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The value of open-ended questions in surveys on patient experience: number of comments and perceived usefulness from a hospital perspective

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Abstract

Objective. To analyse the patients' inclination to comment in generic patient surveys, and to evaluate how these comments were received and used for quality improvement by the hospitals.

Design. The study is based on quantitative and qualitative data from four rounds of patient satisfaction surveys from 1999 to 2006. The open-ended questions and their applicability were evaluated by hospital and department management teams in a survey and by hospital employees and leaders, in semi-structured interviews.

Setting. Eight public hospitals in a Danish county (amt).

Participants. In this study, the participants were 75 769 patients, 173 department/hospital management teams, and 24 hospital employees and leaders.

Interventions. Questionnaires with open-ended questions to patients and hospital/department management teams. Semi-structured interviews with hospital employees and leaders.

Main outcome measure. The number of comments from patients and the usefulness of the comments as perceived by employees and leaders.

Results. A total of 76% of the patients chose to add one or more comments to their questionnaires. The patients' inclination to comment increased over time. The patient's inclination to comment was highest for the most and the least satisfied patients. The comment-gathering was viewed as 'Very useful' or 'Useful' by 80.7% of the department management teams (31 responses).

Conclusion. To gather comments and to forward these to small organizational entities seems to make patient satisfaction measurements more informative and patient-centred. The wording of the open-ended questions, the number of questions and an appeal in the cover letter appear to be important in relation to the patient's inclination to comment.

Keywords: open-ended questions, patient satisfaction, perceived usefulness, patient-centred

Introduction

As health-care systems become more focused on efficiency, surveys of the patient's experience with health care are becoming important for assessing the quality of care. It is therefore problematic that quantitative generic patient surveys have a tendency to overestimate patient satisfaction and to standardize patient experiences, as documented by qualitative triangulated studies [1–5], a tendency that increases as measurements become more generic [6]. In consequence a number of studies have suggested that quantitative patient satisfaction surveys could benefit from being supplemented by open response fields that allow patients to add free-text comments [6–8].

Open-ended questions have been shown to elucidate critical comments that cannot be obtained using purely quantitative surveys [1, 7–10]. Anyway open-ended questions are still used very rarely, even though they have been recommended for 20 years [11]. One reason for this could be a lack of knowledge on how best to collect and present patient's

comments for those who are supposed to use them. A huge amount of literature on how to collect quantitative data exists, but much less has been written about how to collect and handle data from open-ended questions, especially from the practical point of view.

The fact that patients are willing to respond to open-ended questions is not sufficient to make patient surveys a recommended tool for a more patient-centred practice [12]. It is also important to study whether collecting and reporting comments leads to increased willingness among employees to take responsibility for the results. We know that for performance feedback to be accepted as a basis for change, it must be perceived as relevant, timely, comprehensible and related to the day-to-day realities of the organization [13, 14].

The aim of this article was to analyse the patients' inclination to comment in surveys of the patient's experience of health care and to evaluate how these comments were received and used for quality improvement by the hospitals.

Methods

The study was based on three data sources: (i) semi-structured questionnaires for patients who participated in patient satisfaction surveys in Aarhus County from 1999 to 2006, (ii) questionnaires for hospital and department managements focusing on the perceived usefulness of the concept of the satisfaction surveys for their follow-up initiatives and (iii) semi-structured interviews among hospital employees and leaders.

Patient satisfaction questionnaires

In 1999, Aarhus County developed four patient satisfaction questionnaires for inpatients, outpatients, surgical day patients and medical day patients, respectively. The development is described in detail in another article [15].

Each of the four questionnaires contained 9–15 questions on patient perceptions of continuity, communication, coordination, and professional quality. The questions were scored on a four-point scale: 'Yes', 'Both/and', 'No' and 'Don't know/irrelevant'. The overall question 'What is your overall impression of the ward?' was measured on a six-point scale ranging from 'Exceptional (5 stars)' to 'Unacceptable (1 star)' and finally, 'Don't know' followed by the open-ended query: 'Why did you answer in this way? (Criticism, praise or good ideas for the section)'. All perception-related questions were followed by a field with the heading 'Comments'.

