

# Quantifying Surgeon Work in TJA: Where Do We Stand Today?

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# Disclosure

I and my co-authors have something  
to disclose.

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“My Academy” app;

Printed Final Program; or

AAOS Orthopaedic Disclosure Program at

<http://www.aaos.org/disclosure>

# Evaluation of TJA CPT Codes is Underway!

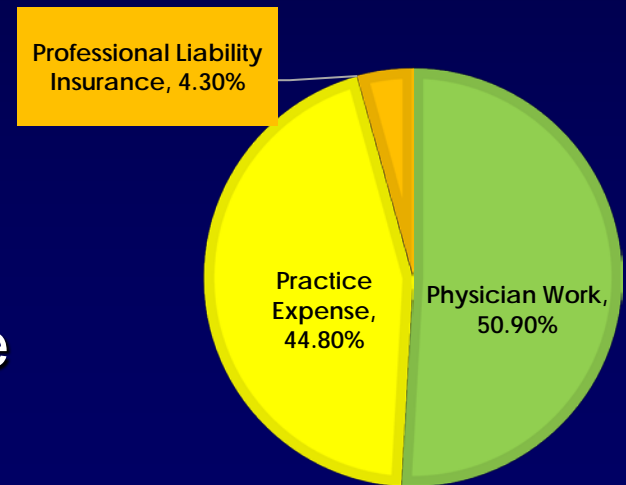
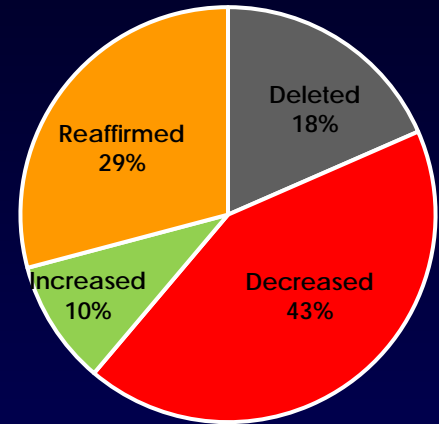
- CPT codes 27130 and 27447 have been identified by CMS as **potentially misvalued**.



- CPT codes are **maintained by AMA** and **used by CMS** for reimbursement.
- The evaluation process occurs every 5 years and is **unpredictable**.
- There is concern that the **intent is to ultimately lower reimbursement to surgeons**.

# CPT Codes Evaluation

- Of nearly 2,100 potentially misvalued services that were reviewed between 1993 and 2018, **over half were either decreased or deleted.**
- Primary target of the evaluation is **physician work**.
  - Physician work accounts for **50.9%** of the total relative value for each service.
  - ? TJA is now performed faster.



# Study Objective

**To quantify the physician work component for CPT codes 27130 (THA) and 27447 (TKA).**

1. Preoperative period following the decision to proceed with surgery and leading to the day before surgery.
2. Immediate 24 hours preceding surgery (preservice time).
3. Operative time (skin incision to dressing application, aka intraservice time).
4. Postoperative work in including day of surgery and the following 90 days.

