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The views of physicians and politicians concerning age-related prioritisation in healthcare.

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ABSTRACT

Purpose of this paper

The aim of this study was to describe the view of age-related prioritisation in health care among physicians and healthcare politicians and to compare their views regarding gender and age.

Methodology

Swedish physicians (n=390) and politicians (n=310), mean age 52 years, answered an electronic questionnaire concerning age-related priority setting in healthcare. The questionnaire had fixed response alternatives with possibility of adding comments.

Findings

A majority of the participants thought that age should not influence prioritisation, although more physicians than politicians thought that younger patients should be prioritised. There were also significant differences concerning their views on lifestyle-related diseases and on who should make decisions concerning both vertical and horizontal prioritisation. The comments indicated that the politicians referred to ethical principles as a basis for their standpoints while the physicians often referred to the importance of biological rather than chronological age.

Research limitations

Web-based surveys as a method has its limitations as biased samples and biased returns could cause major problems, such as limited control over the drop-outs. The sample in this study was, however, judged to be representative.

Practical implications

The results indicate that supplementary guiding principles concerning prioritisation in

healthcare are needed in order to facilitate decision-making concerning resource allocation on

a local level.

The value of the paper

This paper adds important knowledge about decision makers' views on age-related priorities

in healthcare, thus contributing to scientific base for prioritisation in healthcare and the

ongoing debate in society.

Key words: Prioritisation, healthcare, resource allocation, decision makers, politicians,

physicians, questionnaire, web-based survey.

Word count abstract: 238 words

Word count manuscript: 5844 words including references, 3 tables, 1 figure

3

INTRODUCTION

The debate about age as a criterion for prioritisation has been going on for a long time and several studies have indicated that age is a criterion that physicians want to use in prioritisation. For example, Myllykangas (2003) found that physicians were less willing to prioritise older people than were nurses, politicians and the general public. This research team also found that physicians were less willing than the other groups to refer older patients for elective surgery (Ryynanen et al., 1997). Even so, it has been shown in several studies that the general public has confidence in physicians as decision makers in priority settings but not in politicians (Werntoft et al., 2005a, Werntoft et al., 2007). The views of physicians and politicians on age-related prioritisation in healthcare are, however, not well known. Investigating and illuminating this seems a matter of urgency as prioritisation will be of increasing importance in the future, partly due to scarce resources in healthcare and partly the fact that people in developed countries are living longer.

In publicly financed healthcare systems, the combination of increasing demand and constrained resources has led policymakers to address the issue of prioritisation more directly than in the past, with the result that priority setting has become more explicit (Ham, 1997). Horizontal, or macro, prioritisation is done on the political level and concerns various fields, for example allocation of resources between non-institutional care and hospital treatment or between different disease groups. However, among citizens, vertical, or micro, prioritisation is discussed most. Vertical prioritisation concerns how care should be carried out and how much effort should be made for individual people. These types of prioritisation are carried out by the working staff who are also responsible for their decisions (SOU, 2001). Both vertical and horizontal prioritisations should stem from knowledge about and views of the needs for healthcare among citizens (Waldau, 2001). From the citizens' point of view, the most

important thing in prioritisation is to have the possibility to receive healthcare and to have their needs met. From the professional point of view, the ambition is to provide the best possible healthcare with the aid of existing knowledge and resources. From the politicians' point of view it seems most important to achieve the goals that have been established for healthcare with the available money (SOU, 2001). As their goals concerning priorities in healthcare differ, their views about what criteria should be used for prioritisation probably also differ.

According to the Swedish Parliamentary Priority Commission, whose aim is to guide decisions concerning prioritisation, prioritisation in healthcare should not be based on chronological age, regarding examinations, treatments, nursing or rehabilitation (SOU, 1995). The work of the Commission is based on three ethical principles: the principle of human dignity; meaning that human dignity should not be based on people's personal qualities or functions in the community, such as ability, social status, income, etc., but seen as a part of their very existence. The principle of need and solidarity; meaning that most of the care resources should be given to those who are most in need while devoting special consideration, for example, to children, patients who have dementia or are unconscious, and others who have difficulty in communicating with people around them. The cost-efficiency principle; meaning that one should aim for a reasonable relation between cost and effect, measured in terms of improved health and enhanced quality of life (SOU, 2001). On the basis of these principles, the ethical framework identifies client groups that should be accorded priority based on the administrative as well as clinical level of care (Ridderstolpe et al., 2003). However, when Ridderstolpe et al (2003) asked 208 physicians if they were aware of the meaning of the three principles for priority setting, approximately 55 % acknowledged that they knew the meaning of the principle of human dignity, while 47 % were aware of the principle of need and

solidarity and 45 % knew the meaning of cost efficiency. These results could be seen to indicate that the recommendations from the Swedish Parliamentary Priority Commission are not well established among physicians, who are those responsible for vertical prioritisation.

