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## Direct access in primary care and patient satisfaction: A European study

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### ABSTRACT

**Objective:** This study addressed the question to what extent gate-keeping or direct access to health care services influences the satisfaction with GP-services by the population in 18 European countries ("old" EU-countries plus Norway, Iceland and Switzerland).

**Methods:** Two datasets were collected. Firstly, country experts were asked to indicate for 17 different health care providers whether they were directly accessible. A direct accessibility scale was computed from the percentage of services that were directly accessible. Secondly, for patient satisfaction the EUROPEP study was used. This dataset contained information about patient satisfaction with general practitioners services in 14 European countries.

**Results:** If more health care providers were directly accessible in a country, patients showed a higher satisfaction with general practice than in countries where more referrals were required (Pearson's  $r = 0.54$ ,  $p = 0.05$ ). Satisfaction with organisational aspects of general practice (concerning amongst others waiting time and possibilities to make appointments) correlates significantly with a high score on our direct accessibility measure (Pearson's  $r = 0.67$ ,  $p = 0.01$ ). Satisfaction with patient physician communication (Pearson's  $r = 0.46$ ,  $p = 0.10$ ) and medical technical content of the care (Pearson's  $r = 0.41$ ,  $p = 0.14$ ) are not influenced by direct accessibility.

**Conclusions:** Direct accessibility appeared to be important for patients. Apparently, if patients have freedom of choice for the type of health care provider, they evaluate the GP-services more positively. However, this mainly concerns satisfaction with organisational aspects of GP-services; the accessibility does not influence patient's judgement about the actual care provided by their GP.

### 1. INTRODUCTION

In Europe there are roughly two models that determine patient's access to health care. The first model is the gate-keeping system. Here patients first have to see the general practitioner for all health complaints. When more specialised care is required, the patient receives a referral. The second model is the direct-access system, which leaves patients free to visit either a general practitioner first or to visit directly a specialised physician. Countries using the first model will be called here gate-keeping countries and countries using the second model direct-access countries.

There has been some debate on the question which type of system is preferable. WHO always has stressed the importance of 'gate-keeping'-type of systems (primary care led) as a organisational model for structuring health care, but evidence that outcomes of these systems are better is scarce [1-6]. Starfield showed that health care systems with an emphasis on primary health care had lower costs and better health outcomes [1,7]. Delnoij et al. confirmed the costs, but not the health outcomes [2]. In some direct-access countries, the rationale of cost-containment gave impulse to plans for the introduction of gate-keeping-like systems. For instance, Belgium, France, and Germany recently

showed initiatives to introduce a gate-keeping system. In Belgium, plans are made to introduce a general medical file for each patients. Patients should choose which general practitioner is to hold their files. Due to funding limitations, this plan will initially be introduced for the 60 years and older [8]. In France, financial incentives (46 Euro per registered patient in 2001) were introduced for physicians to register their patients and implement a referral system [9]. In Germany, sickness funds are obliged to offer a gate-keeping model with financial incentives for patients who comply with the gate-keeping rules [10]. In the United States, gate-keeping is often a constituent element of Health Maintenance Organisations (HMOs).

A focus point in current European health care reform is to promote demand-led health care. Patient satisfaction is a relevant criterion to assess the performance of a health care system [11,12]. Previous research regarding general practice taught us that this service is evaluated positively by the European patients, although improvements in the organisation of the care were requested in some countries [13–16]. With respect to the access to care, the gate-keeping system features two elements that may lead to less patient satisfaction compared to the direct-access system. Firstly, in the gate-keeping model patients must visit a GP first, also when it is clear that specialist care is necessary, which takes patient's time and may lead to feelings of dissatisfaction. Secondly, the gate-keeping model places the GP in a kind of monopolist position. Patients have to see the GP and switching from one GP to another is often difficult. Thus we can expect that GPs in a gate-keeping system have less incentives to please the patient than in a direct-access model in which they must compete for patients with other providers.

