



# Measuring Experience from the Patient's Perspective: Implications for National Initiatives

Maxwell Drain, MA; Paul Alexander Clark, MPA

There are significant differences between "patient experience" and "patient satisfaction" surveys. Instruments that measure experiences using patient reports require patients to recall and estimate the *frequency* of certain events. By contrast, instruments that capture patient evaluations of care using ratings take both *performance* and relative *importance* into consideration. Hospitals and other healthcare organizations in the United States increasingly will be called to survey patients for public report. This article investigates the differences between patient reports and patient ratings, addresses common misconceptions with satisfaction surveys, and provides recommendations for the appropriate measure of patient experiences for national initiatives.

concerning the two types of surveys and recommends appropriate methodology for measuring patient experiences. "A firm understanding of how patients evaluate their healthcare is critical to the development of sound initiatives aimed at maintaining and improving these evaluations" (Tucker & Adams, 2001, p. 272). More important, a better understanding of survey methodology and the evidence base will highlight fallacies in recent debates and return the focus to the reason why patients are surveyed in the first place: to improve the quality of care and service they receive.

## The Real Measure of a Patient's Quality of Care

Different types of information can be obtained from patient surveys. After discharge, patients may be asked to (a) report their perceptions of what happened during their stay, (b) rate their perceptions of the quality of care and service they received, or (c) indicate how satisfied they were with the care and service. **Table 1** presents examples of these three types of survey questions.

Patient report surveys evoke images of patients with checklists and stopwatches. Healthcare quality professionals learn little about a patient's quality of care by asking them how often or how quickly a pain medication, bedpan, or piece of information was given. For example, responses to the first question in **Table 1** would not indicate whether pain reduction orders were effective. Some patients may say their pain was "usually" controlled and think pain management was "very good," while other patients may say that their pain was "usually" controlled and respond that pain management was "poor."

Judgments based on patient reports are facility centered, not patient centered (Krowinski & Steiber, 1996). The percentages of "never, sometimes, usually, always"

### Key Words

data collection  
health services research  
healthcare surveys  
patient satisfaction  
quality improvement

The Centers for Medicare & Medicaid Services (CMS) has been working with the Agency for Healthcare Research and Quality (AHRQ), both of the U.S. Department of Health and Human Services, to develop a national standard for assessing patient experiences of hospital care in the United States. This process will result in a new survey instrument designed to measure, and publicly report, patient perspectives. CMS "requested a hospital patient survey as a way of providing comparison information for consumers who need to select a hospital and as a way of encouraging accountability of hospitals for the care they provide" (AHRQ, 2003a). After implementation, the resulting Hospital CAHPS survey may make recent state reporting efforts obsolete.

According to AHRQ (2003a), the Hospital CAHPS survey "is intended to capture reports and ratings of patients' hospital experience." However, the relative merits of patient reports and ratings have been questioned recently, particularly with respect to patient experience and patient satisfaction surveys. This article reviews recent research

**Table 1.** Examples of Patient Report, Rating, and Satisfaction Questions

**An example of a question that asks patients to report their experiences is**

*How often was your pain medicine delivered on time?  
(Never, Sometimes, Usually, Always)*

**An example of a question that asks patients to evaluate or rate their experiences is**

*How well was your pain controlled?  
(Very Poor, Poor, Fair, Good, Very Good)*

**An example of a question that asks patients to indicate their satisfaction with their experiences is**

*How satisfied were you with how your pain was controlled?  
(Very Dissatisfied, Dissatisfied, Neither Dissatisfied Nor Satisfied, Satisfied, Very Satisfied)*

responses may indicate how often something occurred but describe nothing about how patients experienced it. For example, it often does not matter how long patients wait; it matters how they *experience* the wait (Leddy, Kaldenberg, & Becker, 2003). For many patients, specific wait times may be far less important than the quality of staff interaction, explanations, and empathy experienced during the wait.

Traditional satisfaction measures—those that specifically ask patients to indicate their level of satisfaction—also are problematic because the interactions of patient expectations, experience, and satisfaction are difficult to separate. According to Cleary (1998), there are “inherent limitations in using assessments of patient satisfaction to make inferences about the quality of medical care. Such evaluations tend to be subjective, subject to reporting biases, and difficult to interpret when they are being used to motivate and guide quality improvement efforts” (p. 35).

Only patient evaluations “help consumers make more informed choices when selecting a hospital and can create incentives for hospitals to improve the care they provide” (AHRQ, 2003, December, p. iv). Organizations need patients’ evaluations to know where to focus resources and to determine whether improvement efforts are working. To effectively guide quality improvement, patient surveys must probe beyond simplistic questions of “How often did X happen during your stay?” to “How well did X meet your needs?”

Patient-centered healthcare realizes that patients are individuals, each with different needs. Realizing those needs and the organization’s ability to meet them are true quality measures. A patient-centered organization is