The basis for prioritisation has, however, been discussed mainly in relation to the use of age as a criterion. Callahan (1995) stated that age is a legitimate basis for allocation of resources because it is a universal category and can be understood at the level of common sense. He also stated that there should be an opportunity for every young person to become old, and it is only fair to limit assistance to those who are already old to make that possible. This view was, in a way, supported by Daniels (1985) who suggested that rationing by age is permissible under some conditions of scarcity. Williams (1997) required greater discrimination against those who are older and asserted that everyone is entitled to a normal span of health and anyone failing to achieve this has been cheated, whilst those who get more than this are living on borrowed time. Veatch (1988) suggested guidelines for limiting care for people who are terminally ill and old and saw younger people as being worse off than older people because they have lived less of their lives. Several researchers (Bell, 1989, Cohen-Almagor, 2002, Purviance, 1993) have argued against these theorists on the grounds of discrimination and ageism. However, responses have been offered to these criticisms; "for one thing because we will not be able to evade the problem as easily as some critics have proposed, and that an agelimit proposal should be compared with other unpleasant choices, not with an ideal world" (Callahan, 1994, abstract). Physicians and politicians when asked about their attitudes to healthcare prioritisation methods and criteria stated, among other things, that the fact that the patient is older should affect prioritisation (Ryynanen et al., 1999). More politicians (43 %) than physicians (27 %) however, thought it should not. Contradictory views on age as a basis

for prioritisation thus seem to be present, among researchers as well as among decision makers.

Cooke & Hutchinson (2001) looked at gender differences when they studied doctors' professional values. They found that, even though a majority disagreed, male GPs were the most likely to agree that the view of the public and those of health professionals should be given equal weight in decisions about rationing. It was not immediately apparent to the authors why male GPs should feel more strongly about this principle than their female counterparts, but a reanalysis of the data suggested it was a genuine result. Among older people (60-100 years) the view of prioritisation in healthcare also differs between men and women, just as between young-old (60-74 years old) and oldest old age groups (85-100 years old). For example significantly more women than men wanted to prioritise older people in healthcare and significantly more participants > 85 years than participants younger than 85 years thought that being employed or middle-aged is an indicator that strongly should affect prioritisation (Werntoft, 2006). Age as well as gender seemingly influences views on prioritisation in health care, at least in older ages.

Rosén and Karlberg (2002) asked politicians and physicians about who they thought should have the greatest influence on resource allocation in public healthcare. Most politicians (61%) but only 28% of the physicians thought that regional healthcare politicians should have the greatest influence. The general public's confidence in the work of healthcare staff was high in a study by Holmberg and Weibull, (2006), even though it decreased from 85% in 2002 to 81% in 2005. In a study by Werntoft et al (2006) 94% of the older people participating, wanted the physicians to make decisions about prioritisation on a vertical level and 73% on a horizontal level. In studies among the general public, (Mossialos and King,

1999, Worth, 1999) it was also found that doctors enjoyed great confidence as decision makers. Werntoft et al. (2006) further showed that in the reasoning of older people about prioritisation they sometimes expressed contempt for the work of the politicians. Neither local nor national politicians had their confidence as decision makers concerning priorities in healthcare. The study by Holmberg and Weibull (2006) showed that the general public's confidence in how politicians do their work has decreased from 29 % in 2002 to 16 % in 2005. Thus the great confidence in doctors as decision makers seems constant while confidence in politicians is decreasing, not only among older people but also among the general public. This lack of confidence in the work of the politicians among older people, the general public and healthcare professionals is in turn a serious threat to democracy. It therefore seems to be of great importance to illuminate views on prioritisation from the standpoint of politicians as well as physicians.

AIM

The aim of this study was to describe the view of age-related prioritisation in healthcare among physicians and healthcare politicians. A further aim was to compare their views as regards both gender and age.

METHODS

Context

The Swedish healthcare system is financed by taxes and is governed democratically by political decisions in democratically elected conventions, at both local and national levels as well as in county councils (Socialstyrelsen, 1998).

Sample

The sample of physicians was selected from the Swedish register of physicians for 2006. Criteria for inclusion were being aged < 68 years and having a registered e-mail address. An information letter about the study was sent by e-mail to 1376 of the registered physicians i. e. all of the registered physicians that met the criteria, but about 700 letters were returned as undeliverable. A fortnight later the electronic questionnaire was sent to the remaining physicians and after two e-mailed reminders, 390 answered questionnaires (57 %) were returned.

