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Medicare and Arthroplasty in the ASC: Is Private Equity our Friend?

Derek Ward, MD
Associate Professor of Orthopaedic Surgery
Division of Adult Reconstruction

Disclosures

- Consulting with Depuy, unrelated to this talk

Outline

- Changing Reimbursement and the push for Outpatient TJA
- Change in private practice structures
- The Rise of Private Equity in Orthopaedics

Changing Practice

- Overall Consolidation

- Move to employment, but still largely private practice
  - AAOS Survey 2018, 57% private practice
  - Scale and Size

- Revenue streams changing
  - Ancillary income
    - 1995 this was 5% of income
    - 2015 this was 40% of income

Clin Orthop Relat Res. 2016 Nov; 474(11): 2354–2356.
Published online 2016 Aug 16. doi: 10.1007/s11999-016-5034-6

A Day at the Office: Is Private Practice Orthopaedic Surgery Dead?

Douglas W. Lundy, MD, MBA

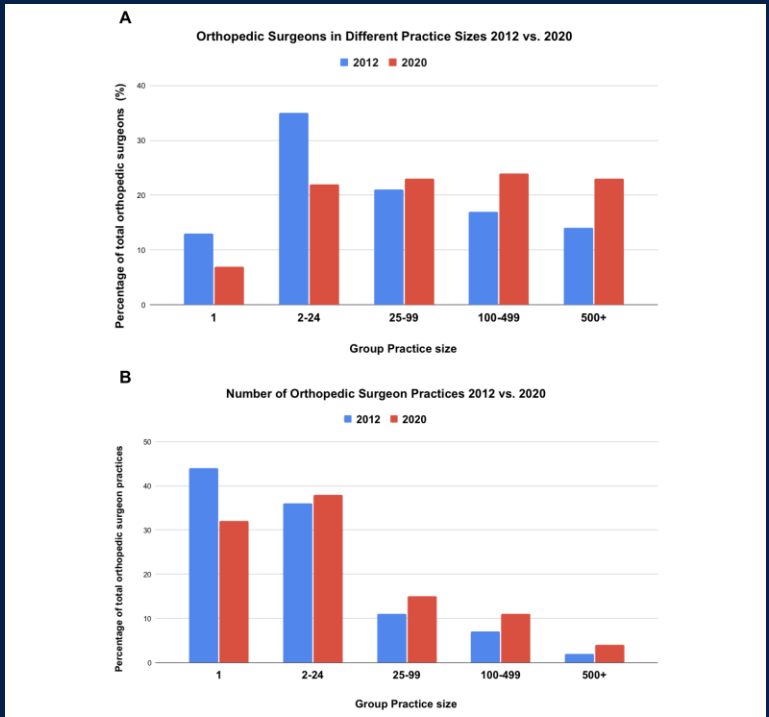

Fig 1. Bar plots showing number of individual orthopaedic surgeons in all practice groups (A) and number of practice groups (B) in each size category for 2012 and 2020.

Orthopaedic Group Practice Size Is Increasing

Jordan R. Pollock, B.S., M. Lane Moore, B.S., Jacob S. Hogan, B.S., Jack M. Haglin, M.D., M.S., Joseph C. Brinkman, M.D., Matthew K. Doan, B.S., and Anikar Chhabra, M.D.

Arthroscopy, Sports Medicine, and Rehabilitation, Vol 3, No 6 (December), 2021: pp e1937-e1944

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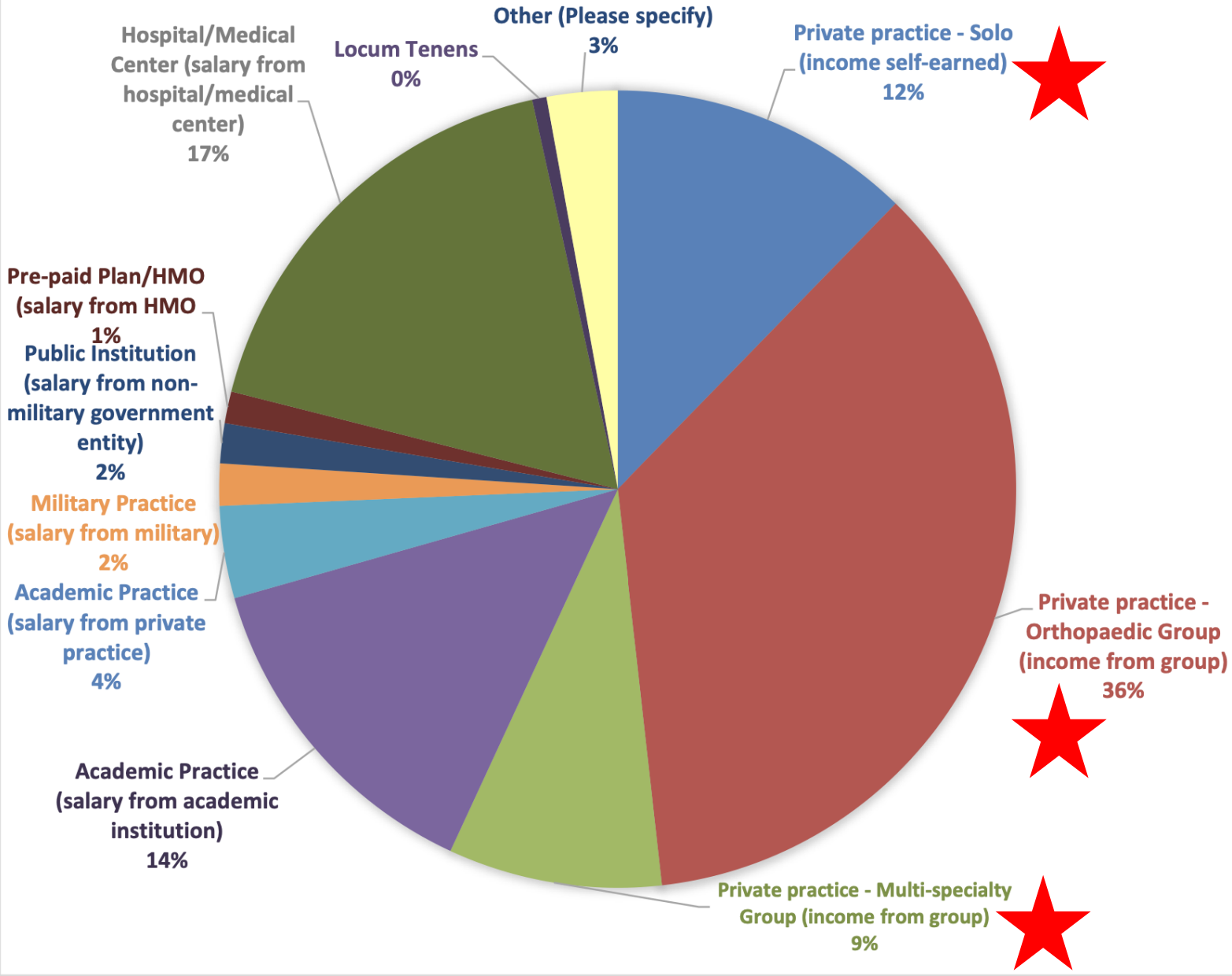
ORTHOPAEDIC SURGEON PRACTICE SETTING



Medicare and Revenue Streams

Figure 42 - Payor Source by Practice Setting

	Private insurance carrier (HMO/PPO/IPA)	Medicare	Medicaid	Worker's Compensation	Self-Pay	Charity/Pro-Bono	Other sources
Private practice - Solo (income self-earned)	41.61	27.88	7.36	13.54	3.99	1.50	4.12
Private practice - Orthopaedic Group (income from group)	46.18	30.74	7.14	9.69	2.89	1.57	1.80
Private practice - Multi-specialty Group (income from group)	44.40	31.55	9.02	8.52	2.33	1.43	2.74
Academic Practice (salary from academic institution)	37.16	24.32	21.30	4.49	3.36	3.88	5.50
Academic Practice (salary from private practice)	45.11	26.13	13.65	6.77	3.44	2.46	2.44
Military Practice (salary from military)	10.08	2.15	.74	0.18	.05	.54	86.25
Public Institution (salary from non-military government entity)	6.30	7.14	8.26	3.02	1.50	.98	72.80
Pre-paid Plan/HMO (salary from HMO)	80.38	10.57	2.85	3.32	0.03	0.54	2.31
Hospital/Medical Center (salary from hospital/medical center)	36.27	29.71	17.68	6.10	2.96	2.20	5.07
Locum Tenens	10.00	40.00	40.00	10.00	0.00	0.00	0.00
Other (Please specify)	28.82	20.50	10.45	10.45	3.64	4.06	22.08

