

Rapid Discharge and Outpatient Total Joint Arthroplasty Introduce a Burden of Care to the Surgeon

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Disclosures



I (and/or my co-authors) have something to disclose.

Detailed disclosure information is available via:

“My Academy” app; 

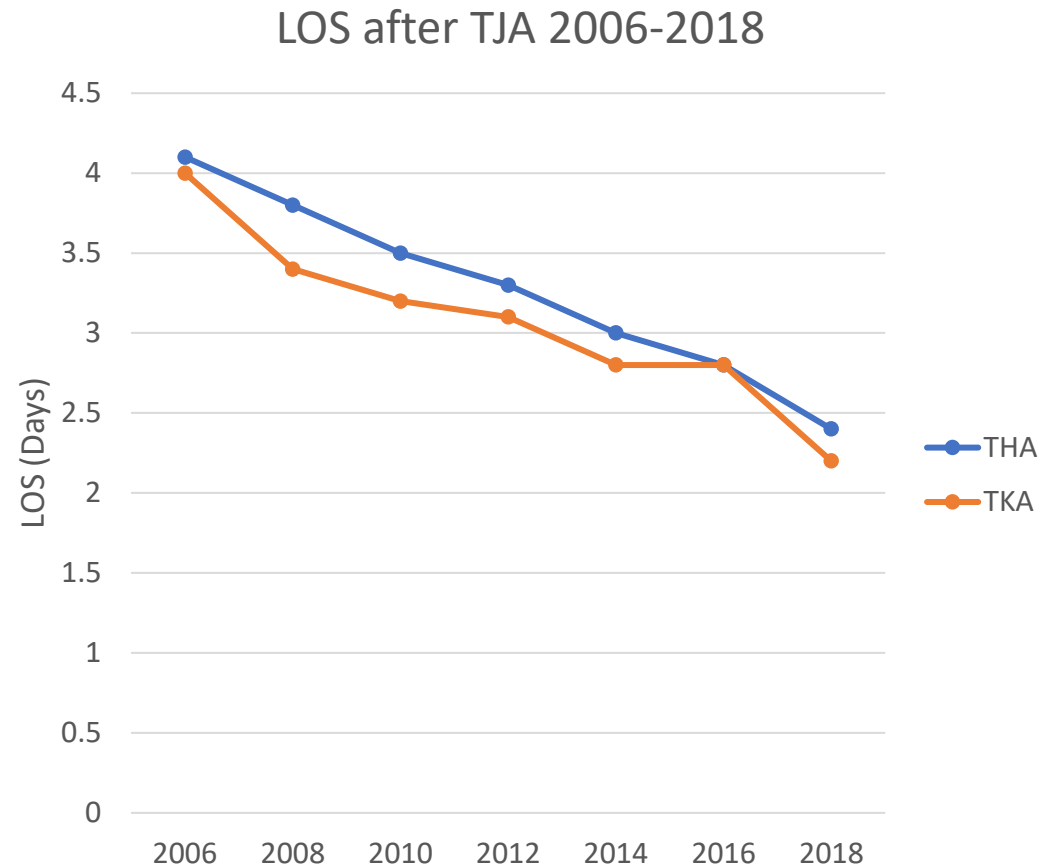
Printed Final Program; or

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Pertinent to present study

Richard Berger, MD, Craig Della Valle, MD
Ownership at North Shore Surgical Suites
and Munster Speciality Surgery Center