# Methods

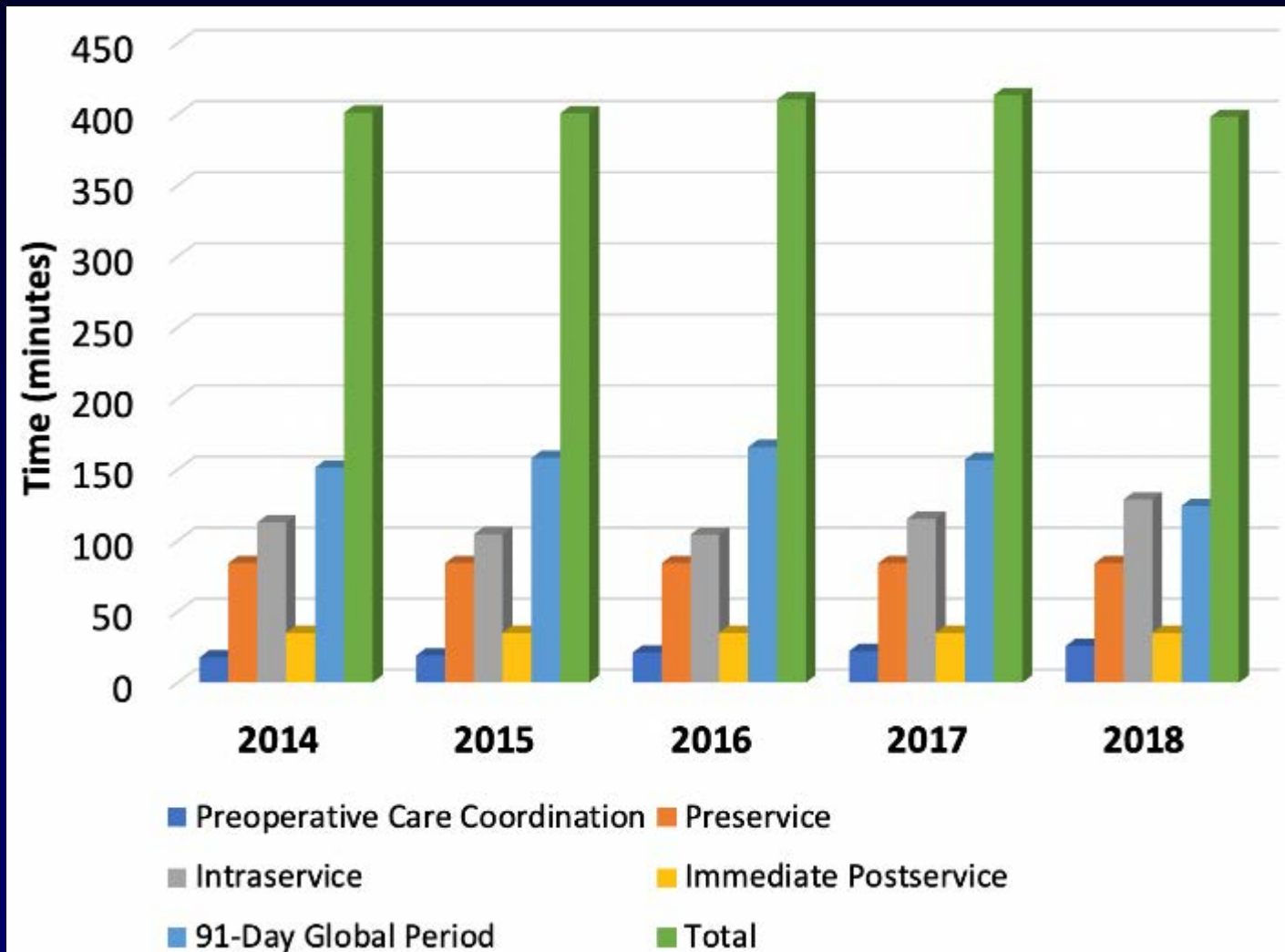
- Retrospective review of from one academic center.
- All patients who underwent primary THA and TKA from January 1, 2014 to December 31, 2018.
- Exclusions: complex primaries, those requiring co-surgeon assistance, intraoperative complications, and outliers (greater than 2 standard deviations from the mean operative time).
- 666 procedures met the above criteria: 379 THAs and 287 TKAs.
- All surgeries were performed by fellowship trained surgeons.

# Results

Phase of Care	2019 CMS PFS	Present Study	Difference
Preservice time (minutes)	75	84	9 (+12%)
Intraservice time (median, minutes)	100	111	11 (+11%)
Postservice time			
Immediate (minutes)	20	35	10 (+75%)
Hospitalization and global 90-day period (minutes)	Not Defined	150±37	–
Inpatient visits	3	5 ±2	2 (+66.7%)
Outpatient visits	3	2.5 ±1	0.5 (–16.7%)
Preoperative care coordination (following decision to proceed with surgery and excluding preservice time, mean, minutes)	N/A	22±10	–
Total time for THA and TKA (mean, minutes)	407	405 ±41	(– 0.5%)

