

# PHYSICIAN-PATIENT COMMUNICATION IN THE ORTHOPEDIC CLINIC: SURGEON-IDENTIFIED CHALLENGES

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## ABSTRACT

**Background:** Effective communication between the physician and the patient is crucial to quality healthcare. The orthopedic surgery clinic setting provides an environment for cultivating the physician-patient relationship, eliciting diagnostic data, and developing treatment strategies. However, little is known about the orthopedic surgeon perspective on communicating with patients. The purpose of the study was to identify patient communication and care issues faced in the orthopedic surgery clinic setting that physicians categorize as challenging.

**Methods:** All surgeons in the department of orthopedics in a large tertiary care center were invited to respond to an online survey on common communication challenges. Physicians were asked to rate 13 challenges identified by the literature and opinion leaders using a four-point Likert scale ranging from "Not at all challenging" to "Extremely challenging". In addition, the survey included open ended questions regarding common challenges in communicating with patients and types of encounters, and thematic analysis was applied. Mean scores were calculated.

**Results:** Nineteen orthopedic surgeons completed the survey and were included in the analysis. Orthopedic surgeons identified misaligned expectations for surgical intervention for a nonsurgical diagnosis as the most challenging encounter in the clinic (16/19). Managing postoperative patient expectations (14/19) and communicating with patients who were dissatisfied with their surgical outcome (13/19) were also commonly rated as particularly challenging. Open ended responses echoed these ratings and additional difficulty

facilitating patient understanding of complex information as common communication challenges.

**Conclusion:** Common challenges in the orthopedic clinic often surround managing patient expectations and providing effective explanations, particularly where physicians perceive a surgical intervention as inappropriate for addressing the patient complaint. Identifying these issues can guide training efforts to help orthopedic physicians in managing these and improving communication. These findings can also provide basis for collecting information about communication challenges from orthopedic surgeons across institutions.

**Level of Evidence: IV**

**Keywords:** health care barriers, physician-patient relationship, communication

## INTRODUCTION

Effective communication between physician and patient is crucial to delivering quality healthcare. Public opinion surveys have demonstrated that 85% of patients identified communication skills as a critical feature of a good doctor.<sup>1,2</sup> Effective communication is central to achieving patient-centered care that involves treating patients as partners, involves them in decision-making, and enlists their sense of responsibility for their care while respecting their individual values and concerns. Previous primary care-based literature has demonstrated that successful communication aids in information recall in patients, patient adherence, and patient satisfaction.<sup>3-15</sup>

The orthopedic surgery outpatient clinic setting provides an environment for cultivating the physician-patient relationship, eliciting diagnostic data, and developing treatment strategies.<sup>16</sup> A 2002 review by Herndon and Pollick described the orthopedic surgeon's communication skills as "the single greatest factor influencing each [patient] encounter."<sup>2</sup> The complexity of surgical indication and intervention adds additional intricacy to the interaction between the surgeon and patient.<sup>14,17</sup> Previous research suggests that in the surgical domain, effective communication is associated with fewer postoperative complications, decreased postoperative pain medication consumption, and shorter inpatient hospital stay.<sup>18</sup> Prior studies have also shown an association between communication and malpractice,<sup>19-23</sup> with one identifying

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Disclosures: One or more of the authors (C.C.) has received funding as a deputy editor of the Journal of Bone and Joint Surgery.

Sources of Funding: No sources of funding declared.

communication problems in 70% of malpractice claims included in the study.<sup>19</sup>

Lipkin, et al. previously described the necessary communication skills for gathering patient information, most notably “recognizing barriers to effective communication and adapting constructively to these barriers.”<sup>16,24</sup> Historically, the literature has relied on patient opinion for evaluation of physician communication skills, often in the form of surveys or patient satisfaction scores.<sup>14,25</sup> The barriers to effective communication in the orthopedic surgery clinic setting as defined by orthopedic surgeons themselves are currently poorly understood. The purpose of this study was to identify and describe the most common physician-identified challenges with patient communication in the clinical orthopedic setting.