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Health Policy & Economics

Medicare Reimbursement for Hip and Knee Arthroplasty From 2000 to 2019: An Unsustainable Trend

Cory K. Mayfield, BS [a], Jack M. Haglin, BS [b], Brett Levine, MD [c], Craig Della Valle, MD [c], Jay R. Lieberman, MD [a], Nathanael Heckmann, MD [a,*]

[a] Department of Orthopaedic Surgery, Keck School of Medicine of the University of Southern California, Los Angeles, CA
[b] Mayo Clinic School of Medicine, Scottsdale, AZ
[c] Department of Orthopaedic Surgery, Rush University Medical Center, Chicago IL

The Journal of Arthroplasty 35 (2020) 1174–1178

- Inflation Adjusted >30% decrease in reimbursement

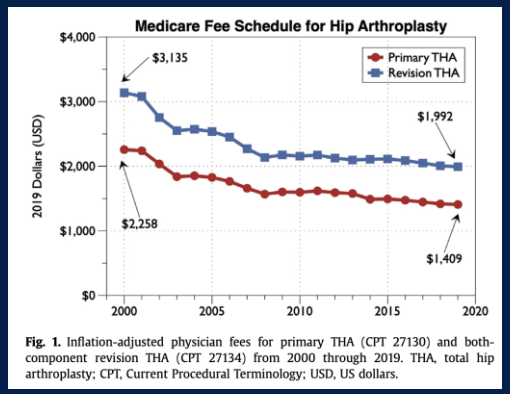

Fig. 1. Inflation-adjusted physician fees for primary THA (CPT 27130) and both-component revision THA (CPT 27134) from 2000 through 2019. THA, total hip arthroplasty; CPT, Current Procedural Terminology; USD, US dollars.

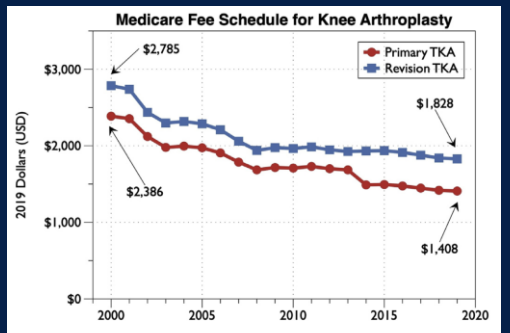

Fig. 2. Inflation-adjusted physician fees for primary TKA (CPT 27447) and both-component revision TKA (CPT 27487) from 2000 through 2019. TKA, total knee arthroplasty; CPT, Current Procedural Terminology.

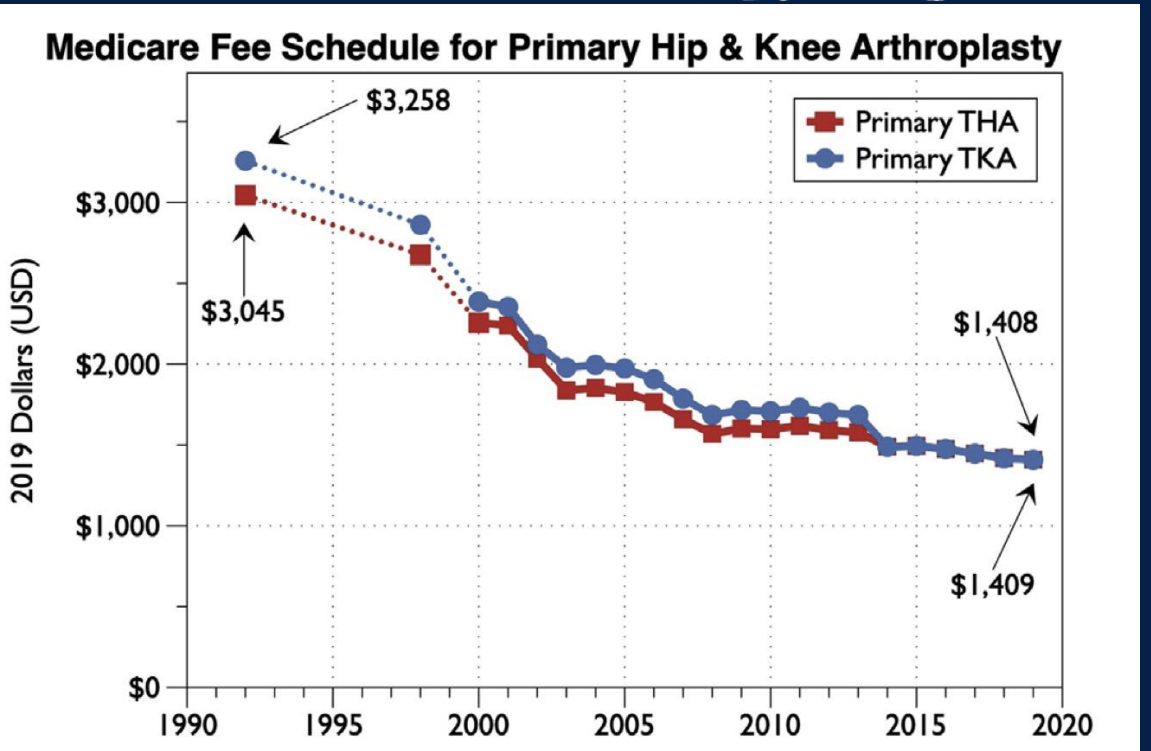

Fig. 3. Inflation-adjusted physician fees for primary THA (CPT 27130) and primary TKA (CPT 27447) from 1992 through 2019. Dotted lines represent data from Hariri et al [3].

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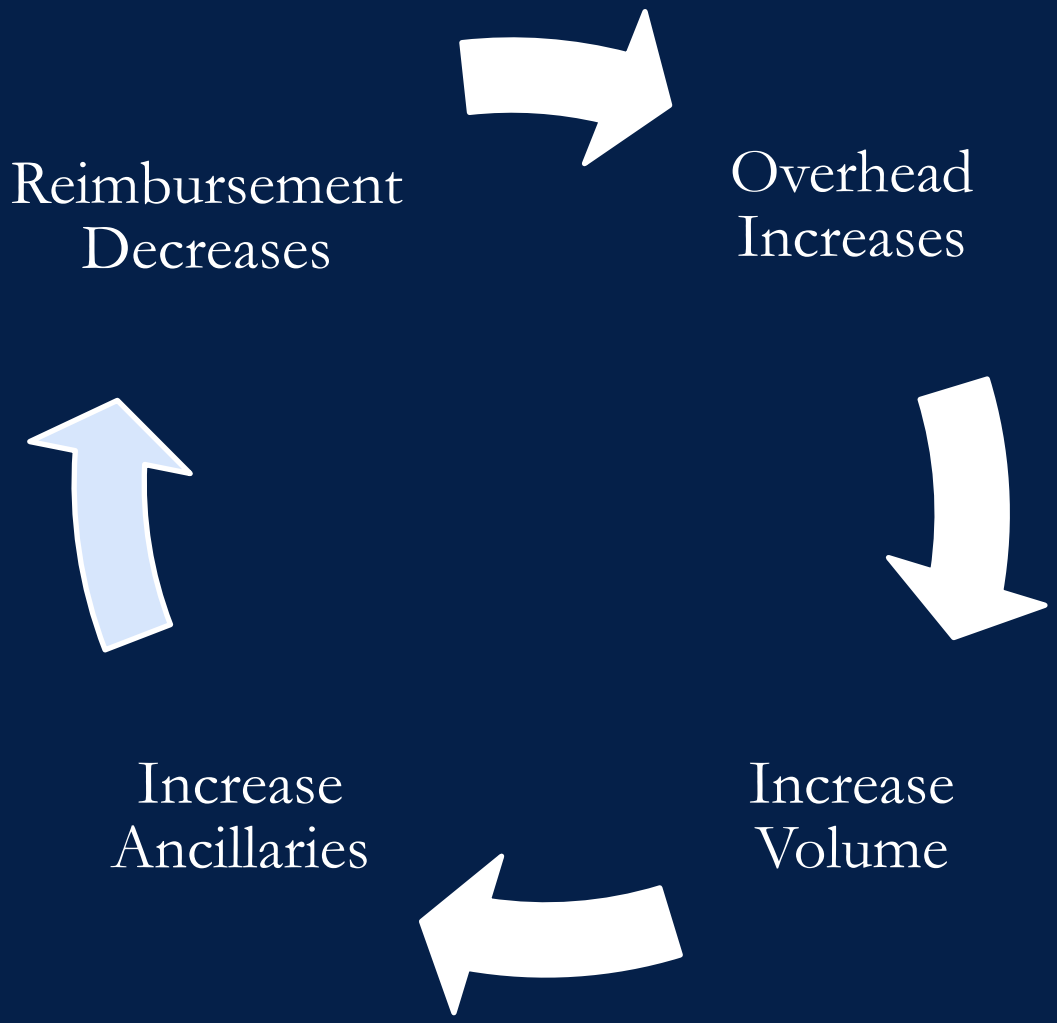
Death and Taxes



