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# Self-referral in a gatekeeping system: patients' reasons for skipping the general-practitioner

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## ABSTRACT

In the Netherlands general practitioners act as the gatekeepers at the primary level to the more specialized and more expensive secondary health-care. As a rule, patients are required to have a referral from their general practitioners to be able to utilize these services. Not all private insurance companies, however, require a referral letter from their customers before reimbursing them for their costs or do not always exert a control whether such referral indeed had taken place. A mail-questionnaire was targeted to a specific group of 2000 privately insured patients to find out the reasons of self-referral. The findings suggest that patients self-refer to a specialist for medical complaints for which they expect to end up at the specialist anyway as they consider these problems as specific for the specialist. Complaints of patients who first visit their general practitioners, however, might be considered as less typical to the specialist. Patients who are living in relatively highly urbanized areas, who are better educated, and who expect to achieve a better quality of communication at the consultation with the specialist, more commonly skip their GPs before visiting a specialist.

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## 1. INTRODUCTION

Currently, two main types of health care systems can be observed in most European countries. On the one hand, there are systems which give patients unrestricted access to the services of medical specialists (e.g. Belgium, France, Germany, Finland, Sweden). On the other hand there are health care systems which refer patients to medical specialists (e.g. England, Denmark, Norway, Spain). The health care system of the Netherlands falls into this second category. In referral systems, general practitioners (GPs) act as the gatekeepers to specialist care. In other words, patient access to more specialized (and more expensive) services of medical specialists is regulated by their GPs. A system in which GPs act as gatekeepers to specialist care generally results in lower health costs [1,2]. An important goal of referral systems is to improve the efficiency and quality of medical care, both at the primary and secondary levels. This explains the interest in

gatekeeping both in Eastern European countries that are reforming their health care systems [3] and in the United States where managed care (including a limited access to specialized services) is rapidly becoming the dominant model for insurance and provision of health care [4].

In the Netherlands, however, the application of the general principle of gatekeeping differs in practice, according to the type of health insurance. For the publicly insured-about 60% of the population [5] with an income below a certain annual level-this requirement is absolute. A publicly insured patient in all cases needs a 'referral card' written by his<sup>1</sup> GP to be able to visit a medical specialist. Even in cases where a patient directly consults a specialist, for example in emergency cases, a referral card from the GP still has to be obtained afterwards. Only with this card, can medical specialists claim their fees to the health insurance fund. The privately insured, however, have more 'opportunities' for self-referral before visiting a medical specialist, i.e. at their own volition and not by referral from the GP. For this group of patients, the referral-requirement is dependent on the insurance company they choose. Medical specialists send a bill to their privately insured patients who in turn, are reimbursed by their insurance companies. In spite of the fact that the policy of the Dutch government is to strengthen GPs gatekeeping position, not all private insurance companies require a referral letter from their policy holders before reimbursing them for the bills of medical specialists. In cases where such a referral is required, private insurance companies conduct few checks on whether such a referral had in fact taken place. There are several reasons for this such as the competition between the insurers and perception of the insurers that people do not often skip their GPs before visiting a medical specialist. In a study, however, where heads of out-patient departments were interviewed, proportions of privately insured self-referring patients to out-patient departments were estimated to be between 10 and 50% of the cases [6].

Research on self-referral in countries where the GPs are gatekeepers to the secondary health services is a neglected area. In Denmark, among a small proportion of the population (3%) who chose part self-payment of medical costs and could in turn visit a specialist without referral, the proportion who contacted specialists within a year was found to be higher than among the rest of the population who fell under the compulsory referral rule, but were entitled to receive the services of the GP free of charge [7]. The former group of patients belonged to higher income groups and more often belonged to higher ranks on the occupational ladder. A study in the United States where direct access to certain specialists is increasingly being limited through managed care showed that self-referring parents to paediatricians did so because they thought that the child's regular physician was unconcerned about the medical problem [8]. A majority of self-referring American patients to internists, on the other hand, did not have a family physician [9].

In systems with restricted access to specialist care, Emergency and Accident (E&A) departments are sometimes used as a 'safe haven' for specialist care. In England, a limited number of studies on self-referral focus on this aspect of self-referral. These studies and a few in the United States conclude that patients sometimes use E&A departments as outpatient clinics for convenience, and sometimes also for previously existing medical complaints [10-14]. Further, dissatisfaction with the primary care providers [15] and workload of these providers [14] are given as a reason by self-referrers to E&A departments.

