

Hospital Rating Websites Have the Potential to Inform Quality Management for Patients after Total Hip Arthroplasty

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Problem

Total hip arthroplasty (THA) is currently the most efficient procedure to reduce disability for individuals with end-stage hip osteoarthritis. There is growing interest in using patient narratives along with survey scores to help clinicians understand what they can do to improve care and inform patients about differences in the care delivered by available providers.

Assessment of problem and analysis of its causes

This is the first study to systematically analyse THA patients' negative statements about their experience with hospitals and to relate it to hospital recommendation. We identified 19 categories of statements from 257 THA patients indicating deficits in structure, process and outcome quality in hospital care and then analysed the association of negative statements with hospital recommendation. In 18 out of 19 categories of negative statements, statistical significant associations (p-value of exact logistic regression < 0.05) between the negative statements and not recommending a hospital were found. Further analysis revealed in 10 of the 19 categories associations based on a ϕ -coefficient greater than 0.3.

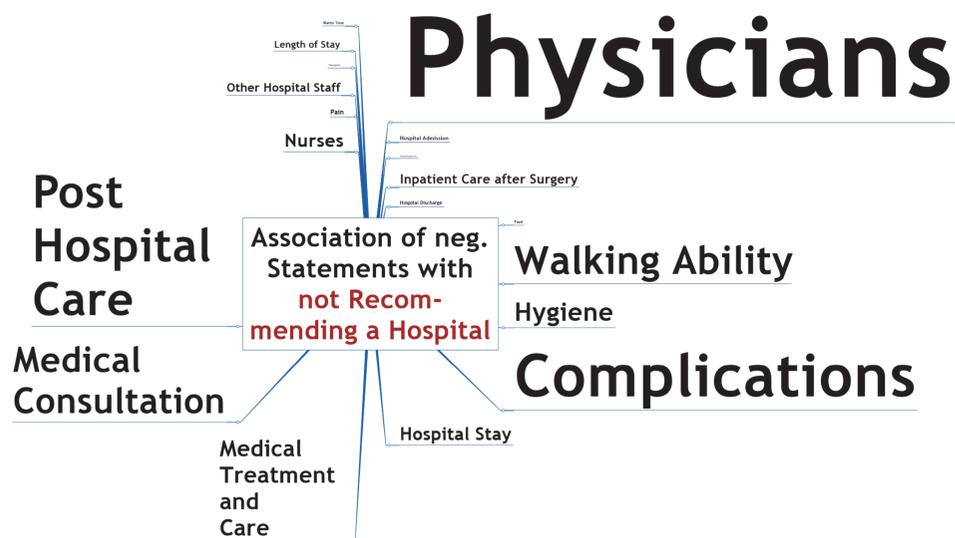


Figure: Association of negative statements with hospital recommendation. Corresponding odds ratios are depicted with letter size. **Table:** A strong association with hospital recommendation ($\phi = 0.657$, $p < 0.0001$, OR = 59.267 [95%-CI: 20.183; 238.536]) was identified with complaints about "medical consultation". (Example: "No consultation and time for the patient, doctor's visit very quickly, everything was always alright!"). In contrast, negative statements about "Hospital equipment" ("The rooms are very bad. Shower not at ground level but with entry - just after a hip surgery very difficult.") had a much weaker association with hospital recommendation ($\phi = 0.205$, $p = 0.0023$, OR = 3.390 [95%-CI: 1.500; 7.995]). (Data not shown in table).

Determinants	All N=257 (%)	Did recommend hospital N=160 (%)	Did not recommend hospital N=97 (%)	ϕ - Coefficient	Odds Ratio 95%-CI	p-value
Medical consultation	63 (24.5)	4 (2.5)	59 (60.8)	0.657*	59.267 [20.183; 238.536]	<0.0001
Physicians	54 (21.0)	1 (0.6)	53 (54.6)	0.643*	187.472 [30.425; +∞)	<0.0001
Hospital stay	53 (20.6)	5 (3.1)	48 (49.5)	0.555*	29.889 [11.110; 101.610]	<0.0001
Complications	39 (15.2)	1 (0.6)	38 (39.2)	0.521*	100.793 [16.267; +∞)	<0.0001
Post hospital care	25 (9.7)	0 (0.0)	25 (25.8)	0.422*	77.461 [16.770; +∞)	<0.0001
Nurses	30 (11.7)	2 (1.2)	28 (28.9)	0.417*	31.658 [7.631; 281.705]	<0.0001
Walking ability	22 (8.6)	0 (0.0)	22 (22.7)	0.393*	65.365 [14.072; +∞)	<0.0001
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Examples for Negative Statements

Physicians: did not provide enough of their time; unfriendly and painful treatments; incorrect documentation; lack of communication with the patient and the medical team; no problem solution and bad/inexperienced surgeons. **Complications:** mild (swelling, burn marks, problems with surgical scar and serious) and serious (dislocations, loosening of the hip joint, pulmonary embolism, wound infection, bacteria infections, injuries of the sciatic nerve, decubitus, thrombosis or blood anemia) postoperative complications. **Post-hospital care:** problems in the organisation of rehabilitation, follow-up examinations in the hospital and outpatient medical care.

Messages for others

Social Media can be analysed to sample patient experience and to identify quality deficits. Our study adds to this knowledge and focuses on a distinctive group of patients with total hip arthroplasty (THA).