The sample of politicians was selected from all 21 county councils in Sweden. Details of names and e-mail addresses for healthcare politicians, elected in 2006, were collected from the county councils' electronic home pages as well as from contacts with their secretariats. E-mails were sent to all politicians in each county council who were supposed to handle healthcare questions; the number depended on the size of the county council. The information letter about the study was e-mailed to 990 politicians and about 400 were returned as undeliverable. After two e-mailed reminders, 310 answered questionnaires (52 %) were returned.

Only about 30 politicians and physicians actively declined to participate due to heavy workload or because they simply did not want to answer the questions, five politicians stated that they did not handle healthcare questions. We have no information about the number of people who actually received the questionnaire. It should be noted that there is also no information available about how many of the participants use and open their e-mail.

The questionnaire

The questionnaire that was used comprised questions about prioritisation and resource allocation; 24 questions in all with fixed response alternatives. The participants had the possibility to comment on most questions and/or their answers. This paper presents the responses to 10 questions concerning age-related prioritisation (Tables 2–3, Figure 1), while the questions concerning resource allocation will be presented elsewhere. The questionnaire was developed based on a review of the literature and on the ethical principles; *the principle of human dignity*; *the principle of need and solidarity* and *the cost-efficiency principle* and the questions were developed in relation to diseases occurring in old age falling within the scope of feasible treatments and diseases related to lifestyle. The questionnaire has been tested in a pilot study (Werntoft et al., 2005b) and has been used earlier to explore older people's views on prioritisation in healthcare (Werntoft, 2006).

Analyses

Comparisons between groups were made using the Chi-square test for categorical data. A multinomial logistic regression analysis was performed with the independent variables profession (politicians and physicians), sex and age groups (<53 years and 53 years and over). Various prioritization criteria were used as dependent variables. Confidence intervals (CI) of 95 % were calculated for the odds ratio (OR) and *p*-values <0.05 were considered statistically significant. Statistical data analysis was carried out using the SPSS, version 14.

Comments from the participants were analysed using a manifest qualitative content analysis (Berg, 2004) focusing on the content i.e. the surface structure presented in the message. The

text in relation to each question was read and labelled by both authors independently who thereafter discussed the categorisation of the content until agreement was reached.

RESULTS

Political party affiliation among the politicians was in line with the representation in the Swedish Parliament (www.riksdagen). The mean age among the politicians was 53 year and 31% were women. Twenty-three percent of the politicians were new to healthcare and had been elected in 2006; 60 % had been healthcare politicians for between four and 12 years and 16 % for more than 13 years. Among the physicians, 44 % had worked for more than 25 years, 35 % for more than 10 years, 10 % for more than five years and 6 % for less than five years. Thus more politicians than physicians were novices in their work. The physicians' mean age was 51 year and 55 % were women. (Table 1).

INSERT TABLE 1

Most of the politicians (95 %) and physicians (82 %) did not think that age should influence prioritisation. Among physicians, 16 % thought that younger patients should be prioritised compared to 4 % of the politicians (p<0.001) (Table 2). A multinomial logistic regression analysis showed that physicians were four times more willing to prioritise young people than politicians were (OR 4.33; 95 % CI 2.19-8.57, p<0.001) with "age should not constitute prioritisation" as reference. The quantitative content analysis showed that in their comments, the politicians referred to utility and the ethical platform and/or ethical principles more often than the physicians, while the physicians more often referred to biological age being more important than chronological age as a basis for prioritisation. The patients' needs and quality

of life were other criteria that physicians emphasised as being more important than chronological age per se.

"Age has always been a part of prioritisation in healthcare, resources are constantly more or less limited." (a physician)

"Chronological age per se should not be a reason for prioritisation but there could be other reasons that are relevant for not prioritising an older person. It is much more important to consider biological age" (a physician)

"I agree with prioritisation as ranked by the Swedish Parliament and the principle of human dignity, everyone should be treated equally" (a politician)

INSERT TABLE 2

One question concerned whether people should have the same priority with respect to life-saving treatment, regardless of their age, and 57 % of the decision makers agreed with this statement, 71 % of politicians compared to 41 % of the physicians, while 16 % of all participants thought that among people with life-threatening illnesses, younger patients should have some priority over older people, 8 % of the politicians compared to 22 % of the physicians (p<0.001) (Table 2). A multinomial logistic regression analysis showed that physicians were almost four time more willing to accept that "among people with life-threatening illness, younger patients should have some priority over older people" than politicians were, with "people should have the same priority with respect to life-saving treatment, no matter what their age is" as reference (OR 3.97; 95 % CI 2.62-6.00, p<0.001).

In their comments both politicians and physicians clearly emphasised that it was important to save a life with dignity and not prolong suffering. Politicians remarked that all people were equal and some politicians also emphasised that these decisions should be made by professionals or physicians and not by politicians.

