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**What should be the role of social  
value in organ allocation decisions?**

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# Abstract

With this thesis, I argue that when selecting which patient should be the recipient of an organ for transplant, a social value judgment about the patient should be included alongside judgments about the patient's level of urgency and prognosis. The reason for this suggestion is that better use can be made of scarce organ resources, in terms of the overall welfare created from each transplant, if the wider effects of the transplant for society are taken into account rather than simply how likely it is that the patient will benefit. I argue that the survival of a patient that makes valuable contributions to society will create more overall welfare than the survival of a patient who makes less valuable contributions. Other commentators have made similar suggestions, however, their discussion of the issue is relatively brief and as such, their arguments are not comprehensive enough to stand up to criticism.

With this thesis, I go beyond their limited discussion and provide an original contribution to knowledge by way of providing a much more detailed analysis of the ethical issues surrounding the inclusion of social value considerations in organ allocation decisions than has been given before, thereby providing a stronger and more convincing case for their inclusion. In order to support this, I also provide a viable framework for how these social value considerations can be acceptably incorporated into the organ allocation decision from both an ethical and practical perspective, something that is sorely missed from the existing literature. Whilst the inclusion of social value judgments into resource allocation decisions has negative associations, I have presented a possible system whereby they can be included

alongside the current organ allocation system in such a way that other important values, such as equality and fairness, can be maintained.

Key words: Social value, organ allocation, organs, transplant, patient selection, resource allocation, Seattle, social worth, criteria.

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# Introduction

## Background and rationale

The main driving force behind this thesis question stems from the fact that there are far fewer organs available for transplant than are needed due to the relatively small number of organs that are donated (NHSBT, 2014g, p. 4). There are already a large number of people writing on the topic of ways of improving organ donation rates (Horton and Horton, 1990; Barnett, Blair and Kaserman, 1992; Plawecki and Plawecki, 1992; Cantarovich, 2005; Salim *et al.*, 2007; Lavee and Brock, 2012; Mercer, 2013). There have also already been changes within Welsh and English law, with a presumed consent system being introduced as an attempt to increase organ donation rates, and Scotland also considering doing the same (Human Transplantation (Wales) Act, 2013; BBC News, 2018a, 2018b; Human Tissue (Authorisation) (Scotland) Bill, 2018; Organ Donation (Deemed Consent) Act, 2019). Rather than researching further into such a saturated area, the focus of this thesis is on improving the use of those organs that are available for transplant now, a topic which receives less attention in the literature due to the focus being on methods of increasing organ donation rates. I will specifically be looking at the role social value could, and perhaps should, play in organ allocation decisions from a normative perspective as a way of improving the allocation of organs through the prioritisation of certain patients based on their instrumental value to society. The reason for looking at such an approach is that there is the possibility of

creating more welfare from each allocation, thereby making better use of the limited number of organs available for transplant.

The debate will be limited to only deceased organ donation where the current central principle in this situation is that the organ “must go to the person who is most in need and has the best match with the donor – a donor can neither direct the organ to a specific recipient nor impose conditions as to who shall be chosen; all such restrictions may be ignored as invalid” (Cronin and Douglas, 2010, p. 276). The reason for limiting the debate to deceased organ donors and allocation only is that this is the area where most welfare can be gained with the addition of a social value criterion with few negative effects. Living donors can direct organs to certain recipients, (unless making an anonymous altruistic living donation), and to remove this option and only allow non-directed living donation would likely result in a lower donation rate for living donations; people are less likely to make living donations altruistically to strangers than they are to people with whom they have existing relationships. Furthermore, “donations by living persons ‘create and sustain intimate personal relationships’ and, in particular, family ties, and constitute exceptions to the general rules of impartial allocation” (Kluge, 1989, p. 12).

In Britain, the main considerations taken into account when deciding who should be the recipient of an available organ are how suitable a match the patient is to the available organ, and how urgently the patient is in need of a transplant.<sup>1</sup> Whilst these measures help to put the organs to best use by minimising the chance of

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<sup>1</sup> See Specific organ allocation criteria (Chapter 1, Table 1).

organ rejection through adequate tissue matching, and minimising patient deaths by giving priority to those who require the organ most, I suggest that perhaps even better use can be made of the organs by including considerations regarding the patient's instrumental value to society. If, out of those suitably matched patients who most urgently require a transplant, the patient who is of most value to society is given priority, then not only is a patient's life saved, but society will also benefit as the survival of the most instrumentally valuable patient has been ensured.

“There is at least a prima facie case for considering some criterion like "social worth" along with strictly prognostic criteria. Consider, for instance, the choice on the eve of World War III between a top diplomat with a 48 percent chance of benefiting from the resource and some other person with a 55 percent chance. Given the circumstances, it might well be reasonable to choose the diplomat because of the far greater need which society has of him and his correspondingly greater value. Chances of benefit for the patient are an important criterion but obviously not the only one that should be considered in allocating resources.” (Basson, 1979, p. 317)

In both circumstances, a patient may well benefit, but in choosing (and hopefully saving) the diplomat, society benefits too.

Even if the supply of organs increases significantly and the problem of organ scarcity diminishes, the discussion of the ethical acceptability and, to a certain extent, the practicability of the inclusion of social value considerations in resource allocation will still be useful. The concept of including social value considerations

in organ allocation decisions could also be applied to other areas of healthcare resource allocation where resources are scarce, perhaps due to some treatments requiring rationing because of the inherent high costs involved, or because they may be only emerging technologies.

“In any case, at any given time and place, the medical profession faces the problem of having to choose who shall live and who shall be allowed to die. Even if we believe that every new remedy can shortly be extended to everyone who needs, it, and the same for the next costly remedy after that, etc., medical resources remain sparse at any given time and place, and the problem of patient selection cannot be avoided.” (Ramsey, 1970b, pp. 243–244)

The reason organ allocation specifically is the focus of this thesis however, is that organ allocation is one of the more pressing resource allocation decisions, and provides a useful case study. Other rationing of other healthcare resources could be somewhat alleviated by making more money available; however, the number of organ transplants performed is limited by the amount of organs that are donated rather than simply the available finances.<sup>2</sup> Furthermore, organ transplants are normally classed as a life-saving treatment, rather than merely life-enhancing, and so it is important that the decision as to who is to receive this

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<sup>2</sup> However, the number of organs available for transplant is not completely insensitive to policy decisions regarding financial funding. More money could be spent on increased marketing which may help to increase organ donation rates, or financial rewards given for signing up to the organ donor register. Nevertheless, the number of physical organs available still remains the major limiting factor rather than the availability of finances as is the case for many other medical treatments.

limited life-saving treatment is considered carefully so that the organ is put to best use.

## **Making best use of the organ**

When using the term “making the best use of the organ”, I mean that as far as is reasonable and ethically acceptable, best use of an organ for transplant can be made by increasing the benefit created with each organ transplant. This is in both the short and long term, for both the recipient and society, with the term benefit referring to welfare and utility created. Whilst this does have a utilitarian element to it, the approach itself is not a purely utilitarian approach, as the benefit created does not have to be *maximised*, only promoted as a consideration amongst other important values, such as equality, justice, and dignity.

I suggest that welfare and utility can be increased with each organ transplant by allocating the organ to the patient who is the most socially valuable from the group of most urgent patients. In this way not only does the patient who receives the organ benefit, but so too does society as a whole. Examples of things that are valuable to society are those that contribute towards its sustainability for the economy, environment, and society itself, with sustainable *growth* occurring where appropriate.

Economic growth generally correlates with overall improvements in quality of life, and as such, is significantly valuable to society for promoting welfare (Strange

and Bayley, 2008, p. 49). However, this sustainable development, and so sustainable welfare, is not dependent on the economy alone; it also depends upon the two additional pillars of the environment and society.

“No matter the context, the basic idea remains the same – people, habitats and economic systems are inter-related. We may be able to ignore that interdependence for a few years or decades, but history has shown that before long we are reminded of it by some type of alarm or crisis... [T]he long-term stability and success of societies rely on a healthy and productive population. A society (or communities within a larger society) that faces unrest, poverty and disease will not develop in the long term: social well-being and economic well-being feed off each other and the whole game depends on a healthy biosphere in which to exist” (2008, p. 27)... “Each country’s historical, economic, social and political context is unique, but the basic principles of sustainable development apply to all.” (2008, p. 49)

An organ can be put to better use if these considerations are taken into account when deciding which patient the organ should be allocated to. Patients whose values, skills, and traits can contribute to society in these ways, and meet the more specific needs that are covered under the general headings of the economy, environment, and society, are going to be more instrumentally valuable in promoting the increase of overall welfare. Members of society will have increased levels of happiness if the changing needs of society are met, and by ensuring the

continued life of those patients who can help to meet these needs, not only will the individual organ recipient benefit, but society as a whole.

The contributions that are most valuable will be those that go towards meeting the needs of society, and depending on how urgently the particular need of society has to be met, the contribution will be more or less valuable than other contributions. For example, two of the basic needs of society are energy supply, and water and sanitation (Task Force on Quality Control of Disaster Management, 2014b, p. 41). If the need for an energy supply for a society was more urgent than that for a water supply, contributions that went towards meeting energy needs would be more socially valuable than those that went towards ensuring a water supply. Any positive social contributions will have a value to society, however, the level of that value is determined by the level of need for that contribution within society.

By having a system in place that alters depending on the needs of society, the government can help to increase overall welfare by giving priority for treatment in certain circumstances to those patients who can best meet those needs. “[T]hrough their data gathering and analysis, policy making and co-ordination, governments can provide support and leadership for moving society in a given direction. They can make sure that individual interests do not detract from the common good” (Strange and Bayley, 2008, p. 121).

I am aware that allocating healthcare resources to patients based on their social value is controversial and that the common view is that a patient’s healthcare should not depend on their value to society. Using social value and taking an

instrumental view of human life, especially in the healthcare context, does have some negative associations, such as eugenics, forced sterilisation, euthanasia (including that of the mentally and physically disabled in Nazi Germany (Burleigh, 2002)), and social Darwinism. However, there are crucial differences between the implementation and motivation of the instrumental view of human life that I will be looking at in this thesis, and that present in the aforementioned concepts. The motivation behind the discussion of the inclusion of social value considerations in organ allocation here is to determine whether such an approach would be useful in minimising the harm that is caused to society when patients die whilst waiting for an organ transplant, and how overall welfare could be increased with each transplant. Considerations of the improvement of genetic features of human populations and the elimination of certain groups within society figure nowhere in the motivation behind the discussion, and indeed would figure nowhere in the criteria used to assess a person's instrumental social value. The social value criterion would sit alongside the current organ allocation system (albeit with a minor change to the waiting time criterion currently present), which for the most part upholds the values of equality and justice.

The aim is not to propose a whole new allocation system based purely on patients' value to society, but rather to show that an additional criterion of a patient's social value would help make better use of the organs by also considering the effect the transplant will have on society, whilst remaining ethically acceptable.



## **How the landscape of organ transplantation has changed**

Alterations to the organ transplant and allocation system are constantly being proposed and implemented based on best practice policies, as a way to make good use of the organs available, with significant steps having been made since organ transplantation first began. More types of organs can now be transplanted since its inception, and the survival rates and survival times following a transplant have also increased significantly.

Organ transplantation began with the kidney, shortly followed by liver, heart and lung transplants. The field continues to evolve, with the transplantation of other body parts such as hands, face, and possibly in the future, complete head transplants (Watson and Dark, 2012; Canavero, 2013). The path to making these successful transplants also involved many other smaller steps and changes. Lessons were learnt, such as the shorter the time between removal of an organ and transplantation to the recipient, the better the prognosis would be, and that immunosuppression plays a large part in the successful graft of the organ. Additionally, deceased, living, and partial organ donation can now be carried out (NHS, 2015b).

Other procedural changes and developments have allowed more organ transplants to be carried out. There is now the option of carrying out paired kidney swaps, the UK's first being in 2007, in which the recipients' partners act as the donor for the other donor's partner (2015b). This allows two transplants to

be carried out for patients who would otherwise each have to wait for a suitably matched deceased donation if their potential living donors are not a match for them. Another change that has been made, also in the UK since 2007, is the option to make an altruistic non-directed organ donation (2015b).

Singapore implemented an opt-out system in 1987 (alongside a reciprocity prioritising criterion) (Albertsen, 2017, p. 139), and many other countries around the world also have an opt-out system. In the United Kingdom in 2013, Wales introduced an opt-out system itself, with the hope that by not requiring the explicit consent of a donor to donate their organs, the number of organs that can be retrieved from deceased donors will increase (Human Transplantation (Wales) Act, 2013, secs 4–9). England has also recently approved an opt-out system after the Bill received Royal Assent in 2019, and Scotland is preparing to make the change by 2020 ((Organ Donation (Deemed Consent) Act, 2019)(Human Tissue (Authorisation) (Scotland) Bill, 2018)). (The efficacy of such systems is still debated however, with countries such as Luxemburg and Bulgaria having some of the lowest donation rates despite having an opt-out system (Willis and Quigley, 2014, p. 56).)

In Israel, a policy change in 2010 introduced the inclusion of a reciprocity criterion in the organ allocation decision in the hope that organ donation rates would increase (Lavee *et al.*, 2010, p. 1133). The policy gives differing levels of priority to patients who require an organ transplant, on what might be seen as a merit basis. A patient's priority differs depending on if they had previously donated an organ, were a registered organ donor, or had a family member who was a

registered donor, or were not registered as a donor themselves and had no relatives that were registered (in descending order, highest to lowest priority) (2010, p. 1131). These prioritisation criteria are only used after the medical suitability criteria are taken into account, and are mainly used as a tie-breaker criterion. However, the hope is that people will be more willing to register as an organ donor, even if only as an insurance policy, if they are given priority for an organ transplant should they require one. (The policy has in fact shown to be effective; in the first year, donor registration rose from 49% to 55%, and the number of actual transplantations rose by 68% (Quigley, Wright and Ravitsky, 2012, p. 972).)

These procedural changes have all helped to increase the number of organ transplants that can be carried out, and improve the survival rates for recipients. But changes have also been made in the American allocation system to make better use of the organs that are available for transplant by improved patient matching.

In the USA, changes have been introduced to the kidney allocation scheme that help to make better use of the organs that are available by including as a criterion in patient selection and organ allocation, the difference in the expected survival time of a patient post-transplant, to the expected remaining time that the kidney will function for. This helps to avoid transplanting a kidney into an older patient who would only live for 10 years post-transplant when the likely usable life of the kidney may be 30 years. The idea is that by matching organs to patients who have similar life expectancy, more life years can be saved/created with each transplant

by making more effective use of the remaining life years left in the organ. The first iteration of this longevity matching criteria was in the form of *Life Years From Transplant* (LYFT), however, it was shortly replaced by the *Estimated Post-Transplant Survival* (EPTS) policy. Whilst the two policies are very similar, the LYFT policy was removed and replaced. Even though it achieved the aim of increasing utility by way of significantly increasing the number of total life years gained from transplantation with the current donor pool, it also posed a severe disadvantage to certain subgroups of candidates, particularly older individuals and those with diabetes (Formica, Friedewald and Aeder, 2016, p. 40). The EPTS policy helped to rectify this by allowing the goal of longevity matching to be realised, without severely disadvantaging particular subgroups (2016, p. 41).

The reason why there has been, and continues to be, changes in the allocation criteria for organs, is that there have never been enough organs available for transplant to meet the demand. It is hoped that by introducing changes to the allocation system, better use can be made of the organs available, both in terms of increasing the longevity of the transplanted organ, and increasing the expected life years of the recipient following treatment. By better matching organs with patients, the cost effectiveness of the transplant is increased in terms of financial *and* quality of life gains. However, the cost effectiveness of organ transplantation could be further improved if the allocation criteria also included a social value element, as this would increase the welfare created with each organ transplant compared to the current system.

There is an ongoing study in the UK which aims to improve equity of access, and to maximise the benefit and cost-effectiveness of kidney and kidney-pancreas transplantation (Oniscu *et al.*, 2016, p. 1). There is currently significant intercentre variability in access to renal transplantation, and the Access to Transplantation and Transplant Outcome Measures (ATTOM) study hopes to better understand the factors in this variability and resolve them.

“The five related research aims of the study are listed below:

1. To identify patient-specific and centre-specific factors that influence (a) access to the transplant waiting-list and to develop a survival probability model as a basis for standardising access to the transplant waiting-list and (b) access to transplantation (deceased donor kidney and pancreas and living donor kidney) for wait-listed patients.
2. To identify patient-specific and centre-specific factors that influence patient survival for transplant wait-listed dialysis patients, after deceased donor kidney transplantation, after SPK transplantation, after living donor kidney transplantation and after pre-emptive transplantation (transplantation as a first mode of renal replacement therapy (RRT) prior to the initiation of dialysis treatment).
3. To evaluate QoL [Quality of Life] and other PROMs [Patient Reported Outcome Measures] for patients on dialysis, after deceased donor kidney transplantation, after SPK transplantation, after living donor kidney transplantation, after pre-emptive transplantation, in waiting-list controls

for kidney and SPK transplantation and in those whose transplants have failed following recruitment to ATTOM.

4. To perform a health economic analysis to explore costs and outcomes associated with alternative approaches to organ allocation.
5. To utilise survival, health status, QoL, treatment satisfaction and costs to determine an optimal organ allocation policy as defined by the maximisation of clinical and cost-benefits derived from transplantation.”

(2016, p. 2)

Whilst all 5 aims of this study are directed at improving the overall outcomes of kidney transplantation, aim number 4 might be of most relevance to this thesis. Because this aim is to explore the costs and outcomes associated with alternative approaches to organ allocation, there is scope to explore an approach that includes a social value criterion. Furthermore, one of the overarching aims of the program is to “investigate how we might maximise the net benefit to society from kidney and SPK [simultaneous pancreas-kidney] transplantation, by selecting recipients in a robust and transparent way so as to achieve the best balance between cost, prolongation of life, QoL [quality of life] and acceptability to patients and wider society” (2016, p. 2). As it will be shown throughout this thesis, consideration of the addition of a social value criterion into organ allocation decisions would meet all of these factors. The aim of the social value criterion is to increase net benefit from each transplant, and to select patients in a manner based on transparent and

justifiable criteria that balances cost and practicality, taking into account the approval of patients and wider society.

One of the outcomes of the ATTOM study is to propose alternative organ allocation policies that consider efficiency and equity factors (2016, p. 6). “Allocation schemes that focus on different aspects, such as maximum benefit from an organ or equal access to transplantation, can be simulated and the results used to help identify an allocation scheme that provides a balance between efficiency and equity that is acceptable to patients and society” (2016, p. 7). Because one of the outcomes of the study is to propose alternative organ allocation policies, and simulations can be run to determine their effectiveness, an organ allocation system that includes a social value criterion should also be considered.

The ATTOM study might help to allocate organs in a more effective way, that improves overall outcomes, for both the patients and wider society, by reducing intercentre variability of access to renal transplantation, and allocating organs in a more cost-effective manner. But if one of the outcomes of the ATTOM study is to suggest alternative and novel allocation methods to improve renal allocation, and possibly organ allocation in general, then the addition of a social value criterion in the allocation decision should be considered, even if only as an addition to the improvements that might come about from other findings of the study.

The policy changes that have been implemented, and the medical advancements made in organ transplantation have already led to a better use of organs in terms of patient outcomes, cost-effectiveness, and an increase in donated organs.

However, even with these improvements, there is still a severe organ shortage worldwide, and there remains room to increase the benefit created with each transplant. The addition of a social value criterion to the organ allocation decision (at least until such a time as there are enough organs to meet demand), would continue to benefit the patient who receives the organ, but also provide increased benefit to wider society. In this thesis, I will suggest a way to make better use of the organs that are available for transplant by allocating them to patients not just based on how urgently they require them, but also on how valuable the patient's contributions are to society. In this way, not only does the patient benefit from their organ transplant, but so too does society.

## **Existing literature**

There have already been commentators who have written on the topic of including social value in resource allocation decisions, such as Basson (Basson, 1979) who has written a brief but useful overview of the topic, and others such as Rescher (Rescher, 1969), Langford (Langford, 1992), and Sanders and Dukeminier (Sanders and Dukeminier, 1967) who specifically argue either for or against the inclusion of social value judgments into resource allocation decisions, but whose articles are again, relatively brief. They do not go into enough detail to thoroughly assess the ethical acceptability of such an approach to making resource allocation decisions, missing out many of the multiple facets that need to be considered to come to a justifiable conclusion. It is only Rescher's discussion that comes close



to providing a detailed discussion and framework for the possibility of social value considerations being factored in to resource allocation decisions, and as such, I will draw on his article throughout this thesis (Rescher, 1969). Furthermore, the issue hasn't been revisited in any real way for a long time, and with this thesis I hope to rectify this by providing a fresh perspective, coupled with a viable framework for the inclusion of social value considerations into organ allocation decisions.

With this thesis, I will go beyond the limited discussion of the issue that is present in the existing literature, both in terms of ethical discussion and practical suggestions. My original contribution to knowledge is a detailed analysis of the acceptability of social value considerations into organ allocation decisions, and the presentation of a viable framework for their inclusion. Because the discussions of the issue within the existing literature are relatively brief, the cases put forward by the proponents of the inclusion of social value judgments are not strong enough to withstand criticism from detractors. Equally however, detractors make their criticisms of the use of social value judgments within organ allocation decisions without consideration of what a potentially acceptable form of the system may look like. Through the discussion in this thesis, I will give a much more detailed analysis of the ethical issues surrounding the inclusion of social value considerations in organ allocation decisions than has been given before, thereby providing a stronger and more convincing case for their inclusion. In order to support this, I also provide a viable framework for how these social value considerations can be acceptably incorporated into the organ allocation decision from both an ethical and practical perspective. By providing a more detailed case

for the inclusion of social value considerations than those which currently exist, and presenting a practical and ethically acceptable form of their implementation, the hope is that their inclusion into resource allocation decisions will not be dismissed so quickly.

Commentators who argue against the inclusion of social value judgements base their arguments mainly around issues of fairness, or because they favour another allocation system. Childress, for example, claims that a social value allocation system is not feasible because it involves evaluating consequences which we cannot accurately predict in the first place, and instead favours a lottery allocation system (Childress, 1970). I accept that determining a person's relative social value may be difficult, however, it is not impossible. And favouring an alternative system such as a lottery, which arbitrarily allocates organs, simply as a means of avoiding making a difficult decision, is a poor move. It will be shown that society will be better off if a social value allocation decision was attempted, rather than avoided in favour of a decision made at random.

Commentators such as Ramsey (Ramsey, 1970a) and Thielecke (Thielecke, 1970) claim that judging a person on their social worth is unethical because doing so is to deny their individual worth as persons. However, judging a person's social worth does not necessarily deny their value as a person; it merely determines how *instrumentally* valuable they are to society. Every person may be equally valuable *as a person*, having equal moral worth, but they are not necessarily equally *instrumentally* valuable to society. And as Basson correctly points out, the value of a human life is not infinite, because if it were, there would be "nothing that

should cause us to prefer the death of one man to the death of the entire population of the North American continent, a view which is, on the face of it, utterly absurd" (Basson, 1979).

Even those who are in support of the idea miss important aspects from their arguments. Lewis and Charny for example, discuss the inclusion of social value considerations with regards to age in their article, "*Which of Two Individuals Do You Treat When Only Their Ages Are Different and You Can't Treat Both?*", but the values which they suggest could be used in allocation decisions are those *held by society* rather than those which are *useful to society* (Lewis and Charny, 1989). Shatin also make a similar mistake by failing to clearly distinguish between society's best interests and what the members of the society happen to value at that moment (Shatin, 1966). Lewis and Charny claim that including the values which society holds in resource allocation decisions is "an attempt to bring true democracy into health service decision-making" (Lewis and Charny, 1989, p. 31), but the inclusion of these society-held values may create a system which includes unwarranted prejudices based on race, age, class, *etc.* Instead, considerations about how valuable someone is *to society* rather than how valued they are *by society* can avoid a system based on such unwarranted prejudices, and instead, remains objective.

Rescher is also in support of social value considerations being used in healthcare resource allocation decisions, however, he also advocates the use of random allocation to make the final decision as to which patient will be the recipient (Rescher, 1969). The social value considerations would narrow down the group

of suitably matched potential recipients to where there would be no major disparities between the relative values of the patients, and of this group, random allocation would decide who receives the organ in order to maintain some level of equality in the system. However, I suggest that even if there are no *major* disparities between the patients, should there be *any* disparities, the higher-ranking patient should be selected due to the fact that they can help to better meet the needs of society, and equality can still be maintained by ensuring that no medically suitable patient is excluded from the waiting list regardless of their value to society.

Langford also attempts to maintain equality alongside social value in his proposed allocation system, however, the social value aspect is “disguised” under the concept of social irreplaceability (Langford, 1992). He suggests that equality can be maintained whilst narrowing down the group of medically suitable potential recipients with acceptable forms of discrimination, such as prognosis, being used to filter out patients. Of the remaining patients, the effect on other people of not saving a patient’s life should then be considered. If *Patient A* is more irreplaceable than *Patient B*, then they are classed as being more valuable to society by virtue of their death being more detrimental. Langford is right to take the idea of irreplaceability seriously when determining a person’s social value, but he is wrong to treat it as the most important criteria; it should form only a part of a larger set of criteria in determining a patient’s social value. In addition, the same equality that Langford has in mind in his system is present in the needs-based allocation system currently in place which would be present in a social value/needs-based combination system when carried out in the right way.

The small body of literature already written in support of the inclusion of social value in healthcare resource allocation decisions places the emphasis on equality in the wrong places, or not at all. In this thesis however, it will be shown that equality of access to healthcare resources such as organs could be afforded to patients even with a system including social value considerations. It would not deny their value as persons as the majority of the current selection criteria would remain. But with the addition of a social value criterion, I argue that the benefits to society could be increased with each transplant. Furthermore, by employing social value in an instrumental sense, the objection that its inclusion would make the allocation system moralistic and judge individuals on their character can be avoided for the most part. If a potential recipient were denied an organ under a system that included social value judgements, it would not be a punishment or reflection on who they are *as a person*, it would simply be based on how valuable their contributions were to society.

## **Utilitarian foundation**

### **Introduction**

The thesis will be using a broadly utilitarian approach as it is an appropriate framework for making policy decisions, as policy makers should remain impartially beneficent. As Eggleston says, (cited in Diepenbrock 2014), “All major policy decisions involve tradeoffs, and utilitarianism provides a framework for

making those tradeoffs and trying to do so in the way that promotes the common good the most" (Diepenbrock, 2014).

The utilitarian approach is based on the reasoning that in ultimate analysis, people have only *two* fundamental objectives, ones that all of us will immediately understand as rational objectives. One is *their own* well-being, and the other is the well-being of *other people*. As such, for the utilitarian, compliance with our moral values and moral norms has a *rational basis* only to the extent to which this really benefits *human beings*: ourselves, other people, and society as a whole (Harsanyi, 1995, p. 324).

“Thus, by utilitarian standards, our moral and political values such as individual freedom, equality, justice, fairness, democracy, law and order, and so on[,] have rational justification only in terms of the benefits that we and other people will obtain if these values are widely respected.

Accordingly, the best moral values and moral norms are those likely to produce the *greatest benefits* for society as a whole as judged from an unbiased and impartial point of view... Thus, the basic principle of utilitarian theory can be expressed also by saying that the *basic rational criterion* for evaluating our moral norms, our moral values, and morality as a whole is their *social utility*.” (1995, p. 324)

One of the reasons for taking a utilitarian approach to morality and social rules is because it involves using just one *rational* principle, that of social utility. Most non-utilitarian authors base their ethical theories on their moral intuitions, which

are unreliable guides when it comes to ethics. Moral intuitions differ from person to person depending on the social groups and societies that they come from, and so there is no reason to suppose that we have direct intuitive access to moral truths. E.g. Rawls and Nozick, two prominent non-utilitarian philosophers, came to completely different ethical theories when using their intuitions: “Rawls arriv[ing] at a radically *left-liberal* and strictly *egalitarian* theory; whereas following his own intuitions, Nozick arrived at a radically *right-liberal* and strictly *libertarian* theory” (1995, p. 331). Moral intuitions might still have a role in ethics by way of drawing our attention to some moral problems we might otherwise have overlooked, but they should not be the final arbiters of morality. Moral intuitions cannot replace our rational judgement on how to resolve moral problems in the best interest of the people affected.

A rule utilitarian approach will be used over an act utilitarian approach as it is preferable given its ability to recognise the importance of individual moral rights and obligations, something which act utilitarianism is less able to accommodate. A rule utilitarian approach also offers some defence against the charge that utilitarianism allows unlimited sacrificing of the individual for society, which most would agree would be an unethical policy.

## **Rule utilitarian justification**

### **Preferred over act utilitarianism**

The use of a rule utilitarian approach is preferred over an act utilitarian approach, particularly for use in the organ allocation social value criteria in particular, as it is more practical to have rules to follow, rather than an unmanageable number of variables to consider on a case by case basis. The rule-utilitarian approach means that social value assessment rules, and general allocation rules, can be made that will create more welfare overall, even though there may be specific cases where more utility could be created if these rules were ignored.

If an act-utilitarian approach were used when applying organ allocation criterion based on social value, it would mean that in each specific case, a thorough investigation would be needed to assess the life of the patient and their social contributions. However, the costs of such a process would be sure to outweigh the expected benefits. With a rule-utilitarian approach on the other hand, rules can be implemented that will in general create more welfare, even if there are certain cases in which more welfare could be created if the rule was not followed. For example, the immediate family of a patient are often the people who are most detrimentally affected by the patient's death, so a rule could be implemented that those with the most immediate family members should be given priority for an organ. Everything else being equal, their death will cause more detriment than that of a patient who had less immediate family members. However, there may be cases where a patient has less immediate family members than another patient, but they will be more detrimentally affected because they have a closer relationship, whereas the immediate family of the other patient are more estranged. Whilst in this case it would be better to allocate the organ to the patient who had few immediate family members, the investigation into the status of the



relationship between the family members and how each of them would be affected by the possible death of the patient would be too costly in terms of time, resources, and intrusion<sup>3</sup>, to provide much, if any, benefit.

### **Recognises individual rights and obligations**

One reason why a rule utilitarian approach is preferred to an act utilitarian approach is that it recognises the moral and social importance of individual rights and obligations because of its commitment to an overall moral strategy. With standard kinds of act utilitarianism, the action-by-action maximisation of social utility would destroy these rights and obligations, as no direct weight is given to agent-relative considerations (Hooker, 1990, p. 69). It might not have difficulty dealing with the moral problem of benevolence, as social utility can be increased by helping other people, however, it does have difficulty with the moral problem of justice precisely because it cannot adequately deal with the problems of moral rights and obligations.

To help illustrate this, Harsanyi gives the example of the government taking away a person's home in order to build a new freeway/motorway, and asks if this is a morally justified action. For the act utilitarian, this action would be morally justified if it creates more utility than disutility. The building of the motorway would benefit the construction team through providing jobs, and users of the

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<sup>3</sup> It is conceivable however, that the patient and family may not mind the intrusion into their privacy if it means that their loved one stands a better chance at receiving an organ.

motorway by providing quicker travel times, as well as many other parties. However, its construction would also create negative utility for the person and their family whose home has been taken away. For the act utilitarian, taking away the person's home is still morally justified even if the utility created is only very slightly more than the sacrifices imposed (Harsanyi, 1985, p. 117). For Harsanyi, this conclusion is clearly inconsistent with common sense morality as the government's actions violate individual rights, specifically, the person's property rights to their home. He says that even if the government offered reasonable compensation, the taking of the home would only be justified if the resulting total utility were significantly more substantial than the resulting total disutility (1985, p. 117). It is not enough for the resulting utility to be only slightly more than the disutility to justify violating the person's moral rights.

If individual rights are to be protected, there will be both social benefits and social costs; benefits for a person from their rights being protected, but inconveniences created when the person's freedom of action is restricted in order to protect the rights of others. However, as Harsanyi points out, the social benefits of such a moral code that protects individual rights and obligations will greatly outweigh the social costs. "...[M]ost of us will strongly prefer to live in a society whose moral code gives clear protection to the individual rights, and does not permit the violation of these rights, except possibly in some rare and rather special cases" (1985, pp. 117–118). It is the recognition of the moral and social importance of these individual rights and obligations that makes rule utilitarianism preferable to act utilitarianism.

By taking a rule utilitarian approach not just to morality, but also to resource allocation decisions, a much higher level of social utility can be created than if an act utilitarian approach were taken, as people would surely rather live in a society in which theirs, and other people's, individual rights are respected.

### **Preferred Over Egalitarian approach**

Defending a utilitarian approach for equality and distributive justice over a more egalitarian approach can be done by appealing to the concept of the "veil of ignorance" and looking at the different responses between Harsanyi and Rawls. The concept of the veil of ignorance, as described by Hooker, is used by both Harsanyi and Rawls when deciding what rules should be in place for society.

"Suppose that, instead of trying to select rules from a point of view in which there is equal concern for everyone and full information about the likely benefits and harms of different possible rules, we select rules for society from an "original position" in which we care about only ourselves but are behind a "veil of ignorance" which hides from us all specific information about ourselves. Behind this veil, we don't have any idea whether we are talented, energetic, healthy, female, religious, etc." (Hooker, 2014, p. 285)

The main idea here is that because behind the veil of ignorance we have no information that could bias our selection of the rules, we would make a rational choice about what these rules should be. However, even though Rawls and

Harsanyi both use the idea of the veil of ignorance and have the same starting point, they both give very different suggestions about what these rules should be.

For Harsanyi (cited in Hooker 2014), the rational choice behind the veil of ignorance would be to choose whatever rules would maximise utility.

“If one had an equal chance of being anyone once the veil went up, then the way to maximize one’s own expected utility behind the veil would be to pick the rules with the greatest expected average utility, everyone’s utility being counted equally and impartially.” (2014, p. 285)

Rawls (cited in Hooker 2014) on the other hand, claimed that the reason why social and economic goods and opportunities should be distributed to the least advantaged people in society first is because when deciding on the principles of justice for a society, if no one knew what their place in that society was going to be, they would choose such a principle just in case they were in fact one of those in the less advantaged position once the veil was raised. He argued that

“...behind the veil of ignorance one would be rational to be risk averse and thus focus on the position of the worst off instead of the average position.”  
(2014, p. 285)

The problem with Rawls’ position however, is that he supposes that the rational choice that people would make, would be the one that involved risk aversion, even though rational choice does not necessarily require risk aversion. It is for this

reason that Rawls' argument has been widely thought to be unpersuasive (Hooker, 2014, p. 285).

If you apply the veil of ignorance to organ transplantation, but allow one piece of information from behind the veil, namely, the percentage chance that you as a citizen might require a transplant in your life, the rational choice would undoubtedly not involve risk aversion as the chance of you requiring a transplant is so small. In 2016, the population of the UK was 65.6 million (Office for National Statistics, 2017, p. 2), and the number of people on the transplant list was 6389 (NHS Blood and Transplant, 2017). This means that there was just a 0.0097% chance for each citizen that they would need an organ transplant.<sup>4</sup>

When deciding what the rules for organ allocation should be from an "original position" in which we care about only ourselves but are behind a "veil of ignorance" which hides from us all specific information about ourselves, *apart* from the 0.0097% chance that we will require an organ transplant, surely it would be more rational to choose those rules which increased average utility, rather than those which helped risk aversion. The organ allocation criterion that I suggest, of allocating organs to those who are most socially valuable (from amongst the most urgent patients), would increase average social utility, whilst allocating organs to those who are least advantaged (from the most urgent patients) would not. Given such a small chance that someone will require an organ transplant, it is unlikely that they would err on the side of caution and take a Rawlsian approach,

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<sup>4</sup> This is ignoring any hereditary or other indicators that you will require a transplant in your life. This statistic takes into account only the number of people in the UK and the number of people that require an organ transplant in the UK.

supporting a rule where the least advantaged are prioritised. It is more likely that, given the 99.9903% chance that someone will not need an organ transplant, they will choose the allocation strategy that will increase average utility. If the inclusion of a social value criterion into the organ allocation criteria was implemented, there is essentially a 99.9903% chance for each citizen that they would benefit from it (or at least not be detrimentally affected), with only a 0.0097% chance that they would not. In this situation, it would be a much more rational choice to opt for the rule which increased average utility.

## **Thesis structure**

In order to provide a more comprehensive assessment of the ethical acceptability, and the practicability of including social value considerations into resource allocation decisions, I will need to look at a number of different issues, of which, will form the basis of the chapters.

I begin by giving an overview of the current allocation procedures for the main transplantable organs in Chapter 1 in order to highlight how and why organs are allocated to certain patients and not others. I outline the considerations that are taken into account when determining a patient's medical suitability as a potential organ recipient, and how a patient's level of urgency, and in some cases, age, determines their place on the waiting list. By giving an account of the organ allocation procedure, the overarching principles for organ allocation can be

highlighted

I then move on to discuss what is wrong with the current organ allocation system in Chapter 2, outlining 3 main problems, and suggest that the addition of a social value criterion to replace the waiting time criterion would solve these problems. I show that 1) the current system places too much emphasis on the welfare of the patients and not enough emphasis on the effects each organ allocation has on wider society, 2) the current system can be unfair to certain individuals due to the waiting time criterion, and 3) that even though part of the nature of the current system is to promote utility, as it stands now, it stops short of promoting additional utility even though it could be done in an ethically acceptable manner.

I then discuss other possible allocation systems to see if they would provide suitable alternatives to the current system, either based on their defining feature, or alongside the current needs-based system as a combination system, concluding that whilst the alternatives provide acceptable options when combined with the current system, none offer as much benefit as a social value/needs-based combination system.

This leads on to Chapter 3 where I outline how the inclusion of a social value criterion into organ allocation decisions could work as a replacement for the waiting time criterion, and why it is acceptable, and perhaps even required, based on the role of the government to do what is not only in the best interests of individual members of society, but also society as a whole.

Once this partial justification for the inclusion of social value considerations is

made, a case study is examined in Chapter 4 to highlight the problematic features of such an approach. The case study looks at the Seattle Artificial Kidney Center in the 1960's, where social value criteria were heavily used in the patient selection process for medical treatment, specifically in the selection of patients for dialysis. Resources were scarce due to the treatment still being in its infancy, but showed promise due to the development of the cannula shunt, and so only a limited number of patients could be treated. This approach was ultimately abandoned for numerous reasons, but this chapter looks at the patient selection process used and highlights the problematic features of the inclusion of social value considerations within this system: mainly, the subjective nature of the social value judgements made by the patient selection committee, and the criteria upon which these judgements were made.

I then move on to Chapter 5 where I suggest how these problems could be avoided if social value judgements were included in organ allocation decisions again. The main suggestion here is that rather than relying solely on a lay committee to make the patient selection decisions as was done in the case study discussed in Chapter 4, experts from relevant fields such as sociology, psychology, and economics should be involved in the allocation process. I outline how experts from these fields would form the *criteria* selection committee, and how they would determine the needs of society at a given point. Another expert committee for *patient* selection would determine the social value of patients based on their contributions towards meeting the needs of society, selecting for treatment, the patient who is most socially valuable.



This leads on to Chapter 6 where I look at the ways in which a person is instrumentally valuable to society, and where these contributions could figure in an organ allocation policy, explaining that there are 3 main categories in which a person can be valuable: 1) active social contributions, 2) effects on proximate individuals, 3) morality. It is these categories, and the contributions within these categories, which would be taken into account by the expert committees when making their social value judgement. I show that whilst these are the 3 main ways in which a person can be instrumentally valuable to society, when it comes to actually implementing these into the criteria on which objective social value judgments can be made, their scope needs to be limited both for ethical, and practical, reasons.

I then move on to Chapter 7, where I outline how the final decision on who would be selected as the organ recipient would be made if a social value criterion were included in the organ allocation process. I suggest that all of the criteria for determining a patient's social value should be applied simultaneously to gain a full picture of the patient's social value. This is in contrast to applying the criteria one at a time in a linear manner, narrowing down the potential recipients until only one remained, as a patient may end up being judged on only one or two of their contributions.

I also describe how points would be allocated to patients based on the contributions that they make, drawing parallels with the immigration points system as, even though the criteria differ, the structure is similar. This parallel also serves to show that a points system is able to reflect social contributions, as

the immigration points system is itself based mainly on social contributions.<sup>5</sup>

Through the detailed discussion of the issues involved with including social value considerations into resource allocation decisions, it will be shown that the inclusion of a social value criterion can be both ethically, and practically made, with the welfare created with each organ transplant benefiting not only the individual recipient, but also wider society.

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<sup>5</sup> However, the social contributions included in the immigration points system are mainly economic in nature.

# Chapter 1: What do we do now?

## Introduction

The number of people who require an organ transplant is growing at a faster rate than the number of donated organs is growing and this has resulted in an increasing number of people dying whilst waiting for an organ transplant (NHSBT, 2015b). Because the number of people needing an organ is greater than the number of organs available for transplant, there has to be some form of rationing. If all people who require an organ are not able to receive one, then there needs to be a way to allocate the available organs fairly, and in such a way that makes the most of, or at least does not waste, this scarce resource. According to the NHSBT (National Health Service Blood and Transplant), transplantable organs have to be “allocated in a fair and unbiased way based on the patient’s clinical need and...achieving the closest possible match between donor and recipient.” (NHSBT, 2014d, sec. 10)

For the different transplantable organs, there are slight differences between the allocation criteria and procedure, and these procedures differ in respect to children also. The more specific details of the criteria for each organ will be given later in this chapter, but without going into too much depth about the specifics relating to patient physiology. There is, however, a general standardised system overall, or at least general criteria that are considered when making organ allocation decisions, and this will also be referred to throughout the thesis.

The system that is in place now in Britain generally uses patients' medical need and level of urgency as the most important factor when determining who should receive an organ (unless the patient is a child; paediatric patients often receive priority over adults for paediatric organs, and sometimes even suitable adult organs too for various reasons, even if the child's medical need is not as urgent as an adult recipient) (NHSBT, 2014e, sec. 1.2.3, 2015c, sec. 1.3.1.2).

Of the potential recipients, the one who is in most urgent need will generally be given priority for an organ transplant based on the accumulation of points using an algorithm based on the allocation criteria that is in place for the organ that they are waiting for. The way that calculations for points are worked out differs from organ to organ with some criteria given a heavier weighting for some organs than others. For some organs, a more exact tissue match or blood type match is needed than is the case for others, or waiting time may play a significant role, or the age of the potential recipient may be an important factor for certain organs.

There are many parts to the organ allocation process, such as who is a suitable organ donor, and how patients should be assessed and registered as requiring an organ. However, the more relevant aspects of the process to this thesis are those relating to which patients are not given a place on the waiting list and why (contraindications), and how the position of those who are given a place on the waiting list is decided (prioritisation), as it is these two aspects which relate most to the actual allocation of organs. The way in which these two features apply for the main transplantable organs will be shown in Table 1 in the next section, and then the main overarching principles for organ allocation will be summarised. Because

the suggested changes to the organ allocation system could apply to all scarcely available organs, I will discuss the problems with the organ allocation system and how they can be rectified in a revised system as a whole, but draw on kidney allocation specifically in order to provide illustrative examples. By referring to kidney allocation in the form of illustrative examples alongside a broader discussion, it will allow for a better illustration for how a revised system could work. The reason for using kidneys in the illustrative examples is that this could be the area in which the revised allocation system could be trialled first, given that the life-threatening nature of kidney failure can be better managed through dialysis than the failure of other organs. Once this revised allocation process has been illustrated and established, it could be applied to other organs, taking into account the varying contra-indications for each organ.

## **Overview**

The “[R]ules for allocating organs are determined by the medical profession in consultation with other health professionals, the Department of Health and specialist advisory groups” (NHSBT, 2015i). The advisory groups (made up of representatives from NHSBT, commissioners and Departments of Health, others from statistics and clinical studies, and lay members) focus almost exclusively on issues to do with specific organs regarding their donation, allocation, retrieval and transplantation rather than the more general issues in these areas for the field as a whole. They enable an exchange of views and information on practical and

strategic issues and recommend changes to the nationally agreed protocols for allocating organs when necessary (NHSBT, 2012). More specifically they:

- Consider operational aspects of transplantation including organ retrieval, organ allocation and data analysis and to monitor activity and outcome.
- Recommend, as necessary, changes to the nationally agreed protocols, to recognise clinical governance issues and ensure, as far as possible, that national standards of good practice are in place with regard to waiting list criteria and organ allocation that provide equity of access to transplantation.
- Remit to NHSBT matters of practice or policy that require consideration within a broader framework.
- Liaise as necessary with the British Transplantation Society and other bodies in the development of national standards. (NHSBT, 2015a)

Even though the specific allocation criteria for each organ are different, there are some broad principles that apply across most of the transplantable organs. The guidelines that usually apply are that the (medically suitable) patient who is in most urgent need (who will die the soonest) will generally receive priority for the organ, with closeness of match to the available organ for transplant being used to decide between patients of approximate urgency. Other criteria that are also

taken into account are that the patient must have a reasonable expected survival time after transplant; at least 2 years for kidneys, and 5 years for livers, and must be able to comply with the immunosuppressant therapy after a transplant (see Table 1 below).

## **Patient/organ matching**

When deciding who should be the recipient for a particular organ, the blood group, age and size of both the donor and the recipient are all taken into account to ensure the best possible match for each patient. Finding the best-matched patient for an organ increases the chances of a successful graft, thereby making good use of the organ and increasing the patient's quality of life. For some organs, such as kidneys, tissue type match is also a consideration, although this is more important for some patients than others. A computer program is used to identify which patient is the best matched, or alternatively, the transplant unit to which the organ is to be offered (NHSBT, 2011).<sup>6</sup> However, there are circumstances where the organ will not be offered to the best-matched patient. If another patient is classed as urgent, or super urgent, the need for an organ transplant due to the risk of imminent death outweighs the risks associated with transplanting a poorly

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<sup>6</sup>The organ will sometimes be offered to a different transplant unit to the area where the donor is being treated in order to provide an equal distribution of organs between transplant centres; livers are allocated on a 4 week rolling rota to the transplant centre that has performed the least amount of liver transplants. However, the organ will still be offered to the best matched patient covered by that transplant centre (NHSBT, 2015d, sec. 7.3)

matched organ (NHSBT, 2014c, sec. 6.1, 2015d, sec. 2.6, 3).

## Contra-indications

As with all organs for transplant, there are certain contra-indications that mean that a patient is not a suitable recipient for a transplant, with some organs having more stringent contra-indications than others. There are also separate contra-indications applicable to a potential *donor* that means that their organs are not suitable for transplant.<sup>7</sup> However, it is the contra-indications for the potential *recipients* that are most relevant here. It is these contra-indications that help the scarce resource of organs to be used effectively and minimise the risk of rejection or graft failure.

The contra-indications can either be absolute or relative. The *absolute* contra-indications are mainly based on the physical in/compatibility of the recipient to the donor organ and are in place because transplanting an organ into a poorly matched patient gives a high risk of graft failure. To offer an organ to particularly poorly matched recipients would be futile and a waste of an organ due to the high chance of rejection. *Relative* contra-indications may also be based on the physical incompatibility of the recipient to the organ donor but do not pose such a high risk of graft failure, or they may be to do with the circumstances of the patient, e.g. their age, previous graft failures, or a likelihood they will not keep to the drug

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<sup>7</sup> Such as if they are HIV positive.



regime required for the organ to be accepted by their body.<sup>8</sup> Whilst these relative contra-indications are not outright grounds for denying a patient a transplant, in conjunction with other factors surrounding the patient's circumstances, the clinician may decide it wise to not allow the operation. This could be because the patient stands only a small chance of benefiting, and transplanting the organ into another patient is likely to result in a higher chance of success. The patient may not benefit from the transplant because they are poorly matched (absolute contra-indication), or because they are likely to not stick to the medication regime required after transplantation (relative contra-indication). In either situation, transplanting the organ to such a patient may not give any increase in quality or length of life, and the organ will have been put to poor use; it could have been transplanted into someone with a higher chance of a successful graft and quality of life.

Each patient is different, and it is up to the clinician to decide whether they think the patient is suitable for a transplant. The patient may have some relative contra-indications that apply to them, but the clinician can decide whether they are enough of a barrier to prohibit the patient from being registered on the waiting list for an organ. E.g. the patient may not have successfully adhered to a medical drug regime for a particular illness in the past, but the clinician can decide if this is likely to happen again from talking to the patient and determining the reasons behind the patient's previous poor medication regime adherence.

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<sup>8</sup> See Table.1 below.

## Specific organ allocation criteria

Below are the specific organ allocation criteria for different organs that determine a person's place on the waiting list as well as any contra-indications that might make them unsuitable for a transplant.