The questionnaires were sent by mail from the departments to patients in the previous 3-month period. The patients were selected at random from the patient registration system using the Danish 10-digit person identification number. A department could use more than one type of questionnaire, typically one for inpatients and one for ambulatory patients. For each of the four patient subgroups, up to 400 patients in each department received a questionnaire. The surveys were anonymous and no reminders were sent. Response rates for the four rounds were constant, highest for surgical day patients and lowest for inpatients.

The questionnaires were enclosed with a letter that urged the patients to comment: 'In the questionnaire, you can provide the reasons for your response for nearly all the questions. These reasons, expressed in your own words, are valuable to us. If there is not enough space on the form, you are welcome to attach them in a letter.'

Students typed the comments in full length to the extent that legibility allowed, following instructions from consultants from the County of Aarhus. Comments were vetted by the consultants before being reported. Comments with racist or sexist content were removed—this occurred in fewer than 10 instances. The names of staff and co-patients were changed to 'no name'.

For each of the departments, reports were prepared with the results specified at the section level. This was done by an IT system, able to interleave the quantitative results and the typed comments. The comments in the report were supplemented with information about the patient's gender, age and diagnosis and with the answer to the question that caused the comment (see example in Table 1).

Evaluation questionnaire for the department managements

Three to six months after having received the survey reports, each management team was asked to answer an evaluation questionnaire about their experience of the survey system. The number of questions was supplemented from 8 (first round) to 15 (last round). The responses were either scored on a four-point scale ranging from 'Very useful' to 'Not useful' or on a four-point scale: 'Yes', 'Both/and', 'No' and 'Don't know/irrelevant'. One of the additional questions concerned the usefulness of the reporting of comments from the patients.

Only one questionnaire was sent to each hospital and department, also when managed by a team. The questionnaires could be filled out by either the team (consisting of two or maximum three leaders) or by one of the team members on behalf of the team. This was not registered. Reminding was done by telephone.

Semi-structured interviews

During summer 2009 semi-structured interviews were carried out on four hospitals including 24 staff members at different organizational levels (8 doctors, 11 nurses and 5 administrative staff). The study focused on the impact on patient centredness by different organizational instruments as the use of diagnose related groups (DRG) and different evaluation methods, especially the perceived usefulness of gathering comments from the patients. The interviews were taped and later transcribed. Text was coded into different themes using NVivo 8.

The qualitative analysis

Comments from the management questionnaires and the interviews, were organized into themes, one of which was

Table I Examples of feedback from patients to a ward

Comment: *I did not know that patients were discharged only a few hours after their operation. I came as a number, and went as a number.*		
Number of stars: One star (Unacceptable)		
Gender: Female	*Age: 60–69 years*	*Diagnosis: Anal disorder*
Comment: *They were in no control of my medical treatment. I talked with a doctor in the corridor. It concerned something very important. I was crying. He was an awful doctor.*		
Number of stars: Two stars (Bad)		
Gender: Female	*Age: 19–39 years*	*Diagnosis: Intestine*
Comment: *They forgot to offer me lunch one of the days. They should talk more with the patients. Sometimes I felt as if I wasn't there.*		
Number of stars: Three stars (Good and bad)		
Gender: Female	*Age: 19–39 years*	*Diagnosis: Internal medicine*
Comment: *All together I received a good treatment. But I want to criticize, that I was called to be there at eight a.m., but I was only scanned after twelve o'clock. I got the answer at nine p.m. And only at that time could I leave. I think the waiting time is too long.*		
Number of stars: Four stars (Good)		
Gender: Male	*Age: 40–59 years*	*Diagnosis: Intestine*
Comment: *Because they treated old and sick people as intelligent human beings.*		
Number of stars: Five stars (Excellent)		
Gender: Male	*Age: 70–79 years*	*Diagnosis: Internal medicine*

Comments are supplemented with the patient's overall impression of the ward, their gender, age and diagnosis.