Move to ASCs for TJA

- Driven by market forces, accelerated by the pandemic

- Medicare Removal of TJA from inpatient only list and addition of TJA to ASC allowable list

- 2014 there were 25 ASCs offering TJA, this was 200 by 2017 and now over 500
  - Covid likely accelerated this
  - ASC management companies seeing massive increase in revenue from TJA
    - Surgery Partners, with a revenue of $543.3 million in the second quarter of 2021, saw TJA revenue almost double at ASCs in 2020 compared to 2019. That growth has continued into 2021 and increased 144% year over year in the second quarter

- Predicted 969,000 (51%) of hip and knee replacements will be performed in an outpatient setting by 2026 — up from 165,000 (15%) in 2016, (Sg2 Research).

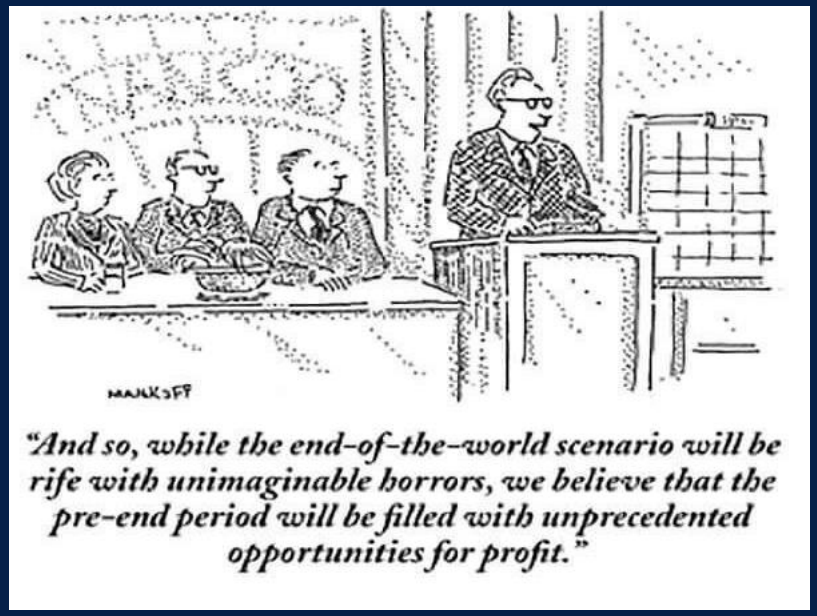
TJA in and ASC in the Medicare World

- Two reimbursement portions for TJA
  - Implants
    - Follows hospital Outpatient Prospective Payment System (OPPS)
  - Service
    - Approximately 40% lower than a hospital setting
    - Justified by CMS in the reduced overhead of ASCs

- Lowering of payment from commercial payers
- Competition between hospitals and ASC for the “least risky” patients
- Incentive to push the limits for patient safety in order to drive volume

The current landscape

- Smaller physician groups unable to compete in the era of consolidation and growth
- Medicare reimbursement driving decisions for TJA allocation and location
- Efficiency and Ancillary income unable to keep up with declining reimbursement
- And yet……Private orthopaedic market as a whole is attractive for “growth” investors



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Enter Private Equity

- Not new to medicine
  - Long term care
  - Family practice, dermatology, pediatrics, ophthalmology, anesthesia
- Relatively new to Orthopaedics
  - Pandemic accelerated what was already occurring financially

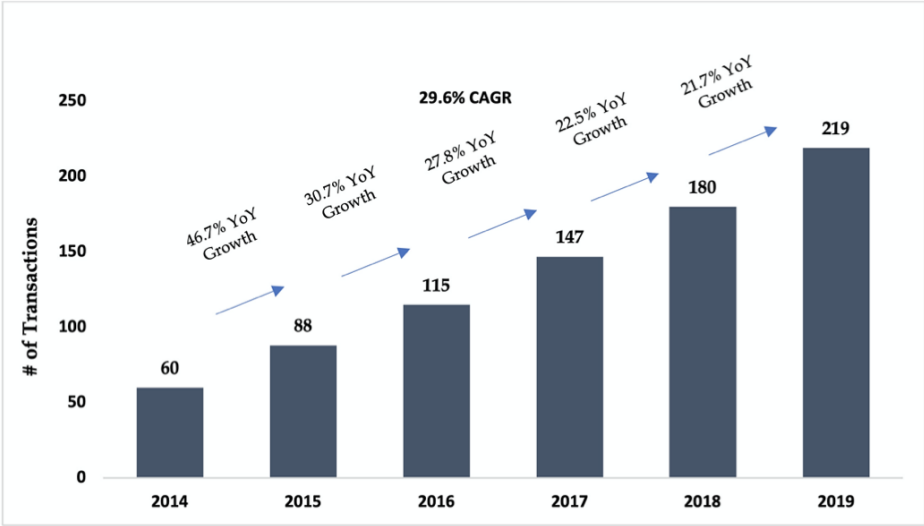
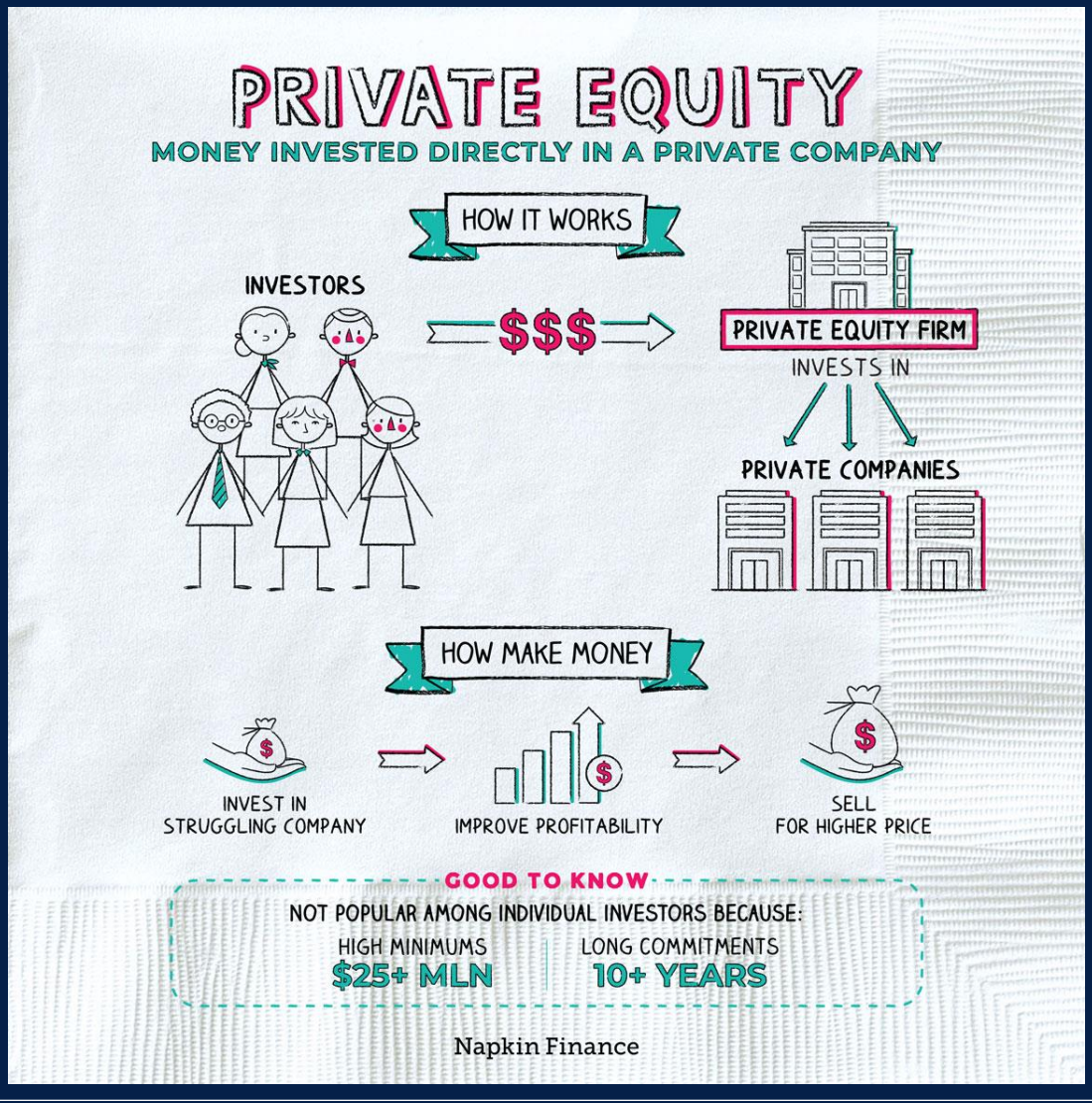


