

Understanding and Improving Patient Satisfaction in Orthopaedic Surgical Procedures: A Review

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ABSTRACT

Orthopaedic surgeons and their hospitals are being evaluated and reimbursed according to their ability to provide patient satisfaction. It behooves physicians to learn how patient satisfaction is evaluated, how patient satisfaction may be improved, and how improvements in patient satisfaction may positively influence patient outcomes both subjectively and objectively. The purpose of this review is to illuminate how evaluation works, how patient factors may affect or correlate with increased satisfaction, and how physicians can improve actions to enhance patient satisfaction. Notably, studies have found that improved care coordination, nursing follow-up, provider listening skills, providing realistic yet positive expectations, and sitting down with patients during their clinic visit can increase patient satisfaction. An improved understanding of patient satisfaction will help orthopaedic surgeons work with government agencies and hospital administrations to make sure that patients receive the best care possible.

Keywords: Patient Satisfaction, Patient Reported Outcome Measures, Hospital Consumer Assessment of Healthcare Providers and Systems, Outcome Measures

INTRODUCTION

In the past 2 decades, both patient satisfaction and patient-reported outcomes have become increasingly important components of how we assess the value of our care as orthopaedic surgeons.¹ As providers within a surgical field, it may be appealing to solely focus on our ability to diagnose and treat orthopaedic conditions. Although these are important aspects of the care we provide, additional factors contribute to overall patient satisfaction and outcomes. Particularly, “consumer experience” is a major contributor to how patients perceive their received care.² Developments with Patient Satisfaction Surveying and government reporting of patient satisfaction scores are requiring physicians to take a closer look at their patients’ overall care experience.

Regarding a wide array of elective orthopaedic surgical procedures, patient satisfaction falls within the range of 68% to 91%.³⁻⁸ This suggests that 1 of 11 patients undergoing elective surgical treatment do not rate their outcome as “good” or “excellent.” This would be considered a failure within many industries of the service sector. These studies show that orthopaedic surgeons’ perception of patient outcome does not correlate with the patients’ reported outcomes; additionally, it shows that the mismatch is due to the surgeons’ overestimation of patient satisfaction in most cases.^{9,10} As healthcare providers seeking to add quality to peoples’ lives, we must understand that there is much more to providing quality care than physiological, radiological, or biomechanical measurements.

It has become imperative that we, as physicians, understand how we are being evaluated and portrayed within our community, which affect not only our reputation but our reimbursement. In addition to improving the inherent value of patient and family experiences, it is suggested that improved patient satisfaction and experience has the reciprocal effect on patients’ physiological and functional outcomes.¹¹⁻¹³

This review aims to help orthopaedic surgeons understand the following: 1) how evaluation works and the subsequent implications, 2) how patient factors may affect or correlate with increased satisfaction, and 3) how we can modulate our actions as physicians to improve patient satisfaction while simultaneously improving patients’ and surgeons’ measurements of outcomes. Furthermore, an improved understanding will help us identify potential flaws in the governmental oversight of patient care, in which we can then advocate for positive change in specific ways.

CONCERNS WITH THE “CUSTOMER IS ALWAYS RIGHT” APPROACH

Many physicians dislike the recent phenomenon of online reviews and customer satisfaction reporting because of the pressure it may place on physicians to provide undue diagnostic tests or treatments. In a study by Jerant et al,¹⁴ a total of 68% of 1319 primary care

visits entailed patient requests for specific diagnostic tests, medical treatment, surgical treatment, or specialty referral. Denial of request for referrals, pain medication prescriptions, or laboratory tests correlated with lower satisfaction scores, whereas denial of requests for antibiotics or imaging studies had no correlation with satisfaction.

Zgierska et al¹⁵ surveyed 155 physicians to assess their feelings on satisfaction ratings, in which 78% of physicians reported that the recent public focus on patient satisfaction had affected their job satisfaction and 28% had subsequently considered leaving the medical profession. Additionally, 59% of physicians reported that patient satisfaction scores affected their compensations, and 50% reported a constant temptation to provide inappropriate care to improve their satisfaction ratings. Clearly, this aspect of trying to obtain patient approval could be considered concerning.

