ORIGINAL RESEARCH

What Can We Learn From Patient Dissatisfaction? An Analysis of Dissatisfying Events at an Academic Medical Center

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BACKGROUND: Patient satisfaction is typically measured by quantitative surveys using predetermined domains. However, dissatisfaction may be an entity distinct from satisfaction, may have different determinants, and may better reflect problems in healthcare delivery.

OBJECTIVE: The aim of this study was to describe domains of dissatisfaction experienced by patients during hospitalization. **SETTING:** The setting was a U.S. urban academic medical center.

PATIENTS: The patients were adults discharged between July 1, 2007 and June 30, 2008

INTERVENTION: The intervention was a postdischarge telephone interview: "If there was one thing we could have done to improve your experience in the hospital, what would it have been?"

MEASUREMENTS: The measurements were standard qualitative analysis of suggestions for improvement.

RESULTS: We randomly selected 976 of 9,764 interviews. A total of 439/976 (45.0%) included at least one suggestion for improvement. We identified six major domains of dissatisfaction: ineptitude (7.7%), disrespect (6.1%), waits (15.8%),

ineffective communication (7.4%), lack of environmental control (15.6%), and substandard amenities (6.9%). These domains corresponded to six implicit expectations for quality hospital care: safety, treatment with respect and dignity, minimized wait times, effective communication, control over physical surroundings, and high-quality amenities. Some of these expectations, such as for safe care, effective communication between providers, and lack of disrespect, may not be adequately captured in existing patient satisfaction assessments.

CONCLUSIONS: The results represent patient-generated priorities for quality improvement in healthcare. These priorities are not all consistently represented in standard patient satisfaction surveys and quality improvement initiatives. Patient input is critical to assessing the quality of hospital care and to identifying areas for improvement. *Journal of Hospital Medicine* **2010;5:514–520** © *2010 Society of Hospital Medicine*.

KEYWORDS: communication, patient satisfaction, professionalism, quality improvement, teamwork.

Additional Supporting Information may be found in the online version of this article.

The United States spends more money per capita on healthcare than any other industrialized nation,¹ yet patients are the least satisfied with their care.² Patient satisfaction is associated in both cross-sectional³ and longitudinal studies⁴ with improved physical and mental health outcomes. Conversely, dissatisfaction with care hampers future medical interactions, prevents sharing of information, and impairs the building of trust.⁵ The increasing recognition that a patient's experience of care affects patient outcomes has furthered efforts to evaluate satisfaction with care.^{6,7}

However, patient satisfaction is challenging to define and understand. Even the definition of satisfaction is ambiguous, for to satisfy can mean both "to make happy" and the lesser, "to be adequate." To dissatisfy is to displease or disappoint, but dissatisfaction is not the opposite of satisfaction: qualitative studies give little if any indication that patients evaluate satisfaction on a continuum ranging from dissatisfied at one end to very satisfied at the other.⁸ Instead, it appears that satisfaction and dissatisfaction are different constructs, such that patients may simultaneously be both satisfied and dissatisfied.^{9,10} Patients often express overall satisfaction with a service or encounter while also reporting specific criticisms about its shortcomings.^{11,12} Alternatively, consumers may be generally satisfied unless something unpleasant or improper happens.¹³ Thus, dissatisfaction and satisfaction may require different methods of measurement.

The most common model for measuring patient satisfaction is a quantitative survey of patients' experiences in specific predetermined domains. Of 54 hospital satisfaction surveys in common use, only 11 included patient input in their development,¹⁴ casting doubt on the relevance of these attributes to patients' priorities of care. Since it is well recognized that patient expectations influence satisfaction,^{8,13,15} it is important to identify patient expectations and priorities up front. However, these have not been clearly established. Furthermore, focusing purely on satisfaction with particular domains of care may miss the separate but illuminating construct of patient *dis*satisfaction.

