

# The Majority of Complaints About Orthopedic Sports Surgeons on Yelp Are Nonclinical



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**Purpose:** To examine and characterize extremely negative Yelp reviews of orthopedic sports surgeons in the United States. **Methods:** A search for reviews was performed using the keywords “Orthopedic Sports Medicine” on [Yelp.com](https://www.yelp.com) for 8 major metropolitan areas. Single-star reviews were isolated for analysis, and individual complaints were then categorized as clinical or nonclinical. The reviews were classified as surgical or nonsurgical. **Results:** A total of 11,033 reviews were surveyed. Of these, 1,045 (9.5%) were identified as 1-star, and 289 were ultimately included in the study. These reviews encompassed 566 total complaints, 133 (23%) of which were clinical, and 433 (77%) of which were nonclinical in nature. The most common clinical complaints concerned complications (32 complaints; 6%), misdiagnosis (29 complaints; 5%), and uncontrolled pain (21 complaints; 4%). The most common nonclinical complaints concerned physicians’ bedside manner (120 complaints; 21%), unprofessional staff (98 complaints; 17%), and finances (78 complaints; 14%). Patients who had undergone surgery wrote 47 reviews that resulted in 114 complaints (20.5% of total complaints), whereas nonsurgical patients were responsible for 242 reviews and a total of 452 complaints (81.3% of total complaints). The difference in the number of complaints by patients after surgery and patients without surgery was statistically significant ( $P < 0.05$ ) for all categories except for uncontrolled pain, delay in care, bedside manner of midlevel staff, and facilities. **Conclusion:** Our study of extremely negative Yelp reviews found that 77% of negative complaints were nonclinical in nature. The most common clinical complaints were complications, misdiagnoses and uncontrolled pain. Only 16% of 1-star reviews were from surgical patients. **Clinical Relevance:** Patients use online review platforms when choosing surgeons. A comprehensive understanding of factors affecting patient satisfaction and dissatisfaction is needed. The results of our study could be used to guide future quality-improvement measures and to assist surgeons in maintaining favorable online reputations.

Orthopedic sports medicine is a subspecialty of orthopedic surgery that focuses on minimally invasive surgery to address acute as well as degenerative conditions.<sup>1</sup> It is estimated that high school athletes in the United States alone account for an estimated

2,000,000 injuries in 1 year and 500,000 physician visits.<sup>2,3</sup> Furthermore, the Centers for Disease Control estimate that nearly 8.6 million sports- and recreation-related injuries occur each year in the United States.<sup>4</sup> Considering how such a prevalence of sports injuries affects the U.S. health care system, an appropriate understanding of patient satisfaction and quality outcomes related to their treatment is important.

There has been an increased effort to maximize the value of health care in recent years. High-quality data concerning providers has been publicly available for years; however, the Affordable Care Act encouraged more transparency regarding previously confidential Medicare data concerning use and payments. Additionally, the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey collects patient-reported experiences and aims to increase the quality of hospital care.<sup>5</sup> Although providers seem to rely on the HCAHPS survey and other standardized metrics, patients also rely on other independent sources for information.<sup>6</sup> Specifically, 72% of Americans

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reported using a social media website for health-related consumer reviews, whereas only 6% of patients were aware of the Hospital Compare website.<sup>7,8</sup>

The use of independent online physician-rating tools is growing in importance in the United States. It has been estimated that 60% of patients use online physician-rating and review resources when selecting a physician.<sup>9</sup> The use of online physician-rating platforms has also become more important in light of the recent rise in consumer-centric health insurance plans.<sup>10</sup> Although there are many online review resources, [Yelp.com](https://www.yelp.com) is perhaps the most widely used resource that patients access when evaluating surgeons.<sup>11</sup> Websites such as [Yelp.com](https://www.yelp.com) provide a flexible, open-ended response platform where patients can expound important details relating to the entirety of their health care experience, rather than providing a limited, narrow response on a multiple-choice survey.

