her on the grounds 'that's not my department'." Public or private health administrators will for these reasons tend in fact to observe the separate spheres' restriction in allocating resources at their disposal. Should we accept this tendency to ignore what Goodin calls spillover into non health spheres as proper or instead attempt to restructure health care institutions, responsibilities, and incentives to undermine this observation of separate spheres?

Suppose we are considering the resource allocation for research on two different diseases, A and B, with comparable health impacts on patients who have them, a comparable incidence in the population, and equal prospects of success. The treatment being sought for disease A, however, is likely to have important applications outside of health care, say in agricultural production or animal husbandry. On the one hand, a society should be able to give higher priority to a research effort that promises both these benefits instead of only the one, since both could be important and legitimate societal concerns. On the other hand, the mandate of a research organization like the National Institutes of Health in the United States is health, not agriculture, and so potential agricultural benefits should not affect their priorities; however, there seems to be no moral objection to the Department of Agriculture adding additional funds to expand support for research on disease A. Likewise, the Department of Labor or private corporations might contribute additional funds to support substance abuse treatment in an effort to reduce its economic costs. One might insist in these two examples that while the Departments of Agriculture, Labor, or private corporations could contribute some of their own resources to the health care research or treatment efforts, those efforts should not receive different resources from the health sector because of their different indirect non

health benefits. But this seems an artificial distinction, since if additional external resources are added to health programs with large indirect non health benefits, the result is to favor the needs of patients served by those programs

Within a health plan whose members contribute resources in the form of insurance premiums, the mandate of the plan's administrators is typically understood to be to use those resources to serve the members' health needs. Securing indirect non health benefits for non members is not part of their mandate because the resources contributed by the plan members should be used for their, not others', benefit. It is a good deal less clear that it would be wrong for the plan's members to agree to take account of indirect non health benefits to plan members of different health programs in prioritizing and allocating the plan's resources to those programs. These are not choices of particular patients on the basis of their personal characteristics and instrumental value, but rather choices between alternative health needs. Using the example of substance abuse again, some health problems are associated with substantial indirect costs and so their treatment is associated with substantial indirect economic benefits. It is a feature of the disease, it might be argued, that it results in these economic losses, not a feature of particular individuals with the disease. No claim is made that some patients are more socially valuable than others, as would be the case if we differentiated patients on the basis of their economic contribution to society. But of course it is individual patients who have these diseases and health needs, so giving weight to this kind of indirect economic benefit will result in a higher priority to the health needs of individual patients with this need. Moreover, it is not in fact a feature of the disease of substance abuse that it has these large economic costs, but a feature of the disease only in individuals who are or would otherwise be employed. Why shouldn't we then give higher priority to substance abuse programs serving working age persons as opposed to the elderly, since the elderly typically are not employed and so their treatment does not produce these economic benefits? We seem back to the violation of claims of fairness, equal moral concern, and the Kantian injunction.

The closer one is to selecting individual patients competing for scarce health care resources, the more ethically problematic prioritizing their claims on the basis of indirect non health benefits appears to be. I think this may be for three reasons. First, the choice then is more directly between individual persons on the basis of their instrumental non health value to others, not just of the different instrumental value of treating different health needs. Second, we are then directly distributing health resources to individual patients, not just money for different health needs, and so the idea that the resource should be used for

the specific purpose it is meant to serve applies more directly. Third, the social roles of those doing the prioritizing or allocating are typically different. While the decision makers at the two macro levels considered above are typically government legislators, health officials, or health plan administrators, physicians typically prioritize different patients for needed treatment. A common objection to physicians doing "bedside rationing" is that their commitments are and should be to the individual patients whom they are treating, not to broader social concerns. This commitment is at the core of the traditional patient-centered physician-patient relationship, and is a fundamental defining commitment of the profession of medicine in many societies. For familiar reasons, it is important to patients, especially to seriously ill, fearful, and vulnerable patients, to have a physician who is single-mindedly committed to their medical needs to the exclusion of other concerns. The importance of patients' trust in their physicians' commitment to their medical needs above all else provides a special reason why physicians should not prioritize their efforts by the indirect non health benefits of treating different patients.

As a rough generalization and all other things being equal, the higher level a macro health care resource allocation or prioritization decision, the more defensible it is to give weight to the indirect non health benefits and costs of alternative resource uses in health care. The closer to micro level choices by health professionals between the needs of their individual patients, the stronger the case that these indirect non health benefits and costs should be ignored on grounds of fairness. However, the policy alternatives are not only to give indirect non health benefits the same weight as direct health benefits, or to give them no weight at all; they can be given some but lesser weight than direct health benefits and costs, though there is no apparent principled answer to how much weight these effects should receive in different contexts. Since the fairness objection to counting these effects in health care resource prioritization is strong, but, so far as I can see, not fully decisive, and because its force is different for different decision making levels and contexts, particular societies might exercise significant discretion through fair, democratic decision procedures about what weight to give them.

#### **Conflict of interest**

None declared

### **Endnote section**

#### Note I

It could be argued that in an indirect fashion, the DALY does not disregard all indirect non health benefits. The DALY is age weighted, assigning more weight to life years during people's productive middle years than during childhood or old age. The principal rationale offered for

this age-weighting was that children and the elderly are generally economically, socially, and psychologically dependent on persons in their productive middle years. By age weighting for this reason, the DALY developers have indirectly given weight to the indirect non health burdens of disease on others that they explicitly claim to exclude when differentiating individuals only by age and sex.

#### Note 2

I would note that even if Kamm's reasoning here is correct regarding taking account of the indirect benefit to C, I believe it does not follow that it would not be unfair to prefer B who can get the drug to C instead of A. Kamm believes this because she believes, very roughly, that fairness requires balancing persons with equal interests in conflict cases such as this, but that after balancing the persons on one side, additional persons with equal interests on the other side can fairly determine our choice; so it is not unfair to save B and C instead of A. While it is not important for my purposes in this paper, I believe that Kamm is mistaken about what fairness requires in these conflict cases. Instead, A should get a fair chance to be saved, whether this is an equal or proportional chance, against B and C; it would not be fair to A simply to save the greater number.

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#### References

- Kamm FM Morality, Mortality. Volume I: Death and Whom to Save From It? Oxford: Oxford University Press 1993,
- Williams B The Idea of Equality. In: Philosophy, Politics and Society, 2nd Series (Edited by: Laslett P, Runciman WG) Oxford: Basil Blackwell 1962,
- 3. Nozick R Anarchy, State and Utopia. New York: Basic Books 1974,
- Walzer M Spheres of Justice: Defense of Pluralism and Equality. New York: Basic Books 1983,
- Kagan S The Limits of Morality. Oxford: Oxford University Press 1989.
- Brock DW Priority to the Worse Off in Health Care Resource Prioritization. In: Health Care and Social Justice (Edited by: Battin M, Rhodes R, Silvers A) New York: Oxford University Press 2001,
- 7. Broome J Weighing Goods. Oxford: Basil Blackwell 1991.
- 8. Kant I Groundwork of the Metaphysics of Morals 1785,

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