In this study we therefore aim to understand patient dissatisfaction with hospitalization more fully as a means of elucidating implicit expectations for hospital care. Using qualitative techniques, we analyzed a large volume of patient responses to a single open-ended study question to identify determinants and patterns of patient dissatisfaction.

Methods

Study Design

We conducted a qualitative analysis of telephone survey data obtained from adults recently discharged after an acute care hospitalization. Survey participants were asked five questions, including: "If there was one thing we could have done to improve your experience in the hospital, what would it have been?" Answers to this open-ended question were included in this study.

Setting and Participants

The hospital is a 944-bed, urban academic medical center. Patients or patient representatives were routinely surveyed in a telephone interview conducted by trained hospital staff 1-5 days after hospital discharge. Calls were attempted to 90% of adult discharged patients, and approximately 50% of them were reached. For this study, we included patients who were age 18 or older, spoke English, and were discharged to home from a medical, surgical, gynecology-on-cology, neurology, neurosurgery, or intensive care unit. Of those patients, we randomly selected 10% of those surveyed between July 1, 2007 and June 30, 2008 for inclusion.

Primary Data Analysis

Qualitative data analysis was used to classify patient suggestions. The study team included internal medicine physicians (J.P.M., L.I.H.), a medical student (A.V.L.), and a recent college graduate (C.P.B.). Codes were generated using a mixed inductive and deductive approach by reading and rereading the primary data.¹⁶ A set of 100 interview responses were first read individually by three investigators (J.P.M., A.V.L., C.P.B.), after which investigators met to discuss themes and ideas. A preliminary list of coding categories was then generated. Each investigator then assigned these coding categories to additional survey responses in sets of 100. Subsequent meetings were held to refine codes using the constant comparative method.¹⁶ Disagreements were resolved by negotiated consensus. The full study group met periodically

TABLE 1. Demographic Information (n = 976)

	No.	% of Total Surveyed
Total surveys	976	
Male	427	43.7
Female	549	56.3
Discharge Unit		
Medical	434	44.5
Surgical	303	31.0
Gynecology/Oncology	103	10.6
ICU/CCU/Step-down	71	7.3
Neurology/Neurosurgery	65	6.6
No suggestions for improvement	537	55.0
At least one suggestion for improvement	439	45.0

to review the code structure for logic and breadth. Once thematic saturation was achieved, the entire dataset was recoded by two investigators using the final coding structure. The final coding structure contained 42 unique codes organized into six broader themes. We used descriptive statistics to characterize the coding category results. The κ score for intercoder reliability was 0.91.

This study was approved by the Yale Human Investigation Committee, which granted a waiver of informed consent.

Results

A total of 976 surveys was randomly selected from 9,764 postdischarge phone interviews completed between July 1, 2007 and June 30, 2008. A total of 56.3% of patients was female. Nearly half the patients were discharged from medical units (Table 1). Of the 976 patients, 439 (45.0%) gave at least one suggestion for improvement, yielding a total of 579 suggestions. Patients also offered numerous positive comments about their care, but these comments were not included in the analysis.

Through qualitative analysis, we assigned suggestions for improvement to six major categories of dissatisfaction: 1) ineptitude, 2) disrespect, 3) prolonged waits, 4) ineffective communication, 5) lack of environmental control, and 6) substandard amenities. We considered the inverse of these problems to represent six implicit expectations of good hospital care: 1) safety, 2) treatment with respect and dignity, 3) prompt and efficient care, 4) successful exchange of information, 5) environmental autonomy and control, and 6) high-quality amenities (Table 2). The number of patient suggestions related to each domain is detailed in Table 3.