"If we don't treat everybody equally, we are back to the time when we sent old people to a suicidal precipice. That is not the case, is it?" (a politician)

"You have to do a cost-benefit analysis which, if you allow that complicated diseases are more common among older, can result in that the costs outweighing the benefit." (a physician)

"I don't want to grow old in a society where my human value decreases with age." (a physician)

Both professions used younger age as a criterion when age was the only criterion presented for prioritisation between patients needing a new kidney. However, when other criteria such as pain were added, (when choosing between three patients needing a new hip) the patients' age became less important. Illnesses such as dementia or cardiac disease also became more important criteria than age when the participants prioritised three patients needing surgery to improve their eyesight. According to 58 % of the decision makers a healthy 80-year-old patient should be prioritised for cataract surgery before younger patients with a lower health status, however more politicians (22 %) than physicians (13 %) wanted to prioritise the younger patient with dementia (p=<0.010) (Table 2). There were also differences between men and women concerning who should be given cataract surgery and the multinomial

logistic regression analysis showed that men were twice as willing to prioritise a 60-year-old with dementia than women were, with "an 80-year-old healthy person" as reference (OR 2.25; 95 % CI 1.28-3.97, p=0.005).

The comments from the politicians revealed that they thought that younger patients, because of their age, would have the best chance of living the longest time in good health, although they emphasised that this decision should be made by the physicians on medical grounds. Another reason to prioritise young patients was that they would then be able to return to work. One reason stated to justify prioritising older patients was that they might have been waiting longer than the younger ones for treatment. The comments from the physicians indicated that the medical and social information about the patients presented in the questionnaire was too insufficient by far but that probably the youngest patients would be in better shape for surgery and the subsequent therapy. The younger patient would probably also have the highest number of quality adjust life years (QALY) left. Reasons given for prioritising the oldest patients by both politicians and physicians was that they would have a more difficult life without treatment, for example, the condition of a patient with dementia will probably decline with bad eyesight. Both professions also commented that one important criterion for the patients who needed cataract surgery, regardless of age or other circumstances was the extent to which their vision was reduced. Both politicians and physicians argued that quality of life (QoL) would improve most for patients with bad pain but also remarked that all patients should have the right to treatment, some politicians and physicians thought that this should be given within three month and referred to the Swedish guaranteed limited waiting period for people who seek care.

"A person with dementia is more dependent on vision, otherwise he will be

more confused and his quality of life will decline." (a politician)

"To cure and relieve pain is, in my opinion, important in healthcare and is frequently ignored in favour of other achievements - therefore I consider pain a primary criterion but also that the other two should have the chance to get a new hip." (a physician)

"All these three people would get pleasure from improved vision, the only difference I see is that the healthy person's activities in daily life could be more easily continued, such as daily walks, social relations and managing the household, things that the other two probably won't be able to do. (a physician)

When the participants were to choose between different methods or criteria for prioritisation, such as lottery, patient's importance to society, age, ability to pay and importance for family support, most participants (53 %) wanted to use the patient's age while 30 % wanted to use the patient's importance for family support (Table 3). A multinomial logistic regression analysis showed, however, that the younger age group (<53 years) were less willing to use "the patient's importance for family support" as a criterion, compared to the older age group (<53 years and over), with lottery as reference (OR 0.55; 95 % CI 0.29-0.88, p=0.017).

INSERT TABLE 3

When ranking four patients with lifestyle-related diseases for surgery, the majority (44 %) prioritised an infertile woman (37 % of politicians and 49 % of physicians) while an alcoholic received the lowest prioritisation for treatment, prioritised by only 10 % (18 % of politicians and 5 % of physicians) (p<0.001). The other two patients, a football player and a

smoker, received the highest rank from 28 % and 18 % of the participants respectively (Table 2). Among both politicians and physicians the comments revealed that athletes should either pay their own costs or use their own insurance. The participants also commented on the importance of surgery for the smoker but pointed out that these diseases were self-inflicted and should not be prioritised at all. Politicians more than physicians referred to the principle of human dignity and meant that everyone should be treated equally. The politicians also emphasised that alcoholism should be acknowledged as a disease and physicians that the woman might be sterile because of earlier healthcare failure.

"The smoker and the alcoholic seem to be in danger and must be prioritised." (a politician)

"The football player has hopefully lived a healthy life and taken responsibility for his health.