**Figure 1.** A Patient-Centered Model for Quality Improvement

<b>Facility Centered</b>	<b>Care Event</b>	<p><b>Delivery of Care</b></p> <p>SOURCE OF DATA: Facility (Medical Record, Objective In-House Observation)</p> <p>TYPE OF DATA: Objective</p> <ul style="list-style-type: none"> <li>• First step in PI is to identify and internally track processes in the care event</li> <li>• Documenting the objective delivery of care is the responsibility of the organization</li> </ul>	<p><b>Possible Goal:</b> When medically appropriate, provide pain meds within 15 minutes of patient request.</p> <p><b>Review Chart:</b> How long until pain meds administered?</p>
	<b>Patient Perception and Evaluation</b>	<p><b>Patient Recall &amp; Report Surveys</b></p> <p>SOURCE OF DATA: Patient</p> <p>TYPE OF DATA: Subjective</p> <ul style="list-style-type: none"> <li>• Will not necessarily mirror the objective tracking of delivery of care</li> <li>• Lacks objectivity because it is shaped by patient’s memory and interpretation</li> <li>• Lacks clear information as to whether care met the patient’s individual needs</li> </ul>	<p><b>Ask Patient:</b> “Did you receive pain meds within 15 minutes of your request?”</p> <p><b>Report:</b> “Yes”</p>
	<b>Patient Satisfaction</b>	<p><b>Patient Evaluation Surveys</b></p> <p>SOURCE OF DATA: Patient</p> <p>TYPE OF DATA: Subjective</p> <ul style="list-style-type: none"> <li>• Patient evaluation surveys collect information that facilities could not otherwise obtain—patient evaluation of their care experience</li> <li>• Patient evaluations of individual aspects of the care event are the best of patient-centered performance improvement</li> </ul>	<p><b>Ask Patient:</b> “How well was your pain controlled?”</p> <p><b>Evaluation:</b> Poor</p> <p>“I was given my pain medicine within 15 minutes, but I still hurt and no one came to check on me.”</p>
<b>Patient Centered</b>	<b>Patient Satisfaction with the Experience of Care</b>	<p><b>Patient Satisfaction</b></p> <p>SOURCE OF DATA: Patient</p> <p>TYPE OF DATA: Subjective</p> <ul style="list-style-type: none"> <li>• Patient satisfaction is a fundamental measure of quality and the multi-faceted outcome of patient evaluations of important aspects of their care (e.g., Nursing Care, Physician Care, etc.)</li> <li>• Improvements in patient satisfaction must be demonstrated in order to comply with CMS’s new Hospital Conditions of Participation</li> </ul>	<p><b>Reporting Satisfaction:</b> Low. “I was uncomfortable and felt abandoned.”</p>

committed to affirming patients' perceptions as their reality and improving the way patients experience care in the future. The model in **Figure 1** provides examples of facility-centered and patient-centered indicators and highlights the different conclusions that may be drawn about patient experiences based on measures of patient reports, evaluations, and satisfaction. Allowing patients to judge and evaluate care—using their own standards—empowers the patient (Grol, 2001) and fosters patient-centered care. Survey instruments that rely on patient reports disempower patients, promote facility-centered care, and communicate the message that patients lack the capacity to judge their own standards of care.

### Patient Experiences and Patient Reports

Patient reports traditionally have been associated with so-called patient experience surveys instead of patient satisfaction surveys. Ware and colleagues (Davies & Ware, 1988; Ware, Snyder, Wright, & Davies, 1983) were among the first researchers to argue that "...ratings capture personal evaluations of attributes of providers and services; they are inherently more subjective because they reflect both personal experiences and the standards consumers apply when evaluating care" (Davies & Ware, 1988, p. 35).

Proponents of patient reports often lump patient evaluations and satisfaction measures together, "claiming that their approach is much more realistic and objective" (Kennedy, 2003, p. 10). Although patient evaluations "are distinct from satisfaction items in that they do not ask the respondent to say how satisfied they were" (Darby, Valentine, Murray, & de Silva, 2000, pp. 7, 8), many proponents of patient reports still confuse the two (Cleary, 1998, 1999).

**Table 2** presents four criteria by which to evaluate patient report and rating measures: subjectivity, sensitivity, interpretation, and effectiveness. Several claims made by proponents of patient reports—including suggestions that patient reports (a) are more valid, less subjective, and easier for patients to answer; (b) increase patients' willingness to report problems; or (c) facilitate quality-improvement efforts compared to patient satisfaction measures—are unproven. In contrast, many surveys using patient ratings have been rigorously tested and found to be reliable, valid, and effective (Carey & Seibert, 1993; Drain,

2001; Kaldenberg, Mylod, & Drain, 2002; Seibert, Strohmeyer, & Carey, 1996).

### Reliability and Validity of Patient Reports

The Picker Institute's inpatient survey (Cleary et al., 1991; Cleary, Edgman-Levitan, Walker, Gerteis, & Delbanco, 1993), one of the most well-known instruments using patient reports, is now owned by National Research Corporation (Tieman, 2001) and marketed by The NRC+Picker Group. Although Picker's survey has become synonymous with the measure of "patient experience," fundamental questions remain concerning its reliability and validity.

*Reliability* refers to the consistency or reproducibility of a measure or the degree to which survey results are free from random error. The more reliable an instrument, the better it reflects a respondent's true opinions and distinguishes among patients with different levels of experience and satisfaction. *Validity* refers to the extent to which a survey instrument measures what it claims to measure, or the degree to which survey results are free from both random error and systematic bias.

**Table 3** lists the most common tests of survey reliability and validity and what to look for when evaluating survey instruments. It is essential to assess the reliability and validity of survey instruments to ensure the accuracy and generalizability of results. "No one would base medical decisions on a diagnostic test without evidence of its accuracy or precision, yet many are willing to assume that any survey that looks good and seems to make sense probably is good" (Seibert, 1998, p. 47).

Although patient surveys often are constructed with little attention given to demonstrating their reliability and validity (Sitzia, 1999; Urden, 2002), several flaws undermined the development of the Picker survey and limit its reliability and validity. The Picker survey was developed from a telephone survey of 100 patients per hospital "...as close as three months after discharge as possible" (Cleary et al., 1991). Subsequent research has shown that patient report measures are unreliable after a delay of more than 6 weeks (Bredart et al., 2002). Patient reports also are prone to error because patients are required to recall multiple instances of

**Table 2.** Four Criteria to Evaluate the Usefulness of Patient Reports and Patient Ratings**1. Subjectivity**

"The notion of 'objective' performance is an indefinable state in most cases. All attribute performance will be judged by a service user in perceptual terms" (Thompson & Sunol, 1995). It is perceived quality that is important. Patient reports are no more objective than patient ratings and have the additional burden of recall biases to overcome. Patient reports are based on what happened during patients' interactions with others and strongly influenced by patients' own needs, biases, and recollections. Without the evaluative aspect of measurement, there is only the patients' recollections of what happened without knowing what criteria they used to judge the standard (e.g., one patient's "usually" is another patient's "sometimes"). Some things might need to happen "always" in order to meet patients' needs, JCAHO standards, or doctors' orders. Other aspects of care could happen "sometimes" and still meet patients' needs (Krowinski & Steiber, 1996).