Research focusing on satisfaction and health care experience with individual providers is lacking.<sup>12-14</sup> Although orthopedic surgeons generally receive favorable reviews, there exist a considerable number of negative and extremely negative reviews.<sup>15</sup> In fact, it has been demonstrated that most reviews on crowdsourced websites are at either extreme of the positive-negative spectrum.<sup>16</sup> As online resources are being increasingly used by patients when choosing surgeons, understanding the factors related to poor reviews is important. The focus of this study was to examine and characterize extremely negative Yelp reviews of orthopedic sports surgeons in the United States. We hypothesized that negative Yelp reviews would focus on nonclinical aspects of care more than on clinical aspects of care.

## Methods

The methods of our study were adapted from a study of extremely negative Yelp reviews of surgeons performing total joint arthroplasty.<sup>17</sup> In July of 2020, a search for “orthopedic sports medicine” was performed on [Yelp.com](https://www.yelp.com) for 8 major metropolitan cities, including Phoenix, Dallas, New York, Washington, D.C., Seattle, San Francisco, Boston, and Los Angeles. The review was confirmed to be related to an accredited orthopedic sports surgeon through a secondary internet search using [vitals.com](https://www.vitals.com), physician websites, Angie’s list, hospital group websites, and/or Doximity. We excluded reviews of practices consisting of multiple specialties and reviews that did not name a particular surgeon so as to ensure that our study remained focused on reviews of confirmed orthopedic sports surgeons.

After excluding reviews other than 1-star (of a possible 5 stars), the complaints were categorized into clinical categories, such as readmissions, treatment complications and reoperation. Complaints were also categorized into nonclinical categories, such as bedside

manner, professionalism, waiting time and financial issues. These categories were based largely on another study examining negative Yelp reviews in the field of total joint arthroplasty.<sup>17</sup> The total number of complaints is larger than the number of reviews because an individual review commonly contains multiple complaints. Reviews were considered surgical or nonsurgical on the basis of whether a surgical episode of care was referenced, and reviews that were unable to be categorized per the above criteria were excluded. The categorization of these variables was performed by medical students to limit potential bias by orthopedic surgeons. Two medical students categorized the data independently, with disagreement being resolved by a third medical student (Fig 1).

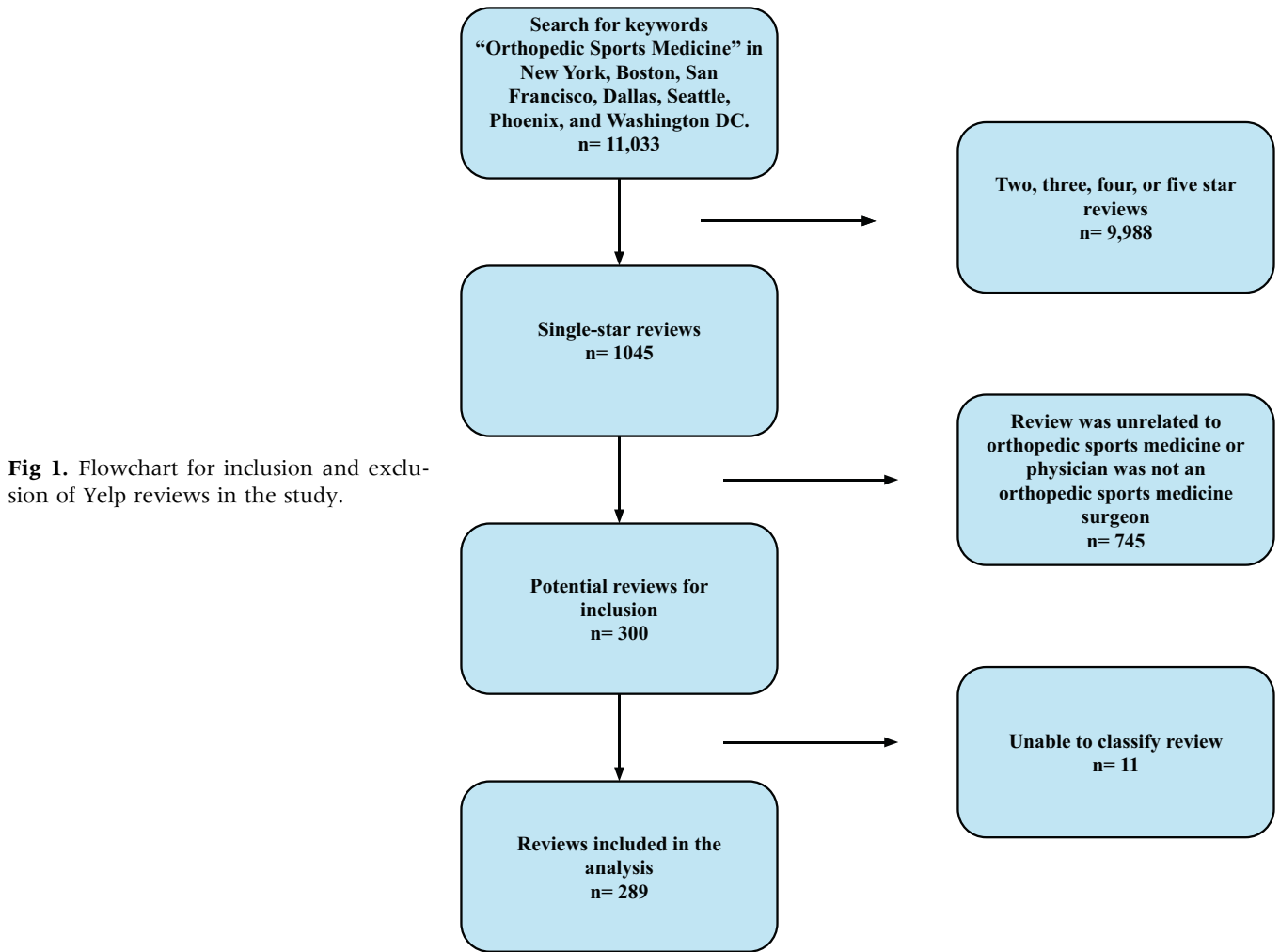
Categorical variables were analyzed using the  $\chi^2$  test with  $\alpha$  set at 0.05. Statistical analysis was performed using a commercially available software package (JMP Pro, version 13, SAS Institute, Cary, NC).

