

# Patients' Needs for Contact With Their GP at the Time of Hospital Admission and Other Life Events: A Quantitative and Qualitative Exploration

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## ABSTRACT

**PURPOSE** Our goal was to explore patients' anticipated needs for contact with their general practitioner (GP) at the time of hospital admissions and other life events.

**METHODS** We undertook a questionnaire survey of 875 patients from 35 general practices spread throughout the Netherlands and a qualitative interview study with 30 patients.

**RESULTS** Most patients expected to need contact with their GP if admitted to a hospital for a serious condition, such as a malignancy (98%) or a heart attack (97%). For minor conditions, such as a minor foot operation, contact was considered less important (33%). At the time of major life events, many patients anticipated needing contact as well: 81% in the case of a birth within the family, 90% in the case of a death in the family. In the quantitative analysis patients' wants were related only to a minor extent to patient characteristics. The qualitative analysis, however, distinguished categories of patients with different needs. Some patients were more technical in their needs, others focussed primarily on the relationship.

**CONCLUSION** Patients appear to have considerable need for contact with their physician at the time of hospital admission and other life events. The profession should reflect on this underexplored field and attempt to take a policy-making position toward initiating patient contact.

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## INTRODUCTION

Family physicians' initiatives to contact patients when they have been referred or discharged and willingness to share life events may be considered acts of commitment. Dedication to patients is considered one of the essentials of general practice.<sup>1-3</sup> Generally, patients may value this dedication, which goes beyond explicit requests and is independent of insurance contracts. Family physicians can express their feelings of commitment in various ways, but remarkably few studies have been undertaken to make the concept operational.

In the Netherlands, general practitioners (GPs) act as the gatekeepers to secondary care. As a rule, patients are listed with one GP, and they do not change physicians easily. GPs receive daily information on admissions and discharges from hospitals. About one half of the GPs are still in solo practice. We notice a certain tradition of GPs to contact patients at the time of hospital admission or if they experience serious life events, such as the death of a relative or birth of a child. Reliable data on the issue are

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lacking, however, and mere heartfelt cries encourage GPs to visit hospitals.<sup>4,5</sup> Patients' needs in this area are largely unknown. Because these contacts are time-consuming and often difficult to integrate into everyday practice, more insight into patients' needs is essential, and in the field of commitment they should be weighed against other services the GPs provide for patients.

We conducted a study to explore patients' anticipated need for contact with their physician in case of a hospital admission and on the occurrence of important life events: "If I were in this kind of situation, I think that I would need contact with my GP." We studied this theme quantitatively, and we explored patients' thoughts and motives in a qualitative way. We tried to identify categories of patients with different needs. This qualitative approach, in addition to being used generally as preliminary research, is highly suitable for this description and understanding of quantitative work because it contributes to the validation of its outcome and enriches quantitative data by insight into its complexity.<sup>6-8</sup>

## METHODS

### Questionnaire Design, Survey Sample, and Data Collection

We developed a structured questionnaire on the basis of pilot interviews. Next, 5 staff members from the Department of General Practice, University Medical Centre, Nijmegen, The Netherlands, and the members of the research team validated this questionnaire. In the questionnaire we first asked patients whether they expected to need contact with their GP for 3 life events, including the death of a family member, the birth of a child, and the discovery of cancer by a specialist. We asked them whether they would need a telephone call or a home visit. The questions were constructed as follows: "Suppose you were in this situation, do you anticipate needing contact with your GP?" Second, we asked patients about their needs relating to 5 reasons for hospital admission, including a minor foot operation, a broken leg, unclear abdominal symptoms, a heart attack, and a malignancy. The possible options were a telephone call, a home visit, a hospital visit, or a combination of these. For both scenarios, we focused on physician-initiated contacts because they require action on the part of the GP. Patient-initiated contacts normally will take place in any case. We therefore excluded the possibility of a visit to the practice. Moreover, we believed that it was unusual for patients in the Netherlands to initiate contact with their GP in these situations. GPs are inclined to telephone or visit such patients and will not ask them to visit the practice.