**2. Sensitivity**

Patient reports typically have fewer response categories than patient ratings, and this reduces the sensitivity of the measure and makes it more difficult to detect changes over time or differences among hospitals. Sensitivity is a particularly important feature of surveys if patients over the course of many months are being surveyed. Unfortunately, many patient reports are simple "yes" or "no" questions asking if something occurred. These questions tend to elicit favorable responses and exacerbate acquiescence bias (Fitzpatrick, 1991). In contrast, 5-point rating scales reduce acquiescence bias (Ross, Steward, & Sinacore, 1995) and produce greater response variability (Ware & Hays, 1988) than other scales.

**3. Interpretation**

Unlike patient ratings, patient reports provide little information without comparison to historical data or benchmarks. Perhaps having 45% of patients "sometimes" informed is a good result—some patients may not want as much information as other patients. Conversely, it could be a bad result—over half of patients may not be receiving enough information. Without comparison, it is often difficult to interpret patient reports or use them to guide quality improvement initiatives. In contrast, patient evaluations indicate immediately if patients thought they needed to receive more information.

**4. Effectiveness**

Patient experience surveys are not effective for continuous quality improvement. Possibly explaining much of their appeal, patient reports elicit few problems (Cleary et al., 1993). Asking patients to estimate how often doctors explained things in a way that they could understand, for example, only promotes minimally acceptable standards of communication and patient-centered care. Very few studies have reported the use of patient reports in quality improvement. Those that have used patient reports typically converted patient reports to "patient satisfaction" measures to evaluate the efficacy of their interventions (Hickey et al., 1996; Meterko, 1996; Niles et al., 1996). Patient evaluations provide direction to quality improvement efforts: Areas that are evaluated poorly by patients indicate aspects of the patient experience that are not meeting patients' needs.

events (Schwarz, 1999). This error increases with the delay between experience and patient report.\*

The Picker instrument also undersampled certain populations that are less likely to have telephones and "underrepresented both older and younger patients, as well as nonwhite patients and those with lower incomes" (Cleary et al., 1991, p. 265). On the question of objectivity, the authors readily admit, "We have no objective measure of the impact of the

events reported...responses to the interview questions represent the patients' perceptions, not necessarily what actually happened" (Cleary et al., 1991, p. 264). Finally, despite recommendations to involve patients in the creation and revision of patient surveys, the authors of the Picker survey instead worked with senior managers, clinicians, consultants, and ten hospital CEOs to develop the instrument (Cleary et al., 1993).

The Picker Institute considered the traditional measure of survey reliability (Cronbach's alpha) inappropriate for its survey but offered no alternative reliability coefficient (Picker Institute, n.d.). A recent study (Jenkinson, Coulter, & Bruster, 2002) discusses the development and validation of a subset of questions from the Picker inpatient survey but also fails to report widely accepted

\*In the most recent PEP-C survey, which is based on Picker's methodology, patients discharged between July 1, 2002, and October 31, 2002, were surveyed (California HealthCare Foundation, 2003). As a result, the earliest that some patients received a questionnaire was four months after their episode of care. The PEP-C survey consisted of three waves of mailings across eight weeks. This means that the delay could have been as long as six months—or longer if surveying didn't begin until after November 1, 2002.

**Table 3.** Common Definitions and Measures of Survey Reliability and Validity

Definition	Measure	Comment
<i>Reliability</i> refers to the consistency or reproducibility of a measure. The more reliable an instrument, the better it reflects a respondent's true opinions and can distinguish among patients with different levels of satisfaction.	Cronbach's alpha measures the internal consistency of items in a survey instrument and is the most common reliability coefficient	Coefficient alpha levels of 0.70 or higher generally are accepted as representing good reliability.
<i>Face validity</i> refers to whether the survey instrument appears on the surface to measure what it is supposed to measure.	Literature review, focus groups, cognitive interviews with patients, field pre-testing	Face validity is not quantified with statistics and is not a scientific measure of a survey's accuracy. It simply is a subjective appraisal of how an instrument appears to potential respondents.
<i>Content validity</i> refers to the extent to which the items in a survey instrument are representative of the concepts they are intended to reflect.	Literature review, expert opinion, focus groups with healthcare providers	As with face validity, content validity is a subjective measure of how appropriate an instrument appears to a set of reviewers and is not generalizable. There are many examples of valid instruments without face or content validity and of bogus instruments with face and content validity.
<i>Predictive validity</i> , a subclass of criterion validity, refers to a survey instrument's ability to predict future attitudes, behaviors, or outcomes.	Multiple-regression studies showing the extent to which scores predict patients' likelihood to recommend or ratings of overall quality of care	A good survey will account for 50% or more of the variance in global evaluations of overall quality and the likelihood of patient recommendations.
<i>Construct validity</i> refers to the degree to which the survey instrument measures the underlying construct or theoretical framework the survey is designed to measure.	Correlation coefficients; factor analysis and confirmatory factor analysis using path models to identify clusters of related variables, or factors, representing the attributes being measured	Discriminant and convergent validity, which are subclasses of construct validity, are routinely assessed using correlational procedures.  Factor analysis determines the underlying factor structure of the instrument. Normally, factor loadings of 0.40 are used to discriminate which variables belong to a factor or dimension of care. Construct validity is often the most important assessment of survey validity.

(For more information, see Aday, 1996; Carey, 1999; Krowinski & Steiber, 1996; Litwin, 2003; Nunnally & Bernstein, 1994; Sitzia, 1999; Streiner & Norman, 1995.)

measures of construct validity (Cleary et al., 1991; 1993; Jenkinson, Coulter, Bruster, Richards, & Chandola, 2002).<sup>†</sup>

Finally, the grouping of items (i.e., "dimensions") on Picker's instrument was determined by a series of focus groups to assess face validity, not by an empirical analysis of data (Jenkinson, Coulter, & Bruster, 2002; Picker Institute, n.d.). Many proponents of patient reports rely on cognitive interviews, or "think-aloud" strategies, for validation (Harris-

<sup>†</sup>Jenkinson, Coulter, and Bruster (2002) do refer to "high levels of internal consistency reliability" reported for Picker survey instruments in an unpublished implementation manual and for a subset of 15 questions they tested in five countries. However, the internal consistency measures that Jenkinson and his colleagues report are barely above the level the authors deem adequate and less than those reported for patient evaluations (e.g., Kaldenberg et al., 2002).