In the Netherlands, studies on self-referral and its relation to the gatekeepers

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<sup>1</sup> In this article, in all cases where we refer to the patient as 'he', we also mean 'she'. The former subject is chosen only for the purposes of fluency in reading.

position of the GPs are also scarce. There is evidence that between one-fifth and one-fourth of the contacts between privately insured Dutch patients and medical specialists were 'initiated' by the patients themselves [5,16]. However, what 'own initiative' means is controversial. A patient who visits his GP with a request to be referred to a specialist also falls into this category, as well as the one who decides to consult a specialist directly. Other studies analysing the gatekeepers position of the Dutch GPs concentrate on E&A department visitors [17,18]. These studies conclude that an important proportion of these patients had medical complaints which could actually have been treated by their GPs.

The aim of this article is to investigate the question of self-referral and to develop a theoretical framework for the phenomenon of self-referral in countries with a gatekeeping system. It is important to understand why patients choose to skip their GPs in these systems. However, we do not aspire to give a representative description of the extent to which self-referral occurs in the Netherlands. Instead, we intend to test some of the hypotheses derived from our theoretical framework. We test the gatekeeping position of the GPs using data from a relatively small and selective group of privately insured patients, namely those who have a financial incentive for skipping their GP. The study can be regarded as a pilot with the aim to shed light on characteristics of self-referring patients and their reasons for not complying with referral rules. In this article there are two main research questions to be explored:

- How is the gatekeeping position of the GPs conceived among the group of patients who has the most interest in skipping the GP?
- To which extent do financial considerations play a role in skipping the GP?

In addition, we have formulated the following sub-questions:

- To which medical specialists do patients mostly self-refer?
- For which medical complaints do patients mostly self-refer?
- What are the socio-economic characteristics of patients who choose to skip their GPs?

## 2. THEORETICAL FRAMEWORK

In this article, it is assumed that the decision of patients to skip their GPs are determined by the following three groups of factors:

- patient associated factors (e.g. demographic, and socio-economic characteristics, medical complaints, social networks);
- image-forming of patients with respect to their GPs (values and expectations of the patients);
- institutional/structural factors (e.g. insurance system).

We consider the following patient associated factors to be of importance: At first, demographic characteristics of patients may influence the extent to which patients decide to self-refer. Depending on their age, patients may prefer certain medical problems to be treated by a specialist rather than their GPs because they may be more worried about their illness or consider the need for treatment by a medical specialist to be urgent. We hypothesize that families with young children, or patients in older age-groups belong to this category. Secondly, the social and economic characteristics of patients, such as their income, education, and place of settlement (urban/rural) provide patients with certain 'resources and restrictions' that either encourage or discourage self-referral. Patients with higher incomes may have fewer considerations about the financial consequences of visiting a specialist without a referral letter from their GPs. Those with a limited income, however, may consider it necessary to visit their GP first to avoid additional costs that might arise

as a result of the (theoretical) check by their insurance companies. People with higher levels of education may more often consider it as their individual rights to visit a medical specialist without being dependent on the decision of their GPs. In addition, these patients may have a better recognition of their medical problems, in the sense that they may have a clearer idea of the type of specialist to consult. This, in turn, may lead to a weaker motivation for visiting their GP first with a concern to avoid time loss. Patients living in highly urbanized areas have more specialist-services available, and thus have an advantage in terms of accessibility of specialists compared to those living in smaller settlements.

Thirdly, social networks of patients may be of importance. Patients having acquaintances in the health sector may have an additional 'resource': using the help of these acquaintances to overcome certain barriers that may be involved in making an appointment with a medical specialist (e.g. requirement of a referral letter from the GP, waiting lists at the out patient departments).

Finally, perception and the state of the patients with regard to their medical complaints influences the context within which patients decide to self-refer. In cases where patients perceive these complaints as serious, life-threatening, and urgent, they will be more inclined to self-refer. An initial visit to a GP in these cases may be considered a loss of time, as patients may think that the GP would refer them to the specialist anyway.

We consider image-forming by the patients about their GPs and specialists in general, of essential importance in their decision to disregard the GPs' role as a gatekeeper. Image-forming is shaped by the values and expectations of the patients concerning GPs and specialists. In this study, the value-expectancy model of motivations developed by Fishbein [19] is applied to the context of patients' motivations in skipping their GPs. The model is widely applied in social research to predict behaviour including its wide application to psychological research problems [20], prediction of fertility and family planning behaviour [21], and motivations for migration [22]<sup>2</sup>. In this study, values and expectations of patients are considered as determinants of image-forming which in turn influences the context within which patients make their decisions.

