

# Patients in Europe evaluate general practice care: an international comparison

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## SUMMARY

**Background.** Patients' evaluations can be used to improve health care and compare general practice in different health systems.

**Aim.** To identify aspects of general practice that are generally evaluated positively by patients and to compare opinions of patients in different European countries on actual care provision.

**Method.** An internationally-validated questionnaire was distributed to and completed by patients in 10 European countries. A stratified sample of 36 practices per country, with at least 1080 patients per country, was included. A set of 23 validated questions on evaluations of different aspects of care was used, as well as questions on age, sex, overall health status, and frequency of visiting the GP.

**Results.** The patient sample included 17 391 patients in 10 different countries; the average response rate was 79% (range = 67% to 89%). In general, patients visiting their

general practitioner (GP) were very positive about the care provided. For most of the 23 selected aspects of care more than 80% viewed care as good or excellent; in particular, keeping records confidential, GP listening to patients, time during consultations, and quick services in case of urgent problems were evaluated positively. Patients were relatively negative about organisational aspects of care. The evaluations in different countries were largely similar, with some interesting differences; for instance, service and organisational aspects were evaluated more positively in fee-for-service health systems.

**Conclusions.** Patients in Europe are positive about general practice but improvements in practice management in some countries are requested. More research is needed to study the complex field of differences in expectations and evaluations between countries with different health systems.

**Keywords:** patient evaluations; general practice; international comparisons.

## Introduction

IMPROVING sensitiveness to patients' needs and experiences with health care is an important challenge. Patients' evaluation of care is increasingly seen by practitioners, administrators, policy makers, and patients themselves as a judgement of quality, a valuable outcome in itself, next to outcomes such as mortality, morbidity, quality of life, and health care costs.<sup>1</sup> Negative evaluations can be regarded as an indicator of a need for improvements. Patients have important insights about care provision that care providers do not have or cannot assume. Care providers often react to patients on the basis of subjective perceptions of patients' needs and experiences that prove to be wrong.<sup>2-4</sup> Systematic gathering of information on patients' needs and experiences, using methodologically-sound instruments such as validated questionnaires, should therefore be an integral part of routine care.<sup>5</sup>

Results of regular application of such instruments can be used in health systems for quality improvement and clinical governance to compare the quality of services between care providers as seen from a patient perspective. In the future, the United Kingdom (UK) government, for example, will send large numbers of questionnaires to all districts to assess patients' experiences of general practice care.<sup>1</sup> The same process can be seen in some other countries. Comparisons of patients' evaluations can also be undertaken at an international level. The organisation and provision of general practice care differs between European countries; for instance, as far as the gatekeeper role of the general practitioner (GP), the reimbursement system, and the preferred type of organisation of services concerns.<sup>6,7</sup> Differences or similarities in patients' views on general practice care may — if an internationally-standardised and validated instrument is used — be helpful in the debate about specific strengths and weaknesses of care provision in a particular country. An international comparison recently showed that to a large extent patients' priorities towards general practice are similar.<sup>8-10</sup>

The question is whether the actual experiences of patients with general practice care are similar as well, or whether they differ

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between countries. One may expect that patients in countries with different health systems will experience different problems in care provision, which will be expressed by patients giving their evaluations on general practice care. Studies comparing patient evaluations of general practice care are still limited or limited in design; for example, only a limited number of countries were involved<sup>11</sup> or the evaluation of care was at a very global level.<sup>6</sup> We therefore conducted a study in 10 European countries to learn about aspects of care that patients evaluate as being generally positive and to compare the opinions of patients in different countries on actual care provision in general practice.

## Method

An internationally-validated questionnaire was distributed to and completed by a large number of patients in the following countries: Belgium (Flanders), Denmark, Germany, Iceland, the Netherlands, Norway, Slovenia, Sweden, Switzerland, and the UK.

## Subjects

In each country a stratified sample of 36 practices was recruited. The recruitment procedure was left to the research teams in the participating countries. However, practice size (one GP versus more than one GP) and urbanisation (villages with less than 15 000 inhabitants versus towns and cities with more than 15 000 inhabitants) had to be used as stratification variables in the selection of practices to reflect the national situation as much as possible. We aimed at a sample of at least 1080 patients per country (30 per practice) to allow a reliable comparison between countries ( $\alpha = 0.01$ ,  $P = 0.90$ , intra-cluster correlation = 0.05, standard deviation on 0.8 and minimal relevant difference = 0.3 on a five-point scale; figures based on pilot studies with the instrument). The actual number of patients approached varied between 45 and 80 per practice depending on the expected response rate in the country (based on previous experience). The study population was comprised of patients with recent experience with general practice (participation asked after a visit to the practice); patients were included if they were aged 18 years or older and able to understand the national language.