Kojetin, Fowler, Brown, Schnaier, & Sweeny, 1999). Cognitive interviews is a means of understanding the face and content validity of particular items on a survey by assessing how the average person or expert might interpret the questions. Respondents are administered questions in personal interviews or focus groups and asked a series of specific probe questions either at the time a question is asked (i.e., concurrent think-aloud) or at the end of the interview (retrospective think-aloud) regarding what they were thinking when they answered the questions and how they arrived at their answers (Aday, 1996; Harris-Kojetin et al.).

Cognitive testing helps researchers determine whether particular questions make sense to those who will be answering them (i.e., have

item-level validity) but says nothing about whether the instrument as a whole or the instrument's domains are operationally valid (i.e., have construct validity). Face validity is a minimum prerequisite for accepting a measure (Streiner & Norman, 1995). Even if interviewers are impartial, cognitive testing may not generalize to the entire population (Alreck & Settle, 1995). Psychometric testing, including factor analysis, is required to demonstrate more substantive forms of validity. To date, no such tests of the Picker instrument or of patient reports have been published in a peer-reviewed journal. A recent review (Sitzia, 1999) found that only 6% of the studies investigated used questionnaires that had been tested adequately.

### Dimensions of Care

According to the National Research Corporation (2003), "[t]he Picker Approach outlines eight dimensions of patient-centered care as the key drivers of quality. Although many of these dimensions were embraced by the Institute of Medicine (IOM) in its report, *Crossing the quality chasm* (Committee on Quality of Health Care in America, 2001), all were adopted by AHRQ as the areas of initial measurement focus for Hospital CAHPS. Following an extensive pilot test and analysis, however, AHRQ concluded that "...it was clear that the general hypothesized structure of the instrument was inconsistent with the observed data" (AHRQ, 2003, December, p. 4-3).

Subscales, or domains, are supported through factor analysis indicating how patients conceptualize their care—not how survey researchers think about care. Face validity and cognitive testing are not sufficient conditions. Most patient satisfaction surveys recognize that patients view care in terms of the different groups of staff with whom they interact (e.g., nurses, physicians) as well as the processes that they experience during their care (e.g., admission/registration, discharge, etc.). Even the revised Hospital CAHPS instrument includes 24 core items covering patients' perspectives about their care from nurses, their care from doctors, the hospital environment, their experiences in the hospital, information at discharge, and overall rating of the hospital (Centers for Medicare & Medicaid Services, 2003, December) similar to Press Ganey's dimensions of care (Kaldenberg et al., 2002; Press, 2002).

### Patient Satisfaction Surveys

In contrast to patient reports, considerable research confirms that patient satisfaction surveys using ratings are leading indicators of healthcare outcomes, including compliance with medical advice, likelihood to recommend, and return visits for care (e.g., see Cameron, 1996; Parhiscar & Rosenfeld, 2002; Press, 2002; Press Ganey Associates, 2004).

Although all patient-derived information is subjective, only patient satisfaction surveys accurately assess the patient's experience. Patient satisfaction surveys that ask patients to evaluate their experiences take into account multiple aspects of care not captured by patient reports, such as

- the empathy and compassion of nurses, physicians, and staff
- the affect, tone, and caring in the delivery of healthcare services
- the quality of the information and explanations that accompany care.

Sitzia and Wood's (1997) comprehensive literature review identified three purposes for patient satisfaction measurement: (a) to describe healthcare services from the patient's perspective, (b) to identify problem areas in healthcare organizations and generate ideas for solutions, and (c) to evaluate healthcare. The evaluation of healthcare was considered the most important reason for measuring the patient's perspective of care. "The term 'evaluation' suggests a cognitive process in which specific aspects of care are assessed, while 'satisfaction' refers to an emotional response to the whole experience" (Wensing & Elwyn, 2002, p. 154). "Perceived quality is just one of a number of antecedent factors driving satisfaction" (Newsome & Wright, p. 162).

Several researchers have drawn an important distinction between surveys that ask patients to evaluate the care they received and surveys that ask patients whether they are "satisfied" or not (Hall & Dornan, 1988; Linn, DiMatteo, Chang, & Cope, 1984).<sup>‡</sup> In testing several methods of measuring patient

<sup>‡</sup>Many critics (a) state that patient satisfaction questionnaires "typically ask patients to evaluate their satisfaction with care received using a scoring system that allows patients to choose one of several responses ranging from 'very satisfied' to 'very dissatisfied'" (Cleary, Keroy, Karapanos, & McMullen, 1989) or (b) discount all patient satisfaction measures because some surveys use global satisfaction questions (e.g., "Rate your overall satisfaction with X"). Both are overgeneralizations and inaccurate reflections of current practice outside of academia.

satisfaction, Ross et al. (1995) found that global measures and very-dissatisfied to very-satisfied scales were inferior to multidimensional evaluations that assessed several aspects of patients' care. "The problems with overall satisfaction measures are compounded by the fact that they may be so high that they are vulnerable to a ceiling effect that reduces the sensitivity of the measure for detecting differences between hospitals or changes over time" (AHRQ, 2003b). Using multidimensional surveys in which patients evaluate specific aspects of their care episode reduces positive bias and identifies more opportunities for quality improvement (Williams & Calnan, 1991).