### METHODS

All orthopedic surgeons in the Department of Orthopedics at a large, tertiary care center were invited to respond to an anonymous online survey on common communication challenges. Surveys were dispersed and collected prior to provider participation in a mandatory communication skills session implemented hospital-wide. The survey was dispensed via departmental email using Qualtrics 2019 software (Qualtrics, Provo, UT). The survey contained 15 items: 13 discrete questions and two open-ended response questions. The open-ended queries were presented first to minimize bias of the narrative response that would have occurred with presenting the discrete categories initially.

The survey included open ended questioning eliciting providers to explicitly identify their individual challenges in communicating with patients and difficult encounters. Two open-ended questions were used: 1) What common challenges do you encounter in communicating with patients? 2) What types of encounters or patients do you find challenging?

The narrative responses were categorized thematically based on 13 common patient interaction challenges identified by review of the existing literature (Table 1).<sup>2,14,16,26</sup> If the open-ended response did not correlate with an established category, it was labeled as “other.” Physicians responses to the open-ended questions were not length restricted, and they were allowed to provide multiple answers, each of which were individually categorized.

Physicians were then asked to rate 13 common patient interaction challenges as previously identified using a four-point Likert scale ranging from “Not at all challenging” to “Extremely challenging.” Each physician was only allotted one answer for each category (A-M).

Descriptive statistics were calculated, including the mean score for each rated category, as well as the proportions of “challenging” and “very challenging”

responses (scores of 3 or 4) for each of the 13 topics. Proportions of open-ended responses that fit the described encounters were also determined. External funding sources did not play a role in this study.

## RESULTS

### Overall Response

A total of 19 out of 26 orthopedic surgeon faculty completed the survey (73%). For each of the rating categories, each physician completed their one allotted response, with nineteen responses in each of the thirteen categories. Responders provided a total of 29 responses to the first open-ended question, and 32 responses to the second open-ended question. No questions were unanswered.

### Discrete Rating

Orthopedic surgeons identified unrealistic expectations for surgical intervention for a nonsurgical diagnosis as the most challenging encounter in the clinic, with 16 describing the encounter as “challenging” or “extremely challenging” (Table 2). Nearly half of the physicians polled described the interaction as “extremely challenging.” Managing postoperative patient expectations and communicating with patients who were dissatisfied with their surgical outcome were also commonly scored highly, with upper-end score reported by 14/19 and 13/19 surgeons, respectively. Physicians reported less difficulty in identifying patient concerns

**Table 1. Common Patient Interaction Challenges**

Patient Interaction Challenge Categories	
A.	Identifying patient concerns/agenda
B.	Managing patients with multiple concerns
C.	Responding to patients who are angry/frustrated
D.	Responding to patients who become emotional during the encounter e.g. sadness
E.	Efficient time management
F.	Adjusting to different levels of health literacy
G.	Addressing worker compensation issues
H.	Managing pain medication requests for chronic pain complaints
I.	Patients who are convinced a surgery is their best option when in reality it is not
J.	Patients with multiple medical comorbidities that are not appropriate surgical candidates
K.	Patient whose health behaviors (smoking, diet, etc.) impact their health and surgical eligibility
L.	Patient disappointment with surgical outcomes
M.	Patients with unrealistic expectations for surgical outcomes