Ineptitude

A total of 7.7% of interviewed patients reported experiencing a situation that made them feel unsafe. Dissatisfaction with safety included adverse events or near misses, uncleanliness, and a perceived lack of knowledge or skill. The implicit expectation that emerged from this domain was

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TABLE 2. Domains of Dissatisfaction and Corresponding Im	plicit Exp	ectations
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Domain of Dissatisfaction	Implicit Expectations	Example
Ineptitude	Safety	The only thing was that when I was getting ready to get discharged, one of Dr. H*'s associates came in and said, "We have to readmit you for a further procedure." I said, "Well, that's strange because Dr. H* put in a stent yesterday, and I'm supposed to leave today." Well, he checked, and he had the wrong guy. I'm glad I said something or else they probably would have hauled me off.
Disrespect	Treatment with respect and dignity	Transport was rude due to me being a heavy person. They were saying they didn't want to move me and snickering.
Prolonged waits	Prompt and efficient care	I called for someone because I had to use the bathroom really bad, but I had those things stuck to my legs and needed help walking to the bathroom but no one came. Well, I had to go so bad that I had a panic attack. Then all these people came rushing in to help. I felt so embarrassed.
Ineffective communication	Successful exchange of information	There were a few days that [were] a little confusing to me. I didn't know if I was going to have surgery or go home. The communication wasn't that great.
Lack of environmental control	Environmental autonomy and control	I was put in a room with a man who had many issues. He was loud and yelling all night. It was a very disturbing experience.
Substandard amenities	High-quality amenities	In that ICU they should put a TV on the ceiling for when you're lying flat on your back looking at the ceiling tiles for 4 days.

that the hospital would be safe, and that medical staff would be knowledgeable and skillful.

Adverse events or near misses were experienced in several areas, including diet, medication administration, patient identification, and equipment. Patients were particularly troubled when they or a family member caught the error:

There was one male nurse in training, C^* , who was about to give my mother an injection. I asked what he was doing because she was about to go into surgery. He said he thought she was going home. He looked at the chart again and it turns out he was holding her roommate's chart. I don't know what would have happened if I wasn't there.

Dissatisfaction with the cleanliness of the hospital environment was also frequently expressed as a safety concern:

The rooms are dirty...The floors are dirty. They don't sweep unless you ask them to.... It took three different people to come and clean the bathroom right. I have to come back for surgery and I'm scared to death with all that bacteria and uncleanliness.

In this category, patients also described care by "not too knowledgeable" trainees or other staff as a safety hazard.

Disrespect

A total of 6.0% of surveyed patients suggested improvements that reflected disrespectful treatment, including poor work ethic, lack of warmth, rudeness, and a lack of attention to privacy and confidentiality. This type of dissatisfaction suggested an implicit expectation for treatment with respect and dignity that was clearly distinct from the expectation of technical quality:

[Hospital name] has always been like [this] since I started going there in 1982. They're very good technically but their bedside manner kind of sucks. You survive but you don't walk away with a warm fuzzy feeling.

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Underprivileged patients were particularly sensitive to the need for respect:

I feel like the doctor that saw me that last night there was trying to get me out of there as fast as possible, saying not in so many words that it was because I don't have any insurance... I just feel like they treated me like an animal.

Violations of privacy and confidentiality were not only perceived as disrespectful, but also as a direct impediment to high-quality care:

In the ER, I didn't like that I had no privacy especially talking with the doctor because I was in the hallway. I didn't have any privacy therefore I wasn't completely truthful with the doctor because everyone could hear.

Prolonged Waits

A total of 15.8% of patients noted dissatisfaction with wait times in the hospital. Waits for admission, transport, or discharge were frequently cited as anxiety-provoking or frustrating:

The ER wait is too long. I was there from 8:00 AM to 2:00 AM the next day. I was there the whole day and night. When someone is in pain, they just want to be taken care of, not waiting around.

Waits related to receiving patient care, for example the inability to access nurses or physicians, more often caused feelings of fear and abandonment:

Every patient is different, I understand, but when you're there at night it can be a little scary. I was not only scared but in pain. The nurse tried to get a hold of the doctor that was on call, but the doctor took hours to respond. That was very scary.