Organs	Priority	Contra-indications	Distribution
<b>Kidneys</b>	<p>Priority for urgent paediatric patients (NHSBT, 2014e, sec. 1.2.3)</p> <p>Waiting time and best match factors (HLA match, donor-recipient age difference, location of patient relative to donor, blood group match) considered together in a points system (NHSBT, 2014e, sec. 1.2)</p>	<p><b>Absolute:</b></p> <p>Uncontrolled cancer</p> <p>Less than 2 years expected survival</p> <p><b>Relative:</b></p> <p>Less than 5 years expected survival</p> <p>Graft loss more than 50% at 1 year.</p> <p>Patients unable to comply with immunosuppressant therapy.</p> <p>Immunosuppression predicted to cause life-threatening complications (NHSBT, 2014j, sec. 3.3)</p>	
<b>Pancreases</b>	<p>Priority is given to sensitised and hard-to-match patients provided this does not prejudice severely ill patients (NHSBT, 2014h, sec. 1.2)</p>	<p><b>Absolute:</b></p> <p>Physical unsuitability for operation or receiving the organ.</p> <p>Patients unable to comply with immunosuppressant therapy.</p> <p><b>Relative:</b></p> <p>Certain physical unsuitability considerations</p>	

<b>Livers</b>	Waiting time (NHSBT, 2014h, sec. 1.3.1)	Continued abuse of alcohol, smoking or other drugs (NHSBT, 2014i, sec. 3.2)	
	Priority for super urgent patients, then hard-to-match patients (NHSBT, 2015d, sec. 2.6, 3)	<p>Recipients must have an estimated life expectancy of 5 years with a quality of life acceptable to the patient (NHSBT, 2015j, sec. 3.2)</p> <p>Illicit drug use (in certain circumstances)</p> <p>Alcohol-induced liver disease, where the patient is likely to revert back to alcohol abuse or not comply with medication (NHSBT, 2015j, sec. 3.7)</p>	Livers allocated on a 4 week rolling rota to the transplant centre that has performed the least amount of liver transplants (NHSBT, 2015d, sec. 7.3)
<b>Hearts</b>	<p>Urgent patients receive priority – first by blood group identity, then blood group compatibility, then by waiting time (NHSBT, 2014c, sec. 6.1, 2014b, sec. 1.2)</p> <p>Urgent paediatric patients are ordered according to waiting time (NHSBT, 2014b, sec. 7)</p>	<p><b>Absolute:</b></p> <p>Physical unsuitability – (Included in this is other illnesses and physical incompatibility.</p> <p>Continued abuse of alcohol or other drugs</p> <p>Psychiatric history likely to result in non-compliance and/or persistent non-compliance with medical therapy.</p> <p>Severe peripheral or cerebrovascular disease, malignancy, other life threatening medical condition, likely to cause death within five years.</p> <p><b>Relative:</b></p> <p>Certain physical unsuitability considerations</p> <p>Continued smoking (Banner <i>et al.</i>, 2011; NHSBT, 2014c, sec. 8)</p>	Hearts will be offered to urgent cases in the transplant centre where the organ was removed, and if no urgent cases, it will be offered to the nearest transplant centre that requires it to minimize travelling time (NHSBT, 2014b, sec. 4)

<b>Corneas</b>	Children and urgent patients are given priority first (NHSBT, 2013, sec. 3.2.1.1, 2015c, sec. 1.2.1.2)	<b>Absolute:</b> If treatment is futile  <b>Relative:</b> If treatment is likely to not achieve the intended outcome (NHSBT, 2013, sec. 3.3)	There is currently no national transplant list for corneal transplantation; each centre holds its own list locally. Requests for corneal tissue are made by or on behalf of the treating Ophthalmologist to the Duty Office at ODT (NHSBT, 2015c, sec. 1.3.1)
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Table.1<sup>9</sup>

## Overarching Principles

It can be seen from the outlines above, that determining a patient's place on the waiting list depends mainly on their level of urgency for an organ. If a patient's health is in a critical condition and they are in urgent need of a transplant, then that patient will usually receive priority for an available organ provided that they are medically suitable. Children also often receive priority for an organ transplant, either due to irreparable damage being done if a transplant is postponed versus that compared to a non-urgent adult transplant being postponed (e.g. cornea transplantation), or because suitably matched paediatric organs become available

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<sup>9</sup> The list of contra-indications mentioned here is not a complete list; detailed patient physiology contra-indications have been omitted as their specific medical language and detail is of less relevance.

less frequently than adult organs (NHSBT, 2015c, sec. 1.3.1.2). Non-urgent patients are again generally ordered by their level of need/urgency, with their time on the waiting list being counted if everything else is equal. For kidneys, one of the main considerations for allocation is waiting time, but this is because the risk to the patient's health whilst waiting for an organ can be managed through alternative medical treatments such as dialysis, and a patient can be on dialysis for up to 20 years or longer (NHSBT, 2015e). However, even though a patient's life can be sustained on dialysis, it is a burdensome treatment and is no replacement for a real kidney. The inclusion of waiting time as a criterion plays a role in minimising the accumulative detriment that is caused by being on dialysis for a prolonged period of time, both from an emotional, and physical standpoint, by helping to minimise the chances of the patient's health deteriorating to such a point where a transplant is no longer a viable treatment option.

The contra-indications for potential organ recipients are mainly based around criteria that help to ensure a successful graft. Contra-indications related to patient/organ blood type and tissue match, as well as contra-indications related to adherence to the immunosuppressant medication regime, help to ensure that the organ is not rejected. By taking care to pair patients with organs that are as close a match as possible to their own physiology, or at least compatible, patients stand the best chance of their transplant being successful, resulting in increased welfare for themselves, and effective use of the available organs.

However, there are a couple of contra-indications for certain organs that have more to do with life expectancy post-transplant than they do with matching the

patient's physiology. For kidneys, there is a relative contra-indication that the patient must have a life expectancy of more than 2 years, and for a liver, the patient must have a life expectancy of at least 5 years with a quality of life acceptable to the patient. The reasoning here is more along the lines of making good use of the limited organs that are available rather than ensuring the welfare of the recipient, as even if the recipient would only live for one year post transplant, their welfare might have been increased.

# Chapter 2: Why change the current system?

## Introduction

It was made clear in the last chapter that there are restrictions in place on who can receive an organ transplant and who cannot, and there are also rules on how the people who *can* receive a transplant are ordered on the waiting list. These rules are in place in order that the organs can be put to good use by not being transplanted into people who are classed as having too high a risk of organ rejection or complications, and not providing an organ to those patients whose life expectancy is too low (NHSBT, 2014j). Transplanting an organ into high-risk patients jeopardises the benefit that this scarce resource can create; if transplanted into a patient with less risk of complications and with a longer life expectancy, the expected useable life of the organ can be increased. To transplant an organ into someone where it will be used for only a year due to the patient's poor life expectancy, when the organ's expected useable life is closer to 10 years, could be seen as poor use of a scarce and valuable resource (everything else being equal) due to the remaining life years left in the organ. It is for this reason why there is an absolute contra-indication for kidney transplants that the patient must have a life expectancy of at least 2 years, and a relative contra-indication that the patient must have a life expectancy of at least 5 years. By having these regulations in place, the number of lives that can be saved, and the amount of welfare

produced from the available organs is hoped to increase. However, as will be discussed in the first part of this chapter, whilst the current contra-indications for kidneys, as well as all other organs, limit potential recipients to only those that are medically suitable and so does go some way to getting the most use out of an organ and increasing welfare (mainly for the patient), I suggest that allocating organs under a system that also takes into account an additional criterion of a person's social value will make even better use of the organs available by increasing the amount of overall welfare created, not just for the patient, but also for wider society.

In this chapter I will describe what is wrong with the current allocation system for organs, including kidneys, and why it is not preferable when compared to an organ allocation system based on patient need (in terms of medical suitability and ability to benefit) *and* their value to society. There are three main reasons as to why the current allocation system is not preferable: 1) too much emphasis on patients as individuals, 2) unfair to certain individuals due to the waiting time criterion, and 3) the argument for further utility, whereby extra utility could be acceptably created whilst maintaining the main ethos behind the current system. I then move on to briefly look at alternative systems of organ allocation, such as random selection, and systems which allocate organs based on a patient's merit, age, or value to society in order to ascertain whether a social value allocation system would indeed be the preferred alternative option over the current system. It will be shown that these alternatives, when based solely on their main feature, result in unnecessary deaths. However, when combined with the current needs-based system, they become more appealing, but it is only the combination of needs-



based and social value criteria in a combined system that provides a real improvement over the system currently in place.

## **Problems with the current system**

There are shortcomings with the current waiting list system that is in place; however, there is an attempt to balance these against the benefits that are gained. For example, because prioritisation for an organ on the UK waiting list is mainly based on the patients urgency, it means that at any point, the numbers on the waiting list could expand to such an extent that “having one’s name on the waiting list has little effect on the chances of treatment in the foreseeable future” (Leenen, 1982, pp. 33–34) (unless one’s need is particularly urgent).

However, the postponement of treatment for those who are in less urgent need is balanced against the benefits of treating those who are in *most* urgent need. By treating the most urgent first, a life is saved that would perhaps have been lost had treatment been given to a patient whose medical needs were less urgent; the less urgent patient has a better chance of surviving long enough to be treated when the resource next becomes available.

The allocation of kidneys is slightly different in that whilst the level of urgency is taken into account when it comes to children, prioritisation for adults is mainly based on being a suitable match for the organ in combination with the patient’s waiting time. Including urgency as a more central criterion in kidney allocation

may not be necessary given that the health of a patient with renal failure can often be managed through dialysis, and allocating organs to those patients who are the most suitably matched helps to make good use of the organs available as it helps to reduce the risk of organ rejection. However, there is still a problem with the allocation criteria for kidneys, as will be highlighted in the next sections, given the inclusion of a waiting time criterion.

### **Too much emphasis on patients as individuals**

Whilst the current system does go some way to making sure that the organs available for transplant are not wasted, it does not go so far as to make sure that the *most* is made of those organs, or at least, even better use could be made of the organs. Whilst any organ that saves someone's life is not strictly wasted, when viewed not in isolation, but compared to who else's life could have been saved using that organ, it may emerge that the organ could have been used more wisely. When someone's life is saved, or when any treatment is given, there are wider effects than just those which simply affect the individual, and the consequences of these wider effects should be taken into consideration when making resource allocation decisions. These effects could be positive or negative, and steps should perhaps be taken to promote or minimise some of these effects.

Under the current allocation system, the NHSBT explicitly directs, under the heading of '*benefit*', that:

“Donated organs should be distributed in a way that provides greatest good to the *cohort of patients* on the National Transplant Waiting list for that organ.” (NHSBT, 2014a)

Whilst it might be right to provide the maximum benefit to the patient cohort, if it is also possible to increase wider welfare at the same time as satisfying the former aim, with no extra detriment caused, analogous to *Pareto improvements*, it would be foolish not to.

The Council on Ethical and Judicial Affairs of the American Medical Association<sup>10</sup> lists 5 factors which they feel may appropriately be taken into account when allocating organs or other scarce medical resources, and all but one are directly patient centred:

- (1) the likelihood of benefit to the patient
- (2) the impact of treatment in improving the quality of the patient's life
- (3) the duration of benefit
- (4) the urgency of the patient's condition (i.e., how close the patient is to death), and in some cases
- (5) the amount of resources required for successful treatment.

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<sup>10</sup> Even though these factors come from the AMA, they match the factors of the UK organ allocation system, but are given more explicitly and succinctly.

(Clarke *et al.*, 1995, p. 29)

These considerations, apart from the last, relate to how much benefit the organ or scarce resource can give to the patient. However, if other considerations such as how much benefit the organ could give to society were also considered, even better use of the organ could be made.

Take a situation where there is a research scientist who has made, and is continuing to make, discoveries on how to cure deadly diseases, and a recluse, unemployed, friendless individual with no family. Both individuals require an organ transplant, but there is only one organ available and it must go to either the scientist or the recluse. Both patients are in urgent need, and both patients will make a full recovery with another 20 years good health ahead of them. It could be argued that giving the organ to the scientist would be a better option as not only would the scientist benefit from the organ, but so too would the rest of society. However, if the organ were given to the recluse, only the recluse would benefit. In either case, the organ would not have been wasted as it has saved someone's life, however, in the case of allocating the organ to the scientist, the organ has been put to *better* use by way of it not only saving a patient, but also creating extra welfare for society. By considering the wider effects the transplant has outside those for the patient, more welfare has been created than would have been created if these effects were not considered.

The scientist's survival has the potential to change society for the better and to save lives all around the world with their research, and their death means that society will miss out on this. The death of the recluse on the other hand, will have

no such impact. Whilst it may seem insensitive to point it out, the death or survival of the recluse has little impact on society, or indeed anyone (apart from the patient himself and the city funeral directors brought in to deal with the deceased). To give the organ to them would be a comparatively poor use of the resource if it were to mean the scientist would die instead. The scientist has more *instrumental* value to society than the recluse does, and by including the instrumental social value of the patients in the organ allocation decision, more overall welfare can be created whilst still achieving the maximum benefit for the patient cohort. Of course, it can be expected that making such assessments as to which patient has the most instrumental value in real cases will not be as straightforward as in this deliberately extreme case, but nevertheless, it serves to highlight the role instrumental value could play in organ allocation.

This is the crux of the argument for altering the current organ allocation system. Even though the organs are not being wasted as they are saving people's lives, and they are being used wisely to an extent, the benefit that the organ has to offer could be increased further. The current system falls short in that not enough emphasis is placed on the fact that the organ available for transplant has more benefit to offer than simply saving just one person's life. If organs were allocated based on how valuable patients' lives are to society (alongside the needs-based system), with the most socially valuable (and urgent) patients receiving priority, then the welfare that is created from each organ transplant is greatly increased, and the detriment caused to society by the death of one of its valuable members is reduced. By allocating organs in this way, not only will the patient who receives the organ benefit, but also the society to which they belong.

Under the current system, in general, those who need an organ the most receive priority for the organ (provided they are medically suitable) even if it means that the situation in the example mentioned above occurs. A patient may be given priority for treatment over another similarly urgent patient, despite the consequences of the death of this other patient being more detrimental. With kidneys, even though urgency does not play as large a role for adults as it does for other organs, the same situation could occur if the recluse were a more suitable match to the available organ than the scientist, or more importantly, if the recluse had been on the waiting list for a longer period. The organ could be transplanted to an individual whose survival or death has no real consequences (beyond themselves), or at least only a minor impact on the welfare of society, even if it means that someone whose contribution to society is extremely important may die instead whilst waiting for the next available organ. Allocating organs in a way that takes into account the patient's instrumental value to society can rectify this situation. There are of course, considerations other than maximising efficiency of resource use that also need to be taken into account, such as equality of access, fairness and justice, and deontological considerations relating to the moral equality of individuals (which will be discussed later in the thesis), that may place a constraint on the extent of the increase of benefits.

It must be noted that if a social value criterion is used, it does not necessarily *have* to be the case (and indeed in the system that I propose, is not the case) that those *most* in need of an organ transplant under the current use of the term urgency will miss out on the chance of a transplant to someone who is in less need but more valuable to society. People's lives are still important, and so those people who are

in most need of an organ should be treated first, as is currently the case. To not treat these people first may result in their unnecessary and untimely deaths. (If these urgent patients whose deaths were relatively imminent were treated first, significantly less urgent patients would still be able to be treated later on as they have longer left to live.) However, in a situation where there is more than one person who is in need of an organ, and they are at a *similar* level of urgency or need, in order to realise the extra benefit that the organ can provide, the organ should be given to the person whose contribution to society is most important. For example, patients waiting for a heart transplant on the urgent waiting list are all classed as being of the same urgency, and once on the waiting list, if there is more than one patient who is a suitable match, the organ goes to the person who has been waiting the longest (NHSBT, 2015h). In the case of kidneys, if there is more than one patient who is a medically suitable match for the available organ, and has an equal amount of points from the other criteria of distance from the organ and age difference from the donor, the organ would be given to the patient who had been on the waiting list the longest. What I suggest instead, is that rather than relying on a first-come first-served system (the problems of which will be discussed in the second half of this chapter) for patients who are at the same level of urgency and suitably matched, the organ should be given to the person who is most instrumentally valuable to society. In this way, those who are in most need of an organ receive treatment first, but the benefit created for society is increased by the most instrumentally socially valuable of those patients being given priority.

Despite this, there may be situations in which it would be reasonable to allocate an organ to someone whose need for a transplant is less urgent under the *current*

*use* of the term 'urgency'. For example: suppose there are two patients waiting for the same suitable organ, with one patient being in urgent need but who is less socially valuable, and the other patient in slightly less urgent need but who is *more* socially valuable. If there were only one suitable organ likely to become available before the less urgent more but socially valuable patient would die without a transplant, then they should receive the organ. The reason for this is that if the more urgent patient were to receive the organ first, the less urgent patient would likely die before another suitable organ becomes available, and the extra welfare that could have been saved/created from saving the more socially valuable, but less urgent patient would be lost. The problem with the use of the term urgency under the current system is that it doesn't factor in that both of these patients are really at the same level of urgency. Regardless of whoever receives the organ in this example, the patient who is *not* the recipient will die before another organ is likely to become available. As such, the term urgency should encompass all those patients who are likely to die before another suitable organ is likely to become available. This revised criterion for the grouping of patients into the urgency categories better reflects the actual urgency of the patients in a practical setting.

So out of those patients who will die before another suitable organ becomes available, the most socially valuable patient should be allocated as the recipient. If there are 4 patients in this group and only one organ to allocate, 3 patients are going to die no matter who receives the organ, regardless of *imminent need*. And so, in such a circumstance, it seems reasonable to allocate the organ to the patient whose continued life will provide the most benefit to society; this way, the overall detriment that is caused by the deaths of the patients is reduced. (The redefinition



of urgency is discussed in more detail in the next chapter under the heading “*How Will the New System Work: Option 1*”.)

Of course, treating patients as individuals, and trying to give them each the care and treatment that is best for them is a commendable aim, and common practice in doctor-patient relationships. Indeed, in other areas of healthcare where resources are not as scarce, such an approach is ideal. Advocating for the inclusion of social value considerations to be taken into account when resources are *not* limited would provide less benefit the more plentiful the resources are. However, when resources *are* scarce, taking into account the wider effects of allocation decisions will provide extra benefit, just as is the case regarding the £30,000 QALY (quality adjusted life years) limit in Britain (NICE, 2015c). Because monetary resources are limited, there is a loose cap on how much money can be spent per QALY (depending on their circumstances) in order that the available financial resources can provide as much benefit as possible. The utilitarian nature of the financial-QALY will be discussed in more detail later in this chapter.

I acknowledge that the idea of including social value criteria into an organ allocation system does raise a number of ethical issues. But before I discuss these in detail, I will first look at some of the other problems with the current allocation system, and how the inclusion of social value considerations in patient selection could rectify them.

### **Unfair to certain individuals due to waiting time criterion**

Whilst the current system may adequately decide which patients are suitable for an organ transplant in the first place and which patients are a suitable match for an available organ, the way in which the final decision is made as to who receives the available organ is flawed. As previously mentioned, patients are generally ordered on the waiting list according to how urgently they require a transplant. However, of the most urgent patients who are a suitable match for the available organ, (both physiologically and in proximity to the organ), and at relatively the same level of urgency and prognosis, it is the patient who has been on the waiting list the longest who would receive the organ (NHSBT, 2015h). It is this inclusion of waiting time as a deciding factor where the problem lies.

Allocating resources on a first-come, first-served basis is fair when those interested parties all have the option to claim the resource from the same date, and are aware of the option. However, in the case of organ transplants, people who are in urgent need of a transplant may have been registered on the waiting list for a shorter or longer time than someone else on the waiting list through no fault of their own. Take the case of two patients who are both in equally urgent need of a transplant, and for kidneys, are an equally suitable match; one patient's illness may have presented itself early on, whereas the other patient's illness may have developed later, but progressed more aggressively and plateaued to the same progression rate as the first patient. Both patients have the same level of need for the transplant, and both patients are an equally suitable match, but (everything else being equal) it will be the patient who has been on the waiting list the longest

who will receive treatment first.<sup>11</sup> I argue that it is unfair to use waiting time as a criterion in this situation given that the two patients did not have the opportunity to register on the waiting list at the same time, as one patient did not even have their illness at the same time as the other. The patient who has suffered the shorter but more aggressive illness is being penalised for not having their illness for as long, despite the fact that they are in just as much need, and just as suitable a recipient, as the patient who has had the longer, less aggressive form of illness, and who too had no control over when their illness presented itself, and its progression rate.<sup>12</sup> I suggest that replacing this waiting time criterion with a social value criterion would create more benefit overall, for both the recipient and society, and remove what might be seen as an unfair criterion that disadvantages some individuals without providing any real benefit. It might be pointed out that if social value considerations were included in organ allocation decisions as a replacement for a waiting time criterion, patients may still be disadvantaged based on circumstances that are outside of their control, and so why should this be a preferable option given that a waiting time criterion is not preferable for this exact reason? The difference between the two criteria however, is that the waiting time criterion is not morally relevant, and creates less benefit than a social value criterion. The patient who has been waiting the longest may not have suffered any more overall than the patient with the shorter, more aggressive illness; they may

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<sup>11</sup> There is a provision however, which helps to rectify injustices when a patient was not registered on a waiting list when they should have been: “6.12.2 If a patient was not (re)activated on the list when it is documented that they should have been and where the relevant allocation system includes waiting time as a factor, the waiting times should be amended. This should be approved by the relevant Chair of the Advisory Group (or Deputy when appropriate).” (NHSBT, 2014d)

<sup>12</sup> However, if the patient were in significantly more need, this would be taken into account and they could be registered as super-urgent (MacGowan *et al.*, 2013).

have suffered for longer, but perhaps not to the same intensity. With a social value criterion however, even though patients may still be disadvantaged due to circumstances that are outside of their control, the reasons for its use are morally relevant and based on objective judgements that should ultimately increase overall welfare.<sup>13</sup> (The moral reason for the inclusion of a social value criterion will be discussed later in this chapter.)

A further problem with the first-come, first-served element of the allocation criteria is that it may unjustifiably favour the well off to the detriment of the less well off. Whilst many people endorse a first-come first-served system for the distribution of resources in particular circumstances, such as intensive care beds (American Thoracic Society Bioethics Task Force, 1997) and organs for transplant (Childress, 2001), with The American Thoracic Society defending the principle as “a natural lottery” within an egalitarian approach for fair resource allocation (American Thoracic Society Bioethics Task Force, 1997), others claim it does just the opposite (Persad, Wertheimer and Emanuel, 2009, pp. 423–424).

Even though a first-come, first-served system, just like with lottery allocation, ignores differences between people, it doesn't necessarily treat people equally, or at least, it does not make the opportunity equally accessible for all. “It favours people who are well-off, who become informed, and travel more quickly, and can queue for interventions without competing for employment or child-care concerns” (Persad, Wertheimer and Emanuel, 2009, p. 424). If a first-come, first-served approach is to be truly equitable, then all potential recipients of the scarce

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<sup>13</sup> The way in which these social value judgments can be made objectively will be discussed in detail in Chapters 5 and 6.

resource must be able to present themselves in a timely fashion. If patients *with* insurance, or who are *more* well off, or who can join the queue faster due to *fewer* commitments are likely to be diagnosed as having end stage organ failure earlier than patients *without* insurance, or who are *less* well off, or with *more* commitments, then a first-come, first-served approach inappropriately favours some patients over others. “Injustice can arise not only from treating the equal unequally, but also from treating the unequal equally”, and it is this injustice that can arise in a first-come first-served system (Leenen, 1982, p. 33).

Furthermore, the queues of a first-come, first-served waiting list system are also vulnerable to bias or corruption. The relationship between a referring doctor and a consultant may affect a patient’s place on the waiting list (1982, p. 33), or, as the pandemic influenza planners for New York state pointed out: “Those who could figuratively (and sometimes literally) push to the front of the line would be vaccinated and stand the best chance for survival” (Bilittier, 2005, pp. 267–268).

In short, “first-come, first-served [systems] allow morally irrelevant qualities - such as wealth, power, and connections - to decide who receives scarce interventions, and is therefore practically flawed” (Persad, Wertheimer and Emanuel, 2009, pp. 423–424). Of course, not all of the problems with a first-come, first-served system are unique to this system alone; other systems may also be vulnerable to corruption and misuse to a larger or smaller extent. But it remains the case that a first-come, first-served system could be easily manipulated, e.g. by GPs exploiting their relationships with consultants to place patients in the queue for treatment earlier.

The objection that a first-come, first-served allocation system allows morally irrelevant qualities to influence who receives scarce resources, might also be levied against a system that incorporates social value considerations. After all, in both systems, non-medical factors will play a part in determining who can/will receive resources. However, simply because there are non-medical factors in play in both systems, it does not mean that in both systems the non-medical factors are morally irrelevant. Within the social value allocation system, the non-medical factors that would influence who receives treatment will make better use of the organ by way of creating more welfare and minimising the overall harm and detriment caused by the death of patients, whilst still maintaining a level of fairness and justice; these 'morally irrelevant' factors are necessary in order to achieve the aims of the system. Within a first-come, first-served allocation system on the other hand, the non-medical factors that affect whether a person receives treatment offer no such benefit.<sup>14</sup> The non-medical criteria simply favour those individuals who are in more privileged positions.

The reason why the non-medical criteria of a social value allocation system should be considered morally relevant is because one of the aims of a health care system is to ensure that the limited resources available are put to best use, as demonstrated by the contra-indications that exclude certain patients as being suitable recipients and the current criteria that a patient must meet to be considered as a possible recipient. For example, the current healthcare system in the UK will not allocate a liver or kidney to a patient who is unlikely to live for more than 5 or 2 years (respectively) after the transplant, as more welfare could

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<sup>14</sup> (Or if they do, it is not intentional.)

be created by allocating that organ to someone who will live a lot longer (NHSBT, 2014j, 2015j). The welfare created here in regard to the caveat is mainly for the patient as measured by QALYs, however it also makes good use of the organs for society by not allocating them to patients who will get significantly less life years from the transplant than other patients, thereby likely increasing overall welfare. It is these kinds of moral considerations in the current system relating to welfare promotion that makes the non-medical social value criteria morally relevant too, but for more than just the cohort of patients, as will be shown in the following section.

### **The further utility argument**

The issue of promoting utility brings me on to the next problem with the current allocation system in that, despite the partly utilitarian elements within the current system, it does not go far enough to *increase* the utility created from each organ allocation. The way the final decision is made with regards to which patient receives the organ is not consistent with the rest of the reasoning that has preceded it. The whole organ transplant process, from organ retrieval right the way through to patient selection, is centred around avoiding “wasting” the organ, and “promoting” the benefit the organ can give, but with the main focus being the benefit for the patient. For example, when the organ is removed from a donor, it is kept in conditions to avoid its deterioration, it is transported to the place of the recipient as quickly as possible to avoid further deterioration again (Organ

Donation Taskforce, 2008), and the patient selected to be the recipient of the organ is chosen for a number of reasons, all of which give the organ the best chance possible of being used for the rest of its usable life, e.g. the patient has a better prognosis or is a more suitable match than another possible recipient. And patients who are excluded from the waiting list are done so on the grounds of avoiding the futile employment of a resource on medical grounds. From beginning to end, the driving force behind the transplant process is to make good use of the organ. The process could be seen as having utilitarian elements to it in that it aims to increase the amount of utility created from each organ (not *maximise* the utility) but it only does so in the limited scope of the relationship between the organ and patient, and with only minor consideration given to the wider effects. There is still room for more utility to be created, without a significant increase in harm, if this utilitarian element of the allocation process were taken a little further. Given the limited utility promotion that is present in the current system, further promotion of the utility that can be created through an organ transplant by considering the wider effects other than those for the patient alone, may appeal. Even though the current system does attempt to promote organ utility through medical criteria, failing to consider certain other criteria that may further increase utility is inconsistent with the nature of the rest of the allocation process.

The consequentialist nature of the process falls at the last hurdle, or stops short of the last hurdle, perhaps on grounds of fairness and equality of access, or perhaps just because of social taboo. If the consequentialist nature of the process was to be extended, the patient selected to be the recipient of the organ should not simply be the patient who is in most urgent need, but rather the patient who will allow



even further utility to be created through the organ transplant. Choosing a patient who is in urgent need obviously helps to promote utility by saving a patient who would otherwise die, but factoring in other non-medical considerations, namely value to society, would also help. In this way, not only has better use of the organ been made by allocating it to the most medically suitable urgent recipient who stands the best chance at using the organ for the rest of its usable life, but it has also helped to realise the utility potential of the organ by allocating it to the recipient who is likely to contribute the most to society.

If the current organ allocation system is already based on a limited consequentialist approach, then there are at least some grounds for considering whether this approach can be extended to include considerations outside of those for the patient alone. The impact and benefit that an organ can create does not stop at the patient who receives it; the continued life that the recipient has impacts society, and to promote the best use of the organ, these impacts and effects should be taken into account, with those patients who will have the best impact on society being the preferred recipients.

Note here that when talking about the limited utilitarian nature of the current system, and the possibility of extending this element, the aim is not to actually *maximise* utility and welfare at all costs; the aim is simply the *promotion* of welfare. If the aim were to maximise welfare, then the allocation process and patient selection criteria for organs may involve violations of other values, such as equality, and respect for life, that are almost universally important. It may mean excluding certain groups from treatment, or giving certain patients priority for

treatment even though they are not in urgent need. Simply *promoting* the increase in welfare however, rather than attempting to maximise it, means that other important values can still be taken into account and balanced against the increase in welfare. “[U]tilitarian considerations can properly be used, provided that we continually look over our shoulders, as it were, to see how far we are departing from an ideal of equality. Such careful use of utilitarian criteria allows for rational decisions to be made in many cases where we would otherwise be reduced to random selection” (Langford, 1992, p. 14).

## **Alternative allocation systems**

### **Introduction**

I have already mentioned that allocating organs to patients based on criteria that includes their value to society will make better use of such a scarce resource, but in the interests of fairness, it would be beneficial to briefly look at some other alternative systems to see if they too may provide any increased benefit, and whether or not they provide a better option over the inclusion of social value considerations in terms of equality of access, distributive justice, and welfare creation.

There are a number of possible alternative principles for allocating resources, other than focusing on a patient's need (e.g. random selection, youngest first, merit), however, if a system is based on just one of these principles, it is unlikely

to encompass all of the relevant values and considerations to ensure fair and effective distribution of the resources (Persad, Wertheimer and Emanuel, 2009); this will become clear in the discussion below. When combined with the needs-based system already in place however, these alternative systems become more ethically acceptable, but only one of these alternatives, namely social value combined with the needs-based system, would provide significant overall benefits over the current system.<sup>15</sup>

I will begin by first looking at saving the most lives, then move on to examine welfare/QALY maximisation, youngest first and fair innings, random allocation, and merit allocation.

### **Save the most lives (easiest to treat first)**

Allocating organs in such a way as to save the most lives is similar to the medical need system that is currently in place, but instead of the main focus being to save those who are most in need of treatment regardless of how complicated the operation is (alongside taking into account other factors such as QALYs, waiting time, and long-term prognosis), the focus here is often on providing treatment to those who can most easily and readily be saved. Not all patients who are most in need of treatment will have a good prognosis even if they receive the required treatment as some treatments and procedures carry a higher risk than others,

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<sup>15</sup> Douglas B. White et al. have proposed a similar multi-principle strategy to allocate ventilators in a public health emergency, but with medical need being combined with saving the most life years and preferring patients in the younger stages of life (White *et al.*, 2009).

both inherently, and for individual patients. As such, the thought here is that the focus should be on saving those who we know *can* be saved, thereby saving the most lives and minimising the risk of wasting the resources that are available on patients who may not benefit. This type of approach is frequently used in military and disaster triage situations where there are usually many people who are in need of medical attention, with only limited numbers of people able to provide the required treatment (Lee, 2010). By focusing resources on those patients who can most easily and readily be saved, it ensures that more lives are saved (even if only in the short term). Significant amounts of time and resources are not spent on the more difficult to treat patients whose treatment needs are more complex, whilst the condition of the easier to treat patients deteriorates.

However, when allocating organs for transplant, a policy that aims to save the most lives may result in the organs not being put to best use, or at least, not being used as well as they are under the current system. If patients are selected for a transplant simply because their life can most easily and readily be saved, it might offer the benefit of using the organ in an operation where there is a high chance that the patient will survive, however, the length of survival time is not taken into account. If using a “save the most lives” policy, an organ may be given to someone who may only survive for five more years, over someone who could survive for twenty more years, simply because their life is easier to save at the time. If everything were equal, then aiming to save the most lives may be a suitable approach to organ allocation, but because things are rarely equal (some lives having been shorter than others; 20-year-olds having lived less than 70-year-olds, and so some lives can be extended longer than others), other considerations need

to included.

Another important aspect alongside the length of the life that is saved is the quality of the life that will be saved. A “save the most lives” system on its own would not take this into account and may favour those who can most readily be saved but whose quality of life would be minimal over a patient whose quality of life would be much higher but may be more difficult to treat. Furthermore, if saving the most lives is the aim of the policy, and people who can most readily and assuredly be saved are treated first, it may result in patients being treated who could survive for longer without a transplant before other patients who may soon die, but whose transplant operation would have taken more time and skill, but perhaps had a better prognosis. This could lead to the unnecessary and untimely deaths of those patients who are most in need, but the survival of those less urgent, but easy to save patients, who would likely have survived until another organ became available anyway. It is not enough to simply save the most lives; other considerations need to be included as well. A save the most lives system alone may maximise the *numbers* of lives saved, but it is not an ideal system as it does not take into account the quality of those lives saved, or the number of additional life years.

When combined with the current allocation system however, some of these other factors *are* considered, so that not only those patients who are the easiest to save are treated, but also those who are most in need of treatment. Of the patients who are in most need of treatment, those whose lives can most readily be saved would be treated first. And if the other considerations of the current system are taken

into account too, such as one of the contra-indications for a transplant being having an expected survival rate of less than 5 years even with a transplant, the “save the most lives” system becomes more acceptable. But despite the increased acceptability of this save the most lives/needs-based combination system, it offers only minor advantages over the current system, and as will be shown later in this chapter, significantly less than a social value/needs-based combination system.

### **Youngest first or fair innings**

Another possible organ allocation method would be to allocate the organs to the youngest patients first, with the reasoning being that “there is some span of life years considered a reasonable life and that societal obligations owed to those who have had this life span are less than to those who have not...” (Rothstein, 2011, p. 7). “[A]nyone failing to achieve this [span of life years] has in some sense been cheated, whilst anyone getting more than this is ‘living on borrowed time’” (Williams, 1997, p. 119). Resources would be directed to those who have had less life years, or to those who had not yet reached the amount of life years considered for a ‘reasonable life’ (fair innings).<sup>16</sup> Even if the organ is transplanted into an older patient whose expected survival time is longer than 5 years with an organ transplant, (everything else being equal) it is still likely that a younger patient will live longer than a more mature patient by virtue of simply being younger.

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<sup>16</sup> In the current British organ allocation system, children do already receive priority for suitable organs, however the reason for this is more to do with suitably sized organs for them becoming available less often, and that they may be prone to irreparable damage in certain circumstances if treatment is postponed (NHSBT, 2014f, 2015g).

Similarly, when allocating vaccines in an influenza pandemic, the young are prioritised (U.S Department of Health and Human Services, 2008), but again, it could be argued that this is due to their vulnerability rather than *simply* as means to fulfilling any societal obligations to ensure that the young achieve whatever span of years is considered a reasonable life.

But despite the current prioritisation of children for particular resources being mainly due to their vulnerability, there is still something to be said for prioritising them, and other young patients due to the life that they have not yet lived, and for de-prioritising those patients who have had a 'fair innings'.

Allocating resources, especially life-saving resources, to the youngest patients first, who are arguably the worst-off as they would otherwise die having had the fewest life-years (Persad, Wertheimer and Emanuel, 2009, p. 425), means that they have the opportunity to have something supremely valuable that older patients have already had access to: more life years (Kamm, 1993). This means that those patients who have already reached old age or who are closely approaching it "would not have their lives further prolonged when this could only be achieved at the cost of the lives of those who were not nearing old age" (Harris, 1985, p. 93). Treating the older person in a situation where it means that the younger person would die would be inherently inequitable. "The younger person would get no more years than the relatively few he has already had, whereas the older person, who has already had more than the younger person, will get several

years more" (Lockwood, 1988, p. 50).<sup>17</sup>

However, if the principle of allocating resources to the youngest patients first was strictly adhered to, it may give rise to intuitively unfavourable situations where infants are the main recipients of available resources (Emanuel and Wertheimer, 2006). Two-month-old babies would be prioritized for life saving treatment over twenty-year-old young adults because they have had less life, despite the fact that the death of a twenty-year-old is intuitively worse than the death of a two-month-old (McKie and Richardson, 2005; Persad, Wertheimer and Emanuel, 2009, p. 425). "The 20-year-old has a much more developed personality than the infant, and has drawn upon the investment of others to begin as-yet-unfulfilled projects" (Persad, Wertheimer and Emanuel, 2009, p. 425).

Furthermore, as objected in the other alternative systems, if the allocation policy were based solely on the one main feature, in this case, allocating to the youngest first, then it would result in the unnecessary deaths of patients due to prognosis not being taken into account. If organs were allocated to the youngest patients first as the sole criterion, it could result in younger patients who may not require an organ immediately, and whose death is not imminent, receiving a transplant

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<sup>17</sup> It should be noted that the span of life-years considered to amount to a reasonable life or to having had a fair innings will differ from region to region with there not necessarily being a set age constituting having reached this point (Williams, 1997, p. 123). Even on a more local scale within the same region there may be differences between what constitutes a fair innings, with upper classes generally having higher life expectancies and the lower classes having lower life expectancies (Dunnell *et al.*, 2018). This raises the question of whether the life-years required to reach the point of a fair innings will be higher for those who would generally have a longer life expectancy than those who would generally have a shorter life expectancy.



before other patients whose need is greater, and whose death without a transplant, will occur sooner.

However, if a youngest first or fair innings approach was combined with the needs-based system already in place, this method of resource allocation becomes more acceptable. Of those patients who are most in need, and have a suitable prognosis with treatment, the youngest patients could be prioritised. The benefits of this are that it does not necessarily mean that it would be mainly infants who would receive resources, and older patients are not categorically excluded from consideration for treatment, as suggested by Daniel Callahan who recommends strict age cut-offs for scarce life-saving interventions (Callahan, 1995). In a youngest first/needs-based combination system, even if there were only two older patients who are a suitable match for an organ, and both in urgent need, neither has to be passed over for treatment in favour of a young patient who is in less urgent need; it would simply be the youngest of the two older patients who would be selected. Those older patients who are most in need will not be pushed further down the waiting list by younger patients whose health needs are less urgent.

But again, despite the increased acceptability of the system when combined with the needs-based approach, it still does not offer as much benefit as a social value combination system would. It might be true that there are more life years saved overall, and the young have been given an opportunity to extend their life to what will hopefully be a normal lifespan, but these benefits mainly affect the individual

patients, whereas a social value combination system will not only benefit the individual patients, but also the wider society.

### **Prognosis or life-years**

A similar alternative allocation system to prioritising the youngest first is to allocate resources in such a way that the most life years are saved. The difference here however, is that resources are allocated in such a way to maximise the most amount of life years saved with the motivating idea being that living more years is valuable, and so saving more years is also valuable (Kamm, 1993; Persad, Wertheimer and Emanuel, 2009, p. 425). Allocating resources to the youngest first attempts to rectify, or at least limit, the perceived injustice and inequality of young patients not having had enough life years as *individuals*, whereas a system allocating resources in order to maximise the amount of life years saved does not look to try to rectify any kind of inequality. It simply seeks to maximise the aggregate benefit of saving something valuable: life years. However, this does cause a tension between the quantity of life-years saved, and their distribution (Russell *et al.*, 1996).

Because the system simply focuses on the aggregate number of life years saved, it causes concerns over distributive justice in that it does not take into account just who receives these saved life-years, and in what quantities. The exclusion of a distributive consideration means that intuitively un-just and unfavourable situations could occur, in which someone who is well-off in terms of life-years

lived could be made slightly *better off* with an extra year of life being given/saved, instead of slightly *improving* the life of someone who is worse-off due to having not lived for as long by giving them an extra year of life. Similarly, there is a difference between giving a few life years to many people, and giving many life years to a few people, despite the number of life years given being the same (Persad, Wertheimer and Emanuel, 2009, p. 425). Ten extra life-years given to one patient will have more of a personal effect on them than 1 extra year of life would have on 10 patients. I am not making a judgement about which distribution of life years here is more favourable, but simply highlighting that under this approach, the different effects caused by the distribution would not be considered. The system also fails to consider the quality of the life years that it is wishing to maximise; it does not consider that a shorter life of higher quality may be more preferable to some, than a longer life with a lower quality. Five extra *active* life years for a patient may be more preferable to them than 10 extra life years being bed-bound.

Even if saving the most life years was combined with the needs-based system, making it a more viable allocation system than if it were based on saving the most life-years alone, it would offer less benefit than the social value combination system. An increased amount of life years saved is not the most important thing to be considered, and it does not necessarily offer any increased benefit on a wider scale. Any benefit created mainly relates to the individual patient, with little benefit being passed on to wider society.

## **QALY maximization**

The number of quality adjusted life years (QALYs) that can be expected after treatment is already a consideration that is part of mainstream resource allocation in the UK. The reason why QALYs play such a prominent role in UK resource allocation is because for the most part, healthcare in the UK is restricted by financial constraints. In order to ensure there are enough financial resources available to provide at least basic care for the whole population, QALYs can be used to determine the appropriate amount of money that should be spent on a patient for a particular treatment dependent on their prognosis. The benefit of using QALYs within resource allocation decisions is that it helps to ensure that best value for money is made, with treatments not being offered if they will not offer a significant improvement in quality of life and life years gained, whilst safeguarding the limited financial resources available overall so that more people can receive the treatment they require. In this way, vast sums of money are protected from being swallowed up by paying for particularly expensive treatments that may only provide marginal, if any, increases in wellbeing. Individual patients will not draw away huge sums of money at the detriment to other patients, as may be the case if a financial limit per QALY were not in place. QALYs are a way of attempting to make the best use of the financial resources available by ensuring that there is enough money available to provide at least basic care to everyone.

When it comes to the application of QALYs to organ allocation however, the justification for its use would have to differ slightly from its financial justification,

as organs are not limited in availability in the same way that financial resources are. Financial resource limitations can be solved by simply making more funds available from somewhere else, whereas organ resource limitations cannot. Organ resources are limited in a physical way through donation numbers, and simply making more available from elsewhere is not possible. Whilst the justification for QALYs on financial grounds is that it ensures there are enough funds for basic treatment for everyone, the same approach could not be used with organ allocation because of these physical resource limitations. An organ cannot be split between all the patients who require it in order to provide all with some improvement in quality of life; the organ has to be given in its entirety and to only one patient.<sup>18</sup> In effect, the recipient has used up the available resource to the detriment of the other possible recipients in a way that would be unlikely to happen if the resource limitations were financial, and QALYs were used to allocate the finances. This is not to say that QALYs do not have a place in organ allocation decisions, but simply that their role is slightly different. Instead of playing a role in the distribution of resources among many recipients, within organ allocation decisions, QALYs would look at which *individual* would receive the resource in its entirety. Each patient can expect a different number of quality adjusted life years after treatment, and so the patient who would have the greatest amount would be favoured for treatment.

However, the problems with using QALYs in this way, and indeed with using QALYs in general, is that it is much more likely that the young will be favoured for

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<sup>18</sup> There are some organs which can be divided into parts, such as livers and lungs, but they cannot be divided into the number of parts to match the number of patients who require them and remain viable for transplant.

treatment over the old, given the fact that young people can generally be expected to have more life years left by virtue of them simply being younger. This kind of discrimination on the grounds of age could be said to violate elements of distributive justice in that older people will not receive treatment even if they will make a full recovery.

Furthermore, a QALY approach to allocating resources does not consider the start and end point of a patient's quality of life. "It disregards the fact that a small but significant improvement for a person in a bad state may be preferred by society to a more substantial improvement for a person in a less severe state (in Norway this preference is part of the official guidelines for prioritising in the national health service)" (Nord, 1992, p. 875). Whilst adhering to public preferences is not always a wise decision when it comes to making healthcare resource decisions given that the public do not have the relevant level of expertise to make these decisions objectively, and public views are notoriously fickle (Tversky and Kahneman, 1981; Ubel, 1999; Litva *et al.*, 2002), there is still something to be said for the difference between making someone who is well off, marginally better off, and making a less well-off person marginally better off.

As a distribution system for resources, it may increase the overall number of life years with a higher quality of life created from treatment, but it does not maximise the utility that is created from the allocation of the resources. Simply because a person may live for longer with a higher quality of life does not mean that the resource has been put to best use, especially when QALYs are used in organ allocation decisions. It is only the individual patient who is taken into account

when QALYs are used in this setting. There are other alternative allocation systems that would offer more benefit, such as a social value system, as will be shown later in this section.

### **Random organ allocation**

Another possible alternative for allocating scarce medical resources, such as organs, is to allocate them randomly to suitable recipients. The benefit of random allocation is that it means no one is favoured over anyone else; as long as the selection is being made from a group of people who are all a suitable tissue match, everyone stands the same chance of being allocated the organ. This system avoids prejudice entering into the decision, which is a problem other allocation systems face, and giving each person an equal claim to a scarce resource also helps to reflect the equal moral status of each person (Ramsey, 2002). Furthermore, as mentioned previously, resources such as organs are indivisible in a way that other resources are not, and so a kidney or a heart cannot be equally divided between the patients who require it. In order to treat patients equally in this circumstance, it means giving them equal opportunity of access rather than equal amounts of the resource (Persad, Wertheimer and Emanuel, 2009, pp. 423–424).

However, random organ allocation may result in unnecessary deaths if the patient cohort as a whole is included for possible selection, as the organ may be randomly allocated to someone who is not in immediate need of an organ, resulting in the death of another patient who *was* in immediate need. By not taking into account

a patient's urgency and prognosis, an organ allocation system based on random selection would result in many unnecessary and untimely deaths.

If a random allocation system did take into account urgency and prognosis, with only those patients who are in most urgent need and have a good prognosis being put forward for random selection, it would make a random allocation system more acceptable by limiting the amount of unnecessary and untimely deaths whilst still maintaining equality of access. However, it would not offer as much overall benefit as a social value allocation system that took into account urgency and prognosis. It may have placed more emphasis on providing an equal chance at receiving an organ, but the benefit that is created from this allocation mainly benefits only the individual recipient, and their friends and dependents. A social value combination system on the other hand, offers wider benefits whilst still maintaining an appropriate level of equal access by not excluding any medically suitable patient from the waiting list. To adhere to random allocation on the grounds of equal access, even between those patients who are most urgent and with a good prognosis fails to take into account other relevant differences between patients. Some patients may be very old or very young, or have a longer or shorter life expectancy after treatment, and with different expected qualities of life at that. Whilst the exact implications of these considerations might be unclear, they are undoubtedly of relevance (Elhauge, 1994). The addition of a social value criterion would take these kinds of considerations into account by looking at the contributions that a patient might make to society and the welfare that they would create, and how long they can be expected to carry on their contributions.



Of course, a random allocation combination system may have an advantage over a social value combination system in that it does not require any real measurement or prediction of uncertain consequences.<sup>19</sup> It also has the advantage of being less vulnerable to bias, corruption, and manipulation. However, these advantages only remain advantages as long as the challenges that a social value combination system face, are shielded away from. The issue of measurement and prediction of future events, actions and consequences admittedly results in uncertain predictions, but these need not be wildly inaccurate if based on evidenced trends and causal relationships. At least by attempting to make these predictions and basing allocation decisions on them, there is a better chance at improving overall welfare than if left to chance alone.

With regard to the possibility that a social value combination system is more vulnerable to bias, corruption, and manipulation than a random allocation system, this does not necessarily have to be the case. If left unchecked, such corruption would indeed be likely to enter into the system, but with the proper policing, regulation, and reviewing of decisions, there is no reason to suspect that any more corruption would enter into the system than is the case for the current allocation system. A random allocation combination system may be less vulnerable to corruption than either the current or a social value system, but nevertheless, there would likely still be the opportunity for corruption to enter the system if there were not the proper policing, regulation and reviewing of decisions present here too.

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<sup>19</sup> Apart from the medical suitability aspect

## **Merit/Reciprocity allocation**

Organ allocation based on merit could also be thought of as something similar to deservedness where a patient would be a possible recipient or not dependent on how much they deserved to receive an organ. As such, this approach is backward-looking in that it rewards past usefulness or sacrifice (Persad, Wertheimer and Emanuel, 2009, p. 426).

Things that might make a patient less deserving of, say, a liver transplant, may be where the patient's illness is self-inflicted, e.g. if the patient had caused their liver failure through excessive drinking despite warnings about the health risks.<sup>20</sup> Someone who *may* deserve to receive a liver transplant however might be someone who had dedicated their life to attempting to increase organ donation rates or raise awareness of the health risks associated with excessive alcohol consumption, are a registered organ donor themselves (Kamm, 1993), or took care of their own health, reducing the health resources they require (Morreim, 1995). The idea of "fault" and whether or not an illness or injury is self-inflicted being present in medical resource allocation considerations is a contentious topic in its own right (Sharkey and Gillam, 2010), but its inclusion in organ allocation decisions would stop injustices of the kind mentioned in the following example.

The positive aspect of allocating organs based on a patient's merit or deservedness

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<sup>20</sup> It might be replied that cases such as this, amongst others are not entirely self-inflicted as someone's drink problem may be related to past circumstances and events outside of their control.

is that it means those individuals who *do* deserve an organ transplant do not miss out to someone who arguably doesn't. For example, it would seem completely unfair if someone who spent their life warning people of the health risks associated with excessive drinking (and did not drink themselves) and promoted organ donation, should die waiting for a liver transplant whilst someone with alcohol related end stage liver disease (ARESLD) received a transplant first.

Reciprocity might also be a favourable allocation consideration for priority treatment for those patients who are ill through doing activities in which they were conscripted into (military), or for which they volunteered to do in order to benefit society (nurses looking after contagious patients)<sup>21</sup>, with the idea being that people are provided with assistance for the significant and positive contributions that they have made (Macklin, 2004).

However, even if the idea of deservedness and merit allocation were implemented, it may not be of much help in most cases. In the example above, the patients are at the opposite ends of the spectrum to each other in terms of merit, and so it is easy to make a distinction between the two patients on who deserves to receive the organ most. But cases towards the middle of the spectrum, it may become more difficult to decide. Suppose, for example, that there are two people who both have end stage liver disease through no fault of their own; how does the idea of merit help to determine who deserves an organ transplant more? Tied with the

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<sup>21</sup> Healthcare practitioners may not always be able refuse to treat someone with a communicable disease, and so their treating of these patients might be said to be obligatory rather than voluntary. However, the healthcare practitioner presumably pursued their career knowing that this was the case, and so their action can still be seen as voluntary to a certain extent. But even if not, this only makes their treating of the contagious patient akin to conscription.

idea of merit and deservedness is the notion of “being a good person” and so perhaps this idea can help to make a distinction; do people who do good things deserve good things to happen to them, whilst people who do bad things deserve fewer good things to happen to them? If one of the patients is having an affair and lying to his family about it, should this count against them? Or if one of the patients is not a vegetarian, would that mean they were less of a good person? Some would argue that it would. The whole concept of being a good person is too subjective to be of much use in certain types of situations. However, if broad strokes are used to rule out those who might be less deserving than someone else, such as ruling out those patients with ARESLD over those whose liver disease is not self-inflicted, then merit allocation could still be a workable system.

But even if patients’ relative deservedness could be determined, there are still other inherent problems with merit/reciprocity allocation. For instance, in order to determine the extent to which someone had lived a healthy lifestyle, or the extent to which someone was responsible for their own illness, it would require “time-consuming, intrusive, and demeaning enquiries” (Anderson, 1999; Macklin, 2004; Persad, Wertheimer and Emanuel, 2009). And merit/reciprocity allocation also faces the same objections as with the other systems; if based solely on merit, then it would result in unnecessary deaths. People who were more deserving of an organ would receive an organ before those who are less deserving, even if the more deserving patient did not require the transplant immediately. The less deserving patient would die when they did not have to. Both patients might have been saved if the patient in more need was treated first.

