Patient Satisfaction with Anesthesia

Beauty Is in the Eye of the Consumer

VALUE in health care—broadly defined as the patient health outcomes achieved per dollar spent—has received increasing attention, including with anesthesia services.[1,2] To deliver value, clinicians and other stakeholders must integrate the often disparate and conflicting healthcare delivery goals of quality, safety, effectiveness, efficiency, timeliness, patient-centeredness, equitable access, convenience, cost containment, and profitability.[2] Patient satisfaction has also become a standard indicator of the value of delivered health care, including with anesthesia-related care.[3] *Patient satisfaction* has been defined as the degree of congruence between patient expectation and provider accomplishment.[4] However, the complexity of the construct of human satisfaction and its multidimensional nature have often impaired the development of psychometrically valid evaluation tools, including those used in the perioperative setting.[5] Nevertheless, central elements of current and likely future health care reform in the United States will link payment to "pay-for-performance" and "value-based purchasing" models,[6] including mandatory reporting of patient-reported scores (*e.g.,* Hospital Consumer Assessment of Healthcare Providers and Systems Survey).[7] In this issue of Anesthesiology , Barnett *et al.*[8] present their qualitative systematic review of the literature regarding measures of patient satisfaction in anesthesia. Their findings and recommendations are timely and relevant to researchers, practitioners, and policymakers alike.

"Evaluating patient satisfaction will become particularly important with the expanded role of anesthesiologists as perioperative physicians in the Surgical Home model proposed by the American Society of Anesthesiologists."

The medical profession has most recently been principally challenged and transformed by the factors such as (1) the increase in patient consumerism, (2) the advent of evidence-based medicine, and (3) the increasing power of the pharmaceutical industry.[9] This increasing consumer orientation of health care is typified by an emphasis on patient satisfaction and has important differences from the more classical, professionally dominated definitions of quality and value.[10] Patient satisfaction is fundamentally based on *patient-centered care* and *shared decision making*—two new and often foreign concepts to many clinicians—including anesthesiologists.

Berwick has defined patient-centered care as "the experience (to the extent in which the informed 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…to include the experience of family and loved ones of their choosing."[10] Such patient-centeredness is reflected in the heightened awareness that the quality and value of healthcare services are most appropriately determined from the perspective of the individual patient.[1,2] It is likewise manifested in the greater emphasis on patient-reported outcomes, including assessments of the experience of health care, as the basis for comparing the effectiveness of services delivered by physicians, health plans, and hospital systems.[1,11]

The medical community and the public are also increasingly embracing shared decision making, a process by which health care choices are made jointly by the practitioner and the patient.[12] Akin to the Medical Home model which has been piloted in the primary care outpatient setting,[13] the Surgical Home has thus been proposed by the American Society of Anesthesiologists and other stakeholders as an innovative, patient-centered, surgical continuity of care model that incorporates shared decision making.[14,15] Shared

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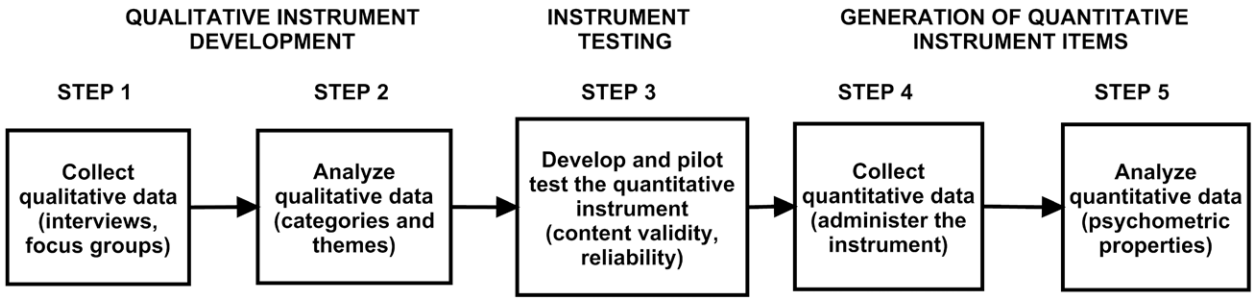

Fig. 1. Procedural steps for mixed methods instrument development.

