

The Evolution of Measuring Patient Satisfaction

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Abstract

Creating a positive patient experience, as measured by current leading satisfaction surveys, is highly relevant in today's healthcare environment as it has been recently linked to payment. Researchers began building the concept and measurement of patient experience in the 1980s. Today patient experience encompasses interpersonal manner, technical quality, accessibility and convenience, finances, efficacy and outcomes, continuity, physical environment, and availability. Measuring the patient experience, which can be thought of as a compilation of patient satisfaction, perceptions, engagement, participation, and preferences, since these tend to be overlapping measures, can be conducted using different methods: mixed, quantitative, qualitative, ethnographic, photo voice, and guided tours. Technology influences when and how the measurement takes place; measurement can be conducted at the time of care or at any time after. Since patient perceptions drive patient satisfaction, it is important to measure factors the patient values. In this paper, we discuss the history of patient satisfaction survey tools, the role of the patient experience, and strategies that can improve patient satisfaction metrics. Based on our review of literature and research, strategies to influence and improve patient satisfaction metrics need to consider the concept of the patient experience as complex and multi-dimensional phenomenon driven by patient expectations and perceptions.

Keywords: Patient satisfaction, Patient experience, Measuring satisfaction, Expectations, Perceptions

Introduction

Determinants of patient satisfaction need to be examined from both the broader patient experience - the customer perspective - and its relationship with the literature on patient expectations [1]. Measured patient satisfaction scores are based on the patient experiences that occur before, during, and after a care visit at various levels of expectations [2], hence patient satisfaction varies from patient experience in that it is a judgement formed by the patient about the accomplishment of the end goal [3]. The broader concept of "patient experience" is defined by the Beryl Institute as "the sum of all interactions, shaped by an organization's culture, that influence patient perceptions across the continuum of care" [4]. The interactions include touch points, policies, communication, actions, and environment, while the culture is the vision, values, people, and community, all of which influence the patient perceptions, or what the patient recognizes, understands, and remembers from the care experience [4]. Patient expectations are the anticipated or believed encounters a patient envisions will occur in a healthcare system and can affect patient satisfaction [5]. Over the last decade, the concept of the patient satisfaction as an outcome measure has gained importance as healthcare providers, including primary care clinics, move beyond achievable care quality and patient safety targets and start organizing multi-disciplinary models of care driven and rewarded by new key performance indicators, such as patient satisfaction metrics [6]. Therefore, creating a positive patient experience, as measured by current leading satisfaction surveys, is highly relevant in today's healthcare environment as satisfaction metrics are often linked to payment.

New and emerging payment models used by insurers incorporate data on patient satisfaction into payment calculations. These trends in payment are mostly driven by the value-based care and payment initiatives recently introduced by the Centers for Medicare and Medicaid (CMS) [7]. For example, Medicare's hospital Value-Based Purchasing (VBP) program paid hospitals \$1.4 billion in performance-based incentives in 2015 alone. About 30 percent of the VBP performance incentives are based on the

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Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) measures of the patient experience of care [8]. Physician practices, including primary care practices, are preparing for the Medicare Access and CHIP Reauthorization Act (MACRA) of 2015, which is expected to be implemented in 2017. This VBP program will incorporate patient satisfaction metrics as part of the quality measure and equation for the merit based incentive payment system (MIPS) [9]. Finally, employer sponsored health plans show a significant move toward higher deductibles, making the patient more inclined to consider value based on price, convenience, and service experience [10].

Therefore, for the first time in the evolution of innovations in healthcare delivery, healthcare providers are looking for strategies to improve the patient experience that is currently measured by patient satisfaction survey tools, such as the HCAHPS survey tool used by Medicare in the VBP programs. Understanding the nature and history of these patient satisfaction tools is key to successful implementation of patient satisfaction improvement strategies. In this paper, we synthesize literature findings and present the readers with a history of patient satisfaction survey tools, discuss the important role of the patient experience, and conclude with strategies that can improve patient satisfaction metrics by focusing on managing two key constructs: patient expectations and perceptions.