According to the value-expectancy model, people have certain goals that they want to achieve and they assign certain values to these goals. Within this context, motivation for a certain behaviour is a subjective, anticipatory weighing of factors which are involved in achieving these goals. If a person thinks that he will achieve his most valued goals at a certain place or as a result of a certain behaviour, he will be more motivated to act in a way which will lead to the desired outcome. In analytical terms, the motivation for a certain behaviour depends on the sum of the value-expectancy products; that is:

$$SI = \sum_{i=1}^n V_i E_i$$

where SI is the strength of intentions for that certain behaviour, V is the value of the outcome, E is the expectancy that alternative places will lead to the desired outcome, and i refers to the specific goals. The multiplicative assumption in determination of these motives exists, because of the fact that if either the importance of a particular goal is low or the expectancy related to that specific goal is weak, then that component will contribute little to the total intentions [22].

In the application of the model to this study, we hypothesize that a person's goals or values and the perceived likelihood of attaining these goals at alternative care providers shape the self-referral behaviour. In other words, patients tend to visit a

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<sup>2</sup> For a detailed description of the value-expectancy model of migration and its practical applications, see [23–25].

health care provider who will provide them with whatever goal(s) they value the most. Patients who perceive that the likelihood of attaining their most valued goals concerning health care and care providers will be achieved by consulting a specialist, will be more inclined to self-refer. It is obvious that this assumption can be applied to situations where there are no strong external restrictions on choice. Although the Dutch health care system is based on gatekeeping, as mentioned above, for the privately insured the need of a referral remains as a theoretical principle rather than a practical requirement.

The last element we hypothesize to be of importance in self-referral is the institutional/structural factors such as the insurance system: Contrary to a more flexible approach by private insurance companies to gatekeeping in the Netherlands, for the publicly insured self-referral is practically impossible as this group of patients are in all cases are required to have a referral from the GP. Unfortunately, we cannot test the influence of the insurance system on self-referral as our sample refers to privately insured patients, only.

### **3. METHODOLOGY**

#### **3.1. Source of data**

In order to answer the research questions stated in Section 1, a survey based on mail-questionnaires was carried out by the Netherlands Institute of Primary Health Care (NIVEL). The survey targeted 2000 privately insured clients of a big insurance company who had declared costs of a visit to a medical specialist in the preceding calendar year and who were not covered for the consultations to a GP. The company requires that patients have a referral letter from their GPs so that they can be reimbursed for the costs of specialist consultation (with the exception of a consultation to an ophthalmologist).

It has to be pointed out that the sample population is not representative for the Dutch population. The specific choice for the sample was made for the following reasons: the main aim of the mail-questionnaire was to find out how the patients who might have the most interest in skipping the GP (i.e. financial interest) conceive the gatekeeping role of their GPs and how important indeed financial considerations were for them in self-referring. These patients would most probably, among other reasons, consider it to their advantage to skip the GP as the cost of visiting a specialist would be covered by their insurance, while that of the GP would not. Further, the sample was restricted to the group of patients where a substantial proportion of self-referrals could be expected in order to facilitate case-finding. Former studies had indicated that self-referral is a 'rare-event' in the total population [26,27].

In this study, self-referral is operationalized in the broadest terms: all cases where patients made a first visit to a medical specialist, without first consulting their GPs, are considered as a self-referral. Visits to ophthalmologists (2% of the first consultations) were therefore also included as a self-referral, as our focus is on the cases where the patient decides to consult a specialist without contacting his GP. The flow of questions that were developed to identify 'self-referring' patients are presented in Fig. 1. The limited percentage of visits to E&A departments (2%) were not considered as 'self-referrers', as almost all of these cases were related to accidents. These patients are different from 'true' self-referring patients who deliberately choose to skip their GP.

The mail questionnaire further included information about patients' demographic, social and economic characteristics; medical complaints for consultation; reasons for self-referral, various attitude questions relating to gatekeeping, and finally statements



related to values and expectations regarding specialists and the GP. The majority of these statements were developed and tested as analytical instruments in other NIVEL studies. A few were developed specifically for this questionnaire.

#### [FIGURE 1]

### 3.2. Response rate

Initially, a response rate of 39.2% was achieved after the questionnaires were mailed to the respondents. About a month later, a follow-up reminder was sent as a result of which the response rate increased to 52% (n = 1039). The resulting response rate is comparable to the annual national Dutch Health Care Surveys (conducted by the Central Bureau of Statistics) based on mail questionnaires, where the response rate has been between 50 and 55% in recent years [28].

Table 1 shows the age and sex distribution of the respondents and non-respondents.

The response rate is higher among women than men. It is the lowest among age group 0–4. The respondents have a mean age of 53 and are, on average, 5 years older than non-respondents. A younger non-respondent population is most probably a result of considerably high non-response rates among population under the age of 14 where the parents/caretakers were asked to fill in the questionnaire in the name of their children.