It remains the case however, that even if extra considerations such as a patient's level of urgency and prognosis were also included for a merit combination system so as to minimise the number of untimely and unnecessary deaths, it would not create as much welfare from each allocated organ as would be created had the organs been allocated using a social value combination system. Reciprocity is inherently backward looking and not future-orientated like social value considerations, and so is likely to create less welfare, with its aim being to reward positive *past* actions rather than encouraging positive *future* actions.<sup>22</sup> The organ allocation system in Israel uses such a merit system to prioritise patients who are registered donors, or who have already donated an organ, rewarding past actions, and encouraging others to register as organ donors (Lavee *et al.*, 2010; Quigley, Wright and Ravitsky, 2012). Whilst attempting to increase organ donation rates through such incentives is commendable as it helps to reduce the organ shortage, it does nothing to increase the welfare created with each transplant.

The bigger issue however, is that by rewarding past actions, healthcare is turned into a 'prize' for good behaviour, rather than as a life-saving service for those in need. The inclusion of a social value consideration on the other hand, being forward-looking, does not *reward* people for their past behaviour, but simply uses their past behaviour as an indicator of what their future behaviour will be and allocates resources accordingly to increase the welfare created by each resource. A social value combination system is not rewarding behaviour because the patient is more deserving of the resource, as is the case with reciprocity; it is allocating

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<sup>22</sup> However, it might be argued that rewarding positive past actions will in turn encourage positive future actions.

the resource to them because their contributions are valuable to society.

### **Social value organ allocation**

I turn now to the social value allocation system that has been mentioned throughout this section, and why it might be a suitable system for the allocation of scarce medical resources, especially transplantable organs. An organ allocation system based on a person's social value would look at how valuable each patient is to society and then allocate the organ to the most socially valuable patient out of those who are a suitable match. The idea behind basing resource allocation on patients' social value is that there are some patients who are more instrumentally valuable than others, and in order to make the most of the available resources, it should be these more instrumentally valuable patients (in terms of meeting the needs of society) who are prioritised for treatment. In this way, the resources do not merely provide benefit to the recipient, but also to the wider society. For example, guidelines that suggest priority treatment for workers who produce influenza vaccinations embodies social value considerations as this will help to save the most lives in an influenza pandemic (Emanuel and Wertheimer, 2006); the nature of their job adds to their overall social/instrumental value by helping to achieve the aims of the vaccination program, namely, to save lives.

However, as with all the other alternative allocation systems discussed, if the system is based solely on its main feature, the system is not a viable option for organ allocation given the number of untimely and unnecessary deaths that would

result. In the case of the social value allocation system, if based solely on a patient's value to society, those patients who are most instrumentally valuable to society would be prioritised for treatment over those patients who are less socially valuable, even if the less socially valuable patient's level of urgency were greater. But if the system also took into account the main considerations of the current system, namely the patient's level of urgency and prognosis, then the system becomes a more viable option. The untimely and unnecessary deaths could be avoided by the resource being allocated to the most socially valuable patient from those who are in most urgent need.

Furthermore, a social value allocation system differs from the other alternative systems in that rather than prioritising patients for one main reason (age, merit, etc.) it prioritises patients based on their ability to promote other important values (Persad, Wertheimer and Emanuel, 2009, p. 425). This means that other values and considerations are *necessarily* important to a social value allocation system, although only important insofar as they help to improve society. A person's life-years lived, whether their illness is self-inflicted, or what their quality of life will be after treatment, are all important considerations to take into account in order to help determine the likely level of welfare they can contribute to society if selected for an organ transplant. Some of these considerations will play more of a role than others, with some being broadly backward looking, such as past contributions and self-inflicted illnesses, whereby they are indicators of future behaviour. However, other considerations such as current contributions, job, family, and expected lifespan, are more forward looking and predictions of future circumstances might be made. But it is herein these extra, non-medical

considerations, that social value allocation becomes problematic.

The non-medical considerations that are necessarily part of a social value allocation criterion are problematic because 1) it introduces non-medical criteria into a medical decision, and 2) it might be a difficult task to determine the extent to which each non-medical consideration plays in each person's welfare contributions. The answers to these two problems will be discussed in more detail in the following chapter, but I will briefly answer them here in order to move forward.

In answer to the latter problem, it might be difficult to determine the exact extent of the role each non-medical consideration plays in a person's overall welfare contribution, and so in turn, it will be difficult to determine a person's overall social value, but it is not an impossible task. It is possible to make broad strokes at first (even if not fine, accurate, strokes), refining and revising the details over time with better behaviour prediction methods, and by drawing upon statistics regarding how the factors in a person's life are likely to affect their future behaviour in order to determine a person's social value.

In answer to the former problem of introducing non-medical criteria into a medical decision, the important thing to note is that the included non-medical criteria are being used *alongside* medical criteria to further increase utility. A patient's social value is only one factor that will be considered alongside other important medical criteria that are currently used. Furthermore, it might be argued that organs are a social resource, and so on these grounds, the inclusion of non-medical criteria in order to increase welfare for society might be acceptable



(Truog, 2005). If organs were a personal resource, then they could be used in whatever way the owner wished, however, because donated organs are a societal resource (in most cases), they should be used in such a way that most benefits society, and this may mean including non-medical considerations in the allocation decision.

It is important to note that the patient would not necessarily be judged on the values that society actually holds, but rather, those which are valuable *for* society; the values that will benefit society. A patient's instrumental value would be assessed objectively by a committee of experts from relevant fields rather than by simply accepting society's perceptions and prejudices. The reasons why the contributions that will benefit society will be used instead of the contributions that society values, will be discussed in more detail in Chapter 5, however, a brief explanation is warranted here.

If the opinions that society holds, are used as a basis for allocating organs to individuals, the goal of making better use of the organs available for transplant may not be achieved, given the often prejudiced, misinformed, or uninformed opinions society may hold. For example, three well respected economic institutes (the Centre for Economic Performance at the London School of Economics, CBI/PwC, and Oxford Economics) wrote reports on the economic impacts on Britain of leaving the EU, all concluding that leaving the bloc will have a significant cost for British households (Centre for Economic Performance, 2016; Oxford

Economics, 2016; PwC, 2016).<sup>23</sup> Nevertheless, the British public voted to leave the European Union. This may ultimately lead to the majority of the population suffering to some extent, and so less overall welfare will be created due to the knock-on effects. As mentioned earlier, economic growth generally correlates with overall improvements in quality of life, and as such, is significantly valuable to society for promoting welfare (Strange and Bayley, 2008, p. 49). If the values that society holds were used to allocate organs, it may actually end up undermining the aim of the social value policy, by in fact *reducing* overall welfare. If experts from the relevant disciplines were to make the decisions about what, and who, is socially valuable, there is more chance of the social value system achieving the aim of increasing welfare.

There are also 2 other main problems associated with assessing social benefit, namely uncertainty over the prediction of future behaviour from past behaviour and circumstances, and assessing what behaviours and skills are likely to produce most benefit. However, these too will be discussed in detail in Chapter 5.

### **Social value is not as subjective as judgements of merit**

Social value is not “too subjective” in the same way that the concept of merit is subjective. The things that are classed as being socially valuable are based on

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<sup>23</sup> “For the Centre for Economic Performance, drops in trade with the EU “is likely to cost the UK economy far more than is gained from lower contributions to the EU budget”. The CBI/PwC report concludes that leaving the EU “would cause a serious shock to the UK economy”, while Oxford Economics reports that “our scenario modelling does not give much cause for optimism about the impact of Brexit”” (Giles, 2016).

what the needs of society are, and when restricted to the basic needs of society, these needs can be objectively assessed, and are based on what society actually needs to function (Task Force on Quality Control of Disaster Management, 2014b).<sup>24</sup> (A more detailed account of the objective nature of societal needs is given in Chapter 5 under the heading of Basic societal functions, p.197). Whether or not someone *merits* receiving an organ transplant is rooted in the perspective and values of the individual making the judgement, rather than based on an agreed set of conditions. However, regardless of whether or not we can make an objective decision about the deservedness of a patient for an organ, it makes practical sense to use a more forward-looking criterion for organ allocation, such as social value. Reciprocity is inherently backward looking and not future-orientated like social value considerations, and so is likely to create less welfare, with its aim being to reward positive *past* actions rather than encouraging positive *future* actions.<sup>25</sup> Allocating organs based on merit/deservedness does not help to make the most of the organs available by increasing the welfare created with each organ transplant, as allocating organs to people who might deserve them does not help to meet the current needs of society.

It is also this difference in motivation that separates judgements of merit (assessing past contributions) from judgements of social value (assessing future contributions), and so the criticisms of one cannot necessarily be applied to the other. Whilst both approaches might assess a person's contributions to society,

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<sup>24</sup> Of course, when it comes to the non-basic needs of society, there is room for subjectivity to figure in the assessment as there will be differing opinions on what "luxuries" are most valuable depending on the interests of the person opining.

<sup>25</sup> However, it might be argued that rewarding positive past actions will in turn encourage positive future actions.

under the social value criterion, whether or not a person deserves the organ does not figure into the final organ allocation. The aim of the social value criterion is to prioritise patients for treatment based on how valuable their contributions are to society, and not whether they deserve the organ or not. The two approaches are distinct and different from each other, and will prioritise different patients in the same scenario. E.g. Patient A and Patient B are both equally suited for an available liver, but Patient B is significantly more socially valuable. Patient A deserves the organ as they have always been conscious about the health of their liver, but does not make socially valuable contributions. Patient B makes socially valuable contributions but does not deserve the liver due to their organ failure being caused by alcohol related end stage liver disease (ARESLED). Patient B also vows to never consume alcohol again, and we have good reasons to suppose that they will be able to refrain from alcohol. Under the merit criterion, Patient A would be given priority for the organ, whereas under the social value criterion, Patient B would be given priority. Under the social value criterion, the merit of the patient is not considered in terms of deservedness due to past actions, but only in terms of the instrumental contributions they can make to the needs of society. The social value criterion is more removed from allocating organs as a form of reward for past actions, and instead focuses on allocating organs in a more objective and instrumental manner.

Determining who *deserves* to receive an organ under the merit criterion would involve substantially more subjective judgements than determining which people are likely to make the most socially valuable contributions to the basic needs of society.

### **Moral Reason for Social Value**

A social value criterion is not arbitrary in the same way that the waiting time criterion is arbitrary. Under the waiting time criterion, if there were two patients who had been on the waiting list for different amounts of time, everything else being equal, the patient who had been waiting the longest would be given priority for treatment. Essentially, this means that even though the illnesses of the two patients might have presented itself at the same time, the patient who could get to the doctor first, or who realised their illness might be something serious first, will be the patient who receives treatment. Using waiting time as a determining factor in patient priority is arbitrary as the patient who has been waiting for a shorter time is not necessarily in any less discomfort or in any less urgent need. Furthermore, treating the patient who has been waiting the longest does not necessarily create any more welfare than treating the patient who had been on the waiting list for less time. Using the waiting time criterion is fair when people have access to the resource at the same time, but in the organ allocation system, it just means that people who are in a better position to see their doctor first will have priority for an organ. The use of a first-come, first-served system here means that morally irrelevant qualities help to decide who is the organ recipient.

However, a similar objection might be levied at the use of a social value criterion. Under the social value criterion, everything else being equal, those patients who are most valuable to society will be given priority for an organ. Those people who are in a better position to make socially valuable contributions will be given

priority over those patients who are not as able to make them, in the same way that those patients who are in a better position to see a doctor first will be given priority for an organ under the waiting time criterion. If the waiting time criterion is unfair because it is affected by the personal circumstances of a patient to determine their priority, then is a social value criterion not also just as unsuitable given that it *solely* relies on a patient's personal circumstances to determine their priority?

Whilst the two criteria are both affected by personal circumstances for which the patient is not (wholly) responsible, there is a moral reason for the social value criterion which the waiting time criterion does not have. The social value criterion will help to increase the amount of welfare that is created with each organ transplant, with not only the patient benefiting, but also the wider society, and because the approach to organ allocation in this thesis is from a utilitarian perspective, a criterion that will increase the amount of welfare with each organ transplant *is* morally relevant. However, the waiting time criterion offers no such increase in welfare as only the recipient benefits, and so this criterion is less morally relevant. Whilst both systems might allow the same non-medical factors, that are (partly) outside of a patient's control, to enter into the prioritisation decision, it is only under the social value criterion that these factors are morally relevant as their consideration will help to increase the overall welfare created with each transplant. The first-come, first-served system on the other hand, achieves no such aim, and so there is no moral justification for its use.

It might still be the case that a person is advantaged or disadvantaged based on circumstances that are outside of their control under both the social value and the first come first served system, however, it would be better to choose the system that offers more overall welfare than another system that suffers from the same issue. And even though it might be the case that people have an advantage or disadvantage based on circumstances that are outside of their control, it is still morally relevant to take these circumstances into account in order to achieve the partly utilitarian aims of the system. Under the first-come, first-served system, the same qualities and circumstances are morally irrelevant qualities to take into account as they do not help to increase welfare.

## **Social value offers most benefit**

Now that the possible alternative resource allocation systems have been discussed, it is time to underline why a social value allocation system would be a better alternative, or rather, why social value considerations should not be excluded from organ allocation decisions.

As has been highlighted throughout this chapter, by including social value considerations in the organ allocation process, benefit is provided not only to the patient who receives the organ, but also to wider society. Unlike the rest of the alternative allocation systems, the welfare that is created with the inclusion of social value criteria affects many people rather than just one. There is of course,

the possibility that the other systems may provide *some* increased welfare to wider society as well as the organ recipient, but it at a far lower level, and the outcomes much less certain. For example, saving the most lives could be seen as benefiting society as it will minimise the distress caused to friends and family through the death of a loved one. However, under a social value combination system, the benefits and welfare that would be created from each organ allocation would be at least that created by a save the most lives combination system. If one of the social benefits of saving the most lives was that it minimised the number of friends and family who would be affected by a patient's death, the social value system would do a better job of this by saving those patients (who are in most urgent need) whose peers would suffer the most. It would minimise the number of friends and family having to come to terms with the fact their loved one is going to die. And indeed, in the system that I propose, such a factor is incorporated into the social value assessment.

A further advantage of a social value combination system over the other alternative combination systems is that it does not focus simply on one value to the exclusion of others. It necessarily looks at other values, some of which are present in the other alternative allocation systems, as it tries to create the most welfare.

From the discussion of the alternative allocation systems above, it is apparent that there are at least some positive aspects to each of them, and as such, certain aspects of their criteria may be able to find a place in a multi-principle system, and indeed do to a certain extent in the current needs-based system. There are some



principles that are important to consider *alongside* other principles in order to avoid the poor use of organs. E.g. in the current allocation system, a patient's level of urgency is one of the main factors affecting when they receive a resource, however, life expectancy is also an important factor as even if a patient is in urgent need, if their life expectancy is poor even after treatment, then they are unlikely to be treated. As has been shown, an organ allocation system based solely on one principle is insufficient as it does not take into account other important, morally relevant considerations, and as such, a multi-principle allocation system is needed that combines these morally relevant individual principles, including a social value criterion (Persad, Wertheimer and Emanuel, 2009).

### **Multi-principle allocation system**

The current needs-based allocation system is already multi-principle to a certain extent in that it does not just take into account the urgency of the patient, but also their prognosis, QALYs, and how at risk the patient is, but with urgency arguably being the most heavily weighted. The principles make for an allocation system for organs and other healthcare resources that is generally acceptable and makes good use of the organs. However, this '*good* use of resources' could be made in to '*best*', or at least '*better* use of resources' if the further principle of social value were also included in the current multi-principle allocation system. The current system's principles for patient selection are medical based, but with the additional

inclusion of the non-medical social value principle, the extra welfare will help make *better* use of available resources.

The question might be raised however, of why not use one of the previously mentioned alternatives as the main basis of an allocation system, and then have additional principles to make up a multi-principle system? The answer to this is that, for the most part, if the alternative allocation systems were used as the main basis, it would result in many untimely and unnecessary deaths (as discussed in the previous section). However, if a patient's level of urgency and prognosis was taken into account first, these unnecessary deaths could be avoided, whilst still achieving the aim of whichever principle the additional system is based around (even if to a slightly lesser extent) by taking the principle into account as an addition. But since it is the social value principle that will offer the most welfare out of the alternatives discussed, and if implemented in the right way, can still be at least as ethically acceptable as any other principle, this is the principle that should be included as an addition to the current organ allocation system.

Furthermore, even if a patient's urgency and prognosis were considered first, creating a multi-principle allocation system combining elements of the other alternative systems would not provide any more of a suitable system than the addition of a social value criterion into the current system would, with it replacing the waiting time criterion.

This combination of the other alternatives is not preferable given that it wouldn't create any more welfare than just the single addition of a social value criterion, and depending on the combination of the alternatives, it might actually create

more harm, or infringe on other important values. For example, if random allocation was combined with age so that perhaps, of those who are the youngest and require treatment, the recipient is selected at random, the policy would be broadly ageist when it does not need to be (depending on the expected life years remaining in the available organ for transplant), and the random selection of a patient means that the welfare that could be created through the considered selection of a patient is not created.

Moreover, the social value criterion itself may take into account elements of these other systems where appropriate in order to determine the expected social value contributions that a person can make to society in receipt of a particular organ. It takes these other elements into account only so far as to assess the expected benefit to society in each case, not as principles to be considered in their own right. E.g. a person's age might be taken into account to determine how long it is likely that they will be able to carry on making their social contributions if they receive a particular organ. Elements of the alternative systems may be considered under the addition of a social value criterion in so far as they go towards helping make an assessment of the likely welfare that would be created from the organ allocation to different patients, and so it makes more sense to limit the multi-principle allocation system to the current system combined with the social value criterion.

Given that it is the social value principle that will offer the most benefit, it is this principle that is the focus of this thesis. The formulation and inclusion of other

principles into other allocation systems as an alternative could be looked at in another paper.

The existing system works well to maximise the aggregate benefit to the patient cohort by ensuring that organs are biologically matched as well as possible to ensure a successful transplant, and are given to the most urgent cases (and are matched for expected lifespan with patients where possible). However, where the decision is between two or more recipients who are equally suitable for an organ, and are in equally urgent need<sup>26</sup>, we should choose the patient whose receipt of the organ will also increase wider social utility. The addition of a social value criterion does this directly whereas other alternative allocation system suggestions either do not do so at all, or do so only approximately.

In the next chapter, the way that the social value combination system could work will be discussed in more detail.

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<sup>26</sup> On the redefined definition of urgency.

# Chapter 3: Social Value as an Additional criterion

## Introduction

As seen in the previous chapter, if the alternative allocation methods to the current system are *combined* with the current needs-based criteria, they are viable systems for allocation, however, these systems do not offer any real improvement over the current allocation system. They will offer little, if any, improvement in the number of lives saved, and whilst perhaps satisfying a separate goal, that being whatever the extra criteria the combination system is based on, those separate goals do not provide any real improvement over the current system in terms of the welfare created. A social value and needs-based combination system on the other hand, would actually provide an improvement over these alternatives and the current system. Not only would people's lives be saved, as is the case with all the other systems, but there would be an increased benefit to society; something the other combination systems do not provide.

In the second part of this chapter, I will outline the broad structure of how the social value combination system would function (with the more specific details of the criteria that will be taken into account explained in Chapter 6). However, before I do so, there are a couple of issues that need to be examined.

Tied up with the idea of allocating organs based on social value are the issues of ownership of organs and in what type of way are organs a social resource. In whatever way organs are being allocated, it would be beneficial to look at who “owns” or has responsibility for those organs, and following on from this idea, in what way those organs should be allocated? Depending on the body/organisation that “owns” or has responsibility for the organs, those organs would/should be allocated differently depending on the duty of that organisation. It will be shown that it is permissible for both the local authority and the government in general to do what is in the best interests of society to a certain degree, and so the allocation of the organs should be carried out in the way that benefits society in keeping with this degree. This then leads on to the question of to what extent donated organs are a social resource; are they a resource that should be available to help improve the lives of all those in society, or are they a resource that should be available for those individual members of society who require them? It is to these questions to which I will turn in the first part of this chapter.

## **Ownership of organs and their use for transplant**

If organs are to be allocated based on social value considerations, the reasons behind the inclusion of the social value considerations need to have just grounds. The justification for the inclusion of social value considerations can be found not only in the fact that many more people would benefit from this redesigned allocation system, but also by looking at the duties that the body/organisation

who owns or has responsibility for the organs has, and how best they might fulfil those duties through the distribution of the organs they are responsible for.

In this section, I will first look at who has responsibility for bodies and organs, and then move on to look at the overarching duties of the authorities and individuals who have responsibility for them, and how this relates to the allocation of organs for transplant.

### **Who owns the body and its parts?**

The debate on bodily ownership is extensive, with commentators arguing in favour of property rights in corpses and human tissue, and some arguing against this. The current position of the law is that there is no property in a corpse or human tissue unless they have been subject to the application of skill (or intended for use in transplantation) (Liberty, 2008b). However, whether the law is right or wrong in this matter, and whether you believe that there should indeed be property rights in corpses and bodily tissues or not (regardless of the application of skill), is not of too much concern to the argument in this section as both positions are compatible with the overall argument. Regardless of whether or not there are property rights in corpses and bodily tissues, it still remains the case in both situations that someone, or some body/organisation will have legal possession and responsibility for them, and the tissue/organs are quasi-property (Nuffield Council on Bioethics, 1995, p. 78; Liberty, 2008b). Identifying the party responsible for organs for transplant and what their duties should be is what is of

concern here.

### **Responsibility for bodies and organs**

When someone dies, it is firstly the responsibility of the family or executors to deal with the body in an appropriate way and in accordance with what the deceased would have wanted, as far as is possible:

In the early English case of *Williams v. Williams*, Kay J. stated that "[a]ccordingly the law in this country is clear, that after the death of a man, his executors have a right to the custody and possession of his body (although they have no property in it) until it is properly buried." (Marusyk and Swain, 1989, p. 360)

But it is not just that there is a right to possession of the body; there are also duties that must be fulfilled:

"There is a duty upon certain people to dispose of a body after a death. This duty falls on the executor or administrator of the deceased's estate, the parents of a deceased child (if the parent has sufficient means), a householder upon whose premises the body lies (this includes for example, a hospital authority if the body of a dead patient is on its premises) and the local authority where no arrangements are otherwise made for the



disposal...<sup>27</sup> It is an offence for any such person, having sufficient means, to fail to discharge this duty” (Public Health (Control of Disease) Act, 1984; Liberty, 2008a).<sup>28</sup>

However, the family or executors can waive their right to the body and hand over responsibility for it to another person who, “when lawfully in possession of it, would be entitled to dispose, retain, or otherwise deal with the body or body parts, subject to public health provisions” (Skene, 2002, p. 176). The person who is now in lawful possession of the body may authorise the removal of any part of the body for therapeutic purposes, medical education, or research. Although, this must be in accordance with the expressed requests of the deceased, or the person in lawful possession of the corpse has no reason to believe that the deceased would have had an objection to their body being used in such ways (Human Tissue Act, 1961). It is then the responsibility of the relevant agencies to use the organs in the ways agreed upon by the deceased individual or the person in lawful possession as far as is possible.

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<sup>27</sup> Where a man died in hospital and none of his relatives could be found so as to make arrangements for a private funeral, the Court of Session, Inner House, held in *Secretary of State for Scotland v. Fife County Council*, [1953] S.C. 257, that it was mandatory, and not merely discretionary, for the local authority to have the body buried or cremated, there being no duty in this connection upon the hospital authority as such.

<sup>28</sup> The fact that the local authority has a duty to dispose of a dead body where no arrangements are otherwise made for the disposal, stems probably not so much out of a respect for the dead, but for the health and well-being of society as is supported by the fact that this law is found in the Public Health (Control of Disease) Act 1984.

Even though the executors have certain duties to fulfil, (and this includes those circumstances where the local authorities have to deal with the deceased), they do not have to cover the expenses of such duties out of their own pocket. They are entitled to recover the costs of the funeral from the estate of the deceased, so long as the funeral expense is appropriately proportionate to the standing and status of the deceased (Smale, 1994, pp. 65–66; Conway, 2003, p. 186).

“Although the executor has a right to dispose of the body, he or she must not spend more than a reasonable amount on funeral expenses without specific authority or consent from the beneficiaries of the deceased’s estate” (Liberty, 2008a).

So even though relatives, or the local authorities, may not have any claim of *ownership* over dead bodies that are in their possession, they do have at least quasi-property rights in them by way of their responsibility/duty to deal with the bodies in whichever way is appropriate under law (Nuffield Council on Bioethics, 1995, p. 78). However, quasi-property rights, or indeed full property rights are not just confined to bodies or parts of the deceased. Full or partial property rights can also be afforded to parts taken from the living if they have received treatment which significantly alters their original attributes, or the body part/sample is needed for a reason designated under law.<sup>29</sup>

Even though the approach taken so far in relation to bodily ownership has been broadly based on what the law says, if taken from an ethical perspective, the same conclusion is reached. *If* there is ownership in organs, then the donation of an organ to the state, or agency of the state that manages transplantation, could be seen as a gift, or transference of property from one party to another.

If the organs of the deceased, or the living, were to be donated for transplant, they would at least be the quasi-property of the local authorities/government as it is they who have the responsibility/duty to distribute organs for transplant, and the

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<sup>29</sup> There have been cases where people have been prosecuted for the theft of their own urine that was designated for use in alcohol tests from a police department (*R v Welsh*, 1974). Even though the police department may not actually own the urine, and they have not done anything to it that could be said to have given it different attributes than it originally had, because the urine was designated for use by a proper authority, the authority could be said to have a quasi-property right in the urine.

(Even though urine is not a bodily tissue in the same sense as an organ or cells, it could still be argued that it is a form of tissue from the body, and the same could also be said for hair. (Although, it might be unclear as to whether the a customer at a hairdressers who left their hair on the floor after it was cut, might be entitled to a claim against the hairdresser if the hairdresser were to then sell that hair on. It might not be illegal as the selling of hair for wig making is routinely done, but would the sale of a customer's hair without their knowledge be classed as an invasion of privacy? Or perhaps profiting on the physical by-products of others without their consent.))

lawful possession of the body parts has been passed on from the individual, next of kin, or executors (if there were any), to the government.

When a person donates their organs for transplant, the organs become a social resource because they are donated on the understanding that they will be used to help members of society who require them. They are willingly donated *by* society, *for* society. As such, it is up to the state and the relevant agencies, being responsible for the donated organs, to decide how best to distribute this social resource.

Now that the issue of who owns/has responsibility for bodies and organs has been clarified, I will move on to discuss what the main roles and duties of the government are, and how they relate to organ allocation, specifically looking at why the fulfilment of these duties points towards including a social value criterion in organ allocation.

### **The role of the government/state (and how it relates to organ allocation)**

In this section I will be looking at what the role of the government is, or at least should be. As was discussed in the previous section, there are circumstances in which the government will come into legal possession of bodies, and the parts that are most important for this thesis, organs for transplant. The reason why the role and duties of the government are of interest when debating the inclusion of a social value criterion into organ allocation is that certain duties of the government

actually point towards using social value in organ allocation decisions.

Whatever its duty is to the people, and to society as a whole, it will have a bearing on how the organs for transplant should be allocated. If the duty of the government is to do what is best for the individual members of society from, say, a prioritarian approach, then that will mean allocating organs in one way, perhaps on the needs-based system with the most urgent patients receiving the available organs. However, if the duty of the government is to do what is best for society overall from a utilitarian approach, then that will mean allocating the organs in a different way, perhaps based on who is most valuable to society, with a view to increasing overall welfare and meeting the needs of society as a whole rather than those of individual citizens.

However, the role of the government in this respect is twofold. It not only has a duty to do what is best for the individual, but *also* what is best for society. For example, in those cases where the deceased has no relatives, or at least, no relatives who wish to take responsibility for the body, the government will take responsibility (Public Health (Control of Disease) Act, 1984, sec. 46.1). It has a duty to the wider society to deal with the body in order to prevent the risk of disease from the rotting corpse, but it also has a duty to do what is/was in the best interests of the (in this case) deceased individual as far as is reasonable. It is the duty of the government and the health care practitioners to ensure that as best as is possible, reasonable, and ethically acceptable, the wishes of the deceased are respected in order to do what was in their best interests. So, if it is known that they did not want to donate their organs then their wish should, and will, be

respected. And if they had a preference for burial or cremation, then the government will also respect that wish (Public Health (Control of Disease) Act, 1984, sec. 46.3).

To further illustrate that the government has a duty to do both of these things, it may be beneficial to look at what the situation would be like if the government had just one of these roles.

If the duty of the government were to do what is best for individuals, then that would perhaps mean that certain individuals would receive disproportionate amounts of help at the expense of the rest of society. It would mean that certain individuals could receive help or assistance with vast resources being spent on them if their need was great, whilst the rest of society may suffer from the loss of resources, reducing the aggregate welfare of society. This does not happen in government, and nor should it. There is a level of utilitarianism that is present in the governmental duties, with an aim to do what is in the best interests of society as a whole (to a point). Vast resources are not spent on individuals at the expense of the wellbeing of the wider society. It might be pointed out that those who require hospital treatment receive more help and money than those who do not need hospital treatment, but the fact is, their treatment does not come at the significant expense of other people's well-being. That is why there is a limit on the amount of money the government will pay to improve a person's health; there is approximately a £20,000 - £30,000 limit per patient on the quality adjusted life years (QALYs) (Devlin and Parkin, 2004), (however, this is not a strict limit and exceptions are made, especially in relation to the cancer drugs fund) (BBC News,

2014a; Cancer Research UK, 2014; NHS England, 2015). This ensures that individuals do not have excessive amounts of money paid to help them at the expense of the money available to the rest of society. So even though the government does have a duty to look after individuals within society, it does not do so at the expense of the wellbeing of the whole.

On the other hand, if the duty of the government was solely to do what is best for society as a whole, it may mean that those individuals in society who are vulnerable will not be given the assistance they need to ensure an adequate quality of life, or even to avoid death. Society as a whole may flourish with the investment of time and money in areas that ensure the sustainability and sustainable growth of society in most aspects, but there may be many individuals who require help that will be ignored. If the focus was on doing what was in the interests of aggregate welfare for society, it may mean that individuals' rights are not protected, such as the right to minimum levels of basic welfare and healthcare etc., and to just treatment in relation to such things as discrimination, equality of opportunity, and distribution of resources or welfare. This is surely a situation that we do not want, and a situation that the government should not allow to happen if avoidable. So even though the duty of the government is to do what is best for society as a whole, it also has a duty to look after those members of society who are most vulnerable, in whatever way that may be, as far as is reasonable whilst balancing the needs of the whole. The government has a duty to protect its citizens, both as a group and as individuals.

When these two duties of the government (doing what is best for society, and what

is best for the individual) are applied to the allocation of organs, an allocation system much like the one that is in place now, but with the inclusion of the additional criterion of social value, would help to fulfil these duties. To fulfil the duty of doing what is *best for society*, a utilitarian approach where organs are allocated purely on a social value basis would be needed. And to fulfil the duty of doing what is *best for the individual* (or at least the individuals most in need), a prioritarian approach where organs are allocated purely on a patient urgency basis would be needed. But because both of these duties need to be fulfilled as far as is possible, a combination system that includes both prioritarian *and* utilitarian considerations is needed.

As was mentioned in the previous chapter, as the current allocation system stands, more emphasis is placed on fulfilling the duty of doing what is best for the individual [patient] than it is for doing what is best for society. (That is not to say that the current system ignores the wider effects on society completely; it does look for the best tissue match to avoid rejection<sup>30</sup>, and will not offer an organ to a patient whose transplant would be futile, and there are numerous contra-indication considerations. But the emphasis remains mainly focused on the patient as an individual). However, with the additional inclusion of the social value criterion, the balance is restored somewhat. The needs-based element of the allocation system fulfils the duty to do what is best for the individual. Whereas the addition of a social value criterion to the allocation system (alongside the other criteria that relate to making the best societal use of scarce resources) fulfils the duty to do what is best for society. In this way, both duties of the government are

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<sup>30</sup> Although this is partly a patient centred criterion.

represented in the allocation system, with individuals' needs being taken into account so that those patients who are most in need are treated first, and the needs of society being taken into account by the most socially valuable of the urgent patients receiving treatment first.

The balancing of the duties here in organ allocation follows a partly Rossian approach, with the *maximisation* of aggregate welfare being constrained by respecting the rights of the citizen. (This results in the overall welfare simply being increased rather than maximised.) There are *prima facie* duties to do what creates welfare for the individual, as well as what creates aggregate welfare for society. However, the duty to create aggregate welfare for society is defeasible in the light of competing concerns, such as infringing on equality and rights, which may be thought of as more important in this situation (Ross, 2007). As such, the increase in aggregate welfare through the use of a social value criterion is only used as a tie-break decision once the other duties of respecting citizens' rights have been fulfilled through the application of the medical criteria. This is not to say that the utilitarian approach here is abandoned, but rather that, to achieve an increase in welfare from the allocation of the organs, the other values that we hold as important, such as equality and rights, need to be maintained and fulfilled before the social value criterion is used.

This revised system provides the opportunity for those who are most in need to receive an organ, and it also helps to do what is best for society by allocating the organ to the patient in this group who is most valuable to their society. Allocating organs to those vulnerable members of society who are important to its



flourishing, whether that be economically, artistically, or scientifically, etc., but more specifically, important to whatever needs require fulfilling within society at that particular time, will help to improve the aggregate welfare of society as a whole. Doing so will ensure and safeguard its flourishing better than allocating organs to those vulnerable people who do not contribute as much to society, or are not valuable in fulfilling the current needs of society.

### **Using people as a means to an end**

It might be questioned as to why we should sacrifice the good of an individual for the good of society as, in fulfilling the duty of the government to do what is good for society, in the case of organ allocation through the social value combination system, it *will* mean disadvantaging an individual for the good of society. The patient who is most in need<sup>31</sup> may miss out on treatment in favour of someone who is less in need. Nozick outlines this objection:

“But why may not one violate persons for the greater social good? Individually, we each sometimes choose to undergo some pain or sacrifice for a greater benefit or to avoid a greater harm... But there is no *social entity* with a good that undergoes some sacrifice for its own good. There are only individual people, different individual people, with their own individual lives. Using one of these people for the benefit of others, uses

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<sup>31</sup> On the current use of the term need.

him and benefits the others; nothing more... To use a person in this way does not sufficiently respect and take account of the fact that he is a separate person, that his is the only life he has" (Nozick, 1974, pp. 30–33).

There are two parts to the reply to this objection. The first is that because the nature of organ allocation is that there are not enough resources for all, there *have* to be some people who make a sacrifice, even if it is an unwilling sacrifice. Even under the current system without the addition of a social value criterion, patients have to forgo their own health for the health of another.<sup>32</sup> Under an allocation system that includes a social value criterion, the same unavoidable sacrifice that some individuals will have to make due to scarce resources will remain, but instead of that being the end of the story, the sacrifice will actually provide a wider benefit, with that benefit being increased social welfare. The decision of who to give the organ to is a *forced choice* between people: whomever it is given to, someone will die or suffer because of the lack of an organ. Therefore, we are not *choosing to sacrifice* a person, but merely choosing *whom to sacrifice*. Because at least one person's health is going to be sacrificed for another under any allocation system, and the final potential recipients that will be considered for an organ transplant under a social value combination system are all at the same level of urgency<sup>33</sup>, it makes sense to at least limit the detriment that is caused by the sacrifice, and promote welfare.

The second part of the reply is that, if the social value criterion is included, the

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<sup>32</sup> Of course, they do not willingly make this sacrifice; it is imposed upon them based on how urgently they require an organ transplant (regardless of the fact that even though patients may have differing levels of immediate need for a transplant, they may actually be of the same urgency).

<sup>33</sup> On my suggested use of the term

patient may be being selected as a means to an end, with that end being increased benefit to society, but that does not ignore the fact that the patient is a separate person and his is the only life he has. The patient still has the ability to choose how to live his life, and no one will force him to do anything he does not want to. He has simply been selected as a recipient because the traits and skills that he has, make it more likely that he will benefit society. But he is free to do as he pleases. He has been given an extended life, and still retains his freedom to pursue his own ends, which, due to careful patient selection, will happen to be beneficial to the rest of society too.

Furthermore, the recipient will not have been treated as *only* a means to an end, but also as an end in himself given that the recipient will have given his consent to receive the organ, expressing his nature as an autonomous creator of his own ends.

Allocating organs in such a way as to include social value criteria may be seen as a controversial idea, however, there is only a slight deviation involved from the current system. Instead of categorising the most vulnerable potential recipients, and then of those, if at the same level of urgency, *allocating the organ to whoever has been on the waiting list longest*, a system including a social value criterion would categorise the most vulnerable patients, and then of those, allocate the organ to whomever is most valuable to society. This revised system simply limits the harm caused to society overall by avoiding the death of someone who is more valuable to it than someone else. The government is fulfilling its duty to the people as a whole, whilst still fulfilling its duty to the most vulnerable individuals.

## **How will the new system work?**

The inclusion of social value considerations within the organ allocation process now has at least a pro tanto justification on the grounds that it can create more welfare than the needs-based criteria alone, but how would the social value combination system actually work in practice? As discussed in the previous chapter, the waiting list for an organ transplant should not be organised based solely on an individual's value to society, but it should be included on some level. There are a number of options for the way in which the social value and needs-based combination system could work that will fulfil the duty of doing what is best for the individual by treating the most urgent patients first, whilst also fulfilling the duty to do what is best for society by including the additional social value criterion. The preferred formulation of the combination system has been alluded to in the previous discussion, however, it will be covered in more detail in the discussion below (option 1), as well as a possible alternative formulation of the system (option 2).

### **Social value as a replacement for waiting time**

The best place to include social value considerations in all possible formulations of an allocation system that includes a social value criterion would be after the medical needs and patient medical suitability criteria had been taken into account.

In this way, the unnecessary deaths of patients can be minimised; those who are most in need of, and medically suitable for an organ transplant, will be given priority. It is then here that the social value considerations can be factored in.

As it stands now, if there are two or more patients who are at the same level of urgency (or with kidneys, suitable match) and have the same prognosis with a transplant, whoever has been on the transplant waiting list the longest will be given priority (NHSBT, 2014h, 2014b, 2015d). Under the social value combination system, if there were two or more patients who were at the same level of urgency and prognosis, and were a suitable match for the organ, then whoever is more valuable to society would be given the organ. The social value criterion would *replace* the waiting time criterion in this final stage (option 1).

Note that the suggestion I am making here is not that a patient cannot have access to the waiting list for an organ if they are not socially valuable. If a patient is medically suitable for an organ transplant, they can be registered on the waiting list, regardless of their social value, and if they are in urgent need, they will be considered for priority treatment. However, where their social value *will* play a role, is in determining whether they receive an available organ over another urgent and suitably matched patient. Regardless of their value to society, a patient will always have access to be registered on the waiting list for an organ transplant so long as it is a medically viable treatment option. Whether they have access to the actual available organ however, will depend on their relative social value to that of the other urgent (and suitably matched) patients.

Below are 2 options for how the social value considerations could figure in a

combination system.

## **Option 1**

### **Redefining urgency**

The first option would be to identify the patients in most urgent need, and then allocate the available and suitability matched organ to the patient who is most socially valuable. However, the conditions to meet the urgency criterion would need to be changed to better reflect the situation for the patient cohort, with the most urgent group being all those who will die before another organ is likely to become available. The social value of all of the patients who are likely to die before another organ is likely to become available would be compared, and the most socially valuable would be chosen as the recipient. The reason for grouping these patients together, despite some of them being able to survive without a transplant for longer than some other patients in this group, is that if those who can survive for longer are going to die before another organ is likely to become available, then are they not really at the same level of urgency as someone whose life expectancy without a transplant is less, but who will also die before an organ is likely to become available? All but one (the recipient) of this group of patients face the same fate if there is only one organ available, it is just that the fate of some patients will come about sooner than others.

For example: if hearts become available once a month on average, and there are 5

possible recipients who are all a suitable match and will die before another heart is likely to become available (the next month), then these 5 patients can be said to be at the same level of urgency as all will die before their next opportunity for a heart is likely to become available. So it makes no sense to select for treatment the patient whose fate will come about the soonest when all 5 of the patients face the same imminent fate, albeit more imminent for some of the 5 than others. Instead, of the patients who will die before another organ is likely to become available, the most socially valuable patient of the group should be selected.

A possible objection to this is that the nature of organ donation is that availability is sporadic. It is not generally possible to know with *certainty* when the next organ will become available as organs may come from accident victims and other sudden deaths. (Of course, there are people whose deaths can be foreseen within a given time, e.g. those with a terminal illness, however, traffic accidents and other sudden deaths cannot.) This means that under this redefined classification of urgency, an organ from these unpredictable sources may suddenly become available that would have been suitable for a valuable patient in the group of 5 who was previously allocated an organ despite having a longer life expectancy than a less valuable patient in the group who had a shorter life expectancy. In this scenario only one person's life has been saved (even if it was the most socially valuable patient) when two lives would have been saved, resulting in an even greater benefit to society.

In reply to this objection however, even though it might not be possible to say with absolute accuracy when another organ will become available, it is possible to

make informed predictions based on previous availability rates and work within these statistics. E.g. if no more than one heart a day becomes available, the most urgent group would only consist of those patients who would die today without an organ. Or if it were unusual for 2 hearts a week to become available, the most urgent group would consist of those patients who would die this week without an organ. In this way, even though predictions with certainty cannot be made, allocation decisions can be made within the limits of informed predictions.

As it happens, transplant rates have not widely fluctuated (NHSBT, 2015k), and the rate at which organs are transplanted throughout the year also remains steady, with no sudden seasonal influx of organs, and so reasonable predictions can be made regarding the likely availability of different organs (NHSBT, 2015f). Take kidneys for example: in the financial year 2015/2016, 2227 kidney transplants were carried out, with relatively little variation in the number of transplants carried out each month (and the variation is even smaller for other organs, such as hearts (NHSBT, 2015f, fig. 14)) (NHSBT, 2016, fig. 8).



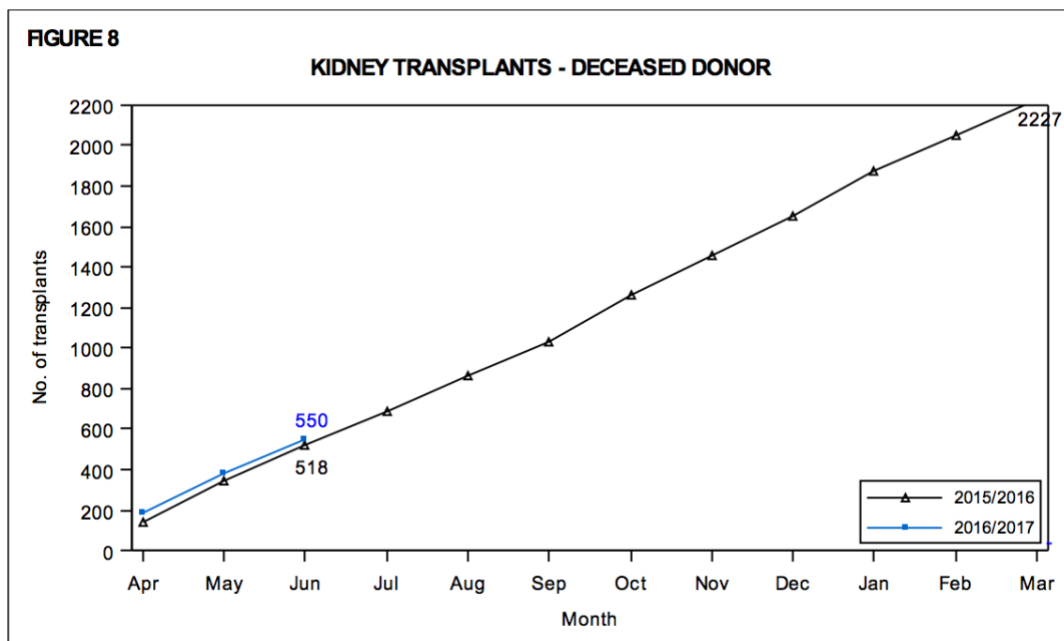


Fig.1 (NHSBT, 2016, fig. 8)

By dividing the total amount of transplants carried out per year for an organ by the amount of days in the year, an average number of transplants per day carried out can be determined. For kidney transplants based on the 2015/2016 figures, that number is on average, 6 transplants a day. For hearts, the figure is 0.49 a day, or more usefully, one transplant every 2 days (NHSBT, 2015f, fig. 14). In the case of hearts, the patients who would be classed as the most urgent would be those patients who will die without a transplant in the next 2 days following the last transplant. When it comes to pancreas transplants, 29 were carried out in 2014/15, and so the average transplant rate is approximately 1 per fortnight, and so any patient who is likely to die within 2 weeks since the last pancreas transplant would be classed as urgent (NHSBT, 2015f). With kidneys, because the availability of the organs is much higher than that of other organs with around 6 transplants a day being carried out, there may not be 6 or more patients who will die before

another organ is likely to become available. As such, the patients who would be prioritised for an organ may be a mixture of those who *will* die before the next suitable organ is likely to become available, but also those patients who are next in need and a suitable match.

## **Option 2**

### **After waiting time**

There is a second option for the position of the social value criterion, however it is less preferred to that of option 1. If *replacing* waiting time with social value considerations in the final stage does not appeal, then there is also the possibility of allowing the waiting time consideration to be taken into account first, and then use social value as a tie-breaker. Essentially, the current allocation system would remain in place, but with the final addition of a social value criterion to make a tie-break decision if necessary. If there were only one organ available, of those patients who have been on the waiting list for the same amount of time, and are at the same level of urgency, the person who is most socially valuable would receive the organ first. The social value criterion would be used to make the tie-break decision in cases where there are two or more patients who are tied in terms of urgency and their accrued time on the waiting list.

However, the problem with this is that it is not likely that this situation would occur frequently enough to warrant having such a social value combination

system in place to begin with. It is unlikely that of the patients who are suitable for the organ transplant, at least two will have been on the waiting list for *exactly* the same amount of time, and both have the same prognosis. They may have been registered on the list on the same day, but it would be an impressive coincidence if they had been registered within the same minute or second. It is reasonable to assume that for all but the smallest amount of cases, there will always be a difference in the waiting time between suitably matched patients. The reason why this is important is because, if waiting time is taken into account *before* social value considerations, then the allocation system is in no better place than it is now; the use of the social value consideration would only be used very rarely, if at all. However, if the waiting time consideration is *replaced* by social value considerations at this final stage for equally urgent patients, then the allocation system *is* in a better position, and no worse off for the removal of the waiting time criterion. The organs are both saving someone's life *and* improving society. Because of this, option 1 should be the preferred formulation of where the social value criterion would fit into organ allocation decisions.

## **Conclusion**

A positive case for the inclusion of a social value criterion into organ allocation decisions has been given in this chapter, by first showing that it is the state who has quasi-property rights in donated organs for transplant, or at least is in legal possession and has responsibility for them, and given this, should allocate the

organs to society in keeping with its duties to society. Because the state has a duty to both the individuals within society and to society as a whole, the way in which the organs are allocated should help to satisfy these duties, and this is exactly what the addition of a social value criterion, implemented in the way I have suggested, could help to do.

By removing the waiting time criterion and instead, grouping all those patients together who will die before their required organ next becomes available into the same category of urgency, the state is doing what is in the best interests of the individual, as far as is reasonable, by ensuring that those who are in most urgent need are considered for treatment first. The addition of a social value criterion when deciding which patient out of this most urgent group should be the organ recipient helps to satisfy the other duty of the government; to do what is in the best interests of society as a whole, by allocating the organ to the patient who is the most socially valuable within the urgent group.

Now that a positive case for the inclusion of a social value criterion into organ allocation decisions has been shown, and where it would figure in the allocation decision, just who should make the social value assessment can be discussed (Chapter 5), followed by a detailed account of types of contributions that would be assessed when determining a person's overall social value (Chapter 6). However, before doing so, it would be beneficial to look at an earlier situation where social value had been included in resource allocation decisions, and why it was so problematic in that particular case. By doing so, the objections that the case study faced can hopefully be avoided when considering the values that should be taken

into account under a revised social value criterion, and how they should be used.

# Chapter 4: Lessons from Seattle

## Introduction

Before I go any further and discuss just what makes someone, or something (such as a trait or skill) socially valuable, it should be noted that the rationing of medical resources to patients based on their social value has occurred before, but was then abandoned in favour of the needs-based system that is now commonplace in medicine. In 1962, Dr. Belding Scribner, who was researching dialysis treatment, reached a stage in his research where dialysis might prove to be a viable long-term treatment with the use of a cannula shunt for those with renal failure, and began treating patients at the Seattle Artificial Kidney Center. However, the resources to treat possible patients were severely limited and so only a handful of patients could receive this treatment. Scribner decided that the fairest way to allocate these resources would be to hand over the patient selection decision to a lay committee made up of members of society who would represent the community and assure that choices were made objectively, without outside pressure, and would decide which medically suitable patients would receive treatment (Robbins and Robbins, 1967).

The decision making process was first detailed in an article titled "They decide who lives, who dies", by Shana Alexander in Life magazine (Alexander, 1962), and although the breakthrough of an indefinite treatment for renal failure should have been arguably the most important aspect of the article, what it is now famous for

is the exposure of the allocation process; up until then it was largely in the hands of the medical professionals and done behind closed doors without the patients or the public knowing what was going on. The reaction to the revelation was mainly critical, and whilst this is understandable, and many of the criticisms were valid due to the way in which the social value criteria were decided and implemented in the patient selection process at the Seattle Artificial Kidney Center, many of the problems faced in this circumstance could have been avoided.

The social value allocation criteria and the lay committee responsible for making the decisions were ultimately abandoned and disbanded for what might be seen as ethical, political, or financial reasons, or a combination of them all. However, looking at this allocation system, the members that made up the committee, and how they made their decisions, will prove a useful case study in anticipating problems that might occur in a revised social value allocation system, and how those problems can be avoided. It will help to highlight some of the arguments against using a social value criterion in organ allocation decisions, and more specifically, how the poor implementation of the criterion can needlessly create problems and injustices. Whilst it was estimated that 42% of the dialysis centres at the time, assayed patients in terms of their social utility, it is only the dialysis centre set up by Scribner for which there is detailed information available, and as such, is the focus of the discussion (Ramsey, 1970b, p. 248). I will first give a more detailed overview of the case, and then move on to highlight the pitfalls and problems of Scribner's approach, and how they could be avoided in a revised system.