Introduction

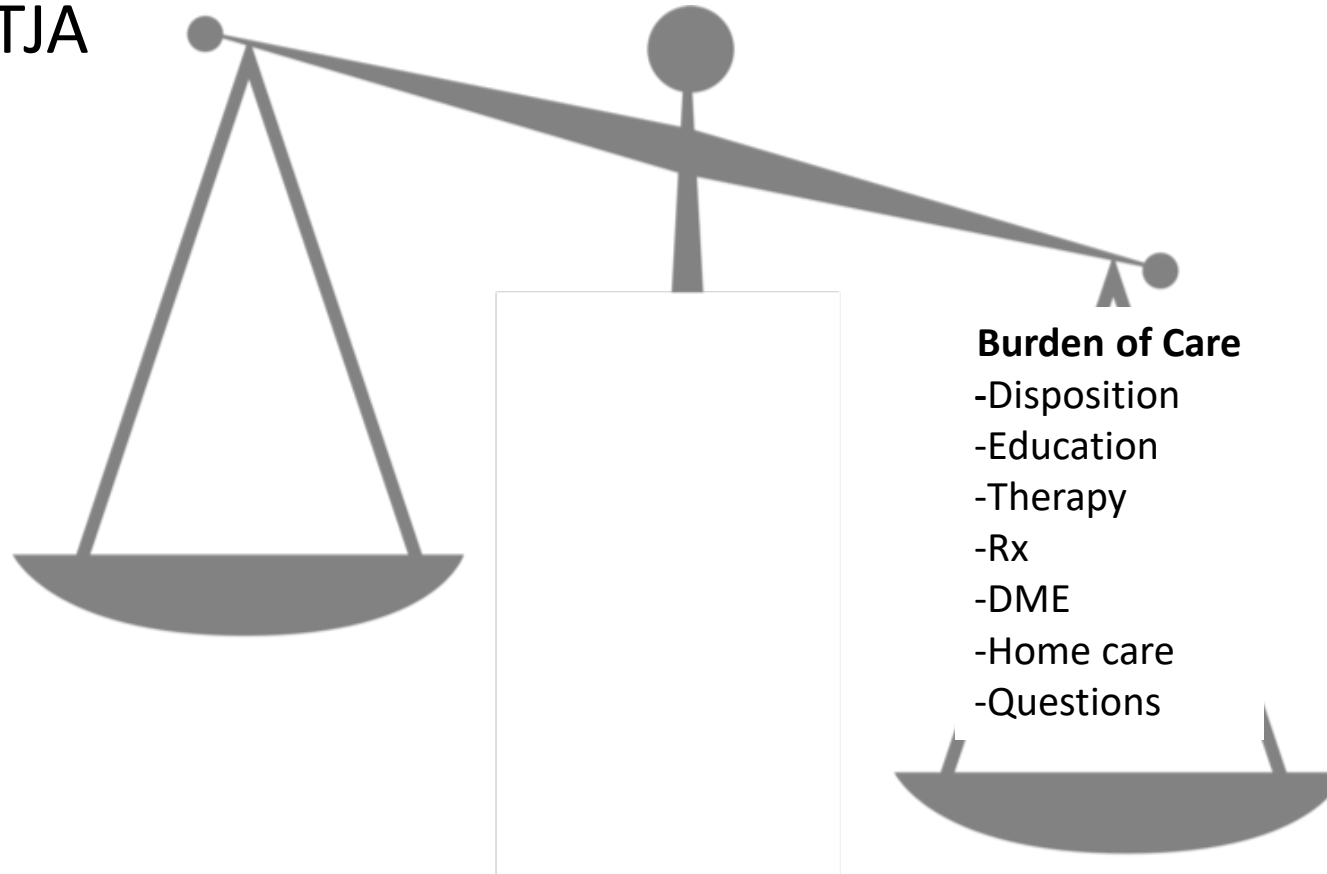


- Steady decline in LOS over the last decade
- National focus on value furthers this trend
- Consequence of this shift to rapid discharge?