Methods

The development of this paper is a result of a larger study aimed at development of evidence-based strategies to influence patient experience and therefore improve patient satisfaction scores. The research project included a systematic review of literature to better understand the dynamics between patient satisfaction scores and the overall patient experience. Keywords included "patient satisfaction", "patient satisfaction improvement strategies", and "improving customer service" and more. Searches with additional keywords were added to narrow the search to the outpatient setting and inpatient acute care setting. This paper presents a synthesis from the systematic review of literature and selected models of practices focused on achieving great patient experiences.

Results and Discussion

History of patient satisfaction surveys

Healthcare delivery in the United States has made great leaps in areas such as clinical care quality, patient safety, and operational effectiveness, including the standardization of many evidence-based clinical pathways and protocols for the management of specific chronic diseases and cancers. In healthcare, researchers started building a theory towards the concept and measurement of patient satisfaction in the early 1980s [11]. The history of the first patient satisfaction questionnaire (PSQ) goes back to 55 Likert-type items that measured attitudes toward characteristics of physicians and medical care services, such as interpersonal skills, waiting time, emergency care, cost of care, and other factors [12]. Today, patient satisfaction encompasses several different dimensions including [12]:

- 1) *Interpersonal Manner*: provider interaction with the patient (courtesy and friendliness)
- 2) *Technical Quality*: competence of the doctor and accuracy of diagnosis

- 3) *Accessibility/Convenience*: wait time and factors in scheduling an appointment
- 4) *Finances*: reasonable prices and insurance coverage
- 5) *Efficacy/Outcomes*: helpfulness of providers in attending to the health of the patient
- 6) *Continuity*: seeing the same physician or provider
- 7) *Physical Environment*: clear signs and directions and a clean, pleasant environment
- 8) *Availability*: being readily available for patients

During the 1980s and 1990s there were continued efforts to improve and refine the PSQ. Furthermore, Ware, Snyder, Wright, and Davies recommended creating a survey that addresses all these factors using a Likert-type scale (strongly disagree to strongly agree) [12]. The number of papers published on the topic of patient satisfaction reached over 1,000 articles a year starting in 1994, partially contributed to the focus on service management among healthcare organizations in the U.S.A. and U.K. [1].

During this last decade, the concept of the patient experience has gained importance as healthcare providers move beyond achievable care quality and patient safety targets, inspired by the Institute of Medicine Report, *Crossing the Quality Chasm* [3], and start organizing models of care driven and rewarded by new key performance indicators such as patient satisfaction metrics like the HCAHPS [3, 6]. Therefore, creating a positive patient experience is vital in today's healthcare environment as it is now linked to payment. Today, we are also learning that variations in patient satisfaction often depend on factors outside of the health services setting and mostly related to social factors [13]. This new understanding of variations in patient satisfaction opens up new opportunities for effectively influencing patient experiences and satisfaction reporting by using targeted patient segmentation strategies.

The patient experience and patient satisfaction

Improving the patient experience requires the measurement of factors and characteristics, that are important and matter to the patient, throughout the care cycle. Therefore, measuring the health status (i.e. blood pressure, blood test results) may not be capturing the overall satisfaction and experience of the patient. Using a mixed methods approach with qualitative and quantitative questions helps to gain a better understanding of what the patient has experienced while receiving care. Quantitative methods, using structured questionnaires, would include patient-reported questions regarding health status, function, quality of life, and condition-specific measures. Qualitative methods are typically open-ended questions used for the patient to describe his/her experiences and can be conducted via interviews or focus groups [3].

Patient experience can also be measured using ethnographic approaches, photo voice, and guided tours. Ethnographic approaches include the use of shadowing and mystery shoppers to examine experiences to note potential improvements for care delivery. Photo voice provides patients with cameras to take pictures of their experience. After their visit, interviews are conducted to discuss the meaning of the photographs, which helps to better understand the patient's needs, preferences,

and perceptions. Guided tours involve the patient leading the evaluator through his/her visit and discussing experiences (i.e. thoughts, feelings) throughout the care process [3].