## Overview of the case

Dr. Belding Hibbard Scribner was a U.S physician and a pioneer in kidney dialysis who developed a cannula shunt to be used in kidney dialysis patients that could be used again and again rather than inserting new dialysis tubes into new arterial locations (Quinton W, Dillard D, 1960; Scribner *et al.*, 1960). This invention was so important in the treatment of kidney failure as, previous to the shunt, dialysis treatment meant inserting tubes into a new arterial location each time the treatment was carried out (or each site only had a couple of uses). This meant that dialysis was not a viable long-term treatment as there was only a limited number of times and locations that the tubes could be inserted. However, because the Scribner shunt was a “permanent” fixture in a patient's artery and could be used indefinitely, kidney dialysis could now treat a patient with kidney failure indefinitely too.

A year after the first cannula was placed in the arm of a patient, and subsequently 2 others, the treatment looked as though it would be a success and Dr Scribner felt enough technical progress had been made to try a feasibility study. The aim was to see whether a community-supported programme could provide a service-orientated artificial kidney centre as a public service (Blagg, 1998), as previous funding from the University Hospital in Seattle had been discontinued for a



number of arguably valid reasons.<sup>34</sup> Funding was obtained from the John A. Hartford Foundation for implementing a community haemodialysis centre for treatment of chronic uraemia and terminal renal failure, later supplemented by a grant from the United States Public Health Service, and had support from the King County Medical Society and the Seattle Area Hospital Council. The centre was built outside the hospital in the basement of Elkind Hall, the Swedish Hospital's nurses' residence, in order to reduce costs, and was able to accommodate three beds and the associated equipment since 'one nurse can conveniently monitor three patients on dialysis' (Blagg, 1998, p. 235).

Because the estimated annual number of ideal candidates for long-term dialysis, (5-20 per million population (1998, p. 235)), was significantly higher than the capacity of the newly formed Seattle Artificial Kidney Center, there needed to be some form of selection process to narrow down the possible recipients for treatment; two committees were formed to carry out this task. The first was the Medical Advisory Committee that made the initial selection and was made up of renal disease physicians and a psychiatrist; the second was the Admissions Advisory Committee, (which, after the article by Alexander (Alexander, 1962), would become known as the "God Committee"), and was made up of an anonymous cross-section of the community: two physicians not involved in the

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<sup>34</sup> "The hospital administration soon informed Dr Scribner that no new patients were to start maintenance artificial kidney treatment. It was recognized this treatment would cost at least \$10,000 to \$20,000 per patient per year, it looked as if it was going to be successful, and research monies for support of this activity could not be relied on indefinitely. Consequently, the University could be placed in the difficult position of having a number of patients on an expensive treatment programme with no funds to support them, yet unable to withhold treatment because the patients would die and the adverse publicity would be very damaging. The problems of developing a dialysis centre at the University Hospital were also recognized, particularly as some form of patient selection would be necessary, and the University, a public institution supported by tax dollars, would be in a very poor position to decide which citizens should be treated and which denied treatment" (Blagg, 1998, p. 235)

care of dialysis patients, a lawyer, a housewife, a businessman, a labour leader and a minister (Sanders and Dukeminier, 1967, p. 367; Blagg, 1998, p. 236).

The criteria used to make the patient selections were:

“A stable, emotionally mature, responsible citizen disabled by the symptoms of uraemia; Absence of long-standing hypertension and its permanent complications, particularly coronary artery disease and cerebrovascular disease; Demonstrated willingness to co-operate in carrying out the prescribed treatment, especially the dietary restrictions; Age 25-45 years; Slow deterioration of renal function (serum creatinine 8-12 mg%), since any residual function simplified the therapeutic problem; Six months residence in the area (Washington, Alaska, Idaho, Montana and Oregon); Financial support; Value to the community; Potential for rehabilitation; Psychological and psychiatric compatibility; and Children and young adults who were not potentially self-supporting were excluded.” (Blagg, 1998, p. 236)

Whilst the mix of criteria used were both medical and non-medical, it was the medical criteria that were applied first, and once the patients that were medically suitable for kidney dialysis had been narrowed down, it was then up to the Admissions Advisory Committee to make the final decisions on which of the medically suitable patients would receive treatment. They decided to base their decisions on social and economic criteria, and would represent the community and assure that choices were made objectively, without outside pressure (Robbins and Robbins, 1967). *“Their role was to assess the relative worth of a candidate to*

*their family and the community in terms of the degree of dependence of others upon the candidate's continuing existence, and the rehabilitative potential and moral value or worth of the candidate*" (Robbins and Robbins, 1967). At first, the committee limited candidates to residents of the state of Washington who were under the age of 45 and could afford the treatment (usually through their insurer). However, because the number of patients who applied was so great, other selection criteria needed to be introduced and it was decided that social contribution considerations would be taken into account. Eventually, the committee not only looked at what they thought the social contributions of the possible recipient were, but also "the personality and personal merit of the candidate, the strength and weaknesses of the candidates family, and the family's emotional support for a patient on chronic dialysis" (Pence, 1995, pp. 297–298). Other methods of patient selection were considered but not used because of the issues associated with those methods<sup>35</sup> (although selection by social worth is not without its own problems, as will be discussed in next section).

Ultimately, the Admissions Advisory Committee, or the 'God Committee', was disbanded, and the social worth selection criteria for the allocation of limited medical resources abandoned. Ten years after the Seattle Swedish Hospital opened the kidney centre, dialysis treatment became federally funded after pressure from lobbyists, kidney patients, and concerns that "too much money was

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<sup>35</sup> "A strictly medical selection committee would have lacked a diversity of viewpoints, could have built-in prejudices if a candidate was followed by a physician committee member, and outside pressures could be exerted on members. Use of first-come, first-served, could have made the decision difficult and arbitrary if there were too many candidates, and if no medical criteria were used, very poor candidates might be treated. This could have jeopardized the whole project because of the limited facilities and limited financial backing with nowhere else to go for support. Treatment of all candidates would have avoided the selection problem, but would have so overloaded the centre that the project would have failed immediately" (Blagg 1998, p.236).

being spent on space [exploration] and the war in Vietnam and too little on dying people who might be saved” (Pence, 1995, pp. 311–312). This meant that the social worth patient selection criteria did not have to be used anymore, and there was no longer a need for the “God Committee”. *“Faced with the ethical problem of which patients should be funded and how to select such patients, Congress, took what was then the easy way out - it simply funded all patients”* (1995, p. 311 added italics).

When first set up, the Seattle kidney centre did not have this option of treating all patients in order to avoid the difficult decisions of deciding which patients should be afforded the chance of life, which is why there was a need for a patient selection committee in the first place. And the same went for other kidney centres; it was estimated that 42% of the dialysis centres at the time, assayed patients in terms of their social utility (Ramsey, 1970b, p. 248). But again, these social value judgements were made out of a necessity to allocate the available limited resources, not as judgements that *only* those patients who were valuable to society should receive treatment. If there had been more resources available, then of course, those patients who were less valuable to society would have been treated too, as indeed became the case in the end when federal funding was made available.

The exposure of the selection committee in Alexander’s article (Alexander, 1962) and the process that they used to select patients for treatment has been described as the birth of contemporary bioethics discussion and research (although this is

debatable).<sup>36</sup> Before then, there were no guidelines or academic discussion on how patients should be selected for treatment, and so the Seattle “God Committee” chose the method that they felt was best, namely the use of social worth considerations. And because there was no guidance on how such a selection system should work, the Seattle committee was simply “the prototype of one way to solve this question of who lives and who dies” (Ramsey, 1970b, p. 244). Given that the Seattle committee was attempting to allocate resources in a way that had not been tried before, there were worries and concerns about the whole process, with reactions by scholars, and the publicity surrounding the developments in Seattle being primarily criticisms centred around the committee favouring patients who embodied the personal values that they held (Blagg, 1998, p. 237). However, these criticisms were surprising to Dr Scribner and the team themselves as they felt it was the new dialysis treatment that was of more interest than the selection committee:

“All of us who were involved felt we had found a fairly reasonable and simple solution to an impossibly difficult problem by letting a committee of responsible members of the community choose what patients (should receive treatment) among those who were medically ideal... In retrospect, of course, we were terribly naive. We did not realize the full impact that the existence of the committee would have on the world. We simply could

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<sup>36</sup> “Albert Jonsen dates 'the birth of bioethics' from the year 1962, when Shana Alexander's article describing the Seattle dialysis selection committee appeared in Life magazine. Elsewhere Jonsen describes 1965-75 as the 'formative decade' for bioethics in this country. David Rothman, in what is the first history of the bioethics movement, dates its beginning with the 1966 publication of Henry Beecher's articles exposing abuses in human experimentation.” (Meilaender, 1995) However, it might be argued that the birth of bioethics was even earlier in 1946 with the development of the Nuremberg code.

not understand why everyone was most interested in the existence and operation of the lay selection committee than in the fact that in two years we had taken a disease and converted it from a 100% fatal prognosis, to a two-year survival. Nor were any of us prepared for the very severe storm of criticism that was to be forthcoming at the annual medical meetings and in the scholarly literature.” (Blagg, 1998, p. 238).

It should be noted however, that it might not have been simply the fact that the Seattle committee was using a controversial selection process that meant it became the focus of Alexander's article in *LIFE* magazine when, arguably, the focus should have been on the innovative dialysis treatment. The patient selection process as a whole and the moral dilemmas that go along with it had never been put so openly in the public field before; previously, it had been discussed only privately among physicians (Pence, 1995, p. 299). The reason the Seattle “God Committee” and selection process might have caused so much of a stir could have also been due to the public being informed for the first time, of the ethical dilemmas associated with patient selection, *as well* as the social worth criteria being used. That is not to say that the criticism of the system generated by Alexander’s article was not valid, but that the amount of interest it caused could be seen as being partly due to the issues of medical ethics being brought into the public sphere for the first time.

Because the Seattle social value selection process was novel, new, and untested until it was actually used, it can be seen as a prototype, and as such, there is room for improvement. The problems with the Seattle system can be largely attributed

to the fact the Seattle allocation system was the first of its kind, and so those who designed it did not know fully what problems to pre-empt and what safeguards to put in place. In a revised system, lessons can be learnt, and I will argue that a revised social value allocation system could be introduced with fewer issues, and may be incorporated into the already widely accepted needs-based system, creating an even more beneficial resource allocation system.

## **Problematic features of the Seattle system**

In this section, I will discuss what the main problems with the Seattle system were, both in terms of criteria, and the procedure used to make patient selection decisions. The main problems of the system were that, firstly, it appeared to place both *moral value* judgements on an individual as well as *instrumental social value* judgements, when it is only the instrumental social value of a person that is important when making objective social value decisions. Secondly, there were problems with the actual social value criteria used in that they were especially subjective, and not useful criteria for a lay committee to use when making a prediction on a person's future contributions. The criteria were also open to abuse from patients who may put themselves and others in potentially risky situations in order to increase their chances of selection, and the criteria unjustly jeopardised the equality and fairness of the selection process. Thirdly, there were problems with the patient selection committee itself in that the members of the committee were made up of lay people who had no relevant knowledge and

expertise of what made someone socially valuable and what is socially valuable to begin with; their judgements were based on their own values and prejudices, and the diversity of the committee members was very narrow. These main problems will be discussed in more detail in the following sections.

### **The value of patients**

One of the main problems perceived with the criteria the Admissions Advisory Committee used (*the social worth standard*), was that patients were being seen as more or less valuable than each other, and then being given or denied treatment on the basis of this decision (Sanders and Dukeminier, 1967). There are two separate issues here: 1) the denial of treatment, and 2), the social worth judgement; it is when these two issues are combined that the problems arise. It is true that some people are more instrumentally valuable to society than others, and it is true that there is always going to have to be some denial of treatment when scarce resources are involved. But denying people lifesaving treatment based on their value to society is where the problem lies for most critics. For them, the denial of life saving treatment based on the patients' social worth is effectively saying that not only are the patients' contributions to society not as valuable as someone else's, but also that their life is not as valuable to society.

However, it might be argued that this is not the case. Even though one person's contributions to society are not as valuable as someone else's, this does not necessarily mean that their *life* is not valuable. The fact that the patients were



narrowed down by their medical suitability/feasibility first, rather than by their social worth, shows that even those people who might make few social contributions are still valued, and are still valuable to society as a person, albeit less than someone else. If they were not valued, then they would have been discounted even before their medical suitability was taken into account on the basis that their contributions to society were less valuable than other patients. It was not necessary that a person was both medically suitable *and* socially valuable in order for them to receive treatment; only medical suitability was necessary, whilst social value was used only as a prioritisation tool. There was no threshold for social value that a patient had to meet in order to be considered for treatment; it was used only to make comparative judgements between patients.

Despite this, Sanders and Dukeminier still had concerns that there might be “undisclosed preferences and prejudices, as well as objective criteria” contained within the term medical suitability or *feasibility* (Sanders and Dukeminier, 1967, p. 373). At some other centres, such as the *Northern California Chronic Hemodialysis Center*, there were specific rules on patient selection that said, “*social values must not influence the decision*” (Northern California Chronic Hemodialysis Center, 1967, p. 372). However, because the specifics of just what constitutes the term feasibility are not detailed, Sanders and Dukeminier worried that social value judgements might still be included, but disguised under the term *feasibility*.

Under a revised social worth allocation system, where possible candidates for treatment are first narrowed down by medical suitability using the current medical need and matching criteria that are in place, worries about social value

judgements being incorporated at this early stage in the patient selection should be alleviated. The algorithms for ranking patient's according to their medical need and as a suitable tissue match are now well formulated and established, and broadly free from social value judgements.<sup>37</sup> The revised system should also not face the objection that if a patient does not receive treatment because the social value of another patient was higher, the unfortunate patient's life is not valuable. It is not that their life is not valuable, or even that it is less valuable; it is simply that someone else's life is more *instrumentally socially* valuable. As was the response to critics of the Seattle system, the fact that the social value judgement on patients comes *after* the medical suitability selection, shows that all patients are valuable and have equal moral worth, and it is only their social value that differs.

## **Social worth criteria**

### **Subjective criteria**

One of the inherent problems with using social worth criteria to assess a patient's value to society, is actually determining how socially valuable a patient is; what criteria do you use?; How deep do you look?; How do you weigh the different factors? In his book, *Classical Cases in Medical Ethics*, Gregory Pence correctly

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<sup>37</sup> However, it might be argued that there are remain some form of social value judgements in the current patient selection process by way of the QALY and the accusations that there is discrimination inherent in the criteria that mean some patients, namely the elderly, are less likely to receive treatment.

points out why these issues posed a problem for the Seattle committee:

“...this committee was struggling with issues of distribution in the era before bioethics. At the time, no philosophers were writing about ethical issues of allocating artificial or natural organs, no philosophers were writing about bioethics at all.” (Pence, 1995, p. 298)

As was mentioned in the last section, the Seattle committee and the selection process they used could be seen as a prototype for a social value allocation system (Ramsey, 1970b, p. 244), and as with most prototypes, problems are discovered and refinements need to be made. The committee was deciding what criteria to include in the decision making process from their own individual consciences without any moral or ethical guidelines from research sources; they were on their own (Sanders and Dukeminier, 1967, p. 371). Making such decisions without any guidance and outlines was sure to raise eyebrows, especially when those decisions were being made by lay people who did not have the relevant knowledge and experience to fully know and understand what makes someone socially valuable, and when their decisions might be biased due to arbitrary prejudices. At best, the lay committee was simply a cross-section of the local society and represented their views on who should receive treatment. The Seattle committee drew up a list of all the factors that they would weigh up when making their selections: age and sex of the patient; marital status and number of dependents; income; net worth; emotional stability, with particular regard to the patient's capacity to accept the treatment; educational background; nature of occupation, past performance and future potential; and names of people who could serve as

references (Alexander, 1962, p. 106). However, the committee members all had differing opinions on the importance of each criterion.

In her article on the Seattle Committee, Alexander claims that the criteria the committee used to make its selection decisions was sometimes arbitrary, with patients over the age of 45 being rejected for treatment, the rejection of children, and only patients who lived in the Washington area being considered for treatment (Alexander, 1962, p. 106). However, these criteria are not fundamentally arbitrary and do have a reasonable amount of justification. The doctors justified the exclusion of patients over the age of 45 on the grounds that “older patients with chronic kidney disease are too apt to develop other serious complications” (1962, p. 106). And the exclusion of children was on the grounds that “the nature of the treatment itself might cruelly torment and terrorize the child” and concerns over whether “a child forced to live under the dietary restrictions would be capable of growth” (1962, p. 106). The basis for these decisions was on the patient’s ability to benefit rather than simply on some arbitrary reason. The exclusion of patients from outside the Washington area was on the grounds of fairness in that “the basic research to develop the u-shaped tube [cannula shunt] had been done at the University of Washington medical School and at its new University Hospital – both state-supported institutions – [and so] the people whose taxes had paid for the research should be its first beneficiaries” (1962, pp. 106–107). For residents of other states to benefit from treatment that the residents of the Washington area had effectively paid for, and whose citizens also required treatment, would be unfair on the citizens of Washington.

Sanders and Dukeminier also had concerns over the subjective nature of the selection criteria. They question the “public service” criteria that the Seattle committee took into account by asking whether “persons who got themselves jailed in the South while working for civil rights were doing a “public service”? What about working for the Antivivisection League? Why should a Sunday-school teacher be saved rather than Madalyn Murray” (Sanders and Dukeminier, 1967, p. 378). They point out that nonconformists who participated in such activities might have been ruled out when historically they have contributed so much to the making of America; “The Pacific North-West is no place for a Henry David Thoreau with bad kidneys” (1967, p. 378). So the Seattle committee might have been using social value criteria that were not objective, and influenced by their own personal biases and prejudices. However, the presence of prejudice and bias in the selection decision could also have been avoided if the selection committees were made up of different members, specifically, members who had experience in the relevant fields relating to assessing the needs of society and patient behaviour and circumstances.

The issue of the subjective values of the committee being incorporated into what should have been an objective reflection of a patient’s value to society will be discussed in more detail in the following chapter under the section *The Selection Committees*.

### **Prediction problems**

It might have been the case that the selection criteria the Seattle committee used was a reflection of their own values rather than an objective reflection of the needs of society, however, even if the selection committee had decided on social value criteria that were objective and warranted, there could still be concerns over how useful the criteria would be in the end. Childress points out that “the difficulties with predicting using social worth raised doubts about the feasibility and justifiability of using a utilitarian approach, and there was also difficulty in judging the consequence of present actions and which persons will fulfil their potential function in society” (Childress, 1970; Blagg, 1998, pp. 237–238). Even if the social value criteria used were justified, if the outcomes of a person’s actions, or the likelihood of them making certain contributions to society in the future cannot be accurately predicted, then how can accurate social value judgements about a person be made? Whilst this is not a problem confined to only the Seattle committee (any system that attempts to place a social worth judgement on a patient will face the same objections), accurately predicting the outcomes of a person’s actions, the likelihood of them making future contributions, and knowing the value of these contributions is even more elusive when it is a lay committee attempting to make these judgements, or even if left to the physicians.<sup>38</sup> They do not have the relevant knowledge and expertise to make these judgements accurately. (This will be covered in more detail in the next section.) Rescher acknowledged how difficult the task of the Admissions Advisory Committee was, especially compared to the task of the Medical Advisory Committee (Rescher, 1969, p. 179): “Biomedical factors are easy, but familial and social factors are

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<sup>38</sup> Furthermore, if social value decisions were made by the physicians, this may create distrust between the patients and the medical profession.

difficult and [involve] intangibles. Even so, these must be taken into account from the ethical viewpoint, and largely based on the principles of utility and of justice” (Blagg, 1998, p. 237).

Under a revised system, once the selection of patients for medical suitability has been made, instead of a lay committee determining how socially valuable a patient is, a committee of experts from relevant fields would make these decisions. Experts from fields such as sociology, economics, and psychology are in a better position than a lay committee to know not only what the needs of society are, but also the likely effects that different people will have in society, (provided that they have enough information). That is not to say that predicting the outcomes of a person's actions, or determining the likely future contributions of a person, would be a simple task for these professionals, but rather that, even though difficult, and perhaps impossible to predict with absolute accuracy, experts from relevant fields stand a better chance at making these predictions, and looking at the right criteria to begin with, than a committee of lay people.<sup>39</sup>

### **Criteria abuse**

Another problem with using social worth criteria to allocate resources to patients, is that patients may abuse, or play on the criteria in order to either make themselves more valuable to society, or to make their death more of a burden on

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<sup>39</sup> A more detailed discussion of who would be best placed to make up the selection committee will be given in Chapter 5.

society. Society would surely not discourage a person from trying to contribute more to society, even if it was for his own security; however, if a person were to intentionally put themselves in a position where their death would be more burdensome without making any real social contributions whilst in this position, they would in effect be holding the allocation committee to ransom. For example, the Seattle committee placed as much, if not more, value on family as it did on societal contributions,<sup>40</sup> so that “A candidate who plan[ned] to come before this committee would [have been] well-advised to father a great many children, then to throw away all his money, and finally to fall ill in a season when there will be a minimum of competition from other men dying of the same disease” (Alexander, 1962, p. 125). Because the Seattle committee placed so much value on family without any safeguards against those who might exploit these criteria, the system was open for abuse. There might not have actually been any cases where a candidate had purposefully put themselves in a position where their death would be more burdensome to society in order to increase their chances for treatment, but if a social worth allocation criterion were to be introduced again, such possibilities would at least need to be considered.

However, the need for safeguards to avoid abuse of the system depends mainly on how significant the risk of abuse of the system is. For example, how likely is it that someone would make life changing decisions about having a family if a social value criterion were in place, on the basis of the small chance that they may end up requiring an organ transplant at some point in the future? The chances of

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<sup>40</sup> “Other factors equal, the group chooses those with dependents...” (Sanders and Dukeminier, 1967)



someone making life altering decisions on the basis of a small risk, are going to be so small themselves that significant safeguards to abuse of the system aren't all that necessary. There are much bigger risks to people's lives and health that people do not avoid, and sometimes even actively pursue, e.g. the risk of a multitude of health issues due to smoking. Or issues that people do not plan for in the future because the event or risk is too far away, or because they think the actual occurrence of the risk will not happen to them, e.g. pensions, house/life insurance. If people regularly do not avoid or put in safeguards to protect themselves from these types of risks, there is no reason to suppose that they will be more inclined to alter their whole life around the even smaller chance of needing an organ transplant.

But this does not address the possibility of someone abusing the system once they find out that they require an organ transplant. If someone were to find out that they require an organ, they could still put themselves in a position where their death would cause more detriment than it would cause if they died in their current circumstances, even if they have not taken advantage of the system beforehand by purposely having a lot of children, or choosing a career path that is likely to be of value. E.g. a parent and spouse could purposely lose all their money and cancel their life insurance policies if they found out that they require an organ so that their death would mean that there was no financial security for their family. Or the eminent medical researcher could encrypt his unpublished results so that they would be lost if he died. In these circumstances, the patient would in effect be holding the NHS to welfare ransom. Even though the children and spouse exist and their welfare depends on the patient, and the encrypted, unpublished results

of the medical researcher might prove useful, responding to these engineered situations would undoubtedly encourage other patients to put themselves in similar situations in future cases. Such a situation would mean that the addition of a social value criterion in the organ allocation decision would become solely based on the minimisation of detriment rather than a balance of this and the promotion of welfare.

In order to avoid such a situation, patients who purposely engineer the type of situations mentioned above could be moved to the bottom of the waiting list so that they are not rewarded for their abuse of the system, and to discourage future abuse of the system by other individuals. Although avoidable detriment would be caused in the short term, overall welfare would be increased as other patients would know that the system would not bend to accommodate such engineered circumstances. A parallel could be drawn with not negotiating with terrorists in order to limit further acts of terror.

### **Equality and fairness**

One of the problems that Sanders and Dukeminier have with including social worth evaluations in organ and resource allocation decisions is that they feel making such decisions may not be in keeping with the equality and equal protection clause of the (American) constitution, and which is present in the NHS constitution too (NHS, 2013):

“It suffices to point out that selection procedures that permit men to evaluate and compare the social worth of human beings and, on that basis, to spare the life of some and doom others may well not meet that command. Judicial notions of morality and fair play, which finally determine the limits of the equal protection clause of the Constitution, may require a more impersonal method of selecting who is to be saved from among the dying.”  
(Sanders and Dukeminier, 1967, p. 374)

Sanders and Dukeminier are right to a certain extent, that deciding who lives and who dies on the basis of social worth may not be allowed under the laws of equality and protection as it amounts to discrimination. However, the government also has a duty to make the best use of the available organs for transplant, and as was discussed in the previous chapter, a more impersonal method of patient selection, such as random allocation, does *not* make best use of organs. By not making a considered selection of a patient, and instead selecting a patient through an impersonal method (drawing names out of a hat), the benefit that is created is less than could acceptably be created.<sup>41</sup> Equality may have been increased a little, but so too has the risk for detriment to society by not actively opting for the survival of the most socially valuable patient. A balance needs to be struck between these two approaches to ensure that both the requirements to maintain equality, and to make the best use of the resources available, can be met. In both the Seattle patient selection system, and in a revised system, a level of equality was (and would be) present in that patients were not (and would not be) discounted for treatment based on their value to society from the outset. A

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<sup>41</sup> Unless by chance, the most socially valuable patient happens to be selected.

patient's medical suitability is most important (from both an ethical and practical point of view) and so that is what is determined first, and then their social value is considered thereafter.

Furthermore, there is a distinction to be made between direct and indirect discrimination. An analogy could be made with the idea of "genuine occupational requirements" in employment selection where there is an element of discrimination in order to achieve a legitimate aim (Equality Act, 2010). These kinds of discriminations can be thought of as indirectly discriminatory as opposed to directly discriminatory as the criteria for selection for a job are relevant, and in place in order that the job can be carried out, which leads to the side effect of indirectly discriminating against a group. However, the criteria are not unjustly prejudiced. The kind of discriminatory considerations that might be taken into account in a revised organ allocation system that included a person's social value could also be thought of as the more acceptable indirect discriminations as they are only in place to achieve the aim of society benefiting from each organ transplant.

Langford also suggests that there can be appropriate forms of discrimination in a resource allocation system whilst still maintaining the principle of equality:

"This is possible because adoption of a principle of equality does not entail that we make no discriminations, only that these discriminations are "i) of an appropriate kind and ii) that they are applied according to established rules, and not arbitrarily..."

It might be urged that what counts as an appropriate kind of discrimination depends entirely on the kind of culture in which we live. However, there are rational grounds for ruling out some kinds of discrimination in any society, once a principle of equality is accepted. In other words, the principle is not infinitely flexible. For example, attempts to justify discrimination in terms of race or gender, can, I think, only be made on the basis of demonstrably false empirical accounts of the nature of race and gender, as in Nazi accounts of race and Aristotle's of gender." (Langford, 1992, pp. 13-14)

Just because there may be some form of discrimination in a resource allocation system does not mean that the principle of equality is ignored.

A further perceived problem with the Seattle system is that the selection committee were 'playing God' with their "unbridled consciences, built-in biases, and fantasies of omnipotence" (Sanders and Dukeminier, 1967, p. 378). To select patients in this way (with broad discretion) might be acceptable for experimental trials as it could help to demonstrate the validity of the project. But "once the procedure proves its merit and passes from the experimental to the standard, justice requires that selection be made by a fairer method" (1967, p. 378). However, in the case of the Seattle Kidney Centre, the new technology of using a cannula shunt for dialysis was by no means a standard practice (even though it did prove to be a successful procedure), and so the committee's method of selecting patients could be defended on the grounds that the procedure was still experimental. The selection committee themselves thought of their selection of

patients as “picking guinea pigs for experimental purposes” and not that they were denying life to others based on their social value (Murphy, 2003, p. 98).

However, even if the committee defended their selection process on the grounds that the procedure was still in experimental stages, it remains the case that certain patients were favoured for treatment, and chosen as guinea pigs for experimental purposes, based on their perceived higher social value, which wasn't a criterion that needed to be included to demonstrate the validity of the project and effectiveness of the treatment. But this preferential selection on social value is not necessarily where the problem lies; I suggest that the problem lies in the way that the Seattle committee judged the social value of patients. Their criteria were highly subjective and prejudiced (see following section) and it is discrimination based on these subjective opinions, dissimilar to the types of discrimination in the genuine occupational requirements, which poses the problem for fairness. Even though there would still have to be a level of discrimination in a revised system in order for the system to provide any extra benefit, this discrimination should be based on objective grounds, and balanced against the requirement for equality and fairness, and the potential detriment that would be caused by setting the level of discrimination too high. E.g. favouring treatment of only those patients who are most stereotypically good-looking (symmetrical faces, golden ratio etc.); it may make for a more aesthetically pleasing society of people, but whatever amount of utility is gained, it would undoubtedly be outweighed by the detriment caused by such a high level of discrimination based on such a superficial value, and so is not an acceptable discriminatory factor.

## **The selection committee**

As briefly mentioned in the last section, one of the main problems with the Seattle allocation system was the Admissions Advisory Committee (*patient selection committee*) itself. Unlike the Medical Advisory Committee members, the members of the Admissions Advisory Committee were arguably under-qualified to make the kind of social value judgements that they had decided to make. Furthermore, they were all from a middle-class background, and so there was the real possibility that there would be sections of society who would be unrepresented, or who would be the subject of the committee bias and prejudice.

## **No relevant knowledge**

If we look at the *Medical* Advisory Committee first, those members are well suited and qualified for their role in the preliminary patient selection based on the patient's medical suitability, as those members were physicians and had a background in dialysis; they had the relevant knowledge and experience to know which patients were medically suitable for the treatment. The *Admissions* Advisory Committee on the other hand, was somewhat less qualified for their role.

The Admissions Advisory Committee decided that those patients who were of most value to society would be selected for treatment, and so their role was to

work out just which patients were indeed most socially valuable; it is for this task that members of the Admissions Advisory Committee were under-qualified. The committee was made up of lay members consisting of two physicians not involved in the care of dialysis patients, a lawyer, a housewife, a businessman, a labour leader and a minister (Blagg, 1998, p. 236). None of these are professions particularly suited to determining the combined social value rankings of the professions, family, and morality, of members of society, or even knowing what the needs of society are in the first place in order to form relevant social value criteria. At best, they could make 'educated' guesses as to which patients were more valuable; at worst, they could base their decisions on their personal biases and prejudices. They did not have enough knowledge or experience of what the needs of society were, or which criteria were more important than others. A committee made up of members from fields relevant to determining the needs of society would have been better placed to make decisions on the social value of patients.

### **Judgements became subjective**

As a result of the committee being made up of members who were not trained as to what the needs of society were, their own personal values crept in to the selection criteria, meaning that their aim of *selecting those patients who were most valuable to society* for treatment, had morphed into *selecting those patients who were most valued by society*. The reason for this stems from the fact that they did not have the relevant skills and experience to know which skills, traits, and



contributions were most *necessary* to society and its functioning, and so they had to make their best guess, and make their decisions on a “virtually intuitive basis” (Alexander, 1962, p. 118). Unfortunately, this meant that their own subjective values became part of the selection criteria, inadvertently changing their selection criteria from determining who is most valuable *to* society, to who is most valued *by* society/themselves.

The subjective elements of their selection criteria are clear when it is questioned as to whether particular considerations are really useful to society, e.g. teaching in Sunday school (Sanders and Dukeminier, 1967, p. 378). Teaching in Sunday school might be morally laudable in the eyes of other church goers, but can it really be seen as useful to society? (It might even be argued that it harms the children by corrupting their minds with religion.) The labour leader on the committee suggests that a “strong will” should be considered in the selection criteria as it means the patient is less likely to give up, and that a person should “have some religion, because that indicates character” (Alexander, 1962, p. 123). Having a strong will might be socially valuable in the sense that resources will not have been wasted by allocating them to someone who will not give up when the treatment becomes too tough, but having will power pertains more to medical prognosis and suitability which had already been considered, than it does to social value. And besides the fact that someone that does *not* have “some religion” can have as much character as someone that does, is character all that valuable to society, especially given its rather vague meaning? If social value is based on a person's contributions and usefulness to society, having character is not necessarily a reflection of this. Just because someone has character does not mean

that they make valuable contributions to society.

The focus of the selection criteria should have been on the patients' value to society, but what ended up happening, due partly to mistaken judgements about what is socially valuable, is that the selection criteria became based on societal values, or at least the personal value of the committee members.

It should be noted however, that the members of the Admissions Advisory Committee should not be completely blamed for not achieving their aim of objectively selecting those patients who were most valuable to society for treatment. They were right to attempt to allocate the resources using social value considerations because, as previously argued, it would create the most amount of welfare from the available resources. However, it was unlikely that they could have objectively and accurately ranked patients on that basis given that they were only lay members and were not well versed in the values necessary for society to function and grow sustainably, nor of the interplay between them, let alone how the changing needs of society over time will influence which patients are most valuable. Had they chosen a different method of determining which patients should receive treatment, such as a lottery or first-come, first-served, they would have undoubtedly been more successful at achieving their aim of objectively selecting patients without personal subjectivity entering into the decision, but it would have meant opting for an inferior selection method.

To solve the two issues stemming from the lay committee's lack of relevant knowledge and experience, a selection committee made up of a team of experts from relevant fields, such as sociology, economics, and psychology, should have

been used, and indeed could be used in a revised system. Experts from these fields are undoubtedly in a better position than a lay committee to know what the actual needs of society are and their relative importance (as will be discussed in more detail in the next chapter). A patient selection committee made up of experts will also be able to make better judgements about which patients can best help meet the needs of society, more so than a lay committee could, and so can make relevant, objective, and justifiable social value judgements rather than being based on subjective personal prejudices.

### **Not diverse enough**

The next problem of the Admissions Advisory Committee is that its members were all from the same middle class background, which gives rise to the possibility that patients of different classes and social groups might not have been considered for treatment because of the prejudices of the committee (Sanders and Dukeminier, 1967, p. 378). There was some attempt to make the Admissions Advisory Committee fair and diverse so as to provide a cross-section of the community, with the committee being made up of members from different professions. However, the fact that the cross-section was taken only from the middle-class means that it was only the middle class that was represented, and so the committee did not provide a true cross-section of society. The effect of the middle-class selection committee can arguably be seen in the selection criteria they used to judge a patient's social worth. The kind of things that were taken into account were a person's level of education, if they were a member of the scouts, went to Sunday

school, and contributed to the Red Cross (1967, p. 378). Indeed, Sanders and Dukeminier claim that the deliberations by the committee were polluted by prejudices and mindless clichés' and described the situation as a disturbing picture of the bourgeoisie sparing the bourgeoisie (1967, pp. 377–378).

However, not all of the social worth criteria used was necessarily middle-class. Whilst some committee members did suggest criteria such as, whether the patient was a Sunday school teacher or scout leader (typically middle-class activities and roles), other criteria suggested were whether the patient had a strong will, or if they have a family they will leave behind if they were to die, and whether that family will be supported with adequate provisions. These are not criteria that immediately conjure up thoughts of the middle-class, but instead are social worth criteria that would appeal to people from any social class.

Nevertheless, it is still a problem that the selection committee was made up of only the middle-class, because it allowed the possibility that certain classes and groups might not be considered for treatment because of the committee's collective prejudices. Even if certain groups and classes were never excluded from considerations, there was the possibility that they could be. A committee made up from a wider cross-section of society would have ensured that a wider proportion of society was represented, so that there would be less chance of certain groups being overlooked for treatment.

Alternatively, if the selection committee were made up of experts from relevant fields, there would not be as much need for the committee members to come from a wide cross-section of society. The experts would, ideally, select the social value

criteria for objective and justifiable reasons, and not because of their own subjective values. Of course, there is the possibility that the personal backgrounds of the experts will have influenced their approach within their field, and even experts from the same field come to different conclusions on the same issue. However, these conclusions are based on objective research unlike the prejudiced views of a lay committee, and an objective compromise may be reached in cases of disagreement. The problem of collective committee prejudice can be avoided by using a team of *experts* to make the social value judgements of patients as they can be reasonably relied upon to make objective decisions using objective criteria.

However, if further safeguards were needed to avoid the possibility of unfounded prejudice finding its way into the selection criteria, rather than finding experts from a cross-section of society, a number of top experts from each field could discuss and decide which values and patients are most valuable, thereby ensuring that one expert's personal bias does not unjustifiably sway the value ranking of a patient one way or the other.

With regards to the Medical Advisory Committee, there was not the same need for their members to be from a wide cross-section of society as their deliberations on patient selection only pertained to the medical suitability of the patient, and not the patient's value. As long as the members of the Medical Advisory Committee were physicians well versed in the needs and likely prognosis of dialysis patients, they could make an objective decision on whether a patient was a suitable candidate for dialysis. And so in a revised system, the same setup would remain; patients would be selected for treatment based on their medical suitability by

physicians from the field in which the patient seeks treatment.

## **Conclusion**

There were many problems with the Seattle committee and the process that was used for patient selection, but the two main problems with the committee and process was that 1) they did not have the relevant knowledge and expertise to make their decisions objectively, and 2) that the criteria used for patient selection became subjective and based on personal preferences.

In any system that includes a social value criterion, there will always be the problem of accurately predicting the contributions that a person is likely to make with relative certainty. However, because the Seattle committee was made up of lay members, the problem of prediction was exacerbated. An accurate prediction of patients' likely social contributions is even more elusive when it is a lay committee that is attempting to make these predictions whilst lacking the relevant knowledge and expertise. Because of this, they did not have any objective and reliable information about what is/was valuable for the sustainable functioning, growth, and flourishing of society that they could base their selection criteria on. As such, their selection criteria became based on their own personal values and opinions about what was valuable to society. This meant that the criteria for patient selection was not an objective reflection of the needs of society, but rather a subjective appraisal of the social worth of patients by a small group of their

peers.

The Seattle system was the first of its kind and as such, can be seen as a prototype for how social value could be incorporated into resource allocation systems. And as is the nature of prototypes, there are problems and obstacles that need to be resolved and remedied before there is a final system that is fit for the mainstream. A revised version of how a social value criterion could be incorporated into resource allocation decisions would address the problems that the Seattle system faced, resulting in a more objective, ethically acceptable, and socially beneficial version.

If the selection committee were made up of experts from relevant fields who had the knowledge and expertise to identify what the needs of society are, and which patients are most apt to contribute to the fulfilment of those needs, then the system immediately becomes more objective. The social value criteria would be based on the actual needs of society as determined by experts from the relevant fields (such as sociology and economics) rather than the guesswork and subjective biases that would occur with a lay committee. And again, experts from the relevant fields (such as sociology and psychology) would be able to identify which patients meet the objective social value criteria through the patients' likely future contributions and actions. The next chapter discusses the ideal candidates that would serve on the committees in a revised system.

# Chapter 5: The Selection

## Committees

### Introduction

In the last chapter, the case study of the Seattle Kidney Center highlighted the problems associated with using social value criteria in a resource allocation system. One of the main problems with the system was that the committee that made the decisions as to who and what was valuable to society did not have the relevant knowledge and expertise to make these decisions in an objective manner. In order to avoid the same problem occurring in a revised system, in this chapter I will look at who would be suitable to decide what the specific needs of society are, and who is best placed to determine which potential organ recipient is the most valuable to society by virtue of being able to help fulfil these needs. It will be shown that two committees made up of experts from fields such as sociology, economics, and psychology, (amongst possible others), will be able to make the required decisions in an objective manner.

The first expert committee would *determine what the current and future needs of society are*, and due to their expert background, will be better positioned than a lay committee to make these decisions given their increased level of knowledge and expertise in this area. It should be their recommendations upon which the policy for priority setting should mainly be based, rather than public opinion.

It will then be shown that a second expert committee, *determining which patients are most likely to help meet the needs of society*, should make the decisions about who should



receive an organ, again due to their increased level of knowledge and expertise over a lay committee.

## **How will the selection committees work?**

With the suggested changes to the organ allocation system that I am proposing, there will need to be two committees involved in the organ allocation decision. The first committee will be the *criteria selection committee* who will determine what the needs of society are and how important those needs are to society at a given time. The second committee will be the *patient selection committee*, who will decide which patients are most socially valuable by virtue of how much they can contribute towards the fulfilment of the needs of society, and how detrimental their death will be. The criteria selection committee would be a single, national committee, making decisions about what the needs of society are and what social contributions will help to best meet these needs. However, the committee could actually be in the form of a working group or enquiry that produces the criteria guidance, much in the same way as the Nuffield Council on Bioethics produces reports and guidance (Nuffield Bioethics, no date). The decisions made here would need to be reviewed on perhaps an annual basis to reflect the changing needs of society. The patient selection committees on the other hand, would be more numerous, with one being present in each transplant unit, applying the selection criteria and deciding on which patients best fit the criteria on those occasions when a decision needs to be made, similar to the way in which local

research ethics committees make decisions on particular research projects based on the terms of reference set out by the HRA (Health Research Authority).

Both committees will be made up primarily of experts, but there still remains room for lay person input, similar to the way that research ethics committees function. With research ethics committees, experts play the primary role in determining the criteria which research must meet for ethical approval, and play a significant role in appraising research proposals to ensure they are ethically sound. The reason why they play such a role is that they have the relevant technical expertise in their domain to be able to make these decisions.

“In the light of their role in identifying and evaluating the risks and benefits of research, research ethics committees must include individuals with scientific and medical expertise. Without such expertise (supplemented, when necessary, by consultants in particular specialties), they will not be in a position to understand the procedures to be used in the study and their potential consequences for participants.” (WHO, 2009, p. 13)

However, lay people also play a role on research ethics committees as they are able to provide a different perspective, or identify issues not considered by the scientific and medical expert committee members.

“Research ethics committees should not...be made up exclusively of scientific experts. Some types of risks and benefits may be more easily identified by non-scientific members, particularly those related to social, legal or cultural considerations.” (WHO, 2009, p. 13)

In the case of the criteria selection committees, there will be room for lay person input into the decision-making process in order to partly reflect public opinion, but also to help to identify social or cultural issues with the criteria and selection process that the specialists may not have considered.

However, with both the criteria selection committee and the patient selection committee, experts will make up the main body in the same way that a research ethics committee is made up. They will have more of the technical knowledge and expertise to identify and evaluate the needs of society, and the contributions that people can make towards fulfilling these needs, than a lay person does. It would make sense for there to be more than one expert from each of the disciplines that would be needed to determine the social value criteria and patient selection decision, as one expert is unlikely to have the range of necessary knowledge to make such decisions. There are many branches of sociology, economics, and psychology that would be needed to make accurate assessments of social value, and so input from each of these specialist experts would be needed to create the social value criteria initially. There may also be a need to have multiple representation of different disciplines not only because of the need for expertise in the many sub-disciplines, but also because of disagreement and the existence of different schools of thought within each sub-discipline. If there were at least two experts from the same discipline helping to make the criteria selection decisions, even though there may be disagreement between them at times, it will ensure that thorough deliberation is given to the criteria selection and rankings.

## **Who will decide what is valuable to society? - (criteria selection committee)**

### **Experts or laypeople**

As highlighted earlier, when deciding which patients should receive organs for transplant under a system that includes the addition of a social value criterion, a patient's medical suitability would be taken into account first in order to ensure that transplants are not carried out on patients where such treatment is futile, and in order to ensure that patients with a low social value score are not excluded from consideration for treatment from the outset. However, with the inclusion of a social value criterion, patient selection decisions are not wholly medical problems. They are partly the problems of psychologists, economists, sociologists, and other professions, as they will be integral in determining a person's level of social value, and so it is they who should be part of the decision-making process.

Rescher agrees that incorporating a social value criterion changes the patient selection process from a purely medical decision:

“When there are more than enough places in an ELT [exotic life-saving therapy] program to accommodate all who need it, then it will clearly be a medical question to decide who does have the need and which among these would successfully respond. But when an admitted gross insufficiency of places exists, when there are ten or fifty or one hundred highly eligible candidates for each place in the program, then it is unrealistic to take the

view that purely medical criteria can furnish a sufficient basis for selection. The question of ELT selection becomes serious as a phenomenon of scale – because as more candidates present themselves, strictly medical factors are increasingly less adequate as a selection criterion precisely because by numerical category-crowding there will be more and more cases whose “status is much the same” so far as purely medical considerations go.” (Rescher, 1969, p. 181)

However, he goes on to suggest that the non-medical criteria should be based on the opinions of lay people:

“Once the medical issues have been brought to bear, fundamental social issues remain to be resolved. The instrumentalities of ELT have been created through the social investment of scarce resources, and the interests of society deserve to play a role in their utilization. As representatives of their social interests, lay opinions should function to complement and supplement medical views once the proper arena of medical considerations is left behind.” (1969, p. 181)

Whilst the patient selection decision is no longer purely medical, I disagree that the involvement of other parties and their opinions in at least the criteria selection should come from lay people alone. Instead, I suggest that it should be experts in the relevant fields, who know what the needs of society are and which of the possible recipients is most likely to help meet them, that should make up both committees. If, as Rescher says, society is investing in a person through the allocation of a scarce resource to that person over some other person, then it

makes more sense for experts to be involved over lay people. If how much society is likely to benefit from an organ allocation needs to be considered, experts can help to make a more insightful decision over which allocation would provide most utility to society.

If an organ allocation system that incorporated social value considerations based on the best interests and the needs of society were to be implemented, these best interests based on society's needs should be decided by a team of experts from different disciplines, even if their decisions may not necessarily reflect those held by society. It might be argued that doing what is in the best interests of society is simply to give society what it wants, given that doing so would be to satisfy the voiced interests. However, it is completely possible (and likely) that certain proportions of society might know what they want, but they do not know what they need, for the long term at least, or even if they do, they act on their desires rather than reasoning and rationality. Take children for instance, or those members of society who are more interested in short term pleasure than concerns for long-term sustained pleasure (included, but not limited to, in this category would be addicts). There are many facets to a well-oiled and functioning society, from the basics of water sanitation to the luxuries of art, and the majority of citizens are not in a position, and do not have the required knowledge or experience, to know the relative importance (based on the needs of society) of these many facets at any given time. Furthermore, if the hierarchy of the best interests of society were based on the views and opinions of society, the criteria would be open to the biases and prejudices commonly held in the public consciousness in a way that would be less likely to happen if based on the objective

reasoning of the relevant experts.

Shatin also highlights both options for the formulation of a social value index, but like Rescher, suggests that a value index based on a public attitude or opinion survey would be preferable to one based on expert opinion as it would “Reflect the totality of society’s opinions about the qualities which should enter into the value index” (Shatin, 1966, p. 98). He says that some would prefer this option as it is a “Truly democratic and proportional representation of the values of the people; an objective means of arriving at a valid index” (1966, p. 98). However, whilst it might provide an accurate representation of the values that people have in society, to what extent can it really be classed as objective? It may be objective in that it represents the values of the people in society, but as Shatin points out himself, such a method of creating a social value index can easily be condemned for allowing blind prejudice to carry the same weight as critical thought, and to allow such blind prejudice to be the basis upon which organ allocation decisions are made would be wholly inappropriate (1966, p. 98).

NICE (National Institute for Health and Care Excellence) uses a similar method to help inform its policy recommendations, with public participation actively encouraged when creating their guidelines and recommendations. The public, whilst not producing guidance themselves, does have an input into the guidance developed by NICE through channels such as the *Citizens Council*, consultations, and meetings in public (NICE, 2015b). The aim is that by involving patients, carers, and the general public in the development of its guidance and other products (the very people for whom the guidance will be relevant), the needs and

preferences of the patients and public are at the heart of the work (NICE, 2015d). However, the NICE guidance development process differs from Shatin's suggestion for the inclusion of public involvement in that NICE simply *considers* the views of the public when drawing up their guidance and only includes these views and recommendations where appropriate; the views of the public are not necessarily included in the guidelines (NICE, 2015a). This helps to avoid the possibility that the views of the public may be included in policy decisions when these views may be based upon blind prejudice. In the end, policy guidance is determined by people who are trained in policy development and have the relevant knowledge and expertise to determine how the needs of society can best be met whilst maintaining ethical acceptability.

What this means is that even though the public do have an input into the decision-making process insofar as their views are considered and incorporated if and where appropriate, trained professionals and relevant experts are still the people who make the decisions in the end, based on what they think is best. The reason why this process has been adopted and why it works, is for the aforementioned reason that it avoids any views of the public that are based on blind prejudice forming part of policy, and the experts and professionals who ultimately produce the guidelines have the relevant knowledge and expertise to know how to best achieve the aims behind the proposed guidelines. A similar system to this could be used in order to determine the specific values that are important for society for a social value criterion, with the views of society being taken into account by a team of relevant experts and professionals that will make the final decisions. The team of experts would base their decisions about what is socially valuable on



objective research about what the functional prerequisites<sup>42</sup> for society are, and additional factors that are both necessary for, and desired by society, that may increase general welfare. In this way, the presence of biases and prejudices of the experts finding their way into the system can be minimised, and the views of the public can be included if there were an appropriate place for them within the criteria.

Shatin suggests that opponents of a value index based on a survey of public attitude and opinion might prefer to “Limit their survey to the leaders of society: the leading statesmen, managers, scientists, artists, humanists and so forth” (Shatin, 1966, p. 98). However, he lacks sympathy for such an approach as he claims that it “Smacks of the all-too-prevalent *father-knows-best* mentality, where the professional expert (the professional engineer or chemist or behavioural scientist or professional anybody) aspire to be *master* of rather than *consultant* to the popular totality” (1966, p. 98). Basson too considers this worry that such an approach could be seen as paternalistic. However, he makes the distinction between a paternalistic policy that involves the “Making of decisions on behalf of someone fully informed and competent enough to make his own choices”, and a paternal choice that “Simply implies the making of a decision for someone without reference to the competency of the person for whom the decision is made” (Basson, 1979, p. 319). He says that the committee making decisions on behalf of

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<sup>42</sup> “Functional prerequisites refer broadly to the things that must get done in any society if it is to continue as a going concern, i.e., the generalized conditions necessary for the maintenance of the system concerned. The specific structural arrangements for meeting the functional prerequisites differ, of course, from one society to another and, in the course of time, change in any given society.”... “Thus all societies must allocate goods and services somehow. A particular society may change from one method, say business enterprise, to another, say a centrally planned economy, without the destruction of the society as a society but merely with a change in its concrete structures” (Aberle *et al.*, 1950, p. 100).

the public is merely paternal in the latter sense, and is warranted because:

“[I]t may be argued that the average American today is simply not sufficiently informed to make decisions regarding the relative social value of a minor poet and a fifty-two-year-old top-level executive with two children. Furthermore, there is no way in which the average American could be so informed for every possible comparison likely to arise. There is just too much relevant information. A SMLR [scarce medical life-saving resources] allocation committee could at least be better informed, more thoughtful, and more rational than the average member of society, even if not perfectly so.” (1979, p. 319)

A team of experts and professionals from disciplines across the board are in a better and more informed position to determine the relevant needs of society, both in the short and long term. They are in a position where they have the adequate knowledge, experience and foresight to know what society requires, even if it may not please society in the short term. Contrary to what Shatin claims, such a team of experts, rather than aspiring to be masters of society and deciding what is to be deemed socially valuable based on their own biases and prejudices, would simply be highlighting what the needs of society are at a specific time period based on research from their field. The public may know what their own preferences and values are, however, they may not have sufficient knowledge and understanding as to what society needs to function and flourish to allow them to make an informed decision were they to be surveyed, and if they possessed such knowledge and understanding, their decision may well be different. For example,

there may be some individuals that are valued by society simply because they and their roles are known, but there may be other individuals who are not valued by society because society is not aware they exist, and that the role they fulfil exists, or of the extent of the contribution they make. There may be those “unsung heroes” that do a lot for society behind closed doors in roles that are not widely known, and who cannot be replaced. If the public were asked who to save, they would obviously choose to save only the known person as they are not even aware that the second exists. However, if the public were aware of the unsung hero and the contributions that they make, their decision of who to save may well be different.