Figure A: U.S. Physician Group Total M&A Transactions by Year

Source: https://news.bloomberglaw.com/health-law-and-business/insight-health-care-consolidation-strong-in-2019-expect-even-stronger-2020.

What is Private Equity



https://napkinfinance.com/napkin/private-equity/

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Macro/micro-economic drivers for PE firms in Ortho

- Large number of smaller groups – Consolidation
- Reductions in payer reimbursement –Need to scale
- Increasing demand for MSK services with an aging population and elective surgery with a higher percentage being performed in ASCs every year
  - Supply/Demand imbalance

- Currently PE firms are flush with cash
  - Estimated $1.8 Trillion dollars allocated to healthcare
  - In 2017 Healthcare deals made up 18% of all PE deals worldwide

- Orthopaedic surgeons view that their long-term practice viability is at risk and can be monetized in the short term in a tax advantaged way
  - “Get what you can while you can” – FOMO if tax laws change
- Perceived threat of the competition of consolidation to smaller practices
- The need for resources and corporate leadership to enable significant group

How Does Private Equity work in Medicine?

- PE firms seeks a controlling interest in an orthopaedic practice – Buy Out
- Physician owners continue to own a minority stake with “roll-over” equity from the buyout
  - Share in the upside value of the practice post-transaction
  - Results in a large up-front tax advantaged payment (long term capital gains rate)
- Physicians retain “clinical control” while yielding “business control”

- Generally two types of transactions
  - Platform – initial investment in a practice
  - Add-on – growth by consolidation and acquisition of another practice.

- Then at some point in the future the firm adds on, consolidates, and eventually sells – “Recapitalizes”

received.

Sample Overview of Multiple Arbitrage

Company	Valuation Range	Rationale	EBITDA	Multiple	EV
Private Equity Platform Investment	7x - 9x	• Regional dominance • Established infrastructure	$5M	8x	$40M
Add-On Acquisition	4x - 6x	• First-mover advantage ensures less competition	$2M	5.0x	$10M
Combined Organization	10x - 12x +	• Value of add-on is enhanced as the organization benefits from premium demanded for the platform company • Combined organization leverages the infrastructure and regional dominance of platform • Synergies from centralizing back-office functions and increased leverage with payors enhance the EBITDA of the combined organization	$7M + $500K in synergies = $7.5M	10.0x	$75M

https://www.providenthp.com/wp-content/uploads/2020/03/Private-Equity-Investment-in-Orthopedics.pdf

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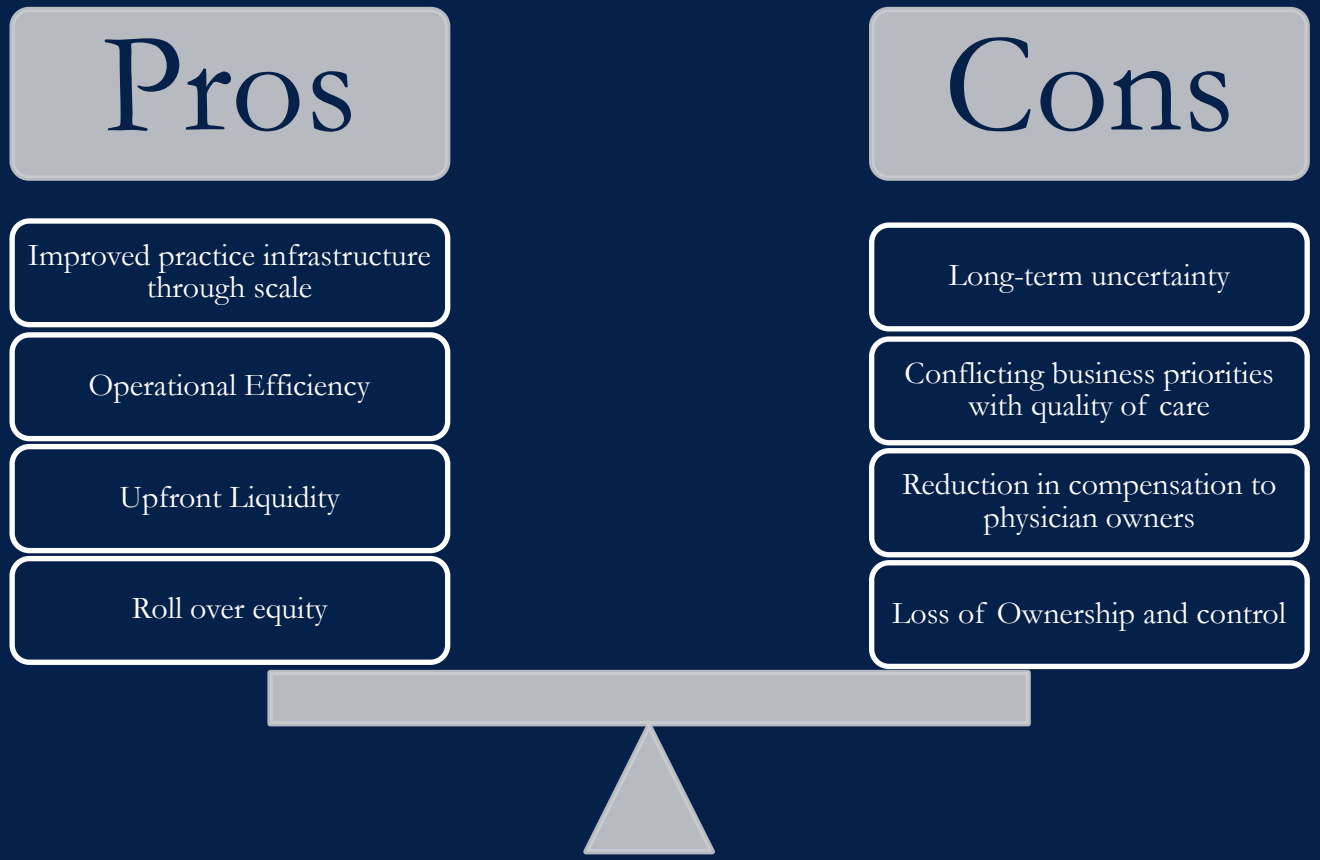
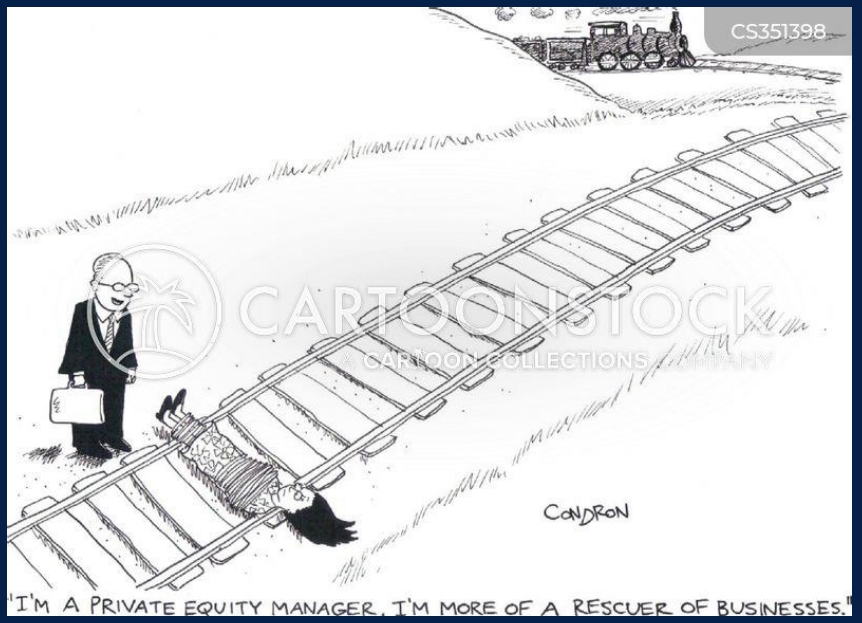