Measurement of patient experience can be done at the time of care or sometime after the care. Today, technology allows providers to conduct surveys fairly quickly via tablets and apps [3]. Since it was found that surveys sent in the mail had a lower response rate than in-person interviews [12], in-office, post visit surveys have the potential to create higher response rates.

There are still major concerns about the validity of leading patient satisfaction surveys and how patient experiences reflect the quality of care. One major limitation of patient satisfaction is that feedback from patients without formal medical training is not always credible [14,15]. Another concern is that patient satisfaction measures are driven by fulfillment of patients' desires, such as certain medications regardless of risks. Finally, there is no common approach to defining the concept of patient experience before measuring it [15].

Patient perceptions and expectations and patient satisfaction

The subjective concept of patient experience follows the basis for various patient satisfaction measures and scores in today's healthcare environment. Patients view healthcare visits as a "time-investment" service [16], so the more time spent with the provider (usually a physician or physician extender, such as a physician assistant or nurse practitioner), the higher perceived service and patient satisfaction [17]. When patients perceive the staff treat them as a whole person and not just a patient and nurses convey themselves in a professional and confident manner, satisfaction increases [18]. Patients are more satisfied when they receive clear, detailed communication and easily understood instructions from their healthcare professionals with the strongest overall satisfaction indicator being the nurse's communication [8,18,19].

Wait time is an ongoing issue in primary care and other clinical settings. Anderson, Camacho, and Balkrishnan found the longer a patient waited, the lower their satisfaction, but the time spent with the provider was the best predictor of patient satisfaction [20]. The lower satisfaction from longer wait times was found to be greatly reduced with increased physician time, but if a patient faces long wait times and a short physician visit, overall satisfaction tends to remain very low [20].

Customer-need knowledge, or understanding patient needs and their level of importance, can help create a more positive patient experience, leading to improved satisfaction [21]. Also, employees that portray a higher degree of empathy toward patients seem to better understand their needs. In scenarios where factors can be more easily controlled, potential failures can be predicted and prevented. For example, when a physician falls behind schedule, this is usually communicated to the patient upon arrival, instead of informing the patient every fifteen minutes. With further experience, frontline staff can become more aware of the likelihood of physician delay, predict the actual time delay, and prevent dissatisfied patients through scheduling larger gaps between patients [21,22]. In scenarios where factors are not as easily controlled, the organization can determine the optimal way to inform the patients [22].

One of the most important factors to control while managing the patient experience is the emotional aspects ranging from fear and anxiety to trust and hope. According to Vogus and McClelland, "high quality care is highly customized care" [19]. Knowledge between provider and patient should be well aligned to ensure confidence in patients when asking questions and help eliminate fear, confusion, and anxiety. The gap between provider and patient can widen from patient emotions and vulnerability when knowledge is not well aligned, creating a more negative experience [23]. This is a strategy that requires both training of physicians and partners and the development of processes that keep the patient informed while allowing for access to information to all partners involved.

Conclusion

As discussed in this paper, strategies to influence and improve patient satisfaction metrics need to consider the concept of the patient experience as a complex and multi-dimensional phenomenon driven by patient expectations and perceptions as well as external social factors. Understanding these dimensions of the overall patient experience is critical to development of patient satisfaction improvement strategies. Considering the patient itself as a member of the care team and as a partner, the healthcare provider can implement strategies focusing on both patients (managing expectations) and employees (employee training and workplace culture). In healthcare, patient perception is what drives patient satisfaction. Therefore patient perceptions should be studied and understood before creating improvement strategies focused on both managing expectations and staff training towards a culture of service and empathy. Understanding customer perceptions requires the measurement of overall perceived value, the attributes and benefits associated with the value, and calculation of the weights for each attribute or benefit that link to the overall perceived value [24].

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