## Results

A total of 11,033 reviews were analyzed, with 1,045 reviews’ (9.5%) being identified as 1-star. Of these 1-star reviews, 756 were excluded because they were not based on an orthopedic sports medicine practice, and 11 were excluded due to unclear classification. In total, 289 1-star reviews were included in the study, comprising 566 total complaints. Of all complaints, 133 (23%) were clinically related, and 433 (77%) were nonclinical in nature. The most common clinical complaints concerned complications (32 complaints; 6%), misdiagnosis (29 complaints; 5%), uncontrolled pain (21 complaints; 4%), and unclear treatment plans (18 complaints; 3%). The most common nonclinical complaints concerned physicians’ bedside manner (120 complaints; 21%), unprofessional staff (98 complaints; 17%), finances (78 complaints; 14%), and waiting time (63 complaints; 11%) (Table 1) (Fig 2) (Fig 3).

Patients undergoing surgery were responsible for 47 reviews that resulted in 114 complaints (20.5% of total complaints). Of these 114 complaints, 63 (55.3%) were clinical, and 51 (44.7%) were nonclinical in nature. The most common clinical complaints by patients after surgery were complications (26 complaints; 23%), reoperations (16 complaints; 14%), uncontrolled pain (9 complaints; 8%), and misdiagnoses (5 complaints; 4%). The most common nonclinical complaints were bedside manner of the physician (21 complaints; 18%), waiting time (8 complaints; 7%), finances (8 complaints; 7%), and unprofessional staff (7 complaints; 6%).

Patients who had not undergone surgery were responsible for 242 reviews and a total of 452 complaints (81.3% of total complaints). Of these 452 complaints, 70 were clinically related, and 382 were nonclinical in nature. The most common clinical



complaints were misdiagnosis (24 complaints; 5%), unclear treatment plan (14 complaints; 3%) and uncontrolled pain (12 complaints; 3%). The most common nonclinical complaints for patients without surgery were for bedside manner (99 complaints; 22%), unprofessional staff (91 complaints; 20%) and finances (70 complaints; 15%). The difference in the number of complaints by patients with and without surgery was statistically significant ( $P < 0.05$ ) for all categories with the exception of uncontrolled pain, delay in care, bedside manner, and facilities (Table 2) (Fig 4).