A multi-disciplinary team of professionals from the relevant fields on the other hand can fill this gap, drawing on their expert knowledge. And, even if their judgement may not be perfect, they are surely in more of a position than the layperson to make an informed decision of what is socially valuable based on the needs of society due to their deeper knowledge of the subject.

### **Place for laypersons**

Even though specialist experts are better able to make decisions within their particular domain due to their deeper understanding and their explicit and tacit knowledge, lay people and novices might still have a role to play in the decision-making process as a whole for policy decisions. Collins and Evans make a distinction between the technical and political phases of decision making (Collins

and Evans, 2002, pp. 261–262), and I suggest that it is in the political phase where the layperson might be able to play a suitable role.

“Collins and Evans’ [(Collins and Evans, 2002, 2007)] theory of expertise only states that whilst technical expertise possesses authority in respect of technical matters, it does not hold determinative authority in respect of broader policy decisions (that deploy technical knowledge) which ought to be made by the appropriate policy-making institutions.” (Priaulx, Weinel and Wrigley, 2016, p. 402)

Part of the policy-making institutions’ processes for deciding on what policies should be implemented will be to look at what the public thinks of a particular policy and what its reception and effects might be. This is where the opinions of the layperson could be considered. Whilst the technical phase of the decision might be best left up to the experts within the relevant domain if it is a purely technical decision, if this technical decision affects wider society, then there is a case for allowing novices and laypeople to have an input in the political phase of the decision, whether by being part of a committee, or wider public consultation.

Feyerabend, whilst perhaps holding an overall position that I don’t support, does make an appealing suggestion that when it comes to policy decisions, scientists and experts should play only an advisory role, with the final decision being made by democratically elected committees (Feyerabend, 1982, p. 89; Sorgner, 2016, p. 115). This suggestion also aligns with that of Collins and Evans (cited in (Sorgner, 2016, p. 117)). They say that the decision-making rights in purely scientific or technical debates should be limited to certified and experience-based experts, and

that the democratic vote and public involvement be limited to the political phase of the decision-making processes.

“[T]he outcome of the technical phase [should depend] exclusively on experts’ judgment [,but f]or the values of democracy to be maintained, the political phase must be granted predominance. Policy-makers can still reject scientific advice, but only if they are well-informed and justify their decisions publicly [(Collins, Weinel and Evans, 2010, p. 193)].” (Sorgner, 2016, p. 117)

Depending on the circumstance and setting, the democratically elected committees making the policy decisions might be made up of politicians who will draw on the opinion on their constituents, or might also include lay people as well as those with a fuller understanding from their interactional expertise in a similar way that research ethics committees are often made up (WHO, 2009; NHS, 2015a). In relation to the suggestions from the experts about what is socially valuable and the criteria for assessing which patients are most socially valuable, the findings and advice of the specialist experts will be weighed up in the political phase of the decision-making process to determine what a particular policy should be. Certain aspects of their recommendations, or elements of the social value criteria might not be implemented due to budget constraints, political party ideals, and public opinion. And it is the feedback from lay people about these recommendations that will help to guide policy decisions by reflecting the views of the public, as well as providing an outside opinion to reduce the effects of groupthink (Liljegren, Höjer and Forkby, 2017).

## What makes an expert?

Before moving on any further, it is worthwhile discussing just what constitutes expertise, and what it takes to be an expert, given that it is experts who will be determining what is socially valuable, and the relative social value between patients.

Experts possess certain skills in a particular domain that laypeople do not, as well as more knowledge and a deeper understanding of their domain, and as such, are better placed to make decisions in their domain than lay people are. “[T]he primary distinction that separates experts from novices appears to be the breadth and depth of their domain-specific knowledge”, and that competence in making predictions within the experts particular domain is inherent in the definition of expertise (Phillips, Klein and Sieck, 2008, pp. 299–300). Phillips et al. claim that we can distinguish experts from others by describing what they know that others do not, and what they *can do* that others cannot (2008, p. 300); Anderson calls this the declarative and procedural knowledge (Anderson, 1983). Below is a list of the types of knowledge that experts possess that novices do not, which is taken from Phillips’ article (Phillips, Klein and Sieck, 2008):

- *Perceptual skills*: in particular the ability to make fine discriminations, seem an essential component of expertise in many settings (Klein and Hoffman, 1993).

- *Mental models*: Experts are able to create mental models of “how things work” which means they are better able to describe, explain, and predict, than journeymen and novices. They are able to make these mental models due to their broader and deeper knowledge and experience (Rouse and Morris, 1986).
- *Sense of typicality and association*: experts can rapidly recognise and interpret complex patterns in a set of information in order to assess the situation more quickly and accurately than non-experts (Chase, 1983; Gentner, 1988; Dreyfus, 1997). The repertoire of patterns that allow experts to recognise situations as typical, also enables them to spot information that is expected but missing from the picture, as well as enabling them to detect anomalies that are present but not expected.
- *Routines*: Experts know a wider variety of tactics for getting things done. This category corresponds to the “knowing how” discussed by Anderson (Anderson, 1983).
- *Declarative knowledge*: Experts know more facts and details, and have command of more explicit knowledge to go along with their tacit knowledge.

In addition to what experts know and what they can do, Klein and Militello suggest several other categories of knowledge related to expertise with a focus on what

experts can do with this knowledge (Klein and Militello, 2004; Phillips, Klein and Sieck, 2008, pp. 301–303):

- *Run mental simulations*: experts can use their detailed mental models, coupled with their understanding of the current state of the situation, to construct simulations of how the situation is going to develop in the future, and thereby generate predictions and expectations.
- *Spot anomalies and detect problems*: the richer mental models of experts enable them to identify atypicalities and therefore adjust the story they are developing to explain the events.
- *Find leverage points*: Klein and Wolf hypothesized that people can generate novel courses of action by identifying and capitalising on unapparent opportunities for useful interventions, i.e., leverage points (Klein and Wolf, 1998). Mental simulation is a powerful tool for using leverage points to support improvisation, and experts are able to improvise better than non-experts when the situation is novel by forming new, effective strategies (Klein, 1998).
- *Manage uncertainty*: expert decision makers tend to use their mental models to fill in gaps with assumptions, to mentally simulate and project into the future, to formulate information seeing tactics.
- *Take one's own strengths and limitations into account (i.e., metacognition)*: Several studies indicate that experts are better self-monitors than non-



experts, and more able to judge the difficulty of problems given to them (Chi, Feltovich and Glaser, 1980). Experts are more likely to consider the underlying principles addressed in the problem at the problem features, whilst novices more often consider characteristics unrelated to the problem (Chi, Feltovich and Glaser, 1981).

These skills and traits that experts possess mean that they are better suited to make decisions in their domains than a lay person is. However, that is not to say that people who have not gone through any specialist training will not possess these skills or traits, or that they should not be classed as experts. It is entirely possible that lay people without professional training, or novices, may have an interest in a particular field or domain and be able to make valuable contributions, and possess some of the explicit and tacit knowledge or traits that experts also possess, through some kind of experience-based, yet uncertified specialist contributory expertise (Sorgner, 2016, p. 118). Unlike the relative model of expertise, where experts are identified through their superior or evaluative ability when compared to novices (Priaulx, Weinel and Wrigley, 2016, p. 399), the sociological model of expertise is able to account for novices that can make valuable contributions to a field, but who have not had any specialist training. If these novices possess the *tacit* knowledge relevant to a domain, not just the explicit knowledge, then they too can be classed as experts (Priaulx, Weinel and Wrigley, 2016, p. 401). The area where this has the most impact is in moral expertise, where at least some of the skills needed to be a moral expert are ubiquitous. On the sociological conception of expertise, Collins and Evans are able to make distinctions between 'ubiquitous expertises' and 'specialist expertises'

(Collins and Evans, 2002, 2007) by defining specialist expertises as being related to domains of knowledge “which form around particular activities and are associated with particular subgroups of larger collectives. Scientific disciplines are paradigmatic examples of such ‘domains of knowledge’, but in principle any meaningful activity that is not widely shared might be regarded as a ‘domain’ that may give rise to specialist expertises” (Priaux, Weinel and Wrigley, 2016, p. 402).<sup>43</sup>

So even though some “novices” might be able to make valuable contributions to a field or domain, they might just have what is termed, interactional expertise; “...the ability to master the language of a specialist domain in the absence of practical competence” [(Collins and Evans, 2007, p. 14)]. Interactional expertise is what e.g. journalists, peer-reviewers and sociologists of science must possess to accomplish their tasks” (Sorgner, 2016, p. 116). A specialist expert on the other hand, will have contributory expertise, which is what you need to be able to do an activity with competence (Collins and Evans, 2007, p. 14). They will have a deeper knowledge and understanding of the field/domain as a whole, and so in general, will be better able to make decisions with competence within that domain than a layperson or a novice would. For example; a deliberative body deciding the best fuel mixture for a manned spacecraft would be better if it were made up of specialist experts rather than lay people, novices, or those with interactional expertise in space fuel, given the need for precision, detail, and risk management.

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<sup>43</sup> “For example, to become a competent astrophysicist, it is not sufficient to just live in a country where astrophysics is practised by a subset of the population. What is needed to gain ‘fluency’ is to immerse oneself into the community of astrophysicists, either by enrolling in a University course and then working in the field or by talking to astrophysicists on a regular basis about domain-relevant ‘stuff.’” (Priaux, Weinel and Wrigley, 2016, p. 402)

And with regards to a social value allocation system that includes a social value criterion, experts with specialist expertise from the relevant fields will be better able to competently assess the needs of society, and make predictions about which patients might best meet these needs.

Their deeper understanding of the issues in play, as well as their interconnectedness, will enable them to make more accurate and objective assessments and predictions. And their assessments are more likely to be grounded in facts and data due to their declarative knowledge (Phillips, Klein and Sieck, 2008, p. 301), rather than the potentially more uninformed opinions of laypersons. Their sense of typicality and association (Chase, 1983; Gentner, 1988; Dreyfus, 1997), along with their ability to create mental models (Rouse and Morris, 1986), means that they will be better able to make accurate predictions about who and what is socially valuable based on their previous experience of causal chains in their field. Building on this, as Klein and Militello point out, experts are able to use their deeper knowledge and understanding to run mental simulations, and spot anomalies and detect problems. This means that they will be able to construct mental simulations of how well their initial assessments of social value would function and play out, and then revise them based on any problems and anomalies that arise, thereby making their final assessments more accurate and reliable.

If the decisions about what is socially valuable and which patients are most socially valuable were to be made by lay people alone, or mainly lay people, as was the case with the Seattle committee, the decisions would be a lot less reliable and

accurate than those made by relevant experts, and would undoubtedly be of a more subjective nature (as evidenced in the actual Seattle case).

## **Objective Decisions**

It might be argued that deciding what is socially valuable is a subjective decision no matter who makes the decision, whether it be a lay person or an expert. However, as will be explained in more detail in the next section (*Basic needs of society*), objective decisions about what is socially valuable can be made once you identify what the needs of society are. The criteria selection experts can make objective decisions about what the needs of society are by looking at what the basic societal functions are, such as those outlined by the Task Force on Quality Control of Disaster Management (Task Force on Quality Control of Disaster Management, 2014a, pp. 39–42). They can then make an assessment of which needs should have most value attached to them based on how well they are satisfied, or not, at any given time by using indicators of function to assess the performance of the basic societal needs (Task Force on Quality Control of Disaster Management, The World Association for Disaster and Emergency Medicine and The Nordic Society for Disaster Medicine, 2003, p. 74). Then, using their knowledge and expertise, they will be able to make predictions about the future needs of society and their relative importance, as well as which patients are most likely to be able to meet these needs.

Once an objective decision about what society needs has been made, a social value score can be determined for these needs depending on how urgently they need to be fulfilled. A social value score for patients can then be determined based on the needs of society that they can contribute to. As discussed earlier in this section, experts are better placed to make these decisions because they have access to the information and tacit knowledge that is needed to make these kinds of social value assessments, making their assessment more objective and accurate than would be the case if a lay person made these assessments.

Of course, there may still be disagreements between the experts on what the needs of society are, which needs are most important, or which patients will best meet these needs. This does not necessarily mean that these decisions are subjective, but simply that there is a difference in the way that the data has been interpreted. In such circumstances, these differences will be resolved in the way that other differences in policy preferences and social science are resolved: by further research, better arguments, or compromise. With any type of committee, there may not be agreement on particular issues when a decision needs to be made. However, through delving deeper into the details of the issue and with further discussion, a final decision can often be made.

## **Summary**

When it comes to deciding what the needs of society are and determining which patients are most socially valuable, it is better that experts from the relevant fields

make these decisions rather than relying solely on a lay committee. Experts will be able to make more accurate and reliable assessments of the needs of society than a lay person, and make a better assessment as to how far a patient contributes towards these needs given their fuller and deeper subject knowledge. One of the main problems with the Seattle patient selection committee was that it was mainly made up of lay people, with only a couple of medical experts on hand to advise of the medical suitability of the patients. This led to relatively arbitrary, or misinformed reasons, for patients being selected for transplant based on their perceived social value. If experts were to make up the criteria selection committee and the patient selection committee, their specialist expertise will allow them to make more accurate predictions about the current and future needs of society, as well as which patients might be best able to meet these needs. Their ability to create mental models, their mastery of routines, and ability to spot trends and anomalies, means that they can make an assessment of not only what the needs of society are, but what skills and contributions will help to best meet these needs.

Economists have a better idea than a lay person about what the current needs of the economy are, as well as its short and long-term needs. They will also be able to make more accurate predictions about what the consequences might be if these needs are not met, and so make a decision about which needs should be given priority. The sociologists will know what the current and future needs of society are, as well as a deeper and fuller understanding of what society needs to function and remain sustainable. And when combined with the expertise of the psychologists, they will also have an idea of which patients might be best able to meet (or not meet) the needs of society, based on the patient's background,

attitude, and circumstances. (A more detailed discussion on the specific disciplines of the experts that will be used to make the criteria and patient selection decisions will be given later in this chapter: *Why these areas of expertise?*)

As such, these subject-matter specialists are able to make decisions about what the needs of society are and what is socially valuable, and then create the criteria upon which potential organ recipients can be measured to determine which patients' continued life will best help to meet those needs. It is because of their increased and deeper specialist knowledge and abilities, that experts from the relevant fields should make the decisions, or at least recommendations, about what is socially valuable, without lay people playing a significant role within this technical phase of the decision. The political phase of the policy decision is where the opinion of lay people is better placed, and where the recommendations of the experts can be implemented or rejected to varying extents based on budget restrictions, party goals, or public opinion.

## **How would the needs of society be decided?**

The way in which the panel of experts will decide on the ranking order of the different values to begin with, will be based on what the needs of society are at any given time, in terms of proper functioning, growth, and stability in different areas. The time period that the committees will be judging the needs of society for could differ depending on the practicability of doing so, but should be reviewed

periodically to ensure that the ranking of the different criteria maintains its reflection of the needs of society. This will ensure that patients' social values can be judged accurately, and the organs are allocated to those patients who can contribute more welfare to society.

The kind of disciplines that will be useful in determining the needs of society for the *criteria* selection committee may come from areas of economics, city planning and future studies, and sociology. They will be able to determine what the needs of society are at any given point and suggest where things could be improved. In turn, the *patient* selection committee will be able to determine which patients are in the best position to meet the needs of society highlighted by the criteria selection committee, and minimise the detriment that will be caused by the death of patients. A panel of experts from the relevant fields will have more insight into the kinds of skills and values a society needs to continue to function and grow and what circumstances should be avoided, than a lay committee would, given the multitude of components that go towards ensuring the smooth, stable, and sustainable functioning of society and promoting growth and welfare.

### **Basic needs of society**

When I refer to the needs of society, what I am referring to are the basic needs that are required to be fulfilled in order for society to function effectively, and the needs that must be fulfilled before other less important needs should be fulfilled. There have been a number of attempts by authors to provide an account of needs



for individuals in general, as well as the more specific needs for the functioning of society. It is the functional needs of society that are of relevance to this thesis, and as such, the discussion of needs will be mainly limited to this aspect. However, I will give an overview of the other accounts of human and societal needs in order to show why they are less useful than the specific functional needs in creating criteria for a patient instrumental social value assessment.

I will begin by outlining Nussbaum's human functional capabilities, which is an account of needs that is comparatively general in terms of the more specific list of needs that is required for this thesis (Nussbaum, 2000). I will then move on to outline the prerequisites for society given by Aberle et al. which is more useful for the purposes of the thesis, but still not specific enough to build social value criteria on (Aberle *et al.*, 1950). Finally, a detailed list of the specific needs of society drawn up by the Task Force on Quality Control of Disaster Management will be discussed, which is an ideal tool for assessing a person's social value (Task Force on Quality Control of Disaster Management, 2014a).

### **Human functional capabilities**

Nussbaum gives a general idea of the needs of members of society when she refers to capabilities in her work (Nussbaum, 2000). When she is referring to capabilities, she is essentially referring to the needs of a person, but framing her discussion around the idea of human functional capabilities; those functions that

a human should be capable of fulfilling in order to increase their welfare. She gives a list of ten “central human functional capabilities”:

***Life:*** Being able to live to the end of a human life of normal length: not dying prematurely, or before one’s life is so reduced as to be not worth living.

***Bodily health:*** Being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter.

***Bodily integrity:*** Being able to move freely from place to place; having one’s bodily boundaries treated as sovereign, i.e. being able to be secure against assault...; having opportunities for sexual satisfaction and for choice in matters of reproduction.

***Senses, imagination and thought:*** Being able to use the senses, to imagine, think and reason – and to do these things in a ‘truly human’ way, a way informed and cultivated by an adequate education, including, but by no means limited to, literacy and basic mathematical and scientific training. Being able to use imagination and thought in connection with experiencing and producing self-expressive works and events of one’s own choice, religious, literary, musical, and so forth. Being able to use one’s mind in ways protected by guarantees of freedom of expression with respect to both political and artistic speech, and freedom of religious exercise. Being

able to search for the ultimate meaning of life in one's own way. Being able to have pleasurable experiences, and to avoid non-necessary pain.

**Emotions:** Being able to have attachments to things and people outside ourselves; to love those who love and care for us, to grieve at their absence; in general, to love, to grieve, to experience longing, gratitude and justified anger. Not having one's emotional development blighted by overwhelming fear and anxiety, or by traumatic events of abuse or neglect. (Supporting this capability means supporting forms of human association that can be shown to be crucial in their development.)

**Practical reason:** Being able to form a conception of the good and to engage in critical reflection about the planning of one's life. (This entails protection for the liberty of conscience.)

**Affiliation:** **A.** Being able to live with and towards others, to recognize and show concern for other human beings, to engage in various forms of social interaction; to be able to imagine the situation of another and to have compassion for that situation; to have the capability for both justice and friendship. (Protecting this capability means protecting institutions that constitute and nourish such forms of affiliation, and also protecting the freedom of assembly and political speech.) **B.** Having the social bases of self-respect and non-humiliation; being able to be treated as a dignified being whose worth is equal to that of others. This entails, at a minimum, protections against discrimination on the basis of race, sex, sexual

orientation, religion, caste, ethnicity, or national origin. In work, being able to work as a human being, exercising practical reason and entering into meaningful relationships of mutual recognition with other workers.

***Other species:*** Being able to live with concern for, and in relation to, animals, plants and the world of nature.

***Play:*** Being able to laugh, to play, to enjoy recreational activities.

***Control over one's environment:*** **A. Political.** Being able to participate effectively in political choices that govern one's life; having the right of political participation, protections of free speech and association. **B. Material.** Being able to hold property (both land and movable goods), not just formally but in terms of real opportunity; and having property rights on an equal basis with others; having the right to seek employment on an equal basis with others; having the freedom from unwarranted search and seizure.

(Nussbaum, 2000, pp. 78–80)

The list that Nussbaum has given does highlight some important functions that humans should be able to carry out, and indeed, perhaps *need* to be able to fulfil in order to live a life with an acceptable level of welfare. However, when it comes to incorporating these kinds of factors to the kind of proposal that I am making, the specifications for each category of need, or for each capability, need to be more detailed, and able to be used more straightforwardly. Furthermore, the

capabilities that Nussbaum refers to apply more to the needs of *individuals* in society and the goals to which they have. What is needed first is an account of what the needs of *society as a whole* are in terms of its basic functions that allow it to continue over time. It is then that Nussbaum's capabilities approach could be used to shape the structure of society so that the central human functional capabilities are free to be exercised.

### **Functional prerequisites**

Aberle et al. wrote an article in the 1950's (Aberle *et al.*, 1950) describing what they thought were the prerequisites needed for society to continue and function over time. They justified the inclusion of each prerequisite by the demonstration that in its hypothetical absence, the society could not survive, since at least one of the four conditions terminating a society would occur.<sup>44</sup> They also point out that "There is no reason to believe that the list of functional prerequisites offered here is definitive. It is subject to revision with the growth of general theory and with experience in its application to concrete situations" (1950, p. 100). Below are the 9 functional prerequisites that they highlight:

- A. ***Provision for adequate relationship to the environment and for sexual recruitment*** – This includes modes of adapting to, manipulating, and altering the environment in such ways as (*a*) to maintain a sufficient

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<sup>44</sup> The four conditions they claim will lead to the termination of a society are A) The biological extinction or dispersion of the members, B) Apathy of the members, C) The war of all against all, D) The absorption of the society into another society (Aberle *et al.*, 1950, pp. 103–104).

number and kind of members of the society at an adequate level of functioning; *(b)* to deal with the existence of other societies in a manner which permits the persistence of the system of action; and *(c)* to pattern heterosexual relationships to ensure opportunities and motivation for a sufficient rate of reproduction. In the absence of these provisions, the group will suffer biological extinction or failure to reproduce or it will suffer absorption into another social system.

B. ***Role of differentiation and role assignment*** – This signifies the systematic and stable division of activities... In any society, there are activities which must be regularly performed if society is to persist. If they are to be done dependably, these extensive and varied activities must be broken down and assigned to capable individuals trained and motivated to carry them out... While a given individual is often the locus of several roles, he can never combine all the roles of his society in himself.

C. ***Communication*** – Evidence from deaf-mutes, “wolf children,” and bilinguals shows that speech, the basic form of communication, is learned and that only rudimentary communication is possible in the absence of shared, learned linguistic symbols. Without learned symbolic communication, only a few highly general emotional states – e.g. anger, sexual passion – in one individual can evoke an appropriate response in another; only a few skills may be conveyed by imitation.

No society, however simple, can exist without shared, learned symbolic modes of communication, because without them it cannot maintain the

common-value structure or the protective sanctions which hold back the war of each against all. Communication is indispensable if socialization and role-differentiation are to function effectively.

- D. ***Shared cognitive orientations*** – In any society the members must share a body of cognitive orientations which (a) make possible adaptation to and manipulation of the situation; (b) make stable, meaningful, and predictable the social situations in which they are engaged; and (c) account for those significant aspects of the situation over which they do not have adequate prediction and control in such a way as to sustain and not to destroy motivation.
- E. ***A shared, articulated set of goals*** – Because there is role-differentiation in every society, we must consider a set of goals rather than a common goal. The facts of scarcity and of differential individual endowments, features of all societies, also make it necessary to speak of a set of goals. It is the range of goals, however narrow, that provides alternatives for individuals and thus reduces one serious source of conflict in societies. (The possibility of universally sought goals in a society is not ruled out.)
- F. ***The normative regulation of means*** – This functional prerequisite is the prescription of means for attaining the socially formulated goals of a society and its subsystems. It complements but does not overlap the functional prerequisite of "effective control of disruptive behavior." The

"normative regulation of means" defines positively the means (mostly noncoercive) to the society's goals.

- G. ***The regulation of affective expression*** – In any society the affective states of the members must be mutually communicable and comprehensible. Furthermore, not every affect can be expressed in every situation. Some must be suppressed or repressed. Lastly, there are affects which must be produced in the members if the social structure is to survive.

In the absence of the first of these conditions, stability of expectation between individuals is destroyed, and apathetic destructive reactions will occur. This is true alike of states of anger and affection, of love, lust and the like. Without comprehensibility and communicability, mutually inappropriate responses in effectively charged situations can only result in the destruction of the relationship. In a love affair, if one member's expression of affection has the intended meaning of a flirtation, while to the other it signifies willingness to consummate the affair, the relationship is headed for a crisis. The same state of affairs with respect to the expression of affect in an entire society is clearly incompatible with the continuation of that society.

- H. ***Socialization*** – A problem is posed for any society by the fact that its structure of action must be learned by new members. To each individual must be transmitted so much of the modes of dealing with the total situation – the modes of communication, the shared cognitive frame of



reference, goal-system, attitudes involved in the regulation of means, modes of expression, and the like – as will render him capable of adequate performance in his several roles throughout life, both as respects skills and as respects attitudes. Socialization thus is a different concept from the maintenance of the child in a state of biological well-being.

- I. ***The effective control of disruptive forms of behavior*** – Prominent among disruptive modes of behavior are force and fraud. The extent to which such behavior will occur is dependent on the way that various other functional prerequisites are met: role-allocation, goal-system, regulation of means and of expression, and socialization being the more obvious cases in point. All these functional prerequisites, it is clear from the preceding argument, tend to prevent the occurrence of disruptive behavior. In addition to, and separate from, these is the effective control of such behavior when it occurs.

(Aberle *et al.*, 1950, pp. 104–111)

The list of functional prerequisites given here provides the base layer for what society needs to function, whereas Nussbaum's list of capabilities is akin to a second layer built on top that comes into play once this functional base system is in place. The functional prerequisites are what allows a society to form and continue, and the functional capabilities are what allow a good life for the individuals in that society.

As useful as the list of functional prerequisites given by Aberle et al. is, in that it highlights what society needs to function and continue, it again only gives the broad headings for the categories of need for societies, and their discussion does not give an indication of a way in which the different categories could be assessed in terms of how in need society is of each category at a given point in time.

### **Basic societal functions**

A more practical account that improves on the previous two lists, whilst still incorporating their main themes however, can be found by turning to a report by the Task Force on Quality Control of Disaster Management relating to health disaster management (Task Force on Quality Control of Disaster Management, 2014a). The items on the list they give bear similarities with the lists given by Aberle et al. and Nussbaum, however, it differs in that they go into more detail about what the basic needs of society are, not by including more headings in their list, but by making their headings more specific to the functions of society, such as *water and sanitation, energy supply, and logistics and transport*. Their list more closely reflects the *basic societal functions (BSFs)* over the other two lists, as they identify the specific functions of society that need to be in place for it to continue over time, rather than simply giving general headings of the categories of needs:

1. **Public Health:** this BSF has a collective focus, as it is concerned with the health of groups of people or a population. The responsibility of Public

Health is the protection and improvement of the health status of a society. Its goal is dominantly prevention; it deals with some direct activities, such as immunisation, but mostly with normative, control, education, promotion, and coordination activities. Public health components are dependent on most of the other BSFs.

2. **Medical Care:** this BSF comprises the medical care of *individual* patients. The Medical Care BSF is responsible for the detection of symptoms and signs, and for the diagnosis and treatment of patients. It includes primary, secondary, and tertiary care, as well as psychosocial support and treatment. Its main goal is the provision of curative medicine.
3. **Water and Sanitation:** in the context of these guidelines, the Water and Sanitation BSF is responsible for:
  - a. Provision of adequate supplies of water suitable for drinking and preparation of food. Water includes any means or processes used to provide clean (uncontaminated) water; and
  - b. Application of measures and techniques aimed at ensuring and improving environmental health in a community through the collection, evacuation, and disposal of liquid and solid wastes with or without prior treatment. Hygiene also is part of the Water and Sanitation BSF.

4. ***Shelter and Clothing:*** the Shelter and Clothing BSF encompasses the responsibility for the provision of protection against harmful environmental elements.
  
5. ***Food and Nutrition:*** the Food and Nutrition BSF is responsible for the provision of any edible substance containing nutrients that, on ingestion, helps to maintain the vital functions of a person or other living organism. Nutrition is the assimilation and metabolism by which living organisms utilise food for maintenance of life, including growth and maintenance of body tissues. It also includes the interaction of foods with health and disease, and improvement of health standards through prevention and treatment of nutritional diseases. *Food security* means enough food. *Food safety* means good quality through proper handling (i.e. properly collected, processed, stored and distributed).
  
6. ***Energy Supply:*** the Energy Supply BSF includes any property with the capability to transform or change a function or parts of the environment or the society for energy; it is what is needed to keep the technical aspects of society operational. This includes fuels (wood, gas, diesel, kerosene, etc.) and electricity used for the provision of heat and cooking. It also includes the provision of light necessary for daily activities, including medical evaluations (assessments) and surgery, and the fuel needed for transport and operation of equipment required for the overall functions of a society.
  
7. ***Public Works and Engineering:*** the Public Works and Engineering BSF is responsible for the application of *technical* knowledge and assistance to

develop and maintain the infrastructure of the society. It includes the infrastructure and all physical structures needed for a society to function (railroads, roads, buildings, power plants, etc.).

8. **Social Structure:** the Social Structure BSF encompasses the relationships within a group of people and the key elements that influence and dictate such relationships: e.g. religion and its systems, hierarchical structure, population density, social, political, and governmental systems, cultural practices, and living conditions as given within the environment.
9. **Logistics and Transport:** the Logistics and Transport BSF includes the range of activities concerned with the supply, procurement, storage, transport, and evacuation of persons, equipment, supplies, wastes, etc. It describes all means and modes of transportation, both public and private: street-cars, subways, trains, buses, private cars, bicycles, oxcarts, donkeys, horses, ferries, ships, etc.
10. **Security:** Security is the BSF responsible for the safety of a given (defined) population. In this context, Security includes the state of being protected from injury inflicted directly or indirectly by other living beings or events.
11. **Communications:** the Communications BSF includes the interchange of *data and information*. Communications include all public and private communication facilities (e.g. fire, police, military, government, private radio (HAM) operators, news- papers, other news media, television,

telephone and telex, facsimile, the Internet, satellite, runners, text messaging, the social media, etc.).

12. **Economy:** the Economy BSF includes the means for providing the resources essential for establishing and maintaining all of the functions and infrastructure of a society. It includes how resources are used by the society and the sources of these resources: e.g. agriculture, crops, industry and the products produced, jobs, foraging (searching for food by hunting, fishing or the gathering of plant matter), trade and transport (import/exports), humanitarian aid, value of the currency, per capita income. Economy consists of the wealth and resources of a community, especially in terms of production and consumption of goods and services.

13. **Education:** the Education BSF is responsible for the education and training of the citizens of the society. It includes all resources used in educating and training the population: the teachers, libraries, training facilities, structures, tools, and equipment. Thus, it also includes the education and training of the responders or potential responders, coordination and control personnel, etc.

(Task Force on Quality Control of Disaster Management, 2014b, pp. 39–42)

The list given here was developed as a way to categorise the basic functions of society and to assess their level of functioning after a disaster, or before an imminent disaster, to minimise the amount of detriment that is caused by the

disaster, by putting more effort and resources into restoring the basic functions that are operating below their functional threshold.

For example, if the basic societal function of logistics and transport was operating below its functional threshold of being able to adequately allow the movement of people and supplies to where they are needed following a disaster, then more resources would be spent to restore this function over another function that is operating at or above its functional threshold. Similarly, if the basic function of water and sanitation was functioning below its functional threshold, with less drinking water being available than is needed to meet the minimum water requirements of its citizens, then resources would be directed to restoring this function.

A society is made up of many parts and by looking at the transectional structure of society, it provides a way to organise a complex society into components:

“These components of society are the basic societal functions that can be further subdivided into functional subcomponents. By using this framework, evaluators can devise appropriate indicators of function and assess how well each function of society is operating at a given time, tracking the impact of a disaster on society, and the effectiveness of interventions. This kind of assessment opens the field of disaster management to repeatable and generalisable structured research.” (Task Force on Quality Control of Disaster Management, 2014b, p. 47)

Whilst this list was developed to be used in disaster management situations, it is also useful for this thesis as it has highlighted the basic needs of society, which is at least part of what is required when assessing the instrumental value of a person based on how well their contributions meet the needs of society. These basic functions of society still need to be fulfilled whether there is a disaster or not, and so the outline of these needs is still a useful tool for prioritising resources in non-disaster situations. Of course, people can be valuable to society in other ways and make contributions to society that don't go towards meeting the basic functions and needs of society, and these too should be taken into account where possible when making an assessment of a person's social value. As such, the useful list given here can be supplemented with other criteria that can be used to assess a person's instrumental social value, such as the effects on a person's proximate individuals in the form of how detrimental their death will be to their immediate family members.

### **How would it be decided which needs are most important**

Even though the basic needs of society have been identified, and even when the non-basic needs, and the contributions that a person can make to society have been identified, there still needs to be a way to assess how important those different needs are to society at any given point. There needs to be a way to assess which functions of society, and which contributions that a person can make to society, are most important. This assessment would also need to be reviewed over time to reflect the changing needs of society.



The Taskforce on Quality Control of Disaster Management again gives a useful approach to making these kinds of assessments by drawing on the idea of *indicators of function*, and looking at the elements that go towards contributing to the overall operation of the function. They suggest that a baseline could be taken to establish a threshold at which each function is operating effectively to fulfil its overall function, with indicators giving an idea of when the function is operating below, at, or above this threshold. They give a table with the kind of indicators that could be used to identify whether the function is operating effectively:

Basic societal function	Primary function(s)	Some indicators of function
1. Medical Care	Provision of medical care for individual patients	Numbers of hospital beds, nurses, and physicians/capita; total hospital days
2. Public Health	Health status of groups or populations	Changes of incidence/prevalence of diseases, vaccination prevalence, decline in school attendance
3. Water and Sanitation	Supply of potable water, disposal of waste	Available water supplies (l/person/day; proportion of population receiving number of litres/person/day), incidence and prevalence of vector-borne diseases
4. Food and Nutrition	Maintain adequate supplies of food, nutritional state	Available calories/day/person, weight, upper arm circumference of children
5. Energy	Ability to transform or change function or parts of the environment or society	Available supplies of clean energy, oil consumption per capita
6. Logistics and Transport	Supply, procurement, storage, transport, evacuation of persons, equipment, supplies, wastes, etc.	Paved roads (km), railroads (km), waterways, warehouses
7. Security	Protection from injury	Perception of safety and violent deaths, crime rates
8. Education	Education and training of citizens of the society	Literacy rate
9. Social Structures	Social interaction	Number of churches, mosques, synagogues; political system
10. Shelter and Clothing	Protection against harmful elements of the environment	Available appropriate shelter and clothing; numbers of homeless
11. Communications	Exchange of information	Operational systems
12. Economy	Wealth and resources of the community, especially production and consumption of goods and services	Gross domestic product, costs of staple foods, unemployment rate/numbers
13. Public Works and Engineering	Building and maintenance of infrastructure	Heavy equipment, numbers of engineers, aid workers

(Task Force on Quality Control of Disaster Management, 2014b, p. 41)

The indicators of any function must be open to review and appraisal to ensure that they are suitable markers of the performance of the corresponding function; “Assessment of the functional state of any of the BSFs [Basic Societal Functions] depends upon the selection of the best possible indicators of function” (Task Force on Quality Control of Disaster Management, 2014b, p. 44). If the indicators of a

function show that the function is not operating at its ideal performance level, then it can be said to be operating below its functional threshold, and as such, resources should be directed at restoring it to, or above, its functional threshold.

“When a deficit exists between the level of available supplies of goods and/or services and a requirement, a need exists. This level of supplies necessary to maintain the function of the BSF or functional component, is the functional threshold. Any level of supply of that good or service that is below the functional threshold, prevents that component or element from meeting all of its required functions” (Task Force on Quality Control of Disaster Management, The World Association for Disaster and Emergency Medicine and The Nordic Society for Disaster Medicine, 2003, p. 74).

However, even if it can be determined which needs of society are not being adequately fulfilled, it still needs to be determined which of these needs are most important to society at a given time and should attempt to be fulfilled first. In this way, value points can be assigned to the different contributions that a person can make to society corresponding to how far they go towards meeting the different needs of society, and how important the needs are that their contributions help to fulfil. The basic needs and functions of society may remain fixed over time, however, the priority in which they need to be fulfilled may change. The Taskforce on Quality Control of Disaster Management point out that in a disaster situation, the climate of the locale will affect whether protection against cold weather should have a higher priority than the provision of water, and similarly, sometimes

circumstances within society may mean that educational contributions are more socially valuable than economic contributions.

Coming to an agreement on the priorities of these needs is a task which I suggest should be undertaken by the criteria selection committee. This committee would be made up of a selection of experts from fields relevant to assessing what the different needs of society are, and would be able to assess the priority that each need should be given based on codified knowledge and tacit knowledge. The Taskforce on Quality Control of Disaster Management make a similar suggestion when they say that when making a qualitative estimate judgement about the severity of an event, “[a] severity score attempts to assign a numeric value to the severity of the damage. Generally, the weights attached to qualitative judgments have been derived from achieving consensus from panels of experts who assign a Likert-type [scale] to their judgments of severity, based on case reports or upon their respective knowledge of the science associated with the topic” (Task Force on Quality Control of Disaster Management, The World Association for Disaster and Emergency Medicine and The Nordic Society for Disaster Medicine, 2003, pp. 95–96). This approach to assessing the priorities of functions in disaster situations could be used or adapted to assess the needs of society in a non-disaster state. Experts from fields such as sociology, economics, and psychology can draw on their respective knowledge of their sciences to determine a hierarchy of the needs of society for any given time, using indicators of function to determine how urgently they need fulfilling, or, if no urgent fulfilment is required, which needs could benefit from more human investment. From this, the patient selection committee, made up from similar fields, will be able to draw upon their scientific

and technical knowledge regarding causal relationships to assign a value score to each contribution a person makes to society dependent on the level of need their contribution helps fulfil.

### **Non-basic societal functions**

So far, the focus has been on what the basic needs of society are, but there are also contributions that a person can make to society which might not go towards meeting any of these basic needs. For example, someone who runs a cinema, a golf course, art gallery, or hairdressers, might make contributions to the basic need of the economy through the taxes that they pay, but they also contribute towards the happiness of their customers through the entertainment and services they provide. Entertainment may not be classed as a basic need of society, but it is surely something that we value and so people that make contributions towards this need are making a contribution to society. As such, contributions to society that might go towards the non-basic functions/needs of society should also be taken into account ideally.

The problem with accounting for these kinds of contributions however, is that assessment of their importance is more subjective than that for the basic functions of society where there are thorough and established indicators of function that can be drawn upon to gauge their fulfilment (The Sphere Project, 2011; Task Force on Quality Control of Disaster Management, 2014b, p. 41). Broad strokes can be made however, in gauging which areas of entertainment need more investment or

are fully catered for. For example, a particular area might have plenty of shops, but few bars. If there was more demand for bars in the area, but less for shops, then contributions made towards improving the provision of bars would be more valuable than those that go towards the provision of shops. As such, if there were two patients who were equal in all regards apart from their contributions to entertainment, the patient who owns a bar in the local area would be more valuable to society than the patient who owns a shop in the local area, and so might be given priority for an organ transplant.

Creating a hierarchy of the entertainment needs of society that could be referred to when assessing a patient's contributions to society however, would prove a difficult task. The subjective nature of entertainment means that every person would have differing opinions on whether more bars were needed, or less shops, or more golf courses. The basic needs of society can be measured in a much more objective way. E.g. the energy needs of society can be assessed based on whether there are power outages or fuel crises.

Because the non-basic needs of society are less amenable to objectivity, but contributions towards them might still remain valuable, they should only be used in a tie-break situation where two patients have the same social value score once all of the other criteria have been applied. Leenen makes a similar suggestion of applying those criteria which are more amenable to objectivity before using the criteria which might be more subjective (Leenen, 1982, p. 35). In this way, the risk of someone being rejected for an organ based on subjective criteria is minimised. Whilst this approach might not be suitable if a perfectly accurate assessment of a

person's *overall* social value is to be made, it might still be suitable for the rare social value tie-break situations that may occur.<sup>45</sup>

### **Valuable to vs. valued by**

It is worth noting again that the *specific* criteria that are deemed to be important for society may not necessarily reflect the views of the public. The views and opinions of the public may be ill informed or based on unfounded prejudices such as race or sexuality which would unfairly disadvantage some patients. As such, the social value criteria will be based on the needs of society as determined by the experts on the criteria selection committee. The experts will make these decisions in an objective manner (as far as is possible), with the patient being given a social value score based on the things that are valuable *to* society, rather than those things that are valued *by* society.

It might be claimed that allocating organs to society based on the values that the members of society hold would also be benefiting society, as the organs would have been allocated to society in a way that conformed with their opinions. However, this may not always be the best course of action when it comes to the

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<sup>45</sup> As will be explained in Chapter 6: Narrowing down or informed selection?, I do not support a linear approach in general in the application of the social value criteria as a way to narrow down the possible recipients; it results in the exclusion of patients who might make valuable contributions to a different criterion. However, in this case, because contributions to the non-basic needs of society are open to subjectivity, but might still be useful, they should be used as a last resort in tie-break situations. A random selection of patients could also be used in this circumstance; however, this approach would undermine the aims of the social value criterion to increase the amount of welfare created with each organ transplant. There stands more chance of increasing overall welfare with the application of partly subjective criteria than if a patient selection was made randomly.

basic needs of society, given that lay members of society may not have the relevant knowledge to know what the actual needs of their society are, and will have different views on the needs of society based on their experiences. Lay members of society are not as sufficiently aware compared to the relevant experts of the causal links between the different parts of society to be able to make a fully informed decision on what is in the best interests of society as a whole. The majority of society may feel that a certain course of action is right, however, if they were in possession of all of the facts of the situation, they may very well make a different decision. For example, the majority of society voted recently for Britain to leave the European Union (EU), based in part on economic reasons. However, if they were in possession of all the relevant information needed to make a decision to leave the EU on economic grounds, their decision may have perhaps been different.

Three well respected economic institutes (the Centre for Economic Performance at the London School of Economics, CBI/PwC, and Oxford Economics) wrote reports on the economic impacts on Britain of leaving the EU, all concluding that leaving the bloc will have a significant cost for British households (Centre for Economic Performance, 2016; Oxford Economics, 2016; PwC, 2016).<sup>46</sup> If more people had been aware of these reports and facts, their decision may well have been different.

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<sup>46</sup> “For the Centre for Economic Performance, drops in trade with the EU “is likely to cost the UK economy far more than is gained from lower contributions to the EU budget”. The CBI/PwC report concludes that leaving the EU “would cause a serious shock to the UK economy”, while Oxford Economics reports that “our scenario modelling does not give much cause for optimism about the impact of Brexit”” (Giles, 2016).

The problem with trying to discover all the relevant facts to make an informed decision is that it often requires much time and effort. In the case of the economic reasons for remaining in, or leaving the European Union, it would involve reading extensive reports such as the ones given by the Centre for Economic Performance at the London School of Economics, CBI/PwC, and Oxford Economics, which many people either do not have time for, or simply are not inclined to do. Because of this, it would be better to let those with the relevant knowledge and expertise of particular areas to be the ones to make major decisions in those areas. If the views and values of the public were the main guiding principles by which resource allocation decisions were made, it may result in misguided policies being implemented due to their lack of knowledge. It is for these reasons that the social value criteria should be based on that which experts determine to be valuable *to* society rather than those things that are actually valued *by* society. (Note that there may still be alignment between the two on certain criteria, with something being valuable to society, and society valuing it.)

## **Who decides which patients are most instrumentally valuable to society? - (patient selection committee)**

Because the public are not always in the best position to know what the needs of society are, how to meet those needs, and who is integral in helping to meet those



needs, an impartial team of experts from different fields, predominantly from economics, psychology, and sociology, would better achieve the aims of the system. They would be able to make objective decisions on which patients can help fulfil the needs of society outlined by the criteria selection committee.

### **Why these areas of expertise?**

The reasons why I suggest that experts from the fields of economics, sociology, and psychology should make up at least part of the team of experts for the criteria selection committee as well as the patient selection committee is because it is these fields which possess the relevant knowledge to determine the needs of society, and can assess social value in order to select the right organ recipient. In the case of the Admissions Advisory Committee in the Seattle case study, one of the reasons why their decisions about which patients should receive dialysis were so biased and discriminatory was that they were under-qualified to determine the social value rankings of potential recipients, and so considered factors that were irrelevant. With experts from the relevant fields making up the criteria selection and patient selection committees in a revised system, such bias and discrimination can be avoided. They would be able to identify key areas, such as skills shortage, that would warrant prioritising patients that make particular contributions to these areas.

Economists would have a role to play on the committees, especially the criteria selection committee, as they would be able to contribute in ways such as making

assessments about current skills shortages in the labour market, and forecasting for the likely skills shortages in the long term (Boswell, Stiller and Straubhaar, 2004, pp. 16, 18). The most widespread method for estimating current labour and skills shortages is through the use of surveys, with employer surveys in particular, being used to ascertain vacancy rates. These can then be compared to unemployment rates to derive a picture of labour mismatches (2004, p. 16). In the UK, this is done through the Employer Skills Survey (ESS), and is a valuable tool for informing short-term policy responses to skills or labour shortages (2004, p. 18). “It is important to understand the prevalence and nature of skill-shortage vacancies as an inability to recruit appropriately skilled labour may act as a brake on business growth and hinder productivity” (Vivian *et al.*, 2016, p. 36). It is this kind of information that can be used in assessing a person’s social value, with those skills and occupations that are in shortest supply but highest demand being the most socially valuable in this category.

Sociologists and psychologists would also be required on the committees, especially on the patient selection committee, as they will be able to assess which patients might be most likely to contribute to society in particular ways. Whilst the fields of sociology and psychology are separate, there are overlaps in many places, and the field of social psychology is well established. Walker highlights the overlap of the two disciplines when he says that:

“The facts of psychology and sociology are inevitably coexistent. Indeed, as has often been pointed out, they are the same phenomena seen in different frames of reference... The recognition of the relativity of

psychological generalisations to particular sets of sociological conditions is indeed one of the major advances of psychology in the last few years. But this does not involve the reduction of psychological laws to sociological laws. Under certain sociological conditions, certain uniformities of behaviour may be discovered. Under other conditions of social structure, other uniformities may hold. The discovery of these uniformities is the primary business of psychology. Once discovered, they may be used to predict (and control) behaviour under certain observed sociological conditions." (Walker, 1941, p. 448)

He continues to say that,

"The importance of sociology for psychology lies, therefore, in the identity of the material with which the two sciences deal, namely human behaviour. Each science studies this same material from different viewpoints, and each meets the technical difficulty of isolating its variables. No scientist who wishes to predict as well as explain can hope to do so without going beyond the boundaries of his science. Psychologists, therefore, have much to learn from studies of current social trends and the prevailing social structure, and without a knowledge of the *facts* will be unable either to predict behaviour or even formulate explanations of behaviour." (Walker, 1941, p. 449)

By looking at social trends and attitudes, alongside personal attitudes, predictions can be made as to the likely future contributions of individuals and groups. To highlight the need for experts in these professions to be part of the patient

selection committee, take an example of how their input may be needed in the category for the effects on proximate individuals, where the death of a parent will undoubtedly have an effect on their children.

The general member of the public will not know the likely extent of the detrimental effect on the individual children of the deceased patient, and how that detriment may vary depending on age. This is an important consideration because, if parents are going to be given extra value points because they have at least one child and have a unique relationship with their child, then there needs to be some distinction as to when the offspring is no longer classed as a dependent, and when the unique relationship is not as vital to a child's development. Experts from the field of psychiatry and psychology will be able to make much more informed decisions on what effect the interplay between a child's age and circumstances will have in the bereavement process, and which individuals will suffer most harm. In turn, these differences in these effects can be reflected accordingly in the amount of value points given to parents awaiting a transplant. They are in the best position to know the likely effects that a person's death may have on another, and the level of detriment that it might cause, especially in comparison to another person, and so make a judgement as to which patient's continued life can avoid the creation of the most detriment.

For example, a very young infant is likely to be affected less by the death of a parent than a slightly older infant due to them not being able to grasp the concept of what has happened. Beverly Raphael, who has a background in psychology and psychiatry, points out that,

“The death of a loved one means not only the loss, but also the nearness of personal death, the threat to self. One is close to death and may be touched or contaminated by it. All of the personal and internalised meanings of death will be evoked by the death of a loved one. All the personal vulnerabilities associated with death will be aroused by its closeness to the self.” (Raphael, 1992, p. 23)

However, because a young infant only starts to hold the image of their relationship to the parent towards the end of their first year of life, the relationship before then is based purely on “The here and now, composed of the gratification and frustration, the actuality of interaction and the primordial affectual experiences attached to such interaction” (1992, p. 17), and involves no such comprehension of the nearness of death. If a child’s mother dies in the first few months of life, “He may show crying and distress because of the removal of vital supplies, but good mothering by a surrogate may settle this quickly” (1992, p. 76).

Contrast this with the bereavement of an older child, and the detrimental effects are more severe. For a child aged between 6 months and 2 years old, the child is increasingly able to hold their parent (specifically the mother) in their absence, as a representational image within them and as a concept of a person (1992, p. 78). However, because they cannot yet conceptualise the permanence of death, the nature of the dead state, the child may search for the mother and experience their death in terms of separation and absence from the image of their mother as a source of good feelings and interactions. As such, the child protests for the mother to return, but to no avail, and so their feelings of despair supervene, and the

mother's image is now that of longing and pain (Raphael, 1992, p. 79).

Raphael also explains the effects that children up to the age of twelve experience from bereavement, with the children experiencing different levels of suffering in different ways, with older children no longer experiencing the death of a parent purely in terms of pain and abandonment, but due to a greater understanding of the future, "they are much more likely to be aware of what the loss will mean in the future, of how it will continue, and the possibilities of life ahead without the lost person" (1992, p. 107) The long-term effects of bereavement on a child can range from general ill health, psychosomatic effects, and depression amongst others. However, the likelihood of these occurring and the role that they will play can differ depending on the circumstances of both the bereavement and the support network for the child after the bereavement.