'usefulness of comments from the patients in follow-up efforts'. From the quotations we produced a condensed summary, and illustrative comments were provided. Explanations to justify the positive evaluations in the quantitative part of the management questionnaire and differences in perception among nurses, doctors and administrative employees were identified.

The quantitative analysis

The patient's inclination to comment is seen as a dichotomous-dependent variable, and background variables that we expected to predict inclination to comment were seen as category covariates. For each patient category, we calculated the unadjusted and adjusted odds ratios (ORs), which can be interpreted as the likelihood of that specific group to comment, compared with the group of patients selected as the reference group. The adjusted ratios can be interpreted as the specific effect of the single value of an independent variable. For every OR, we have calculated the 95% confidence interval. The adjusted correlation coefficient for the estimated model is expressed with the correlation coefficient (Nagelkerke) as the ability of the estimated model to predict the patient's inclination to comment. The model is estimated in SPSS version 17.00 using binary logistic. All variables were entered at the same time.

Results

The patients' inclination to comment

A total of 75 769 patient responses were received and the response rates across the four survey rounds were: 53.5% for inpatients, 57.9% for outpatients, 57.8% for medical day patients and 59.9% for surgical day patients.

One or more comments were offered by 76% of patients giving a total of 149 221 comments. The inclination to comment was: 77% for inpatients, 73% for outpatients, 80% for surgical day patients and 77% for medical day patients. Patients who commented offered an average of 2.6 comments (range from 1 to 13).

The inclination to comment increased over time from the first to the fourth round: 71, 75, 81, and 78%. The comments varied in the length from a few words to three to four pages of text and averaged 87 characters in length, corresponding to one line of typed text. Some of the comments provided a concrete remark on a specific issue, whereas others were of a more narrative character.

A total of 68.2% of inpatients used the comment field in connection with their overall assessment. Considering the total volume of comments from inpatients, 31.3% were provided in connection with the overall assessment question and 68.7% in connection with the 12 specific questions (Table 2).

Table 3 shows that inpatients under 20 years of age (typically filled out by relatives of the children), offered the most (78%), and patients over 80 years of age the least comments (55%). Of the patients with further education 75% commented, while 65% of those with a lower secondary school education commented. Women commented slightly more frequently (71%) than men (66%), and native-Danish-speaking patients commented more frequently (69%) than non-native Danish speakers (59%). The differences for age, gender, language and education hold, even after controlling for differences in patient composition. There were no differences, on the other hand, between the eight specialties after control, but still, due to the patient composition, the gynaecology, parenchymal surgery and paediatric departments received the most and the medical and orthopaedic surgery

Table 2 The number of comments according to 13 questions asked during the four survey rounds from 1999 to 2006, sorted by the number of comments

Question	Number of comments	Percentage of patients answering the question with a comment
What is your overall impression of the ward?	22 481	68.2
Was the accommodation adequate? (e.g. bath, toilet and patients' sitting room)	6246	19.0
Did you receive a good welcome at the department?	5644	17.2
Was your examination and treatment well planned during your contact with the hospital? ('A main thread')	4120	12.6
Are you satisfied with the treatment of your illness?	3970	12.1
Did you get the personal support you needed from the staff during your admission?	3726	11.3
Did the doctors listen to you with interest when you said something?	3459	10.5
Did you get the information you needed during your admission? (e.g. about your illness, examinations, treatments and side effects)	3434	10.5
Did you receive careful nursing during your admission? (From all the staff you were in contact with.)	3277	9.9
Was the collaboration between your GP and the department about your illness satisfactory? (e.g. referral and follow-up)	3027	9.2
Were you allowed to stay at the department until you felt ready to leave?	2942	9.0
Did you get the information you needed before leaving the department? (e.g. medicine and good advice)	2903	8.8
Was there a clear coherence in what you were told, when you talked to various staff in the department?	2104	6.4

A total of 71 579 comments from 32 809 inpatients.
Note that 4246 comments were not included in the table because they were offered in connection with questions that were not consistently present in the survey, or were tied to background questions.

departments the fewest comments. The patient's inclination to comment was highest for the most and especially the least satisfied patients.

