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**METHODS:** All commercially insured patients undergoing primary TKA from 2020 to 2022 at our institution were included. Data on PA status, time to approval or denial, number of denials, and denial reasons was prospectively collected. Additionally, the number of office visits and overall costs of nonoperative treatment received in the year prior to TKA, and from initial PA request to date of surgery, was also recorded.

## DISCUSSION AND CONCLUSION:

	Prior Authorization Required	No Prior Authorization	p-value
Age			
Mean	66.1	66.1	.99
SD	10.5	10.5	
Range	45-88	45-88	
Gender			
Male	10	10	.99
Female	10	10	
Insurance			
Medicaid	10	10	.99
Medicare	10	10	
Private	10	10	
Other	10	10	
Comorbidities			
Hypertension	10	10	.99
Diabetes	10	10	
Asthma	10	10	
Chronic Pain	10	10	
Depression	10	10	
Anxiety	10	10	
Alcohol Use	10	10	
Smoking	10	10	
Obesity	10	10	
Osteoporosis	10	10	
Heart Disease	10	10	
Kidney Disease	10	10	
Liver Disease	10	10	
Cancer	10	10	
Other	10	10	

[illegible]

Values given as mean  $\pm$  SD or N (%).

Table 2. Surgery authorization type and administrative requirements prior to TKA (n=4,289).

[illegible]

	Prior	No Prior
Physician visits	1.0	0.7
Physical therapy	0.3	0.2
Medication	0.1	0.1
FROM	1.0	0.7
Costs	\$1,000	\$500

		Authorisation rate (n=5460)	Control rate (n=5203)	p-value
Smoking				
	Smoker	44 (1.6%)	21 (1.2%)	0.891
	Non-smoker	102 (1.3%)	100 (1.6%)	
	Control	146 (2.4%)	121 (2.3%)	
Hispanic				
	Hispanic	522 (18.8%)	570 (10.6%)	0.218
	Non-Hispanic	331 (1.7%)	477 (2.4%)	
	Control	763 (5.5%)	715 (4.4%)	
Sexual Inactivity				
	Sexually Inactive	1170 (40.4%)	1030 (19.7%)	0.002
	Sexually Active	168 (1.2%)	173 (3.3%)	
	Control	921 (6.4%)	841 (5.3%)	
Insurance/Professional Fee Reimbursement (%)				
	Reimbursed	473 (4.2%)	330 (3.2%)	0.481
	Not Reimbursed	106 (1.0%)	106 (1.0%)	
	Control	169 (2.8%)	166 (3.2%)	
Office Visits				
	Number of Visits	308 (2.2%)	288 (4.3%)	0.308
	Control	100 (1.6%)	104 (1.9%)	
PT				
	Number of Episodes	247 (4.1%)	245 (1.8%)	0.004
	Control	268 (1.8%)	268 (4.9%)	
	Number of Episodes	101 (3.5%)	115 (2.0%)	0.134
	Control	101 (1.3%)	114 (1.1%)	
X-Ray				
	Number of Episodes	477 (9.9%)	431 (5.6%)	0.001
	Control	107 (2.0%)	136 (2.6%)	
	Number of Episodes	121 (6.5%)	131 (6.7%)	0.691
	Control	90 (5.3%)	92 (2.7%)	
Total Cost (in Year Dollars)				
	Cost	744 (4.8%)	645 (4.8%)	0.454
	Control	166 (2.8%)	157 (2.7%)	

Table 4. Multivariate regression for cost between surgery request date to date of TKA (n=6,289)

Independent Variable	Coefficient	Standard Error	t-value	p-value
Age	-1.36	1.56	-0.87	0.383
SES500 (XXX)	-0.89	1.18	-0.74	0.453
Authorization Status (No Y/N)	-41.9	16.2	-2.59	0.004
Dental (No)	78.2	35.2	2.25	0.030
Dental Inpatient, Approved				
Occupation (No)	-35.8	44.5	-0.81	0.413
Dental on Dental Request				
(No)	38.1	32.6	1.17	0.240
Admission Requested (No)	192	51.2	3.75	0.000