Bowlby lists the variables he believes to be associated with the more favourable outcomes of childhood bereavement:

1. The causes and circumstances of the death, including what the child is told and what opportunities are given to him subsequently to enquire about what has happened.
2. The family relationships after the loss, especially whether or not the child remains with the surviving parent and the quality of those relationships and family life following the loss.

3. The patterns of relationship within the family before the loss, particularly the relationships between the parents and between each of them and the bereaved child.

(Bowlby, 1980, p. 311)

Understanding the interplay between the different variables on the effects of bereavement is something that the layperson just does not have, but that particular experts from psychology and sociology might have. I have outlined a brief account of how children may be affected by bereavement, and it is by no means a comprehensive account of the ways in which a child can be affected by a death. However, it serves to show that the ways in which different age groups are affected differs dramatically, as well as depending on the circumstances of the death itself, and the quality of the support network afterwards.

The effects of a person's death are also felt by adults, whether it be the death of a child or spouse. Raphael outlines the effects that bereavement of this nature will have on an adult, and again, there are numerous variables that would need to be taken into account in order to make an accurate judgement about the level of detriment that may be caused in each situation in order to make a social value judgement (Raphael, 1992, chaps 5–6). And again, it is this level of detail that requires the involvement of experts in psychology and sociology to be involved in the decision-making process. In order to accurately make a judgement about which patients' deaths will cause most detriment, someone with a deep understanding of the interplay of these variables and the effects they have is needed. They may not be able to know the *exact* effects that the death of an

individual will have on someone and how this will affect their social contributions in the future, but drawing on research, they will be able to make better predictions about future contributions and increase welfare.

Similarly, regarding the category of active social contributions (both positive and negative), experts from fields such as psychology can make predictions of people's future behaviour, and so in turn their likely active social contributions. Ajzen and Fishbein are proponents of the theory of reasoned action and state that humans are, "Usually quite rational and make systematic use of the information available to them" (Ajzen and Fishbein, 1980, p. 5) when making decisions. These decisions are based on their intentions which are formed by the relationship between two basic determinants, one personal in nature and the other reflecting social influence (1980, p. 6). "The personal factor is the individual's positive or negative evaluation of performing the behaviour; this factor is termed *attitude towards the behaviour*... The second determinant of intention is the person's perception of the social pressures put on him to perform or not perform the behaviour in question. Since it deals with perceived prescriptions, this factor is termed *subjective norm*" (1980, p. 6). It is the relative importance that an individual places on the attitude towards the behaviour and the subjective norms that will make their intentions differ and so alter their behaviour. Of course, there are other factors that will influence a person's behaviour, however, Ajzen and Fishbein claim that these are external variables that affect the beliefs a person holds or the relative importance they attach to attitudinal and normative considerations rather than affecting behaviour directly.



Ajzen and Fishbein explain how the theory of reasoned action can explain and predict a person's behaviour in any number of fields, ranging from weight loss, occupational orientation, and family planning behaviours, to consumer behaviour and voting behaviour, and even how an understanding of the relationship between attitudinal and normative considerations can change a person's behaviour in relation to alcoholism (1980, chaps 8–15). They even go as far as to outline the steps needed when creating a questionnaire, suggesting questions that need to be asked in order to gain an insight into the person and their beliefs and values, and predict their behaviour (1980, chap. 261). Whilst having a questionnaire to aid in making predictions about a person's behaviour is useful and can be carried out by almost anyone, the interpretation of the data and its place alongside the other data would need to be carried out by experts from the field in order to ensure an accurate value judgement is made.

The input of sociologists and psychologists is also integral when making predictions about the likely future negative contributions that a person may make from a criminal standpoint. There have been many studies and papers written explaining the circumstances under which a person may continue a life of crime, and how likely or unlikely it is that a person will commit further individual crimes (Laub and Sampson, 1993, 2001; Sampson and Laub, 2003; Forrest and Hay, 2011; Fazel *et al.*, 2012; Mullane, 2012). There are also tools already in use in the UK criminal justice system to enable the probation service to make assessments and predictions of the risk of reoffending and the risk of harm to the public that a convicted offender presents. Such tools are the Offender Group Reconviction Scale (OGRS) (Copas and Marshall, 1998; Howard *et al.*, 2009), Risk of Serious

Recidivism Score (RSR) (Moore, 2015, p. 334 Appendix H), and the Offender Assessment System (OASys) (Moore, 2015). By including these considerations in the decision-making process, sociologists and psychologists are better able to make social value judgements about a person than a lay committee ever could.

## **No role for laypersons**

The role for a layperson in the *patient selection decision* would be relatively small due to their lack of expertise. The only possible place for a lay committee in the patient selection decision would be if criteria could be laid out by the experts from the relevant fields and used by the lay committee to base their decisions on. They would make their decisions based on the criteria that the experts have outlined with regards to how likely it is that a person will contribute to society. For example, people with certain skills are more likely to contribute in particular ways in some categories, and people in other circumstances will contribute in different ways. There are some small benefits to such an approach, as it means that there is at least some public involvement in the selection process. It means that the public are not completely removed from the process and are involved in the *application* of the criteria, even if not in the *selection* of the criteria. However, a group of laypersons applying the criteria would not be the best way to achieve the aims of the system in terms of maximising the welfare created from each organ transplant. Their application of the criteria may not be accurately applied to each patient given that they may not have the necessary insight to judge each case

adequately enough to come to a decision that accurately reflects a patient's social value.

Furthermore, there will undoubtedly be situations in which there will be patient selection decisions to be made for which the selection criteria may not be comprehensive enough or detailed enough for a layperson to make an accurate appraisal of a potential recipient's likely future contributions. There may also be criteria that will not be able to be applied in a straightforward manner, as it may need experience to make certain decisions, e.g. when it comes to psychology. The professional psychologist will be able to see and explain why a person has acted a certain way, whether this is likely to affect their behaviour and future contributions, and highlight the factors and criteria that influence their prediction (Ajzen and Fishbein, 1980, p. 58; Mischel and Shoda, 1995; Mischel, 2004, p. 3). However, if a layperson were to attempt to apply the criteria highlighted by the expert in this manner, they would have to become well versed in psychology themselves to ensure that the criteria were being applied correctly and that the patient wasn't 'mis-assessed' in terms of their potential social value. They would either have to become experts themselves in the different fields, or frequently draw on the advice of experts in many cases.

It would be more time efficient and yield better predictions if it were experts in the first place that made the decisions about which patients are most likely to make different contributions and in turn, determine their social value rank. In this way, we can ensure that the patient's social value is being judged accurately, and not on the half-informed knowledge of a layperson. It is more plausible that the

role of lay people would be to simply give their input, and for the expert committee to consider these views, but only incorporate them where appropriate. If a team of experts were to make the decision as to which patient was most valuable to society, at least the patients who do not receive an organ could rest assured that the procedure had been applied correctly and that they were not unfairly put to the bottom of the list.

## **Problems with the committees**

### **Disagreement on the needs of society**

With regards to the criteria selection committee, there could be concerns with how feasible it is to suppose that the committee will be able to come up with a workable list of skills and values that are important to society in fulfilling its needs and how they can be ranked. It is possible that even if the experts do come up with a list of skills and values that are important for society, they may not be able to agree on the order that they should be ranked.

Whilst it might be a fair argument that the committee may not be able to agree what is valuable from the *ranking* perspective, it is unlikely that the committee will not be able to agree what things are valuable overall. There are certain basics in the form of (but not limited to) the basic societal functions outlined earlier (Task Force on Quality Control of Disaster Management, 2014b, pp. 39–42), that a society needs to function and flourish, and certain things, that will obviously cause

detriment to society, and a team of experts can be reasonably expected to agree on what these things are. It is in the relative value that the experts may place on this criteria where disagreement may lie, due to the potential bias for criteria that comes under their professional heading. However, given that this team of experts are well educated and rational, scientifically minded people, it is unlikely that they will hold *completely* opposing views on what are essentially facts about the needs of society. It is unlikely to be the case that one expert will judge something to be beneficial to society, whilst another judges it to be detrimental. A more likely scenario is that two professionals from the same field, e.g. economists, will have differing opinions on what type of need is more valuable to society. Economist A might think that Person A is more economically valuable because they can contribute to society in the immediate future, but Economist B might think that Person B is more economically valuable to society because they can contribute more in the long term. However, despite this difference of opinion, the experts on the committee will know that their aim is to arrive at a consensus of ranked values, and so will aim to reach a valid and objective compromise between their views through a process of reflective equilibrium based on a thorough reading and discussion of the facts involved and whether the current or future needs of society outweigh one another in each circumstance.

However, even supposing that the committee will not be able to agree upon the way in which the values should be ranked, this would not necessarily pose a problem to the implementation of the policy. Despite the fact that the agreed upon contributions that are valuable for society might not be able to be ranked, they would still be useful in helping to determine a patient's value, at least to some

extent. If the experts cannot decide that some needs are more important than others, then it could be supposed that those needs are as important as each other, and determining which patient is most likely to meet these needs will still help to reveal their value to society compared to other patients who may meet more or less of the criteria. If there are at least some value criteria to go by, the social value allocation method provides a better alternative than what is currently used.

## **Conclusion**

It has now been shown that the people who are in the best position to determine just what the needs of society are, and which patients are most likely to help meet the needs of society, are a team of experts from the relevant fields, namely, psychology and sociology for the patient selection committee, and economics, sociology, and psychology, for the criteria selection committee. However, what still needs to be discussed are the ways in which a person can be valuable to society, and how this could be incorporated into a social value criterion from both an ethical and practical perspective. The next chapter will look at the ways in which a person can be valuable to society, and the extent to which these considerations should be included when making a social value judgement of a person.

# Chapter 6: The ways in which people are valuable

## Introduction

It has now been shown that a resource allocation system that takes into account a patient's value to society can put resources to better use than allocation systems that do not, and that a committee of experts making decisions about what and who is valuable to society would mean these decisions could be made more objectively than if they were made by a lay committee. However, what has not yet been discussed in detail, is the ways in which a person can be valuable, and the types of contributions they can make that will go towards meeting the needs of society.

In this chapter, I will begin by looking at the ways in which a person can be valuable, and then in Chapter 7, I suggest how the different contributions could be incorporated into a social value assessment to give a final value rank to each patient. The reason for looking at the ways a person can be valuable to society, is that they can then be mapped on to what the needs of society are in order to determine a final value rank for a person based on how far they go towards meeting these needs.

The lessons that can be learnt from the Seattle system discussed in Chapter 4 will help to shape the specific social value criteria, narrowing down the scope of a

patient's contributions included in the system, to keep the process objective and practical.

## **The ways in which people are valuable**

It is important to note that when making a judgement about how valuable someone is to society, it is simply on their *instrumental* value which a judgment is being made; there is no judgement being made about the person's moral worth. Even if it is the case that every person has equal moral worth by virtue of being human, their instrumental value to society is still different, and it is this instrumental value that is of concern when allocating scarce resources. In order to make the best use of the resources that are available, it is important to look at what can be gained from the allocation of each resource, which in this case, means looking at the contributions that a person makes to society. It is these contributions that are being assessed, not the person themselves. Each person may have equal moral value, but the contributions that they make to society will differ, and as such, so too will their instrumental value. Even if each person's life is no more valuable than someone else's life, the contributions that a person makes may be.

To take an extreme example, if there was only one suitable organ available and the choice of who to allocate the organ to was between a low-functioning alcoholic and the prime minister on the eve of World War 3, taking into account the



instrumental value that each has would likely result in the prime minister being allocated the organ given that his contribution to society would hopefully be to avert the war through negotiations, whereas the low-functioning alcoholic is unlikely to be able to make such beneficial social contributions to avert the war. However, if these potential recipients were treated equally based on their moral value as persons, and the organ was randomly allocated, the alcoholic may receive the organ, the prime minister would die, and there is every chance that negotiations to avert WW3 would breakdown. In this case, greater harm would be caused by not taking into account the patients' instrumental value. Even though their value as persons may be the same, the instrumental value of their contributions to society is different, and taking this value into account will help to make better use of the resources available by increasing welfare and minimising detriment. Whilst this is an admittedly improbable example, it serves to show how taking into account a person's instrumental value to society when allocating organs in tie-break situations can increase overall welfare.

In this next section, I will be looking at the ways people can be instrumentally valuable to society and where these would figure in an organ allocation policy that included a social value criterion, and the considerations needed to determine a person's overall instrumental value.

In the following sections, I will discuss in detail the three main ways in which a person is instrumentally valuable to society; through their: social contributions, effects on proximate individuals, and morality. All the things that make a person instrumentally valuable can be categorised under one of these three broader

categories. For example, Shatin suggests a list of things which might be taken into consideration when judging a person's social value, and each of these things (bar one) will fit under one of the categories that I have mentioned (Shatin, 1966, p. 99):

<b>Shatin's suggested considerations</b>	<b>Respective category</b>
<i>Medical prognosis and outlook for full recovery</i>	<i>Medical selection</i> <sup>47</sup>
Economic productivity of the person when well	Social contributions
Age and productive years left	Social contributions
Considerations based upon potential contributions to society	Social contributions
Society's need for his services	Social contributions
Contribution to the cultural stream of humanity in all areas of human endeavour: arts, sciences, humanities, economics, governance	Social contributions

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<sup>47</sup> This is an exception in his list as even though Shatin considers "medical prognosis and outlook for full recovery" a consideration that should enter into the determination of the social value of a person, I feel that it fits more naturally within the medical suitability criteria.

Responsibility of the welfare of others	Effects on proximate individuals
Children, friends, social and community relationships	Effects on proximate individuals
Marital and family status and responsibilities	Effects on proximate individuals
History of anti-social behaviour	Morality, and social contributions

Table 2.<sup>48</sup>

Shatin admits that his list of considerations is not in any order of importance, however, this *would* need to be taken into account were it to form part of a resource allocation system, with the more important contributions being given a higher social value score. His list may also not be comprehensive enough to cover all of the considerations which should be taken into account when determining someone's social value, but it does provide a starting place. It states which considerations could go towards determining a person's social value, and highlights how any of those considerations would fit into one of the three broader categories that I suggest.

Below is a more detailed account of the three main categories, and some of the more specific criteria that would be considered within each. The categories are broad enough to include any of the specific criteria that would be taken into

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<sup>48</sup> Table 2: Shatin's suggested social value considerations placed into three broad categories (Shatin, 1966, p. 99).

account when determining a person's social value, however, the specific criteria that will be discussed in the following sections of this chapter will not be a comprehensive list of all of the criteria that would be included, but rather suggestions of the kinds of criteria that the selection committee could/should look at.

The reason why this is not going to be a comprehensive list is because I do not have the relevant expertise to make a comprehensive list of the needs of society and the ways in which a person can be valuable to society; however, as discussed in the previous chapter, the experts on the selection committee would. The criteria that I will outline will show that the main ways in which a person can be valuable to society can be accommodated within organ resource allocation decisions, and that the 3 main categories should be able to encompass any of the specific criteria that the selection committee may include in their decisions.

## **Social contributions**

### **The difference between active and passive social contributions**

A person's social contributions in general could be understood to include a whole multitude of things ranging from what they do for a job, to how much they buy at the supermarket, or how friendly they are to strangers. It could also include how much they are loved by others, how happy they make other people, and how much

others rely on them. However, there is a distinction to be made between different kinds of social contributions in that some are active, whilst others are passive.

The *active* social contributions that a person makes are those contributions a person makes by giving up their time, or consciously going out of their way to make a contribution. The kind of active social contributions that would come under this category might be their profession, or how much tax they pay, or organising events that benefit the community, etc.

Drawing on the basic societal functions (BSF) given by the Task Force on Quality Control of Disaster Management, the items within their list can help to highlight what type of contributions are classed as active or passive (Task Force on Quality Control of Disaster Management, 2014a). Most of the functions on their list would mainly accommodate the active contributions that a person makes. For example, the basic needs of public health, medical care, water and sanitation, energy supply, public works and engineering, logistics and transport, and education would mainly involve the active contributions that a person makes through their profession. However, people may also make contributions towards these basic societal functions through other active means. They may volunteer their time to help run education programmes, or help meet the BSF of shelter and clothing by helping to help those who are homeless.

*Passive* social contributions on the other hand, are those contributions a person makes simply by virtue of being in particular relationships or circumstances, e.g. contributing to another's life by being their object of affection or role model. As

such, passive contributions are better placed in the category “effects on proximate individuals.”

The way in which a person lives their life may inspire other people to live their lives in a similar manner. If someone makes active contributions to society, they may also passively contribute to society by inspiring others to also make positive active contributions to society. They are making a passive contribution to society by virtue of others wanting to emulate their behaviour. E.g. a celebrity who actively supports a charity through their active contributions, may inspire others to also participate in charitable acts, even though this is not the celebrities aim. They have passively contributed to society by inspiring others to make a positive contribution. A youth group leader may inspire good behaviour in the children and teens. Or a friend or family member registering to donate, or donating, an organ may inspire others to also donate their organs.

However, determining whether or not a person has made a passive contribution through inspiring others to make positive social contributions, and to what extent a person has been an inspiration would be difficult and costly. The costs of this investigation would almost certainly outweigh the benefits. As such, the scope of a person’s passive contributions would need to be limited to those easily accessible and verifiable factors when being included in the social value assessment. One passive contribution that meets this criteria, is a person’s value to their family.

A person is valuable to their family not necessarily because of their active contributions to the relationship, but because of the nature of the relationship

itself. They passively contribute to society by virtue of being valuable in the eyes of their family, and so, if this person could be saved from death by receiving an organ transplant, the detriment that would be caused by their death would be avoided. The effect that a person's death would have on their immediate family are the kind of passive contributions that could be taken into account, as the number of immediate family members that a person has is easily verifiable, and the detriment that might be caused due to the death of the person may also be partially quantifiable.<sup>49</sup>

## **Active contributions**

I will now discuss some of the main considerations that would come under the category of *active* social contributions, and how they would figure in a social value resource allocation system.

### **Profession**

A person's profession will be a key factor in helping to determine their overall instrumental value to society as this is one of the main ways in which a person *does* contribute to society. A person spends a substantial proportion of their day,

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<sup>49</sup> See earlier discussion of the effects of bereavement on different aged family members.

and their life, working, and each person's job contributes to society in some way. As such, it should be a main consideration in determining their social value.

Different professions offer different amounts of social benefit, and so not all professions are equally instrumentally valuable to society. These differences will need to be accounted for in a resource allocation system that incorporates social value considerations, and should be based on the needs of society at the time. For example, a job that gives people the opportunity to bungee jump is arguably not as valuable to society as a job that involves maintaining a water sanitation facility so that people can have clean drinking water. Both offer a benefit to society, (bungee jumping gives (some) people an exciting and fun experience in their life, and clean drinking water ensures that people stay free from disease), however, only the water sanitation facility employee is contributing to one of the basic necessities of society; the bungee jump employee is offering what might be seen as a luxury.

Of course, the relative importance of these professions also depends on how well particular needs of society are covered already, and how ir/replaceable a person is within their professional field. In a country such as Britain, the basic water sanitation needs of society are well met; there are adequate facilities, a steady supply of skilled employees, and an efficient water distribution infrastructure. However, in less developed countries, water sanitation may not be so well implemented, and safe drinking water can be in short supply. Between these two countries, the relative value of the water sanitation professional will be significantly different. In some developing countries, a water sanitation



professional will be highly valued as they are helping to produce a scarce and necessary commodity, and people with the relevant skills to do so are also in shorter supply. In Britain however, because the water sanitation process is so established and well catered for, and there are many skilled workers that, with a little training, could step into a vacant position at a facility, the value of the employee will not be as high as it would be in the developing country. Nevertheless, even in Britain, safe drinking water is still a necessity, whereas bungee jumping is not, and so it might be argued that based on profession alone, someone that offers bungee jumping opportunities for a living is not as valuable to society as someone that produces clean water. However, this line of thought stems mainly from a worry about future provisions of resources rather than catering for the needs of society at the current time.

If the basic necessity of water sanitation really is well catered for in terms of facilities and there was an excess of water sanitation professionals, including a reasonable number of future potential employees, someone in this profession might be less valuable than the bungee jump instructor if bungee jumping was in high demand, and qualified instructors were in short supply. The current and future needs for water sanitation are catered for and so ensuring that the other needs of society are catered for becomes more important and as such, those professions more valuable. A person's ir/replaceability will be discussed in more detail in Chapter 7: *Ir/replaceability and value to society*, but for now it should simply be noted that there are varying levels of importance to professions depending on what the current and long-term needs of society are, and how easily these needs can be met in terms of people to fulfil the job.

I am not making a claim here about the size of the role that that each of these considerations (of necessity and ir/replaceability) should play in determining the social value of a person, only that they both need to be taken into account in order to determine how instrumental they are for higher level goods (such as preventing disease in the case of the water sanitation employee, and providing pleasure in the case of the bungee jump instructor) by estimating how much welfare will be forgone in the absence of that employee.

### **Problems with this criterion**

#### **Career choices**

Besides the issue of balancing a person's contributions against how ir/replaceable they are (which will be a problem present in most, if not all, of the criteria), there are a couple of other problems that might occur and will need to be overcome when using a person's profession as part of their social value ranking. One of these problems is that if people know what professions the selection committee class as valuable to society, people may start training for, and taking up these professions in order that they may stand a better chance of increasing their own value ranking should they require an organ.<sup>50</sup> The problem with this lies in that, because so many people will be taking up what are considered, at the time, valuable professions, the surge in the number of people within these professions may in

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<sup>50</sup> This is not to say that criteria that the selection committee will use to make their patient selections should not be available to the public (as an open and transparent selection process would be preferable), but rather that simply being aware of the relative values of different professions may have an impact on people's career choices.

fact make those professions less of an asset to a person due to employees in that field becoming easily replaceable.

Imagine, for example, there was a shortage of plumbers in the country, and so the few plumbers that did exist were hugely valuable to society. Multitudes of people may start to train as, and take up the plumbing profession, hoping that they too will become more instrumentally valuable (from a purely professional perspective) in the eyes of the selection committee should they require an organ or other scarce resource. However, because there will now be a huge number of plumbers within society, whatever value was added to the profession and the individual by virtue of the skill being previously in short supply, will have been significantly lowered now that it is a common profession in an oversaturated market. Because of this, people may now be in a worse position than before their initial career choice or career change. Their original profession may now be more valuable given the overall change in career choices. The inclusion of a person's profession in social value considerations may have the effect of influencing their life decisions, and end up actually steering the person to worse circumstances where they are not as socially valuable as they had expected to be.

However, even if this were to be the case, should this really be a reason to not include profession in social value considerations? People frequently change professions because they believe that it may be good for them in some way, but sometimes it does not work out that way. Regardless of whether it would affect their social value ranking, a person may decide to take up a scarce profession in order that they can earn more money (supply and demand) to support their

family, but end up earning less money should thousands of other people also have the same idea. These are simply considered choices and risks that people take, or do not take in life. The possible negative consequence of the profession criterion tempting people into particular career paths should be no reason to not include profession in the social value criteria; people already willingly make this choice for purely financial gain and not as a possible insurance policy for their survival should they require an organ transplant.

It is also unlikely that people will make their career choices on the basis of the remote chance that they might require an organ transplant at some unforeseeable time in the future in the first place. People don't often think in the long-term when it comes to making these kind of insurance decisions in the short term. E.g. smoking, health insurance, and pensions. People are aware that smoking will damage their health in the long term, that health insurance will be hugely important were some significant illness to affect them, and that a pension will be their main source of income when they retire. However, people still persist to smoke, forego health insurance, and do not start contributing to a pension until they are closer to reaching retirement age, as the long-term effects of their actions (or inactions) have little impact on their circumstances and situation in the short-term. Given this, it is reasonable to think that people will also have the same attitude to making their career choices for the short-term with the long-term possibility that they may require an organ transplant in mind. The probability of requiring an organ transplant is quite remote for most people, and so it is unlikely that people will make their career choices based on this remote possibility.

## Unemployment

Another problem with the inclusion of profession in social value considerations is that unemployed people will obviously (and sometimes unjustifiably, or at least undesirably, if the aims of a social value system are to be met) fare worse than those in employment as the unemployed are not contributing to society through their job. However, this does not have to be the case, as the reason behind the unemployment can be examined, as well as the skills they possess and their desire to get back into work. Is the person unemployed through no fault of their own (redundancy) or do they simply not have the motivation to work? People who do not wish to work can be said to not be unfairly worse off as they would make their decision not to contribute to society in this respect knowing that it may negatively affect their chances of receiving an organ should they require one. However, people who do wish to work, and people who do have a useful skill set could have their skills and motivation taken into account so they will not be unfairly worse off. This would also ensure that those people who are likely to be most valuable to society if they *were* in employment are not deprioritised as this would undermine the aim of the allocation system.

This is not to say that those people who are not in employment despite having a useful skill set, will be favoured for treatment at the same level or above those who are employed, but simply that their skills, motivation and potential could be taken into account. There may be plumbers who are employed despite an over-saturated market, and builders who are unemployed despite an under-saturated

market, but seek employment, e.g. redundancy from a failed company due to poor management despite demand for the business. People from both professions would have their skills taken into account along with their current state of employment, but also their ir/replaceability. Even though the builder may not currently be employed, the fact that people in this high demand profession are in short supply makes their skills more irreplaceable and so will have added social value. Saving the unemployed builder over the employed plumber in this circumstance may make the most positive difference due to saving the more valuable skill set and the high chance of the motivated builder getting back into work. But if the builder's skill set was poor or they lacked the motivation to work, then their social value from a professional perspective may be lower than the plumber, even in a saturated market. Simply because a person is unemployed does not have to mean they will be disadvantaged if social value were included in organ allocation decisions. And equally, valuing certain people in unemployment does not necessarily mean that the aim of the system is undermined (especially as they can also be instrumentally valuable to society in other areas of their life: see section *Effects on proximate individuals*).

There will, of course, still be people who are unemployed through no fault of their own and wish to work, but there may not be a need for their skill set due to an oversaturated or obsolete market. These people will be worse off because of circumstances outside of their control, however, this is an unavoidable consequence of a social value system, but a necessary one if the aims of the system are to be realised. Under any system there are going to be certain individuals and

groups who fare worse, but the overall welfare that would be created by the inclusion of social value criteria into organ allocation outweigh these exceptions.

When it comes to people who are unable to work through no choice of their own, e.g. a disability, these people will be at a disadvantage with regards to this particular criterion, but they may still have an advantage under the other criteria. Not being able to make active social contributions through employment does not mean that a person cannot be socially valuable in other ways. Alternatively, a set number of base points could be given for the profession criterion for those members of society who are unable to work.

#### **Where this criterion would figure in the organ allocation policy**

Now that it has been shown that a person's profession is a useful and acceptable criterion to include in social value considerations, I will briefly outline *how* it could be included and used in the deliberations.

Given that not all professions are equally valuable to society, there needs to be some sort of ranking system for professions that reflects their relative importance. Different countries already have a system for ranking how important they feel different professions are to their country when it comes to accepting people for immigration. For example, Australia and New Zealand have the *Australia and New Zealand Standard Classification of Occupations* (Australian Bureau of Statistics, 2009) which details the different skill levels of a vast number of professions, and

the *Migration Occupations in Demand List* (Australian Department of Immigration and Citizenship, 2013) which details those occupations and specialisms identified by the Department of Education, Employment and Workplace Relations (DEEWR) that are in short supply. Depending on the level of need within the country for different professions and the skill level of the profession, a person is awarded a certain amount of points that will go towards their overall point score for immigration suitability. In doing so, the country can ensure that some of their economic and societal needs are met by managing who can apply for immigration.

A similar ranking system could be used in the social value resource allocation policy for professions, with those professions that are more valuable to society being given more points. The fact that there are already systems in place that rank the importance of professions to countries and societies shows that the profession criterion could be implemented relatively easily. These pre-existing ranking systems may not be based directly on social value, however, the fact that they exist and are in frequent use means that such a list can be easily constructed and used, mapping on the relative social value of different professions once they have been determined. Each of the other social value criteria would also be given points relative to their importance, with a person's total score determining their final social value rank amongst the other potential organ recipients. This means that even if a person has a job that is not particularly valuable to society, they are not necessarily excluded from receiving consideration for an organ since they may still be instrumentally valuable in other ways.<sup>51</sup>

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<sup>51</sup> A more detailed account of how an immigration points system could be adapted to capture social value will be discussed in Chapter 7.



It might be argued that using an immigration criteria template for the provision of essential healthcare is problematic given that immigration criteria are in place for deciding whom to admit from a group who are non-citizens and therefore (on the conventional view) are not the responsibility of the government. Whereas in the organ allocation case on the other hand, the decision as to who will get the service is between different citizens, the provision of which is among the key duties that governments have to their citizens. In response to this criticism, the government may have a duty to provide healthcare provision to its citizens, however, in the case of organ transplantation, the provision of transplants cannot be given to all those who require it. As such, the government is not neglecting its duties by using an immigration criteria template, but rather deciding how best to meet their duties given the limitation of resources. Furthermore, the immigration template is simply a way to show that it is possible to rank professions and skills, and is used because of its transferable *structure*; the motivation behind the two systems is different.

## **Income**

Income should play a part in the social value criteria as the income that a person earns directly relates to how much tax they pay, and the more taxes that a person pays, the more money that the government has to provide services to society to increase welfare.<sup>52</sup> As such, with the inclusion of a person's income into the social

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<sup>52</sup> People or companies may sometimes evade or avoid taxes, and so not make the tax contributions that they should, however, these are often criminal or legally dubious in nature.

value criteria, it means that those who earn the most and pay the most tax will have a higher social value score on *this* criterion than those who pay less taxes. However, the needs of society will change over time, and so the value of the contributions that a person makes will also vary. The importance of tax contributions and income will alter depending on the economic needs of the country, and so it is not necessarily the case that economic contributions will prevail, as was the worry of Leenen (Leenen, 1982, p. 35).

Economic growth generally correlates with overall improvements in quality of life, and as such, is significantly valuable to society for promoting welfare (Strange and Bayley, 2008, p. 49). The British government tax system is based on a scheme whereby those who earn more pay higher taxes, and whichever government is in place, it is likely to remain the case that those who earn more will continue to pay higher rates of tax. To do otherwise would mean that there would not be enough financial resources to meet the needs of society without increasing taxes to such an extent on the lower earners that they are financially crippled. It is the higher rates of tax that the higher earners pay which makes them more valuable to society given that one of the biggest sources of revenue for the government is through income tax; the top 10% of income taxpayers contribute over half of all the income tax paid, and the top 1% contributing 27% of all that is paid (Pope and Roantree, 2014, p. 46).

There are also other forms of tax that could be taken into account when determining someone's social value. Someone may run or work for a business that pays corporation tax, and as such, their social value may be affected by whether

the company they work for pays corporation tax in this country or abroad, and the amount of this tax contribution. However, such detailed discussion of the interplay between these essentially economic factors takes me beyond the issues at the level of moral principle and into the realms of microeconomic cause and effect, which is outside the scope of this thesis. It would be the work of professionals with the relevant expertise in these areas to determine the appropriate value to be placed on the different economic contributions of individuals and companies, however, it will suffice to say here that at least economic contributions in the form of income tax could have some social value placed on them in order to help determine an overall social value rank of an individual.

Even though it is the wealthy that make the highest tax contributions,<sup>53</sup> perhaps ideally, everyone (under a fair government) contributes to a level of tax that is affordable for them, and so whether someone earns a large or small amount, they still “feel the pinch” equally. From this perspective, to value someone that pays a higher rate of tax more than someone that pays a lower rate is unfair as the higher rate taxpayer sacrifices no more of their personal wellbeing or security for the good of the country than the lower rate taxpayer. However, even though the higher rate taxpayer may not sacrifice any more of their personal security and wellbeing from a financial perspective than the lower rate taxpayer, it still remains the case that they do contribute more money to society through taxes. And so, from a governmental point of view, one higher rate taxpayer is more

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<sup>53</sup> I am assuming here that the wealthiest members of society are not participating in any tax avoidance or evasion schemes.

instrumentally valuable to them than one lower rate taxpayer (purely in economic contributions) as the increased amount of money they contribute helps to ensure the security of a greater number of people in society, including other low rate taxpayers. If the opposite approach were taken with the lower rate taxpayer being valued more than the higher rate taxpayer and being given priority for lifesaving treatment, because the income from tax contributions from those paying the lower rate would obviously be less, the government would be losing out on potential income. It may be a sobering thought to some to think that the government views its citizens as a form of income (if only partly and not entirely), but it is true; *"The people are the riches of a nation"*.

However, it is not a one-way relationship; the government does offer services in return, and the higher the income from the citizens in society, the higher the income for the government, and the higher the quality and range of services available to society. So those citizens who have a higher income and pay more in taxes are more of an asset to the government (at least from an economic perspective) and as such, their health should be protected more than those paying lower tax in order to ensure their continued contribution.

Of course, there may be people who do not earn as much or make fewer tax contributions, but make equally, or more socially valuable contributions under another criterion. E.g. some charity workers may eschew the pursuit of high incomes so that they can help others, or some people may enjoy their job even though it has low wages. Their professional contributions may be more socially valuable than someone who makes significant tax contributions. Simply because

someone earns more or makes more economic contributions, does not *necessarily* mean that they will receive an organ over someone who makes less economic contributions. However, working out how valuable someone is to society involves taking into account *all* the contributions that a person makes to society, and in order to make an accurate assessment of their overall contribution, a person's tax contribution also needs to be taken into account. But this is just *one* of the ways in which they make a socially valuable contribution.

A person's profession and income are not the only two ways in which a person can make active social contributions; they are just two possible suggestions of the criteria that could be included under the category of *active social contributions*. There are many other ways in which a person can make positive contributions to the welfare of society, and these would be determined and elucidated by the expert criteria selection committee.

### **Problems with this criterion**

This criterion too is not without its own problems. When thinking about the economic loss to the government when an affluent citizen dies, the question emerges as to whether the economic gain from saving an affluent citizen is enough to warrant the effort of implementing the criterion, and the negative social effects that it may cause, such as resentment towards the affluent from the less affluent. The *overall* amount of money that is lost through rich people dying due to organ failure may be small when compared to what is brought in through taxes from

people dying from other illnesses, even if they are on a low income and paying a low rate of tax. With 88% of taxpayers paying the lower rate of tax, and only 12% paying the higher rate, the numbers could be interpreted so that the combined income of the higher rate taxpayers that *die* due to the lack of an organ is likely to be just a drop in the ocean compared to the combined amount of those who pay the lower tax rate and die due to the lack of an organ (Pope and Roantree, 2014, p. 45). And so, including income as a selection criterion may not offer any real economic gain to the government.

However, there is the other side of the argument that overall, those who pay more income tax do, when combined, contribute more money than the combined lower rate taxpayers despite the fact there are significantly less individuals; the top 1% of taxpayers contribute 27% of all the income tax paid, and the top 10% contributing 59% (2014, p. 46). This goes to show that those people who pay more income tax really are instrumentally and economically valuable to society; it takes just the top 10% of taxpayers to make up over half of all the government's income tax revenues. So even though there is the possibility that the amount of income tax lost through the death of a high rate taxpayer may appear insignificant compared to the overall loss of income tax from all those who die whilst waiting for an organ transplant, it doesn't change the fact that those higher rate taxpayers really do make an important contribution to society, and as such, this should be reflected in the patient selection process. It is not that higher rate taxpayers *deserve* to receive an organ because they make a bigger contribution, but simply that their larger contribution means that it makes them more instrumentally

socially valuable (purely from an economic perspective) and as such could be given priority for an organ transplant based on this criterion.

Of course, not everyone who pays more in income tax will automatically be the most valuable once other considerations, such as passive social contributions and morality, are taken into account alongside how ir/replaceable the person is. The death of someone who is a high rate taxpayer that can be easily replaced by someone else who will also earn as much money and pay as much tax will have less of a detrimental economic effect on society than the death of a high earner and taxpayer who cannot be as easily replaced.

The use of an income criterion might also face the same criticism posed against the Seattle system in the last chapter, in that preferring those for treatment who earn more might be construed as the *bourgeoisie sparing the bourgeoisie* (Sanders and Dukeminier, 1967, p. 378), but this would not be the case under a revised system. Those who are wealthier would not be preferred based on the personal preferences of the selection committee (as was the case with the Seattle committee), but simply because they are more instrumentally valuable to society by way of tax contributions. However, the sentiment behind the objection of the inclusion of such criteria may still prove a problem for the implementation of the system by potentially undermining the benefits that the criteria aim to promote. Preferring those members of society who have the highest income may lead to social resentment of the more affluent members of society by the less affluent. Is this a trade-off that we are willing to make, and would the detriment of resentment outweigh the benefits of economic stability and increased services for society that

would be created? Perhaps not. One of the main sources of income for the government is the income tax paid by the very affluent, and it is this income that helps to fund the provision of infrastructure for society which the less affluent benefit from, and *rely* on. The benefits here are so widespread and entrenched in life, that the absence of these is bound to be more detrimental than the occasional resentment felt towards an affluent citizen who receives a transplant. Furthermore, the affluent patient would not even necessarily be receiving the transplant on the basis of their income alone; it would be in conjunction with the other selection criteria.

#### **Where this criterion would figure in the organ allocation policy**

Quite simply, those people who pay more income tax would be awarded more points than those people who pay less. In this way, the relative importance of each person's income tax contribution is reflected.

#### **Other *active* social contribution criteria**

Other active social contributions that a person might make to society could include those contributions that a person makes outside of their professional commitments and contributions. A comprehensive list of the ways in which a person can make active social contributions to society would be far too extensive to discuss here, however, such contributions would include organising or



contributing towards charitable events, or activities which benefit society in other ways, such as running activities for the old or young, whether they be for pleasure or education. This would make a person more instrumentally valuable to society due to the welfare that they are helping to create. Again, the level of instrumental value for these contributions would differ depending on the current needs of society and would be determined by the relevant experts. Whilst some of these other active social contributions might not be as necessary for society as the basic societal functions, they may still have an important role to play in enhancing the quality of life of members within society; even during the Second World War, a number of bombed British theatres were rebuilt and repaired whilst ensuring the more basic needs of society were met.

## **Passive contributions**

### **Effects on proximate individuals**

The difference between *active* social contributions, and *passive* contributions in the form of effects on proximate individuals, is that the former looks at the value that an individual can offer to society through the contributions that they actively make. The latter however, focuses on a person's value to their immediate relations and the proximate individuals within their life. Here, inter-human connections are at stake (Leenen, 1982, p. 35), and a person passively creates value by the nature of their relationships and their value in the eyes of others.

Whilst a person can be instrumentally valuable to society through their professional, economic, and other active social contributions, they can also be valuable to other members of society on a personal level. A person's death, or continued life may have an effect on society as a whole, even if only in a small way, however, it is on the smaller scale that the effects of a person's death are felt more intensely. E.g. a citizen's death may mean that society loses someone who is skilled in their profession, and the government will lose the individual's continued tax revenue; these are small consequences when viewed in the context of society as a whole. However, the effects of a person's death are felt more acutely within the personal relationships the individual had with others. Rescher makes a suggestion for the inclusion of the effects on proximate individuals to be included when allocating scarce medical resources and says that the nature of the relationship between a patient and their spouse, children, and parents, and the issue of their financial and psychosocial dependence upon them are obviously matters that deserve to be given weight (Rescher, 1969, p. 178).

The death of a doctor who was also a mother, wife, and active member of the local community will be seen to the wider society as just another death of a citizen, and by the government as the death of a doctor who can be replaced by another doctor. However, to those proximate individuals who knew the deceased personally, the death will have more serious effects. The child who has lost their mother, the husband who has lost their wife, and the close-knit community who has lost one of their most active members, have suffered a greater loss by the doctor's death than other members of the wider society have. For the proximate individuals, the deceased cannot be replaced in the same manner as they could be in a professional

capacity. A replacement mother for the child may fulfil all of the roles and duties that the child's actual mother did, however, the child will still be left unsatisfied (Raphael, 1992, pp. 76–79).<sup>54</sup> It is not simply the motherly duties that are lost for the child; it is the actual person that is missed. The mother is instrumentally valuable to the child because of *who they are*, not because of what they do. It is this kind of value that is covered under the heading *passive* social contributions; the passive contributions that a person makes by virtue of being personally valuable in the eyes of another. It is mainly her relationship to her child that makes the mother valuable to them rather than simply the *active* contributions she makes, e.g. taking the child to football, ballet, parties, providing food, reassurance, etc. The value of a parent to their child occurs passively through the on-going relationship and is not wholly dependent on the active contributions the parent makes. The instrumental value of the parent lies in the happiness, security, and comfort (amongst other things) that the child finds by virtue of their unique relationship. Children often love their parents regardless of whether or not the parent makes valuable active contributions to the relationship (some people are bad parents, but their children still love them), and children often grieve when their parent dies, but it is not simply the loss of the active contributions the parent made that they are grieving.

## Friendship

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<sup>54</sup> Depending on the age of the child.

One of the other major groups that would come under the term proximate individuals would be a person's friends. The number of friends that a person has, as well as the level of that friendship, will play a role in how detrimental an individual's death will be. However, despite admitting that a person's life is not only valuable to himself, but also to his friends, colleagues, and neighbours, Rescher neglects to include these groups in his suggestion to include considerations regarding the effects on others in patient selection decisions. He gives no reason why he chooses to only include considerations for family members apart from the fact that these relationships are a thing of "unique intimacy and significance" (Rescher, 1969, p. 178). Yet, a person's friends, as well as their immediate family will also be affected by their death, and are often also a thing of unique intimacy and significance. Close friends are more likely to be affected by someone's death than a more distant friend, and the higher the number of close friends that a person has, the more detriment that will be caused by that person's death. Although Rescher ignores the possibility of considering the effects that a person's friends may feel by their death, he may be right that such considerations should be limited to immediate family members. Even though the number of friends that a person has will undoubtedly play a role in how detrimental a person's death would be, it would simply not be practicable to include this as a criterion due to the variables between people in what constitutes a close friend, general friend, distant friend, or acquaintance.

For some people, they may class someone as a close friend if they see them a specific number of times a week, whereas for someone else, a close friend may be someone with whom they have shared particular experiences or where their

friendship has a certain level of depth, despite rarely being in contact (imagine old friends who are rarely contacted due to difficult circumstances). The problem with ascertaining each individual's views on what constitutes a friend, a close friend, or an acquaintance, would be difficult enough in itself, however, the more serious issue lies in actually determining how many people would be classified in each group. A person may say that they feel that they are close friends with almost everyone they have met in order to help their chances of receiving an organ if they knew that having a large number of close friends would make their death more detrimental.

An ideal approach would be to contact all of the people that the potential recipient knows and determine what they feel their level of friendship with the patient is, as the level of detriment that might be caused could be accurately assessed. However, such an approach is not practicable given that, firstly, it might not be possible to reach, or even know, everyone who would be classed as a proximate individual to a person, and secondly, to know whether the proximate individuals were actually telling the truth when questioned about their relationship with the possible recipient. It is easy to imagine the majority of proximate individuals saying that they felt they had a close relationship with the potential recipient, regardless of whether this was true or not, simply in order to try and help save the patient's life. And indeed, many people may feel that they *should* attempt to save a friend's life, even if not a close friend, especially if it requires little effort.

Because of the problems associated with determining how many friends a person has, and in what capacity, it is not practical to include this as a criterion in

determining how valuable a person is to society, and instead, the extent of inclusion for proximate individuals should be limited to immediate family members.

When it comes to family members, for most people, it will be their immediate family that feels the biggest loss, and this loss can be expected to lessen towards the extended family. That is not to say that extended family members will not feel the loss, and for certain individuals, this loss might be the same as can be expected to be felt as that by an immediate family member. However, in general, it is a person's partner, parents, siblings, or children that feel the most loss in the family. Because accurately determining which extended family members are also feeling such a significant loss is just as problematic as determining which of a person's friends will also feel a significant loss, it makes more sense to limit the inclusion to only immediate family members where definite lines can be drawn. Of course, there will be circumstances in which a person does not get along or even talk to their immediate family anymore, and so, determining the level of detriment that might be caused to proximate individuals if inclusion is limited to immediate family will create a number of exceptions, but in general, this limitation will provide a suitable measure.

### **Problems with this criterion**

#### **Manipulation of the system**

Whilst it is undeniable that people do have social value with regards to proximate individuals, there is the worry that if this criterion were included in the decision of a person's overall social value, people may put themselves in precarious positions in order to make themselves more valuable by virtue of their death being more detrimental. As mentioned earlier, this type of criteria abuse was also a potential problem with the Seattle system, as the Seattle committee placed as much, if not more, value on family as it did on societal contributions.<sup>55</sup> If a person wanted to increase their value ranking, they would be “well- advised to father a great many children, then to throw away all his money, and finally to fall ill in a season when there will be a minimum of competition from other men dying of the same disease” (Alexander, 1962, p. 125). In a sense, the patient would be holding the system to ransom by actively manipulating their circumstances so that their death would have a serious detrimental impact on the people around them, and the only way to avoid this detriment would be to give the patient an organ. This kind of reckless behaviour is obviously something that should not be encouraged, and so there would have to be a safeguard in place to discourage these kinds of actions, otherwise the selection criteria may end up rewarding immoral behaviour.

To safeguard against people taking advantage of the system and manipulating their personal circumstances to make their death more detrimental at the expense of others, any patient who is found to be doing this could be removed from the waiting list, or at the least, placed further down the list. This may cause detriment

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<sup>55</sup> “Other factors equal, the group chooses those with dependents...” (Sanders and Dukeminier, 1967).

in these *particular* cases, however, *overall* in the long-run, it would lead to increased benefit as people would know that they will not be prioritised for treatment if they actively create a situation in which their death would be detrimental at the expense of others through a malicious action. Dealing with the potential problem in this way is similar to the way of dealing with the demands of terrorists. If the demands of terrorists were met to avoid the short-term detriment caused by their actions, it would be likely to increase the long-term detriment by encouraging other terrorists to do the same, by making demands and threats that cause fear and terror in society. However, by not negotiating with terrorists, the threat of future demands and actions are lessened as they are aware that there is little chance that their demands will be met, whatever the threat.

The parallels between this and the manipulation of the social value criteria in an allocation system, are that if patients purposely create situations in which other people will be detrimentally affected by their death<sup>56</sup> and are then given preference for treatment to avoid this detriment, other patients will be encouraged to do the same in the hope that their engineered situation will result in their “demand” for an organ being met. This could lead to a situation in which anyone who is waiting for an organ transplant, engineers their circumstances so as their death causes as much detriment as possible. Because organs are a scarce resource and only one person’s demand for an organ can be met at a time, the detriment that would have been caused by the death of the recipient will have been avoided, but the engineered detrimental situations of the other potential

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<sup>56</sup> Such as by putting the family in a large sum of financial debt and cancelling any life insurance policies so that their death would leave the family in financial ruin.



recipients will have not, bringing about an overall net detriment rather than the overall net benefit as the system was designed to deliver. By placing patients who manipulate the system in this way lower down the list or by excluding them from the list altogether, other patients will be discouraged from manipulating the system and the risk of net detriment can be minimised.

However, it should be pointed out that patients who make their death more detrimental by actually making positive contributions would not need to be penalised. For example, even if *Patient A* were to intentionally pursue a socially valuable career path, or do valuable charity work simply because they know they require an organ transplant or were at risk of needing one, they would be making *positive* social contributions, despite “playing” the system. However, if *Patient B* placed their family in deep financial debt and their continued earning would be the only way to repay this debt, they would, in a sense, be making a *negative* social contribution by creating a situation where the wellbeing of others is at risk. The family of *Patient B* will gain no benefit from being in massive debt, but society does benefit from the charity work and socially valuable profession of *Patient A*.

### **Discrimination against certain groups**

There is also the worry that certain groups of people may be unfairly discriminated against due to their lack of proximate individuals. For example, parents may be preferred over bachelors, extroverts over introverts, and socialites over hermits; these are not necessarily factors that people have any

control over. It might be seen as unfair to effectively penalise someone because they have not found someone to raise a child with, or do not have many friends because they are shy, or prefer to keep themselves to themselves rather than mix within the community. Of course, again, these people may be socially valuable in other areas of their life, but under the application of the criteria "*effects on proximate individuals*", those patients who have fewer social interactions, dependents, and friends, may in general, fair worse than those who have more.

However, even though certain types of groups will be discriminated against under this criterion, the discriminations that are present are not based on unfounded prejudices. They simply reflect the level of detriment that can be expected to occur from the death of particular individuals based on different criteria, in this case, the harm that would be caused to proximate individuals. The death of people who have more dependents, friends, and social interactions is likely to have a bigger detrimental effect on society as they play a part in the lives of more people. If bachelors, introverts, and hermits were to be discriminated against, it would not be because of subjective societal preferences and prejudices, but rather on the grounds of objective instrumentality.

Granted, not all proximate individuals will be affected to the same extent by the death of their mutual friend/dependent/family member/social interactor, and ideally, this is why the *actual* likely effects on *all* proximate individuals would be taken into account and not simply the number of immediate family members that a person has. The death of one introvert patient may have a huge effect on the few close friends that they have, whereas the death of a fleeting socialite may have

only a small effect on each of the multitude of people they know. Even though more people will be affected by the death of the socialite, the level of harm is much lower for each individual. However, as previously discussed, due to the nuances of what constitutes friendships of different kinds, including friends into the social rank decision would be impractical. This is why the scope for proximate individuals would need to be limited to the number of immediate family members that a person has, as in general, it is these individuals who are likely to be the most detrimentally affected compared to the effects on the extended family.

### **Where this criterion would figure in the organ allocation policy**

Including proximate individuals into the social value criteria would mean that those people with more immediate family members, are more instrumentally valuable, as their continued life helps to avoid the increased negative social effects that would be caused by their death, compared to those of someone who had fewer immediate family members. As such, they would be ranked higher under this criterion. However, the ir/replaceability of the person could still be taken into account, just as was the case with the considerations under the *social contributions* category, even though it is reasonable to think that on the whole, people *are irreplaceable* within personal relationships in a way that they generally *aren't* in a professional capacity. The age and nature of the familial relationship to the patient will vary the response that relations have to the bereavement, and this too will need to be taken into account based on the recommendations of experts from the relative fields, such as sociology and psychology. E.g. as discussed in Chapter

5, people of different ages will respond differently to bereavements, and bereavements within different types of relationships.