Pros
Improved practice infrastructure through scale
Operational Efficiency
Upfront Liquidity
Roll over equity
Cons
Long-term uncertainty
Conflicting business priorities with quality of care
Reduction in compensation to physician owners
Loss of Ownership and control

What is the scale of PE in medicine?



"I'm a private equity manager. I'm more a rescuer of businesses"

JAMA
American Medical Association

Private Equity Acquisitions of Physician Medical Groups Across Specialties, 2013-2016

Jane M. Zhu, MD, MPP, MSHP, Lynn M. Hua, BA, and Daniel Polsky, PhD, MPP

- 2013-2016
- 355 practice acquisitions out of ~18000

Table 2.

Specialties of Medical Groups and Physicians Among Those Acquired by Private Equity Firms, 2013-2016

Specialty (Specialist Description)	Specialty Practices					Specialty Physicians				
	Total, No. (%)[a]	Year of Acquisition[b]				Total, No. (%)[a]	Year of Acquisition[b]			
		2013	2014	2015	2016		2013	2014	2015	2016
Total	355 (100)	59	72	88	136	5714 (100)	843	1413	1576	1882
Anesthesiology (anesthesiologist)	69 (19.4)	10	20	15	24	1894 (33.1)	246	593	458	597
EM (emergency physician)	43 (12.1)	10	6	10	17	901 (15.8)	150	184	148	419
Family practice (family practitioner)	39 (11.0)	7	9	6	17	515 (9.0)	90	123	164	138
Dermatology (dermatologist)	35 (9.9)	1	5	11	18	334 (5.8)	11	26	86	211
Pediatrics (pediatrician)	20 (5.6)	4	8	5	3	166 (2.9)	9	61	57	39
Internal medicine (internist)	12 (3.4)	2	5	2	3	365 (6.4)	64	183	79	39

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What about orthopaedics?

- Until Covid orthopaedics was relatively untouched by PE
  - High cost of entry
  - High independence valuation by practitioners
  - High revenue - no need to sell

- In 2020 there were eight PE firms investing in orthopaedics
- By 2022 this had grown to 14 firms expected to grow to 20 by end of 2022
  - Over 30 transactions in 2021

https://focalpointllc.com/update-private-equity-partnerships-with-orthopedic-groups-current-state-key-considerations/

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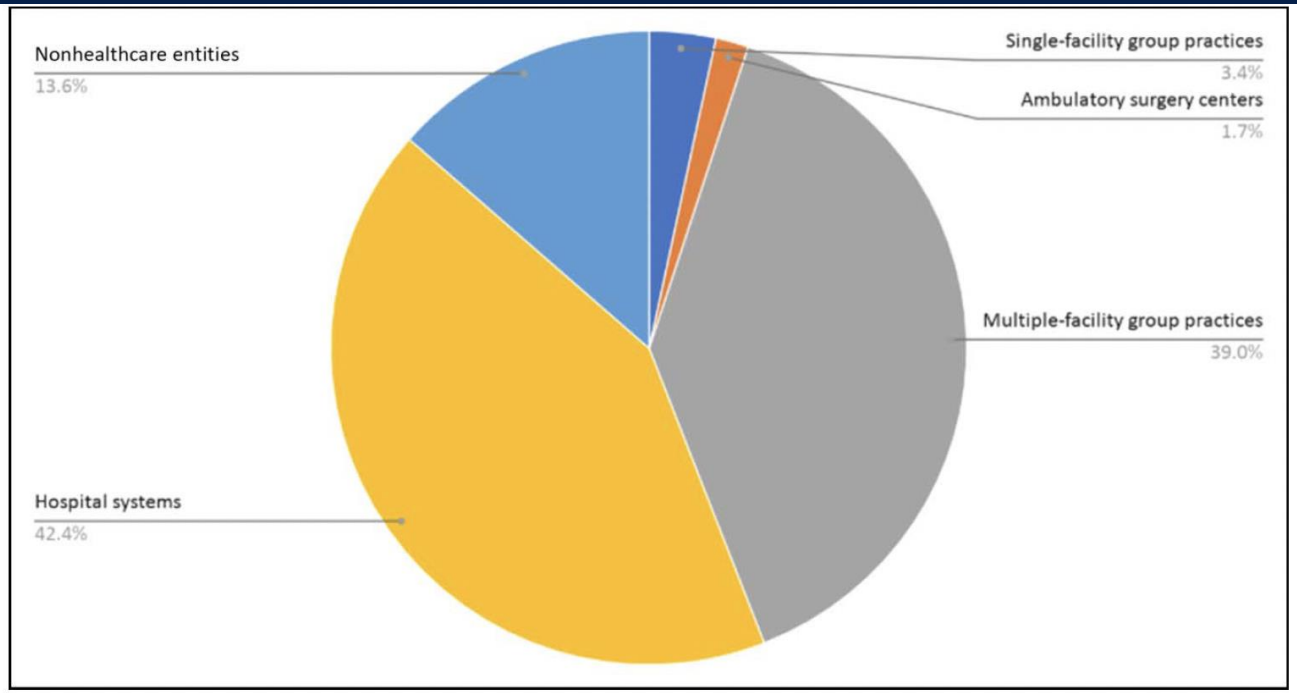
Trends in Private Equity Acquisition of Orthopaedic Surgery Practices in the United States

Christopher Mikhail, MD
Dhruv Shankar, BS
Amir Taree, BA
Kush Mody, BS
Joseph Barbera, MD
Jeffrey Okewunmi, BS
Samuel Cho, MD
Shawn Anthony, MD, MBA

Journal of the AAOS Global Research & Reviews® | December 2021, Vol 5, No 12

- Deals from 2010 and 2019 was compiled from four business databases: S&P Capital IQ, CB Insights, ThomsonONE, and Zephyr.
- 68 Deals, only 5 (7.4%) PE funded



Pie chart showing composition of orthopaedic practice buyers from 2010 to 2019.

Recent Trends in Private Equity Acquisition of Orthopaedic Practices in the United States

JAAOS® | April 15, 2022, Vol 30, No 8 |

Venkat Boddapati, MD
Nicholas C. Danford, MD
Cesar D. Lopez, MD
William N. Levine, MD
Ronald A. Lehman, MD
Lawrence G. Lenke, MD

- Cross sectional study using financial databases Thomson ONE, Capital IQ, Zephyr, CB Insights, and Private Equity Hub and publicly available data.