As previous research on predictors was lacking,

we collected information on patient characteristics that might be related their needs: age, sex, number of visits to the physician in the past 12 months, number of years registered with the practice, chronic illness, recent hospital admission, and life events and psychosocial problems in the past 5 years.

We based our survey in the practices of a broad sample of 35 GPs spread throughout the Netherlands. This sample was representative on main demographic variables. We sent each practice a batch of 25 questionnaires, including reminder cards. Next we asked the practice assistants to post 1 numbered questionnaire to each of 25 consecutive patients (18 years or older) who had visited the GP on the first day of a specified week. This procedure prevented selection bias by GPs and thus provided a semirandom sample. Patients completed the questionnaire at home and returned it by mail to the research team. After 2 weeks, the practice assistants sent a combined thank-you and reminder card to all the patients. In addition, the practice assistants collected baseline characteristics for all patients. They returned these data anonymously to the researchers using the unique questionnaire numbers.

### Qualitative Study Sample and Data Collection

For the qualitative part of the study, we recruited patients from a wide variety of 25 GPs in the eastern part of the Netherlands. We asked the GPs to give a letter to the first 5 patients who visited them on a day during the week. In the letter we explained the purpose and theme of the interviews and assured patients' anonymity. Patients returned the reply form with informed consent and indicated their age, sex, chronic illness, and number of visits to the GP in the last year. On the basis of these characteristics, we were able to choose a variety of patients. Two trained interviewers (graduated medical students with interview training) performed the interviews. They used the framework approach<sup>8</sup> and an interview guide. While concentrating on the scenarios that had been used in the questionnaires, the interviewers focused mainly on views and motives for patients' needs and expectations. The interviews were held at the patients' homes and tape recorded.

### Analysis

We explored the survey data with principal components analysis. In this way, we structured the data and sought to validate our assumptions. For the detected components, we calculated sum scores to determine patients' overall needs. We used multiple linear regression analysis (general linear model procedure, SAS, Cary, NC) to relate sum scores to patient characteristics.

The interviews were completely transcribed. Two

**Table 1. Response Rates Within Subgroups**

Characteristic	Responders (Overall Response = 644/873)	
	Number*	Percent With Characteristic
Age, y†		
18-40	182/284	64
41-60	270/349	77
61-80	170/210	81
> 80	20/24	83
Sex		
Female	399/533	75
Male	243/338	72
Chronic illness‡		
Yes	255/314	81
No	380/548	70
Contacts with physician in the last 12 mo (including last visit)§		
1-2	122/177	69
3-4	154/221	70
5-10	244/310	79
> 10	121/162	75

\* Because of missing values from sent questionnaires, for which assistants collected baseline characteristics but forgot to fill in some of the data, the number of usable questionnaires ranged from 862 to 871.

† Response rate increasing with age,  $P < .001$  ( $\chi^2$  for trend).

‡ Response rate higher for patients with chronic illness  $P < .001$  ( $\chi^2$ ).

§ Response rate increasing with higher contact frequency,  $P < .016$  ( $\chi^2$  for trend).

**Table 2. Patients' Need for Contact With Their Physician During Life Events**

Situation	Need Contact No. (%)	Type of Contact (%)	
		Telephone Only	Home Visit
Birth of a family member	477/587 (81)	16	65
Death of a family member	569/630 (90)	9	81
Bad news from a specialist	616/632 (97)	10	87

**Table 3. Patients' Need for Contact With The GP in Case of Hospital Admission**

Hospital Admission	Need Contact No. (%)	Type of Contact (%)			
		Telephone Only	Home Visit After	Hospital Visit	Both Visits
Broken leg	447/634 (71)	33	19	12	7
Minor foot operation	210/633 (33)	23	7	2	1
Vague abdominal symptoms	574/631 (91)	38	20	21	10
Heart attack	613/633 (97)	12	37	26	22
Discovery of cancer	618/633 (98)	5	36	27	30