Of the 1039 respondents, an unexpected 17% reported that they had not visited a medical specialist in 1995, reducing the number of our final sample size to 861 (see Fig. 1). This drop-out was caused by the registration system of the insurance company in question. For administrative simplicity purposes, patients who had visited care-providers at the primary level such as physiotherapists, were registered in the files as having visited medical specialists.

#### [TABLE 1]

### 3.3. Analyses

Data were analyzed by using uni and multivariate techniques. Respondents who had self-referred for a first consultation were provided with 21 possible reasons for self-referral and were asked to state the importance of each of these reasons in their specific decision to self-refer (4 = most important of all, ... 1. absolutely no reason). They were also provided with an open-ended 'other' category. Following a multiple response analysis, a factor analysis was applied to analyze the reasons for self-referral. The respondents were provided with a series of statements (goals) relating to health care providers and their services for an analytical application of the value-expectancy model. They were first asked to rate the importance of these 'goals'. Then they were asked to state whether they thought they could achieve each of these specific 'goals' by visiting their GP or by visiting a specialist ('expectations') (Table 2).

In the analysis, these expectancy ratings were coded into expectancy-scores for the GP and the specialist. If the respondent thought that a 'goal' was better achieved at the GP's, the GP scored 1 and the specialist 0 for that specific 'goal', or vice versa. If the respondent stated that in terms of a specific goal both the GP and the specialist were equally good, both care providers scored 1; if they were thought to be both equally bad, they both scored 0. In this way, a value-expectancy score was calculated for each goal. By applying the formula in Section 2; composite value-expectancy scores (using all given goals) were calculated both for the GP and the specialist. At the second step, a principal components analysis was applied to

identify groups of goals. The value-expectancy scores for the GP and the specialist for the identified components were, at a later stage, used as explanatory variables in the logistic regression to predict self-referral among this specific group of patients.

In order to explore the background characteristics of self-referring patients, univariate analyses were applied where the significance of variables was tested by chi-squares.

[TABLE 2]

## 4. RESULTS

### 4.1. Most commonly self-referred specialists

The respondents were asked to state the nature of their last visits in 1995 to a medical specialist. One-fifth had reported that their last visit to a medical specialist in 1995 was for a first consultation (Fig. 1). For slightly more than three quarters it was a follow-up; for a small group of patients, the last visit was to an E&A department. A minor group gave other reasons.

Almost one-quarter of the patients whose last visit to a medical specialist was for a first consultation stated that they had made an appointment themselves with the specialist in question without having contacted their GP (or another specialist) at all. Three quarters of these self-referred patients reported that they had not contacted or informed their GP at all, even after the visit to the specialist. It is remarkable, however, that the majority of our sample who are not insured for visits to the GP still did choose to consult their GPs before visiting the medical specialist in question.

Ophthalmologists are the most commonly self-referred specialists (by almost half the patients), most probably due to the fact that the respondents do not initially need to have a referral letter from their GP to be reimbursed for the costs of these visits. Gynaecologists are the second most commonly self-referred specialists (by 40%), followed by ENT-specialists and dermatologists (by one-third, respectively) who are all visited without the referral from the GP more often than the average (i.e. 24%). Orthopaedists, general surgeons, urologists, and internists, on the other hand, are most commonly visited by patients who had first visited their GPs and were referred to this specialist by the GP (by more than 80% of the patients, respectively).

### 4.2. Medical complaints of self-referring versus GP-referred patients

In Table 3, medical complaints for the first specialist consultation for self-referring and GP-referred patients are compared (patients could state more than one complaint, if they had any). These complaints relate to the field of the specialist consulted. Complaints of self-referring patients ranged from acute to chronic, minor to life-threatening. More than one-third of these patients visited a specialist for complaints related to their eyes or to get or renew their spectacles. The second most common group of reasons were related to medical complaints of female patients, such as those related to menstruation or menopause, or other gynaecological problems (14.4%). Diseases of the skin, high blood pressure, problems of the ear and complaints related to the urinary system were all mentioned by one-tenth of the self-referring patients, respectively. One-quarter of the patients, who did first visit their GP and were referred to the specialist had complaints related to the musculoskeletal system. These complaints are followed by diseases of the skin and

problems related to the eye.

[TABLE 3]

### 4.3. Reasons for skipping the GP before visiting a medical specialist

#### 4.3.1. Reasons that are considered to be important in self-referral

Top-ten 'important' reasons of self-referral are presented in Table 4. More facilities/services provided by the specialist and need of medical help which is considered by the patient as typical to a specialist are the two most commonly stated important reasons for self-referral. Further, to avoid time-loss by skipping the GP, self-referral as a habit, to avoid paying for a GP consultation, and feeling certain that the GP would have referred anyway, have been mentioned as reasons to self-refer by half the patients, respectively.