In addition to their use of evaluative ratings, one feature of Press Ganey's instruments that differs them from traditional patient satisfaction questionnaires is a focus on *specific* healthcare experiences (Kaldenberg et al., 2002). Rather than giving generalized opinions about healthcare, patients rate the quality of specific events or experiences related to their most recent encounter. "Detailed questions about specific aspects of patients' experiences are more likely to be useful for monitoring the performance of various hospital departments...and could point to ways in which healthcare delivery could be improved" (Jenkinson et al., 2002, p. 338). Global measures are inadequate because improvement interventions are targeted at specific processes (Carey, 1999; Carey & Seibert, 1993). Rather than using simple questions to assess patient experiences (e.g., "During this hospital stay, did you need any emotional support from doctors, nurses, or other hospital staff?" Yes or No), the Press Ganey approach uses detailed questions to measure each of several dimensions of patient-centered care.

Kano, Seraku, Takahashi, and Tsuji (1996) contend that it is not enough to merely satisfy patients by meeting their basic and spoken requirements—particularly in highly competitive healthcare markets. Patients expect that their basic needs will be fulfilled. Attaining high levels of patient satisfaction is hard to achieve by excelling in these areas alone. However, there are unspoken or unexpected patient needs that when satisfied lead to high levels of satisfaction. These attributes sometimes are called excitement attributes or "delighters." They are not expected by the

patient but when present can result in high levels of patient satisfaction.

"Hospitals, in general, do an extremely good job at taking care of their patients. But today the call is for greatness, for 'patient-inspired healthcare.' When staff focus on listening and learning from the voice of the patient, they'll also take care of the areas of concern..." (M. Malone, personal communication, December 16, 2003). Unfortunately, patient report surveys, such as Picker's, focus primarily on problems from the facility's perspective. Patient satisfaction evaluations not only assess patients' articulated needs and performance issues but also measure "delighters" that lead to patient loyalty and trust.

## Discussion

Patient surveys used as diagnostic measurement tools must be statistically reliable and valid (see **Table 3** for a minimum set of criteria). Changing care processes, developing interventions, or creating "report cards" based on questionnaires with untested reliability or validity is a risky venture at best (Seibert, 1998). Patient reports are not direct measures of performance and have not been validated using techniques any more sophisticated than focus groups and cognitive interviews. "If a research instrument has not undergone a robust process of development and testing, the credibility of the research findings themselves may legitimately be called into question and may even be completely disregarded" (Kelley, Clark, Brown, & Sitzia, 2003). For example, contrast the Picker dimensions of care against Hospital CAHPS.

By definition, a patient-centered approach requires that patient needs, expectations, and evaluations be taken into account for quality improvement purposes. Patient reports merely estimate the frequency or occurrence of certain events. Patient reports simply assess the number of problems regardless of the importance of the issues to patients. Patients' recall and reporting of events will be shaped by their memory and will not necessarily reflect the objective delivery of care. The proper use of patient surveys is to collect information that cannot be collected any other way, such as patient evaluations of care.

"It really does not matter if the patient is right or wrong. What counts is how the patient felt even though the caregiver's perception of

reality may be quite different” (Petersen, 1988, p. 25). Proponents of patient reports would ignore the patient’s real experience of care. The “experience” of care is always a personal, cognitive phenomenon that can be revealed through ratings, not vague recollections of events. The idea that patients objectively report what “really” happened some weeks or months earlier, as though they were reading a medical chart, is untenable.

## Recommendations

The Hospital CAHPS survey is intended to be a public report tool to guide consumers in hospital choice. However, past efforts by public agencies at designing and publicly reporting quality measurement data have encountered methodological problems (Berwick, 2002; Berwick & Wald, 1990; Epstein, 1998). Designing a reliable and valid healthcare survey to scientifically assess patients’ perspectives presents methodological problems equally complex and nontrivial.

Rhode Island was the first state to require all its hospitals to use the same patient survey and release the results to the public (Barr et al., 2002). Rhode Island “hospitals were involved in quality improvement all along, but used the pilot [Press Ganey] results in particular to help target specific areas for improvement” (Barr et al., 2002, p. 65). Efforts in other states to survey patient experiences using patient reports have been less successful.

In 2000, Massachusetts decided not to release data from its statewide hospital survey because of concerns over the validity of collected patient report data. “Some [patients] were asked about their care two months after discharge while others were asked several months later, opening the possibility that results might vary because of failed memory rather than differences in care. The length and season of the surveys also differed, which could further skew results” (Tye, 2000, p. A01). According to Andrew Dreyfus, executive vice president of the Massachusetts Hospital Association, “Public reporting only works when the information is valid and fair, and there were enough questions about the validity and fairness of this data that no one felt comfortable about releasing it publicly” (Tye, 2000, p. A01).

Similar questions recently have been raised with the Patients’ Evaluation of Performance

in California, or PEP-C, survey. Only 47% of the California’s hospitals participated in the second round of the survey—up from 30% in the first round (Benko, 2003). Self-selection is one problem (McCormick, Himmelstein, Woolhandler, Wolfe, & Bor, 2002), particularly if the public is expected to take the results seriously, but the survey’s methodology and use of patient reports are more problematic.

Public reports should be based on surveys conducted shortly after a patient’s stay, not weeks or months after discharge. Patient perceptions of something as simple as whether information was presented at discharge deteriorates significantly after 1–2 weeks (Henderson & Zernike, 2001). Patient survey data obtained more than 6 weeks after discharge have been shown to be unreliable (Bredart et al., 2002). As a result, patient surveys, particularly those that will be used for public accountability, should not be delayed.

Survey instruments also should be short—not 65+ questions like the original Hospital CAHPS prototype. The length and complexity of patient reports increase respondent burden, lower response rates, and degrade data quality. Survey instruments must be available in multiple languages. Non-English-speaking patients represent a substantial portion of many hospitals’ populations. Excluding these patients from surveys for public report by failing to have appropriate translations produces survey results that are not truly representative of patient populations and should not be used for public accountability.

In sum, the measures and methods used for public report should empower patients to evaluate the quality of their care. Although researchers acknowledge the multidimensional nature of patient satisfaction (Linder-Pelz & Struening, 1985; Press, 1984, 2002; Press & Ganey, 1989) and propose different models of patient evaluation, there is remarkable consistency in the underlying factors measuring patient experiences across these surveys. Despite the recent focus on public accountability, hospitals have always been publicly accountable by word of mouth and by the accountability that they bring to each and every patient encounter.<sup>5</sup> Patients are always judging—and they judge an organization against their own personal set of expectations. When individuals ask friends and family members for recommendations, they do not

ask for reports on the frequency of specific events. Rather, they ask, "How was the care? Were you satisfied? Would you recommend this hospital?"