It was also distressing to patients to watch roommates experience a delay in help for urgent needs:

The lady next to me was an elderly woman with a brace on her neck, and she couldn't speak very well. She had diarrhea at night and she would ask for a bedpan. The nurses would take forever

TABLE 3.	Descriptive	Statistics	of Dissatisfaction	Domains

	No. (N = 579	% of Total	% Within
Domain of Dissatisfaction	suggestions ^a)	Surveyed	Domain
Perceived ineptitude	75	7.7	100
Adverse events	18	1.8	24.0
Cleanliness	36	3.7	48.0
Perceived lack of knowledge/skill	12	1.2	16.0
Rushed out	9	0.9	12.0
Disrespect	59	6.0	100
Unprofessional staff behavior	55	5.6	93.2
Lack of privacy/confidentiality	4	0.4	6.8
Prolonged waits	154	15.8	100
Response to call bell			
Bathing/toileting/distress	24	2.5	15.6
General	41	4.2	26.6
Wait for physician	12	1.2	7.8
Wait for admission bed	29	3.0	18.8
Wait for transport	16	1.6	10.0
Wait for food	7	0.7	4.6
Wait for medication	11	1.1	7.1
Wait for diagnostic test/procedures	6	0.6	3.9
Wait for discharge	8	0.0	5.2
Ineffective communication	72	0.8 7.4	5.2 100
Communication with patients	33	7.4 3.4	45.8
Communication with family	3	5.4 0.3	43.0
Translation	2	0.2	2.8
Communication between providers	13	1.3	18.1
Coordination of care (inpatient)	11	1.1	15.3
Medication reconciliation	5	0.5	6.9
Continuity inpatient to outpatient	5	0.5	6.9
Lack of environmental control	152	15.6	100
Physical environment			
Roommates	38	3.9	25.0
Noise	24	2.5	15.8
Temperature	12	1.2	7.9
Smell	1	0.1	0.7
Interruption by staff	15	1.5	9.9
Lighting	2	0.2	1.3
Chaos/hectic	4	0.4	2.6
Shorter Stay	8	0.8	5.3
General	3	0.3	2.0
Facilities			
Pain control	10	1.0	6.6
Painful procedures	17	1.7	11.2
Facilities			
Bathrooms	7	0.7	4.6
Maintenance response	5	0.5	3.3
Traffic/parking	6	0.6	3.9
Substandard amenities	67	6.9	100
Food quality	26	2.7	38.8
Food variety	5	0.5	7.5
Food service	16	1.6	23.9
TV	8	0.8	11.9
Beds	8	0.8	11.9
Gowns	4	0.4	6.0
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^aSome respondents gave more than one suggestion, resulting in a greater number of total suggestions than the number of respondents with at least one suggestion for improvement.

bringing it to her.... I just think when there are elderly people they should be more attentive to them because they tend to not be as vocal, you know? Together, these comments represented an implicit expectation for prompt and efficient care.

Ineffective Communication

Communication during hospitalization was a source of dissatisfaction in 7.4% of surveyed patients. Communication failures occurred in several areas. Most common was the ineffective transfer of medical information to patients:

For days I thought I was having surgery on Friday. So all that day I ate and drank nothing and got prepped for surgery. Finally later that night I was told I was going to have it on Saturday. Saturday comes and still nothing. I never saw a surgeon or talked to any-one... Then later after that I was told I'm not having the surgery. That was the most frustrating thing.

Patients were also dissatisfied with their ability to communicate with their doctors:

I was sent home on a Friday and was sent right back on Friday night because my blood count was low and I ended up needing a blood transfusion. I tried to tell them this but they didn't listen. They need to listen to the patients.

Failed communication between care providers in the hospital was a third inadequacy noted by patients:

The only problem I had was all the different doctors coming in and out. There's so many that it confuses the patient, and a lot of them would contradict each other. One doctor said I could go home and another doctor said, 'No, you need to stay.'