## **Morality**

Morality is the last category of social value considerations, and it would include such things as the type of actions a person makes or the motivation behind them, the views they may hold, and their personality traits. The moral considerations would serve as a guide to how good a person is as a human being in terms of the benefit or detriment their character will have on society. Whilst it would be ideal to include morality in the social value assessment, it will be shown that ultimately, it should be rejected as a social value criterion due to problems in actually assessing a person's level of morality. Instead, the morality criterion should be reframed, and the focus narrowed down to the likely negative contributions that a person will make to society.

If a morality criterion were to be incorporated, the things that would be included under moral considerations are to do mainly with the person's character. It is not what they have to offer to society in the same sense as their profession, but it is how they conduct themselves within society. The reason why moral values should ideally be included is because they can serve as an indicator and predictor of social utility. It is reasonable to believe that the more people there are that do good, the more good will be present within society, and the more people that do bad, the more bad there will be within society. What is referred to here when talking of

the good and the bad in relation to morality are the choices and actions that a person makes and the extent to which they create welfare, or cause harm. Based on purely moral criteria, those members of society who are more moral, are more valuable than those who are immoral. However, if those people who have a better level of morality were preferred for a scarce resource, again, it would not be because they are more *deserving*, but because they are more *instrumentally valuable* in creating welfare within society.

If moral considerations are to be taken into account, they should only be done so as a means to an end, with that end being to promote welfare. People who behave immorally would not be denied organs because they do not *deserve* them or because they are judged to have a poor character, and similarly, people who do behave morally would not be given organs because they *do* deserve them. Those who have a higher moral standing would be more likely to receive an organ simply because their morality would be more beneficial to society.

If we take the case of a paedophile, their actions are immoral in that they cause a non-necessary harm to another person; this harm is something that will obviously not benefit society, and actually has a detrimental effect on it. Accordingly, the utility from morality for this person is less than that from someone who does not cause such harms, and so they are less valuable to society. They may even be given negative points for their action when it comes to deciding their value rank. Other actions that a person makes that cause harm could also be taken into account, even if the harm caused by these actions is comparatively smaller. A husband who commits adultery harms his wife emotionally when she finds out, and even though

this harm might not be on the same scale as the harm caused by someone who abuses children, it is, nevertheless, still a harm to a member of society, and so could be included, and the level of harm reflected accordingly in the points given and the final rank value.

On the other end of the scale, if a person upholds morality and behaves well, they are going to be more valuable to society because they are promoting a good. From being polite and cordial with others, to handing in a large bag of money found in the street to police so the rightful owner can claim it, to helping to house the homeless, these actions promote a good by creating happiness, ultimately making the person who makes these actions more valuable to society.

Furthermore, looking at a person's level of morality can serve as an indicator of the kind of impact that person will have on society. If people generally behave morally, or immorally, or a mixture of the two, then depending on the circumstances, it can be expected that they will carry on in the same manner in the future, and so this can be factored into the value rank decision (this will be discussed in more detail in the next section) (Mischel and Shoda, 1995; Mischel, 2004).

### **Problems with this criterion**

#### **Prediction**

It might be questioned as to how the likelihood of future detriment to society can be determined by looking at a person's immorality, and who should make that call to begin with. Simply because a person has committed an immoral action in the past, why should this make him less valuable to society? The answer to this is simply that his past actions *don't* necessarily make him less valuable, but rather that it is the relative likelihood of him making future immoral actions that impacts his value ranking depending on how detrimental the effects will be for society. If someone generally behaves immorally, or morally, or a mixture of the two, then they might be expected to carry on behaving in that manner in certain circumstances and situations (Mischel and Shoda, 1995; Mischel, 2004). "Generally speaking, strong attitudes and personality traits are expected to predict behaviour better than their weaker counterparts" and can be expected to remain stable over time and be resistant to persuasion (Ajzen, 2005, p. 58). By aggregating an individual's behaviour on a given dimension (e.g. "conscientiousness," "sociability") over many different situations, it is possible to estimate an overall "true score" of someone's personality. "These correlations document that people differ significantly on virtually any dimension, showing stable overall individual differences: on the whole, some people are more sociable than others, some are more open-minded, some are more punctual, and so on. Such aggregate information is useful for many goals..." (Mischel, 2004, p. 3). This kind of information could be used to make predictions on how likely it will be that an individual will make future detrimental contributions to society.

There are of course many variables that affect a person's actions in different situations despite their overall personality traits, such as how a person appraises

“Situations (including people and the self), [their] beliefs, expectancies, goals, and [their] self-regulatory competencies” (2004, p. 4). However, Mischel claims that once the variables that affect a person’s psychological processes are understood and how these lead people to interpret the meanings of situations in different ways, links can be made to their distinctive patterns of behaviour in particular conditions and situations in potentially predictable ways (Mischel, 2004, p. 4). “Thus, individuals are characterized by distinctive and stable patterns of behaviour variability across situations” (2004, p. 7). By using the available data and research into personality and behaviour carried out by the likes of Mischel as a way of attempting to maximise social welfare from each organ transplant, there is a better chance of actually achieving that increase in social welfare than if the research that is available was not used and the current system remained unchanged.

Making decisions based on predictions about a person’s future behaviour are made frequently within the law as it stands now in terms of criminal punishment, and rehabilitation and release/parole from prison. The effect that certain actions/values will have on society and the frequency with which they will occur is used regularly when deciding the fate of criminals in the courts and deciding whether someone should be released from prison. Assessments can be made about the likelihood of committing future criminal actions, and the seriousness of those crimes, using tools such as the Offender Group Reconviction Scale (OGRS) (Copas and Marshall, 1998; Howard *et al.*, 2009), Risk of Serious Recidivism Score (RSR) (Moore, 2015, p. 334 Appendix H), and the Offender Assessment System (OASys) (Moore, 2015). History, psychology and criminology can be used to



inform decisions on how best to deal with people who hold certain values and commit certain actions. Values and ideas can spread and may lead to unfavourable consequences, as happened with the London riots in August 2011; people who would never have usually participated in a riot ended up doing so through the influence of others and the spread of an idea (BBC News, 2011). Other values and ideas that may have a detrimental effect on society could be due to inspiring religious extremist terrorist acts, or people inciting racial hatred. The fact that people are prosecuted for “inciting” racial hatred shows that there is a risk that immoral ideas and values can spread, and also a precedent to stopping the spread. People can also make immoral actions on an individual basis and negatively affect the lives of other people, e.g. stealing and abuse. Making a decision as to which actions and values may be detrimental to society is not a new or novel proposal; it happens often. Using the evidence available, an estimate can be given of the likelihood of a person making future moral or immoral actions and the likely effect of those actions, and these estimates can be reflected in the final value rank accordingly. People who are more likely to have a detrimental effect on society through their immorality are less valuable to society on this criterion than people who will make a positive contribution to society through their morality.

### **Impossible assessment**

Another problem with the inclusion of moral virtues into the allocation criteria is that it might be impossible to comprehensively assess the morality of an individual without some sort of “morality-team” investigating every aspect of a

person's life. Every aspect of a person's life would need to be investigated thoroughly as some people may be better at hiding their immorality than others, and if we only took account of moral wrongs that we happened to know about, this is potentially unjust. It would be unfair to deny the opportunity of life-saving treatment to someone because their moral wrongs were known, whereas another's are well hidden.

If the whole morality of a person were to be taken into account in organ allocation decisions, then a full investigation of their life would be needed to ensure that there were no hidden immoralities that the selection committee did not know about that would give the patient an unfair advantage over other patients whose immoralities were not so well hidden. However, such an investigation would be highly intrusive into the life of each patient, and as a whole, vastly expensive due to the time and resources that would be needed to conduct each investigation. The costs of such an investigative element to the system may well outweigh, or at least significantly diminish the potential gains in social utility. The same problems also exist for the positive aspects of a person's morality. To make a full assessment of a person's positive moral contributions, it too would require a resource intensive investigation, the costs of which would be sure to outweigh the potential benefits.

If a person's morality is to be taken into account in the allocation system, then the morality criteria needs to be less comprehensive and more straightforward, whilst still providing enough insightful and useful information to make an instrumental social value judgement. What is needed, is a simple, and easily accessible list of a person's significant moral contributions and actions. However, what constitutes

a moral and immoral action is highly contested between both the same and different societies due to diverse moral theories and because the existence of objective moral truths is itself highly contested. This means that a list of moral actions is realistically unattainable. On the other hand, an easily accessible list of actions that have a negative effect on society and cause detriment *is* something that is attainable in the form of a criminal record.

### **Rejecting the morality criterion**

Taking a person's morality into account when assessing their value to society is not feasible on the grounds that it would require a resource heavy investigation to comprehensively scrutinise every aspect of a person's life in order to determine their relative level of morality. Moreover however, the moral judgements on a patient's behaviour will, by their very nature, be subjective at their basic level. Leenen worries that the subjective nature of these judgements means that people would be excluded from selection simply because their social behaviour is not approved of by someone on the selection committee.

“Chronic alcoholism, drug addiction, a bohemian way of life, create major problems when used as criteria for selection. Their evaluation is strongly connected to subjective convictions and moral judgments, which differ in society. Is a lifestyle unacceptable to a doctor a reason for exclusion of a patient? And if social behaviour were accepted as a criterion would it then not be a matter of justice to give the patient with 'bad behaviour' a chance

to 'improve his life'? Has the prison population less right to such treatment than the rest of society? Selection on the basis of social behaviour would lead to the imposition of predetermined ways of conduct, because everybody would know that certain sorts of behaviour could exclude him from treatment. Bourgeois conduct would be encouraged and the creative nonconformists and unrecognised geniuses would have less chance, despite possibly making important contributions to the progress of society – even if this were often recognised only posthumously.” (Leenen, 1982, pp. 34–35)

Because of this subjectivity, he instead believes that a patient's social behaviour should only be taken into account if it is medically relevant, e.g. if a person's alcoholism is likely to stop them from being able to comply with treatment requirements (1982, pp. 34–35). Whilst Leenen is correct in pointing out that certain types of social behaviour are relevant from a medical suitability standpoint, the subjectivity of judgements on social behaviour can be minimised if made by the right selection committee and based on sound evidence about which types of social behaviour were detrimental or beneficial to society. In this way, judgements about a person's social behaviour can be made objectively, and used in determining a social value score.

As a way of including these judgements into the system in an acceptable and practical way, removing the subjectivity as far as is possible, the morality criterion would need to look at only the harms that a person makes within society that appear on a criminal record, removing any moral judgements within the social

value assessment as far as possible. The reason for drawing on a person's criminal record is that it partly captures the essence of the morality criterion, but can be used in a much more objective way.

The aim of the morality criterion is to try and quantify how good or bad a person is, and factor that into their social value score, but due to the problems with assessing a person's morality, it is the essence of the morality criterion that needs to be captured and incorporated into the social value criteria. The positive contributions that a person makes are akin to the good of morality, and are already taken into account in the first category of *active positive social contributions*. But the bad moral actions that a person makes still need to be accounted for, and could be thought of as *active negative social contributions*. A person's criminal record is an easily accessible record of their negative social contributions, and so provides a practical way of incorporating the essence of that part of the morality criterion into a final social value score.

Including the essence of the morality criterion in this way takes the criterion further away from moral judgements and closer to judgements about a person's active detrimental contributions to society. However, this is not necessarily a bad thing, as the patient's social value score should be based on criteria that are as objective as possible. But what it does mean, is that even though a person can be valuable to society through their relative morality, when it comes to making social value judgements about a patient, the closest thing to an acceptable and practical inclusion of a morality criterion is to consider a person's criminal record as a way of determining their active detrimental contributions and the likelihood of future

active detrimental contributions.

### **Active detrimental contributions**

A person's criminal record would serve to highlight the significant actions that a person has made that negatively affect society. The law provides a more objective framework than morality does, in that the court system give us a procedure for making socially endorsed judgements about people's behaviour. Whilst not every conviction necessarily equates to an immoral action, and not every immoral action is necessarily criminal, a criminal record gives a suitable level of information to base a social value judgement on, and to make a judgement about the likelihood of the patient making future similar active detrimental contributions whilst not requiring an intrusive and costly investigation. Different crimes have different levels of severity present in the action, and so a criminal record can be looked at to determine the level of importance the convictions will play in deciding a social value rank. However, since the social value criteria as a whole is forward looking, simply because a person has a criminal record, does not mean that they will automatically be ranked lower than someone who does not have a criminal record. The forward-looking nature of the system means that it is a combination of the crime committed and the likelihood of the person committing future crimes that have a detrimental impact on society, and how detrimental those actions will be, that is important. These judgements can then figure into the overall social value score as negative points, reducing the score depending on the type and likelihood of future detrimental contributions being made.

For instance, if Person A had killed someone but was now completely rehabilitated, and Person B had never killed anyone, everything else being equal, both patients would receive the same value rank for this criterion. But if there was a high likelihood that Patient A would kill again, then they would be given negative social value points, reducing their overall social value score.

### **Collapse into other criteria**

It might be pointed out that once the debate has shifted from morality to the avoidance of detriment to society through criminal actions, the criteria replacing that of morality are not significantly distinct from the criteria under the other main headings. In effect, the morality criterion has simply collapsed into the criteria present under the other two main headings, especially, active social contributions.

When the scope is limited to criminal activities that cause detriment to society, this criterion does indeed more closely align with that of active social contributions, rather than warranting a separate category of its own like a pure morality criterion would. When looking at the criminal record of a person, it is a way of helping to determine how likely it is that they will make further negative contributions to society, with less of a focus on morality itself. As such, it would be better to include considerations of serious criminal activity under a sub-heading of *active negative social contributions* under the broad category of active social contributions and to *not* use morality as a criterion category when

determining a person's social value rank.

### **Where this criterion would figure in the organ allocation policy**

If a person's level of morality were to form part of their social value ranking, those people who had a higher level of morality would receive more points as a higher morality is, in general, more valuable to society than a low level of morality. When trying to gauge the level of a person's morality, guidance could be taken from the other value categories and the actions the person made in those categories. For example, the type of profession they have may be one that speaks of their morality, e.g. a charity worker who willingly accepts a poor wage in order to dedicate their lives to helping others, or the head of a business conglomerate that cares more for profits than the effects their business is having on the environment, and the poor wages and working conditions of their employees.

However, because it is only the criminal actions of a person which negatively affect society that will be considered, it makes more sense to allocate negative value points to the patient to reflect their potential future negative contributions and the severity of them, and the effect that this will likely have on society. This would reduce their overall value rank.

As mentioned previously, simply because a person may have made detrimental contributions to society and have a criminal record, this does not mean that they will not be considered for an organ. The points system would still be used, taking



into account the points scored in the other categories, and the person's overall score would determine whether they were to receive an organ. Take the businessman for example; he may have a criminal record and care more for profits than he does about the environment and his employees. However, the value he has in the other categories, of social contributions and effects on proximate individuals, may make him the most socially valuable potential organ recipient.

## **General ethical objections**

### **Equality and justice**

The issue of equality and fairness has already been touched upon in Chapter 4, and it was shown that the social value selection criteria for patients can still be thought of as maintaining these values when seen as being analogous to “genuine occupational requirements” with the side effect that the criteria are simply indirectly discriminatory rather than directly discriminatory. However, whilst the inequality of healthcare based on instrumental social value might be justifiable in this way, there is the objection that a person’s social value itself may be based on previous unjust inequalities. If a person has achieved their social value (whether of high or low value) through previous injustices and inequalities that have, or have not, allowed them to make more valuable contributions, then it might also make the allocation of organs based on their social value unjust. Is it just to allow those who have been lucky in income terms (and hence are lucky to have been

able to contribute to society through tax) to therefore also be advantaged in terms of lifesaving medical treatment? It seems that one unjust inequality may lead to another. The inequality in healthcare based on social value may then be just (even if unequal) in its own terms, but unjust because of its linkage with another injustice.

Michael Walzer describes this concept as complex equality in which:

“...no citizen's standing in one sphere or with regard to one social good can be undercut by his standing in some other sphere, with regard to some other good. Thus, citizen X may be chosen over citizen Y for political office, and then the two of them will be unequal in the sphere of politics. But they will not be unequal generally so long as X's office gives him no advantage over Y in any other sphere – superior medical care, access to better schools for his children, entrepreneurial opportunities, and so on” (Walzer, 1983, p. 19).

In relation to the spheres of a social value organ allocation system, the inequalities between people with regards to the different spheres in their life that are judged on the social value criteria outlined earlier in this chapter, *will* give people either an advantage or disadvantage in another sphere. If someone does have a bigger income, or larger family, or more important job, then their fortune in these spheres will give them an advantage in the sphere of healthcare when it comes to organ allocation under this proposed system. And those people who have lower incomes, smaller families, and less important jobs will be at a disadvantage in the sphere of healthcare.

Admittedly, there is an issue here with equality. The inequality with regards to healthcare and organ allocation that would occur in the patient selection process under the proposed system, will be related to the patients' lives, circumstances, and history. But maintaining equality is not the only thing that is of concern when allocating scarce medical resources. And when it comes to the spheres of justice, is it even possible to separate one sphere from another?

Some spheres, if not every sphere, will play a part in the role of another sphere. For example, in the case of the politician being elected, it will be their employment history sphere that has given them an advantage over someone else, and when it comes to their employment history, this will have been affected by their education sphere, which will/may have been affected by their parent's income sphere. Should these spheres be allowed to have an effect on each other? It seems that if Walzer is OK with citizen Y being chosen over citizen X for office, this must presumably be because they are better for the job, and this is due to their previous employment sphere, and any other spheres that have contributed to their suitability for the job. And so, in this circumstance, one sphere has given them an advantage in another sphere over someone else. However, it makes sense that someone's education and career history can give them a better chance of being elected to political office, and we might even think it *appropriate* that their education, career history, and track record is considered when deciding who to elect. Their previous experiences and how they may contribute will affect their ability to promote general wellbeing in their role, which is one of the same goals that I argue an allocation system for organs ought to be promoting. So when it comes to resource allocation, is it not also acceptable that a person may be at an

advantage for healthcare because of one of their other spheres? Their social value sphere makes them more suitable for the position of organ recipient because they are more suitable for the job of promoting welfare and minimising detriment.

Whichever criteria are used in resource allocation rationing, inequalities will be created due to the shortage of resources, with some patients receiving treatment, whilst others will miss out. The worry here is that the inequality will be due to something (other than the shortage of resources) based on the patient's personal circumstances but which may be outside of the patients' control. When it comes to giving a value rank to people, it may seem unfair, even if objective, to give a low value rank to someone who is of low value to society due to circumstances that are out of their control. For example, if the person's low motivation to work was due to their upbringing and the morals and values instilled in them throughout childhood; are they really to blame for their poor motivation and their choice to depend on state hand-outs? Who they are, their values, their personality, are all products of their environment and upbringing, and so whilst it might be objective to give them a low social value score based on these things, putting the person at a disadvantage because of them might be seen as unfair and unjust because they are outside of the individual's control.

However, even if this is the case, the social value criterion is at the least, no more unfair or unjust than the waiting time criterion that it would be replacing. The waiting time criterion is also subject to the same influencing factors of some social spheres and circumstances affecting patient prioritisation. But as demonstrated earlier in the thesis, there is a moral reason for the use of a social value criterion

that the waiting time criterion does not have.

Furthermore, equality is not the only value that needs to be taken into account when allocating resources, especially scarce medical resources. That is not to say that equality should not be considered at all, but rather that it needs to be considered alongside other values such as effectiveness, risk, and, of most concern in this thesis, the promotion of social benefit, so that an appropriate balance can be struck. Any alternative tie-break criterion that avoided social value affecting healthcare treatment, such as random allocation, would be inconsistent with the partly utilitarian aims of the organ transplant system, and would not promote the increase of welfare created with each organ transplant. What is important is that these concerns and values, and the criteria that aims to maximise social benefit, need to be appropriately balanced and justified so that they do not produce unacceptable and arbitrary inequalities.

### **Equality is not an intrinsic moral value**

As a further reply to the fact that the social value score might be based on previous inequalities, the approach used here is utilitarian in nature, and so this potential inequality is not necessarily a problem as social equality is *not* an intrinsic moral value for a consistent utilitarian.

“To be sure, other things being equal, a more equal distribution of economic and noneconomic benefits is always preferable to a less equal

distribution. But the main reason for this lies in the law of diminishing marginal utility of money and of most other good things in life. Thus, greater economic equality is morally desirable mainly because a poor man, who is likely to spend any extra money on important necessities, is also likely to derive a much higher utility from an extra \$100 than will a rich man, who is likely to spend any extra money on relatively unimportant luxuries.” (Harsanyi, 1985, pp. 124–125)

When it comes to other social benefits however, if social equality was an intrinsic moral value, it would mean prioritising resource allocation to a poor person (or an otherwise disadvantaged person) even if they are not expected to gain as much benefit from it as if it were allocated to a rich (or otherwise more fortunate) person. Harsanyi gives an example to help demonstrate this point.

“Consider a distribution of a scarce lifesaving drug, or a distribution of scarce university admissions, when the available supply of either falls very much short of existing demand. Suppose that, in the case of the drug, we have to choose between a rich patient and a poor patient, both of whom badly need this drug. Suppose, also, that the rich patient is definitely expected to benefit more from the drug. Or suppose that, in the university admissions example, we have to choose between a rich candidate and a poor candidate both of whom have the qualifications required for admission. Suppose, also, that the rich candidate is clearly better qualified and can derive a greater benefit from university education.

Then, statement A [that social equality is an intrinsic value] would imply that we should give the lifesaving drug or the university admission to the poorer person, even though the richer person would derive a greater benefit from it - except, perhaps, if this richer person would derive a *very much* greater benefit from the lifesaving drug or from the university admission. Yet, even if the richer person is expected to derive only a moderately greater benefit from the drug or from the university admission, he will have a stronger moral claim to it. It would be morally unjustifiable discrimination against him if he were denied the drug or the university admission merely because he happens to be rich." (1985, pp. 125–126)

From this example, he concludes that in the distribution of social benefits, prioritising a poor person over a rich person, even if for a given benefit the former is not expected to derive a higher utility than the latter is, is a completely unacceptable moral value judgement.

"Utilitarian theory is right to take the view that economic and social inequality is not an intrinsic moral value, and that it is morally wrong to discriminate against a rich or an otherwise fortunate person in order to reduce the difference between him and the poorer or otherwise less fortunate members of society." (1985, p. 126).

So the fact that the elements of the social value score attributed to a person might be based on entrenched social inequalities is not necessarily a problem for a utilitarian approach to resource allocation, as social equality is not an intrinsic moral value. That is not to say however, that social equality is not valuable, but

rather that it is only valuable insofar as it goes towards maximising overall welfare, which for the utilitarian, *is* an intrinsic moral value. Social equality does not need to be aimed for in every action or rule, but it does need to be factored into decisions and social rules to determine whether its inclusion in different circumstances would yield more welfare.

For example, in my suggestion for the way in which the social value criterion could be included into the current allocation system as a replacement for the waiting time criterion, it is not necessarily a problem that a person's social value score may be partly based on previous social inequalities. However, social equality still needs to be taken into account to ensure that people have equal access to the waiting list for a transplant in the first place. If particular people or groups were prohibited from having access to the waiting list from the beginning, the social inequality here would be needless and offer few, if any, benefits and would likely reduce welfare. Again, whilst social equality is not an intrinsic moral value, it is something that most people do value, and so its inclusion in social rules can increase overall welfare when implemented at the right times. But it remains that, "Even though equality and justice (including fairness) are of fundamental importance from a utilitarian point of view, they cannot always be the decisive considerations for framing social policies" (1985, p. 127).

When the social value criterion is used, I am suggesting that rather than always prioritising people with a particular background that makes them advantaged or less advantaged, we look at what their social contributions are, and prioritise them for treatment on this basis. In this way, no one group of people, or people from a



particular background, will always have priority for an organ. Under the social value criterion, sometimes those who are commonly thought of as advantaged will have priority for an organ and sometimes they might not. Who gets priority for an organ under this criterion will depend on their circumstances and contributions, the specifics of which vary both between and within groups of people. It might be the case that some people who are commonly thought to be advantaged, such as the rich and powerful, are easily replaceable, or their death will cause little detriment to society, and so will not get priority for an organ if the other potential recipient is less wealthy, but has a larger family and so less easily replaceable. The reverse might also be true, in which a less advantaged person might be more easily replaceable and have no family, compared to another patient who is wealthy and has a large family. In this way, no one is given priority over anyone else for treatment for reasons other than that it will help to create more overall welfare, and there is not one type of patient who will always gain priority over another, or who will always be at a disadvantage.

## **Too costly to determine social value**

### **Morality**

The costs that would be incurred in attempting to determine comprehensively the level of morality of a person would almost certainly outweigh the potential social benefits that might have been expected to occur from the inclusion of a morality criterion in deciding a social value rank. If a comprehensive investigation of a

person's life were to take place, so that all of the good and bad things that they have done/do are taken into account, not only would it be hugely intrusive into each person's life, but it would also be a huge undertaking for the investigation itself. The entire life of the individual under investigation would need to be examined, and each action and decision they have made would need to be interpreted as to whether or not it was a moral or immoral decision. The time that would be needed to do this would be massive, and possibly even take longer than the time the patient may have left to live before a decision has been made.

Whilst the main cause of rationing when it comes to organ transplants is not financial in nature, but rather a shortage of the actual physical resources, the financial implications of conducting such an in-depth investigation into the morality of each possible transplant recipient would make the investigation too costly due to the resources and the wages that would need to be paid for such lengthy investigations; this money could be better spent elsewhere in the health service. The financial costs would outweigh the potential social welfare benefits, and these financial costs could create more social welfare if spent elsewhere.

However, this objection is only applicable if it is a comprehensive investigation into a person's *morality* that is to be carried out. It is possible that a less comprehensive investigation could be carried out that only focuses on those known socially detrimental actions that have been serious enough to appear on a *criminal record*. Relying on the criminal record of a person means that an intrusive and costly investigation into morality is not needed, and so the inclusion of the criterion becomes more feasible again. It must be noted that I am not claiming

that if someone has committed a crime, that their action is necessarily immoral; looking at a person's criminal record simply narrows down the scope of an investigation into the actions of a person that have had, and may have, a detrimental effect on society, saving a costly investigation into morality.

The other two main criteria of active social contributions and the effects on proximate individuals can also be determined without requiring an intrusive and costly investigation.

### **Active social contributions**

The majority of the information needed to know the extent of someone's active social contributions is readily available and can be found out by simply looking at their employment and financial records. A person's profession and other significant activities that they participate in that contribute to society are easy enough to assess without requiring a time-consuming verification process. A patient's other significant active social contributions that do not have such an easily accessible and verifiable record could be assessed by collecting references from, and conducting a handful of interviews with, the patients' friends and acquaintances who can testify to the contributions.<sup>57</sup>

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<sup>57</sup> The structure of these interviews would need to be well designed and the questions comprehensive but objective in nature so as to avoid putting certain patients at an unfair advantage or disadvantage. If not carried out correctly, the interviews might leave room for the patient's friends, family, and acquaintances skills (or lack of) in articulation and persuasion to affect the outcome of the interview rather than it being based solely on the patient's real contribution.

Other ways in which a person may make active contributions to society will be harder to assess and verify, and so perhaps should not be included in the final social value criteria. The kind of criteria that might be harder to assess are the day to day activities that a person makes/does that might help to contribute to society, but which are only minor contributions and will be harder to verify. For example, whether or not a person regularly recycles, or reduces their energy and water consumption when possible, so as to limit their impact on the environment and contribute to a more sustainable society. Not only will determining whether someone does actually recycle regularly or attempts to reduce their energy consumption be difficult to assess accurately, but the relatively minimal positive effects of these contributions might be outweighed by the costs of time consumption and intrusiveness of the verification process. It is these kinds of smaller active contributions that it might not be practical to consider when determining someone's overall value to society.

As such, the active social contributions that a person makes should be limited to their profession and their economic contributions, as well as their other major active contributions. In this way, the process is only minimally intrusive and not time intensive. The exact active contributions that would be taken into account would need to be decided by the criteria selection committee based on whether the benefit to society of the contribution can be quantified and verified, and whether or not the costs of the verification would outweigh the expected benefits of considering the contribution.

### **Effects on proximate individuals**

With regards to the criterion of effects on proximate individuals, there are a number of options available as to how to determine the likely level of detriment that will be caused by a patient's death. Ideally, a comprehensive investigation of the people the patient knows, and their relationship to them, would be undertaken, and various interviews and tests given to determine the likely effects the patient's death will have on the proximate individuals. However, such a comprehensive investigation would be expensive and time consuming enough that the costs may outweigh the potential benefits that might be gained. A less comprehensive implementation of the criterion could still prove useful though if the criteria were limited to only immediate family members as outlined earlier in this chapter.

Taking into account only the number of immediate dependents and family members, and excluding friends, would help to make the investigation less resource intensive, but still provide a useful amount of information to make a social value judgement about the effects on at least some of the proximate individuals that will be affected, especially those who will be affected the most. In general, it is the family of a person who is most acutely affected by their death, as well as their closest friends. Determining what makes someone a close friend is again, a task that would require a huge amount of resources given that the nature of close friendships differs from person to person, and so working out which friends constitute a close friend would undermine the aim of the allocation criteria due to the costs outweighing the potential benefit. Determining the number of

immediate family members that a person has faces no such problem as this information is readily available.

Of course, there will be cases in which a person is not close to their family, have certain family members that they do not talk to or are on bad terms with, or are only close to a small section of their family, and so there will be some family members who will not be significantly affected by the death. But for the most part, people are close to their parents, grandparents, siblings, offspring, and spouses, and so this is an ideal way to take into account the effects of a death on proximate individuals without requiring a prohibitively costly and intrusive investigation. Applying the rule across the board will create more benefit (despite there being some cases where certain family members are included in the value judgement despite not being close to the patient) than would be created if time was spent identifying the exceptions to the rule.<sup>58</sup>

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<sup>58</sup> A similar situation may be found in the case of government bursaries for students based on parent income. If a student's parents' income is below a certain threshold, the student is entitled to a government bursary, whereas a student whose parents have an income above this threshold is denied the bursary on the grounds that the parents are more likely to have the available funds to help the student financially, and that parents with a lower income are not in such a position to financially assist their child. This reasoning might hold true for the most part, however, there will be exceptions where parents with a higher income are not in a position to financially assist their child due to pre-existing debts and commitments, and parents with a lower income who are in a position to help their child due to frugal spending habits or wise investments. Attempting to identify these exceptions would require an investigation into the personal financial circumstances of each family and their spending habits, an investigation that would use vast amounts of resources given the number of students that attend universities, and the cost of doing so would mean that there would be significantly less money available for those students who were eligible for a bursary after this investigation. So the application of the threshold to everyone, without a comprehensive investigation, creates more benefit than would be created if an investigation were carried out in order to identify the exceptions.

## Children in the system

When it comes to allocating organs to children under the system that I suggest, there might be a worry that children would receive low priority for an organ given that they often make less socially valuable contributions than adults. They do not have jobs and so make no economic or professional contributions to society, and adults are more likely to be able to make more valuable contributions. If this were the case, children would be being penalised for not making contributions to society even though they cannot make these contributions in the first place. At least with adults, the criteria that are taken into account when assessing their social value are wide enough that even if someone is not valuable in one category, there is a good chance that they are valuable in another category, and so are not the subject of blanket discrimination. Children on the other hand are likely to only be valuable in terms of how many family members they have.

Whilst there is the possibility that children will receive lower priority for an organ transplant because of their generally fewer social contributions, it is unlikely to occur as a trend in practice. If an organ does become available that is suitable for a young child, it is likely that it will *only* be suitable for a young child as it is not enough to support an adult. Given that child organs become available so rarely (Health Resources & Services Administration, 2014, pt. 5), it makes sense to transplant them into children when they do become available because the child is more medically suitable for the organ than an adult would be. Furthermore, because the social value criteria are only used when there are 2 or more patients who are equally medically suitable for an available organ, a child will be given

priority over an adult for child organ, even if both are a medical match, as the child will be more medically suitable for the organ given their relative size, e.g. heart transplants (NHSBT, 2017a). However, with certain organs, there is more flexibility between the size disparity between the child and the organ, with adult kidneys generally being able to be transplanted into children above 2 years old (Stanford Children's Health, no date), but paediatric patients are still given priority for kidney transplants due to the potential for a growth boost from an early transplant (Salvatierra, Millan and Concepcion, 2006; NHSBT, 2017b).

In those cases, however, where an organ would be equally suitable for a child or an adult, the social value criteria could be taken into account. It is likely overall that the adult would be making more socially valuable contributions than the child, and in these types of cases where the organ is equally suitable, the adult may well receive priority. Even though the child is likely to not be making any professional contributions, they will be valuable to their families. But the adult on the other hand, will be valuable to their family *as well* as making social contributions. The child may have a longer time left in their life to make socially valuable contributions if they received the organ over the adult, but knowing whether this will actually occur or not, and the extent of those contributions is too unpredictable to include in an assessment. One possible option to resolve the slight possibility of children being systematically scored lower on the social value criteria would be to give them a base score to begin with, given that they will hopefully have a longer time to contribute in the future as adults.



## **Risk of lower donation rates**

### **Public opinion**

Even though I have argued that the implementation of a social value criterion into the organ allocation system can be ethically justifiable, one of the main remaining barriers to its introduction is whether or not the public would support such a policy. If the public does not support the policy, then the expected benefits that would be created from the policy would be outweighed by the negative consequences of its introduction. For instance, if the criteria, or the system itself, is perceived as unfair in some way, this may lead to lower donation rates. People may be more unwilling to donate their organs for transplant if they do not agree with the principles upon which the allocation of organs is based for some reason or another.

One example of this is from Brazil where a presumed consent law was introduced for organ donation, and it was expected that this would lead to a rise in the number of organs available for transplant. However, because the public did not support the policy for a number of reasons, it actually led to a dramatic decrease in the number of donated organs (Csillag, 1998). Part of the downfall of the policy was due to popular imagination where a part of the population feared that their organs would be removed even before they were clinically dead. The public did not have faith in the government and did not support the policy, so the public actually opted out of donating their organs, partially as a sign of protest, and partially as a safeguard to their own health; they did not trust the medical profession to give the same amount of care to them if they were registered organ donors. Many rushed

to the public offices to register themselves as non-donors to avoid such a risk, and instead of the presumed consent system increasing organ donation rates, it actually had the effect of reducing them (Csillag, 1998). Because the public did not support the policy, the aims of the policy were not achievable. It is possible that the same could happen with the aims of the introduction of the social value criterion. If the public do not support the proposed policy, then a situation similar to Brazil may occur. Any benefit that was expected to arise from the inclusion of the social value criteria would be outweighed by the increase in harm from the increased number of people that would die waiting for an organ transplant due to the reduced number of donors.

For this reason, before the policy is introduced nationwide, there would need to be a full assessment of the public opinion towards the policy to gain an idea of what its reception might be, and what would need to be changed in order to make the policy acceptable. Public forums and focus groups could be used to determine the likely public attitude to the overall policy as well as the different elements of the policy, and once obtained, a trial could be introduced for a short period, taking into account the feedback from the public meetings. Kidneys could be used for this trial given that the life-threatening nature of kidney failure can be better managed through dialysis than the failure of other organs.

There are 3 main benefits from introducing the system as a small trial at first. 1) The location of the trial could be selected based on the feedback of the public forums. If there was one area that showed they were more amenable to the policy than other areas, then it would be likely to gain approval in that area for a trial

easier than other areas. 2) By carrying out a trial at first, it will allow potential problems with the policy and procedure to be highlighted and resolved before it was rolled out to a wider area. 3) If the policy is introduced on a small scale first, it gives time for the wider public to become accustomed to the idea of having a social value criterion included in organ allocation decisions. Over time, the public become more accustomed to ideas and policies that were once considered unfavourable, e.g. abortion and euthanasia (Calman, 2004, p. 367). Even though a policy might not be suitable for introduction at one point in time, once the discussion is started and people become used to the idea that this is a possibility, the introduction of the policy becomes less controversial with the public being more amenable to it than they were originally.

The criteria themselves might be ethically acceptable, but if the reception of the criteria and system by the public is poor, then their ethical acceptability counts for little, especially if the implementation of the system ends up reducing organ donation rates. In the case of the Brazilian presumed consent system, its failed implementation perhaps could have been avoided with adequate marketing, and public consultation and information. Such an investigation into the possible public reception of the inclusion of social value criteria in organ allocation decisions would need to be the focus of a separate project due to the level of investigation that would be needed. However, it is worth highlighting a couple of issues that will affect how well received the policy will be: 1) sensationalist reporting, 2) the framing of the policy.

## Media Sensationalism

Whilst gauging what the public reception might be to the introduction of the policy is important, it is only one aspect of the public view that needs to be considered when introducing this policy. The other aspect is the presentation of the policy itself, ensuring that it is presented in such a way that the public is likely to be amenable to the proposal. It needs to be presented in a positive light, with sensationalist reporting on the implications of the policy kept to a minimum as far as possible. I am not suggesting that the media would need to be censored when reporting the policy introduction, but simply that they would need to be encouraged to present the policy and discussion around its introduction in a less sensationalist way than might be usually expected, especially from the tabloid media. (How effective that encouragement is likely to be is debatable however).

“The 24-hour news cycle means that media organisations are battling for audience share, which in turn means that “the press has moved towards sensationalism, entertainment, and opinion (Kovach and Rosenstiel, 1999, p. 193).” (The PLoS Medicine Editors, 2008, p. 681)

Reporting in this manner might be good for business, but it does present a situation whereby the facts can't always be easily separated from opinions and speculation.

“Headlines are often written by news editors, rather than the article's reporter, and are particularly prone to exaggeration. All of this sensationalism strays far from the reality of biomedical research, a slow

process that yields small, incremental results based on long-term studies that always have weaknesses.” (2008, p. 681)

Whilst any study and policy will have weaknesses, it will be important for the revised organ allocation policy to be presented in a way that avoids sensationalist claims in the media in order for the public to be able to appraise the policy themselves based on the facts of the policy rather than speculative opinions. The way in which an issue is presented in the media can have a huge effect on the public’s opinion of the issue, even if the presentation of the issue is inaccurate. For example:

“Gilens (1996) examined the discrepancies between the actual and media-portrayed racial makeup of America’s poor. Gilens sampled every story on poverty in America from the nation's three major news magazines (Time, Newsweek, and US News and World Report) from 1988 through 1992, and then analysed the content of the accompanying pictures. Of those persons pictured in poverty, 62% were African American, which is more than twice the actual proportion of blacks who make up the American poor (29%). It is likely that such an overrepresentation may lead to exaggerated impressions of how many blacks are in poverty. In fact, several surveys show that the majority of Americans overestimate the proportion of poor blacks, with the majority of Americans believing that there are more blacks than whites in poverty.” (Anastasio, Rose and Chapman, 1999, p. 153)

If the media present the revised social value organ allocation policy in this kind of way, by reporting heavily on the possibility that a wealthy person will receive or

has received an organ over a poorer person due to their perceived higher social value without reporting on the other possibility of a poorer person receiving an organ over a wealthy person due to their other social contributions, then the public may gain exaggerated impressions that the wealthy will always receive an organ over the poor, when this is not the case. If media outlets cannot be encouraged to report the policy introduction in a straight, non-sensationalised way, a government public information campaign might also need to be used as this would enable greater control over the presentation and framing.

### **Issue Framing**

A similar way in which the public opinion can be swayed, and often used in politics, is using the technique of issue framing. This is slightly different to the sensationalist and entertainment aims of the tabloid media, and instead focuses more on the presentation of the actual facts of an issue. By altering the way in which the facts of an issue are presented to the public, their opinions can often be changed. It is well known that people will respond differently to questions in public-opinion surveys when those questions are worded differently (Schuman and Presser, 1996). Previous studies have treated this tendency as a question-wording effect with methodological, rather than substantive, importance, but more recent studies have shown that focusing on the specific effects of an issue rather than the more general effects can also affect people's responses (Jacoby, 2000, p. 758). Jacoby found that by framing issues of government spending in a way that highlighted exactly who would benefit from the spending rather than

framing the issue in more general terms e.g. there will be more money to spend, people would not only give different responses, but would actually change their mind on the issue.

“The framing effects revealed in this analysis do not merely show that varying issue presentations produce *different* levels of *aggregate* public support for government spending. Instead, alternative frames can actually induce *individual* people to *change* their responses to the spending issue. These opinion shifts have directional bias, and their magnitude is sufficient to easily achieve statistical significance.”

“The evidence shows unambiguously that the specific formulation of the issue – the one that mentions specific recipients of federal outlays – *moves* public opinion toward greater support for government spending.” (2000, p. 758)

“This study...demonstrates that framing effects are extremely powerful – probably more so than previously recognised. All of the previous work on this topic has shown that differently-framed stimuli correspond to different kinds of responses, among different subsets of people. The findings reported above go far beyond this: Differing frames produce widespread changes in the ways that people respond to a single issue, with systematically lower support for government spending in the general presentation and greater support in the specific frame.” (2000, p. 763)

If the addition of the social value criteria to the organ allocation policy can be framed in such a way that it highlights or gives examples of situations where specific people or groups might benefit rather than simply saying that society as a whole will benefit, then the research by Jacoby gives good reason to think that the public may be persuaded by the policy. By framing the issue so that specific benefits of the policy are highlighted, rather than only the general benefits, those who may not have supported the inclusion of social value criteria may change their mind. Whilst the overall aim of the addition of the social value criteria is to increase the welfare created with each transplant, by *not* framing the issue in the general terms of its partly utilitarian approach, but instead framing it to focus on the specific beneficial consequences to groups or individuals, then there is greater chance that the public will support the policy.

“The ability to frame issues – that is, define the way that policy controversies will be presented to the public – is undoubtedly one of the most important “tools” that political elites have at their disposal [e.g. (Edelman, 1993; Rochefort and Cobb, 1994)]. Reliance on one issue frame rather than another does not, in itself, require any outlay of tangible resources. However, it does influence the distribution of public responses to that issue (Schneider and Ingram, 1990). Thus, issue framing as a political strategy involves minimal costs, and it has the potential to provide sizable benefits (Schön and Rein, 1994).” (Jacoby, 2000, p. 751)

Even though the aim of framing the social value organ allocation policy in a way that focuses on the specific rather than the general benefits would be to influence



the level of support that the public will give to the policy, it should not necessarily be thought of in negative terms as is often the case e.g. (Page and Shapiro, 1992). It might be seen as the overt manipulation of citizen preferences (Ginsberg, 1986), or as a reflection of the shallow, superficial quality of individual issue attitudes (Zaller, 1992), but this is not necessarily accurate. Jacoby claims that his study shows that rather than manipulating the preferences of citizens, citizens react to the substantive content of issue appeals (Jacoby, 2000, p. 764). In this way, "...political elites do the same thing that any other reasonable person would do: they provide their "audience" – the mass public – with the kind of information that supports their own preferred position. They do not accomplish this by outright lies (at least, usually)..." (2000, p. 764). Presenting an issue in such a way that it is likely to gain the most support is something that is a political inevitability, but also, it is the natural way in which facts would be presented. If a policy is being introduced because it is thought that this is the best thing to do, and that it has benefit to offer, it is natural to present that policy by focusing on what benefits can be expected to occur from it. Of course, different political parties, and individual politicians themselves, will not all present or frame issues in the same way; "...political leaders differentially interpret the causes, nature, and consequences of social problems, a process that is usually facilitated by the very complexity of the problems themselves. This is the essence of the issue-framing process" (Jacoby, 2000, p. 764).

## **Conclusion**

It has been shown in this chapter, that there are three main ways in which a person can be instrumentally valuable to society: their active social contributions, their value to proximate individuals, and the extent of their morality. However, even though people are instrumentally valuable in these ways, actually incorporating these contributions when making a decision about someone's overall value to society would be particularly difficult, time consuming, and expensive if done so in their entirety. To provide a comprehensive assessment of the social value of a person, the considerations that would need to be taken into account within each of the categories would require intrusive and time-consuming investigations, the costs of which would be sure to outweigh the potential benefits that could be expected to be gained from such investigations. Instead, limiting the extent to which the categories are included when making a social value decision about a patient to only those factors which can be easily assessed, through readily accessible information, means that such intrusive and time-consuming investigations are not necessary, and useful social value judgements can still be made.

The category of effects on proximate individuals would need to be restricted to only taking into account a person's immediate family rather than including their extended family and their friends. This is due to the extensive investigation that would be needed to determine the exact nature of the relationship between the patient and proximate individual, and how they might be affected by the death of the patient. Restricting the scope of this criterion to include only those proximate individuals who are most affected in general makes the task feasible whilst still yielding useful information.

Similarly, limiting the scope of the morality criterion, and in fact altering it to consider only a person's active detrimental contributions prevents the subjective nature of morality from becoming part of what should be an objective system for making social value judgements. By limiting the scope further to only consider a person's criminal record, again, extensive investigations into a person's life can be avoided, saving time, money, and personal intrusion, whilst still yielding useful information.

It might appear that there is an element of "double counting" in the system if a person's morality in the form of active detrimental contributions are taken into account as well as their social contributions discussed in the first category. However, the difference between the two categories is that one looks at the active *positive* contributions that a person makes, whilst the other looks at the active *negative* or detrimental contributions. A person's positive contributions may award them social value points, whereas the likelihood of them making future *negative* contributions may lower their social value score through minus points being given.

When introducing the social value criterion to the organ allocation system, it will also be important to frame the issue in a positive light and attempt to reduce the amount of sensationalist reporting of the policy. In doing so, there is more chance of the public being amenable to the system, and so more chance to achieve the aim of increasing the welfare created with each transplant,

Now that the broad ways in which a person can be instrumentally valuable to society have been highlighted, I will give an outline of how the overall criteria and

patient selection process would function in practice. I will make a suggestion for how a standardised system for determining patients' instrumental value could work that has parallels with the points systems used in many countries for immigration.

# Chapter 7: Selection in practice

## Introduction

In this chapter I will outline how the social value assessment will work in practice, describing how the decisions made by the experts about what the needs of society are can be incorporated into an assessment of a patient's social value. This final social value score will in turn guide the selection of which patient will be selected as an organ recipient.

However, before moving on to discuss this, it is worth highlighting two issues that will affect the social value of a person dependent on their skills and attributes when coming to a final assessment. Firstly, it is not just the amount of welfare from a contribution that needs to be taken into account when determining a person's overall social value, but also how much detriment can be avoided by their continued life. Secondly, how replaceable or irreplaceable a person is will also play a role in determining a person's social value score.

## **The distinction between value to society and detriment to society**

Tied to the idea of value to society, is the idea of detriment to society. When trying

to determine the value of something to society, clues to its value may be given by looking at not just what it contributes, but also what the consequences might be if that thing did not exist.

“Some might feel that in assessing a patient’s value to society one should ask not only who if permitted to continue living can make the greatest contribution to society in some creative or constructive way, but also who by dying would leave behind the greatest burden on society in assuming the discharge of their residual responsibilities. Certainly the philosophical utilitarian would give equal weight to both these considerations.”  
(Rescher, 1969, p. 178)

The positive effects of a contribution need to be considered when determining how valuable it is to society, but so too do the detrimental effects that might be caused by the loss of this contribution; both will influence the overall social value score of a person. Part of a person's value to society lies in the fact that their continued life can avoid a level of harm occurring that would be caused by their death. So it follows, that the lives of those people whose death would be more detrimental to society are more instrumentally socially valuable than the lives of those people whose death would be less detrimental.

It must be noted however, that the death of those people who make the most valuable contributions to society will not necessarily have the most detrimental consequences. There is a subtle but significant difference between the effect that a person's contributions, and the harm that might be caused by the lack of those contributions, plays in determining a person's overall value to society. Just

because a person may make a significant active contribution, it does not mean that the loss of that contribution will be particularly harmful. Perhaps the contribution, whilst valuable, is not especially necessary, or the contribution can be easily replaced. For example, take the case of a celebrity from a popular TV show, and a top heart surgeon, both of whom have no family. The minor celebrity may make a significant active contribution to society through the entertainment they provide and the revenue they help create, and the surgeon may make a significant active contribution through all the lives they save. However, the level of harm that is caused by their deaths may be lower than the level of harm caused by the death of someone whose active contributions are less socially valuable. The celebrity may make active contributions which are valuable in the sense that they generate revenue for the country and create happiness through entertainment for a proportion of the population, however the loss of this contribution through their death is not likely to cause significant harm to the wellbeing of their followers, or to wider society. Their active contributions may have a higher level of value than a lot of other people's active contributions, in part because of the number of lives they affect, but their contributions are not an important and necessary part of society. They are in many ways, superficial, but moreover, replaceable. People may be happy that the celebrity and their contributions are there, but not be overly disappointed when they are gone. The government may welcome the revenue, but will gain revenue from the replacement celebrity, and the public may welcome the entertainment, but will quickly move on and appreciate the next TV show host. A Google trends graph (Fig.2) for the frequency of searches for different celebrities shows how quickly public interest returns back to previous levels following peak searches at the time of a death, even for the most famous of

celebrities.

“Extensive media coverage at the time of a celebrity’s death can create a spike of public interest, but over time as the publicity drops away so too does the nostalgia wave” (Matheson and Baade, 2004; Gunter, 2014, p. 107).

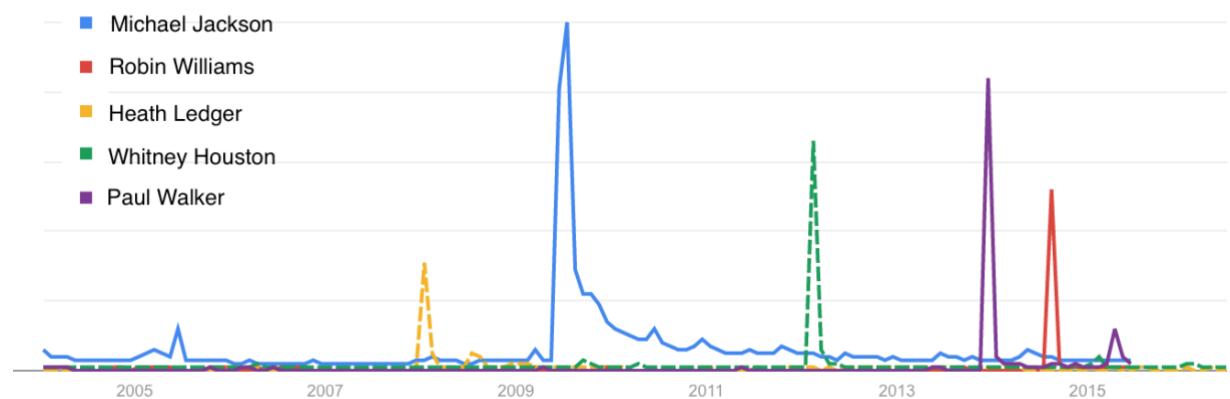


Fig.2: Data Source: Google Trends ([www.google.com/trends](http://www.google.com/trends)).