Introduction: Burden of Care

Traditional LOS TJA

Surgeon
Practice



Burden of Care

- Disposition
- Education
- Therapy
- Rx
- DME
- Home care
- Questions

Hospital
Social Workers
Discharge Planners
Nurses
Nurse aids
SNF
IP Therapist
Dieticians
Medical Consultants

Introduction: Burden of Care

Rapid Discharge LOS TJA

Surgeon Practice

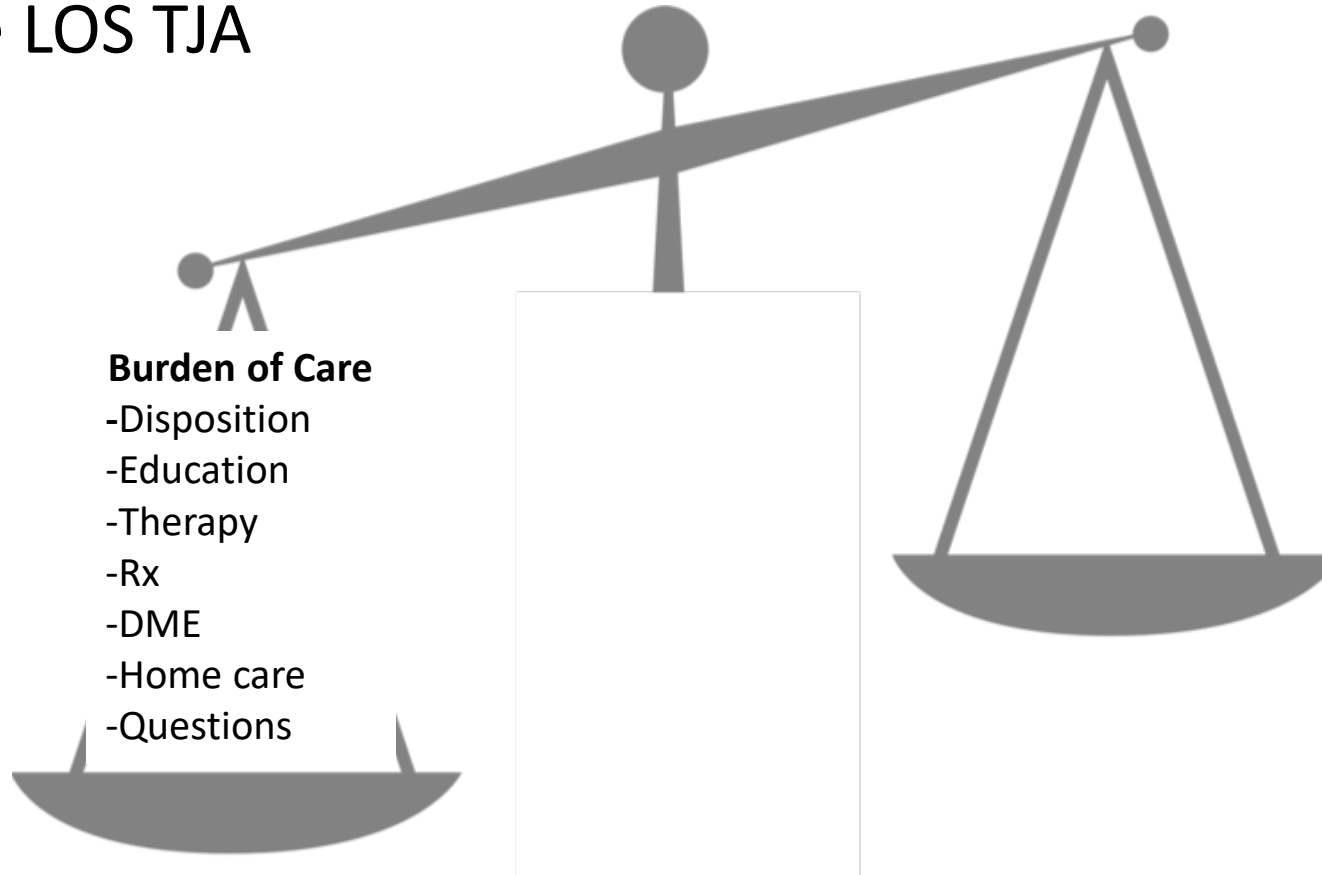
**Driven by surgical
staff on telephone

Burden of Care

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- Rx
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Purpose

