ORIGINAL ARTICLE

The German Health Care System in International Comparison

A Patient Perspective

Klaus Koch, Christoph Schürmann, Peter Sawicki

SUMMARY

Background: International health care systems of industrial countries show great differences in organization and financing. During 2008 the Commonwealth Fund interviewed sicker adult patients from eight countries to compare aspects of quality of health care.

Methods: In total, 9633 randomly selected patients from Australia, Canada, France, Germany, The Netherlands, New Zealand, United Kingdom, and the USA were recruited for structured interviews. All participants were adults who reported being in poor health, having a serious illness or disability, having been hospitalized, or having had major surgery in the past two years.

Results: In total, only 34% of participants in Germany rated the quality of their health care as „excellent“ or „very good“. This fraction was larger in the other countries (up to 66%). Sicker adults in Germany consulted more physicians. Problems with coordination were reported by all countries, in particular concerning the communication between specialist/general practitioner, hospital/general practitioner and the flow of information to the patients.

Conclusion: Although sicker adults report similar experiences and problems with coordination their satisfaction with health care differs internationally. Compared to a similar survey in 2005 the general satisfaction of sicker adults with health care in Germany has improved.

In 1999 the Commonwealth Fund began collecting data on health care in five countries, using a uniform methodology, in order to compare the quality of the health care systems (1–9). Up until 2004, data were collected in Australia (AUS), Canada (CAN), New Zealand (NZ), the USA, and the United Kingdom (UK); in 2005 Germany (D) took part in the study for the first time (10, 11). In 2006 the Netherlands (NL) joined in, and in 2008 France (F). The Institute for Quality and Efficiency in Health Care (Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen, IQWiG) contributed to the design and financed the German surveys.

The target groups and main focus changed from year to year. In 2008, as in 2005, the study related to the experiences of sicker adults who were particularly dependent on health care provision (11).

Respondents were asked about the following:

- A general assessment of the health care system and health care provision
- Ease of access to health care, including waiting times and delays
- Relationship with family doctor/primary care physician and specialists, including coordination of care and medical drugs
- Experiences in hospital and in emergency departments
- Consumption of prescription drugs, including coordination of treatment with several drugs and considerations of cost
- Patient safety, including medical errors in drug administration, the communicating of false diagnostic results, or delays in information about results
- Experiences with preventive measures, including follow-up care and the management of chronic diseases
- Access to information technology, including the possibility of email correspondence with family/primary care physician and access to personal medical files
- Extent of health insurance, any additional financial burdens due to illness.

A summary description of the experience of respondents with chronic diseases has been published separately (6). The present article describes selected results

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TABLE 1

Demographic baseline data of sicker patients from eight countries (weighted) (figures are percentages)*¹

Country	D	AUS	CAN	F	NL	NZ	UK	USA
N	1077	737	2608	1213	928	756	1103	1211
In %								
Sex								
Male	44	49	49	43	46	49	47	45
Female	56	51	51	57	54	51	53	55
Age								
50 or older	59	47	47	55	59	44	62	49
Education level ³								
Low	54	66	47	50	80	48	64	56
Intermediate	20	17	39	33	10	23	13	25
High	24	16	14	17	10	26	19	18
Income ²								
Below average	48	43	45	46	31	34	42	50
Average	18	20	20	23	21	22	22	17
Above average	26	31	29	25	37	39	21	28
Place of birth								
In the country of interview	89	78	86	87	93	81	92	81
Outside the country of interview	11	22	14	13	7	19	7	18
Health cover								
Private insurance	11	48	57	89		36		39
Public/statutory and private	10				81		16	
Top-up insurance								
Public/statutory only	78	51	42	11	16	63	83	35
No health cover								21

*¹ Some columns may not add up to 100 percent because respondents were given the option to say that they were not sure or could decline to answer altogether; ² median income in D: 29 000 euros; ³ (eTable 1)

for Germany and compares them, where meaningful, with the findings for 2005 (11).

Methods

The study is based on structured telephone interviews with randomly selected respondents. Coordinated by Harris Interactive Inc. on behalf of the Commonwealth Fund, the interviews were carried out between 3 March and 30 May 2008 simultaneously in Australia, Germany, France, Canada, New Zealand, the Netherlands, the USA, and the United Kingdom. Respondents were adults over 18 years of age who reported their health as fair or poor and reported having a chronic disease or disability, and/or having been hospitalized or having undergone major surgery within the past 2 years. Hospital stays relating to uncomplicated childbirth were not included.