The problem of the others, is in a way, self-inflicted caused by addiction." (a physician)

"No one should be prioritised. Athletes have to pay their own costs as long as society, the public and sponsors allow them to continue their activities. They can pay through an insurance system." (a physician)

Concerning decision making in *vertical priority settings*, 83 % of the participants preferred the doctors (89 % of the politicians and 78 % of the physicians) to decide the priorities. More physicians than politicians, however, wanted national politicians or the National Board of Health and Welfare to make these decisions (p=0.002). Concerning *horizontal prioritisation* i.e. resource allocation, 20 % of the physicians wanted doctors to make the decisions compared to 11 % of the politicians. That these decisions should be made by local politicians

was the choice of 48 % of the politicians but only 6 % of the physicians, instead, 70 % of the physicians wanted national politicians or the National Board of Health and Welfare to make those decisions, compared to 38 % of the politicians (p=<0.001) (Table 3). The comments from both politicians and physicians revealed that they thought that in vertical prioritisation the doctors should decide in consultation with the working team and the patient and/or the patient's next of kin. The decision should be in line with local and national guidelines stipulated by politicians.

"National guidelines first, then doctors. Close to the patient, of course, but under the politicians' eyes, preferably mine ©" (a politician)

When the participants had to grade the extent to which different criteria should affect prioritisation, indicators such whether the patient was old, still working or living in an institution, more politicians than physicians (p>0.001) thought that the indicators should *not* affect prioritisation. Physicians on the other hand, more than politicians, thought that the fact that the disease was self-inflicted should affect prioritisation (p<0.001) (Figure 1).

DISCUSSION

Webb-based surveys are still a new phenomenon in Sweden and the method has its limitations as biased samples and biased returns could cause major problems. Zhang (1999) suggested that individuals in a population or sample may not have equal access to the Internet and therefore, by using the Web in combination with e-mail, postal mail, or fax, researchers can take advantage of the Internet's unique capabilities and reduce the risk of limiting responses to certain groups of individuals in a sample. The high drop-out in this study might be explained by the fact that not all politicians and physicians use their e-mails or even their

computers, although they are supposed to in their work. The drop-outs are however unlikely to be systematic i.e. the representativeness of different parts of the country and different fields of activities was satisfactory. Gosling et al. (2004) also emphasized that internet data are not free from methodological constraints, such as the lack of control over the participants' environment and the susceptibility to fake and repeat responses. Nevertheless Internet methods have many important advantages over traditional methods. Researchers surveying issues directly related to homogeneous groups should not be overly concerned about the percentage of questionnaire returns, as the representativeness will probably be high. This presumes, however, that enough responses are received to meet statistical assumptions (Leslie, 1972). Perhaps the most challenging aspect of using the Internet for survey research is the lack of research guidelines. More research is needed to explore the full potential of the Internet for survey research (Zhang 2000).

The transferability of the result from the manifest qualitative analysis of the comments from the participants ought to be considered further. Since not all participants made comments on the questions they cannot be used to draw any conclusions about differing views on prioritisation between politicians and physicians. However, the comments indicated that their views were founded on different principles where the politicians largely referred to ethical principles and also pointed out that some questions concerned medical decisions and thus were not for politicians to answer. The physicians, on the other hand, often referred to quality of life and used the lack of information about the patients as an argument when they did not want to answer a question. Thus, the comments indicated that the politicians were more orientated than the physicians concerning the ethical principles that form the basis for the ethical platform, on which prioritisation in healthcare in Sweden should be based. Molloy et al (1991) found similar results when asking physicians about caring for older incompetent

patients and the authors suggested that more attention should be paid to the training of physicians in ethical issues in clinical practice. These results and the result from Ridderstolpe et al. (2003 could indicate that knowledge about ethical principles are not well established among physicians. However, the present curriculum for university programs in medicine in Sweden includes seminars concerning medical ethics and ethical principles are held regularly throughout the education (www.ki.se; www.lu.se). This indicates that the physicians of tomorrow will probably be better prepared as regards the basis for decision making in healthcare.

The results showed that a majority of both politicians and physicians thought that everyone should have the same priority with respect to life-saving treatment, regardless of age.

However, both professions used younger age as a criterion when age was the only criterion for prioritisation presented. But when other criteria, such as pain were added, the patients' age became less important. When older people (60-100 year) were asked the same questions the answers were similar, but among older people who received public care and service, 80 % stated that people should have the same priority with respect to life-saving treatment, regardless of age (Werntoft et al. 2007), compared to 71% of the politicians and only 41 % of the physicians in this study. However, as both politicians and physicians clearly emphasised that it was important to save a life with dignity and not prolong suffering they probably have a different focus on the question than old people who are in need of healthcare service.

Furthermore, physicians most certainly have experience of this situation in reality, i.e. having to prioritise between a younger and an older person for a special treatment, which might explain their standpoints.