authors (HS, a GP-researcher; and CvdV, a research assistant) independently and systematically analyzed the interviews. During the analysis, a thematic framework evolved, which we applied to all the interviews by annotating the transcripts with codes.<sup>9</sup> These codes emerged from initial reading of the transcripts. For example, the statement "I would definitely need a home visit if a close family member died. After all he is my personal doctor; I expect consolation, support. Why? The emotional bond we have, our relationship, it is his knowledge of my family. I find this very important," would be analyzed with the following codes: What: "I would expect a home visit." Function: "I expect consolation, support." Motive: "The emotional bond we have, our relationship, his knowledge of my family." Assessment: "I find this very important." We used the software program ATLAS.ti (Scientific Software Development, Berlin, Ger) as an aid to the analysis. We present the results semiquantitatively, with words referring to the number of patients: a few (1 to 5); some (6 to 10); half (11 to 20); most (21 to 25); and all (26 to 30).

## RESULTS

### Patients' Needs

We received 644 of 875 usable survey replies (74%). Respondent analysis showed only small differences within subgroups. Frequent visitors and older patients were slightly overrepresented (Table 1). More than 80% of the respondents indicated that they anticipated needing contact with their physician after a birth or a death in the close family or when bad news was received from a specialist. In these situations, most respondents thought of a home visit (Table 2). In the case of a hospital admission for a minor foot operation, 33% wanted contact with their physician, compared with 98% who wanted contact with their physician when a malignancy was discovered during admission. Respondents most often anticipated needing a visit after the hospital admission (Table 3).

### Patient Needs and GP and Patient Characteristics

Principal component analysis showed 2 components congruent with our previous assignment; one component related to home scenarios, and one to hospital scenarios. The experience of a recent hospital admission or having lived through a serious life event recently did not influence patient needs. A model containing 10 patient characteristics explained

merely 16% of the observed variance for home situations and 8% for hospital situations (Table 4).

### Qualitative Exploration of Patients' Needs

We interviewed 30 of 44 eligible patients initially by focusing on a variety of basic characteristics.

We continued until saturation occurred after interviews 26 through 30. Eighteen patients were female; 14 suffered from a chronic disease. Eight patients were aged 20 to 39 years, 10 were aged 40 to 59 years, and 12 were more than 60 years old. Sixteen had been registered for more than 10 years in the practice, and

14 were registered for fewer years. We saw an equal distribution of the number of contacts with the GP, ranging from 1 to more than 20 contacts in the last 2 years.

**Table 4. Patients' Need for Contact With Their Physician in Relation to Patient Characteristics**

Characteristics	Patients' Need for Contact*			
	Home Scenarios†		Hospital Scenarios‡	
	Mean Score	P Value	Mean Score	P Value
Age, y				
18-40	4.98		11.67	
41-60	4.81	< .001	13.43	.040
61-80	4.25		14.23	
81-100	3.22		14.14	
Sex				
Male	4.26	.399	13.33	.226
Female	4.38		13.78	
With children				
Yes	4.99	< .001	13.68	.440
No	3.65		13.06	
Years in the practice				
< 1	4.65	.053	14.69	.169
1-2	4.44		13.60	
3-4	3.90		12.36	
5-10	4.57		14.12	
> 10	4.03		12.09	
Physician contacts in the past year				
1-2	4.18	.019	14.86	.069
3-4	4.21		13.79	
5-10	4.35		12.60	
> 10	4.54		12.23	
Chronic illness				
Yes	4.22	.191	13.48	.742
No	4.42		13.26	
Distance from hospital (km)				
< 5	4.19	.680	13.33	.933
5-9	4.21		13.28	
10-20	4.35		12.96	
> 20	4.54		13.92	
Hospital admission in past year				
Yes	4.28	.552	13.05	.313
No	4.36		13.68	
Serious life event last five years				
Yes	4.39	.335	13.30	.787
No	4.24		13.46	
Serious psychosocial problem past 5 years				
Yes	4.27	.580	13.64	.491
No	4.37		13.10	
Variance explained by model, %	16		8	

\* A higher sum score means more need for contact.

† Eigenvalue component 1.37; mean sum score 5.3 (SD 1.64).

‡ Eigenvalue component 3.21; mean sum score 13.9 (SD 7.10).