Further analysis shows comparable results for ambulatory patients and day patients.

Evaluations by management teams

A total of 173 (86.5%) of the 200 evaluation questionnaires were returned. Across the four rounds of surveys the managers responded positively about their opinions of the survey system, e.g. 136 out of 165 (82.4%) answered, 'Yes' to the question: *'Has the survey resulted in concrete follow-up activities'?*

When following the fourth round the managers were asked to '*Evaluate the usefulness of the comments from the patients in the department report*', 25 out of 31 teams (80.7%), answered either 'Very useful' or 'Useful'.

Even though there was no specific open question concerning the practice of gathering comments from patients, 27 of the 173 survey teams commented on that issue, addressing the following topics: the ability of comments to produce new insight, look-out areas that need initiative and initiate further analysis.

It was indicated that comments inspired the implementation of additional initiatives and prompted additional analysis in case they failed to provide clear answers. Several stated that the comments were more useful than the actual number of satisfied and not-satisfied patients.

The management groups appreciated that the comments were presented with precise information about organizational affiliation and diagnosis.

However, criticisms were also levelled at the patient comments, based on a lack of acceptance of the value of qualitative data, indicating that analysing qualitative data as a method might be valued when more comments are used in patient surveys (see selected comments in Table 4).

Follow-up interviews with doctors, nurses and administrative employees

The interviews supplemented and specified the findings from the management surveys. The follow-up interviews highlighted three themes: differences in follow-up procedures, scepticism against quantitative measures of patient satisfaction and acknowledgment of hearing the patient's voice in a changing institutional environment.

In one department, the leader read all the comments from the patients, and made a memo that was distributed to the employees. Some important selected comments were read aloud at staff meetings. In other departments the leaders expected the employees to read the reports themselves.

Table 3 The proportion of patients with added comments on the overall question related to the background variables