Although the answers from politicians and physicians showed many similarities, differences between them were also found. For example concerning lifestyle-related diseases, the politicians prioritised an alcoholic and emphasised that alcoholism was a disease in itself while the physicians prioritised an infertile woman, and emphasised that healthcare may have caused her infertility. Significantly more physicians than politicians also thought that the fact that the disease was self-inflicted should affect prioritisation as well as the fact that the patient was old or was working. A Finnish research team (Ryynänen et al., 1999) asked the same questions about indicators for prioritisation of nurses, doctors, politicians and the general public. In that study, the doctors also significantly more than the politicians, thought that being old or having a job should affect prioritisation. The politicians' views on resource allocation between patients seem to be more in line with the national guidelines presented by the Swedish Parliamentary Priority Commission, stating that age should not affect prioritisation. Apart from the differences seen between physicians and politicians, only small differences were seen in the study group related to age or gender. This is in contrast to earlier studies among older people, where relatively large differences were seen between age groups as well as between men and women in the study group, concerning their views on age as a criterion for prioritisation (Werntoft et al 2004). This can be explained by the fact that age, as well as gender differences, becomes more visible with higher age. It might also be a reflection of cohort effects, meaning that people born in the inter-war years have different experiences and views on ageing and roles in society than people born after the Second World War.

Views on who should be responsible for decisions about prioritisation in healthcare differed between politicians and physicians. Concerning *vertical prioritisation* more politicians than physicians thought that physicians should decide, concerning *horizontal prioritisation* more politicians than physicians, thought that the local politicians should decide. The results

indicate that physicians to a much greater extent want national guidelines and national politicians to provide a frame for resource allocation, and that local politicians should have only a limited influence in those issues. This is in line with findings from Rosén and Karlberg (2002) who also asked politicians and physicians who should have the greatest influence on resource allocation (i.e. horizontal prioritisation) in public healthcare. Most politicians (61 %), but only 28 % of the physicians, thought that regional healthcare politicians should have the greatest influence and 25 % of the physicians instead wanted Members of Parliament to have the greatest influence. The results of our study might be a sign of that the guidelines outlined by the Swedish Parliamentary Priority Commission provide little support for decisions concerning resource allocation and that supplementary guiding principles are needed. There is thus a need for a national effort to provide well-founded directions that can be used in making decisions about resource allocation on a local level.

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REFERENCES

- Bell, N. K. (1989) What setting limits may mean: a feminist critique of Daniel Callahan's Setting Limits. *Hypatia*, 4, 169-78.
- Berg, B. L. (2004) *Qualitative research methods for social sciences*. 5th ed: Boston, Allyn and Bacon.
- Callahan, D. (1994) Setting limits: a response. Gerontologist, 34, 393-8.
- Callahan, D. (1995) Setting limits. Medical goals in an aging society. Washington, D.C., Georgetown University Press.
- Cohen-Almagor, R. (2002) A critique of Callahan's utilitarian approach to resource allocation in health care. *Issues Law Med*, 17, 247-61.
- Cooke, L. & Hutchinson, M. (2001) Doctors' professional values: results from a cohort study of United Kingdom medical graduates. *Med Educ*, 35, 735-42.
- Daniels, N. (1985) Just healthcare, Cambridge, Cambridge Univ. Press.
- Gosling, S. D., Vazire, S., Srivastava, S. & John, O. P. (2004) Should we trust web-based studies? A comparative analysis of six preconceptions about internet questionnaires. *Am Psychol*, 59, 93-104.
- Ham, C. (1997) Priority setting in healthcare: learning from international experience. *Health Policy*, 42, 49-66.
- Holmberg, S. & Weibull, L. (2006) *Science in Society* (In Swedish: Vetenskapen i samhälletresultat från SOM-undersökningen 2005). *VA-rapport 2006:1*. Vetenskap & Allmänhet.
- Leslie, L. (1972) Are High Response Rate Essential to Valid Research? *Social Science Research*, 1, 323-334.
- Molloy, D. W., Guyatt, G. H., Alemayehu, E., Mcilroy, W., Willan, A., Eisemann, M., Abraham, G., Basile, J., Penington, G., Mcmurdo, M. E., et al. (1991) Factors affecting physicians' decisions on caring for an incompetent elderly patient: an international study. *CMAJ*, 145, 947-52.
- Mossialos, E. & King, D. (1999) Citizens and rationing: analysis of a European survey. *Health Policy*, 49, 75-135.
- Myllykangas, M., Ryynanen, O. P., Lammintakanen, J., Isomaki, V. P., Kinnunen, J. & Halonen, P. (2003) Clinical management and prioritization criteria. Finnish experiences. *J Health Organ Manag*, 17, 338-48.
- Purviance, S. M. (1993) Age Rationing, The Virtues, and Wanting More Life. *The Journal of Medical Humanities*, 14, 149 -165.
- Ridderstolpe, L., Collste, G., Rutberg, H. & Ahlfeldt, H. (2003) Priority setting in cardiac surgery: a survey of decision making and ethical issues. *J Med Ethics*, 29, 353-8.
- Rosén, P. & Karlberg, I. (2002) Opinions of Swedish citizens, health-care politicians, administrators and doctors on rationing and health-care financing. *Health Expect*, 5, 148-55.
- Ryynanen, O. P., Myllykangas, M., Kinnunen, J. & Takala, J. (1997) Doctors' willingness to refer elderly patients for elective surgery. *Fam Pract*, 14, 216-9.
- Ryynanen, O. P., Myllykangas, M., Kinnunen, J. & Takala, J. (1999) Attitudes to health care prioritisation methods and criteria among nurses, doctors, politicians and the general public. *Soc Sci Med*, 49, 1529-39.
- Socialstyrelsen (1998) *Healthcare in Sweden 1998* (In Swedish: Sjukvården i Sverige 1998). The Swedish National Board of Health and Welfare.
- SOU (1995) Priorities in health care. Ethics, economy, implementation. Final report by The Swedish Parliamentary Priorities Commission. (In Swedish: Vårdens svåra val), Stockholm, Ministry of Health and Social Affairs.