### Conclusion

Surveys for public report should complement, not compete with, hospitals' current surveys used for quality improvement. "Although accountability measures may identify areas and organizations that need improvement, these results are necessarily so far downstream that they are rarely of much help to the process of improving the delivery of health care" (Solberg, Mosser, & McDonald, 1997, p. 136). Patients deserve to be allowed to evaluate the quality of their healthcare experience. Patient satisfaction evaluations enable and empower patients by making them the ultimate arbiter of the quality of their experience. Patient evaluation surveys manifest the relative and changing values of the patient and are more effective measures of quality of care than patient reports. Simply identifying whether specific processes occurred and at what frequency reflects the values of the institution, not those of the patient.

"Satisfaction should be defined by patient experience, not by providers' definitions of quality. Unfortunately, most healthcare surveys have focused on evaluating the 'different dimensions of patient services...with little attention being directed to the relative importance of these dimensions'" (Kaldenberg et al., 2002, p. 4:18). As healthcare enters a new era of report cards and public accountability, patient surveys must measure experience from the patient's perspective using rating, not reports, to achieve any semblance of effectiveness.

### Acknowledgment

The authors thank Dennis Kaldenberg and Deirdre Mylod for their inspiration and guidance.

*§When the Kaiser Family Foundation and AHRQ (2000) asked the public who was "most believable" as a source of information about quality of hospital care, government agencies ranked eight out of nine sources. A majority of respondents preferred to rely on their own experiences or the recommendation of family and friends. Similar findings have been found for health plan report cards (Goldfield et al., 1999; Scanlon, Chernew, Sheffler, & Fendrick, 1998). "The evidence indicates that consumer report cards do not make a difference in decision making, improvement of quality, or competition" (Schauffler & Mordavsky, 2001, p. 69).*

### References

- Aday, L.A. (1996). *Designing and conducting health surveys: A comprehensive guide* (2nd ed.). San Francisco: Jossey-Bass.
- AHRQ. (2003a, January). *Hospital-CAHPS: Web chat transcript*. Retrieved February 16, 2003, from [www.ahrq.gov/qual/cahps/hcaphstrans.htm](http://www.ahrq.gov/qual/cahps/hcaphstrans.htm)
- AHRQ. (2003b, January). Revised answer to question 6: Hospital-CAHPS Web chat transcript. Retrieved February 16, 2003, from [www.ahrq.gov/qual/cahps/hcaphstranq6.htm](http://www.ahrq.gov/qual/cahps/hcaphstranq6.htm)
- AHRQ. (2003, December). *HCAHPS three-state pilot study analysis results*. Retrieved January 8, 2004, from [www.cms.gov/quality/hospital/3State\\_Pilot\\_Analysis\\_Final.pdf](http://www.cms.gov/quality/hospital/3State_Pilot_Analysis_Final.pdf)
- Alreck, P.L., & Settle, R.B. (1995). *The survey research handbook: Guidelines and strategies for conducting a survey* (2nd ed.). Chicago: Irwin.
- Barr, J.K., Boni, C.E., Kochurka, K.A., Nolan, P., Petrillo, M., Sofaer, S., et al. (2002). Public reporting of hospital patient satisfaction: The Rhode Island experience. *Health Care Financing Review*, 23(4), 51-70.
- Benko, L.B. (2003, June 23). Voluntary problems: While California's PEP-C patient survey gains momentum, hospitals often aren't willing to participate in the quality gauge. *Modern Healthcare*, 33, 6, 7, 16.
- Berwick, D.M. (2002). Public performance reports and the will for change. *Journal of the American Medical Association*, 288(12), 1523-1524.
- Berwick, D.M., & Wald, D.L. (1990). Hospital leaders' opinions of the HCFA mortality data. *Journal of the American Medical Association*, 263(2), 247-249.
- Bredart, A., Razavi, D., Robertson, C., Brignone, S., Fonzo, D., Petit, J.Y., et al. (2002). Timing of patient satisfaction assessment: Effect on questionnaire acceptability, completeness of data, reliability and variability of scores. *Patient Education and Counseling*, 46(2), 131-136.
- California HealthCare Foundation. (2003). *Results from the Patients' Evaluation of Performance (PEP-C) Survey: 2003 Edition Technical Report*. Retrieved June 27, 2003 from [www.chcf.org/documents/quality/PEPCTechReport.pdf](http://www.chcf.org/documents/quality/PEPCTechReport.pdf)
- Cameron, C. (1996). Patient compliance: Recognition of factors involved and suggestions for promoting compliance with therapeutic regimens. *Journal of Advanced Nursing*, 24(2), 244-250.
- Carey, R.G. (1999). How to choose a patient survey system. *Joint Commission Journal on Quality Improvement*, 25(1), 20-25.
- Carey, R.G., & Seibert, J.H. (1993). A patient survey system to measure quality improvement: Questionnaire reliability and validity. *Medical Care*, 31(9), 834-845.
- Centers for Medicare & Medicaid Services. (2003, December). *National implementation of Hospital CAHPS (HCAHPS)*. Retrieved December 5, 2003, from [cms.hhs.gov/regulations/practicing/cms10102.zip](http://cms.hhs.gov/regulations/practicing/cms10102.zip)
- Cleary, P.D. (1998). Satisfaction may not suffice! A commentary on 'A patient's perspective.' *International Journal of Technology Assessment in Health Care*, 14(1), 35-37.
- Cleary, P.D. (1999). The increasing importance of patient surveys. *British Medical Journal*, 319(7212), 720-721.
- Cleary, P.D., Edgman-Levitan, S., Roberts, M., Moloney, T.W., McMullen, W., Walker, J.D., et al. (1991). Patients evaluate their hospital care: A national survey. *Health Affairs*, 10(4), 254-267.
- Cleary, P.D., Edgman-Levitan, S., Walker, J.D., Gerteis, M., & Delbanco, T. L. (1993). Using patient reports to improve medical care: A preliminary report from 10 hospitals. *Quality Management in Health Care*, 2(1), 31-38.