## Discussion

Nonclinical complaints were more than 3 times more common than clinical complaints in the extremely negative reviews of orthopedic sports surgeons found on [Yelp.com](http://Yelp.com). The most frequently cited nonclinical complaints were related to physicians' bedside manner, unprofessional staff, finances, and waiting times. The most common clinical complaints were related to complications, misdiagnoses, uncontrolled pain, and

reoperation. These findings are similar to those of other studies, in which nonclinical complaints are more common than clinical complaints.<sup>17-19</sup> Although our study has limitations, we believe the information it contains is relevant and important for orthopedic sports surgeons as they aim to increase patient satisfaction, improve patient care and provide high-value care.

These results coincide with previous reports that nonclinical complaints, such as waiting times, interactions with office staff and other nonclinical characteristics are common sources of patients' complaints about physicians.<sup>20-22</sup> The most common complaint in our study was physicians' bedside manner, accounting for 21% of all complaints. Interestingly, studies have demonstrated that bedside manner is likely to be the most important factor in patient satisfaction, with improvement in bedside manner correlating with the greatest increase in patient satisfaction.<sup>15,23</sup> A survey of patients' views of physicians noted that patients are more focused on doctor-patient relationships than on health care delivery and health outcomes.<sup>24</sup> Communication ratings have also been found to have more

**Table 1.** Analysis of Negative Yelp Reviews Categorized as Clinical And Nonclinical Complaints

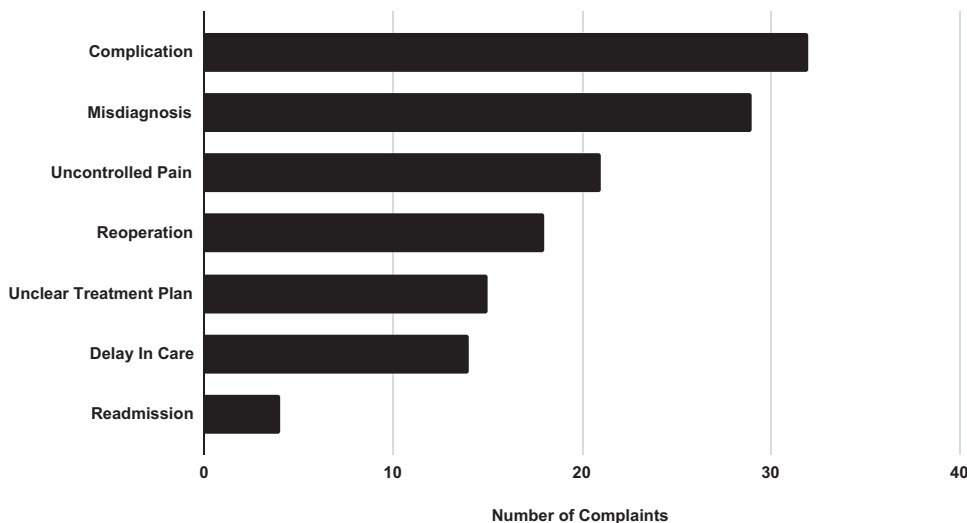
Focus of the Review	Number of Complaints, N (% of Total)	Percentage of Responses within Category
Clinical Complaints		
		Clinical Category (N = 133 complaints)
Complication	32 (6%)	24%
Misdiagnosis	29 (5%)	22%
Uncontrolled pain	21 (4%)	16%
Reoperation	18 (3%)	14%
Unclear treatment plan	15 (3%)	11%
Delay in care	14 (2%)	11%
Readmission	4 (1%)	3%
Total Complaints	133	
Nonclinical complaints		
		Nonclinical Category (N = 433 complaints)
Physician bedside manner	120 (21%)	28%
Unprofessional staff	98 (17%)	23%
Financially related	78 (14%)	18%
Wait time	63 (11%)	15%
Scheduling issues	29 (5%)	7%
Not enough time spent with provider	26 (5%)	6%
Bedside manner midlevel	12 (2%)	3%
Facilities	7 (1%)	2%
Total complaints	433	

influence on patient satisfaction than quality of care.<sup>25</sup> Our findings are further contextualized by these studies that underscore the importance of qualitative characteristics in patient ratings.

