

Time for a Thorough Evaluation of Patient-Centered Care

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Patient-centered care is now the goal for virtually all health-care systems, but what is it, and how is it measured? The Institute of Medicine (IOM) considers care to be patient centered if it, is “respectful of and responsive to individual patient preferences, needs, and values and ensures that patient values guide all clinical decisions.”¹ The IOM further separates patient-centered care into 8 dimensions, including respect for patient preferences, information, medication communication, coordination of care, emotional support, physical comfort, involvement of the family, continuity and transition, and access to care. The dominant metric used to measure patient-centered care is patient satisfaction, which is the measure that is most likely to be improved in trials of interventions aimed at 1 of these 8 dimensions.²

Given the past indifference to patient satisfaction, the paradigm shift toward the patient's view is a welcome change. Hospitals and health care systems increasingly reward providers who obtain the highest rates of patient satisfaction. For many hospitals and clinics, it is their only measure of quality with a financial incentive. However, patient-centered care is only one aspect of quality of care as defined by the IOM.¹ Other aspects include safety, effectiveness, efficiency, and equity. In the drive toward 100% patient satisfaction, it is possible that these other aspects of quality may suffer. Is the race to the top of patient satisfaction in the best interest of the health and well-being of the population? Without a thorough evaluation of patient-centered interventions, we cannot optimize the use of our limited resources to provide the best care for everyone.

One common interpretation of patient-centered care is delivering the care patients want, when they want it, and where they want it. It can be argued that the epitome of such care was delivered to Michael Jackson.³ His personal physician (Dr Conrad Murray, a cardiologist) provided his requested treatment (highly effective sedation with propofol), when he wanted (to sleep), and where he wanted (at home without annoying monitoring equipment). Although the outcome (death from oversedation) was not what Michael wanted, Dr Murray's process of care was clearly aimed to improve Michael's satisfaction with care, although it led to a conviction of involuntary manslaughter. In all likelihood, Dr Murray received top scores on his Press-Ganey surveys, and he would

have been recommended to others had his patient survived. Fortunately, few can afford such patient-centered care.

Other less extreme but more common cases demonstrate how care aimed at improving satisfaction may not always improve health. Many providers of urgent care have seen patients with mild symptoms of an upper respiratory infection who will only consider the visit satisfactory, if they are prescribed antibiotics. Within cardiology, asymptomatic patients at low risk for coronary artery disease may still request to have a coronary computed tomography scan for reassurance. Pediatricians are occasionally asked to validate a parent's belief that childhood vaccinations are harmful and should be avoided. One can imagine situations where satisfying certain patients who are requesting narcotics or have a diagnosis of psychosis would go against recommended medical care. In all of these situations, providers risk receiving a low satisfaction score for doing what is best for the health of the patient (and in the case of antibiotics, for society as a whole).

Should we even be concerned if health is worsened by patient-centered care? Don Berwick, former administrator for the Center for Medicare and Medicaid Services, acknowledges that patient-centered care is not always evidence-based. In his 2009 *Health Affairs* article, “What patient-centered should mean: Confessions of an extremist,” he argues that nonevidence-based care should occasionally trump evidence-based care, if this is what the patient wants.⁴ He emphasizes that patient-centered care is “the experience (to the extent the individual patient desires it) of transparency, individualization, recognition, respect, dignity, and choice in all matters, without exception, related to one's person, circumstances, and relationships in health care.” The choice between patient satisfaction and effectiveness (including safety) in the case, where they are in conflict, is a philosophical one. It is well accepted that patients can rationally trade off length of life for improved health status. Why not be able to trade health for satisfaction? However, it can be argued that this choice should be made not just by the potential recipient, but by all those paying for the care. As most care is paid by premiums and taxes, it can be argued it is society's view that should be sought.

Cost of care will also vary across patient-centered care interventions. Depending on the cost and gain in patient satisfaction, patient-centered care can be labeled as a good or poor value. The impact of patient-centered care (or any care for that matter) can thus be defined on 3 axes (patient satisfaction, impact on health, and cost to deliver it). This model can be mapped to the 6 IOM components of quality¹: safety (health) patient centeredness (satisfaction), effectiveness (health), efficiency (cost), and equity (mix of health and satisfaction). Any intervention designed to improve patient-centered care should be evaluated on these 3 axes.

Willingness to pay is one method that can be used to compare views of satisfaction, health improvement (mortality

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and health status) with an economic metric.⁵ Populations can be surveyed to determine how much they would be willing to have their premiums increased for interventions that increase convenience of care, improve health status, or decrease the risk of death. With such an analysis, one can decide whether to pursue care that has opposite effects on health and patient satisfaction. Similar studies can be done to determine whether care, aimed primarily at patient satisfaction, should be paid by society or the individual.