This leads to our research question: How does the access to health care services influence the population's satisfaction with general practice? Are patients in gate keeping countries less satisfied with general practice than in direct-access countries?

## 2. METHODS

### 2.1. Accessibility

Since gate-keeping and direct accessibility are theoretical concepts, which may vary in their consequences within different countries, we developed an access scale including a list of 17 different health care providers (see Table 1). The following providers were selected: providers of medical care, providers of allied health services, providers of community nursing and home care, and providers of rehabilitation services. One or two country experts (e.g. physicians, persons working at national health institutes or in a health department of the government) were asked to indicate whether the provider was directly accessible or whether a referral was needed. For more complex arrangements, there was room for explanations. We calculated a direct-access score for each country by computing the proportion of providers patients had direct access to. In one situation, we deviated from the expert's indication: when providers were indicated as directly accessible but further explanation indicated that the patient could only expect financial compensation after a referral by medical doctor, we coded the accessibility of that provider as 'referral needed'. The information about accessibility was collected in 2002 in the 15 old member states of the European Union and three additional countries, namely Switzerland, Norway, and Iceland, which form together the European Economic Area.

To check the validity of our data, we compared our results with Boerma and Fleming [17], who provided an overview of gate-keeping and direct-access countries. The comparison revealed two countries with an unexpected outcome, namely Finland and Iceland. On the basis of our data, we would expect a gate-keeping system for Finland and direct-access system for Iceland. Since the data from Boerma and Fleming are rather old (their data collection was in 1993), we consulted the experts of these countries with the question whether their country could be characterized as a gate-keeping or non-gate-keeping system. Both country experts replied that the Boerma and Fleming typology was not or no longer valid. Changing the system typology for both countries resulted in a consistent pattern, where in gate-keeping countries less than 50% of the services is directly accessible and in free-access more than 50% (see Fig. 1). We thus concluded that our scale provided a consistent and more refined scale for accessibility compared to the division into direct-access system and gate-keeping system.

### 2.2. Patient satisfaction

Patient satisfaction with General Practice was measured by Grol and Wensing [13,14,18]. They collected data in 16 countries of which 14 overlapped with the direct accessibility study (there were no

data available on patient satisfaction for Italy, Ireland, Luxembourg and Greece). By means of an internationally validated questionnaire, patients of general practices could indicate the degree of satisfaction on a scale of 1 (poor) to 5 (excellent) for 23 aspects (see Appendix A). Total patient satisfaction was operationalised as the average percentage per country that scored 'excellent' for all 23 aspects. We choose to use only the 'excellent' category to obtain sufficient variation among the countries: On average 94% of the respondents scored 3 or higher. Besides overall satisfaction, we distinguished three different aspects of GP-care: medical technical content of care, patient–doctor communication, and practice organisation (Grol et al. [19] distinguished five different aspects). Satisfaction with patient–doctor communication was operationalised as the average percentage per country that scored 'excellent' for questions dealing with how the patient evaluated the commitment of the physician (items 1–6, see Appendix A). Satisfaction with the content of care was measured by computing the average score per country on 'excellent' for questions dealing with medical technical aspects of primary care (items 7–11). For satisfaction with practice organisation, items 19–23 were used. In most countries more than 1000 respondents were interviewed, except in France (473), Portugal (540) and Spain (316) [20]. We used the average score of each country, regardless the sample size in that country. For Belgium, we computed the combined average for Flanders and Wallonia.

### 2.3. Validity testing

An important weakness of the EUROPEP study is that the questionnaire was sent to patients of general practice. This may lead to higher levels of satisfaction among patients of general practice within direct access countries, since these patients themselves chose to go their GP. Thus, to establish the validity of our findings to some extent, the analysis was repeated with data available from the Quote-studies (*Quality of care through the patient's eyes*) [21], in which in 12 countries different groups of patients answered questions about general practice. There were 10 items in this study concerning GP-care. Four items dealt with doctor–patient communication (good understanding of patient's problems, patient may contribute to decisions on treatment, GP takes patient seriously, GP explains prescribed medicines understandably). The other six dealt with practice organisation (waiting times (two items), approachability by phone, prescribed medicines covered by health insurance, information exchange with other care providers (two items)). Eight countries were overlapping with our direct accessibility data: Denmark, Greece, Italy, Ireland, Netherlands, Norway, Portugal, and the UK. In seven of these countries, hospital files were (partly) used to select patients.