## Procedures

The GPs handed out a written questionnaire to all eligible patients consecutively visiting their practice after a chosen starting date. The patient was asked to complete the questionnaire at home and return it in a pre-paid envelope to the research unit. Reminders were mailed to non-responders at three weeks after handing out the questionnaires and patient addresses were docu-

mented and numbered identically to numbers in the questionnaire. Reminders were sent from the practice or the research unit depending on the feasibility and privacy regulations in a specific country.

## Instruments and variables

The core of the questionnaire was a set of 23 questions on evaluations of different aspects of care, using a five-point answering scale with the extremes labelled as 'poor' and 'excellent'. The selection of the 23 questions was based on previously performed international studies by the EUROPEP group. First, a study to select aspects of general practice care that are very important for patients was devised.<sup>8</sup> Secondly, some pilot studies to test different versions of the questionnaire were performed in all the participating countries. And finally, a study with the current version to select the 23 items from a list of 44 items took place. We selected items that showed good variation across patients, possessed high-item response, and showed no problems with translation. The questionnaire also included questions on patients' characteristics: age, sex, overall health status (one question), and frequency of attendance.

The English version of the questionnaire was independently translated to the national languages by two researchers and one professional translator and then discussed in a meeting by these three persons. Consensus was achieved on a translated version, which was then translated back into English by two independent professional translators.<sup>12</sup> Their results were compared with the original English questionnaire in a meeting and the final translated version established.

## Analysis

Data entry was coordinated by the research units in the different countries; further analysis was conducted in the coordinating centre in Nijmegen. Frequency distributions were used to describe the patient samples. For the description of patients' views we used the percentage of patients who used the two most positive answering categories (four and five) of all patients who answered the question (other than 'do not know/not applicable'). Pearson correlations with four other methods (percentage of patients who used category five, percentages of patients who used category one and two, a mean score, and an individual difference of the mean score) were between 0.89 and 0.99. Since the mean percentage varied significantly across the countries, we also calculated a rank score based on these percentages within each country and compared these between countries. We further compared the patient evaluations in different countries by multi-dimensional scaling. The percentages in Table 2 were used to

**Table 1.** Response percentages and characteristics of patients in the study.

	n	Response (%)	Female (%)	Age in years (mean)	Overall health status (% poor/fair)	Mean number of visits to GP in last 12 months
Belgium (Flanders)	2530	81.1	64.3	49.6	23.7	9.7
Denmark	1307	83.7	72.7	46.0	26.8	6.5
Germany	2224	77.2	62.5	53.7	35.9	12.3
Iceland	1058	67.2	69.1	47.4	32.7	7.1
Netherlands	1772	87.5	67.7	47.6	29.0	6.1
Norway	1609	89.0	70.3	50.7	33.3	5.5
Slovenia	1808	83.7	62.9	49.3	32.5	6.9
Sweden	1652	83.4	62.8	57.1	49.5	3.7
Switzerland	1497	69.3	62.4	53.4	23.4	8.7
UK	1934	72.7	67.6	51.3	34.7	6.8
Total	17 391	79.5	65.8	50.7	32.0	7.6