- Cleary, P.D., Keroy, L., Karapanos, G., & McMullen, W. (1989). Patient assessments of hospital care. *Quality Review Bulletin*, 15(6), 172-179.
- Committee on Quality of Health Care in America, Institute of Medicine. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academies Press.
- Darby, C., Valentine, N., Murray, C.J.L., & de Silva, A. (2000). *World Health Organization (WHO): Strategy on measuring responsiveness* (No. GPE Discussion Paper Series: No. 23). Geneva: EIP/GPE/FAR World Health Organization.
- Davies, A.R., & Ware, J.E., Jr. (1988). Involving consumers in quality of care assessment. *Health Affairs*, 7(1), 33-48.
- Drain, M. (2001). Quality improvement in primary care and the importance of patient perceptions. *Journal of Ambulatory Care Management*, 24(2), 30-46.
- Epstein, A.M. (1998). Rolling down the runway: The challenges ahead for quality report cards. *Journal of the American Medical Association*, 279(21), 1691-1696.
- Fitzpatrick, R. (1991). Surveys of patient satisfaction: II—Designing a questionnaire and conducting a survey. *British Medical Journal*, 302(6785), 1129-1132.
- Goldfield, N., Larson, C., Roblin, D., Siegal, D., Eisenhandler, J., & Levertson, I. (1999). The content of report cards: Do primary care physicians and managed care medical directors know what health plan members think is important? *Joint Commission Journal on Quality Improvement*, 25(8), 422-432.
- Grol, R. (2001). Improving the quality of medical care: Building bridges among professional pride, payer profit, and patient satisfaction. *Journal of the American Medical Association*, 286(20), 2578-2585.
- Hall, J.A., & Dornan, M.C. (1988). Meta-analysis of satisfaction with medical care: Description of research domain and analysis of overall satisfaction levels. *Social Science & Medicine*, 27(6), 637-644.
- Harris-Kojetin, L.D., Fowler, F.J., Jr., Brown, J.A., Schnaier, J.A., & Sweeny, S.F. (1999). The use of cognitive testing to develop and evaluate CAHPS 1.0 core survey items. *Medical Care*, 37(3 Suppl), MS10-MS21.
- Henderson, A., & Zernike, W. (2001). A study of the impact of discharge information for surgical patients. *Journal of Advanced Nursing*, 35(3), 435-441.
- Hickey, M.L., Kleeffeld, S.F., Pearson, S.D., Hassan, S.M., Harding, M., Haughie, P., et al. (1996). Payer-hospital collaboration to improve patient satisfaction with hospital discharge. *Joint Commission Journal on Quality Improvement*, 22(5), 336-344.
- Jenkinson, C., Coulter, A., & Bruster, S. (2002). The Picker patient experience questionnaire: Development and validation using data from in-patient surveys in five countries. *International Society for Quality in Health Care*, 14(5), 353-358.
- Jenkinson, C., Coulter, A., Bruster, S., Richards, N., & Chandola, T. (2002). Patients' experiences and satisfaction with health care: Results of a questionnaire study of specific aspects of care. *Quality and Safety in Health Care*, 11, (5)335-339.
- Kaiser Family Foundation/Agency for Healthcare Research and Quality. (2000). *National survey on Americans as health care consumers: An update on the role of quality information*. Retrieved February 15, 2003, from www.kff.org/content/2000/3093
- Kaldenberg, D.O., Mylod, D.E., & Drain, M. (2002). Patient-derived information: Satisfaction with care in acute and post-acute care environments. In N. Goldfield, M. Pine & J. Pine (Eds.), *Measuring and managing health care quality: Procedures, techniques, and protocols* (2nd ed., pp. 4:69-89). New York: Aspen.
- Kano, N., Seraku, N., Takahashi, F., & Tsuji, S. (1996). Attractive quality and must be quality. In J. D. Hromi (Ed.), *The best on quality* (Vol. 7). Milwaukee, WI: ASQ Quality Press.
- Kelley, K., Clark, B., Brown, V., & Sitzia, J. (2003). Good practice in the conduct and reporting of survey research. *International Journal for Quality in Health Care*, 15(3), 261-266.
- Kennedy, T.D., III. (2003, September). Patients' opinions matter [Letter to the editor]. *Hospitals & Health Networks*, 77, 10-11.
- Krowinski, W.J., & Steiber, S.R. (1996). *Measuring and managing patient satisfaction* (2nd ed.). Chicago: American Hospital Publishing.
- Leddy, K.M., Kaldenberg, D.O., & Becker, B.W. (2003). Timeliness in ambulatory care treatment. An examination of patient satisfaction and wait times in medical practices and outpatient test and treatment facilities. *Journal of Ambulatory Care Management*, 26(2), 138-149.
- Linder-Pelz, S., & Struening, E.L. (1985). The multidimensionality of patient satisfaction with a clinic visit. *Journal of Community Health*, 10(1), 42-54.
- Linn, L.S., DiMatteo, M.R., Chang, B.L., & Cope, D.W. (1984). Consumer values and subsequent satisfaction ratings of physician behavior. *Medical Care*, 22(9), 804-812.
- Litwin, M.S. (2003). *How to assess and interpret survey psychometrics* (2nd ed.). Thousand Oaks, CA: Sage.
- McCormick, D., Himmelstein, D.U., Woolhandler, S., Wolfe, S.M., & Bor, D.H. (2002). Relationship between low quality-of-care scores and HMOs' subsequent public disclosure of quality-of-care scores. *Journal of the American Medical Association*, 288(12), 1484-1490.
- Meterko, M. (1996). The evolution of customer feedback in health care. *Joint Commission Journal on Quality Improvement*, 22(5), 307-310
- National Research Corporation. (2003). *National Research Corporation's Picker approach used as foundation for AHRQ's newly introduced Hospital-CAHPS® survey*. Retrieved June 27, 2003, from www.nationalresearch.com/news/releaseH-CAHPS.html
- Newsome, P.R.H., & Wright, G.H. (1999). A review of patient satisfaction: 1. Concepts of satisfaction. *British Dental Journal*, 186(4), 161-165.
- Niles, N., Tarbox, G., Schults, W., Swartz, W., Wolf, E., Robb, J., et al. (1996). Using qualitative and quantitative patient satisfaction data to improve the quality of cardiac care. *Joint Commission Journal on Quality Improvement*, 22(5), 323-335.
- Nunnally, J.C., & Bernstein, I.H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
- Parhiscar, A., & Rosenfeld, R.M. (2002). Can patient satisfaction with decisions predict compliance with surgery? *Otolaryngology and Head and Neck Surgery*, 126(4), 365-370.
- Petersen, M.B.H. (1988). Measuring patient satisfaction: Collecting useful data. *Journal of Nursing Quality Assurance*, 2(3), 25-35.
- Picker Institute. (n.d.). *Validity of the Picker/Commonwealth inpatient questionnaire*. Boston, MA: Author.
- Press Ganey Associates. (2004). *External publications and presentations*. Retrieved May 7, 2004, from www.pressganey.com/products\_services/readings\_findings/external\_publication.php
- Press, I. (1984). The predisposition to file claims: The patient's perspective. *Law, Medicine, & Health Care*, 12(2), 53-62.
- Press, I. (2002). *Patient satisfaction: Defining, measuring, and improving the experience of care*. Chicago: Health Administration Press.

