## Characterizing Single-Star Negative Online Reviews of Orthopaedic Trauma Association Members

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## INTRODUCTION:

The purpose of this study was to characterize factors that contribute to one-star negative reviews regarding orthopaedic trauma surgeons.

## METHODS:

A search was performed for Orthopaedic Trauma Association members on Yelp.com, Healthgrade.com, and Vitals.com in New York, Boston, San Francisco, Los Angeles, Dallas, Phoenix, Seattle, Baltimore, Denver, Houston, Philadelphia, and Washington DC. All single-star reviews (out of a possible 5 stars) were included in this study. Reviews were categorized as either clinical or non-clinical and then further subcategorized. Categorical variables were analyzed using a chi-square test. The rate ratio (the ratio of the rate for nonsurgical divided by operative reviews) was determined for each category. RESULTS:

A total of 288 single-star reviews were included in the study, comprising 655 total complaints. Of all complaints, 274 (41.8%) were clinically related and 381 (58.2%) were non-clinical. Of the 288 single-star reviews, 96 (33.3%) were from surgically treated patients and 192 (66.7%) were from nonsurgical patients. Most complaints were in reference to non-clinical aspects of care such as physician bedside manner (173 reviews, 60%), not enough time spent with provider (58 reviews, 20%), and wait time (42 complaints, 15%). The most common clinical complaints were for complication (61 reviews, 21%), disagree with decision/plan (49 reviews, 17%), and uncontrolled pain (45 reviews, 16%). Operative patients had a significantly higher rate of clinical complaints than nonsugical patients (1.57 vs. 0.64 clinical complaints per review, p<0.001). Nonsurgical patients had a significantly higher rate of non-clinical complaints than operative patients (1.43 vs. 1.10 non-clinical complaints per review, p<0.001).

## DISCUSSION AND CONCLUSION:

Most 1-star reviews referenced a non-clinical aspect of care with a physician's bedside manner being the most common complaint. Operative patients were significantly more likely to reference a clinical aspect of care, such as complications or misdiagnosis compared to nonsurgical patients, who more commonly referenced non-clinical aspects of care.

Table 3. One-Star reviews of operative vs. non-operative orthopedic trauma surgery patients.						
	Surgical Patient Complaints (n=96)	Percentage of Total Surgical Complaints	Non- Operative Patients (n=192)	Percentage of Total Non- Operative Complaints	Rate Ratio (Non- operative complaints/Operative Complaints)	p- value
Clinical Complaints						
Surgical Complication	59	61%	2	1%	0.03	< 0.001
Reoperation	31	32%	1	1%	0.03	< 0.001
Uncontrolled Pain	27	28%	18	9%	0.67	< 0.001
Delay in care	13	14%	18	9%	1.38	0.182
Misdiagnosis	9	9%	22	11%	2.44	0.546
Unclear treatment plan	6	6%	18	9%	3.00	0.317
Disagree with decision/plan	5	5%	44	23%	8.80	<0.001
Readmission	1	1%	0	0%	0.00	
Non-Clinical						
Bedside Manner Doctor/Unprofessional	47	49%	126	66%	2.68	0.044
Not enough time spent with provider	24	25%	34	18%	1.42	0.090
Rude/unprofessional Staff	9	9%	27	14%	3.00	0.221
Wait Time	9	9%	33	17%	3.67	0.065
Phone Communication Issues	6	6%	22	11%	3.67	0.132
Scheduling issues	5	5%	15	8%	3.00	0.361
Bedside Manner Midlevel/Unprofessional	2	2%	1	1%	0.50	0.034
Billing/Insurance	2	2%	8	4%	4.00	0.317
Cost	1	1%	8	4%	8.00	0.134
Facilities	1	1%	1	1%	1.00	0.480
Commute/Travel	0	0%	0	0%		