In our study we found that only 2% of reviews complained of midlevel providers, whereas 17% focused on unprofessional staff, and 21% focused on physicians. A recent article examining patients’ perspectives of midlevel providers in orthopedic sports found that 62.9% of patients reported that a physician’s midlevel provider is an important consideration when choosing a physician.<sup>26</sup> A recent study of 11,527 reviews by patients of total joint arthroplasty surgeons found that higher ratings of orthopedic surgeons were significantly correlated with staff friendliness, punctuality and knowledge/expertise.<sup>27</sup> Therefore, because modern orthopedic patient care has become an interdisciplinary team approach, with responsibilities shared among nurses, office staff, medical assistants, midlevel providers, and the attending physician, ratings of physicians are often a reflection of an entire team of individuals, not just of a single provider. Our results support this notion; a substantial number of negative reviews of orthopedic sports surgeons were associated with interactions with midlevel and office staff rather than with the surgeon.

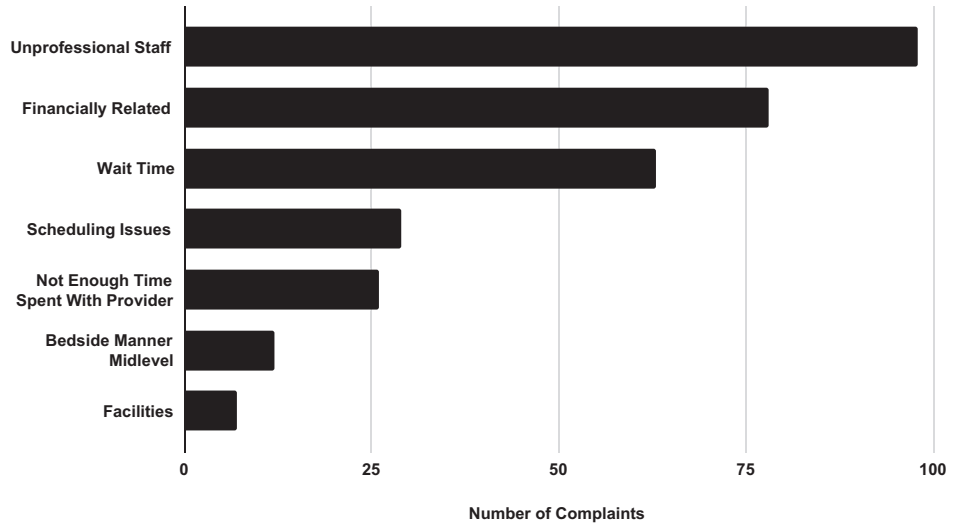
Of the 566 complaints in our study, there were 78 (14%) financial complaints relating to insurance issues, billing problems or excessive cost. This coincides with a previous report that nearly 1 in 6 patients undergoing elective orthopedic surgery is potentially at risk for a surprise bill.<sup>28,29</sup> It is important to understand these finance-related issues because they are a common source of complaints for orthopedic surgeons. A study of 1,077 patients involved in orthopedic sports medicine found that being an in-network provider was, predictably, 1 of the most important factors for patients when choosing an orthopedic sports medicine physician.<sup>10</sup> In addition, patients who receive accurate

**Clinical Complaints of Orthopedic Sports Medicine Patients**



**Fig 2.** The most common clinical complaints on [Yelp.com](https://www.yelp.com) of patients undergoing orthopedic sports medicine surgery.

**Non-Clinical Complaints of Orthopedic Sports Medicine Patients**



**Fig 3.** The most common clinical complaints on [Yelp.com](https://www.yelp.com) of all patients of orthopedic sports medicine surgeons. This figure defines non-clinical complaints among all orthopedic patient reviews included in this study.

information about the cost of care are more likely to rate positively the quality of the care they receive.<sup>24</sup> A study examining patients’ perspectives on cost reported that 48% of patients expected physicians to initiate a conversation about the costs of care for treatment. Alternatively, only 7% of patients actually discussed the costs of their surgical care with their physicians.<sup>30</sup> Our results regarding financially related concerns suggest that discussing the cost of various treatment options could help to improve patient satisfaction and to decrease the number of negative reviews.