decision making does not mean the same thing in all cases; therefore, it can best be understood as a continuum that includes patient- or agent-driven decision making, physician recommendation decision making, equal partners decision making, informed nondissent decision making, and physician-driven decision making.[12]

One way to ensure surgical care is patient-centered is to appropriately measure patient satisfaction with anesthesia. However, as Barnett *et al.*[8] demonstrate in their review of the existing measures of patient satisfaction with anesthesia, these instruments vary in rigor and quality. Utilization of poorly constructed and nonvalidated instruments oftentimes yields incorrect assessment of patient satisfaction and creates uncertainty in the accuracy of the reported results. Barnett *et al.'s* review seeks to qualitatively evaluate available measures of patient satisfaction with anesthesia, based on the type of anesthesia and surgical procedure. This review is the first attempt to systematically appraise the array of existing measures of patient satisfaction with anesthesia and to inform their accurate use for healthcare quality improvement. In addition, Barnett *et al.'s* review provides a model for qualitative evaluation of instrument psychometric construction, which can be applied in developing validated instruments to measure patient satisfaction with different healthcare experiences.

To the authors' credit, Barnett *et al.*[8] adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses statement standards[16] in assessing the existing measures and reporting the review results. They applied a rigorous procedure of locating, coding, and scoring 34 patient-satisfaction instruments, paying specific attention to the reported steps in instrument psychometric development. These steps included the description of the instrument development process and its pilot testing and an account of instrument validity, reliability, and acceptability to patients. Importantly, Barnett *et al.* evaluated patients' involvement with the generation of the questionnaire items as the first step in the instrument development process.

Involving patients in the process of questionnaire design and validation is critical for developing reliable measurements of patient satisfaction. Patients are seen as important stakeholders in determining the quality of health care because they bring their values, beliefs, and experiences into the assessment of provider performance.[17] To ensure the process of designing an instrument is inclusive of stakeholders' views, a mixed methods approach that meaningfully integrates qualitative *and* quantitative methods, is recommended.[18] Integrating qualitative data from patient interviews and quantitative data from validated surveys ensures the depth of understanding the construct of interest from multiple perspectives, along with the opportunity for broad applicability of the survey results.[19] Specifically, as set forth in the "Best Practices for Mixed Methods Research in Health Sciences" commissioned by National Institutes of Health Office of Behavioral and Social Sciences Research,[20] a sequential mixed methods design, consisting of an initial qualitative exploration of stakeholders' views and subsequent development and testing of the quantitative instrument, provides an objective and holistic method for instrument development. This design could be applied to assess patient satisfaction with health care by using the themes from patient interviews or focus groups to design an instrument to measure the quality of clinical procedures. This would be followed by the administration of the quantitative instrument to a large sample to establish the instrument's reliability and validity. We present the procedural steps for developing a final quantitative instrument grounded in the views of patients using a mixed methods approach in figure 1.

In summary, in their well-done systematic review, Barnett *et al.*[8] have provided an excellent summary of the current literature related to patient satisfaction with the gamut of perioperative services provided by anesthesiologists. The most significant finding of their review is that the vast majority of the anesthesia-related studies do not use validated instruments to measure patient satisfaction. This omission may lead to misleading results in studies of effectiveness of anesthesia care delivery. Thus, the use of new techniques, including the above-described mixed methods approach, may help clinicians and researchers to include more rigorously validated measures to evaluate patient-reported outcomes for anesthesia services. Evaluating patient satisfaction will become particularly important with the expanded role of anesthesiologists as perioperative physicians in the Surgical Home model proposed by the American Society of Anesthesiologists and others.[14,15] Indeed, in this expanded capacity as the surgical patient's primary *perioperativist*,[15]

anesthesiologists will largely impact hospital performance on health care metrics by achieving compliance with broader process measures such as those of the Surgical Care Improvement Project,[21] thus ultimately improving patient-centered outcomes. By doing so, anesthesiologists will become a more vital and valued provider from the perspective of the patient, administrator, and payer.

Thomas R. Vetter, M.D., M.P.H.,* Nataliya V. Ivankova, Ph.D.,† Jean-Francois Pittet, M.D.*
*Department of Anesthesiology, University of Alabama School of Medicine, Birmingham, Alabama. pittetj@uab.edu. †Department of Human Studies, School of Education, University of Alabama at Birmingham, Birmingham, Alabama.

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