In Germany, households were randomly selected using random digit dialing and contacted by telephone.

The target person was defined as the adult in the household who had most recently had a birthday. In the first part of the interview, all interviewees were asked for basic demographic data. In the second part, the questions were about their state of health, in order to identify suitable participants.

The third, extensive part of the interview was then carried out with suitable (sicker) participants.

In all countries the interviewers used computers to work their way through the questions and record the answers (CATI, computer-assisted telephone interview). Interviews lasted for an average of 17 minutes; the range in all countries was 14 to 22 minutes.

Results

Profile of the patient sample

In Germany a total of 3192 persons were successfully interviewed, corresponding to a participation rate of 31%. The figures by which the participation rate was

TABLE 2

Rates of occurrence of inclusion criteria for sicker patients in the survey

Country	D		AUS		CAN		F		NL		NZ		UK		USA	
	IP	SP	IP	SP	IP	SP	IP	SP	IP	SP	IP	SP	IP	SP	IP	SP
Number of persons	3164	1077 (34%)	1637	737 (45%)	7966	2608 (33%)	3166	1213 (38%)	2577	928 (36%)	1873	756 (40%)	2522	1103 (44%)	3096	651 (39%)
Of which (in %)																
Health fair or poor	16	48	21	46	13	41	18	46	21	57	14	36	23	53	21	53
Illness, injury, or disability ^{*1}	21	62	25	56	19	58	20	51	20	57	22	54	27	62	23	59
Hospitalized ^{*2}	20	58	25	56	16	48	23	59	17	47	24	58	19	44	18	46
Major surgery ^{*2}	12	36	12	27	11	32	13	35	8	23	11	28	11	24	13	33

IP: Initial sample population; SP: sicker patients

^{*1} who had required intensive medical care; ^{*2} within the past 2 years

arrived at are given in the supplementary material accompanying this article.

Out of 3192 persons who underwent the screening interview, 1320 (41%) fulfilled the inclusion criteria as “sicker” patients. Of these 1320 persons, 1201 took part in the complete survey. Deviations of the sample from the average in all the countries in respect of age, sex, (German) federal state, and level of education were adjusted by weighting according to data from the Federal Statistical Office for 2007; in Germany this gave a weighted population of 1077 men and women (*eTable 1*). All analyses in the present study relate to this weighted “base” population, unless otherwise stated. Both absolute and relative rates are given. Relative rates are presented as percentages. *Table 1* shows the characteristics of the German respondents alongside those of other nations. Further information will be found in the supplementary material.

Health problems among respondents

Between 13% (CAN) and 23% (UK) of respondents assessed their health as fair or poor; in Germany the rate was 16%. *Table 2* and *eTable 2* list data on the other criteria that led to inclusion in the survey. Overall, between 33% (CAN) and 45% (AUS) of the respondents in the original screening interviews fulfilled the criteria for further questioning; in Germany the figure was 34%.

General assessment of the health care system and health care provision

There was no unanimity among German respondents in their assessment of the health care system: 25% thought that it was so bad that it needed changing from the

ground up. Only the USA had a higher disapproval rate (30%). On the other hand, almost as many respondents (24%) thought that the Germany system did not function badly, taken all round, and only small changes were needed. Most respondents saw some good things, but also a need for fundamental change (*Table 3*).

Assessment of the quality of medical care

The answers to questions about the quality of medical care provision during the past year varied greatly (*Table 4*). Between 34% (D) and 66% of respondents (NZ) answered “excellent” or “very good.”

Germany had the lowest rate of assessment as “excellent” or “very good”; there was no change on this between 2005 and 2008. On the other hand, the number of those who thought the quality of provision in Germany was “fair” or “poor” was also relatively low at 12%. The range in the other countries was between 9% (F) and 19% (USA). In Germany, 53% of respondents described the quality of care as “good.”

Extent of health insurance and extra costs

In all of the countries included in this study it is possible to have private (extra or top-up) health insurance in addition to the statutory/public health cover (*Table 1*). Between 16% (NL) and 83% (UK) had only the basic cover; 16% (UK) to 81% (NL) had private health cover exclusively or as an extra. In Germany, 11% of sicker patients were privately insured, and another 10% had top-up private insurance in addition to statutory health insurance. The USA stands out on this point, because 21% of respondents had no health insurance at all and were treated in special medical centers.