Finally, patients were dissatisfied when there was ineffective communication between inpatient and outpatient providers.

They said the VNA [Visiting Nurse Association] is supposed to come. The nurse hasn't come to see me and she hasn't called.... My daughter and I have been waiting.

Thus, patients had an implicit expectation for effective communication between all parties in the hospital and were dissatisfied when any type of communication was inadequate.

Lack of Environmental Control

A total of 15.4% of surveyed patients reported dissatisfaction with the inability to control the physical environment. The inability to control noise levels, roommate behavior, temperature, smells, pain, lighting, staff interruptions, food service, smoking, and even humidity were all anxiety-producing for different patients. The feeling of being imposed upon by an uncomfortable physical environment also extended to hospital facilities such as inaccessible bathrooms, traffic, and parking. Dissatisfaction with rooming arrangements was common:

I was in a triple room and one of my roommates had at least six visitors in the room at a time every day including two infant twins. Someone really should have said something about that. It became very disturbing, and I even left a day early because of that.

2010 Society of Hospital Medicine DOI 10.1002/jhm.861 View this article online at wileyonlinelibrary.com. An expectation for quiet, especially during the night, was also repeatedly expressed:

The night shift could have been more considerate of people trying to rest. There was a lot of noise and bangs. I know people have to laugh and have fun but it could have been a little more quiet.

Related was the inability to control interruptions by staff members:

It's hard enough to get sleep, but then those blood suckers come in the middle of the night.

This category of dissatisfaction reflected an implicit expectation for autonomy and control over the environment so that it was conducive to rest and healing.

Substandard Amenities

A total of 6.9% of surveyed patients suggested improvements to amenities such as food, bedding, gowns, and television. Moving beyond the expectation of having peaceful surroundings, these comments reflected an expectation of a well-appointed hospital environment with high-quality amenities. A typical example was this comment about the food and service:

You never get what you order from the kitchen. Your tray either has something missing from it or it's the wrong tray or not the right diet. It's very frustrating and hard to get the orders the way you want.

Discussion

We analyzed 439 patient suggestions for improving hospital care and found that dissatisfaction resulted from six categories of negative experiences: 1) ineptitude, 2) disrespect, 3) prolonged wait times, 4) ineffective communication, 5) lack of environmental control, and 6) substandard amenities. These domains represented a corresponding set of implicit patient expectations for: 1) safety, 2) treatment with respect and dignity, 3) prompt and efficient care, 4) successful exchange of information, 5) environmental autonomy and control, and 6) high-quality amenities. Each of these categories suggests avenues by which both the assessment and provision of hospital care can be made more patient-centered.

The most widely used patient satisfaction survey in use in the United States today is the Hospital Consumer Assessment of Healthcare Providers & Systems (HCAHPS), which includes eight domains: communication with doctors, communication with nurses, responsiveness of hospital staff, pain management, communication about medicines, discharge information, cleanliness of the hospital environment, and quietness of the hospital environment.¹⁷ The dissatisfaction domains found in this study closely overlap the HCAHPS satisfaction domains, but with a few key differences.

First, dissatisfaction with ineptitude in our study encompassed concerns over adverse events and near misses, in

addition to the cleanliness of the environment. Other research has shown that dissatisfaction with hospitalization can be predicted by the number of reported problems¹⁸ and the perception of receiving incorrect treatment.¹⁹ While elaborate methods have been devised to assess and compare the hospital quality and safety, patient satisfaction surveys including the HCAHPS survey often fail to ask patients directly about their perceptions of safety. In fact, this study and others^{20,21} show that patients are able to recognize adverse events during hospitalization. Patient report may be a useful adjunct to other methods of adverse event case finding and outcomes reporting.