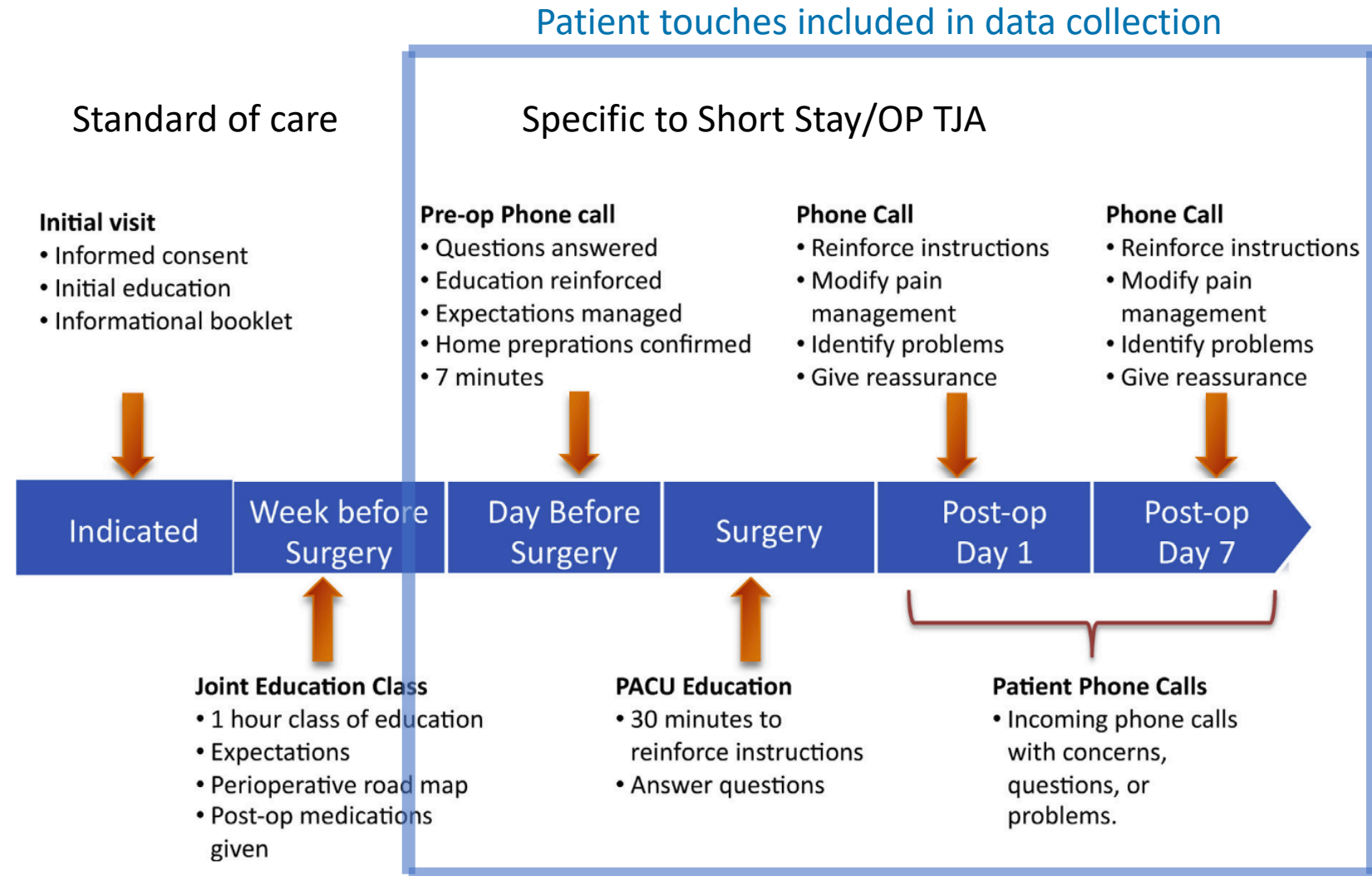
Primary: Quantify patient touches through telephone calls, within the first 7 days post-operatively in patients who underwent rapid discharge TJA (LOS = POD 0 or 1)