**Table 2.** Evaluations of patients on general practice care in different countries.

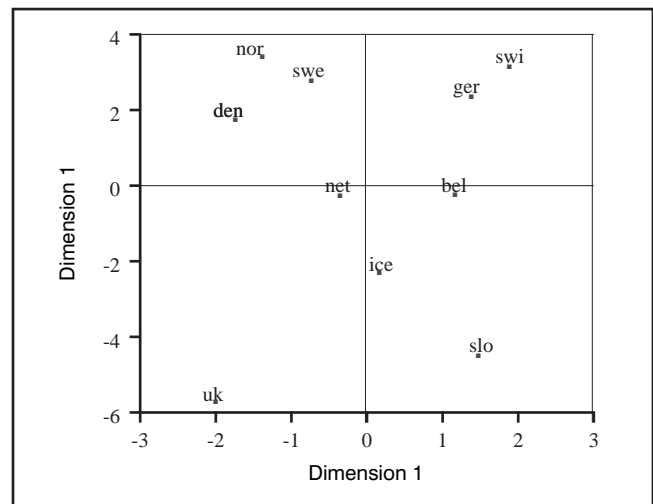
		Belgium (Flanders)	Denmark	Germany	Iceland	Netherlands	Norway	Slovenia	Sweden	Switzerland	UK	Total
Mean percentage		87	74	88	83	80	76	89	78	91	72	
Range		66–97	53–96	70–95	70–97	61–95	54–91	60–97	65–89	79–97	50–91	
Keeping your records and data confidential (A6)	I	97	96	94	97	95	91	97	88	96	91	94
	II	1	1	3	1	1	1	1	1	5	1	
Listening to you (A5)	I	93	79	92	93	89	85	95	85	96	83	89
	II	3	5	5	3	2	2	2	3	4	2	
Making you feel you had time during consultations (A1)	I	92	75	90	93	88	78	92	85	96	80	87
	II	5	10	9	2	3	14	7	4	3	4	
Providing quick services for urgent health problems (A23)	I	93	81	95	86	85	83	89	84	96	71	87
	II	2	2	2	9	4	6	14	5	2	15	
Telling you what you wanted to know about your symptoms and/or illness (A13)	I	90	74	90	89	83	78	92	81	93	79	85
	II	7	12	10	5	7	15	6	8	10	5	
Thoroughness (A9)	I	89	80	91	85	81	82	92	83	90	78	85
	II	9	3	8	11	11	7	8	6	17	7	
Physical examination (A10)	I	88	79	91	86	82	80	90	80	93	76	85
	II	14	6	7	8	9	10	11	9	9	10	
Explaining the purpose of tests and treatments (A12)	I	89	78	89	86	83	79	89	80	92	79	85
	II	11	9	13	10	6	12	13	11	12	6	
The helpfulness of the staff (other than the doctor) (A18)	I	83	79	92	81	84	83	89	87	93	70	84
	I	21	7	6	16	5	4	15	2	11	17	
Making it easy for you to tell him or her about your problems (A3)	I	88	75	89	88	83	80	87	76	94	81	84
	II	12	11	12	6	8	9	19	17	8	3	
Interest in your personal situation (A2)	I	90	79	90	78	82	84	79	77	95	78	84
	II	-	8	11	17	10	3	22	16	7	8	
Helping you to feel well so that you can perform your normal daily activities (A8)	I	89	74	88	90	79	83	93	77	91	69	84
	II	10	14	14	4	14	5	4	15	13	18	
Helping you understand the importance of following his or her advice (A15)	I	86	80	86	83	80	78	91	80	89	76	83
	II	16	4	17	12	13	13	10	10	18	9	
Involving you in decisions about medical care (A4)	I	87	72	87	82	81	79	89	79	91	76	83
	II	15	16	15	13	12	11	16	12	15	11	
Getting an appointment to suit you (A19)	I	88	72	93	78	78	78	85	83	97	62	82
	II	13	17	4	18	15	16	20	7	1	20	
Quick relief of your symptoms (A7)	I	84	74	83	88	75	81	94	79	85	67	81
	II	20	13	22	7	20	8	3	14	21	19	
Knowing what s/he had done or told you during previous contacts (A16)	I	84	73	85	81	76	75	90	79	89	72	81
	II	19	15	19	15	16	17	12	13	20	13	

I: percentage of patients who scored 4–5 on the scale; II: rank order within the country based on percentages of patients who scored 4–5 on the scale (1 = most positive).

**Table 2.** (continued). Evaluations of patients on general practice care in different countries.

	Belgium (Flanders)	Denmark	Germany	Iceland	Netherlands	Norway	Slovenia	Sweden	Switzerland	UK	Total
Preparing you for what to expect from specialists or hospital care (A17)	I 85 II 18	68 19	85 21	82 14	75 19	71 18	88 17	72 19	89 19	72 14	79
Help in dealing with emotional problems related to your health status (A14)	I 85 II 17	68 20	85 20	76 19	76 18	69 19	87 18	71 20	90 16	71 16	79
Offering you services for preventing diseases (e.g. screening, health checks, immunisations) (A11)	I 77 II 22	68 18	85 18	74 21	76 17	67 20	85 21	75 18	84 22	74 12	77
Getting through to the practice on the phone (A20)	I 93 II 4	53 23	95 1	75 20	71 22	56 22	92 9	67 21	96 6	62 21	77
Being able to speak to the GP on the telephone (A21)	I 90 II 8	59 22	87 16	72 22	72 21	54 23	93 5	65 22	91 14	51 22	75
Waiting time in the waiting room (A22)	I 66 II 23	59 21	70 23	70 23	61 23	57 21	60 23	65 23	79 23	50 23	63

I: percentage of patients who scored 4-5 on the scale; II: rank order within the country based on percentages of patients who scored 4-5 on the scale (1 = most positive).



