Responsibility, fairness and rationing in health care

Alexander W. Cappelen a, Ole Frithjof Norheim b, *

a Department of Economics, University of Oslo and the Norwegian School of Economics, Norway
b Division for Medical Ethics and the Philosophy of Science, Department of Public Health and Primary Care, University of Bergen, Kalfarveien 31, N-5018 Bergen, Norway

Abstract

Objective: People make different choices about how to live their life and these choices have a significant effect on their health, the risks they face and their need for treatment in the future. The objective of this article is, drawing on normative political theory, to sketch an argument that assigns a limited but significant role to individual responsibility in the design of the health-care system.

Method: In developing our argument, we proceed in five steps. First, we review the literature on criteria for priority setting. Second, we explore the most prominent contemporary tradition in normative theory, liberal egalitarian ethics, with the aim to clarify the role of responsibility for choice. In particular, we discuss where liberal egalitarian theories would draw the ‘cut’ between the responsibility of the state (which is extensive) and the responsibility of the individuals (which is limited but significant). In the third step, we identify a priority setting dilemma where the commonly advocated criteria would assign equal priority. Finally, we develop a simple model in order to examine the implications of introducing a well-defined notion of responsibility for choice in a priority-setting dilemma of this kind.

Results: Liberal egalitarianism holds individuals responsible for choices that affect their health, given that (i) the illness is completely or partly a result of individual behaviour and choice; (ii) the illness is not life-threatening; (iii) the illness does not limit the use of political rights or the exercise of fundamental capabilities; and (iv) the cost of treatment is low relative to the income of the patients. The paper shows how this type of considerations can be used to determine an optimal level of co-payments for diseases even when individual choices cannot be observed directly.

Conclusions: It is possible to assign a limited but significant role to individual responsibility in the rationing of health-care resources. The liberal egalitarian argument captures a concern that is not captured by traditional criteria for priorities in health care. It can thus help policy makers in situations where the cost-effectiveness of different alternatives and the severity of the illnesses are approximately the same, or if the society wants to assign some weight to responsibility for choice. It can easily be linked to a system of graduated co-payments, but need not be.

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1. Introduction

So-called life-style diseases, such as obesity, certain types of cancer and cardiovascular disease, constitute an increasing portion of health problems. The probability of acquiring these diseases and the expected
need for treatment is affected by the choices people make about how to live their life. This paper suggests how considerations of fairness related to personal responsibility for own choices should enter into the design of the health-care system. In particular, we ask whether the extent to which a disease is a result of individual choices should be allowed to affect the degree to which it is given priority and the level of co-payments even in the absence of incentive arguments.

The background for this question is the fact that the costs of modern health care are constantly rising, and the menu of possible interventions is steadily increasing. The public is unable and unwilling to pay for all services for which there are documented effects. Doctors and policymakers are therefore required to ration health-care services and sort out priorities among new groups of patients. One policy response within publicly funded health-care systems, such as the NHS or the Scandinavian welfare systems, is to define ‘core services’ that should be a priority while at the same time allowing for private financing of non-essential services [1–5]. Another option is to rank services according to some pre-defined priority criteria, such as cost-effectiveness etc., and introduce co-payment graded according to priority rank [6]. Within such a system, core services would receive full public funding, while “low-priority” services would be provided, but financed partly through co-payment from the patient or supplementary health insurance. Finally, there would be “no-priority” services for which there is a demand, but where society has no obligation to cover the costs. In vitro fertilization, some forms of plastic surgery or the removal of tattoos are commonly cited examples of this type [7,8].

A key question is what criteria should govern the selection of core services and the determination of co-payments. A commonly accepted set of criteria states that the priority of a given condition and its intervention should be assessed in terms of the severity of disease, the benefit from the intervention and the cost-effectiveness of the intervention. The degree to which a disease is a result of factors that people themselves can control, such as their diet and their level of exercise, has not been included in the commonly accepted set of criteria. The medical profession and health politicians have, for good reasons, been reluctant to allow individual responsibility for health affect the extent to which patients should be treated. Nevertheless, we shall in this paper argue that it is possible to assign a limited but significant role to individual responsibility in the rationing of health-care resources.

