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Perspective

The Patient Experience and Health Outcomes

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Do patients' reports of their health care experiences reflect the quality of care? Despite the increasing role of such measures in research and policy, there's no consensus regarding their legitimacy in quality assessment. Indeed, as physician and hospital compensation becomes increasingly tied to patient feedback, health care providers and academics are raising strong objections to the use of patient-experience surveys. These views are fueled by studies indicating that patient-experience measures at best have no relation to the quality of delivered care and at worst are associated with poorer patient outcomes. Conversely, other studies have found that better patient experiences — even more than adherence to clinical guidelines — are associated with better outcomes. Which conclusion is correct? We believe that when designed and administered appropriately, patient-experience surveys provide robust measures of quality, and our efforts to assess patient experiences should be redoubled.

Critics express three major concerns about patient-reported measures, particularly those assessing "patient satisfaction." First, they argue that patient feedback is not credible because patients lack formal medical training. They believe that patient-satisfaction measures actually capture some aspect of "happiness," which is easily influenced by factors unrelated to care. Articles in the popular press have even suggested that employing singing, costumed greeters would raise patient-experience scores. However, Jha and colleagues found that overall satisfaction with care is positively correlated with clinical adherence to treatment guidelines.[1] One explanation for this correlation is that patients base their satisfaction rating on an accurate "sense" of the quality of technical care. That would make patient-experience measures and clinical adherence measures redundant, which might imply that patient feedback has no additional value — but then the concern about credence would be meritless.

Another explanation is that the measures used to capture patient satisfaction reflect interpersonal care experiences, such as patient–provider communication, which correlate with technical care but represent a unique dimension of quality. Health care is, after all, a service, so measures of its quality should include assessment of the extent to which the patient and service provider reach a com-

Representative Questions from the HCAHPS Survey.*

Question Number	Survey Section	Question	Answer Options
3	Your Care from Nurses	During this hospital stay, how often did nurses explain things in a way you could understand?	Never Sometimes Usually Always
17	Your Experiences in This Hospital	Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?	Never Sometimes Usually Always
20	When You Left the Hospital	During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?	Yes No

* The standard and expanded Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) surveys may be found at www.hcahpsonline.org/surveyinstrument.aspx.

mon understanding of the patient's situation.[2] For example, a language barrier between patient and physician may affect the course — and therefore quality — of treatment. We have found that patient-reported measures not only are strongly correlated with better outcomes but also largely capture patient evaluation of care-focused communication with nurses and physicians, rather than noncare aspects of patient experience, such as room features and meals.[3,4] Consequently, when collected through well-designed survey instruments that direct patients to report their experiences rather than their general "feelings," such as the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey (see table), even a controversial measure such as "satisfaction" appears to be tied both theoretically and empirically to quality.

A second concern is that patient-experience measures could be confounded by factors not directly associated with the quality of processes. For example, some observers believe that patients base their assessment of their experience on their health status, regardless of the care they've received. However, if feedback is determined by outcome, there should be no correlation between patient-experience measures and outcome when analyses control for clinical adherence. Yet several studies, including two of our own,[3,4] have shown such correlations in multiple data sources in relation to multiple disease conditions, which indicates that patient-experience measures don't simply reflect clinical adherence–driven outcomes but also represent a different dimension of quality that is otherwise difficult to measure objectively.

The third concern is that patient-experience measures may reflect fulfillment of patients' a priori desires — for example, their request for a certain drug, regardless of its benefit. If that explanation were valid, then our finding that higher satisfaction is linked to better outcomes would indicate that patients can judge better than clinicians the best course of treatment. This implication is not intuitive, and the concern is not consistent with the data. For example, studies have shown that patient-experience measures and the volume of services ordered are not correlated; in fact, increased patient engagement leads to lower resource use but greater patient satisfaction.

How, then, do we explain the inconsistent results concerning patient-experience measures and health outcomes? There are five points to consider. First, one must think about whether these measures focus on a specific event or visit. We find that when focused on a specific hospital visit, they are consistently correlated with accepted outcome measures, such as mortality and readmission rates. In contrast, the use of general evaluations of health plans tends to produce null to opposite results. One reason may be that health-plan surveys tend to assess all care provided by a plan over a long period, leaving patients to determine which interactions should factor in to evaluations.

Second, survey instruments should focus on patient–provider interactions — the aspect of care for which patient-reported measures are most credible — and evaluate interactions with all providers and coordination within the care team. When we analyzed the factors influencing overall

Categories of Experiences Assessed by the HCAHPS Survey, in Order of Degree of Correlation with Overall Satisfaction.*

1. Communication with nurses
2. Pain management
3. Timeliness of assistance
4. Explanation of medications administered
5. Communication with doctors
6. Cleanliness of room and bathroom
7. Discharge planning
8. Noise level at night

* Data are from Boulding et al.[3]

patient-experience scores in hospital settings, we found that aspects of nursing care and communication were more predictive than interactions with physicians. In the HCAHPS survey, communication with physicians ranked fifth out of eight categories in terms of correlation with overall satisfaction (see box).[3] Some studies with null findings or negative associations between patient-experience measures and outcomes evaluated only communication with physicians. Limiting patient-experience measurement to a single dimension may exclude the interactions that most strongly affect experiences and outcomes. This fact alone could explain why many studies show no relation between outcomes and patient experiences.

Third, timeliness of measurement is important. For example, the HCAHPS survey questionnaire is collected no later than 42 days after the patient's discharge. Conversely, surveys conducted by health plans and primary care physicians typically require patients to consider interactions that occurred a year or more previously, which can introduce considerable recall inaccuracies and bias.

Fourth, to eliminate confounders and alternative explanations, outcome measures should be risk-adjusted and closely related to the interaction of interest. These two factors might explain the finding by Fenton et al. of a negative association between patient-experience measures and outcomes, since the average lag between the measured experience and the outcome was 3.9 years and the researchers controlled for risk by means of self-reported health status.[5] In contrast, in the hospital studies that showed positive associations,[1,3,4] risk was controlled for with the use of empirical data, and patients' assessments were done during hospitalization or within 30 days after discharge.

Fifth, there's no common approach for defining "patient satisfaction." Each study we've examined used a measure labeled "satisfaction," yet none of the survey instruments included questions using that word, and the researchers did not use the same set of measures. Nevertheless, if these measures address a specific event or visit, focus on provider–patient interactions, and are assessed in a timely manner, they seem to capture an important and otherwise unmeasured dimension of quality of care. But a common measure of patients' overall assessment of care — grounded in sound research — would facilitate cross-study comparisons and might reduce confusion and skepticism regarding what patient "satisfaction" actually measures.

Although there are unresolved methodologic issues related to the measurement and interpretation of patient experiences — regarding survey content, risk adjustment, and the mode and timing of survey administration — we believe that both theory and the available evidence suggest that such measures are robust, distinctive indicators of health care quality. Therefore, debate should center not on whether patients can provide meaningful quality measures but on how to improve patient experiences by focusing on activities (such as care coordination and patient engagement) found to be associated with both satisfaction and outcomes, evaluate the effects of new care-delivery models on patients' experiences and outcomes, develop robust measurement approaches that provide timely and actionable information to facilitate organizational change, and improve data-collection methods and procedures to provide fair and accurate assessments of individual providers.

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