Secondary: Compare same day (POD 0 discharge) and inpatient (POD 1 discharge) patient touches

**Drive Policy and help guide surgeons transitioning to shorter LOS

Methods

- Retrospective Review of 103 patients
 - Outpatient (POD 0)
 - Short stay (POD 1)
- All patient touches studied from POD 0-POD 7
 - Phone calls (in/out)
 - Office visits



Results

- Entire Cohort (103 surgeries) required:
 - 253 total patient touches (calls)
 - 83 hours of total staff time required over the study period
- 49 minutes per rapid discharge arthroplasty patient
- No difference in number of calls or duration between short-stay (POD 1) patients and outpatient (POD 0) patients ($p=0.31$)

Results

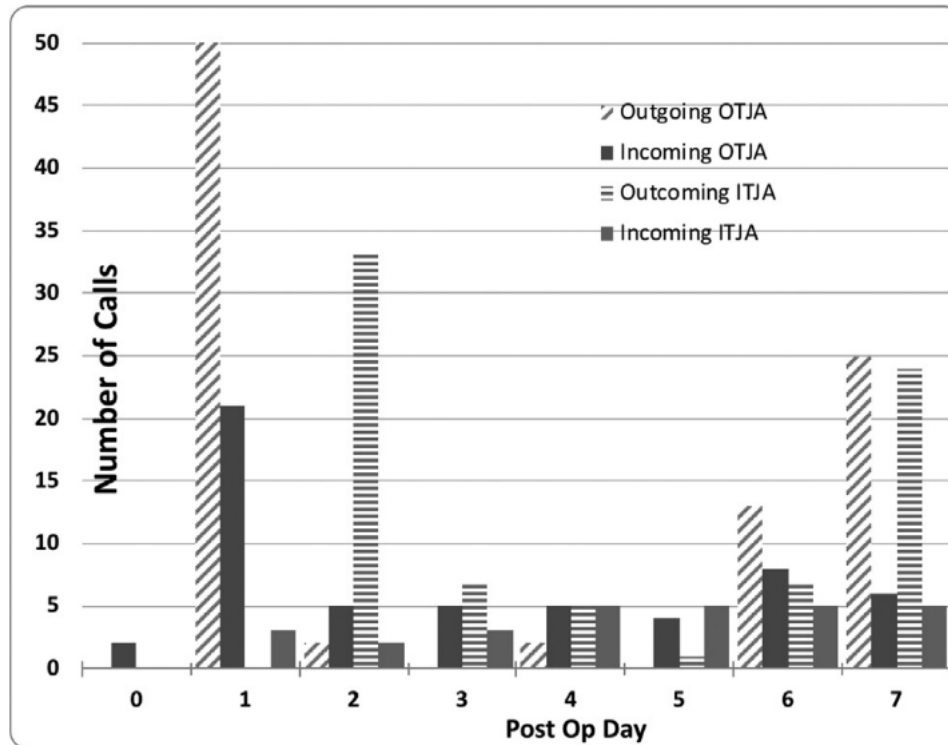


Fig. 2. Distribution of incoming and outgoing phone calls following rapid-pathway arthroplasty surgery.