PATIENT-REPORTED EXPERIENCE MEASURES AND PATIENT-REPORTED OUTCOME MEASURES

Patient-reported experience measures (PREMs) are distinctly different from patient-reported outcome measures (PROMs). However, both contribute to overall patient satisfaction.

Patient-Reported Experience Measures

In 1985, Press-Ganey was founded by medical anthropologist Irwin Press, PhD, and sociologist and statistician Rod Ganey, PhD.¹ They popularized the idea of the medical field being part of the consumer service industry, saw that the public would find value in the collection of patient-reported satisfaction scores, and that reporting these data to the public would allow patients to compare “care” across organizations. These data were largely focused on patient experience. In 2002, the Centers for Medicare and Medicaid Services (CMS) collaborated to develop and validate the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey.¹⁶ With the help of the CMS, it morphed into a standardized 27-question survey that could be administered by approved vendors, the most prominent being Press-Ganey. The 27 questions were split into 10 domains (Table 1). However, the survey was not focused on patient outcomes, but rather on the “consumer experience” during an inpatient hospital stay, or PREMs.

In 2005, hospitals began to receive a financial incentive for participation in the HCAHPS survey.¹ Results from these surveys were first reported publicly in March 2008 and are now reported annually. In 2010, the results of the HCAHPS survey began to influence Medicare reimbursement. In 2017, about 1.7 billion dollars were withheld from hospitals across the United States, which was then distributed to top performers in consumer satisfaction.¹ Although the results from

Table 1. Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey domains and question focus

Nurse communication
Doctor communication
Responsiveness of hospital staff
Pain management
Communication about medicines
Discharge information
Cleanliness of hospital environment
Quietness of hospital environment
Overall rating of hospital
Willingness to recommend hospital

this survey may affect reimbursement and patient perception, specific consumer experiences correlate poorly with overall patient satisfaction. Kemp et al¹⁷ found that coordination, nursing follow-up, and ability to listen were the top correlates with patient satisfaction, and even these had low correlation (Spearman's Correlation Coefficients of 0.54, 0.46, and 0.45, respectively).

Patient-Reported Outcome Measures

PROMs are patients' perception of their overall health, function, and pain experience after undergoing orthopaedic procedures. These are not focused on the “consumer experience” but rather on measuring how effectively orthopaedic care can improve the quality of life. Some of these questionnaires focus on general quality of life and disability (ie, Veterans RAND12 or PROMIS 10), whereas others focus on the patients' perception of functional results and pain relief in a specific joint or area of the body (ie, Oswestry Disability Index; Knee Injury and Osteoarthritis Outcome Score; and Disability of the Arm, Shoulder, and Hand Score). The most commonly used assessments regarding PROMs can be found on the website of American Academy of Orthopaedic Surgeons.¹⁸

Results of PROM assessments seem more clinically relevant for surgeons. This is because they represent the ability to apply orthopaedic knowledge and skill to improve the quality of life rather than the ability to provide a luxurious consumer experience. However, these assessments do not contribute to government or agency reporting of patient satisfaction, nor do they influence government reimbursement.¹⁸

EASY WAYS TO MODULATE PATIENT SATISFACTION

Several studies have shown that various factors may increase satisfaction ratings. Morris et al¹⁹ found that providing orthopaedic trauma patients with the attending surgeon's biosketch increased the number of patients that reported their care as “excellent,” from 52% to 74%. Swayden et al²⁰ showed that satisfaction

rates increased by 34% when the surgeon sat (rather than stood) during patient visits. Additionally, patients' perceived time spent with the physician increased nearly five times the actual time. Wadsworth²¹ showed that satisfaction ratings may improve if nurses can be influenced to sit with the patient as well. Camacho et al²² showed that visits less than 5 minutes nearly tripled dissatisfaction ratings from patients waiting longer than 20 minutes. Therefore, improving wait times and controlling the ratio between wait time and time spent with the surgeon may improve overall satisfaction ratings.