### 2.4. Statistical analyses

For the statistical analyses Pearson's correlation coefficient was used, based on the fact that both patient satisfaction and direct accessibility were available on an ordinal scale. A significance level lower or equal 0.05 was chosen as level for statistical significance.

## 3. RESULTS

### 3.1. Accessibility of services

In all countries in our study, the GP was directly accessible (see Table 1). The paediatrician had an ambivalent position. Some countries included paediatricians in primary care; others considered the care provided by these physicians as specialised care. The emergency ward and the dentist were directly accessible in almost all countries. Mother and childcare and ambulatory specialist care were directly accessible in half of the countries and needed referral in the other half. For the care sector (community nurses and home helps) also about half of the countries required referrals, but these may come from other providers than a GP (e.g. social security organisations, welfare institutions). Mental health care from psychotherapists was directly accessible in half of the countries. In most countries referrals were required for the psychiatrist. Allied health services (e.g. physical therapy, speech therapy) mostly required a referral or prescription. Hospital care was in almost all countries only accessible by referral. Rehabilitation care always required a referral.

### 3.2. Accessibility and patient satisfaction from EUROPEP

Fig. 2 displays the relationship between patient satisfaction with overall GP-care and direct accessibility in the different European countries. Countries with more providers directly accessible for patients showed a higher patient satisfaction with GP-services than countries where for many

providers referrals were required (Pearson's  $r = 0.54$ ,  $p = 0.05$ ). Countries with gate-keeping systems (indicated with a triangle in Fig. 2) showed less patient satisfaction compared to 'direct-access' countries. However, Spain and France can be regarded as an exception. In Spain, patients appeared to be highly satisfied about their GPs, although there was a gate-keeping system. In France, the contrary was the case.

Breaking down patient satisfaction into several aspects of medical care showed that satisfaction with patient-physician communication (Pearson's  $r = 0.46$ ,  $p = 0.10$ ) and medical technical content of the care (Pearson's  $r = 0.41$ ,  $p = 0.14$ ) were not significantly influenced by direct accessibility. Satisfaction with organisational aspects of GP-care, however, correlated significantly with direct accessibility (Pearson's  $r = 0.67$ ,  $p = 0.01$ ).

### 3.3. Accessibility and other studies into patient satisfaction: testing the validity

The analysis with satisfaction data from Kerssens et al. showed comparable correlation coefficients for the overall satisfaction (Pearson's  $r = 0.81$ ,  $p = 0.02$ ). Breaking down overall satisfaction into satisfaction with communicational aspects and organisational aspects revealed a non-significant correlation for communicational aspects (Pearson's  $r = 0.63$ ,  $p = 0.10$ ) and a significant correlation for organisational aspects (Pearson's  $r = 0.80$ ,  $p = 0.02$ ).

## 4. CONCLUSIONS AND DISCUSSION

Direct accessibility appears to be relevant for health care users. Patients with freedom of choice in selecting health care providers are more satisfied with their General Practitioner than patients who have to visit a GP first. This holds for overall patient satisfaction. Overall patient satisfaction can be subdivided into satisfaction with organisational aspects, with doctor-patient communication, and with medical technical content of the care. The higher satisfaction mainly had to do with organisational aspects. This phenomenon may have several explanations. The patients can 'blame' the GP for needing a referral and are therefore less satisfied. Another explanation may be that in gate-keeping countries the GP is less patient-oriented. In countries with direct accessibility of all health care providers, GPs face competition from their more specialised colleagues, which may result in more attention for patients wishes and needs besides the medical content of their visit. For the two other distinct aspects of care, namely doctor-patient communication and the technical quality of care there is no difference in satisfaction among patients from direct-access or gate-keeping systems.