Second, while HCAHPS and others identify warmth, courtesy, concern, and respect as dimensions of patientcentered care,14,17,22,23 the ability of quantitative satisfaction surveys to capture the experience of disrespectful treatment may be limited, especially during hospitalization. Most respondents who commented on feeling disrespected identified only a single encounter, which can be masked by otherwise satisfying interactions with numerous care providers. Directly asking patients whether any experience during hospitalization caused them to feel disrespected, and allowing room for explanation, might more efficiently identify problem areas. This is particularly important because even one episode of disrespectful treatment, particularly when perceived to be racially motivated, increases the likelihood of not following a doctor's advice or putting off care.24

Third, HCAHPS emphasizes two aspects of communication: that between patients and doctors, and that between patients and nurses. Our patients confirmed that these are important, but they also noted a third dimension of communication contributing to dissatisfaction: provider-provider communication. Communication and coordination failures among providers are key contributors to adverse events or near misses,^{25–28} but their influence on patient satisfaction has not been widely assessed. Furthermore, patient input is rarely utilized to identify poor interprovider communication. Our study suggests that, just as patients can identify adverse events, they are also able to recognize poor provider-provider communication.

Patients' reports of dissatisfying events also highlight areas in which small changes in hospital practice might greatly improve the patient experience. For instance, concerns over environment, food, sleep, hygiene, and pain appeared to be representative of a broader dissatisfaction with loss of autonomy and control. Hospitalized patients are often obliged to room with strangers, are subject to noise and interruptions, and cede control of their medication management at a time when they are feeling particularly vulnerable. The importance of this lack of autonomy to patients suggests a variety of small interventions that could improve satisfaction, such as individual control of noise and temperature, a visible commitment to a quiet hospital environment, and minimized interruptions and sleep disturbance.^{29–32} Single-occupancy hospital rooms have been associated with lower rates of

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nosocomial infection, medication errors, and patient stress, as well as increased privacy, rest, visitor involvement, and doctor-patient communication.^{33,34} The most sophisticated intervention, acuity-adaptable private hospital rooms, allows hospitals to maintain patients in the same private hospital room during an entire admission, regardless of changes to level of acuity.³⁵

In-depth analysis of suggestions for improvement, as gathered by telephone surveys of recently discharged patients, was a particularly well-suited approach to identifying explicit expectations for care that were violated by dissatisfying incidents. When allowed to express dissatisfaction in terms of suggestions for improvement, patients talked freely about specific dissatisfying experiences. Using telephone interviews allowed a large volume of patient responses to be included, unlike smaller focus groups. Our study was oral and did not rely on the literacy level of patients. Additionally, the open-ended nature of questioning avoided some of the usual pitfalls of satisfaction surveys. We did not rely on predetermined satisfaction categories or presume the inherent value of particular attributes of care. Nonetheless, our study does have important limitations.

Patient perceptions were not compared with chart data or clinician report. Caregivers were allowed to participate in lieu of patients, which may have reduced identification of some dissatisfying events. Likewise, patients discharged to nursing homes or who were not English or Spanish speaking were excluded and may have had different dissatisfying experiences. Interviews were brief and dissatisfying events were not explored in detail. Although nearly half of respondents reported dissatisfying events, some patients may have been reluctant to criticize their care directly to a hospital representative. Finally, patients generally confined their comments to one or two dissatisfying events, even though there may have been others. We therefore cannot draw any conclusions about the relative frequency of dissatisfying events by domain.

Conclusions

All hospitalized patients bring expectations for their hospital experience. While specific expectations vary between patients, expectations for: 1) safety, 2) treatment with respect and dignity, 3) prompt and efficient care, 4) successful exchange of information, 5) environmental autonomy and control, and 6) high-quality amenities were found in this study to encompass core expectations for hospitalization. It may be useful to ensure that postdischarge surveys explicitly address these expectations. Efforts to address and manage these core expectations of hospital care may help to reduce patient dissatisfaction with hospitalization and improve the delivery and quality of hospital care.

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