**Figure 1.** Similarities and dissimilarities in evaluations of patients receiving general practice care in different countries (multi-dimensional scaling; Euclidean distance model; den = Denmark; nor = Norway; swe = Sweden; net = Netherlands; uk = United Kingdom; swi = Switzerland; ger = Germany; bel = Belgium; ice = Iceland; slo = Slovenia).

calculate a matrix of dissimilarities between the countries (Euclidean distances), which was plotted in a two-dimensional space using an iterative model fitting procedure (fit of the final model was 0.99, which is very good). Large distances between the points in the space indicate dissimilarity and small distances between the points indicate similarity.

**Results**

*Samples*

The patient sample included 17 391 patients in 10 different countries. The average response rate was 79% and ranged from 67% in Iceland to almost 90% in Norway (Table 1). In all countries about two-thirds of the responders were women. Average age was approximately 50 years, except for Sweden where it was 57 years. The mean number of visits to the GP in the year preceding the study varied considerably in the different countries, from 3.6 in Sweden to 12.3 in Germany. Cultural and health system differences are expressed in these figures. The desired number of 1080 patients from 36 practices per country was (almost) achieved in all countries.

*Evaluations of patients*

In general, patients in Europe visiting their GP are very positive about the care provided. For most of the selected aspects more than 80% of the patients had the opinion that care was good or excellent. Most of the positive judgements were for keeping patient records confidential, the GP listening to patients, time during consultations, and quick service in case of urgent problems. Relatively negative judgements were for the evaluations of waiting times in the waiting room, speaking to the GP on the telephone, getting through to the practice on the telephone, and preventive services offered by the practice. More than 20% of the patients had the opinion that care was less than good for these aspects.

Considering the average evaluation scores of all 17 391 patients on the 23 items, we found that older patients had more positive evaluations of general practice care than younger

patients (<40 years = 4.1 on a scale of one to five, aged 40 to 64 years = 4.3 on this scale, and aged  $\geq 65$  years = 4.5 on average). No differences were found for sex and overall health status. Frequent attenders had more positive evaluations than others (more than three visits = 4.3 on the five-point scale versus 4.1 for less than three visits).

### *Differences between countries*

Differences in overall assessment were seen between countries. A tendency towards more positive evaluations was found in Switzerland, Germany, and Belgium, countries with a fee-for-service system and no gatekeeper role for the GP. A tendency for less positive judgements was found for the UK and the Scandinavian countries.

The evaluations of patients in different countries on the aspects of care rankings were largely similar. Nevertheless, some interesting differences can be seen. Relatively positive evaluations were given to preventive services in the UK, information and explanation given in the UK and the Netherlands, the helpfulness of the staff in Norway and Denmark, quick relief of symptoms in Slovenia, and getting an appointment as well as getting through on the phone in Switzerland, Germany, and Belgium. Relatively negative evaluations were given for the time for consultations in Norway and Denmark, quick service in case of emergencies in the UK and Slovenia, thoroughness in performance in Switzerland, and interest in the patients' personal situation in Slovenia. Multidimensional scaling was applied to visualise similarities and differences between the countries with respect to patients' evaluations of general practice care (Figure 1). The evaluations of patients in Germany, Switzerland, and Belgium — countries where patients have free access to specialist and hospital care — were largely similar and differed from evaluations in the Scandinavian countries and the Netherlands. They differed also from evaluations of patients in the UK and Slovenia, countries with a centralised national health system.

### **Discussion**

Patients in Europe are generally very positive about their GP and about their general practice. They are particularly positive about the time they get, the way the GP listens to their problems, the confidentiality of records, and the speed of services from general practice in case of emergency problems. In an earlier study by the EUROPEP group these aspects were mentioned by patients as being the most important for good general practice care. It is interesting to see that some aspects of practice management received relatively negative evaluations, for instance waiting times, accessibility, and organisation of preventive services. This shows that in many practices management may need improvement, although it is an often neglected part of general practice care. New methods are being developed for quality improvement in this area.<sup>13</sup>