(Grand mean)	*n* (32 809)	Percent of patients with added comments (68.2% (*63–75%*))	Odds ratio-unadjusted	Odds ratio-adjusted
Age group				
0–19	3330	78.0	2.84 (*2.55 to 3.16*)***	3.48 (*2.86 to 4.23*)***
20–39	5440	76.0	2.58 (*2.35 to 2.83*)***	2.34 (*2.06 to 2.66*)***
40–59	8770	72.0	2.08 (*1.92 to2.26*)***	1.93 (*1.72 to 2.16*)***
60–69	6039	68.0	1.71 (*1.57 to 1.87*)***	1.65 (*1.46 to 1.85*)***
70–79	5559	60.0	1.23 (*1.13 to 1.34*)***	1.23 (*1.09 to 1.38*)***
80 or over (reference)	3274	55.0		
Gender				
Men (reference)	17 260	66.0		
Women	15 262	71.0	1.32 (*1.26 to 1.38*)***	1.42 (*1.34 to 1.52*)***
Education				
Beyond lower secondary	6028	75.0	1.67 (*1.56 to 1.79*)***	1.38 (*1.28 to 1.49*)***
Not beyond lower secondary (reference)	16 264	65.0		
Filled out by				
Patient (reference)	27 399	69.0		*Insignificant in the model*
Relative	4988	69.0	1.03 (*0.97 to 1.10*)	
Experience				
One time (reference)	19 271	69.0		*Insignificant in the model*
Two times	5839	68.0	0.94 (*0.88 to 1.00*)*	
Three times	2353	67.0	0.92 (*0.84 to 1.00*)	
More than three times	3732	69.0	1.01 (*0.93 to 1.09*)	
Native language				
Danish (reference)	30 885	69.0		
Non-Danish	1076	59.0	0.65 (*0.58 to 0.74*)***	0.61 (*0.51 to 0.73*)***
Field of specialization				
Orthopaedic surgery (reference)	4021	69.0		*Insignificant in the model*
Medical	6128	62.0	0.73 (*0.67 to 0.80*)***	
Gynaecology	2817	77.0	1.48 (*1.32 to 1.65*)***	
Parenchymal surgery	4027	68.0	0.95 (*0.87 to 1.05*)	
Paediatrics	2124	79.0	1.67 (*1.47 to 1.89*)***	
Specialized medical	7413	68.0	0.96 (*0.88 to 1.04*)	
Specialized surgery	5149	69.0	1.02 (*0.93 to 1.12*)	
Other	921	62.0	0.73 (*0.63 to 0.84*)***	
Round				
1 (reference)	8631	61.0		
2	8726	67.0	1.26 (*1.18 to 1.34*)***	1.23 (*1.14 to 1.32*)***
3	7710	75.0	1.86 (*1.74 to 1.98*)***	1.91 (*1.76 to 2.06*)***
4	7742	73.0	1.68 (*1.57 to 1.79*)***	*N/A*
Type of admission				
Emergency	16 830	68.0	0.93 (*0.89 to 0.98*)**	*Insignificant in the model*
Planned (reference)	14 596	70.0		
Overall assessment				
Five stars	9141	79.0	2.31 (*2.18 to 2.45*)***	2.44 (2.26 to 2.63)***
Four stars (reference)	17 428	62.0		
Three stars	4367	74.0	1.77 (*1.64 to 1.90*)***	1.64 (1.49 to 1.81)***
Two stars	551	83.0	3.03 (*2.42 to 3.79*)***	2.43 (1.81 to 3.27)***
One star	461	87.0	4.03 (*3.07 to 5.28*)***	3.83 (2.62 to 5.59)***
Internet use				
Yes	21 722	76.0	1.60 (*1.52 to 1.70*)***	1.26 (*1.17 to 1.36*)***
No (reference)	9135	67.0		

n = 32 809 inpatients, included from 1999 to 2006.
Nagelkerke for adjusted model 11.2% explained.
*$P < 0.05$.
**$P < 0.01$.
***$P < 0.001$.

Table 4 Selected comments from the management teams on the use of patient satisfaction instrument with a widespread use of comments

'*Reading the patient comments has provided an insight into problem areas*.' Department management team
'*Even though there are no unambiguous answers in such a survey, the responses do point to areas for initiative. The explicative comments are valuable, and can be earmarked as areas for improvement*.' Department management team
'*Could also set up a focus group interview for additional qualification*.' Department management team
'*It's good to include the remarks. They say more than stars*.' Department management team
'*Selected patient comments should be eliminated—they give expression to nothing other than different perceptions of the same place, the same staff, etc., and are solely a manifestation of the ways in which people differ*.' Department management team
'*It is necessary to have special analysis models in order to get to the essence of patient statements, where the gold lies buried, i.e. knowledge that we can apply in terms of consumer-perceived professional and organisational quality* [. . .].' Department management team

Table 5 Selected comments from doctors and nurses on the use of a patient satisfaction instrument with a widespread use of comments