To provide additional insight into the reasons of self-referral, factor analysis was applied with varimax rotation and maximum likelihood extraction (Table 5). This analysis produced six main groups of reasons for self-referral, which together explain 64% of the total variance with reliability coefficients ranging from 0.67 to 0.80. Two groups of reasons, namely, problems of GP access and a positive image of the specialist together explain one quarter of the total variance among self-referring patients. Furthermore, negative impressions of the GP, need for a second opinion and the urgency of the problem, form groups of reasons for self-referral. Financial considerations, i.e. avoiding paying for a GP consultation, appear as a factor but do not correlate with any other reason (explaining 7% of the total variance).

[TABLE 4]

[TABLE 5]

#### 4.3.2. Values and expectations regarding the GP and specialists

The value-expectancy scores were initially calculated as composite scores (i.e. for all the statements or 'goals' presented) for the GP and the specialist. These scores were further compared between self-referred patients and GP-referred patients. The composite value-expectancy score for the specialist is higher than that for the GP among self-referring patients (Table 6). When the group of patients who were referred by their GP to the specialist are considered, a reverse pattern is observed, however: the composite value-expectancy score for the GP is higher than that for the specialist. These findings support our hypothesis that patients who expect to achieve their most valued 'goals' by consulting the specialist would be more inclined to self-refer.

At the second step, value-expectancy scores were calculated as a set of sub-scale scores to reflect different potential motivational elements for self-referral. Principal components analysis was applied to determine these clusters of goals. As a result, two groups of goals were identified:

1. Quality of communication: to be always taken seriously; to be given a good explanation of the treatment; to be given enough time and attention; to have the health-care provider understand the patient's concerns (reliability coefficient: 0.75).

2. Accessibility: not to pay out of one's own pocket; being informed about the



costs of treatment; having a friendly doctor; having an easily accessible doctor (reliability: 0.60).

The value-expectancy score for quality of communication at the specialist is higher among the self-referring patients than that for the GP. For the second component, accessibility, there are no significant differences between the scores for the GP and the specialist, among the self-referring patients.

When the GP-referred patients are considered, however, the value-expectancy score for accessibility is higher for the GP than for the specialist. Although the mean value-expectancy score for the GP in terms of quality of communication is also higher than that for the specialist, this difference is not statistically significant.

#### [TABLE 6]

#### *4.3.3. Attitudes towards the referral system*

In the questionnaire the respondents were also asked about their attitudes related to the Dutch gatekeeping system. More than half of the self-referred patients (60%) and a big majority of the GP-referred patients (83%) stated that they found it in general 'good' to visit their GP before consulting a medical specialist. But this did not mean that they did so without any questioning of the system. Not only almost all self-referred patients, but also a big majority of GP-referred patients, thought that they should be able to visit a medical specialist without the requirement of a referral from their GP, whenever they wanted to.

#### **4.4. Background characteristics of self-referring patients**

Table 7 presents background characteristics of self-referring and GP-referred patients at their first consultation with a medical specialist. Parallel to our expectations, patients with higher educational levels and those living in highly urbanized settings more commonly self-refer. Patients with lower educational levels and those living in less urban settlements, however, more often first consult their GPs. The percentage of self-referring patients in the highest income group, among those who have acquaintances in the health sector and those who consider their medical complaints as 'urgent' is higher than the patients who did first visit their GPs. These differences however, are not statistically significant. Similarly no significant differences are found among patients with different demographic characteristics or among those who were in different states of being worried about their complaints.

A logistic regression was applied to analyze the influence of these background differences at the multivariate level. Due to the low number of cases in the self-referral group, no significant relations were found.

#### [TABLE 7]

### **5. DISCUSSION**

In countries where the health system is based on the gatekeepers role of the GPs, research on self-referring patients to medical specialists is a neglected topic. This is also the case in the Netherlands. In the Dutch health care system, the organization of the insurance system provides the privately insured with more 'opportunities' to disregard the rules of referral. As a result of policies of insurance companies, a privately insured patient (who is covered for the costs of the GP) does not

necessarily have to pay for the costs of a visit to a medical specialist even if the visit took place without a referral letter from the GP. Insurance companies, for several reasons do not always exert controls whether a referral indeed has taken place. Publicly insured, on the other hand, have to pay the costs of a visit to a specialist from their own pocket if they choose to skip the GP before visiting a specialist. Evidence from previous research in the Netherlands indicated that among privately insured patients self-referral was not uncommon, but still a 'rare-event'.