The surgeon’s death on the other hand, may also not be significantly detrimental, but for different reasons. The surgeon’s active contributions are valuable and, perhaps more meaningful than those of the TV show host by way of saving lives, but the surgeon could be replaced relatively easily with another surgeon (provided they are not one of the only pioneers of a new technique) and so her death would have little detrimental effect. Her active contributions (in a professional capacity at least) could be easily fulfilled by another surgeon. This level of ir/replaceability of a person and their contributions affects their value to society.

Note that, the fact that the deaths of the surgeon and the celebrity cause little



detriment, does not mean that their contributions only have a small value. Both make significant contributions to society, but since they can be easily replaced, the detriment caused by their deaths is minimal. The way in which a person's ir/replaceability affects their social value is discussed in more detail below.

### **Ir/replaceability and value to society**

Keeping with the case of the surgeon for now, if they were one of the only people skilled enough to perform a certain type of life-saving surgery, then their value to society would rise due to their rare skill set and the fact that those skills are important for the good of society. If an important/necessary contribution is in short supply, then it must be protected to ensure that it is not lost. However, it is not just the level of irreplaceability of a person's active contributions that will affect their overall value; the level of irreplaceability of a person's passive contributions will also play a significant role. Take the case of a stay-at-home mother of five; even though her active contributions may be low in terms of her economic and professional contributions, she still makes valuable passive contributions by virtue of the relationship to her family.<sup>59</sup> She is of value to her children and family not just because of the active contributions she makes within their lives, but also because of who she is in relation to them personally. If the mother died and another person came along and performed all the roles the

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<sup>59</sup> I am not claiming that all stay-at-home mothers make few active contributions; I simply use this in the example here to illustrate that even in cases where someone makes few active contributions, there are circumstances where the irreplaceability of a person's passive contributions means the person can still be significantly valuable.

mother performed, the children would still have been harmed. It is not the fulfilment of the parental duties alone that is of value to the children, it is the mother herself. A person is irreplaceable in a way that a skill set is not. In this way, the mother's value to society increases within the category of effects on proximate individuals due to her irreplaceability. A recluse surgeon on the other hand, whilst making valuable active social contributions would be significantly less socially valuable under the category of effects on proximate individuals. The active contributions that the surgeon makes to her patients could be fulfilled by another surgeon without causing any detriment, and because the surgeon has no friends or family, there are no passive contributions to proximate individuals to consider. Langford holds a similar view and says that the mother is irreplaceable in a way that a heart surgeon is not, except in rare circumstances (where the heart surgeon is the only person that can carry out a particular operation for example). He says that when considering the allocation of scarce medical resources, and the prognoses for A and B are similar, "then the consequences for other people of saving A instead of B can properly be considered provided there is no realistic substitute for A" (Langford, 1992, p. 14).

However, simply because something is irreplaceable does not immediately make it more valuable to society; there does have to be some level of importance and benefit there to begin with. If a standard surgeon was compared to the only person on earth who could juggle 15 balls, the juggler's skills would still be less valuable to society than the surgeons if the juggler's skills did not provide a significant amount of welfare for people. The reason for this is that the detriment that might be caused to society by the loss of the juggler's unique skill will be

minimal in relation to the detriment that might be caused by the loss of the surgeon's skill in saving lives, *even if* this skill set can be more readily replaced. There is a balance between the importance and irreplaceability of contributions that needs to be struck. The more important/necessary a contribution is for the functioning of society, the more value it will gain depending on its level of irreplaceability. If the necessity of the contribution is lower, the value added to it because of its irreplaceability will also be lower.

## **Narrowing down or informed selection?**

When making the final selection as to which patient will be the organ recipient, as explained, medical criteria are the most important criteria to take into account before any non-medical criteria should be applied (a suggestion also made by other commentators) (Rescher, 1969; Leenen, 1982; Blagg, 1998, p. 236). The reason for this is that it ensures those who are most in need of medical attention, and are suitable recipients for treatment, receive treatment first. Furthermore, putting medical criteria before non-medical criteria reflects the importance of each person's intrinsic value. Only once the medical criteria have been used to determine which patients are most in need, and are medically suitable recipients for an organ, should non-medical criteria be used to select just which patients will receive treatment. The non-medical criteria, specifically relating to social value, will now be discussed with regards to how it should be applied when assessing a patient's social value.

There are two ways in which the social value criteria could be used to determine which patients should receive scarce medical resources. The first option is to use and apply the social value criteria in a linear manner as a means of narrowing down the number of possible recipients until only one remains. The second option is to apply the criteria simultaneously, taking into account all of the contributions that a person makes, so that a fully informed selection can be made. It is this latter option that is the preferred method.

In the linear, narrowing down approach, the most important criteria would be applied to the possible recipients first, and if there are two or more patients with a comparable score/value, then the next level of criteria will be applied, and so on, until there remains only one patient. Leenen makes such a suggestion in his article *Selection of Patients*, saying that criteria relating to the individual (namely medical criteria) should be applied first, then criteria based on the patient's immediate relationships (proximate individuals) applied second, and finally, criteria based on social value (Leenen, 1982, p. 35).<sup>60</sup>

The reason why he supports this linear approach is that he claims those criteria that are most amenable to objectivity should be applied first, and those less amenable to objectivity should only be used if there remain two or more patients after the application of each criterion.

He suggests the criteria should be applied in this order:

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<sup>60</sup> Note that what Leenen calls "social value" is only a part of what I call social value.

- A. Medical criteria
- B. Personal criteria directly relevant to the treatment
- C. Daily living conditions directly relevant to the treatment
- D. The patient's importance for his immediate relations

(1982, p. 35)

He claims that applying the selection criteria in this way would uphold the principles of equality and human rights (1982, p. 36).

The only non-medical social value criteria that he allows to be considered is that of the patient's importance for his immediate relations.<sup>61</sup> He says that age and social behaviour are not suitable criteria for the selection of patients, and grave objections are made against the use of a patient's significance for society also. He says age is not a suitable criterion because a person's rights do not change with age, and so their right for treatment should not depend on their age. Similarly, how suitable a person is for treatment changes depending on their age, but is not the same for all people of the same age, and so age limits as a criterion should not be used (1982, p. 34). He also says that social behaviour is not suitable because judgements about the lifestyle of a person are strongly connected to subjective convictions and moral judgements, which differ within society, and so cannot be objectively assessed (1982, pp. 34–35). He goes on to argue that the significance

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<sup>61</sup> This criterion would closely align with the "effects on proximate individuals" category that I suggest.

of the patient to society is also not suitable because the assessment of social value is subjective and cannot be objectively established, with political factors perhaps coming in to play, alongside discrimination, and economic criteria prevailing (1982, p. 35).

He acknowledges the fact that some people might object that the criteria should be applied simultaneously rather than consecutively, and he says that, "However understandable this comment might be, it should be kept in mind that the principles of equality of opportunity and equal human rights are at stake" (1982, p. 36). Despite his lack of detail on these principles, it is understandable that he should want to use objective criteria to select patients for treatment. But applying the criteria in a consecutive, linear fashion, with the most objective criteria first, means that there is the potential for patients to miss out on receiving an organ despite making significant social contributions in categories that are perhaps only *slightly* less amenable to objectivity.

In the case of Leenen's suggestions, once the medical criteria have been taken into account, if there is more than one possible recipient for treatment left, the importance of the patient to their immediate relations is taken into account. This essentially means that the patient chosen for treatment is the one with the biggest family or the strongest relationship, despite another patient making significant contributions elsewhere, e.g. filling gaps in the labour market, or making advancements in renewable energy that have the potential to solve the energy crisis. Once the importance to the patient's immediate relations criterion has been applied, he suggests that a random patient selection should be made if there is still

more than one suitable patient for treatment (1982, p. 36). He favours this approach over narrowing down the possible recipients any further through the application of other social value criteria, as he considers other social value criteria too hazardous.

However, how can an approach such as the linear application of the criteria uphold equal opportunity and respect equal human rights if some patients are excluded from consideration for treatment based on the consideration of only one criterion (after the medical criteria)? By applying the criteria in a linear fashion, patients who are not particularly valuable in the first criterion to be applied will not have an equal opportunity to access an organ despite them being valuable in other areas of their life.

As shown in the last chapter, people are valuable to others, and to society, in a number of different ways. Because people can make valuable social contributions in other categories, other social criteria need to be taken into account also. If social value is going to be taken into account, all of the different ways in which a person can be valuable need to be considered when determining who should receive an organ.<sup>62</sup> Someone may not make many contributions under a criterion that is highly objective, however, under another, slightly less objective criterion, they may make significant contributions. Applying the criteria in a linear way here would mean that the person would miss out on the chance of receiving an organ despite still making significant social contributions. Not only does this undermine the principle of equality with regards to accessing the organs for transplant, but it

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<sup>62</sup> Or at least as far as is practically possible.

also undermines the aim of the system: increasing the overall welfare created with each organ transplant. Not only is it inequitable to make such a decision based on a single criterion, but to do so would undermine the aim of the system.

By not taking into account the person as a whole, the value that they have in other areas of their life and the contributions they have to offer are ignored. Furthermore, the cumulative sum of these other, individually less valuable contributions might outweigh the single, more valuable contribution that would be applied first in a linear approach. In this way, the aim of allocating the organ to the patient who is most valuable to society is undermined by instead allocating the organ to the patient who is most valuable to society on only one particular criterion, rather than to the patient who is most valuable on the whole to society.

It is for this reason that the linear narrowing down approach is not suitable for patient selection when applying social value criteria given the potential for patients to miss out on an organ despite making valuable contributions in different categories. Instead, applying the criteria in a non-linear, simultaneous fashion is preferable. This would take into account all of the social contributions a person makes<sup>63</sup>, meaning that the total value of a person is taken into account rather than just how valuable they are in one aspect of their contributions to society. This will allow an informed selection to be made about which patient should be the organ recipient based on their social value score.

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<sup>63</sup> At least, taking into account all of the contributions that can be objectively and practically assessed and incorporated into the selection criteria.



## **Reaching a final decision on a patient's social value**

In this section, I will outline a suggestion for the way in which the societal needs determined to be of importance by the criteria selection committee should be accumulated, and how a final decision on a person's social value rank can be decided by the patient selection committee. I suggest that a points system similar to that which some countries use for immigration to determine who should be allowed to stay in their country, could be adapted and used to determine who is most valuable to a particular society. Using a points system such as this will help to overcome the utility aggregation problems often associated with utilitarianism. In this setting, such objections relating to the utility aggregation may come in two forms: 1) questioning how the amount of welfare created through active contributions compares to the welfare created through passive contributions, and 2) how can the amount of potential welfare created by each contribution be quantified?

The answer to these questions can be found by splitting it into two parts and drawing partly upon a rule utilitarian approach. With regards to a person's passive contributions in the form of their value to their proximate individuals, as mentioned in the last chapter, it is a patient's family members who are most affected by their death, and who can be practicably taken into consideration. As such, in order to limit the amount of detriment that is caused by a patient's death,

on the criterion of “effects on proximate individuals” it will be the patient with the largest number of immediate family members that will be given priority. So rather than working out how much welfare will be created for each proximate individual, which indeed would be a difficult and perhaps impossible task, broad strokes can be made instead, that the death of those patients with more family members will create more detriment in the form of emotional distress than the death of those patients with fewer family members. No doubt there will be cases in which a person’s smaller family will be caused more emotional distress due perhaps to a closer family relationship, however, for the most part, the rule will increase the amount of overall welfare whilst allowing it to be practically implemented.

When it comes to the quantification of active contributions, a simple way of bridging the problem is to determine first what the needs of society are and their relative importance in creating a sustainable, functioning, and growing society, thereby creating a hierarchy of needs. Points can then be assigned to each level of need on the hierarchy using expertise from fields such as economics and sociology. The corresponding number of points can then be allocated to patients based on which needs their contributions help to meet. So again, rather than working out the amount of welfare that might be created for every person in society through an organ transplant to a particular individual and facing the classic utility aggregation problem, the problem is managed. The task of increasing overall welfare is made achievable and manageable by looking at what needs should be met within society, which in turn will generally improve welfare, rather than working out exactly how much welfare will be created from each action.

However, a simple tally of the number of criteria a patient meets would be unfair, as well as undermining the aim of the system as a whole; a patient who possesses a few highly valuable skills and attributes may miss out on an organ to someone who possesses a handful of low value skills and attributes. This would be unfair to the patient as the decision-making process would not have reflected their value accurately. It would also undermine the aim of the policy in the first place by potentially allocating an organ to a patient who would not necessarily benefit society as much as another. For this reason, a needs and criteria hierarchy is preferable.

Each contribution that a patient makes will be given a score depending on the needs the contributions go towards meeting, and the place of that need on the hierarchy, with some contributions receiving negative scores if they cause harm to society. These scores will be totalled to give an overall social value score that will determine where an individual will be placed on the waiting list (after medical considerations have been taken into account).

The benefits of using such a system with set criteria and points is that, not only will it help the decision-making process stay methodical and ensure that the set criteria are adhered to, but it also means that the process can easily be made accessible to the public. By having set criteria that the committee base their decisions on, it avoids ad-hoc decisions being made about patients' social value, and patients can be made aware of the criteria that their social value rank has been determined by, and just who the people are that are making these decisions. (The specific identities of the committee would need to stay anonymous both for their

own protection and to avoid bribery, but the credentials of the committee could be made available). In this way, the objections of Sanders and Dukeminier in the case of the Seattle patient selection committee making their decisions as a “secret committee operating without explicit criteria” are avoided (Sanders and Dukeminier, 1967, p. 378).

In the next section, I will outline in more detail how the patient selection process and the points system for assessing social value will work in practice.

## **Parallels with the immigration points system**

Once the medical criteria have been applied to patients, so that the most urgent patients have been grouped, a practical way to determine which patient is the most socially valuable in this group would be to use a points system similar to that which is used in immigration decisions. The immigration points systems outlined below serve only to illustrate how a social value points system could work, and that the points system *framework* could be adapted for the assessment of social value. The immigration criteria are mainly economic in nature, and so the scope of the criteria would need to be more comprehensive, with the immigration tiers changed to reflect the 3 categories of social value contributions that encompass the ways in which a person can contribute to society, e.g. services offered that have little economic value but high social value, the effects on proximate individuals, and a person’s criminal offending risk. The non-economic but socially valuable

contributions will play more of a prominent role in the case of social value assessment for organ allocation than is the case for immigration assessment. By doing so, a more complete social value assessment can be made than could be done by using the immigration criteria alone.

The limitations of the analogy between the two systems, as well as their similarities and differences, will be outlined in the discussion below in order to help build a picture of some of the main features of the proposed points system.

Many countries have an immigration points system whereby when a person applies for immigration, they gain points depending on their skills and contributions. In the UK and Australia, the points systems are mainly based around professional and economic contributions (Department of Home Affairs, no date; UK Home Office, 2014; GOV.UK, 2015).

At the heart of the Australian points system is the decision to grant immigration visas for applicants based on their personal attributes and ability to contribute to society - most significantly, through their occupational status (Department of Home Affairs, no date; BBC News, 2014b). The UK adopts a similar approach to the Australian immigration model, with there being 5 different tiers under which an applicant can apply that directly relate to the (mainly economic) contributions they can make to society:<sup>64</sup>

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<sup>64</sup> Technically speaking, there are only 4 tiers as of 25 March 2013. "When the UK's employment-based immigration was split into five tiers, Tier 3 was envisaged as the Tier for unskilled migrants and intended to replace existing low-skilled immigration programmes. However, by the time the five-tier points-based system came into operation in 2008, the UK government felt there was no

Tier 1: 'High-value migrants' from outside the EEA [European Economic Area] and covers entry of entrepreneurs, investors, and those very few people who come under the 'exceptional talent' visa.

Tier 2: 'Skilled workers' from outside the EEA with a job offer in the UK. It includes skilled workers who are transferred to the UK by an international company, skilled workers where there is a proven shortage in the UK, ministers of religion and sportspeople.

Tier 3: Designed for low-skilled workers filling specific temporary labour shortages. The Government has never allocated any visas under this scheme.

Tier 4: Students aged over 16 from outside the EEA who wish to study in the UK. Applicants must have a place at a registered UK educational establishment before they can apply.

Tier 5: Contains six sub-tiers of temporary worker including creative and sporting, charity, religious workers, and the youth mobility scheme which enables about 55,000 young people every year to work in the UK on working holidays. The visas are awarded to young people from countries that have reciprocal arrangements with the UK.

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need for any unskilled immigration from outside the European Economic Area. It was designed to replace schemes such as the Seasonal Agricultural Workers Scheme (SAWS) and the Sectors Based Scheme (SBS) currently only available for Bulgarians and Romanians. Consequently, Tier 3 was never operational and on 25th March 2013, Prime Minister David Cameron announced that it was to be 'shut down completely.'" (WorkPermit.com, 2015a)

(WorkPermit.com, 2015b)

Under each of the tiers are criteria which, if satisfied, will award a different number of points, and if enough of the criteria are met and enough points earned, then an application can be made. Depending on the tier and type of visa applied for, the criteria are different, but can include:

- having at least either £50,000, £200,000, or £2,000,000 in investment funds
- have been officially endorsed as having a genuine and credible business idea
- be a recognised or emerging leader in the fields of science, humanities, engineering, medicine, digital technology, or the arts
- knowledge of English language
- having a recognised bachelor's degree, master's degree, or PhD
- have a job offer in the UK with an appropriate salary (usually £30,000 per year, or the 'appropriate rate' for the job offered – whichever is higher)
  - There are some exceptions for lower pay, e.g. if you'll work as a medical radiographer, nurse, paramedic or secondary school teacher in some subjects, or you'll work as a pre-registration nurse or midwife.

- the amount of personal savings you have
- whether you are carrying out charity work

(UK Home Office, 2014; GOV.UK, 2015)

The parallels between the immigration points system and the proposed social value assessment for potential organ recipients are mainly to do with the structure of the two systems, rather than the specific criteria (although, as I will demonstrate, the immigration criteria may be useful as a partial basis for the criteria in one part of the social value assessment). When determining a score for the social value assessment, points would be given depending on what the needs of society are at a given time, and how far the person's contributions go towards meeting these different needs; an approach also used in the immigration assessment. For example, in the UK when applying for immigration, if you are trained or have an occupation that is on the occupational shortage list (UK Home Office, 2016), then you will receive more points than if you have a job that is not on the list. The reason for this, is that by having a job that is in short supply, you are helping to meet one of the needs of society more so than if you had a job for which there was little demand. This criterion could also be used when allocating points for the social value assessment, as in general, on this criterion, those people who work in a profession on the occupational shortage list are more valuable than those people whose profession is not on the list as they are helping to meet the country's employment needs.



The benefit of using the immigration system as a partial template, especially for the first category of *active positive social contributions*, is that by using the tools that are already available in the system, such as the occupational shortage list, the process of assessing a person's social value when making organ allocation decisions can be sped up.

A further parallel between the two systems, or more precisely, an apparent parallel with a slight difference in operation, is that the 5-tiers for immigration are akin to the 3 main categories in the social value system. In the UK, whilst the 5 tiers for immigration are called tiers, they are not necessarily worth more than each other in terms of points, but rather you apply for an immigration visa under one of the 5 tiers depending on your circumstances, and then under each tier, there are criteria which you gain points for. A different number of points are given depending on your level of skill and economic contributions, e.g. level of English language, settlement funds (money readily available), level of education, profession, prospective earnings (UK Visa Bureau, no date). Similarly, under a social value points system, the 3 main categories in which a person can contribute to society may not necessarily be worth more than each other, but their differentiation helps to make the assessment of social value more manageable and methodical by allowing the assessment to take place in 3 parts, with points being given for the contributions made under each category.

Even though there are 3 main categories of social contributions, the actual social value assessment is more analogous to the assessments made under a *single* tier of the immigration system, with the three categories corresponding to different

immigration criteria within a tier. By using the criteria in each category, a final social value score can then be reached, with points given depending on the types of social contributions the person makes.

Despite the parallels between the two systems in terms of the points-based approach, there are significant differences and limitations to the analogy with regards to their specific criteria, motivation, and operation. Whilst both systems use a points-based approach, assigning points to set criteria designed to reflect social value, it is only the first category of the social value assessment (active positive social contributions) where the *content of the criteria* are similar to those for immigration. For the other two categories of the social value criteria, it is mainly the points-based approach where the parallels lie. For example, even though there is an element of criminal assessment in both the immigration system and the social value system, the way in which the assessments are carried out, as well as the motivation behind the assessments, differ. And similarly, it is only the points-based approach where there is a parallel for the category of effects on proximate individuals. These similarities and differences will be discussed in more detail below in relation to the different social value categories.

Under the first category of *active positive social contributions*, most of the criteria used in the immigration points system currently in place in the UK could be drawn on as a basis for this category's social value assessment. The immigration points system itself is based on the value that a person can contribute to society, with the criteria mainly taking into account the profession of the person, and the prospective economic contributions that they are likely to make, both directly and

indirectly (as outlined on pages 321-323), and covers most of the contributions that would need to be assessed under this category (UK Home Office, 2014; GOV.UK, 2015; WorkPermit.com, 2015b).

Even though these are factors that would need to be considered under the active positive contributions category, these immigration criteria are (nearly) all designed to ensure that priority is given to migrants who will benefit the economy. Under the social value assessment for potential organ recipients, a person's other active social contributions would need to be included, and so there would be less of a focus on purely economic criteria. Even under the *active positive social contributions* category, it is not just the economic contributions that a person makes that are important, as the aim of the social value assessment is to also capture the other beneficial social contributions that a person makes. As such, included in the social value assessment of a person's active positive social contributions will be their contributions to society in the form of services offered even if they provide little economic benefit. Such non-economic contributions are present in the immigration criteria, such as whether you are carrying out charity work, or have a low paid job on the exceptions list, but they play only a small role and are peripheral to the broadly economic contributions in the immigration criteria. Under the social value system, these non-economic, but socially valuable contributions would play more of a prominent role *alongside* economic contributions.

However, even though the criteria present in the immigration system might be used in the social value assessment, some of the criteria are potentially

problematic even as predictors of economic utility, and as such, the criteria would need to be adapted and not simply copied from one system to the other. For example, salary may be a poor indicator of the value of a person's professional contribution even if it is useful to assess their potential economic contributions.

The second category in the social value assessment would be the *effect on proximate individuals* category, whereby the number of immediate family members that a person has will be taken into account, and potentially the age and relation of those family members. Again, the non-economic contributions a person makes are playing more of a prominent role in the social value criteria than they do in the immigration criteria, with this criterion serving to minimise the distress caused to families by an individual's death. The analogy between the two systems holds less strong for this category, with the main parallel being only that a points system is used. The criteria that exist in the immigration system do not cover the kind of value that would be assessed under the *effect on proximate individuals* category, but the points system itself is still a useful framework here. Points could be given to the patient for the number and type of immediate relations they have. Depending on the ages of the relatives, and the nature of the kinship to the patient, the patient's death will have a different effect, and so this should be reflected in the points given (Raphael, 1992). For example, if a female patient had 3 children and a father, the patient may receive 7 points for the father and 10 points for each child, given that the loss of a mother to young children may cause more significant detriment than the loss of an adult to their older parent.

The third category of social contributions in the form of negative contributions covers only the criminal activity of the person due to the problems with using a morality criterion outlined earlier in the thesis. Looking at a person's criminal record and the likelihood of committing future criminal actions is also something that is included in the immigration process under the term *good character* in both the UK and Australian immigration systems. In the Australian immigration system, indicators of the *lack* of good character are related to having a criminal record, and the likelihood of making future criminal actions, such as:

- engaging in criminal conduct
- harassing, molesting, intimidating or stalking another person
- vilifying a segment of the Australian community
- inciting discord in the Australian community or in a part of it
- being a danger to the Australian community or a part of it.

(Migration Act, 1958, sec. 501 (6))

The UK immigration system also takes into account whether the applicant is of good character by again, looking at the applicant's criminal record, e.g. convictions, non-custodial sentences, suspected criminal activity, as well as the

applicant's financial soundness, notoriety<sup>65</sup>, and whether they have been deceptive or dishonest (UK Home Office, 2017).

Whilst the UK and Australia both look at the character and criminal record of the person, there are no points awarded or deducted from the application; a decision on the applicant's eligibility is simply made depending on the risk the assessor deems the applicant to pose. However, in the social value assessment for organ allocation, I suggest that points are deducted from the overall score depending on the likelihood of the person making active detrimental contributions in the future in the form of criminal activities. A different number of points would be deducted from the overall score based on the severity and likelihood of criminal actions being committed. For example, if there were two people convicted of armed robbery, but one had an 80% chance of reoffending and the other a 30% chance, everything else being equal, the person who poses the higher risk will have more points deducted from their social value score than the lower risk person. With regard to the severity of the crime, a convicted murderer with an 80% chance of reoffending would have more points deducted from their social value score than a convicted burglar with an 80% chance of reoffending. The more serious the

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<sup>65</sup> "The decision maker should note that the following matters should not normally, of themselves, be relevant to assessing good character: a. Divorce/separation, or other marital or domestic problems, b. Promiscuity or sexual preference within the law, c. Drinking or gambling, d. Eccentricity, including beliefs, appearance and lifestyle; or e. Unemployment/working habits/other legitimate means of support. However, where there is evidence that a person has – by the scale and persistence of their behaviour – made themselves notorious in their local or the wider community, consideration should be given to refusal. In such circumstances, the decision maker may ask for an interview to help substantiate any information received, for example, from members of the public.

The decision must be a reasonable one. Therefore, the scale and level of behaviour need to reflect so poorly on a person's character that the application should be refused." (UK Home Office, 2017, p. 22)

crime, and the higher the chance of reoffending, the more points that will be deducted from the final social value score.

Whilst both the immigration points system, and the social value points system, have an element where the risk of a person committing a crime needs to be assessed, there are differences between both the motivation and the execution of the assessment between the two systems. The motivation and execution of the criminal risk assessment in the social value system uses the assessment as a prioritisation tool and utilises a gradation scale of risk, whereas the immigration system uses the assessment as an exclusion tool, making a single threshold judgement of risk.

The motivation behind the criminal assessment in the immigration system is to ensure that those applicants who pose a criminal risk are not permitted entry. For the social value system however, the criminal assessment is used to determine the social value score of a potential organ recipient. The immigration system uses the criminal assessment to determine whether an applicant should be *excluded* from admission, whereas the social value system uses the criminal assessment simply as a *prioritisation* tool. It is this difference in motivation that means that using a points system for the criminal assessment is more suitable than the exclusion approach used in the immigration system, as no matter the crime risk of a patient, they will never be excluded from the waiting list for an organ.

The actual execution of the criminal assessment is also different in that for the social value system, where a specific number of points needs to be deducted based on specific criteria and parameters. The immigration system on the other hand,

simply requires the immigration officer to make a decision as to whether they think the applicant poses *enough* of a criminal risk to deny them entry; an opinion that may differ from officer to officer. Within the social value system, such variables need to be removed as far as possible, and so specific parameters with specific point deductions is preferable.<sup>66</sup> However, there might be difficulty in making criminal assessments about the severity and likelihood of reoffending in the social value system. When comparing two people where one of whom poses a low risk of reoffending for a serious crime, and the other poses a high risk of reoffending for a minor crime, there may be a difficulty in deciding which patient poses the most risk. An algorithm would be able to work out an overall point score for both patients, but this score would be based on the parameters that we decide. The patient selection committee would need to make a decision about whether, if the organ allocation decision came down to this element of point deduction, it would be better to allocate the organ to the person with the low risk of committing a serious crime, or the person with the high risk of committing a minor crime.

By combining the scores from the 3 social value categories, an overall score is reached that will reflect the social value of the patient. When an organ becomes available for transplant, of the recipients that are a suitable match for the organ and are in the most urgent need group, the patient with the highest social value score would be selected as the organ recipient.

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<sup>66</sup> It might be better if such variables were also removed from the immigration decision, but such a discussion would be tangential here.



## **The need for both an algorithm and human input in patient selection**

In order to ensure the social value assessment is carried out in an efficient manner, an algorithm will be used which will allocate points to patients according to whether certain objectively assessable criteria are met. However, there will also need to be human input into the patient selection. There are two main reasons why it is necessary to have both an algorithm *and* an expert committee to make accurate social value judgements about possible organ recipients at this final stage. The first is that the human element can help to verify the claims of the most urgent patients in those cases where the algorithm has given the same social value score to more than one patient, and the second is that it can help to assess those contributions that cannot be easily entered into the algorithm, such as the risk assessment for future criminal actions.

### **Verification**

There may be cases where two or more patients are given the same social value score once all of their contributions have been assessed. In these cases, it might be better to verify the claims and circumstances of the patient to ensure the social value score is accurate and that the most socially valuable patient receives the available and suitable organ, rather than simply opting to allocate the organ randomly to one of the similarly scored patients.

For example, a patient may have registered their profession as one of those on the occupational shortage list, which would mean that they would be given more points than if they were in a profession that was not on the list. Whilst it is possible that the patient could have outright lied about their profession, it is more likely that they would embellish their professional contribution in order to qualify for more points. By placing those who attempt to manipulate the system at the bottom of the waiting list as a deterrent, as outlined earlier in the thesis, outright lies about social contributions should be minimal. However, the opportunity to exaggerate their social contributions may still be an option that patients pursue.

A patient may claim and register their occupation as one of those on the occupational shortage list, when in fact they have only minimal experience or involvement with that specific occupation, with their actual profession simply being related. For example, one profession on the occupational shortage list is project manager within the electricity transmission and distribution industry (UK Home Office, 2019). A patient who works in this industry may list their occupation as project manager when they may only be a project assistant or supervisor who has been involved in some minor way with the management of a project. By carrying out this kind of verification in situations where two or more patients have the same social value score, a more accurate social value assessment can be made, and a decision reached as to which patient should be the organ recipient. If after the verification process, there are two or more patients with the same score and are equally suitable for the available organ, then a random allocation can be made.

One of the problems highlighted earlier with carrying out thorough investigations and verifications into patients' circumstances is that it is time and resource intensive, and so the costs of the investigation would outweigh the expected benefits. However, if the verification element is limited to only the tie-break circumstances at this final stage, the frequency of the investigations is likely to be low enough that the resource costs are minimal.

### **Criminal Risk Assessment**

The second reason for the need of an expert committee to be used in conjunction with the algorithm is to assess those contributions that a person makes that cannot be easily quantified and entered into the algorithm. The computer algorithm can help to speed up the assessment of a person's social value by accounting for the contributions a person makes that can be given a concrete value, such as profession or the number of immediate family members. However, not all of the components that go towards making up a person's social value can be given points easily, and so this is where there needs to be a human element to the scoring process, drawing on the input of experts.

For the likelihood of future detrimental contributions in the form of criminal activities, the history and the circumstances of the patient need to be taken into account, and these factors can't be weighed up and assessed easily by an algorithm. (It is perhaps for this reason why an immigration system also has a human element in the process to assess good character alongside the points

algorithm.) There are tools used in the UK criminal justice system, such as the *offender group reconviction scale (OGRS)*, to help assess the risk of a criminal reoffending using limited information (Copas and Marshall, 1998). The main aim of the tool and the score that it generates, is to “provide background information for probation officers in their writing of *pre-sentence reports*, [with] these reports being designed to inform judges and magistrates when deciding what sentence might be appropriate for each individual offender” (Copas and Marshall, 1998, p. 159). This score however, is intended only as informal advice to probation officers and does not play any formal part in the judicial process. In order to make an accurate assessment of the risk of reoffending, the probation officer will “form their judgement in the light of all the special circumstances of the case” (Copas and Marshall, 1998, p. 159). It is these special circumstances which cannot be easily captured and entered into an algorithm which means that there needs to be a human element to the social value assessment as well as the algorithm.

The algorithm and the human element will work together in coming to a final decision on the social value score of the patient. The algorithm will do much of the leg work by assigning a score to the patient based on the concrete facts of the patient’s situation in much the same way that the immigration points system does. The human element of the process will then come into play by revising the points score based on the variables and nuances that can be better captured by a human. In this way, the process of determining a social value score for a person can be

done in a way that isn't prohibitively time intensive; the human element only has to contribute to a part of the decision process rather than from beginning to end.

## **Final overview**

It has now been shown how the patient selection process would function and how the patient selection committee would assess a patient's social value. To help make the whole process clear, I will give a final overview of the complete criteria and patient selection process.

Patients will first be ordered based on their medical suitability for the available organ, and then any medically suitable patients who will die before the next suitable organ is likely to become available, will be classed as being in the most urgent need. If there is more than one patient in this most urgent group, then the social value criteria will be applied in order to make a tie-break decision as to who should be the organ recipient.

The criteria selection committee would decide what the specific basic needs of society are, and create a hierarchy based on how urgently they should be fulfilled, using indicators of function to make this assessment. Each need will be given points depending on its place on the hierarchy. The patient would be judged on the 3 main categories of contributions: active positive social contributions, number of proximate individuals, and active negative social contributions.

Under the active positive contribution category, each contribution that a patient makes will be given a corresponding number of points depending on which need (as determined by the criteria selection committee) that contribution goes towards meeting. Under the active positive contributions category, a person will be given points for factors such as their profession and economic contributions. Under the proximate individuals category, they will be given a number of points for each immediate family member that they have, with more points being given for dependents, and varying depending on the nature of the dependency and the age of the dependent. Under the active negative contributions category, points will be deducted from the social value score depending on the likelihood of a person committing future criminal actions and the seriousness of those actions, based on their past criminal record.

The total number of points will be calculated by entering the data into a database which an algorithm can use to generate a total point score. The patient selection committee will assess any patient contributions that can't be captured effectively by the database and algorithm, and add their scores to the generated score. Out of the most medically urgent patients that are suitable for the available organ, the patient with the highest social value score will be selected to receive the organ.

## **Conclusion**

It has now been shown just how a final decision on who would be selected as the organ recipient for a transplant could be made under an organ allocation system that included a social value criterion. The criteria for selection would be organised in a similar way to that of the immigration points system, whereby points are given to a patient depending upon which criteria they match, and in the case of the social value criterion for organ allocation, the contributions they make to society. When considering the contributions the person makes, their level of ir/replaceability also needs to be taken into account. Even if someone makes a valuable contribution to society, that contribution might be easily fulfilled by someone else, making the death of the person less detrimental than the death of someone who is more irreplaceable.

It has also been shown that when reaching a decision on a social value score for a patient, rather than applying the social value criteria in a linear fashion in order to narrow down the patient selection, all of the criteria should be applied simultaneously in order to make an informed selection. By taking into account all of the criteria, it ensures that an accurate representation of the social value of the patient is achieved rather than simply a reflection of how valuable a patient is to society from only one aspect. In this way, it can be assured that the organ is allocated to the patient who will create the most welfare for society.

# Conclusion

There has never been enough of a supply of transplantable organs to meet the demand, and so there has been a continual focus on improving the ways in which organs are allocated to patients in order to increase the effectiveness of each organ transplant. There have been many factors incorporated into organ allocation criteria over time which have helped to ensure that each transplant is effective, not only in terms of a successful graft, but also in terms of cost effectiveness and longevity of the transplant. Blood matching, tissue type matching, and time between removal and transplantation of the organ, are all factors that help to ensure that there is a successful graft, and that the organ remains functioning in the recipient as long as possible (NHSBT, 2011). In the US, other factors have also been suggested, such as matching patients to organs based on the expected remaining life years left in both the patient and the organ (McCullough and Schaubel, 2008; Stegall and Stegall, 2009). The aim here is to not transplant an organ with 10 years of function left in it to a patient with only 5 years left to live even following transplant, when there is another possible recipient who has at least 10 years left to live. Improvements in the way organs are allocated are continually being developed and implemented, e.g. the current ATTOM study that aims to “improve equity of access to kidney and kidney–pancreas transplantation across the UK and to optimise organ allocation to maximise the benefit and cost-effectiveness of transplantation” (Oniscu *et al.*, 2016, p. 1). This thesis continues this trend of improving the allocation of organs by suggesting ways in which non-medical criteria can be included in organ allocation decisions, further improving



the non-medical benefits of organ transplantation through better recipient selection.

The main point that I have argued for in this thesis is that there should be the small addition of an extra criterion to the current organ allocation system in order that better use can be made of organs for transplant. And by better use, I mean increasing the overall welfare created with each transplant. The extra criterion that I have argued for is a social value criterion that takes into account how instrumentally valuable a person is to society. Whilst other commentators have also raised the possibility of the inclusion of social value considerations into scarce resource allocation decisions, their attempts at justifying the inclusion have been relatively brief. They have not given enough detail to provide an adequate overview and justification for how such an inclusion would work, or have suggested a type of social value that is ethically unacceptable. In this thesis I have provided a more thorough discussion of how a social value criterion could be included in scarce resource allocation decisions, specifically organ allocation decisions, and shown that such a criterion can be both ethically and practically implemented.

Arguing for such a position has been largely abandoned in recent literature, and the reasons for this are understandable; the position has many negative associations and problems. Making judgments about a person's social value is associated with subjective prejudices and opinions, and when using these judgments to make patient selection decisions for healthcare treatments, the immediate thought is that certain groups of people may be excluded from

treatment, whilst other groups are given universal priority. It might even be argued that there are similarities between such a proposal, and those of other potentially inglorious proposals such as eugenics, forced sterilisation, and euthanasia. Arguing for the inclusion of social value judgments into healthcare provision might be seen as futile, or at the very least, prohibitively problematic, given that it has so many negative associations and facets that need to be covered. However, there are still positive elements to the inclusion of social value considerations in resource allocation, and I have attempted to provide an outline and justification for how this inclusion could be made whilst maintaining other important values such as equality and objectivity.

Whilst the underlying argument for the inclusion of social value considerations into organ allocation decisions comes from a consequentialist background, the argument itself may appeal to proponents of other moral theories. The aim of the proposal is not necessarily to *maximise* the welfare created with each organ transplant, but rather to simply *increase* the amount of welfare that can be created whilst maintaining equality, and equal opportunity to benefit from a resource. Attempting to maximise welfare might involve committing some intuitively immoral actions that will not be acceptable to many people, but simply *increasing* welfare when it involves little or no detriment is something that most people would agree with. It is upon this principle that the argument for the inclusion of social value considerations in organ allocation decisions is made. If more welfare can be created through a certain action than is currently the case, and there is little or no detriment created through the action, then it would be foolish not to carry out that action.

I have shown that including non-medical criteria into the organ allocation process in the form of instrumental social value judgments can be ethically acceptable if implemented in the right way, with such judgments being as objective as possible. In order to maintain the objectivity of these judgements, the scope of the criteria that make up the overall social value judgment needs to be limited. The subjective elements of the criteria need to be removed as far as is possible, whilst still retaining the criteria's effectiveness at accurately reflecting the patient's social value. If the subjective elements remained present in the decision, potential organ recipients may miss out on the chance of an organ based on the values of the selection committee, as was the case at the Seattle Artificial Kidney Center in the 1960's (Alexander, 1962). I have also shown that limits to the extent of the criteria included when making these social value judgments need to be in place for practical reasons. To take into account each and every aspect of the possible criteria within the different contribution categories would require intrusive and lengthy investigations into each patient's life, making reaching a social value decision in a timely fashion a near impossibility. With a more limited scope for the criteria that are taken into account however, the task becomes more manageable and practical for implementation, without sacrificing the usefulness of the judgment.

I began by explaining in Chapter 1, how organs for transplant are currently allocated, and the reasons behind how patients are prioritised. The main principle for organ allocation is that those patients who are medically suitable and in most urgent need, are prioritised for treatment. And where there are two patients who are of similar need and prognosis, it is often the patient who has been on the

waiting list the longest who receives priority.

In Chapter 2, I then went on to highlight the problems with the current organ allocation system. The main problem is that it focuses too much on the effects and welfare for the individual patient from the allocation of an organ, and not enough on the effects and welfare for the wider society. Concern for the wider effects is something that should be factored into the allocation system given that the organs are a social resource, and it is society who is making an investment of the organ in the recipient.

“In “choosing to save” one life rather than another, “the society,” through the mediation of the particular medical institution in question – which should certainly look upon itself as a trustee for the social interest – is clearly warranted in considering the likely pattern of future services to be rendered by the patient (adequate recovery assumed), considering his age, talent, training, and past record of performance. In its allocations of ELT [exotic lifesaving therapy], society “invests” a scarce resource in one person as against another and is thus entitled to look to the probable prospective “return” on its investment.” (Rescher, 1969, p. 178)

Furthermore, the current allocation system already has a strong element of utility promotion within it, and if further utility can be acceptably created with a slight change and addition to the current system, with little, if any, detriment created, it would make no sense not to.

There are also two further problems with the current system in that the definition

of urgency needs to be redefined, and in turn, the waiting time criterion needs to be replaced. Allocating organs to those patients who are in most urgent need is an acceptable method of distribution as, in theory, the patient in most urgent need can be saved who would otherwise soon die without a transplant, and further organs may become available to save the life of the next urgent patient on the waiting list. However, in reality, there is a shortage of organs for transplant, and so patients who are classed as less urgent die whilst waiting for the next organ to become available. Whilst they may be less urgent in medical terms as they are likely to live for a longer period, in real terms, all patients who are likely to die before another suitable organ becomes available are of the same urgency. All face the same fate given that another organ is not likely to become available to save them. As such, I suggested that the most urgent class of patients should be those patients who will die before the next suitable organ is likely to become available.

This leads on to the next problem with the system in that the waiting time criterion used to decide between patients of the same urgency needs to be replaced as it can be unfair to certain patients. Allocating resources on a first-come, first-served basis can be acceptable in some situations, but only when those interested parties all have the option to claim the resource from the same date, and are aware of the option. However, in the case of organ transplants, people who are in urgent need of a transplant may have been registered on the waiting list for a shorter or longer time than someone else on the waiting list through no fault of their own. Two patients who are at the same level of urgency may have been registered on the waiting list at different times due to one patient's illness presenting early and progressing slowly, and another patient's illness presenting later but progressing

faster. It is unfair to use waiting time as a criterion here given that the two patients did not have the opportunity to register on the waiting list at the same time, as one patient did not even have their illness at the same time as the other. As such, the waiting time criterion needs to be replaced by another method of deciding between patients of similar urgency.

I then went on to discuss other possible systems for resource allocation and whether they could offer more suitable alternatives in the organ allocation setting to the prioritarian approach currently in place. It was shown that if the alternative allocation systems are based solely on their main features, e.g. random selection, fair-innings, save the most lives, social value etc. then they do not provide a suitable alternative to a prioritarian approach for organ allocation. However, when *combined* with the prioritarian approach, so that the main feature of the alternative system is applied to the cohort of patients who are in most urgent need of treatment, then they do provide acceptable alternatives, but it is only the social value/needs-based combination system that offers any real benefit over these alternatives. The addition of the social value criterion enables the organ allocation system to take into account the effects of each organ transplant on the wider society and allocate the organ so that not only does the transplant benefit the recipient, but also wider society. It also provides a suitable replacement for the waiting time criterion, so that, out of the most urgent group of patients, the patient who is the most socially valuable will be selected as the organ recipient.

I then went on to outline in Chapter 3 how the inclusion of a social value criterion into organ allocation decisions could work as a replacement for the waiting time

criterion. I also argued that the inclusion of a social value criterion in organ allocation decisions is acceptable, and perhaps even required, based on the role of the government to do what is not only in the best interests of individual members of society, but also society as a whole. Of course, the inclusion of social value considerations into such resource allocation decisions is highly problematic not just in principle, but also for practical reasons.

To highlight the problems that might be encountered when including a social value judgment about a patient in resource allocation decisions, I gave an overview in Chapter 4 of a version of this combination system that was used in the allocation of trial dialysis treatment in the 1960's at the Seattle Artificial Kidney Center. The way in which the system functioned here meant that any social value judgments made were highly subjective. The problem arose from the fact that the committee used to select which patient would receive the organ was a lay committee and based their social value judgments about the patient on their own personal, and often biased views. They had no expertise to assess instrumental social value, and as such, could not objectively make instrumental social value judgments.

The opinions of a patient selection committee being taken into account when making social value judgments on possible recipients is not in itself a bad thing, and is indeed something that actually needs to happen to achieve the aims of the system. However, as explained in Chapter 5, the opinions need to come from experts from the relevant fields who have the knowledge and expertise to make objective decisions about the relative social value of patients. As such, these

experts should make up the patient selection committee, and the same applies to the criteria selection committee. The views of a lay committee are not informed enough to be able to determine what the needs of society are and their relative importance at any given time, and so are not entirely suitable members for the selection committees. The expert criteria selection committee, or possibly working group, would have a more detailed knowledge of the basic needs of society, and be able to create a hierarchy based on the needs of society at different times. Similarly, lay members would not be as informed as experts in the fields of psychology and behavioural economics to know which patients might best meet the needs of society for the patient selection committee. If social value considerations were to be included in organ allocation decisions, an expert committee from the relevant fields would need to play a large part in both the criteria selection and patient selection decisions in order to maintain an objective system, and to ensure that patients are not disadvantaged based on the biased and subjective views.

Objective decisions would need to be made about the overall social value of a patient based on the ways in which they are valuable to society, by considering both their positive and negative active social contributions, and their passive contributions by way of their value to proximate individuals. These different ways in which a person can be valuable to society were described in Chapter 6. The three broad categories in which a person can be instrumentally valuable to society are through their positive active social contributions, their passive contributions through their value to proximate individuals, and through their morality. However, in order to maintain objectivity and practicality when making the social



value judgment, the scope of the investigation into the extent that a patient is valuable in each of these categories needs to be limited. A person's value to their proximate individuals needs to be limited to the number of immediate family members for practical reasons, and the morality category needs to be replaced by a less subjective criterion, but one that still accounts for a person's detrimental contributions. A person's criminal record and the likelihood of future negative active social contributions being made is a suitable alternative that captures at least part of the essence behind the morality criterion. This also has the appeal from a practical perspective, as a person's criminal record is easily accessible. Reducing the scope of the criteria means that the system can be introduced with minimal cost, as the information needed is, for the most part, readily available. Lengthy and intrusive investigations are not required, reducing the amount of time and money required when introducing the criteria, whilst maintaining its usefulness in making an objective social value judgment.

In Chapter 7, I outlined how the final decision on who would be selected as the organ recipient would be made if a social value criterion were included in the organ allocation process. I suggested that the criteria for determining a patient's social value should be applied in a simultaneous manner rather than linearly. By applying the criteria simultaneously, it allows an informed selection to be made about which patient is most socially valuable. In this way, the complete social value of the patient is taken into account. If the criteria were applied linearly, one at a time, narrowing down the potential recipients until only one remained, the aim of the system would be undermined, and patients may be judged on only one or two contributions.

I then went on to describe how points would be allocated to patients based on the contributions that they make. I drew parallels with the immigration points system as, even though the criteria differ, the structure provides a useful framework. This parallel also shows that a points system is able to reflect social contributions, as the immigration points system is itself based on social contributions.<sup>67</sup>

Also outlined in Chapter 7 was the need for both a points algorithm and a patient selection committee. The points algorithm will help to make the patient selection process quicker by calculating the patient contributions that can be easily measured and quantified, such as the type and number of immediate family members, and a person's profession and economic contributions. The human element in the form of the patient selection committee is also needed however, to assess those contributions that cannot be easily entered into an algorithm.

If a social value criterion is introduced to the current system in the way outlined in this thesis, then better use of the organs available for transplant can be made; the overall welfare that occurs from each organ transplant will be increased with little detriment created. Those who are most in need of an organ (and who are medically suitable) will still receive priority for treatment, but instead of using waiting time to decide which of the most urgent patients should receive the organ, the social value criterion would be used. In this way, not only will the individual organ recipient benefit, but so too will wider society.

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<sup>67</sup> However, the social contributions included in the immigration points system are mainly economic in nature.

It might be questioned whether it is even possible for judgments to be made about what the needs of society are, and which patients might be best placed to help meet these needs. Making these kinds of assessments naturally involves predictions about future circumstances, which inherently involve a level of uncertainty. Whilst decisions over future circumstances will always involve uncertainty, this is not necessarily a reason to refrain from making the decision. Treatment decisions are made based on a patient's prognosis, but it is not guaranteed that the patient will benefit as expected (and they frequently don't). Nonetheless, these kinds of decisions are routinely and justifiably made. If relevant information and evidence is relied upon for making these decisions, an informed decision can be made. With the case of the experts on the criteria and patient selection committees discussed in this thesis, there is evidence within their fields that can be drawn upon to make their informed decisions even in the face of uncertainty. For example, psychologists can draw upon studies and research into the re-offence rate of people from different backgrounds and in different situations in order to gain an idea about the likelihood of a person committing future crimes through prevalent trends, and economists can determine which occupations are in short supply and will need more investment. Even though there is uncertainty around what future circumstances may arise and contributions that may be made, reasonable and justifiable predictions can be drawn from the evidence available.

There are other problems that would still need to be resolved before such a system could be put into place, not least of which is the development of an actual algorithm for determining social value, and a decision on how many points should

be given for different social contributions based on the current needs of society. However, the development of these features should be the topic of another project. Such a task would be a job for the experts that I have described given that they have the relevant knowledge and expertise to make these decisions. The objective in this thesis was to simply assess whether there could be a place for social value judgments in organ allocation decisions from an ethical perspective, and to make a suggestion about how they could be implemented from a practical perspective, providing a possible framework for how an organ allocation system including social value considerations could work.

A further problem that would need to be resolved in a separate project is related to public opinion. It would need to be determined how acceptable the introduction of a social value criterion into organ allocation decisions would be in the eyes of the public. If its introduction did not carry public favour, then it is entirely possible that the public will refuse to donate their organs, thereby creating more detriment overall due to exacerbating the shortfall in transplantable organs. Again however, this is a job for someone in a field such as sociology and would be a research project in itself. It might even be beneficial to look at possible marketing options to determine whether the system might gain more public favour when presented in a particular way.

The aim here in this thesis however was to present a positive case for the inclusion of social value criteria into organ allocation decisions and to present a possible option for policy change. I have gone further than previous commentators by providing a more thorough examination of the issue in order to provide a stronger

case for the inclusion of social value criteria, rather than simply giving a brief overview of the issue. Furthermore, I have provided a possible framework for how the addition of a social value criterion could be implemented into an organ allocation system in order to show that it could be practicably incorporated into patient selection decisions. Hopefully it may raise discussion amongst policy makers about rekindling this abandoned approach to resource allocation, but in a different form than it has been implemented in the past, with the further projects mentioned providing the next step forward.

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