An example can illustrate the point we are making. In some countries, dental care for adults is not, with some exceptions, covered by the public health-care system. Caries-related disease for adults can partly be seen as a function of as to what degree each person has done an effort to prevent caries. Assume now that the health-care budget in a country is increased. Would it be fair to give priority to dental care for caries in adults (i.e. to include it among the public services) as compared to another conditions, say medical treatment for allergic rhinitis, where the severity of the condition, the benefit from treatment and cost of treatment are about the same—but where the disease is attributable to factors solely outside the affected person’s control? Liberal egalitarian theories argue that society should eliminate inequalities in health that arise from factors outside individual control, but not inequalities in health that arise from differences in choice.

A rejection of responsibility in health care would imply that we could not distinguish between these two cases. The aim of this article is, drawing on normative political theory, to sketch an argument that assigns a limited but significant role to individual responsibility. This argument could help to explain how a health policy with graded co-payment according to priority could be formulated in cases of the kind described.

In developing our argument, we proceed in four steps. First, we review the literature on criteria for priority setting. Second, we explore the most prominent contemporary tradition in normative theory, liberal egalitarian ethics, with the aim to clarify the role of responsibility for choice. In particular, we discuss where liberal egalitarian theories would draw the ‘cut’ between the responsibility of the state (which is extensive) and the responsibility for choice by individuals (which is limited but significant). In the third step, we identify a priority setting dilemma (dental care versus allergic rhinitis) where the commonly advocated criteria would assign equal priority. Finally, we show how this approach can be used to determine a just-level of co-payments for different diseases.
2. Principles and criteria for rationing

Most authors agree that distributive health policies should be aimed at two goals: efficiency and fairness in the distribution of health care [9–17]. Although people disagree about how much weight the different concerns should have, there are some reasons for rationing that almost all theories of resource allocation in health care would recognise [18–22]. This set of accepted criteria states that the priority of a given condition and its intervention should be assessed in terms of:

1. The severity of disease, if untreated.
2. The benefit from the intervention.
3. The cost-effectiveness of the intervention.
4. The quality of evidence on 1–3.

This information can, in concrete rationing cases, be formulated in terms of characteristics of the patient, the condition, and the health intervention in question. A common feature of this set of criteria is that they are forward looking and focused on the consequences of interventions. Forward-looking type of arguments are not concerned with what individuals have done, but rather what will produce the best state of affairs in the future.

It is also possible to identify a set of criteria that no policy document and no established theory of distributive justice have accepted. The list of unacceptable criteria includes race, ethnicity, religion, sex, social status, sexual orientation and physical or mental disability. Such personal characteristics are considered normatively irrelevant from the perspective of distributive justice [23]. These are criteria of rationing that people affected by such decisions would have good reasons to reject [21].

Responsibility for choice of life style is, together with, for example, age, in a third set of criteria, the set of contested criteria [24–28]. Holding individuals accountable for their choices in the context of health care is controversial. The responsibility criterion differs from the criteria in the first set by being backwards looking. It tells us that it is not sufficient to have information about the consequences of possible interventions in order to make priorities. We also need historical information about why there is need for the intervention, in particular whether the need for treatment is a result of choices made by the patient.

In the next section, we explore how the so-called liberal egalitarian theories of justice locate the line between the responsibility of the state and the responsibility for choice by individuals, and discuss how they might respond to the powerful arguments against using responsibility as a criterion in the rationing of health care.

3. Liberal egalitarianism and responsibility

People make different choices about how to live their life and these choices have a significant effect on their health, the risks they face and their need for treatment in the future. Important philosophical and political positions argue that a just health policy must take account of such differences. One prominent ethical tradition that has focused on personal responsibility is liberal egalitarianism.