The current study was designed to shed light on the phenomenon of self-referral and its underlying reasons. For case-finding reasons and to investigate the extent of gatekeeping function of the GPs, a mail-questionnaire was targeted to a specific group of 2000 privately insured patients of a private insurance company: those who were not covered for the GP-consultations and therefore were assumed to have at least a financial interest in skipping the GP. In our specific group it was important to find out the role of financial factors in the decisions of those who decided to self-refer. Although it may be expected that non-response and drop-out may have caused a selection-bias, the resulting 52% response rate was comparable to that of annual national Dutch Health Care Surveys.

The results showed that a quarter of this specific group of patients visited a medical specialist for a first consultation without contacting their GPs at all. Financial considerations, that is, not having to pay for a GP consultation, were stated only by 46% of the patients as an important reason for self-referral, and ranked at the fourth place. Instead, need of help considered to be typical to the specialist, having more or better facilities at the specialist, and avoiding time-loss as a result of a consultation to the GP were among the most commonly stated reasons. Self-referring patients, further had higher value-expectancy scores for the specialist in relation to the quality of communication.

A clear trend was found in the medical complaints of self-referring and GP referred patients: patients self-referred to a specialist for medical complaints for which they expected to end up at the specialist's anyway, and therefore tried to save time. Patients who first visited their GPs and were referred to the specialist, on the other hand, most commonly had complaints which might be considered by the patients as less 'typical' to a specialist. Patients, in these cases, may not also often know what the relevant medical specialism is and therefore need the advice of their GPs.

Our bivariate analyses also showed that as hypothesized self-referral is more common among the higher educated and those living in highly urbanized areas. While the former group of patients may more often consider it as an individual right to self-refer to a specialist and therefore disregard the role of their GPs as a gatekeeper. For the latter group, however, better availability of secondary services in urban areas may play a role.

Overall results of this study imply that the longstanding gatekeeping position of the GPs in the Netherlands is widely accepted by the people. In a specific group of patients who have a financial interest in skipping their GPs, still three quarter chose to visit their GPs before consulting a specialist. But this does not mean that gatekeeping position of the GPs is accepted without any questioning: a vast majority of all the patients also believe that they should be able to have the freedom to consult a specialist without having to visit the GP first, if they wish. These may include cases where the patients think they need the advice of a specialist rather than their GP, or cases where they are familiar with the health problems they face, for example, in the case of chronic diseases.

Due to the small scale of the study, our results on self-referral should not be considered as representative for the Netherlands. There is a general feeling, among the scholars that self-referral in the Netherlands may increase in the future. This is

due to several developments: as far as the privately insured are concerned, the Dutch government is considering to ask private insurance companies to include the compulsory referral system in their policies, and also to apply stronger controls for the implementation of this regulation. To which extent this would be followed by the insurance companies is not clear, however. Recently, some of the public insurance companies have also dropped from their policies the requirement of a referral card from the GP for consultation to a specialist. This may increase the incidence of self-referral also among this group of patients. Further, unification of European countries and easier utilization of health care facilities 'across the border' may in the long run have its implications on the Dutch referral system [29].

All these national and international developments may influence the gatekeeping system in the Netherlands. In some cases the 'bureaucracy' of this system may lead to discrepancies between the patients' wishes and the interests of the insurance companies on the one hand, and the goals of Dutch policy makers with regard to cost-containment in the health care system by preventing unnecessary use of hospital care, on the other.

We hope that this study will inspire both Dutch researchers and international scholars in countries where the health system is based on the gatekeeping position of the GPs, to further investigate the topic through larger scale studies.