**Table 2. Physician Difficulty Rating of Communication Challenges Faced in the Orthopedic Surgery Clinical Setting**

Category	Rating [n, (%)]					
	1-Not at all challenging	2-Somewhat challenging	3-Challenging	4-Extremely challenging	Lower End [1+2, (%)]	Upper End [3+4, (%)]
A. Identifying patient concerns/agenda	11 (57.9%)	5 (26.3%)	2 (10.5%)	1 (5.3%)	16 (84.2%)	3 (15.8%)
B. Managing patients with multiple concerns	6 (31.6%)	5 (26.3%)	7 (36.8%)	1 (5.3%)	11 (57.9%)	8 (42.1%)
C. Responding to patients who are angry/frustrated	2 (10.5%)	7 (36.8%)	5 (26.3%)	5 (26.3%)	9 (47.4%)	10 (52.6%)
D. Responding to patients who become emotional during the encounter e.g. sadness	5 (26.3%)	7 (36.8%)	5 (26.3%)	2 (10.5%)	12 (63.2%)	7 (36.8%)
E. Efficient time management	3 (15.8%)	7 (37%)	7 (37%)	2 (10.5%)	10 (52.6%)	9 (47%)
F. Adjusting to different levels of health literacy	7 (36.8%)	10 (52.6%)	1 (5.3%)	1 (5.3%)	17 (89.5%)	2 (10.5%)
G. Addressing worker compensation issues	3 (15.8%)	9 (47.4%)	5 (26.3%)	2 (10.5%)	12 (63.2%)	7 (36.8%)
H. Managing pain medication requests for chronic pain complaints	3 (15.8%)	8 (42.1%)	5 (26.3%)	3 (15.8%)	11 (57.9%)	8 (42.1%)
I. Patients who are convinced a surgery is their best option when in reality it is not	0 (0%)	3 (15.8%)	7 (36.8%)	9 (47.4%)	3 (15.8%)	16 (84.2%)
J. Patients with multiple medical comorbidities that are not appropriate surgical candidates	2 (10.5%)	6 (31.6%)	8 (42.1%)	3 (15.8%)	8 (42.1%)	11 (57.9%)
K. Patient whose health behaviors (smoking, diet, etc.) impact their health and surgical eligibility	2 (10.5%)	6 (31.6%)	9 (47.4%)	2 (10.5%)	8 (42.1%)	11 (57.9%)
L. Patient disappointment with surgical outcomes	0 (0%)	6 (31.6%)	11 (58%)	2 (10.5%)	6 (31.6%)	13 (68.4%)
M. Patients with unrealistic expectations for surgical outcomes	1 (5.3%)	4 (21.1%)	10 (52.6%)	4 (21.1%)	5 (26.3%)	14 (73.7%)

or adjusting to differing health literacy, with 11 and seven surgeons describing the encounter as “not at all challenging,” respectively.

**Open-Ended Responses**

When asked to identify challenges in the outpatient clinic setting without prompting of the specific categories of the study, 17.2% of responses identified misaligned patient and provider expectations for surgical intervention as one of the most common and difficult patient interactions. Managing postoperative expectations of patients also proves difficult for 13.8% of orthopedic surgeons surveyed. Nearly 21% fell into the “other” category, with more than half referencing non-English speaking language barriers to eliciting clinical information from the patient.

In reference to specific encounters, physicians equally described three of the most commonly experienced difficult situations (each 15.6%): managing chronic pain patients, unrealistic surgical expectations for outcome, and patients expecting surgical intervention where physicians perceive a surgical intervention as inappropriate

for addressing the patient complaint. The remaining categories were referenced at least once, with the exception of addressing worker compensation issues, as no physician mentioned worker’s compensation in their open response.

**DISCUSSION**

The purpose of the study was to explore physician-perceived challenges in communicating with patients in the orthopedic surgery clinical setting. This survey identified that physicians recognize common struggles in their clinical encounters, and regularly rate these as significantly difficult, even when unprompted by category.

Interestingly, surgeons described managing patients who expect surgical intervention for a complaint where physicians perceive a surgical intervention is inappropriate as the toughest communication interaction, with sixteen participants rating the encounter as “challenging” or “extremely challenging.” The same category was frequently mentioned in the open-ended responses as well. This seems paradoxical to the actionability of surgi-

cal training – the resolution of medical malady through direct surgical intervention. It reflects on perhaps the less publicly understood aspect of operative training – the knowledge of when surgery is indicated, and when it is not. This concept of effectively communicating indications for surgical intervention that contradict pre-existing patient expectations remains poorly understood and remains a significant clinical challenge.

Handling dissonant expectations between physician and patient and patient dissatisfaction with an operative outcome were both expressed as difficult without categorical prompting (15.6% and 9.4%, respectively) and scored as “challenging” or “extremely challenging” (14/19 and 13/19, respectively). The management of patient expectations for postoperative outcomes has been previously explored. Noble, et al. acknowledged the gap in understanding between patient expectations for a procedure and what the physician and procedure can realistically provide, and attributes this to a lack of proper informed consent in discussing outcomes.<sup>27</sup> In addition, the study described how patient satisfaction with surgical outcome is significantly influenced by failure to meet preoperative expectations of postoperative activity level. The study also suggests incompatible definitions of “success” between patient and surgeon contributes to lack of patient satisfaction with results and suggests discussion of the patient’s personal goals in conjunction with the likelihood of those goals as an important tool to reduce postoperative dissatisfaction.