- SOU (2001) Priorities in health care. Perspectives for politicians, profession and citizens. Final report by The Swedish Parliamentary Priorities Commission. (In Swedish: Prioriteringar i vården). Stockholm, Ministry of Health and Social Affairs.
- Waldau, S. (2001) *Priorities in healthcare: saving for justice* (In Swedish: Prioritering i hälso- och sjukvården: att hushålla för rättvisa), Lund, Studentlitteratur.
- Veatch, R. M. (1988) Justice and the economics of terminal illness. *Hastings Cent Rep*, 18, 34-40.
- Werntoft, E., Hallberg, I. R., Elmståhl, S. & Edberg, A.-K. (2005a) Older people's views of priorities in health care. *Aging Clin Exp Res*, 17 402-411.
- Werntoft, E., Edberg, A-K., Rooke, L., Hermeren, G., Elmstahl, S. & Hallberg, I. R. (2005b) Older people's views of prioritization in health care. The applicability of an interview study. *J Clin Nurs*, 14 Suppl 2, 64-74.
- Werntoft, E. (2006) Older people's views of prioritisation and resource allocation in health care. *Doctoral Dissertation from Department of Health Sciences*. Lund, Lund University.
- Werntoft, E., Hallberg, I. R. & Edberg, A.-K. (2007) Prioritisation and resource allocation in health care. The views of older people, receiving continuous public care and service. *Health Expectations*, 10, 117-128.
- Williams, A. (1997) The rationing debate: Rationing health care by age: The case for. *BMJ*, 314, 820-5.
- Worth, C. (1999) Rationing. Use of representative health panel shows changes in public attitudes to rationing. *BMJ*, 318, 941.

www. ki.se (Accessed 2007-11-20)

www.med.lu.se (Accessed 2007-11-20)

www.riksdagen.se (Accessed 2007-10-12)

Zhang, Y. (1999) Using the Internet for Survey Research: A Case Study. *J Am Soc Inf Sci.*, 51, 57-68.

TABLE 1. Characteristics of the participants

	Politicians	Physicians	Total
	n=310	n=390	n=700
-			
Gender %			
Men	69	45	59
Women	31	55	41
Age			
Mean (SD)	53 (11)	51 (9)	52 (10)
Educational level %			
Primary <10 years	8		3
Secondary >10 years	25		10
Tertiary, university degree	67	100	87
Fields of activity %		Physicians	
Anaesthesia and intensive		•	
care		10	
Internal medicine		35	
Paediatrics		10	
Psychiatry		10	
Surgery		25	
Other		10	
Political party	Politicians	Representation in	
r		the Swedish	
		Parliament	
Centre Party	11	8	
Green Party	5	5	
Left Party	8	6	
Liberal Party	12	7	
Moderate Party	19	24	
Social Democrats	31	37	
Swedish Christian		- ·	
Democrats	10	6	
Other	4	4	

TABLE 2. Priority settings. The distribution of the politicians' and the physicians' responses. Chi² calculated for differences between the two groups.