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FIGURES AND TABLES

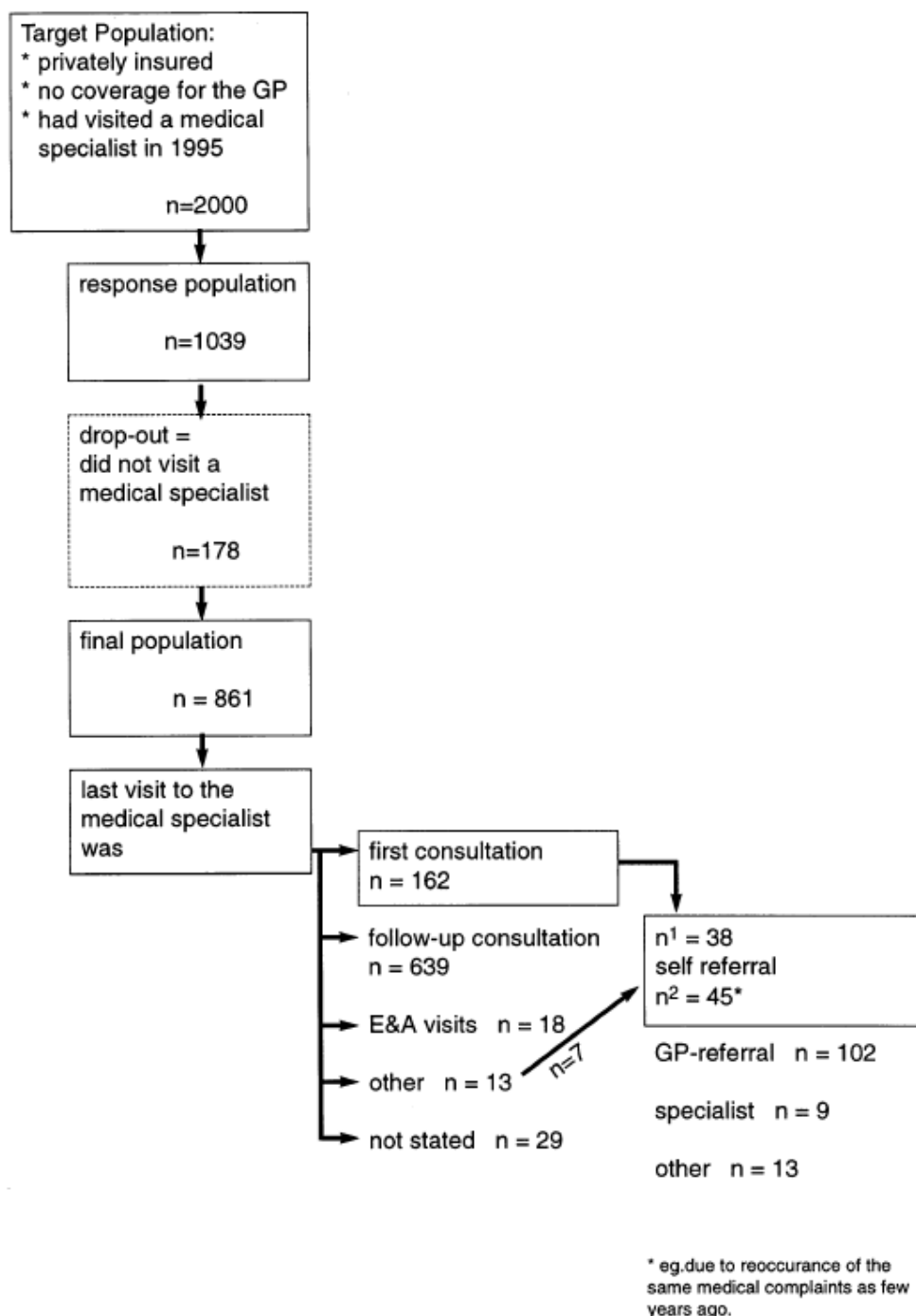


Fig. 1. Selection of the self-referring patients.



Table 1  
Age and sex distribution of the response and non-response population

Age	Response			Non-response		
	Men	Women	Total	Men	Women	Total
0-4	0.4	0.5	0.5	2.4	2.3	2.3
5-14	3.2	1.8	2.4	8.9	9.7	9.3
15-40	10.4	13.0	11.8	13.7	16.2	14.9
41-64	69.8	69.5	69.7	63.8	55.2	59.9
65-74	11.5	9.9	10.6	5.8	5.0	5.4
75+	4.7	5.2	5.0	5.4	11.7	8.2
Total	45.9	54.1	100	54.8	45.2	100
<i>n</i>	470	555	1025	528	433	961
Unknown			14			
Mean age	54.0	52.5	53.2	47.7	48.0	47.8

Table 2

Goals	Values	Expectancies
The GP/the specialist...		
1. Should always take me seriously	1. Not important	1. Better at the GP
2. Should give me a good explanation on the treatment	2. Somewhat important	2. Better at the specialist
3. Should give me much time and attention during the consultation	3. Important	3. Both as good
4. Should understand the fact that I do sometimes worry	4. Very important	4. Both as bad
5. Should tell me how much the treatment costs and what amount would be reimbursed		
6. Should let me come for a visit in between on the same day, if I want to		
7. Should finally let me choose the treatment I want		
8. Should do his work in such a way that I won't have to pay out of my own pocket		
9. Should always be friendly		
10. Should be easily accessible, if I want to go there		
11. Should work efficiently		

Table 3  
Comparison of self-referring and GP referred patients according to most common medical complaints for consulting a medical specialist<sup>a</sup>