TABLE 3

Views on the health care system in 2005 and 2008

Country	D		AUS		CAN		F		NL		NZ		UK		USA	
	2008	2005	2008	2005	2008	2005	2008	2005	2008	2005	2008	2005	2008	2005	2008	2005
In % ^{*1}																
On the whole, the system works pretty well and only minor changes are necessary to make it work better	24	16	24	23	34	21	41	n.p.	41	n.p.	29	27	36	30	23	23
There are some good things in our health care system, but fundamental changes are needed to make it work better	50	54	56	48	50	61	33	n.p.	49	n.p.	50	52	49	52	45	44
Our health care system has so much wrong with it that we need to completely rebuild it	25	31	19	26	14	17	22	n.p.	7	n.p.	19	20	12	14	30	30

^{*1} Some columns may not add up to 100 percent because respondents were given the option to say that they were not sure or could decline to answer altogether; n.p., country did not take part in 2005

TABLE 4

Overall, how do you rate the quality of the medical care that you have received in the past 12 months?

Country	D		AUS		CAN		F		NL		NZ		UK		USA	
	2008	2005	2008	2005	2008	2005	2008	2005	2008	2005	2008	2005	2008	2005	2008	2005
In % ^{*1}																
Excellent/very good	34	35	61	63	61	59	47	n.p.	37	n.p.	66	72	62	63	55	57
Good	53	55	22	26	23	26	42	n.p.	47	n.p.	20	17	24	23	25	24
Fair/poor	12	9	15	10	14	13	9	n.p.	13	n.p.	13	10	12	12	19	19

^{*1} Some columns may not add up to 100 percent because respondents were given the option to say that they were not sure or could decline to answer altogether; n.p., country did not take part in 2005

Despite these insurances and other kinds of health cover, extra payments from private means (“out-of-pocket”) were usual in all countries (*eTable 3*). The proportion of those who had had to pay the equivalent of more than 640 euros (1000 US\$) in the previous 12 months was between 5% (F, UK) and 39% (USA); in Germany it was 12%.

In Germany, 28% of respondents said they had gone without medicines, a visit to the doctor, or an examination or treatment at least once during the previous 2 years on grounds of cost. In 2005 the figure was also 28% (11) (*eTable 3*). Respondents on an annual income of less than 29 000 euros had done this slightly more often (30%) than those with an income above the average (25%).

Relationship with primary care physician and specialists

In all countries apart from the USA, at least 95% of respondents always went to the same place (“medical home”) when they were ill. In most cases this is a family doctor (primary care physician), but in England 8% and in the USA 10% went to a medical facility with

a rotating staff of physicians (*Table 5*). In Germany, 43% of patients questioned were given an appointment to see a family doctor on the same day if they had an acute medical problem, but longer waiting times were also frequent. In the Netherlands and New Zealand, only 3% and 5% respectively had to wait more than 6 days for an appointment; in the other countries the rates ranged from 13% (UK) to 32% (CAN). In Germany, 24% had to wait 6 days or more.

Waiting times of over 4 weeks to see specialists are not rare either: in Germany, 21% of respondents had to wait at least a month for an appointment, and 11% even had to wait for over 2 months. However, this is still lower than in other countries, in which the rates went up to 30% (CAN) (*Table 5*).

The health systems also differ in terms of the significance of emergency admissions to hospital. Twenty-seven percent of sicker patients in the Netherlands and 34% in Germany said they had been admitted to an emergency department in the past 2 years; in Canada and the USA, the figures were almost twice as high.