The comments make it much more relevant. Much better, because in that way you can see how things work. We can miss seeing the whole human being we are treating. Sometimes we really have to look into what kind of human being lies in this particular bed. And they [patients] have comments, have perceptions and are used to some habits, and we must respect that. So I think the comments are really important – they make it more relevant. Leading nurse
We have not used them [the reports] much, but we have used the statements. The comments. We take a look at them and say: Does this say something about something that we can do better? But the figures about how satisfied you are with this or that – I simply do not think it [the survey] is good enough to interpret or to use to improve. Leading nurse
I can use the comments, yes. But I want to say – there are a lot of them – . . . In the last patient survey – it took a lot of time reading them. But I think it is interesting reading. But I have to admit, that I have not handed it out [to the doctors]. The way I thought of it, was that I wanted to read it all together, and then try to see if it makes sense to me, and what can be useful. Leading doctor
I read them [the comments] when they come. Interviewer: What drives you – obligation or interest? The doctor: It's damn interest! We are a little proud in that matter. We want to give people a good experience, when they come to us. At the same time we also have focus on efficiency! And in this way we can keep a balance . . . Our effectiveness is now so high that many patients have problems keeping up with what happens, so they might become dissatisfied with something that from another perspective is highly satisfactory. Leading doctor
Basically I am a little sceptical concerning the interpretation of it [patient satisfaction]. Is it a sign of quality? I'm not convinced, but if I was a patient myself, I would rather be satisfied. But I think it can mislead us. I think it is easy to trick the patients in to being satisfied, without giving them a reason for being satisfied. Doctor
I would not say that they [patient surveys] are unnecessary. One thing is simply to express your opinion – maybe you shout into the big nothing, but anyway you have a feeling of being heard. So that is at least a minimum of satisfaction for the patients to voice their opinions. But I would rather wish that it would have some operational effects, and you could collect the experiences with the purpose of creating a change. Doctor

Especially the doctors were critical as to what lay behind the high quantitative satisfaction rates and in general did not see patient satisfaction surveys as an evaluation of their core activities. However, they acknowledged a need for better surveys to voice the patients in a changing organizational context and all doctors interviewed evaluated the concept of collecting patient comments positively. Most of them had read the comments with interest.

The nurses were also critical towards the quantitative part of the surveys, but expressed responsibility for the results, mainly because the questions concerned core values in care. The nurses emphasized that the comments played a central role in follow-up activities elucidating that production must be challenged with the patient-centred perspective from the comments. See selected comments in Table 5.

The administrative managers did not seem to have any special interest in the comments. They focused on the differences between the quantitative results among departments and hospitals, and used the high overall reported patient satisfaction to create motivation.

Discussion

Open response fields have hitherto been used primarily in patient satisfaction surveys in smaller studies—targeting

patients in specific fields of specialization. This study shows how open response fields can be used and accepted in larger generic surveys, without being coded, which is otherwise the case in most patient surveys.

It is noteworthy that an average of 76% of the patients included one or more comments on their patient satisfaction questionnaires, a percentage that increased during the six-year study period indicating that the patients became more active over time [16]. The high inclination to comment in the Aarhus County surveys can be explained by the fact that more open-ended questions were asked, and that the cover letter contained a direct appeal regarding the importance of providing such comments. The proportions of comments in three comparable Danish studies were 28, 58 and 30% [17]. In an English study 42% of the patients released a comment [18].

The patient's inclination to comment follows the same pattern as those known to report poorer experience in patient surveys [19]. Patient comments can therefore provide departments with detailed insight into what lies behind the figures in the survey results. Most comments came from young patients, women and those with further education. In addition, most comments came from patients who had sought information about their disease on the Internet.

Patients who are 'Exceptionally' satisfied or use the three critical response categories to the overall question offer significantly more comments than those who answer 'Good'. This can be explained by three general ways in which patients react to satisfaction surveys [20]. There are patients who are positively surprised by something in the process, those who are negatively surprised, and those who are not surprised by anything. The consequence is that comments both deliver input for quality improvement and appreciative comments that can stimulate employee motivation.

The main strength in gathering comments lies in its ability to elucidate specific criticisms, because patients tend to criticize only when they can target their criticisms very precisely [21–23]. Open-ended questions offer the patients a means of explaining their responses. This is important because independent experts have judged that critical comments have a greater potential for initiating changes than positive ones [11]. On the other hand, it is important to emphasize that collecting comments is not a substitute for personal interviews or focus groups because they have a lack of interactive activity.