Although clinical complaints were less common than nonclinical complaints, they are still noteworthy because they accounted for almost a quarter of the extremely negative reviews in our study. A substantial number of clinical complaints regarding complication, misdiagnosis, uncontrolled pain, and reoperation were reported. This is somewhat to be expected because a study of knee arthroscopy found that the overall incidence of complication was about 2%, with major complications about 0.9%.<sup>31</sup> Although complications are somewhat common, not all of these complications

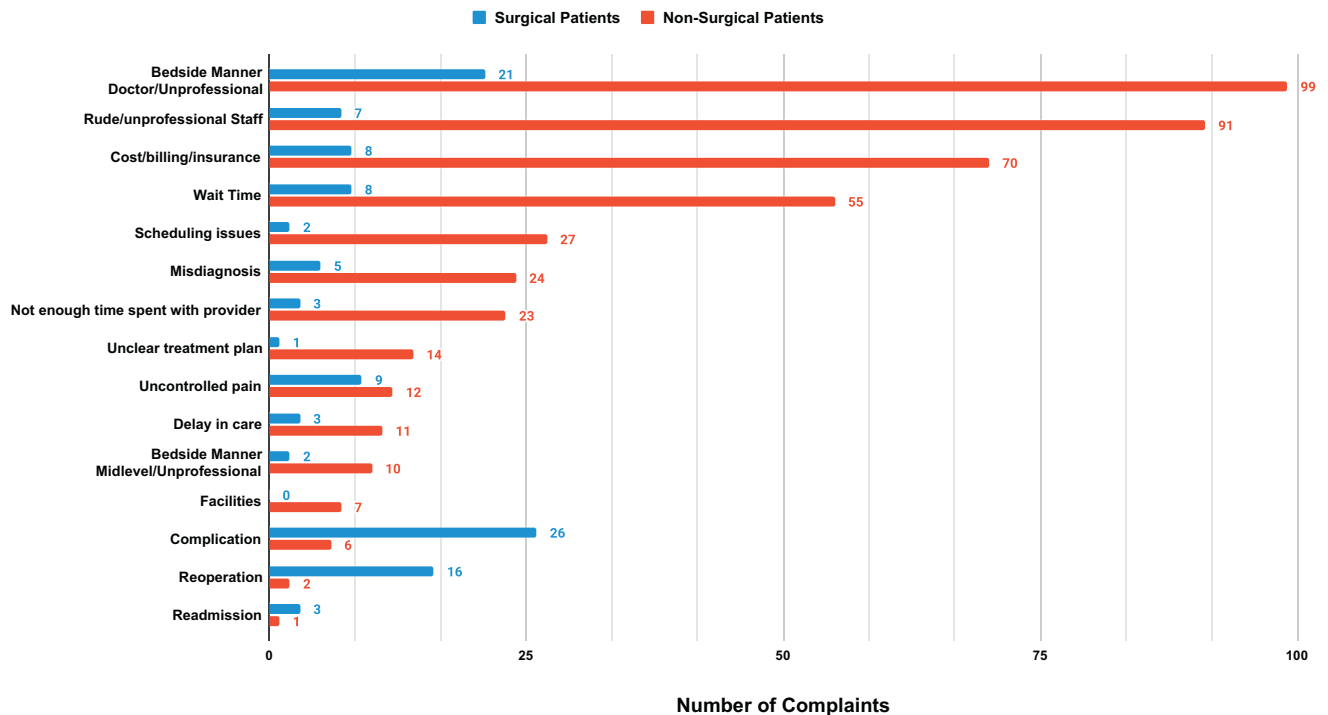
**Table 2.** Analysis of Negative Yelp Reviews Categorized as Clinical or Nonclinical Complaints by Patients With or Without Surgery