### Whose Initiative?

Most of the patients told us that they anticipated needing contact in various conditions but that they would never take the initiative to initiate contact. They considered it the responsibility of the GP or a matter of course that the GP would take the first step. When asked why they would refrain from taking the initiative themselves, most patients were unable to respond or replied, "Things like these go without saying." Nevertheless, it was clear to most of the patients that they would not be the ones to take the first step. This attitude was often coupled with a clear judgment: the GP could prove his or her value by showing initiative but could also forfeit a lot by failing to do so. Only a few patients said that they would take the initiative themselves. They spoke less in terms of the relationship but were thinking more in terms of what the GP could do for them.

### Home Scenarios

The few patients who said that they would not need contact if a family member died told us that either their relatives had another GP or that they considered making contact their own responsibility. A few said that they anticipated being in need of a home visit but would appreciate just a telephone call, because they were afraid to take up the GP's time. Most patients, however, rejected contact by telephone if a relative were to die; telephone

contact was often considered "cold," "too easy," or "too distant." Patients found that their physicians could fill diverse roles to meet their needs, ranging from just being "a listening ear," to giving consolation and support, and possibly prescribing tranquilizing medication for relatives. Most patients would need contact because of their perceived relationship with their GP: "he knows the family," "a matter of trust," "because of our emotional relationship." Some patients simply considered it the GP'S job to seek contact with the family: "It's his job," and "he should be interested."

In the event of a birth in the immediate family, only a few patients thought that the GP had a specific medical task of examining the newborn. Some said that a GP had to welcome the baby just because it would be a new patient. Others thought that a GP should assess how the new family was coping. Some simply considered it a GP's task. Patients who did not need anything or just a telephone call said it was because of the GP's pressured time: "he is too busy," or "he has more important work to do." Some considered a visit to be primarily the midwife's concern. Nevertheless, all said they would value a home visit from their GP. Most patients mentioned the relationship with their physician as the main reason for wanting contact: The GP who initiated contact would demonstrate commitment to patients, "just to let us know that he is interested," even if the physician did not take on a specific role.

After receiving bad news from a specialist, most patients wanted a home visit, mainly "to insure that she is informed" or "just to talk." They expected the GP to be supportive and interested and to discuss the future with them. A few patients would not need contact because they considered the GP's task finished after referral: "The diagnosis has been made," "he cannot do anything anymore," or "others take over." Some patients thought that they should take the initiative in contacting or visiting their GP.

**Hospital Scenarios**

Most interviewees regarded a brief admission for a minor foot operation and a 2-week admission for a broken leg in more or less the same way. The duration of the hospital stay was considered unimportant. These problems were assessed as relatively small, generally not necessitating contact: "not serious," "small technical problems," "not dangerous," and "unimportant." On the discovery of a malignancy, however, almost all patients wanted contact, mainly because of the perceived mutual trust and the overall need for contact because of a serious event. Only a few patients

needed nothing from their physician. They thought that the hospital would take over all treatment. Most others would want conversation, support, interest, or advice for the future. Some thought that their GP should translate the hospital's technical language. Some found that the GP's role should end and start again at the hospital's gate, but others stated that they would want a confidante at the bedside.

**Evolving Patient Categories**

From the qualitative analysis we identified 2 major patient categories. One small group of patients concentrated primarily on tasks required of their GP. This group would show more initiative in contacting the GP, reported less of a bond, and spoke more in terms of tasks and roles. The other large group concentrated primarily on their relationship with their GP, expected things from their GP more implicitly, and would show less initiative in contacting their GP themselves (Table 5).

**DISCUSSION**

This study shows that many patients anticipate needing contact with their personal physician in the event of a serious life event and at the time of hospital admission for life-threatening illness. The qualitative analysis suggests that patients usually will not initiate such contacts themselves. We identified patient groups with different commitment needs. Some patients focus primarily on physician tasks; these patients expect less and will show more initiative. Other patients focus predominantly on the physician-patient relationship, and these patients want more contact. Recognizing these patients types could be important in everyday practice, because doing so may make GPs aware of possible unspoken needs and enable them to balance these needs against other assignments.