TABLE 5

Access to medical care

Country	D	AUS	CAN	F	NL	NZ	UK	USA
In %								
Do you have a family doctor who you regularly see when you are ill?								
Yes, I have a family doctor	95	89	89	98	99	92	91	78
No family doctor, but always the same practice, emergency department, or clinic	3	6	7	1	1	4	8	10
Neither family doctor nor the same practice, emergency department, or clinic	2	5	4	2	0	5	1	11
I have been going to this family doctor or this medical facility for 5 years or more	77	63	66	73	78	59	74	51
Waiting time for a family doctor's appointment when last ill								
Same day	43	37	25	44	55	51	45	25
Next day	17	16	11	18	24	20	16	18
Six days or more	24	18	32	16	3	5	13	23
Waiting time for specialist appointment ¹								
Less than 4 weeks	79	62	56	74	79	63	57	86
One month to less than 2 months	10	19	14	10	11	12	16	7
Two months or more	11	18	30	15	11	24	27	7
Last time you needed medical treatment in the evening, at the weekend, or on a public holiday, how easy was it to get medical care without having to go to a hospital emergency department? ²								
Quite difficult or very difficult	34	59	56	59	27	39	44	58
I was admitted to an emergency department at least once during the past 2 years								
Yes	37	52	61	39	27	46	40	56
In your opinion, was the reason for your most recent admission to an emergency department a problem that could have been treated by your family doctor/ a doctor at the medical facility you usually attend, had he/she been available?								
Yes	18	35	39	24	29	21	24	36
How easy is it to get a telephone appointment during the normal opening hours of your family doctor's practice? ³								
Very easy	29	53	44	40	36	66	52	42
Fairly easy	39	32	33	44	46	25	31	38
Quite difficult/very difficult	31	13	21	15	17	8	16	19
During the past 2 years, have you called a hotline or telephone advice service to obtain medical advice?								
Yes	6	15	25	5	14	20	32	16
Advice / information								
Received "all" the advice or information needed	52	38	58	57	77	55	62	45

^{*1} basis: respondent needed to see a specialist in the past 2 years; ^{*2} basis: respondent needed medical care out of hours; ^{*3} basis: respondent had attempted telephone contact

Communications between physicians and patients seem to be in need of improvement in all countries. Thirty-six percent of German respondents said that the aims and priorities of treatment had not been mentioned to them, 69% had not received a written treatment plan, and only 21% had been contacted by the doctor after the visit to see whether they were getting on all right (eTable 4). Only one respondent in 10 in Germany reported having a doctor who scored positively on all these points; in other countries the rate was higher. On

the whole, though, patients said that doctors who made an effort to include them in decisions were the rule rather than the exception.

Coordination and continuity of care

Given the criteria for inclusion of respondents, it was to be expected that more than one physician was involved in patient care. Germany stands out in these results in that 47% of respondents were under treatment by at least four doctors (Table 6). Even in the two countries

TABLE 6

Coordination and continuity of care

Country	D	AUS	CAN	F	NL	NZ	UK	USA
In %								
Number of doctors seen in the past 2 years								
0	1	2	3	3	2	2	3	3
1	7	10	15	15	14	19	15	14
2, 3	45	50	49	52	56	49	49	45
4 or more	47	37	29	28	28	29	30	35
Respondent has "often/sometimes" in the past 2 years had the impression that time was being wasted because of poorly organized medical care	33	26	29	22	20	25	20	35
Doctors had not received patient's medical notes ^{*1}	33	20	17	29	17	12	15	22
Family doctor did not receive information about treatment by the specialist ^{*1}	17	15	16	9	14	16	14	21
Coordination problems experienced at doctor's appointments during the past 2 years								
Test results, medical notes, or reasons for referral had not reached the doctor	13	15	18	15	9	18	15	23
Doctor ordered an unnecessary (i.e., duplicate) medical examination	18	12	10	11	4	11	8	19
The treatment recommended by the doctor was of little or no use for my health	24	20	21	35	15	18	16	26
At least one of these three problems	37	32	34	46	24	31	28	43
Problems on discharge from hospital ^{*2}								
I was given no clear instructions about symptoms and when a follow-up would be necessary	29	23	19	35	21	25	27	12
I did not know who to turn to with any questions about illness or treatment	11	17	12	18	12	18	19	8
I did not receive a written treatment plan giving information about care after discharge	42	40	31	41	36	33	34	10
The hospital made no arrangements about after-care with a family doctor or other medical professional	39	37	33	41	23	35	30	28
At least one of these four problems	63	60	53	70	52	55	54	37
Were you prescribed new medications on discharge from hospital?								
Yes	30	46	54	37	29	48	51	64
Was there any discussion about what to do about the medications you were already taking before admission to hospital?								
No	20	30	33	34	30	36	29	29
After discharge, were you readmitted to hospital, or did you have to attend the emergency department, because of complications?								
Yes	9	12	15	6	13	11	12	17

^{*1} basis: respondents who needed to see a specialist within the past 2 years; ^{*2} basis: respondents who had been hospitalized within the past 2 years

ranking next, Australia and the USA, the rates were notably lower, at 37% and 35%. In the other countries, the highest rate was 28%.