Liberal egalitarianism combines the radical idea that we want a society where we can live as equals with the idea that people should be held responsible for their choices [31–36]. A liberal egalitarian approach can thus be seen as consisting of two parts. First, the liberal principle that people should be held accountable for their choices, that has been named the principle of responsibility, and secondly, the egalitarian principle that individuals who make the same choices also should have the same outcomes, that has been named the principle of equalisation [37]. On the background of these two principles, liberal egalitarian theories would argue that society should eliminate inequalities in health that arise from factors outside individual control [29], but not inequalities in health that arise from differences in choice [21,30]. It is important to stress that the principle of responsibility is justified by fairness considerations and it applies even in the absence of incentive considerations.

In the context of health policy, there are also strong fairness arguments for not accepting the principle of responsibility. Consider the long-time smoker who at age 60 develops coronary heart disease. He now suffers from angina pectoris and is at risk for getting a myocardial infarction, or even a stroke. The cardiologist makes further diagnostic tests and tells him he needs a percutaneous intervention (PCI). Many think it would be a harsh judgement to deny him the procedure because the disease could be said to be self-inflicted.
Such moral concerns would be even stronger if we consider the case where a patient has already acquired a myocardial infarction, is suffering great pain and is at high risk of dying. Should acute treatment be denied for him? Many would strongly object to this [24]. Perhaps, the strongest moral argument against holding people accountable for the consequences of their choice is found in the view called complex egalitarianism [38]. Securing fair equality of health-related opportunities is important for protecting the capabilities of free and equal citizens. Overemphasising choice and responsibility undermine democratic equality, according to this view. A commitment to equality implies a concern for inclusion, not exclusion [39]. Any plausible interpretation of liberal egalitarianism in health care must respond to arguments of this type.

One response to this argument is to point out that liberal egalitarianism does not necessarily hold individuals responsible for the consequences of their choice. In the context of health care, this latter principle would imply that individuals should have refused publicly financed treatment if the agent could have avoided the need for treatment by making a better choice. The principle of responsibility states that individuals should be held responsible for their choices, not for the consequences of their choices. For example, this argument supports levying taxes on tobacco instead of having lung cancer victims paying for their treatment [40].

However, in this paper, we shall avoid the objections against introducing personal responsibility by focusing on a class of priority setting dilemmas that do not involve important and substantial health-related opportunities. We ask whether it is possible to define a limited but significant role for individual responsibility in cases that satisfies the following condition:

(i) The illness is completely or partly a result of individual behaviour and choice.
(ii) The illness is not life-threatening.
(iii) The illness does not limit the use of political rights or the exercise of fundamental capabilities.
(iv) The cost of treatment is low relative to the income of the patients.

Some elements of dental care for adults might satisfy this condition. In the following sections, we explore the priority of adult dental care as a realistic policy choice where these concerns play a major role.

4. Introducing responsibility for choice in a priority setting dilemma: the dental care versus allergic rhinitis case

In some countries, dental care for adults is not, with some exceptions, covered by the public health-care system. For adults, costs associated with special conditions and where the consequences of non-treatment are substantial, exemption rules typically apply. Consider now that the health authorities want to increase the annual health budget by a given amount money and is contemplating how to allocate these new funds. The choice is between the treatment of caries-related dental diseases and treatment of allergic rhinitis. In the current situation, the costs of antihistamines and nasal steroids for seasonal allergic rhinitis is not reimbursed if the treatment period is less than 3 months/year—which is often the case. Should the prescription rules be more inclusive?

The increase in the health budget is not sufficient to fully finance the treatment of both these illnesses. The government thus considers the following options:

(a) To include treatment for caries-related dental disease for adults in the comprehensive package of core services that is provided for free.
(b) To include from day-1 antihistamines and nasal steroids for allergic rhinitis in the package of core services.
(c) To include both (a) and (b), but with differentiated co-payment.

Regardless of which policy is chosen, special dental problems are exempted as it is today, and the reimbursement rule applies for antihistamines and nasal steroids for allergic rhinitis when the treatment period exceeds 3 months/year.

We make the following not unreasonable assumptions. The severity of both kinds of disease, if untreated, is the same. The benefits from the interventions are the same on average for both options. The relevant treatment costs are the same, and the quality of evidence is equally good. This implies that the traditional criteria for rationing in health care described above give little guidance. Furthermore, it seems that these criteria ignores a morally relevant difference between the two diseases: that allergic rhinitis is a condition that arises from factors beyond each person’s control, while
Caries-related disease can partly be seen as a function of to what degree each person have done an effort to prevent caries (in saying this, we do not deny that there are other factors beyond individual control that partly contribute to caries). We can thus distinguish between three groups of patients.