Table 2. Annual Number of Acquisitions 2010 to 2019

Annual Deal Volume (No. of Acquisitions)										% Change	
2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	% Overall Change	CAGR
1	1	0	0	0	2	4	7	12	10	900.0	29.2

CAGR = Compound Annual Growth Rate

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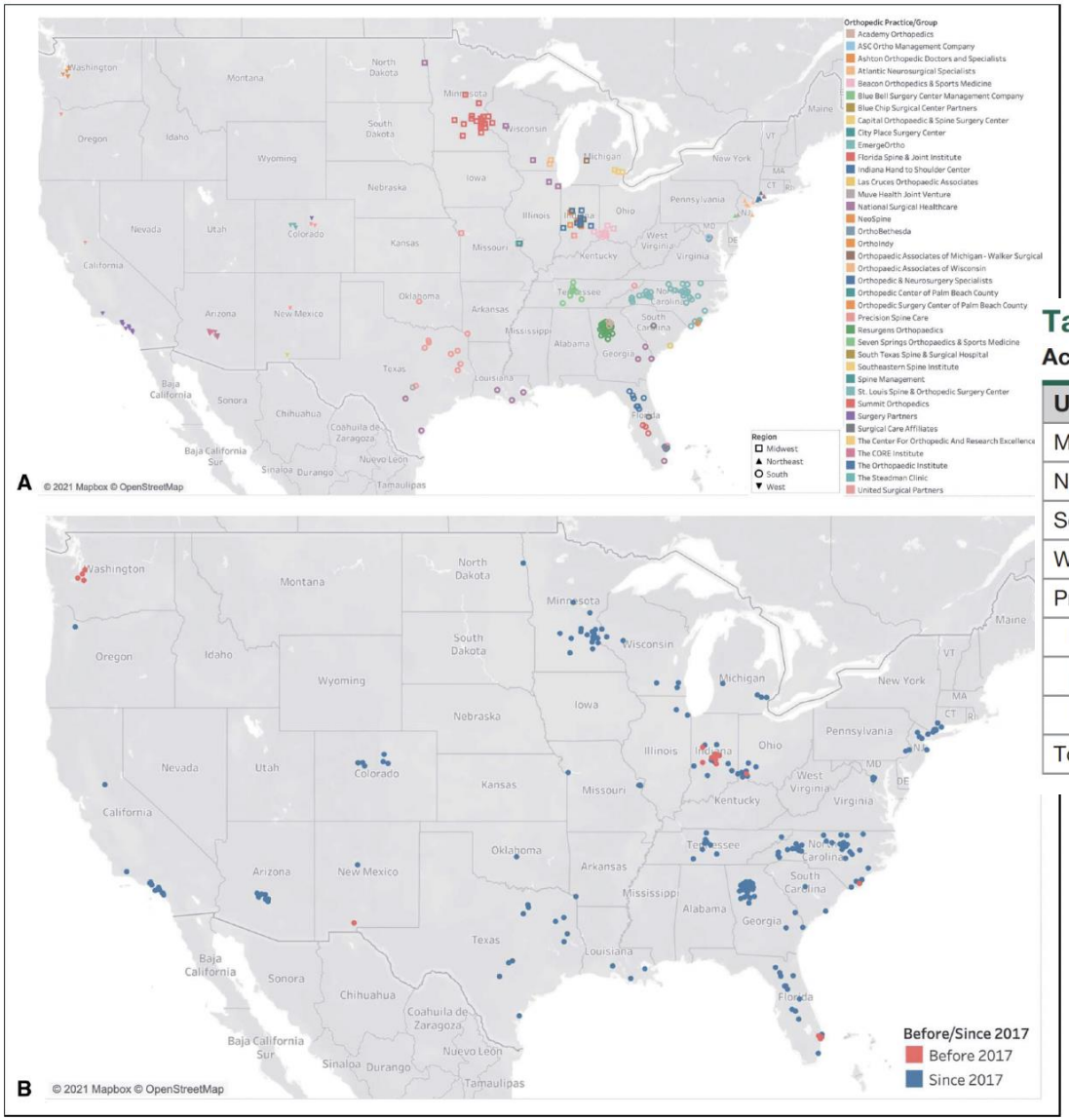
Figure 1



A, Map showing private equity acquisitions of US orthopaedic practices. **B**, Private equity acquisitions of US orthopaedic practices before and after 2017.

Table 3. Geographic Variations in Private Equity Acquisitions

US Census Region	No. of Acquisitions	%
Midwest Region	3	7.3
Northeast Region	11	26.8
South Region	21	51.2
West Region	6	14.6
Practice setting		
Major metropolitan area	29	70.7
Mid-sized metropolitan area	7	17.1
Rural	5	12.2
Total	41	—

So…..What Happens Next?

- What happens to patients?
- What happens to physicians?
- What happens to practices?

What is the Evidence?

Association of Private Equity Investment in US Nursing Homes With the Quality and Cost of Care for Long-Stay Residents

Robert Tyler Braun, PhD, Hye-Young Jung, PhD, [...], and Mark Aaron Unruh, PhD

- Cohort study of 9864 nursing homes, all for-profit, 302 PE backed
  - Looked at changes after acquisition
- Increases in emergency department visits - 11.1%, hospitalizations - 8.7%
- Quarterly costs increased 3.9% or $1081 annually per resident.
- No difference in pressure ulcers or severe pain

JAMA Health Forum. 2021 Nov; 2(11): e213817.
Published online 2021 Nov 19.
doi: 10.1001/jamahealthforum.2021.3817

- Other studies mixed
- Increase in staffing and 5-star ratings
  - Gupta A, Howell ST, Yannelis C, Gupta A. Does Private Equity Investment in Healthcare Benefit Patients? Evidence From Nursing Homes. Working paper 28474. NBER working paper series. National Bureau of Economic Research; 2021.
- Decrease in staffing and 5-star ratings
  - Gandhi A, Song Y, Upadrashta P. Private equity, consumers, and competition: evidence from the nursing home industry.

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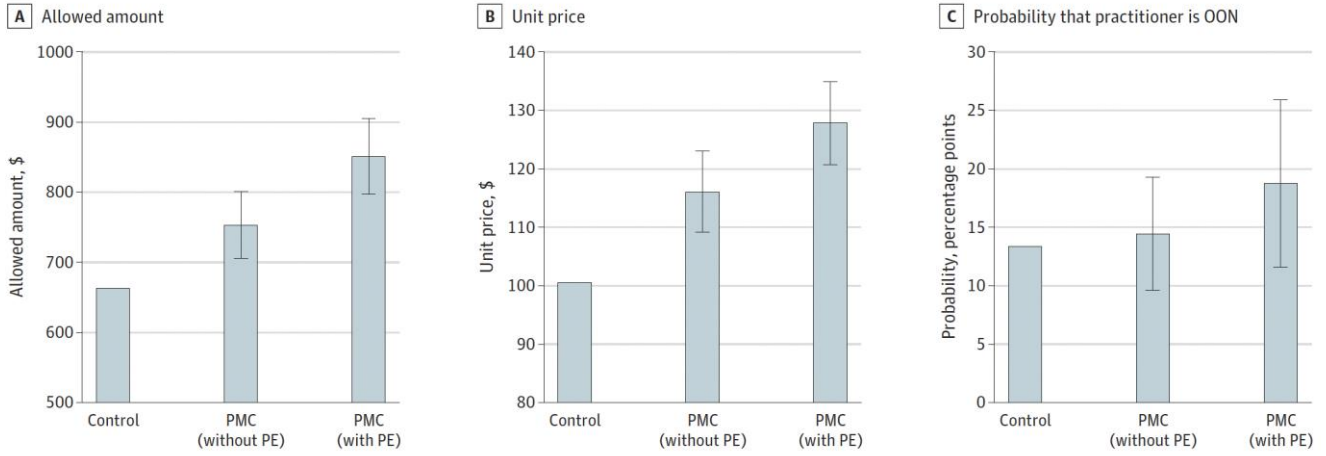
JAMA Internal Medicine | Original Investigation

Association of Physician Management Companies and Private Equity Investment With Commercial Health Care Prices Paid to Anesthesia Practitioners

Ambar La Forgia, PhD; Amelia M. Bond, PhD; Robert Tyler Braun, PhD; Leah Z. Yao, BS; Klaus Kjaer, MD, MBA; Manyao Zhang, MA; Lawrence P. Casalino, MD, PhD

Figure 2. Adjusted Differential Changes in Outcomes Associated With Physician Management Company (PMC) Contract With and Without Private Equity (PE) Investment