	Surgical Patients (N = 47)		Nonsurgical Patients (N = 242)		P Value ( $\chi^2$ )
	Total Complaints	N (% of Total)	Total Complaints, N (%)		
<b>Clinical Complaints</b>					
Complication	26	(23%)	6	(1%)	<b>&lt;0.001</b>
Reoperation	16	(14%)	2	(0%)	<b>&lt;0.001</b>
Uncontrolled pain	9	(8%)	12	(3%)	0.326
Misdiagnosis	5	(4%)	24	(5%)	<b>0.012</b>
Readmission	3	(3%)	1	(0%)	<b>&lt;0.001</b>
Delay in care	3	(3%)	11	(2%)	0.935
Unclear treatment plan	1	(1%)	14	(3%)	<b>&lt;0.001</b>
Total complaints	63		70		
<b>Nonclinical</b>					
Bedside manner, doctor	21	(18%)	99	(22%)	<b>&lt;0.001</b>
Wait time	8	(7%)	55	(12%)	<b>&lt;0.001</b>
Finance related	8	(7%)	70	(15%)	<b>&lt;0.001</b>
Unprofessional staff	7	(6%)	91	(20%)	<b>&lt;0.001</b>
Not enough time spent with provider	3	(3%)	23	(5%)	<b>&lt;0.001</b>
Bedside manner, midlevel	2	(2%)	10	(2%)	0.576
Scheduling issues	2	(2%)	27	(6%)	<b>&lt;0.001</b>
Facilities	0	(0%)	7	(2%)	0.022
Total complaints	51		382		

NOTE. Numbers in bold indicate significant differences between surgical and non-surgical complaints.



## Surgical Patient Complaints vs. Non-Surgical Patients Complaints



**Fig 4.** Comparison of complaints by patients who reported having surgery versus patients who did not report having surgery.

should result in extremely negative reviews. Complications and poor outcomes are always a risk of surgery, so education and establishing appropriate expectations prior to surgery may help patients to become better satisfied with their care.<sup>32,33</sup>

It remains unclear whether the information available in online review and rating websites reflects the quality of care accurately. Several previous studies have attempted to assess the relationship that online reviews share with readmission rates, infections, morbidity, mortality, and infection. These results have demonstrated a consistently poor association between online ratings and objective health care outcome measures.<sup>34-36</sup> In our study, 77% of all complaints were related to nonclinical issues, suggesting that the majority of negative online reviews are separate from factors that are directly related to the quality or outcome of the care received. This suggests that, similar to previous investigations in other subspecialties, orthopedic sports surgeon reviews demonstrate a poor correlation between online ratings and objectively measurable patient outcomes.

The characterization and volume of complaints were significantly different between patients who underwent surgery and those who did not. After surgery, patients were responsible for only about 16% of the 1-star reviews on Yelp, whereas patients without surgery accounted for 84% of the 1-star reviews. This could be a result of a significantly positive correlation between

patients requiring surgery and patient satisfaction.<sup>37</sup> Alternatively, patients with extremely negative preoperative interactions would be unlikely to proceed with surgery.

The factors most commonly cited in extremely negative [Yelp.com](#) reviews of orthopedic sports surgeons are related to physicians' bedside manner, unprofessional staff, finances, and waiting times. An understanding of factors leading to extremely negative reviews on social media platforms is necessary for orthopedic sports surgeons to improve patient satisfaction and maintain positive reputations. The results of our study and further context surrounding patient satisfaction can be used to direct quality-improvement projects aimed at bettering patients' experiences.

### Limitations

Our study has several limitations. Only [Yelp.com](#) reviews were analyzed in our study, and our results should be understood in that context. For example, it has been reported that patients who are either extremely satisfied or extremely dissatisfied with their care are most likely to leave reviews. The patients writing the extremely negative reviews found on [Yelp.com](#) may not be representative of surgeons' practices. There could also be patients who are extremely dissatisfied with their care but do not report this dissatisfaction on [Yelp.com](#). The search of [Yelp.com](#) reviews consisted of 8 large metropolitan areas, albeit in vastly different geographic areas; nonetheless,

that could limit the applicability of our findings to surgeons in rural areas. It is also possible that the reviews analyzed in our study were erroneously categorized. However, we had 2 authors independently categorize these variables, and any differences were subsequently resolved by a third author.

## Conclusion

Our study of extremely negative Yelp reviews found that 77% of negative complaints were nonclinical in nature. The most common clinical complaints were complications, misdiagnosis and uncontrolled pain. Only 16% of 1-star reviews were by patients who had undergone surgery.

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