Germany has made such a choice regarding the use of spa treatment for patients. The spa (from the Latin acronym *sanus per aquam*, meaning “health by water”) is a mainstay of German culture and is supported by their federal health system.^{6,7} Towns in Germany can qualify and choose to use the prefix Bad, or “bath,” before their name, if they meet strict water and air quality standards, among other conditions. The spas typically specialize based on their water type: ocean, other salt water, marsh, or mineral. Germans are usually eligible to receive 3 weeks of spa treatment every 3 years if prescribed by a physician. The indications for a prescription include either treatment of a chronic condition or as a preventive for those with risk factors for disease (eg, lack of sleep, stress). The treatment often includes a combination of diet, exercise, relaxation, massage, and motivation provided by the medical staff.

Although patients in the United States would agree that such spa treatment can improve patient satisfaction, many would say that the spa cost should be paid by the individual consumer rather than the medical plan or government. In comparison, some in the United States feel marijuana should be covered by health plans, because it is approved for medical use in 12 states (and now for any use in 2). As with spas, some believe medical marijuana improves health, whereas others believe it only improves well-being. Do patients want more care aimed at improving well-being, if it means higher premiums or copays? To decide, we need to know how much patient satisfaction is improved, whether health is impacted, and at what cost.

A few studies have evaluated patient satisfaction and the relationship to health, although much more needs to be done. In a study using the CRUSADE Registry, Press-Ganey scores of patient satisfaction were positively correlated with 13 of 14 performance measures for acute myocardial infarction.⁸ These patient satisfaction ratings are commonly scored by the patient on a 1 to 5 scale several days to weeks after their visit with a provider. The most sought after rating is a 5 (highest score) on the question asking whether the patient would recommend this provider to others. Average scores for a provider are usually in the upper 4s, making it difficult to find significant differences between individual providers. In the CRUSADE Registry, higher patient satisfaction scores were also associated with lower risk-adjusted inpatient mortality. The impact of patient satisfaction was comparable with improvement in guideline adherence with a one-quartile change in both patient satisfaction and guideline adherence scores associated with similar changes in predicted survival. The most important determinant of overall patient satisfaction was satisfaction with nursing care.

In a study using data from 2429 hospitals, Jha and colleagues found a positive correlation between Medicare patient satisfaction and clinical performance for acute myocardial infarction and heart failure, although the absolute differences were modest.⁹ The top quartile of hospitals in quality of process of care for acute myocardial infarction had a Hospital Consumer Assessment of Healthcare Providers and Systems score of 95.3 compared with 93.5 for those in the lowest quartile ($P < 0.001$).

Not all studies have found a relationship between patient satisfaction and improved health. In a study from Canada, satisfaction with care was more likely in patients who were older, without depression, and with better functional capacity, but it was not associated with the quality of myocardial infarction care or survival.¹⁰ Jaipaul found a negative correlation between overall patient satisfaction and unadjusted mortality rates in a study of 29 hospitals in Northeast Ohio.¹¹ Unfortunately, the study did not determine whether differences in clinical quality explained the patient satisfaction–outcome inverse relationship.

Even if the positive association between patient satisfaction scores and outcome is real, we cannot assume that interventions that increase patient satisfaction will improve outcome. Formal trials of interventions are needed to determine whether interventions designed to improve patient satisfaction have additional benefits. A few randomized trials have examined patient-centered care or its components. Studies of physician training have shown improved patient satisfaction but no obvious improvement in health outcomes.² In a randomized trial of physician and nurse training in patient communication, those patients in the intervention group reported better communication with their doctors and greater treatment satisfaction, but they reported significantly worse clinical measures of body mass index and triglyceride levels.¹²

Although these studies are a step in the right direction, additional research is clearly needed in multiple areas. We need more studies examining the relationships among patient satisfaction, health, and the impact on cost. This is particularly important for interventions designed to improve high rates of satisfaction to 100% patient satisfaction, as they may be most susceptible to unintended consequences. Patients’ views on the relative value of patient satisfaction and health are needed. We may be surprised with the results.

Patient-centered care and its metric, patient satisfaction, are only growing in importance. They are now publicly reported by national payers in both the United States (<http://www.hospitalcompare.hhs.gov>) and Canada (http://www.cihi.ca/CIHI-ext-portal/internet/en/document/health+system+performance/indicators/performance/chrp_report_about). Many health facilities and systems are looking to the service and retail industries to reach 100% patient satisfaction. As with the customer, it is tempting to say that “the patient is always right.” Perhaps one should rephrase slightly to say the patients are always right. To the extent that we are all paying for care, all of us, as potential patients, want the best value for improving health and well-being. To make informed decisions, we need a rigorous evaluation of all new patient-centered interventions examining not only whether they improve satisfaction with care, but also their impact on health and the cost of delivering care.

Disclosures

Dr Heidenreich is employed by the VA Health Care System, which has an Office of Patient Centered Care. He has no other relevant financial relationships to disclose. The views expressed are Dr Heidenreich's and do not necessarily represent the views of the VA Health Care System or Stanford University.

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