This finding draws the gaze to aspects of coordination of care. In Germany, 33% of respondents reported that the specialist had no information on their existing medical history; in other countries the highest rate was 22% (USA). Thirty-three percent of German respondents had had the impression during the past 2 years that time was sometimes or often wasted because of poorly organized medical care. This was more frequent than in the other countries, with the exception of the USA (35%). Table 6 also contains data on aspects of treatment in hospital.

Medications and patient safety

German patients were taking a mean of 2.5 different medications; in the other countries, mean values ranged between 2.2 and 3.5 (eTable 5).

In Germany, 12% of respondents said that there had been errors in their treatment; in France (9%), the Netherlands (8%), and the United Kingdom (10%) the rates were slightly lower. Supplementary eTable 5 also gives data on errors in the use of medications and diagnostic examinations.

Discussion

This survey of sicker patients confirms that in 2008, too, there were large differences internationally

between patients' experiences and satisfaction with their health care systems. In every country there are elements that appear in need of improvement. In addition, in all the countries there is a significant proportion of patients who are dissatisfied; the numbers are smallest in the Netherlands and in the United Kingdom.

In comparison to the 2005 survey (11), general satisfaction with the health system in Germany has improved slightly in terms of numbers. It cannot, however, be ascertained whether this change is due to a difference in the make-up of the patient sample or whether it represents a genuine trend to greater satisfaction.

Despite this, as in 2005, it was apparent that, in their subjective assessment both of the German health care system as a whole and of the quality of their own individual medical care, German patients were less satisfied than the respondents of most of the other nations. Although 87% of respondents in Germany said the quality was at least good, most of them nevertheless wanted some fundamental changes. This discrepancy was also seen in 2005. However, it cannot be inferred from these data that the treatment results in Germany were actually worse.

It is possible that patients in Germany are more critical or have higher expectations than patients in the other countries. It is a known sociological phenomenon that objectively good conditions of life can be subjectively perceived as poor (16). This shows that levels of satisfaction are determined not just by the reality of health care provision, but by the levels of expectation against which reality is being measured.

It is possible that Germans tend to give more negative assessments. Jürges (17) compared self-reported health in various European countries with rates of reported health impairments. This study showed that in comparison to the European average, the German respondents tended to rate their own health as poorer for the same frequency and severity of disease. International comparisons that fail to account for such national differences in reporting styles can therefore lead to erroneous conclusions.

One single aspect in which Germany stands out internationally is that almost half the respondents reported being under the care of more than four doctors. This means that their treatment is in many hands and coordination is thus more difficult. One finding of this survey is that patients in Germany more frequently report particular problems of coordination.

A strength of this survey is that the same set of questions was administered in all the countries at the same time. The authors therefore assume that the survey reliably shows up existing differences in perception in the various participating countries. The rates of diseases varied between countries, for reasons that are unclear. These differences in disease rates may also mean that differences in experience between countries are partly due to differences of care in medical specialties.

One limitation of surveys of this sort is that internationally they are increasingly having problems in achieving high response rates. With a response rate of

31%, participation in Germany was at a level that is usual for such surveys. The consequences for findings of a low response rate is a subject that is widely debated (12–15, 18). A low response rate does not necessarily mean that the findings of a survey are grossly biased.

Another limitation of this survey is that the respondents' subjective assessments cannot be objectively verified.

It is not really possible to draw conclusions about causal relationships from surveys of this kind. However, the authors are of the opinion that the data do reflect the views of patients about the German health care system with adequate reliability. Against this background, the authors believe this survey is a valuable contribution to the current German discussion, because it places the assessment of the strengths and weaknesses of the Germany health care system against an international yardstick. The patients' actual experiences show that some things can be improved, but they do not call the German health care system as a whole into question.

Conflict of interest statement

The authors declare that no conflict of interest exists according to the guidelines of the International Committee of Medical Journal Editors.