G1: Those who get caries because of factors outside their control.
G2: Those who get caries because of poor self-care.
G3: Those who get allergic rhinitis because of factors outside their control.

In order to focus on the fairness considerations, we shall assume that a fixed share of the population ignores self-care and that the size of these groups, therefore, is constant.

Since the increase in the health budget is insufficient to finance the treatment of all individuals who develop one of the two illnesses, the government must determine a set of co-payments that are sufficient to finance the deficit. The traditional criteria of severity, expected benefit and cost-effectiveness do not help us in making this decision since we have assumed that these diseases have approximately the same severity and the treatments are equally cost-effective. The question is, thus, how the fact that all individuals who get allergic rhinitis get it for reasons outside their control, while a fraction of those who get caries get it because they have been negligent with their self-care, should affect the way in which we ration the limited public resources between different diseases.

To answer this question, let us ask how we would have distributed the resources if we had full information about each individual’s behaviour. In particular, if we had information about whether or not a person had neglected self-care, should we then hold them responsible for the increase in expected costs? Above, we have argued that a liberal egalitarian theory would want to finance all health-care expenditures due to factors outside the individuals’ control, but none of the costs due to differences in choice. In this context, liberal egalitarianism has the following three goals:

1. G1 should pay the same as individuals who do not develop any disease (from the principle of equalization).
2. G2 should pay the actual cost of their treatment (from the principle of responsibility).
3. G3 should pay the same as individuals who do not develop any disease (from the principle of equalization).

In a situation with full information, it is clear how one would want to determine co-payments in the pursuit of these three goals. The optimal policy would simply be to set co-payments for G2 equal the cost of treatment and then share the new resources in the health budget equally between G1 and G3. However, the government does not have information about whether or not an individual has neglected self-care. There has to be one co-payment for all individuals with the same disease. Given this informational constraint, the pursuit of goal (2) will necessarily violate goal (1). Given the budget restriction, there is also a conflict between the pursuit of goals (1) and (3), because a lower co-payment to those with allergic rhinitis will reduce the funds available to finance treatment for those with caries.

The government is thus faced with a difficult trade-off between incompatible goals: how much should we sacrifice of goal (1) in order to pursue goals (2) and (3). In other words, what is the optimal difference between co-payments for the two diseases?

5. Determining optimal levels of co-payment

To illustrate this problem, let us consider a numerical example. Assume that the cost of treatment for both diseases is 1000 NOK, and that the total adult population is 3 million. The chance of getting caries in spite of self-care is 5% and the chance of developing allergic rhinitis is 10%. Finally, assume that 5% of the adult population neglects self-care and that everyone who neglects self-care develops caries.

Initially, the treatment of both diseases is financed fully by the individuals, and the co-payments for both diseases are thus set equal to the actual cost. Then the health-care budget is increased by 450 million NOK and the health-care authorities have to decide how to distribute these resources between dental-care and treatment for allergic rhinitis. Expenditures due to the basic risk are equal to 450 million NOK, and the first-best distribution is simply to fully finance all those who become sick due to factors outside their control and to levy co-payments equal to 1000 NOK for all those who get caries due to lack of self-care.
However, the health authorities are not able to distinguish between those who need dental care due to lack of self-care and those who need dental care due to the basic risk. Those who neglect their self-care add costs equal to 142.5 million NOK, and the total expenditures are therefore equal to 592.5 million NOK. We thus need to set the two co-payments so as to cover the deficit of 142.5 million NOK. Given the informational constraint, the policy objective is to determine the level of co-payments so as to get as close as possible to the first-best distribution (e.g., the distribution where G2 pays co-payments equal to 1000 NOK and G1 and G3 pays zero co-payments).