The reasoning for why orthopedic surgeons find these types of encounters particularly arduous is poorly understood in current peer-reviewed literature. Prior studies largely focused on the general content of surgical clinic visits. Levinson, et al. previously described conversation content of physician-patient communication in the orthopedic and general surgery clinic settings in a landmark study that identified differences in communication patterns between primary care and surgical specialties. The study demonstrated that surgeons spend close to 50% of total visit time on patient education and counseling, a significantly increased amount compared to primary care.<sup>14</sup> This, in addition to the highly technical details of surgical intervention, poses unique challenges in communicating with patients. The study also highlighted the propensity for surgeons to discuss outcomes towards recovery, which is supported by the current study as a common difficulty in the orthopedic clinical encounter.

Of significant note, 17/19 surgeons surveyed reported adjusting to health literacy as “not at all” or “somewhat” challenging, making the category the lowest scoring in the entire study. A study by Rosenbaum, et al. found limited musculoskeletal literacy to be more prevalent

than general health literacy.<sup>26,28</sup> Multiple studies across orthopedics specialties have also found health literacy to be a significant barrier to the understanding of orthopedic injuries and procedures.<sup>29-31</sup> The current study, however, is a subjective evaluation of physician opinion on health literacy and does not evaluate patient opinion. It also offers no objective data by which to measure the understanding of patients. While the current study stands in contrast to the literature, it is difficult to compare subjective views to the rigorous objective data in the current orthopedic literature.

We sought to identify the specific challenges to physician-patient communication in the orthopedic surgery clinical setting. Previous patient surveys have shown a dissonance in how patients perceive orthopedists, and how orthopedists perceive themselves and their colleagues.<sup>32</sup> Patients placed value in both technical skill and compassion but scored orthopedic surgeons much lower in the latter. With the restatement of the importance of technical skill, and the propensity for surgeons to spend most of a visit on patient education,<sup>14</sup> it makes sense that communication surrounding the action of surgery (indications, expectations, and outcomes) is perceived as particularly challenging. Noted differences in perspective between patient and surgeon may help to explain why surgeons in the current study did not identify health literacy as a barrier even though previous literature demonstrates this.

Furthermore, patient evaluation of the clinical encounter has become increasingly more critical to orthopedic practice in recent years. Recent literature in the hand surgery clinic setting also demonstrated physician empathy to be the most influential factor in patient satisfaction.<sup>33</sup> With a shift towards physician compensation based on patient experience, clinical encounter ratings are used to evaluate the quality of care, and in turn, how much physicians are reimbursed.<sup>34,35</sup> Tools such as the Press-Ganey questionnaire are often used to score physicians for the care provided and determine their compensation.<sup>35-38</sup> Specifically, the Press-Ganey questionnaire incorporates an assessment of physician communication within its scoring matrix. While the extent to which the physician communication aspect of Press-Ganey affects overall scores has not been previously explored in the literature, the mere existence of the topic within the survey presents a potential avenue for improving the patient experience.

Additionally, previous review of graduate medical school education have shown a deficiency in communication education in their curricula.<sup>39</sup> The identification of this reveals a need to develop effective training tools to improve physician communication overall. The results of the current study suggest a potential need for further



education for orthopedists in the identified weak areas. Communication training specifically targeting negotiating patient expectations for surgery, expected postoperative outcomes, and dissatisfaction with postoperative results may help to combat the difficulty of these interactions in the clinic setting. This could enhance patient comprehension as well as improve health care delivery.

Improving physician-patient communication in orthopedics is a continuous effort and has taken many forms over the years. A 2005 instructional course given by the American Association of Orthopaedic Surgeons (AAOS) comprehensively detailed several strategies for enhancing the physician-patient relationship. The review detailed the importance of both written educational materials as well as interactive workshops in order to facilitate skillful improvement. Methods for effective communication include open-ended questioning, eliciting patient perspectives and expectations early, allowing

patients to answer without interruption, reflective listening, frequent empathic statements checking for patient comprehension, and using direct clear statements when delivering bad news.<sup>40</sup> Table 3 provides additional communication strategies that may be particularly helpful in exploring and addressing the primary challenges highlighted by survey respondents in this study.<sup>41,42</sup>

**Limitations**

There are several limitations to the current study. The study reports subjective physician perceived patient interaction difficulties and relies on recall of individual experience, and there is no objective data to reconcile with these opinions. Further large-scale investigations are needed to quantify the specific frequency of each of these encounter categories. The thirteen described communication challenges may also exhibit some overlap in certain patient populations or clinical scenarios.