- Press, I., & Ganey, R. F. (1989). Patient experiences that contribute to satisfaction with the hospital. *California Association of Hospitals and Health Systems*, 13(12), 1–5.
- Ross, C.K., Steward, C.A., & Sinacore, J.M. (1995). A comparative study of seven measures of patient satisfaction. *Medical Care*, 33(4), 392–406.
- Scanlon, D.P., Chernew, M., Sheffler, S., & Fendrick, A.M. (1998). Health plan report cards: Exploring differences in plan ratings. *Joint Commission Journal on Quality Improvement*, 24(1), 5–20.
- Schauffler, H.H., & Mordavsky, J.K. (2001). Consumer reports in health care: Do they make a difference? *Annual Review of Public Health*, 22, 69–89.
- Schwarz, N. (1999). Self-reports of behaviors and opinions: Cognitive and communicative processes. In N. Schwarz, D. C. Park, B. Knäuper & S. Sudman (Eds.), *Cognition, aging, and self-reports* (pp. 17–43). Philadelphia, PA: Psychology Press.
- Seibert, J.H. (1998). Patient satisfaction and quality improvement: Strategies and pitfalls. *Managing Employee Health Benefits*, (Summer), 46–50.
- Seibert, J.H., Strohmeier, J.M., & Carey, R.G. (1996). Evaluating the physician office visit: In pursuit of a valid and reliable measure of quality improvement efforts. *Journal of Ambulatory Care Management*, 19(1), 17–37.
- Sitzia, J. (1999). How valid and reliable are patient satisfaction data? An analysis of 195 studies. *International Journal for Quality in Health Care*, 11(4), 319–328.
- Sitzia, J., & Wood, N. (1997). Patient satisfaction: A review of issues and concepts. *Social Science & Medicine*, 45(12), 1829–1843.
- Solberg, L.I., Mosser, G., & McDonald, S. (1997). The three faces of performance measurement: Improvement, accountability, and research. *Joint Commission Journal on Quality Improvement*, 23(3), 135–147.
- Streiner, D.L., & Norman, G.R. (1995). *Health measurement scales: A practical guide to their development and use* (2nd ed.). New York: Oxford University Press.
- Thompson, A.G., & Sunol, R. (1995). Expectations as determinants of patient satisfaction: Concepts, theory and evidence. *International Journal for Quality in Health Care*, 7(2), 127–141.
- Tieman, J. (2001, May 14). Grim answer to survey: Picker Institute shuts down after bungling study. *Modern Healthcare*, 31.
- Tucker, J.L., III, & Adams, S.R. (2001). Incorporating patients' assessments of satisfaction and quality: An integrative model of patients' evaluations of their care. *Managing Service Quality*, 11(4), 272–286.
- Tye, L. (2000, September 6). Hospital group to keep patient survey secret. *The Boston Globe*, p. A01.
- Urden, L.D. (2002). Patient satisfaction measurement: current issues and implications. *Lippincott's Case Management*, 7(5), 194–200.
- Ware, J.E., Jr., & Hays, R.D. (1988). Methods for measuring patient satisfaction with specific medical encounters. *Medical Care*, 26(4), 393–402.
- Ware, J.E., Jr., Snyder, M.K., Wright, W.R., & Davies, A.R. (1983). Defining and measuring patient satisfaction with medical care. *Evaluation and Program Planning*, 6(3–4), 247–263.
- Wensing, M., & Elwyn, G. (2002). Research on patients' views in the evaluation and improvement of quality of care. *Quality and Safety in Health Care*, 11(2), 153–157.
- Williams, S.J., & Calnan, M. (1991). Convergence and divergence: Assessing criteria of consumer satisfaction across general practice, dental and hospital care settings. *Social Science & Medicine*, 33(6), 707–716.

### Authors' Biographies

Maxwell Drain is Assistant Manager of Research and Development at Press Ganey Associates, South Bend, IN.

Paul Alexander Clark is Senior Knowledge Manager at Press Ganey Associates.

For additional information on this article, contact Maxwell Drain by phone at 574/232-3387, ext. 137 or by e-mail at [mdrain@pressganey.com](mailto:mdrain@pressganey.com).

*Journal for Healthcare Quality* is pleased to offer the opportunity to earn continuing education (CE) credit to those who read this article, take the posttest, and complete the hard copy or online form. This continuing education offering, *JHQ W1*, will provide one contact hour to those who complete it appropriately.

### Core CPHQ Examination Content Area IV. Performance Measurement and Improvement