Medical complaints	Self-referred	GP-referred
To get/renew spectacles	16.9	7.7
Complaints related to menstruation/menopause/female genital organs	14.4	5.7
Complaints related to eye (e.g. pain, redness, discharge)	11.9	6.7
Diseases of the skin (e.g. acne, eczema, rash)	9.5	8.7
High blood-pressure	9.5	1.0
Complaints related to ear (e.g. pain, infection, discharge)	9.5	6.7
Complaints related to urinary system (other than related to bladder)	7.1	5.8
Fear for (another) serious/fatal disease	4.8	—
Complaints related to heart (e.g. pain, fast beating)	4.8	3.8
Complaints related to nose (e.g. bleeding)	4.8	1.0
Complaints related to legs/knee/ankle/foot	2.4	14.4
Complaints related to neck/shoulders/back	2.4	11.9
Complaints related to abdomen	2.4	5.8
Complaints related to throat (e.g. pain, infection)	—	4.8
Complaints related to stomach (e.g. pain, heartburn)	—	4.8
<i>n</i>	42	99
Not known	3	3

<sup>a</sup> More than one medical complaint could be stated by the respondents.

Table 4  
Top ten reasons for self-referral: percentage of self-referring patients for whom the specific reason was 'important' in skipping the GP

	%
Need of typical specialist help; GP wasn't suitable for the problem	58.5
More facilities at the specialist	58.5
Time-gain, did not need to visit the GP first	48.8
Finance, did not need to pay for a consult to the GP	46.3
Habit, mostly makes an appointment with the specialist without consulting the GP	46.3
GP would have referred anyway	41.5
Has more confidence in the specialist	36.6
Needed medical help directly	29.3
To soothe the mind/reassurance	17.1
Could visit the specialist on the same day	17.1

*N* = 41

not stated = 4

Table 5  
Results of factor analysis on reasons for self-referral

	Eigen value	Variance	Alpha
Factor 1: positive impressions about the specialist <sup>a</sup> Need of typical specialist help More confidence in the specialist More facilities at the specialist	3.89	12.4	0.75
Factor 2: urgency Need of direct help To avoid the consequences of a 'too late' referral	3.02	10.3	0.80
Factor 3: difficulty in accessibility of the GP GP is difficult to reach by phone To soothe the mind/reassurance Difficulty in the accessibility of the GP during vacation	1.79	13.1	0.73
Factor 4: second opinion Second opinion To soothe the mind/reassurance	1.64	10.2	0.80
Factor 5: negative impressions of the GP Habit to self-refer GP doesn't know me and my problems GP can't offer enough time and attention	1.29	10.8	0.67
Factor 6: financial reasons Didn't need to pay a consult to the GP	1.14	6.7	

<sup>a</sup> Only variables with factor loadings higher than 0.50 are included in the factors.  
*n* = 41, n.s. = 4

Table 6  
Means of value-expectancy scores for GP and specialist according to type of referral at the first consultation to a medical specialist

	Self-referred		GP-referred	
	GP	Specialist	GP	Specialist
Total	16.94	19.28 <sup>a</sup>	19.32	17.34 <sup>a</sup>
Factor 1 (quality of communication)	9.98	11.70 <sup>a</sup>	11.18	10.86
Factor 2 (accessibility)	7.59	7.56	8.28	6.71 <sup>a</sup>
	<i>n</i> = 41		<i>n</i> = 102	
	ns = 4			

<sup>a</sup>  $p \leq 0.05$

Table 7  
Background characteristics of self-referring and GP-referred patients at the first consultation with a medical specialist (%)

	Self-referred (max $n = 45$ )	GP-referred (max $n = 102$ )
Demographic characteristics		
Gender		
Male	55.3	52.0
Female	44.7	48.0
Age-group		
0-14	2.6	2.0
15-40	18.4	13.7
41-64	65.8	74.5
65+	13.2	9.8
Resources and restrictions		
Monthly income (in Dutch guilders)		
LT 2200	8.6	9.3
2200-3100	—	9.3
3100-4200	22.9	25.6
4200-5100	14.3	19.8
5100+	54.3	36.0
Degree of urbanization		
Not at all	8.1	21.6
Low	24.3	24.7
Moderate	13.5	26.8
High	27.0	10.3
Very high	27.0	10.3
$p (\chi^2) = 0.02$		
Education		
Primary	10.5	4.9
Secondary	15.8	46.1
High school/university	73.7	49.0
$p (\chi^2) = 0.00$		
Acquaintances in the health sector		
Yes	59.5	43.9
No	40.5	56.1
Urgency of the complaint		
Not urgent	35.3	47.5
Somewhat urgent	32.4	32.3
Urgent	32.3	20.2
State of the patient		
Not worried	29.4	29.6
Somewhat worried	35.3	50.0
Worried	35.3	20.4