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KEY MESSAGES

- In Germany, more physicians are involved in the care of sicker patients than in other countries.
- Problems of coordination are regularly reported in all countries, especially communications between specialist and primary care physician, hospital and family, and in keeping the patient informed.
- Despite similar experiences and similar coordination problems, levels of satisfaction with health systems vary greatly internationally.
- In Germany, only 34% of respondents scored the quality of their care as "excellent" or "very good." In other countries the proportion was higher (up to 66%).
- 50% of German respondents think that fundamental changes are needed in the health system; 25% are for complete reform.

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E-SUPPLEMENT

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Make-up of the study sample

The complete telephone database consisted of 13 266 randomly generated telephone numbers. Of these, 3090 were not connected, and for another 1774 it was unclear whether they related to a private household. This left a group of 8402 households/persons. Out of these, 5210 did not agree to take part or could not be contacted. Thus, 3192 persons (unweighted initial screening sample) remained with whom interviews were carried out for inclusion in the survey. To calculate the response rate, some of the households for which it remained unclear whether they were private households were rated as nonresponders. In relation to the thus estimated population for inclusion, a participation rate of 31% was achieved.

Out of the 3192 persons interviewed in Germany, 1320 (41%) fulfilled the inclusion criteria for sicker patients. Out of these 1320 persons, 1202 took part in the complete survey.

Characteristics of respondents and weighting

Compared to the average in the population, the initial screening sample in all countries contained a larger proportion of women and a larger proportion of older persons. In Germany there was also a larger proportion of persons with a lower level of education; in most of the other nations, it was persons with a higher level of education that tended to be over-represented. In order to minimize effects of these deviations from the average, the initial sample in each country was adjusted by weighting. This was done using an iterative procedure (rim weighting).

This weighting procedure also altered the make-up of the base sample of sicker patients. In the end, for Germany there was a weighted sample population of 1077 men and women. Unless otherwise stated, all the analyses in the present article relate to this weighted “base” sample. *eTable 1* shows demographic characteristics of the German base sample before and after weighting.

After weighting, the proportion of women in the base sample in all countries was between 51% and 57% of respondents; in Germany it was 56%. Between 44% and 62% of respondents were over the age of 50 years; in Germany the figure was 59%.

Health problems of respondents

The survey targeted people who in the past 2 years either were dependent on regular contact with the health system or had needed treatment for a severe illness. *eTable 2* lists the frequencies of chronic diseases.

As in 2005, in 2008 respondents were adults (over the age of 18) who reported that their health was “fair” or “poor,” that they suffered from a chronic illness or disability, and/or had been hospitalized or had undergone major surgery within the past 2 years. Thus, the study targeted a group that was particularly reliant on health care provision.

Supplementary findings relating to costs, physician-patient communications, and how prescription drugs are handled are provided in *eTable 3*, *eTable 4*, and *eTable 5*.

ORIGINAL ARTICLE

The German Health Care System in International Comparison

A Patient Perspective

Klaus Koch, Christoph Schürmann,
Peter Sawicki

eTABLE 1

Demographic data of the German respondents

	Initial sample group		Sicker patients	
	Unweighted	Weighted	Unweighted	Weighted
N	3192	3164	1201	1077
in %				
Sex				
Male	40	48	37	44
Female	60	53	63	56
Age				
18–24	7	13	4	7
25–34	13	21	7	12
35–49	30	26	23	22
50–64	26	22	30	27
65 and older	24	19	37	32
Education level ^{†‡}				
Low	63	50	68	54
Intermediate	21	23	18	20
High	14	26	12	24
Federal state				
Baden-Württemberg	13	13	13	13
Bavaria	15	15	15	14
Berlin	5	4	6	5
Brandenburg	3	3	3	3
Bremen	1	1	1	1
Hamburg	2	2	1	1
Hesse	7	7	9	9
Mecklenburg–West Pomerania	2	2	3	3
Lower Saxony	9	10	8	8
North Rhine–Westphalia	21	22	19	20
Rhineland-Palatinate	5	5	4	4
Saarland	1	1	2	1
Saxony	6	5	7	7
Saxony-Anhalt	4	3	4	4
Schleswig-Holstein	3	3	2	3
Thuringia	3	3	3	4

[†] Low: at most, advanced technical college entrance qualification; intermediate: at most, technical or vocational school education completed; high: university level or advanced technical college level education completed;