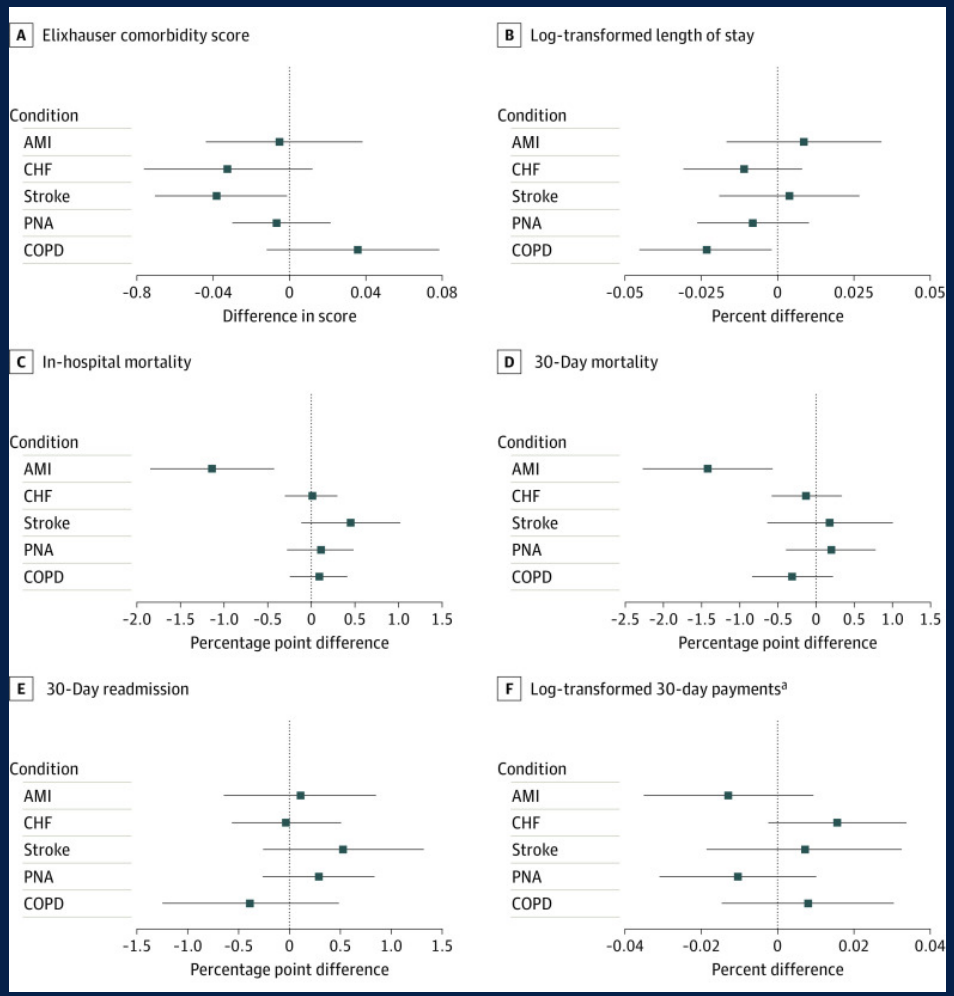
Adjusted difference-in-differences estimates from the specification interacting the post-PMC contract indicator with an indicator for whether the PMC received PE investment, relative to the regression-adjusted mean value of the control facilities, are shown. Therefore, the difference between the height of the PMC bars and the control bar represents the differential change in each outcome relative to control facilities, with the corresponding 95% CIs (error bars). The regression-adjusted difference (95% CI) between PMCs with PE relative to without PE is as follows: +$97.18 ($35.38 to $158.97) for allowed amounts, +$11.71 ($4.46to $18.95) for unit prices, and +4.34 percentage points (−2.11 to 10.79) for the probability that a practitioner is out-of-network (OON). See eTable 9 in the Supplement for the regression output.

JAMA Network Open
American Medical Association

Association Between Hospital Private Equity Acquisition and Outcomes of Acute Medical Conditions Among Medicare Beneficiaries

Marcelo Cerullo, MD, MPH, Kelly Yang, MA, [...], and Anaeze C. Offodile, 2nd, MD, MPH

- Patients 66 and older admitted for AMI, acute stroke, CHF exacerbation, COPD exacerbation, and pneumonia
- Compared 3 years prior to PE acquisition of hospitals to 3 years after for 2001-2018
- Differences in differences approach to analysis
- 20 million non-PE hospital patients compared to 660k PE hospital patients
- Modest mortality benefit for AMI patients



JAMA Netw Open. 2022 Apr; 5(4): e229581.
Published online 2022 Apr 29. doi: 10.1001/jamanetworkopen.2022.9581

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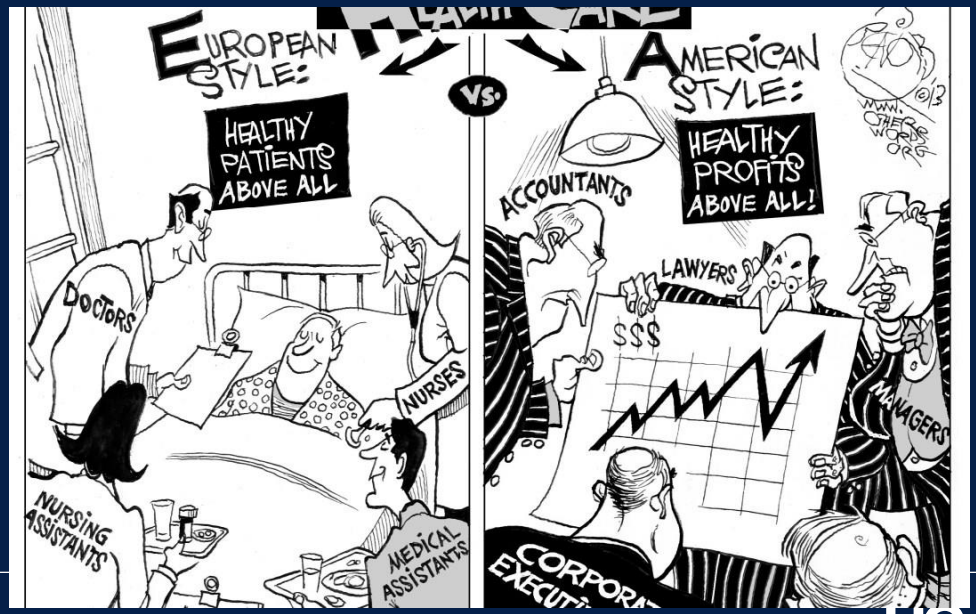
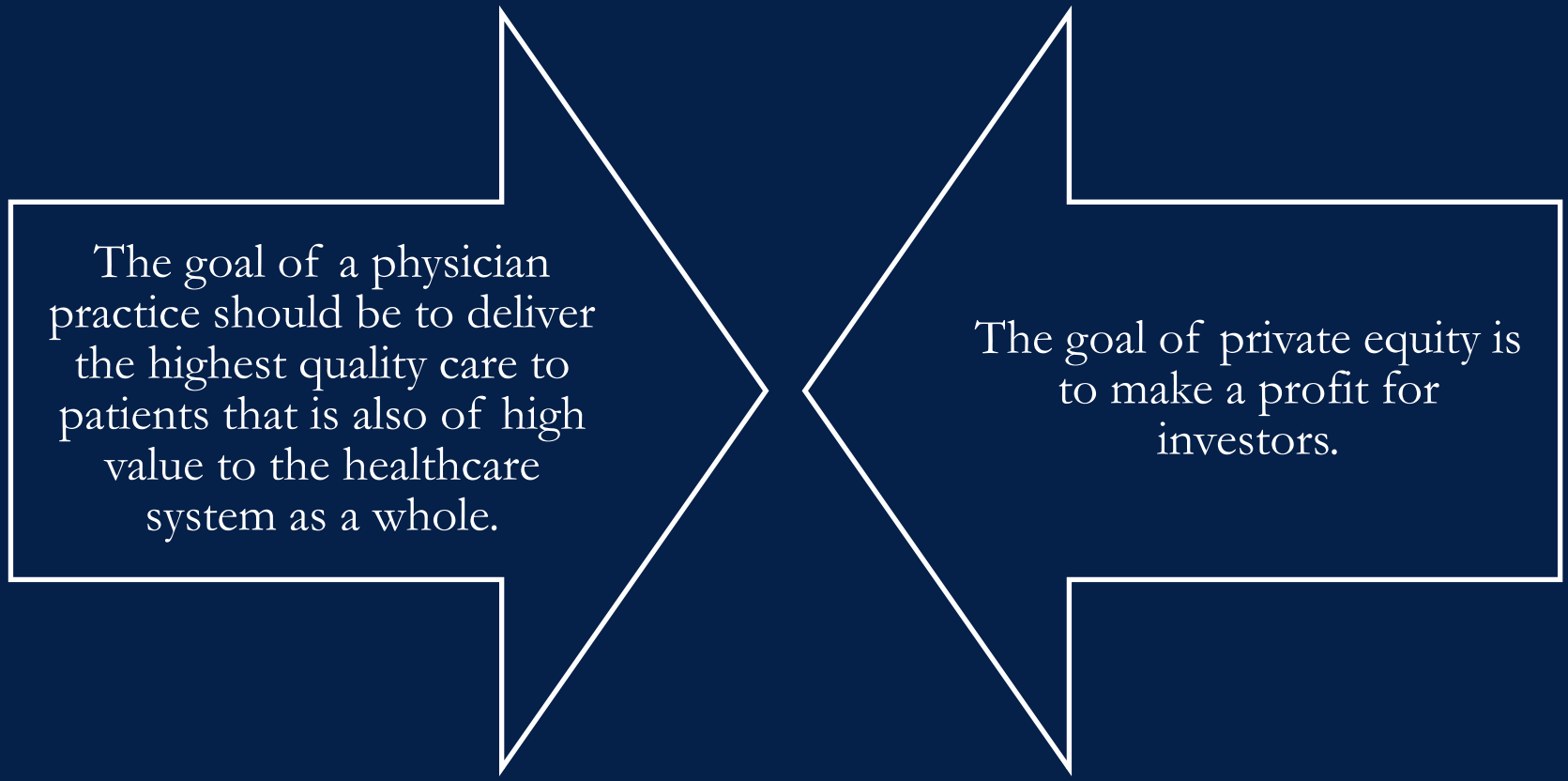
But….. What happens next?

