



INDIANA

ORTHOPEDIC

INSTITUTE



INDIANA

JOINT REPLACEMENT

INSTITUTE

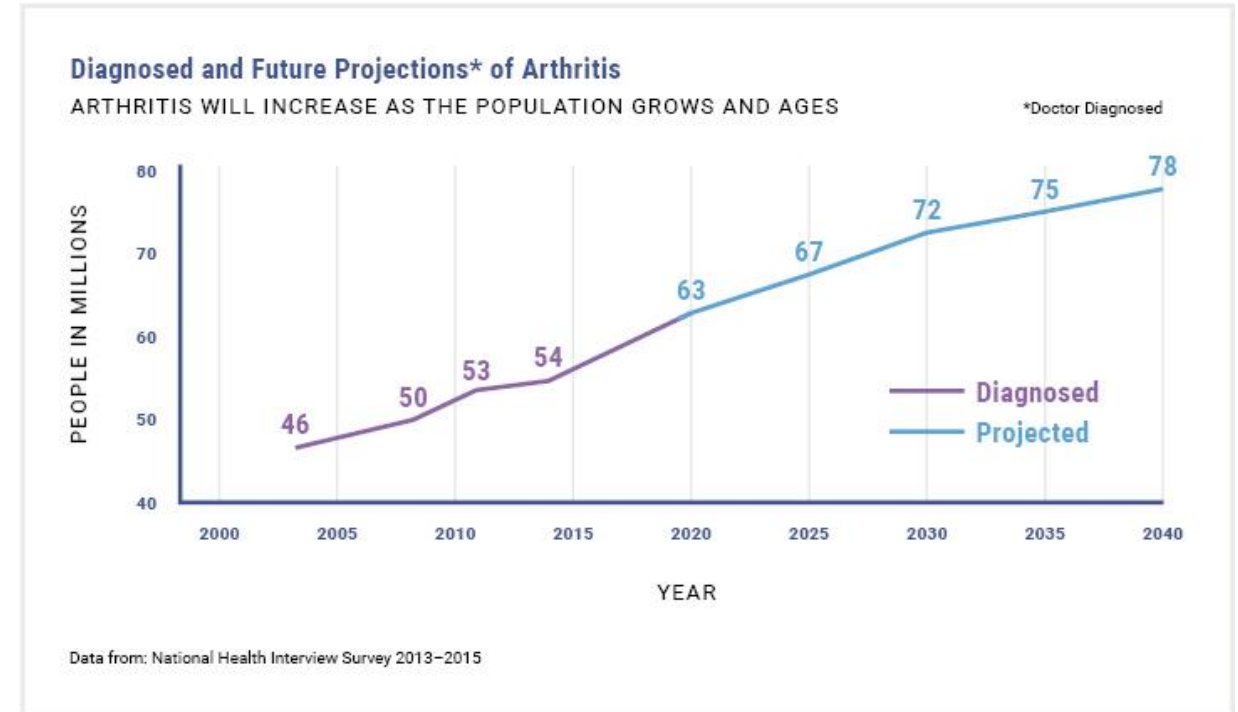
**A new approach to hip and
knee replacements**