[‡] Some columns may not add up to 100 percent because respondents were given the option to say that they were not sure or could decline to answer altogether

eTABLE 2

Rates of seven chronic diseases in sicker respondents

Country	D	AUS	CAN	F	NL	NZ	UK	USA
Number of respondents (weighted)	1077	737	2608	1213	928	756	1103	1211
In %								
Arterial hypertension	41	30	32	32	34	25	37	43
Cardiac disease	22	15	13	14	16	13	14	14
Diabetes mellitus	15	13	17	12	13	10	11	21
Arthritis	15	36	33	12	19	20	35	38
Depression, anxiety, or other psychological problems	15	30	26	34	16	17	25	31
Asthma, COPD, ^{*1} or other chronic pulmonary disease	11	23	20	15	15	20	18	22
Cancer	10	11	11	10	9	14	9	13
At least one of the seven chronic diseases	68	74	72	67	66	64	75	78
Two or more (of seven) chronic diseases	38	46	45	35	36	32	45	55

^{*1} COPD, chronic obstructive pulmonary disease

eTABLE 3

Additional financial burdens and consequences*¹

Country	D	AUS	CAN	F	NL	NZ	UK	USA
In %								
Out-of-pocket expenses in the past 12 months for medical treatment, tests, etc.								
\$ 0	8	12	24	17	33	10	63	9
\$1 to \$100	10	9	13	11	8	15	7	5
\$101 to \$ 1000	57	34	33	25	37	39	11	31
More than \$1000	12	27	17	5	8	11	5	39
Not sure/refused to answer	13	19	12	42	14	15	9	16
Have you in the past 2 years done any of the following due to cost?								
Not filled a pre-prescription or skipped doses	13	18	16	12	3	16	8	39
Had a medical problem but not seen a doctor	16	21	9	10	2	20	4	34
Forgone any medical examination, treatment, or after-care recommended by a doctor	14	23	10	11	3	17	6	36
At least one of the above	28	35	23	21	6	29	14	52

*¹ Relates only to expenses not covered by public or private health insurance, 2008

eTABLE 4

Patient-physician communication

Country	D	AUS	CAN	F	NL	NZ	UK	USA
In %								
The doctor in charge of treatment...								
Discussed the most important goals or priorities	64	60	65	51	51	58	50	74
Gave a written plan to help the patient better manage his/her own treatment at home	31	42	47	34	35	43	35	66
Made contact after the appointment to find out how the patient was doing	21	30	36	27	27	35	29	49
Yes to all three	10	16	23	10	13	20	16	36
The doctor has a (specialized) nurse who is regularly involved in the treatment	13	18	22	26	29	33	48	33
This includes telephone support and advice	28	38	49	24	39	37	37	48
Family doctor "always" encourages patients to ask questions* ¹	41	52	53	39	40	54	45	56
The available treatment options are "always" explained and the patient involved in the decision	56	58	56	42	61	60	48	51
Patient "always" receives clear instructions about which symptoms are important and when further care is needed	60	60	57	46	59	65	50	59

*¹ Basis: respondent has a family doctor or family practice

eTABLE 5

Medication and safety

	D	AUS	CAN	F	NL	NZ	UK	USA
In %								
Consumption of prescription medication								
Respondent takes at least one prescription drug regularly or continuously	73	68	69	69	68	57	73	73
No medication	26	31	28	26	32	42	26	25
Four or more	27	26	31	29	27	24	40	38
Mean value	2.5	2.4	2.9	2.8	2.4	2.2	3.3	3.5
Doctors or pharmacists have in the past 2 years always discussed all the drugs the respondent was taking ^{*1}								
Often	20	20	18	9	11	13	22	20
Sometimes, rarely, or never	48	42	40	67	64	50	49	41
Treatment errors								
Respondent believes that a treatment error was made during the past 2 years	12	16	14	9	8	14	10	16
Wrong drug or wrong drug dose was given	6	12	9	8	6	10	8	13
Either or both of these errors	16	21	18	14	13	18	15	22
Errors in laboratory tests								
Respondent has in the past 2 years received incorrect results of a diagnostic examination or laboratory test	4	6	5	3	1	3	4	6
Respondent has in the past 2 years experienced delay in receiving abnormal test results	4	12	11	5	6	10	10	15
Either or both of these errors	7	17	14	8	6	11	13	19
Any kind of medical error								
Error led to "very" or "quite" serious health problems	39	36	38	34	42	37	35	39

^{*1} Base: respondents who regularly take medical drugs