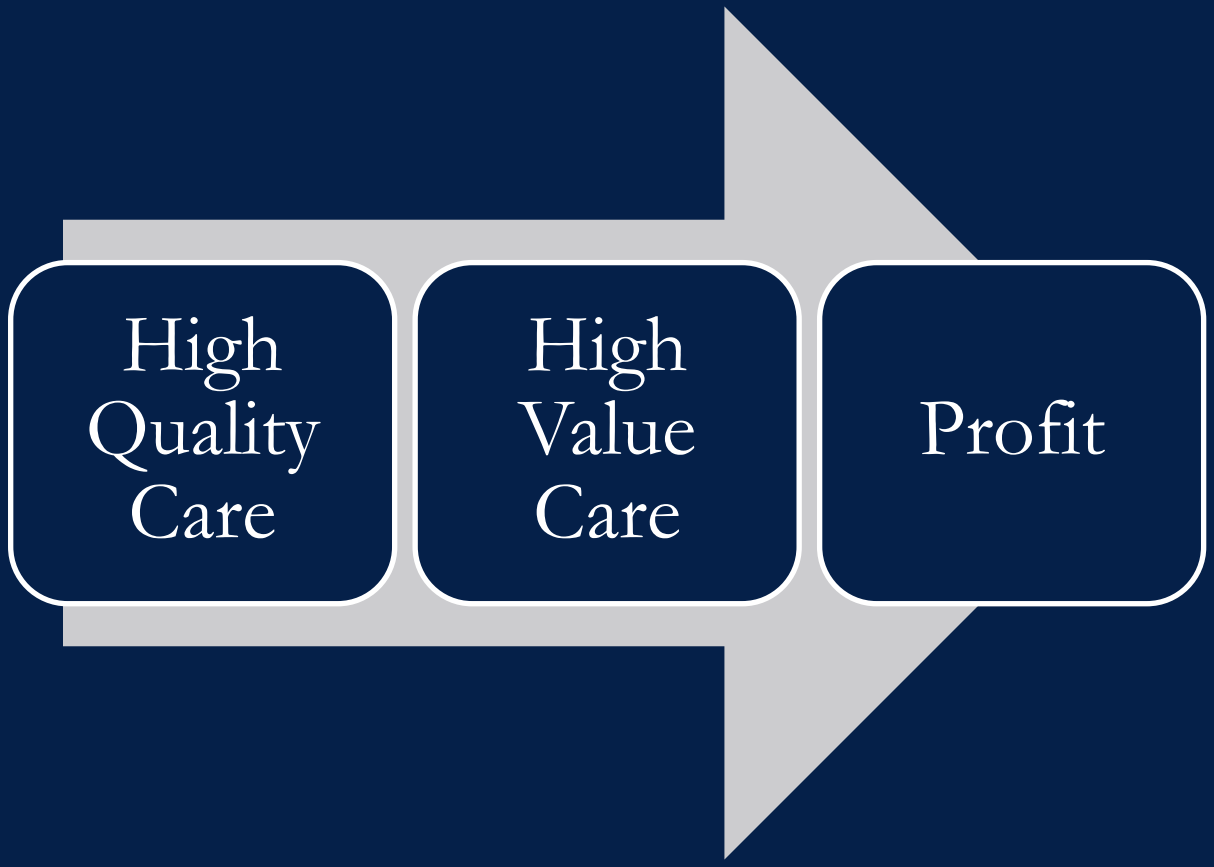
- What happens to the next partner who joins the practice?
- What happens when costs are cut and prices rise for patients and payers?
- What happens when the PE firm sells to the next firm?
- Where is the patient in all of this?



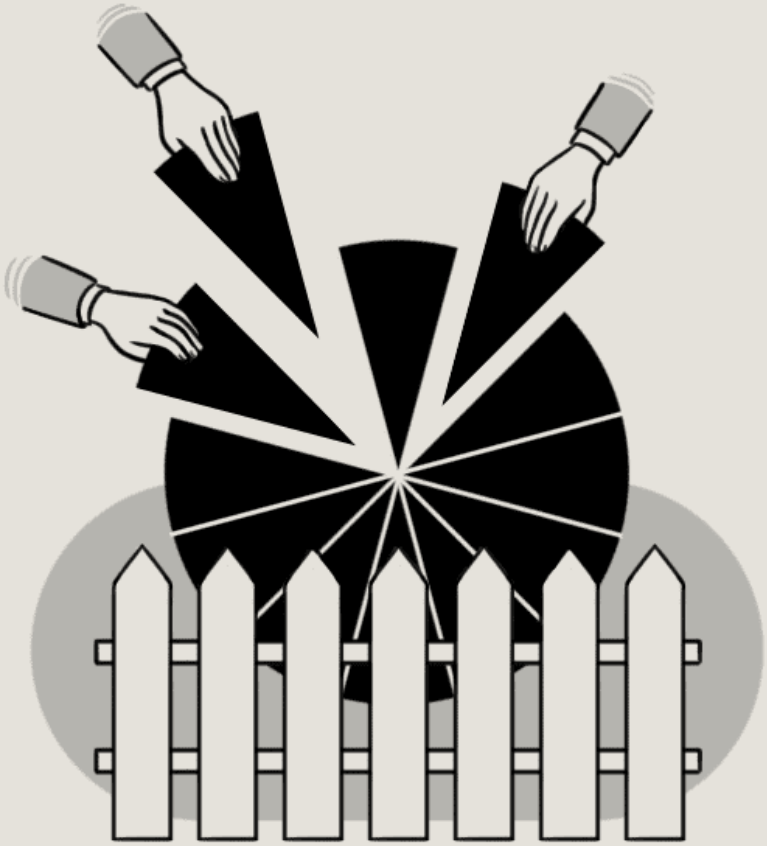
Ethical Conundrum



Ethical Conundrum



Private Equity Serves Investors by Definition



Private Equity

['prī-vət 'e-kwə-tē]

A type of alternative investment in which the investors purchase shares in privately-held businesses.

This is who we serve, this is who we are

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The future

- Private equity may in fact be good for orthopaedic surgery and our patients…..but the ethics are not clearly aligned
  - We may get more than we bargained for
- This is a symptom of overall problems in healthcare
  - Declining reimbursement, increasing administrative burden
- Consolidation will continue, private equity will likely play an increasing role

Conclusion

- Although it remains a small portion of orthopaedic business, private equity is increasing
- Evidence is lacking to draw any real conclusions
- As a profession we must be diligent and cautious to continue to serve our patients in their best interests

Thank You!

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