			101	I OII CIAILS			p-value
	n=700 (%)	(%)	n=31	n=310 (%)	n=390 (%)	(%	
Who do you think should be prioritised in healthcare?							< 0.001
Younger patients	71	(11)	11	4		9	
Older patients	10	6	4	Ξ	6 (2)	5)	
Age should not constitute prioritisation	585	(87)	272	(95)	313 (8)	2)	
What alternative do you think is most fair? (from Nord et al 1996)							<0.001
Among people with life-threatening illness, younger patients should have some							
priority over older people	109	(16)	25	(8)	84 (22)	5)	
People should have the same priority with respect to life-saving treatment,							
unless they are very old	179	(27)	4	(14)	135 (35)	2)	
People should have the same priority with respect to life-saving treatment,							
regardless of age	380	(57)	220	(71)	160 (41)	1)	
Who should be the one to have a new kidney?							0.216
A 60-year-old woman	475	(95)	166		309 (96)	(6	
A 70-year-old woman	10	(2)	ω		7 (2		
An 80-year-old woman	14	3	∞	(5)	6 (2)	·	
Who should be the one to have a new hip joint? ³		,			,		0.093
A 60-year-old man with walking difficulties	47	8	22	(10)		_	
A 70-year-old man with bad pain	424	(74)	170	(9/)	264 (72)		
An 80-year-old man using a wheelchair because of his bad hip	104	(18)	31	(14)			
Who should be the one to have cataract surgery to improve the eyesight?							0.010
A 60-year-old with dementia	80	(16)	40	(22)	_	<u> </u>	
A 70-year-old with coronary disease	128	(26)	38	(21)	(28)		
An 80-year-old healthy person	293	(58)	102	(57)	191 (60)	<u> </u>	
Which of the following patients should be ranked first for treatment?							<0.001
A patient who smokes, refuses to stop and needs a coronary by-pass operation							
	100	(18)	42	(18)		_	
A patient who is an alcoholic and needs a liver transplant	99	(10)	40	(18)	16 (5)	<u> </u>	
A patient who is a football player, injured during training and needs a new knee							
to be able to continue his sporting activity	162	(28)	62	(27)	100 (29)	6	
A patient who, because of several abortions, is infertile and needs an operation	C V	3		í		ć	
to be able to get pregnant	720	(44)	8/	(77)	100 (44)	(6	

TABLE 3. Priority settings. The distribution of the politicians' and the physicians' responses. Chi² calculated for differences between the two groups

Questions	Total %	%	Politicians	ians	Physician	p-value
			n=310 (%)	(%)	n=390(%)	
What method or which criterion ought to be used when choosing						
between patients who should be satisfactorily treated?						p=0.175
Lottery	77	(13)	56	(13)	48 (14)	
The patient's importance in society	23	4	9	(3)	17 (5)	
The patient's age	307	(53)	114	(20)	193 (54)	
The patient's ability to pay						
The patient's importance for family support	177	(30)	80	(34)	97 (27)	
Internal missing	116		81		35	
Who should make the decisions in vertical priority settings? (from						
Mossialos & King, 1999)						p = 0.002
Doctors	550	(83)	254	(88)	296 (78)	
Nurses	5	Ξ	ω	Ξ		
Local politicians	6	Ξ	4	Ξ	5 (1)	
National politicians	48	6	6	(3)		
The National Board of Health and Welfare	43	6	12	4		
The public	7	Ξ	2	Ξ		
Internal missing	38		56		12	
Who should make the decisions in priority settings for resource						
allocation? (from Mossialos & King, 1999)						p < 0.001
Doctors	107	(16)	31	(11)	76 (20)	
Nurses	7	Ξ	5	6	2 (1)	
Local politicians	159	(24)	137	(48)	22 (6)	
National politicians	284	(43)	82	(28)		
The National Board of Health and Welfare	06	(14)	28	(10)	62 (16)	
The public	12	6	7	$\widehat{\exists}$	10 (3)	

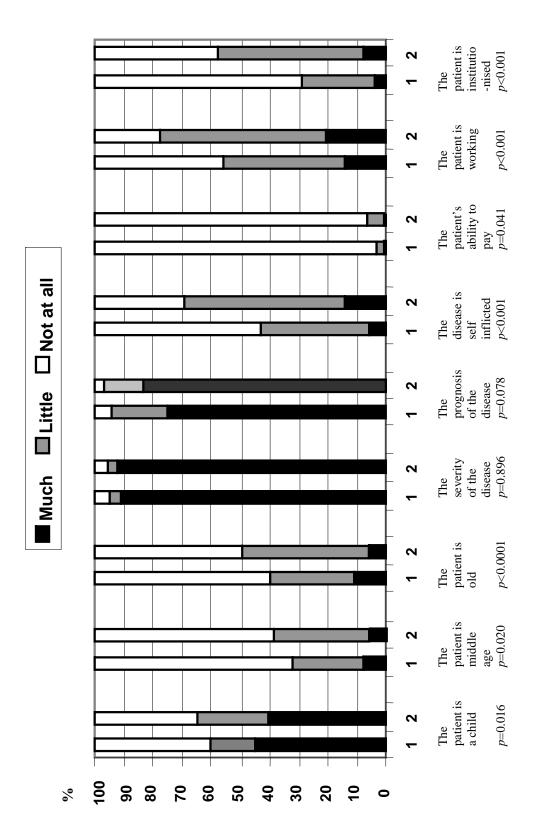


Figure 1. How indicators are perceived to affect prioritisation decisions. 1= politicians, 2= physicians