**Table 5. Patient Categories Evolving From Qualitative Research**

Category	Emphasis on Tasks	Emphasis on Relationship
Needs	More frequent telephone contact Preferably patient initiated Explicit request	More frequent home visits Preferably physician initiated Implicit request
Purposes	Primarily tasks Prescribing Assessing relatives Organizing	Mainly support Listening Being there Showing commitment
Motives	Primarily in terms of function Physician's task For future management	Mainly in terms of emotion Having emotional bond Knowing the patient
Assessment	Expressed as importance Beneficial Profitable	Expressed as appreciation Kind Nice

The concept of commitment studied here is linked to continuity of care. Some even define continuity in terms of commitment, such as "being there when the patient needs us,"<sup>10</sup> and "assuming ongoing responsibility for patients."<sup>11</sup> Saultz<sup>12</sup> recently suggested a hierarchical definition for continuity of care, comprising the informational, longitudinal, and interpersonal levels. Commitment may be linked to both the longitudinal and the interpersonal levels. It requires dedication and responsibility, qualities that develop more easily within an ongoing personal relationship. Studies on commitment add to the body of research on patients' needs for provider continuity<sup>13,14</sup> and coordination of care.<sup>15</sup>

So far, commitment has been relatively unexplored in the literature. A systematic review of patient preferences regarding general practice care did not mention the issue,<sup>16</sup> nor did another study of patients' views on what makes a good GP.<sup>17</sup> We found one outdated study that discussed the conceptual theme more superficially. It concluded that patients appreciated hospital visits, but that GPs varied considerably in their habits.<sup>18</sup>

Solid evidence from studies on the value of commitment is lacking. GP visits to older patients soon after discharge resulted in fewer admissions to nursing homes in the following year.<sup>19</sup> GP input into discharge planning did not result in a decline in readmissions, but more patients believed that their return home was well prepared.<sup>20</sup> Visits soon after discharge by health visitor assistants did not benefit patients after discharge,<sup>21</sup> and the debate continues on the necessity of GP home visits after early discharge for myocardial infarction.<sup>22,23</sup> One UK study, however, found that patients older than 65 years and their caregivers complained about a lack of support after hospital discharge and reported being dissatisfied because of problems with home visits.<sup>24</sup>

GPs are more satisfied with home visits to newborns than with practice appointments.<sup>25</sup> A small survey in one suburban family practice showed that patients greatly appreciated contact with their family physician after the death of a loved one, but only one half of the patients expected a telephone call.<sup>26</sup> This finding may indicate the difference between needs and expectations; the latter may be based more on actual experiences.

A clear limitation of this study is that we asked patients for anticipated needs in hypothetical scenarios. These anticipated needs may be considered different from their needs in reality, and patients might have overestimated their needs. It was noteworthy, however, that recent admission to a hospital or having lived through a serious life event recently did not influence patients' needs. Moreover, few patients wanted contact after a minor operation, indicating that patients were not indiscriminate about their need to see their GP.

Our research was based in the Netherlands, which is a densely populated country, and the distance from a clinic to a hospital is probably shorter than in most other countries; therefore, the expectation of a hospital visit may be relatively high. Also, we focused primarily on GP-initiated contacts, because this activity is a Dutch tradition. We excluded practice consultations, which may be a convenient alternative in other countries. We consider our insights about the need for GP-initiated actions to be most relevant for daily practice, but future research may well include patient-initiated options. Finally, if we had taken a sample from the whole practice population, slightly different needs might have become apparent. Even so, about 80% of patients see their GP yearly, and our participants varied considerably in the number of visits they made to their physician in the past year.

Tuning the practice to patient needs is considered an important way to improve the quality of care. Our findings indicate that many patients in the Netherlands implicitly want contact with their GP at the time of hospital admission and other life events. Our impression that only a few patients would take the initiative themselves requires further quantitative confirmation. Further research may help the profession take a stand on these issues. In the meantime, the practicing physicians will have to weigh patients' needs in this area against the needs of other patients for other services. Our study, however, shows clearly that patients' needs are considerable at the time of hospital admission and other life events.

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**Key words:** Physician-patient relations; patient preferences; life change events; home visits; physician role; continuity of patient care

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