Non-coded comments can be added a new dimension when reported back to their original small organizational context. A procedure that is fundamentally divergent from the coding practice, that has been dominant [9, 17, 18, 20, 24]. An emotional bond can be forged between the listener and the narrator when life stories are related [25]. The interviews indicate that managements read selected patient stories aloud at personnel meetings, thereby putting the patient perspective on the agenda in a pedagogical way.

The open response fields in the Aarhus County surveys could have been improved upon by being more precise in asking for comments [11]. Instead of just asking 'Comment:' the open-ended questions can be customized to central issues of interest. But we still need good answers to many of the questions on how to optimize the use of open questions in generic surveys: The wording of the open-ended questions, the number of such questions, the appeal in the cover letter, the way the comments are presented to the hospitals, how to analyse the comments and how anonymity is perceived by the patients. The yardstick for the answers is how to make patient surveys more patient-centred [14].

There are also arguments against the use of open response categories. The risk of repetition of the same problem or possible dramatization by individual patients may contribute to a distortion of the overall impression. Consequently, it is important to ensure that the recipients of the patient comments are informed of the purpose of gathering qualitative and quantitative data, and for what purpose these data can be used. Another argument against using comments might be that it is more time-intensive to process. Our assessment from this study is that typing out the comments in the completed survey process increased the cost of the surveys by roughly 10%, a cost that will be reduced as on-line data gathering becomes standard.

It is also important to emphasize that the study shows that some departments do not consider patient comments useful. This point of view is also supported in the literature [18, 26], indicating different needs. Areas that especially may benefit from collecting patients' comments could be situations where differing opinions about the character of the disease exist among patients and professionals [27, 28] and areas where new ways of organizing or new ways of treatment are being implemented. Also the fragmentation of health-care systems in general [29] has potential as arguments for more individualized and therefore difficult to capture in standardized surveys. Here comments can play a sentinel role.

Comment-gathering has been recommended as a method for improving patient satisfaction surveys for the last 20 years, but it has been used in only a few studies. A number of factors may account for this. Perhaps patient satisfaction surveys have mainly served strategic and legitimizing objectives vis-à-vis the political and administrative apparatus [30], with the result that comments have been considered to be of no interest. Perhaps comment-gathering is viewed as an element that delays mechanical data-gathering and scanner-based processing. Or perhaps comment-gathering has been viewed as a culturally foreign element in a field that has been characterized by a natural science-based approach.

This study has shown that most patients are able to put their perceptions into words. Evaluations from the hospitals also indicate that a qualitative practice is widely accepted and valued as an important supplement to quantitative results. Using comments from generic patient surveys seems to be a promising way to broaden the channel from patients' perceptions to quality improvement.