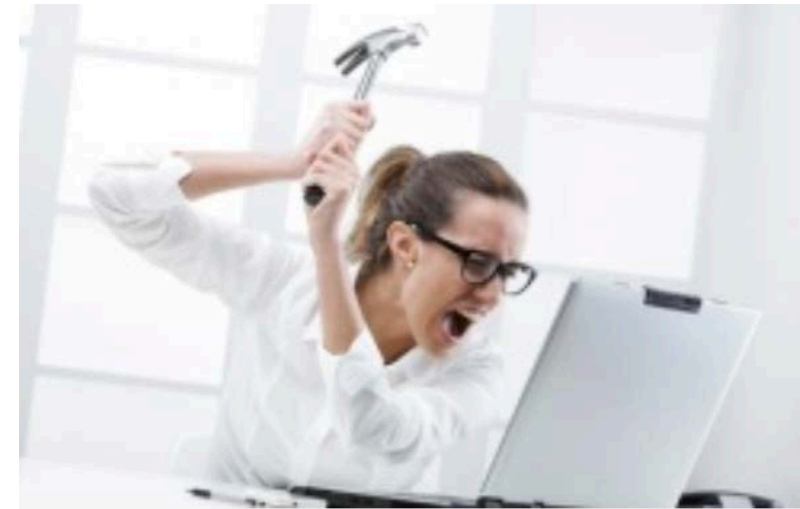
Table 3

Subject Matter of the Perioperative Telephone Touches.

Issues	Number	Percentage	Number	Percentage
Pain	34	23.0%	20	19.0%
Nausea	17	11.5%	6	5.7%
Medication questions	11	7.4%	25	23.8%
Sleep problems	9	6.1%	1	1.0%
Urinary burning, frequency, retention	9	6.1%	0	0%
Leg swelling	7	4.7%	15	14.3%
Skin rash	5	3.4%	0	0%
Physical therapy scheduling	5	3.4%	13	12.4%
Administrative forms request	5	3.4%	0	0%
Fever	4	2.7%	0	0%
Implant clicking questions	3	2.0%	1	1.0%
Ice machine (cryotherapy) issues	2	1.4%	0	0%
Drain site bleeding	2	1.4%	0	0%
Muscle spasms	2	1.4%	0	0%
Syncope	1	0.7%	1	1.0%
Driving questions	1	0.7%	0	0%
Showering questions	1	0.7%	0	0%
Numbness	1	0.7%	0	0%
Dizziness	1	0.7%	3	2.9%
Blurry vision	1	0.7%	0	0%
Sciatica pain	1	0.7%	0	0%
Dental questions	1	0.7%	1	1.0%
Calf pain	1	0.7%	0	0%
Shortness of breath	0	0%	3	2.9%
Wound concerns	0	0%	1	1.0%
Anxiety	0	0%	1	1.0%
Bite from pet cat	0	0%	1	1.0%

Discussion

- Rapid discharge TJA adds 49 minutes per patient of telephone touches
- This is time interacting with patient only excludes log-in time, recording conversations into EMR, fulfilling patient requests.
- Equivalent to 3 office visits per patient (49 minutes per patient at 15min billed on time for a level III)



Conclusions

- The burden of perioperative care is transferred from hospitals and post-acute care facilities to surgeon's team and results in previously undocumented patient touches in the form of phone calls and education.
- Policy makers should understand that modern arthroplasty has new and increased management burdens that fall heavily on surgical practices.
- Valuation of arthroplasty should consider these patient touches as they increase, both physician work as well as practice expense, two of the three components included in the assignment of RVUs by the Relative Value Scale Update committee (RUC) that provides recommendations to CMS.

A photograph of the Chicago skyline under a clear blue sky. The Willis Tower is the most prominent building in the center. To the left, a construction crane is visible against a building under construction. To the right, another construction crane is visible. The foreground shows the tops of various other skyscrapers and buildings.

Thank you!
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Introduction

- Traditional Pathway
 - Nurse- Education
 - Nurse aid- Education
 - Case manager- Discharge setup
 - Inpatient PT/OT- Therapy
 - Inpatient pharmacist- prescriptions
- **Driven by in person hospital staff



- Rapid Discharge Pathway:
 - Nurse-Education, discharge setup, therapy appointments, prescriptions, questions

**Driven by surgical staff on telephone



Results: Demographics

Table 1
Demographics.