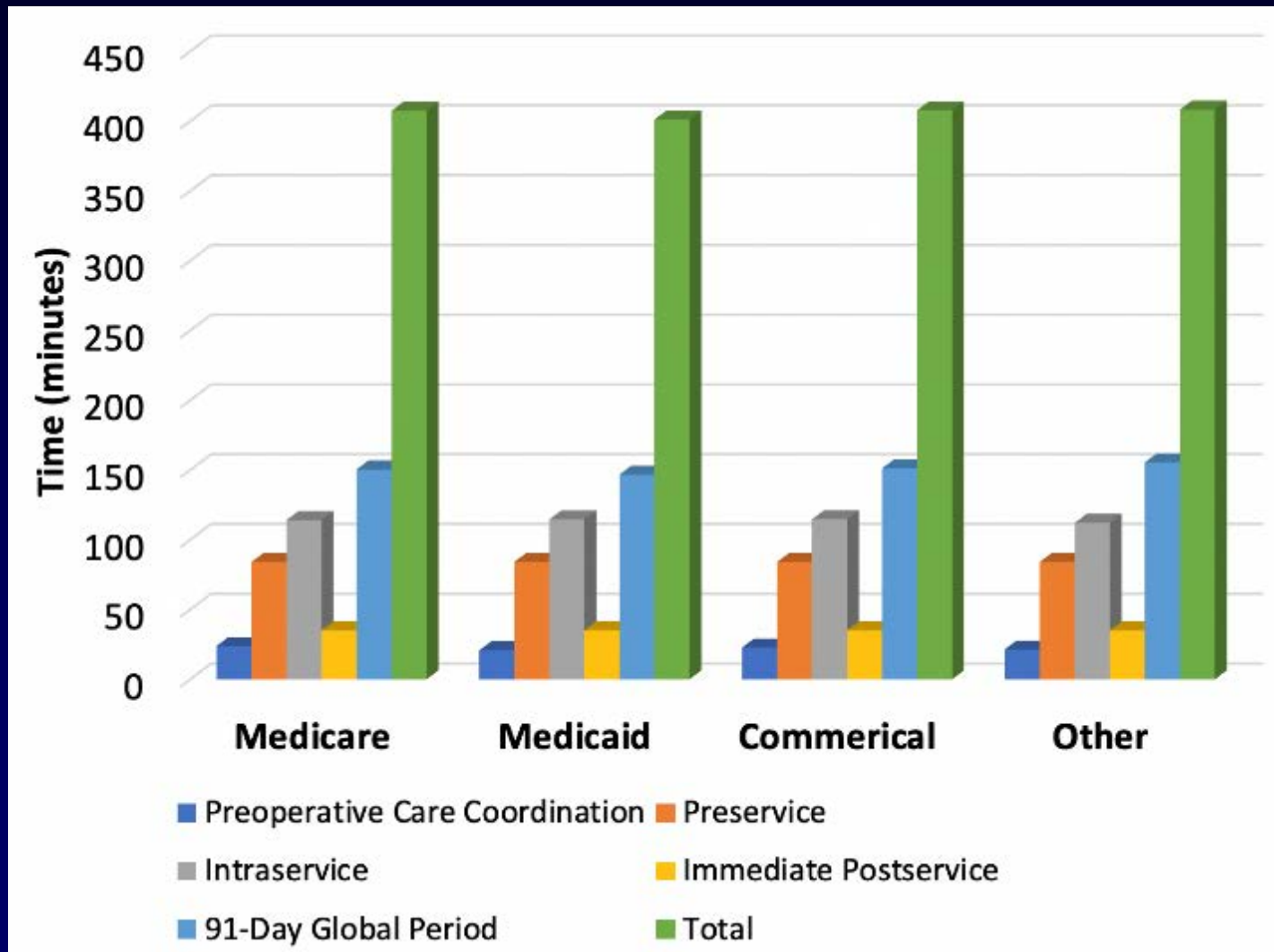
Phase of Care	THA	TKA
Preservice time (minutes)	84	84
Intraservice time (median, minutes)	109	113
Postservice time		
Immediate (minutes)	35	35
Hospitalization and global 90-day period (minutes)	140±35	162±36
Inpatient visits	5 ±2	5 ±2
Outpatient visits	2 ±1	3 ±1
Preoperative care coordination (following decision to proceed with surgery and excluding preservice time, mean, minutes)	21±9	23 ±11
Total time for THA and TKA (mean, minutes)	393 ±38	420 ±40

# Results: Trend Over Time





# Results: Trend by Payer Type



# Limitations

- Retrospective review from a single tertiary public academic hospital.
- We used very conservative estimates for certain tasks and could not quantify a number of other tasks (e.g., completing medical leave paperwork, coordination of care with other providers, administrative burden for regulatory compliance, collection of quality metrics, etc.).

# Compared to Previous Studies

No Evidence to Support Lowering Surgeon Reimbursement for Total Joint Arthroplasty Based on Operative Time: An Institutional Review of 12,567 Cases

Morad Chughtai, MD <sup>a</sup>, Atul F. Kamath, MD <sup>b, \*</sup>, on behalf of the Cleveland Clinic Arthroplasty Group

Average Operative Times for 1,313 Primary Total Hip Arthroplasty and 1,300 Primary Total Knee Arthroplasty Over 39 Months Are Roughly Equal to Medicare Attributed Operative Times

Roshan P. Shah, MD, JD <sup>\*</sup>, David Lauthen, MHA, Jeffrey A. Geller, MD, H. John Cooper, MD

Quantifying the Perioperative Work Associated With Total Hip and Knee Arthroplasty: The Burden Has Increased With Contemporary Care Pathways

Amy S. Wasterlain, MD, P. Maxwell Courtney, MD, Michael F. Yayac, MD, David G. Nazarian, MD, Matthew S. Austin, MD <sup>\*</sup>

# Conclusions

- This study shows that the 2014 evaluation of TJA codes is still accurate.
- Physician work is a moving target that is more complex than what is captured in the RUC model (e.g., preoperative optimization).
- There is need for innovative reimbursement assessment that reflect the changing role physicians play in value-based care.

# Thank You

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