In two countries, France and Spain, unexpected results were found. The French were markedly more negative about their general practitioners compared with the other European countries with a direct-access system and the Spanish population was definitely more positive compared with the other gate-keeping countries. In Spain, the reform in primary care in the last decennia may have improved accessibility markedly [23], whereas in France the explanation may be sought in cultural characteristics: the technology oriented view of medical care in the French population may contribute to the low satisfaction for non-high-tech care-like general practice [24]. Another reason may be a bias due to a lower number of respondents in these two countries.

The accessibility scale can be seen as a refinement of the division into direct-access and gate-keeping systems. Our scale was capable of distinguishing between both systems and providing more detailed information, thus allowing a more advanced analysis. Patient satisfaction and accessibility were measured independently: both concepts were measured in different non-related studies and could not have been influenced by each other. A weakness of this study is that we only have information about the satisfaction with GP-services. It is unknown whether satisfaction with other healthcare services can be related to direct accessibility. We also cannot evaluate satisfaction with other primary care-like providers, like dentists or paediatricians. Furthermore, we have to stress that patients are generally satisfied with General Practice in their country; there was no real negative judgement. However, the fact remains valid that patients in direct-access countries are more satisfied with their GP. There is some debate about the validity of population surveys to test patient satisfaction [11,12,27]. High satisfaction rates may reflect a lack of concern about this issue. However, the fact that Grol and Wensing based their questionnaire on items that were rated as important issues by patients themselves provides a solid argument against the lack of concern hypothesis. Previous research of Wensing et al. [20] did not reveal a significant relationship between gate-keeping and patient satisfaction. There are two important differences compared to our study. Firstly,

due to data restrictions, Wensing et al. had to use categorical variables. Our direct accessibility index provided a more refined and updated scale. Secondly, we used only the most positive response category ('excellent'). Since patients in Europe are quite satisfied with General Practice, using the two most positive response categories ('good' and 'excellent') results in less variation among countries. Deveugele et al. [25] studied variation in GP consultation times. They suggested that GPs in 'open market' systems may be involved in 'patient binding', resulting in longer consultation times. Our findings may have a similar explanation: GPs in direct accessibility countries may be more 'patient-oriented' due to competition with specialised care providers.

Do the results suggest that we should stop with gate keeping health care systems? That is not what we'd like to advocate. In order to evaluate gate-keeping systems properly, a broader view should be applied, including besides patient satisfaction other aspects like health care costs and health outcomes (see Ref. [26]). Besides this, the lower satisfaction within the gate-keeping system is mainly due to organisational aspects. These aspects may be changed by policy measures more easily than patient-physician communication and medical technical aspects. To gain more insight in the importance of direct accessibility in health care, two research lines should be developed. Firstly, further research should address patient satisfaction with other types of care. Secondly, further research should address the outlier positions of France and Spain, that show clearly that there is more than gate-keeping to influence patient satisfaction.