PATIENT EXPECTATIONS AND SATISFACTION

According to a recent review,²³ meeting patients' preoperative expectations seems to be the most significant predictor of overall satisfaction after spine, shoulder, knee, and hip procedures. Being married or employed were factors that seemed to lead to higher satisfaction ratings. Other factors include improvement in general health and function and if the patient experienced fewer postoperative complications. Patient factors that were associated with higher expectations across elective orthopaedic surgical procedures included younger age, worse preoperative functional status, higher education level, and the active search for orthopaedic information from non-orthopaedic sources.

Interestingly, studies have shown a correlation between patients' higher expectations of improvement after surgical intervention and the postoperative satisfaction. Carr et al²⁴ showed improved results of PROMs on the SF-36 survey in patients that expected no residual pain after anterior cervical discectomy and fusion. Yee et al²⁵ found that higher expectations were associated with improvements on the SF-36 surveys at 1 year after undergoing posterior spinal treatment. Toyone et al²⁶ noted that patients who expected more improvement from lumbar discectomy had greater satisfaction postoperatively than those who had lower expectations.

Regarding shoulder procedures, patients with higher preoperative expectations had better postoperative performance on the Disability of Arm, Shoulder, and Hand (commonly known as DASH), Visual Analogue Scale (VAS), and quality of life scores after undergoing rotator cuff repair.²⁷ Swarup et al²⁸ showed that patients who expected more after a primary total shoulder arthroplasty had better PROMs on VAS and SF-36 scores.

For joint reconstruction, Gandhi et al²⁹ found that patients with higher preoperative expectations of pain relief after undergoing total knee arthroplasty (TKA) and total hip arthroplasty (THA) had improved pain 1 year postoperatively. This was compared to those that held lower expectations for pain relief. Mahomed et al³⁰ showed that the expectation of complete pain relief was a predictor of improved SF-36 scores and pain relief 6 months after TKA. Lastly, higher preoperative

functional expectations have shown to correlate with a greater improvement in Western Ontario and McMaster Universities Arthritis Index scores 1 year after TKA.³¹

SETTING EXPECTATIONS AND IMPROVING OUTCOMES

How then, should we prepare our patients' expectations before an orthopaedic surgical procedure? Some try to lower expectations so that the intervention and results will easily meet those expectations; however, the data reviewed suggest that perhaps we should strive to increase patients' expectations for improved clinical results. These patient expectations may be modified by face-to-face clinical visits and preoperative surgical classes that provide a positive outlook with realistic postoperative expectations.³²

In orthopaedic studies, no prospective data exist that specifically show that increasing patient expectations improves outcomes. However, preliminary prospective data within the field of cardiothoracic surgery suggest that presurgical modulation of expectations could influence both patient-reported outcomes and biologically measured outcomes. The PSY-HEART trial conducted by Rief et al¹² noted that presurgical psychological intervention focusing on positive outcomes resulted in improved patient-reported outcome measures and also decreased inflammatory markers. This was when compared to the group without psychological intervention. This psychological intervention included the development and recording of personal short- and long-term goals and positive expectations after surgical treatment. The intervention also focused on discussing effective means of dealing with unpleasant experiences postoperatively. This type of psychological intervention may prove to be useful across other surgical specialties such as orthopaedics.

CONCLUSION

The medical service sector is new to the world of consumer evaluation. Although the systems in place for public and governmental evaluation are imperfect, the goals of increasing consumer satisfaction and improving patient outcomes are not mutually exclusive. High-yield areas to improve patient experience and satisfaction include improved care coordination, nursing follow-up, and provider listening skills. Sitting down with the patient has shown to drastically affect the patients' perception of their care. Realistic, yet positive expectations have been shown to improve satisfaction and outcomes within the field of cardiothoracic surgery, and this phenomenon may translate to orthopaedics. As we attempt to understand how patients' perceive and evaluate the medical and non-medical services provided by physicians and the hospital systems, we have an opportunity, as physicians, to improve their overall experience and perceived quality of medical care.

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