The crucial question is what it means to be as close as possible to the first-best distribution in this case. One answer to this question is that we should set the co-payments so as to minimize the total sum of co-payments paid by those ideally should not pay any co-payments, i.e., minimize the sum of co-payments paid by G1 and G3. The solution to this policy problem is seen by observing that it is more costly to reduce the co-payments paid by G1 than the co-payments paid by G3, because reducing the co-payments for G1 also implies that we reduce the co-payments for G2. This additional cost is increasing in the share of dental patients who need treatment due to lack of self-care. In our example, the policy makers will therefore minimize the additive sum of unjust co-payments by setting the co-payment for allergic rhinitis equal to zero and finance the whole deficit of 592.5 million NOK by the co-payments on dental care (i.e. by setting co-payments for caries equal to 487 NOK). This policy will also minimize the share of government funds that is received by those who are sick due to factors under their own control and maximize the share of public funds that is spent on people who are sick due to factors outside their own control.

However, it might be argued that we are not only interested in minimizing the additive sum of deviations from the first-best distribution. The reason for this is that it could be argued that large deviations from the first-best solution are worse than small deviations. It could be argued that it is better to have 1000 people pay 1 dollar more than to have one person pay 1000 dollars more. We can view this as inequality aversion and it captures the idea, well-known from authors, such as Rawls [32], that we might want to give additional weight to those who are worst-off due to factors outside their own control. If policy makers put more weight on large injustices, it might be optimal for the government to set a positive co-payment also for those who need treatment for allergic rhinitis in order to avoid large co-payments for those who need dental treatment due to the basic risk. However, it will never be optimal to set the co-payments for dental care lower than those for allergic rhinitis. In the extreme case of inequality aversion where the elimination of large deviations from the first-best solution is given absolute priority, the policy makers will want to minimize the maximal co-payment for any person who becomes sick due to the basic risk. The co-payments for both dental care and treatment of allergic rhinitis would then be set equal to 240.5 NOK. In practice, the degree of inequality aversion will be a matter for political deliberation.

Generally, the optimal level of co-payments will depend on the share of people who are sick due to lack of self-care and the degree of inequality aversion. An increase in the relative size of G1 will increase the optimal co-payments for dental care, while an increase in the inequality aversion will increase the optimal co-payments for allergic rhinitis.

6. Concluding remarks

In this paper, we have tried to show that it is possible to assign a limited but significant role to individual responsibility in the rationing of health-care resources. We have also argued that this approach captures some morally relevant differences between different alternatives, differences that are not captured by traditional criteria for priorities in health care. It can thus help policy makers in situations where the cost-effectiveness of different alternatives and the severity of the illnesses are approximately the same, or if the society wants to assign some weight to responsibility for choice. It can easily be linked to a system of graduated co-payments, but need not be.

The argument for including individual responsibility in the list of priority criteria developed in this paper is a fairness argument and is not based on incentive considerations. Holding people responsible for their choices with respect to unhealthy life styles could also be justified by incentive arguments. We have, however, ignored such considerations by assuming that people’s behaviour is unaffected by the co-payments in order to focus on the fairness argument.
One important problem with the approach we have proposed has not been discussed in this article. Any theory that attaches importance to individual respon-
sibility presumes that it is possible to identify the factors that are outside the control of the agent and those that are under the control of the agent. How-
ever, it is notoriously difficult to draw a precise ‘cut’ between circumstances and choice. In this paper, we made the important assumption that people are equally free to make the choice of self-care and that dental self-
care requires the same ‘effort’ for all individuals. This assumption could be challenged. There is certainly a correlation between socio-economic factors and dental self-care, and this suggests that the choice of negli-
gence is not fully under the individual’s control. Any policy that attempts to take into account individual responsibility must therefore be aware of the possibility that it might actually introduce a hidden discrimination between different socio-economic groups.

Our primary goal in this article is not to argue for or against dental care for caries, but rather to focus on responsibility in health care. We believe this focus is important for two reasons: First, responsibility is seen as a key feature of liberal egalitarian theories of justice, but has recently been neglected in theories of health-care distribution. Second, we anticipate that modern health policy—with the development of mod-
ern medicine including the new genomics as a driving force—will need a more fine-tuned account of the role of responsibility in health care [41].

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