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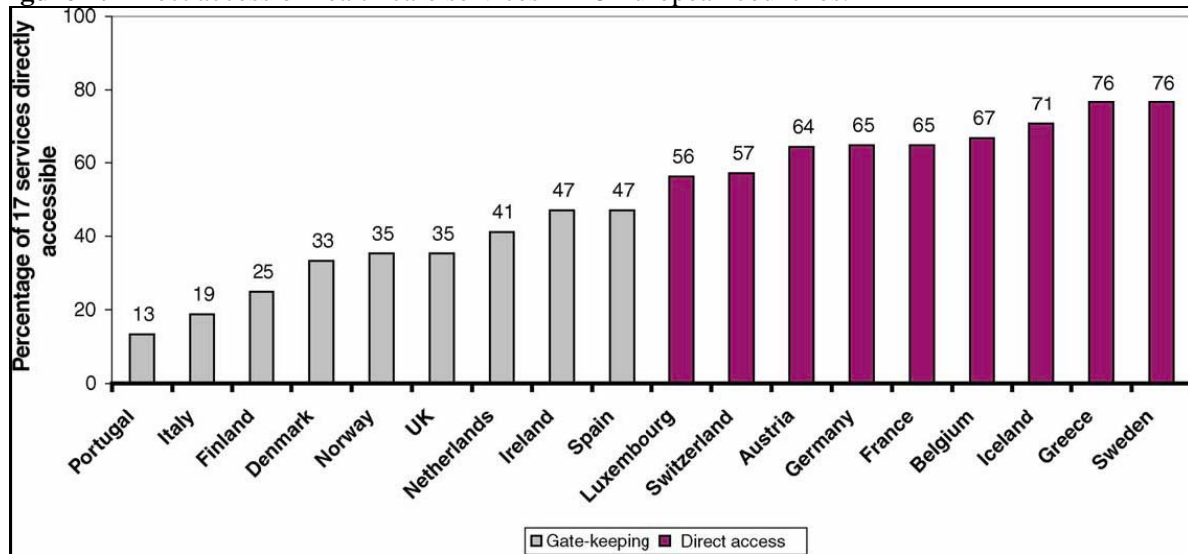
TABLES AND FIGURES

Table 1: Direct accessibility of 17 health services in 18 European countries

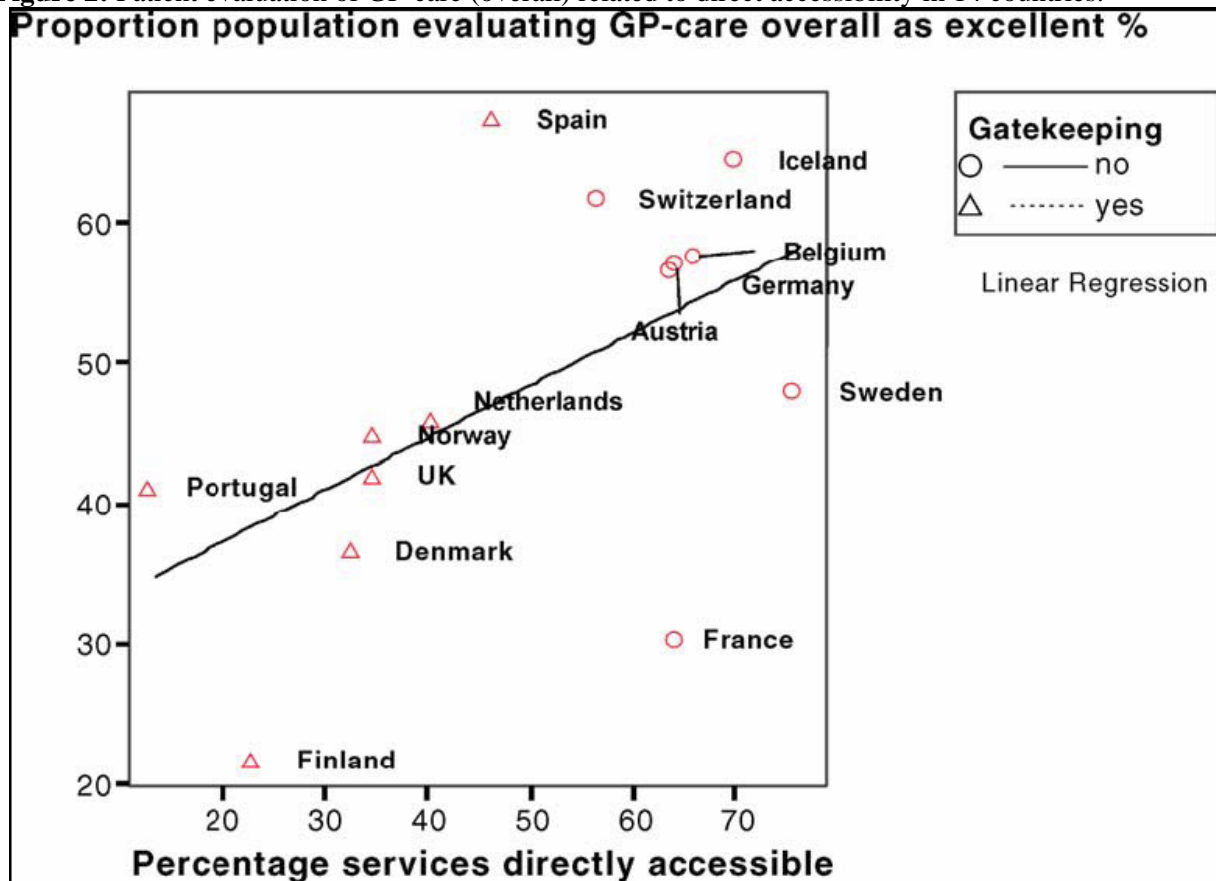
Yes: service directly accessible, no: referral required, ? unknown. The table is sorted by degree of direct accessibility for both services and countries.