A second conclusion is that the opinions of patients in different countries about general practice are, to a large extent, similar: aspects that are evaluated positively in one country are evaluated in a similar way in other countries. There is, however, a general tendency in a specific country to give generally positive assessments. Multidimensional scaling showed that countries can be grouped according to the evaluation of patients of the 23 selected aspects of care. In particular, patients in countries with fee-for-service systems and without a gatekeeper role for the GP (Belgium, Germany, and Switzerland) seem to have very positive opinions. They differ from the Scandinavian countries and the Netherlands, countries with more focus on the central gatekeeping role of the GP. This is not in line with the finding of Starfield<sup>6</sup> that patients in countries with a primary care focus

were more positive about primary care; however, she used only one overall question for this purpose. Service may indeed be more consumer friendly in the fee-for-service system countries, since they operate in a competing market place: if you are not satisfied with general practice care, you can always go directly to medical specialists. However, patients in countries with a fee-for-service system may also be a self-selected group who prefer a GP over a medical specialist. Evaluation of care by patients probably expresses a balance between expectations and experiences. Some authors speak of a crisis of expectations in countries with a national health service, where raised expectations may easily lead to increased disappointment with care provision.<sup>14</sup> Fee-for-service systems may follow the expectations of the public much more closely as they are more flexible in reacting to these expectations and to increased consumerism.

There are some further interesting concrete differences in evaluations between countries. For instance, patients in the UK are very positive about preventive services and information giving, two aspects that have received a lot of attention and consideration there in recent years. Accessibility aspects, such as getting an appointment and getting through to the practice on telephone, were evaluated positively in Germany and Switzerland and this may be caused by the attitude described earlier of keeping patients satisfied in countries where patients are free to go directly to the medical specialist.

There may be some pitfalls in this study. For instance, practices were selected through the research teams in the various countries and selection bias may have been introduced by this procedure. Patient samples are probably not completely similar in the different countries as well. However, such disparities are caused by natural differences in culture and health systems; for instance, in the organisation of services, the size and type of organising general practices, frequency of visits to the practices, role of staff in care provision, etc. Our aim was to include, not exclude, such differences. We further included only patients that regularly visited general practice; opinions of patients who rarely visit these practices may be underrepresented. The same is true for patients who do not master the national language well. However, we managed to gather data from a large number of patients in a large number of countries with high response rates in all countries, we used a well-designed questionnaire that was systematically tested beforehand in a rigorous process in all the countries, and we used a rigorous translation procedure as well. So, we may expect that the results of this study provide a valid picture of opinions of patients visiting general practice in Europe. These opinions are positive but the results also identified possible areas for quality improvement, such as in the accessibility and the management of practices.

### **References**

1. Richards T. Patients priorities. [Editorial.] *BMJ* 1999; **318**: 277.
2. Richards T. Partnership with patients. *BMJ* 1998; **316**: 85-86.
3. Cockburn J, Pitt S. Prescribing behaviour in clinical practice: patients' expectations and doctors' perceptions of patients' expectations — a questionnaire study. *BMJ* 1997; **315**: 520-523.
4. Jung HP, Wensing M, Grol R. What makes a good general practitioner: do patients and doctors have different views? *Br J Gen Pract* 1997; **47**: 805-809.
5. Council of Europe. *Recommendation number R(97)17 of the Committee to Member States on the development and implementation of quality improvement systems (QIS) in health care*. Strasbourg: Council of Europe, 1997.
6. Starfield B. Is primary care essential? *Lancet* 1994; **344**: 1129-1133.
7. Boerma W, Van der Zee J, Fleming D. Service profiles of general practitioners in Europe. *Br J Gen Pract* 1997; **47**: 481-486.
8. Wensing M, Jung HP, Mainz J, *et al*. Which aspects of general practice care are important for patients? A systematic literature review. *Soc Sci Med* 1998; **47**: 1573-1588.

9. Grol R, Wensing M, Mainz J, *et al*. Patients' priorities with respect to general practice care: an international comparison. *Fam Pract* 1999; **16**: 4-11.
10. Wensing M, Mainz J, Ferreira P, *et al*. General practice care and patients' priorities in Europe: an international comparison. *Health Policy* 1998; **45**: 175-186.
11. Calnan M, Katsouyiannopoulos V, Ovcharov V, *et al*. Major determinants of consumer satisfaction with primary care in different health systems. *Fam Pract* 1994; **11**: 468-478.
12. Guillermin F, Bombardier C, Beaton D. Cross-cultural adaptation of health related quality of life measures: literature review and proposed guidelines. *J Clin Epidemiol* 1993; **46**: 1417-1432.
13. van den Homberg P, Grol R, Van den Hoogen H, Van den Bosch W. Assessment of management in general practice: validation of a practice visit method. *Br J Gen Pract* 1998; **48**: 1743-1750.
14. Smith R. The NHS: possibilities for the endgame. *BMJ* 1999; **318**: 209-210.

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