	Outpatient TJA (n = 57)	Inpatient TJA (n = 46)	P-Value
Age (y)	60.3	62.4	.19
Male	33 (57.9%)	21 (45.7%)	
Female	24 (42.1%)	25 (54.3%)	
BMI (kg/m ²)	28.4 (SD 5.2)	31.1 (SD 6.3)	<.001
Charlson Comorbidity Index	1.8 (SD 1.0)	2.5 (SD 1.4)	<.017
TKA	38 (66.7%)	40 (87.0%)	
THA	19 (33.3%)	6 (13.0%)	

TJA, total joint arthroplasty; SD, standard deviation; BMI, body mass index; TKA, total knee arthroplasty; THA, total hip arthroplasty.

Results

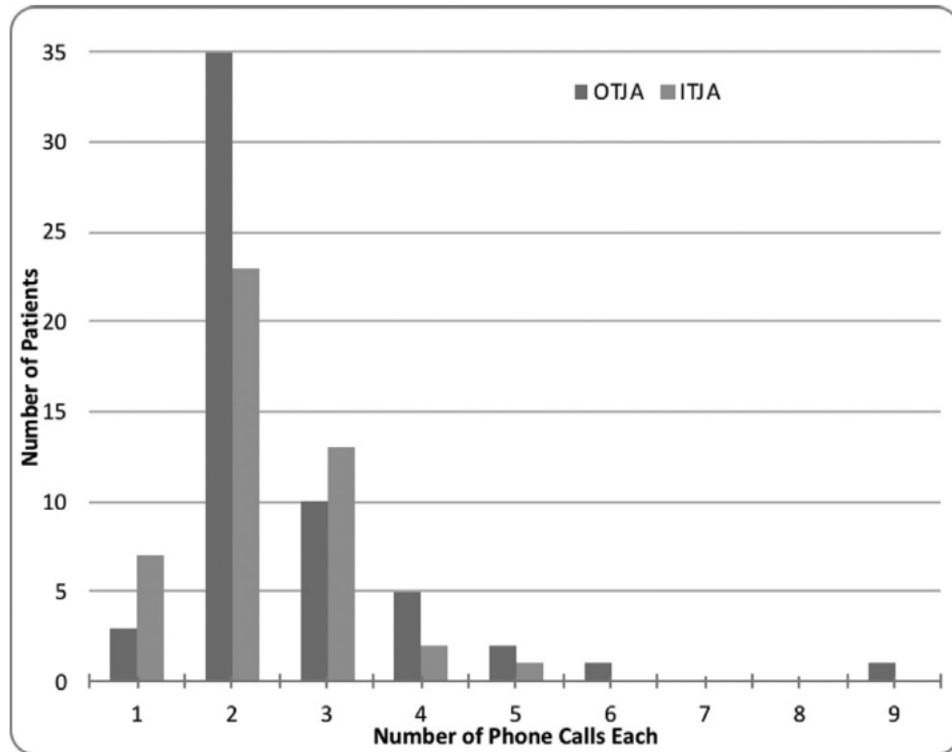


Fig. 3. Distribution of the number of touches per patient in the first week after surgery.

Table 2

Touches Required in the First 7 D After Surgery.

	Outpatient TJA (n = 57)	Inpatient TJA (n = 46)	P-Value
Outgoing calls	92 (1.6/patient)	68 (1.5/patient)	.82
Incoming calls	56 (0.98/patient)	37 (0.8/patient)	.14
Total calls	148 (2.6/patient)	105 (2.3/patient)	.31
Duration of calls (min)	4.9 (SD 2.2)	4.2 (SD 2.4)	.08

TJA, total joint arthroplasty; SD, standard deviation.

****No Difference in number of calls or call duration when comparing outpatient (POD 0) and inpatient (POD 1) groups**