**Table 3. Evidence Based Strategies For Addressing Challenging Communication in Orthopedics**

General skill set <sup>1,7</sup>	Specific strategies (relevant example phrases in <i>italics</i> )	Relevance to common challenges
Skill Set 1 Create Rapport	Warm greeting <i>"Nice to meet you"</i> Small talk before big talk <i>"Where did you drive from today?"</i>	Demonstrates attention and interest in patient
	Sitting, eye contact	Conveys full attention/time for patient
	Address communication barriers	Early empathy for patient discomfort or language barriers
Set Agenda	Elicit list of all concerns related to orthopedic complaint <i>"First I would like a list of what you are hoping to discuss during this visit"</i>	Early identification of issues important to patient
	Negotiate agenda <i>"We can address your pain issues, can I refer your other issue to regular doctor?"</i>	Opportunity to clarify what can and cannot be covered in visit
Skill Set 2 Patient-centered History Building	Open ended questions <i>"Tell me about your knee pain"</i>	Allow patient to describe condition in their own words
	Active, reflective listening <i>"So just to summarize...."</i>	Conveys to patient they are being heard
	Explore patient perspective (Idea, concerns, expectations, effect on life) <i>"What do you think is causing this or might help this?"</i> <i>"What are you especially worried about related to your pain?"</i> <i>"What are you hoping surgery would do for your pain?"</i> <i>"How has this pain impacted your daily functioning?"</i>	Explores what patient is hoping to achieve through intervention such as pain relief, better functioning, etc. Provides framework for treatment discussions.
	Consistent empathic responses to patient emotions <i>"Sounds very frustrating", "I'm sorry you have been in such pain."</i>	Conveys compassion for patient concerns and expectations
Skill Set 3 Educate, Counsel and Plan	Assess patient starting point <i>"What have you heard/read about carpal tunnel syndrome?"</i>	Clarifies patient understanding of condition and expectations for treatment
	Frame explanation using patient perspective/goals. <i>"I know your hope is surgery could help your pain, unfortunately surgery won't improve the cause of this pain."</i>	Aligns discussion with patient ideas, concerns, expectations
	Provide explanation in understandable chunks with room for questions/perceptions <i>"Physical therapy is useful for this condition, what questions do you have about it?"</i>	Gives patient room to process and express ongoing concerns/questions
	Respond with empathy (acknowledgement, support, etc.) throughout <i>"I know you are disappointed", "I wish surgery could help your pain", "We'll work together to help you manage this."</i>	Acknowledges patient suffering, disappointment and goals, conveys partnership
Assessing Understanding	Ask patient to restate understanding of decisions, possible outcomes, management <i>"Can you tell me in your own words what to expect as a result of this surgery?"</i>	Increases retention of key components of discussion, allows for correction of misconceptions

Given the extraordinary breadth of orthopedic maladies as well as the patient population, it would be difficult to isolate these to determine their effects, even within a subspecialty. Additionally, this survey was limited to one academic institution and its staff physicians. Although the number of employed faculty at our institution is relatively small, our response rate was 73%. A more complete survey participation may have yielded slightly different results. As previously mentioned, the overall number of survey participants is low and is a weakness of the study. As such, sub-analysis by specialty would compromise anonymity in this study. Replication of the survey on a national scale in both academic and private practice settings would provide a more comprehensive view of the surgeon-identified challenges and perhaps reveal patterns related to geographic region, practice setting, or level of care. Further sub-grouping by orthopedic subspecialty may also demonstrate differences in perception but would again require a much larger survey population.

### CONCLUSION

Common challenges in the orthopedic clinic often surround managing patient expectations and providing effective explanations, particularly involving patients for whom surgical intervention is not perceived as appropriate. Identifying these issues can guide training efforts to aid orthopedic surgeons in improving their clinical communication skills. These findings can also provide basis for further work examining communication challenges from orthopedic surgeons across institutions.

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