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References

1. Bruster S, Jarman B, Bosanquet N *et al*. National survey of hospital patients. *BMJ* 1994;**309**:1542–46.
2. Williams B, Coyle J, Healy D. The meaning of patient satisfaction: an explanation of high reported levels. *Soc Sci Med* 1998;**47**:1351–59.
3. Dougall A, Russell A, Rubin G *et al*. Rethinking patient satisfaction: patient experiences of an open access flexible sigmoidoscopy service. *Soc Sci Med* 2000;**50**:53–62.
4. Marcinowicz L, Grebowski R, Chiabicz S. Exploring negative evaluations of health care by Polish patients: an attempt at cross-cultural comparison. *Health Soc Care Community* 2009;**17**:187–93.
5. Collins K, O'Cathain A. The continuum of patient satisfaction-from satisfied to very satisfied. *Soc Sci Med* 2003;**57**:2465–70.
6. Rist RC, Stame N. *From Studies to Streams. Managing Evaluative Systems*. New Brunswick: Transaction Publishers, 2006.
7. Law AV, Ray MD, Knapp KK *et al*. Unmet needs in the medication use process: perceptions of physicians, pharmacists, and patients. *J Am Pharm Assoc* 2003;**43**:394–402.
8. Marcinowicz L, Chlabicz S, Grebowski R. Open-ended questions in surveys of patients' satisfaction with family doctors. *J Health Serv Res Policy* 2007;**12**:86–9.
9. Altschuler A, Nekhlyudov L, Rolnick SJ *et al*. Positive, negative, and disparate—women's differing long-term psychosocial experiences of bilateral or contralateral prophylactic mastectomy. *Breast J* 2008;**14**:25–32.
10. Milberg A, Strang P. Met and unmet needs in hospital-based home care: aualitative evaluation through open-ended questions. *Pal Med* 2000;**14**:533–4.
11. McKillip J, Moirs K, Cervenka C. Asking open-ended consumer questions to aid program planning—variations in question format and length. *Eval Program Plann* 1992;**15**:1–6.
12. Mead N, Bower P. Patient-centeredness: a conceptual framework and review of the empirical literature. *Soc Sci Med* 2000;**51**: 1087–110.
13. Cummings TG, Worley CG. *Organization Development and Change*, 7th edn. Ohio: South-Western, 2005.
14. Ginsburg LS. Factors that influence line managements' perceptions of hospital performance. *Health Serv Res* 2003;**38**:261–86.
15. Riiskjær E, Ammentorp J, Nielsen JF *et al*. Patient surveys – A key to organizational change?. *Patient Educ Couns* 2010; **78**:394–401.
16. Hibbard JH. Using systematic measurement to target consumer activation strategies. *Med Care Res Rev* 2009;**66**:9S–27S.
17. Christensen MF, Gut R, Freil M. Kvalitative patientkommentarer – om anvendelsen af åbne svarkategorier i spørgeskema-undersøgelser (Qualitative comments from the patients—about the use of open-ended questions in patient surveys). *Metode Data* 2005;**91**:13–20.
18. Thomas LH, McColl E, Priest J *et al*. Open-ended questions: do they add anything to a quantitative patient satisfaction scale?. *Soc Sci Health* 1996;**2**:23–35.
19. Hall JA, Dornan MC. Patient sociodemographic characteristics as predictors of satisfaction with medical care: a meta-analysis. *Soc Sci Med* 1990;**30**:811–8.
20. Nelson EC, Larson C. Patients' good and bad surprises: how do they relate to overall patient satisfaction? *QRB* 1993;**19**:89–94.
21. Merkouris A, Papathanassoglou EDE. Evaluation of patient satisfaction with nursing care: quantitative or qualitative approach? *Int J Nurs Stud* 2004;**41**:355–67.
22. Staniszewska S, Henderson L. Patients evaluations of their health care: the expression of negative evaluation and the role of adaptive strategies. *Patient Educ Couns* 2004;**55**:185–92.
23. Coyle J. Exploring the meaning of 'dissatisfaction' with health care: the importance of 'personal identity threat'. *Sociol Health Illn* 1999;**21**:95–123.
24. Strasser S, Davis RM. *Measuring Patient Satisfaction for Improved Patient Services*. Michigan: Health Administration Press, 1991.
25. Denzin NK. *Interpretive Biography*. California: SAGE Publication Ltd., 1989.
26. Hyrkäs K, Paunonen M, Laippala P. Patient satisfaction and research-related problems (part 1). Problems while using a questionnaire and the possibility to solve them by using different methods of analysis. *J Nurs Manag* 2000;**8**:227–36.
27. Album D, Westin S. Do deseases have a prestige hierarchy? A survey among physicians and medical students. *Soc Sci Med* 2008;**66**:182–8.
28. Shortell S. Occupational prestige differences within the medical and allied health professions. *Soc Sci Med* 1974;**8**:1–9.
29. Sofaer S. Navigating poorly charted territory. Patient dilemmas in health care 'Nonsystems'. *Med Care Res Rev* 2009;**66**: 75S–93S.
30. Meyer JW, Rowan B. Institutionalized Organizations: Formal Structure as Myth and Ceremony. *Am J Sociol* 1977;**83**:340–63.