Health service	GP	Emergency department	Dentist	Paediatrician	Gynaecologist	Midwife	Ambulatory specialist	Hospital based specialist	Community nurse	Home care (home helps)	Other psycho-therapists	Psychiatrist (inpatient care)	Hospital Speech therapist	Physical therapy/ exercise	Occupational therapist	Rehabilitation clinic	Services direct accessible within country (%)
Portugal	Yes	No	No	No	No	No	No	No	No	Yes	?	No	No	No	No	No	13
Italy	Yes	Yes	Yes	No	No	No	No	No	No	No	?	No	No	No	No	No	19
Finland	Yes	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No	No	No	No	24
Denmark	Yes	Yes	Yes	No	No	No	No	No	Yes	No	Yes	No	?	No	No	No	33
Norway	Yes	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No	No	No	No	35
UK	Yes	Yes	Yes	No	No	No	No	No	Yes	Yes	No	No	No	No	No	No	35
Netherlands	Yes	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	No	No	No	No	No	41
Ireland	Yes	Yes	Yes	No	No	No	No	No	No	No	Yes	No	Yes	Yes	Yes	No	47
Spain	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No	No	No	No	No	47
Luxembourg	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	?	Yes	No	No	No	No	56
Switzerland	Yes	Yes	Yes	Yes	Yes	?	Yes	Yes	?	?	No	Yes	No	No	No	No	57
Austria	Yes	Yes	Yes	Yes	Yes	?	Yes	Yes	?	?	Yes	No	No	No	No	No	64
Germany	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	65
France	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No	No	No	65
Belgium	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	?	No	Yes	No	No	No	67
Iceland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	?	No	No	No	No	No	71
Greece	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	76
Sweden	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	No	76
Direct access of 100 94	94	94	56	56	56	63	50	50	56	50	57	35	22	24	18	18	100

**Figure 1:** Direct access of health care services in 18 European countries.



**Figure 2:** Patient evaluation of GP-care (overall) related to direct accessibility in 14 countries.



**APPENDIX A: ITEMS FROM THE EUROPEP STUDY**

The satisfaction score varied from Poor to Excellent in a five-point scale

1. Making you feel you had time during consultations
2. Interest in your personal situation

3. Making it easy for you to tell him or her about your problems
4. Involving you in decisions about your medical care
5. Listening to you
6. Keeping your records and data confidential
7. Quick relief of your symptoms
8. Helping you to feel well so that you can perform your normal daily activities
9. Thoroughness
10. Physical examination of you
11. Offering you services for preventing diseases
12. Explaining the purpose of tests and treatments
13. Telling you what you wanted to know about your symptoms and/or illness
14. Help in dealing with emotional problems related to your health status
15. Helping you understand the importance of following his or her advice
16. Knowing what s/he had done or told you during previous contacts
17. Preparing you for what to expect from specialist or hospital care
18. The helpfulness of staff (other than the doctor)
19. Getting an appointment to suit you
20. Getting through to the practice on the phone
21. Being able to speak to the general practitioner on the telephone
22. Waiting time in the waiting room
23. Providing quick services for urgent health problems

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