3/18/25



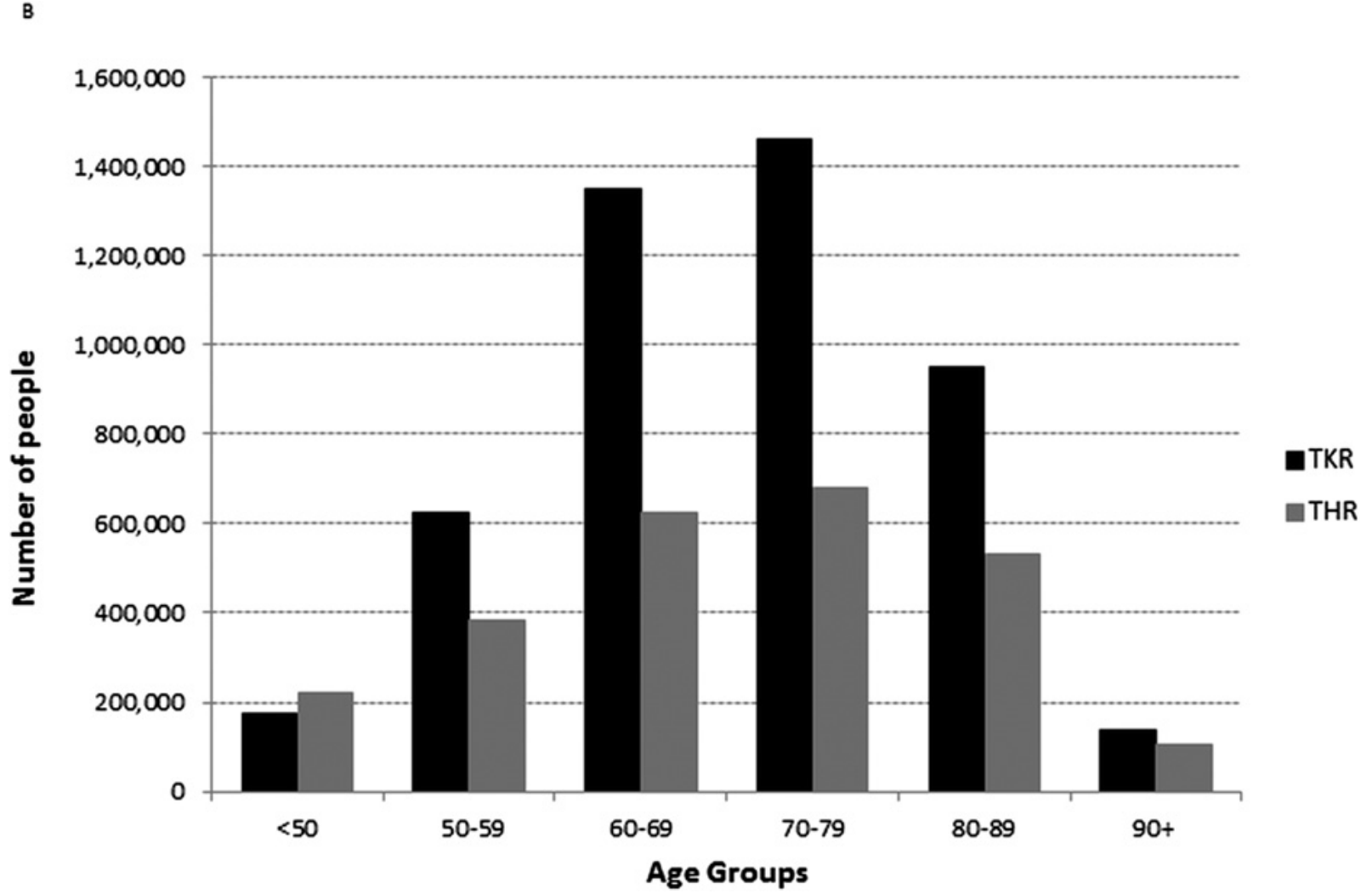
Incidence of arthritis

- 1 in 5 adults in the US are diagnosed with arthritis
- Approximately 63 million people
 - Predicted to increase to 78 million people by 2040
- More common in females than males

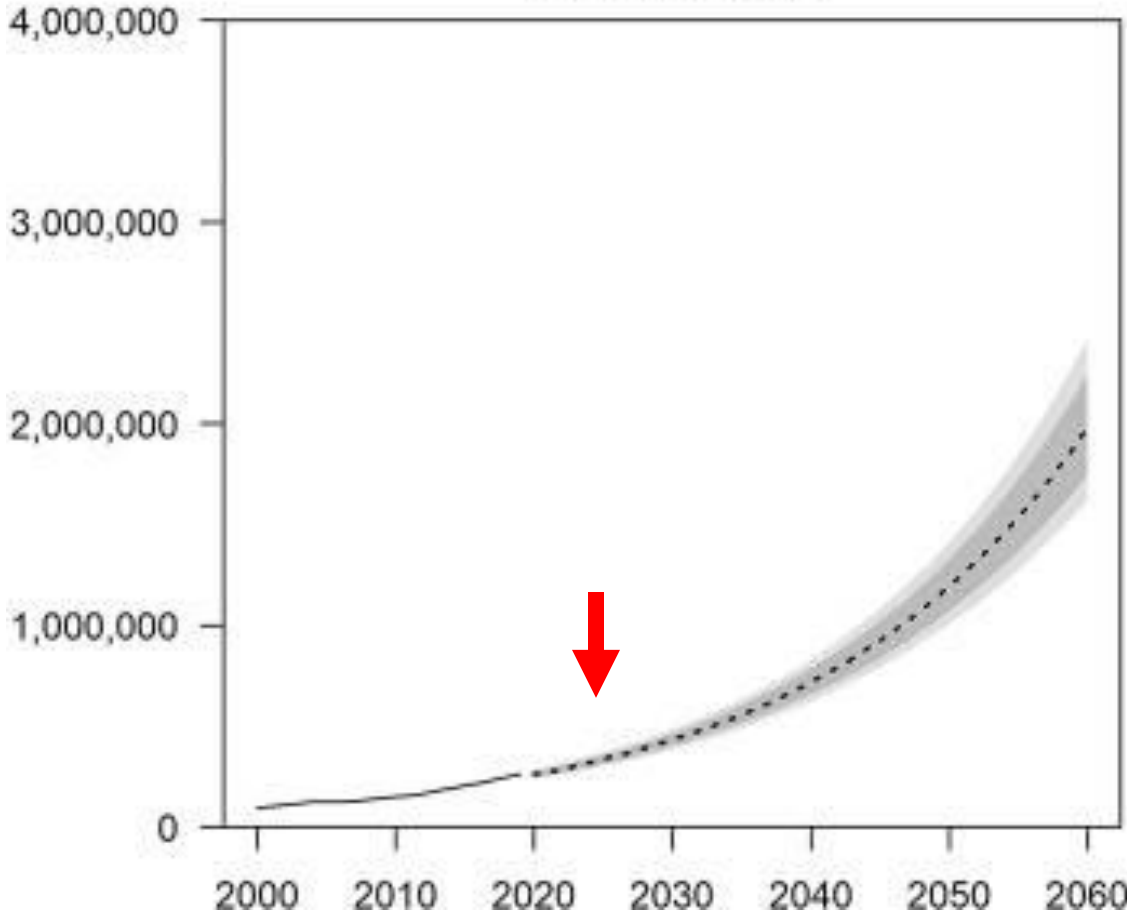


2010 US data

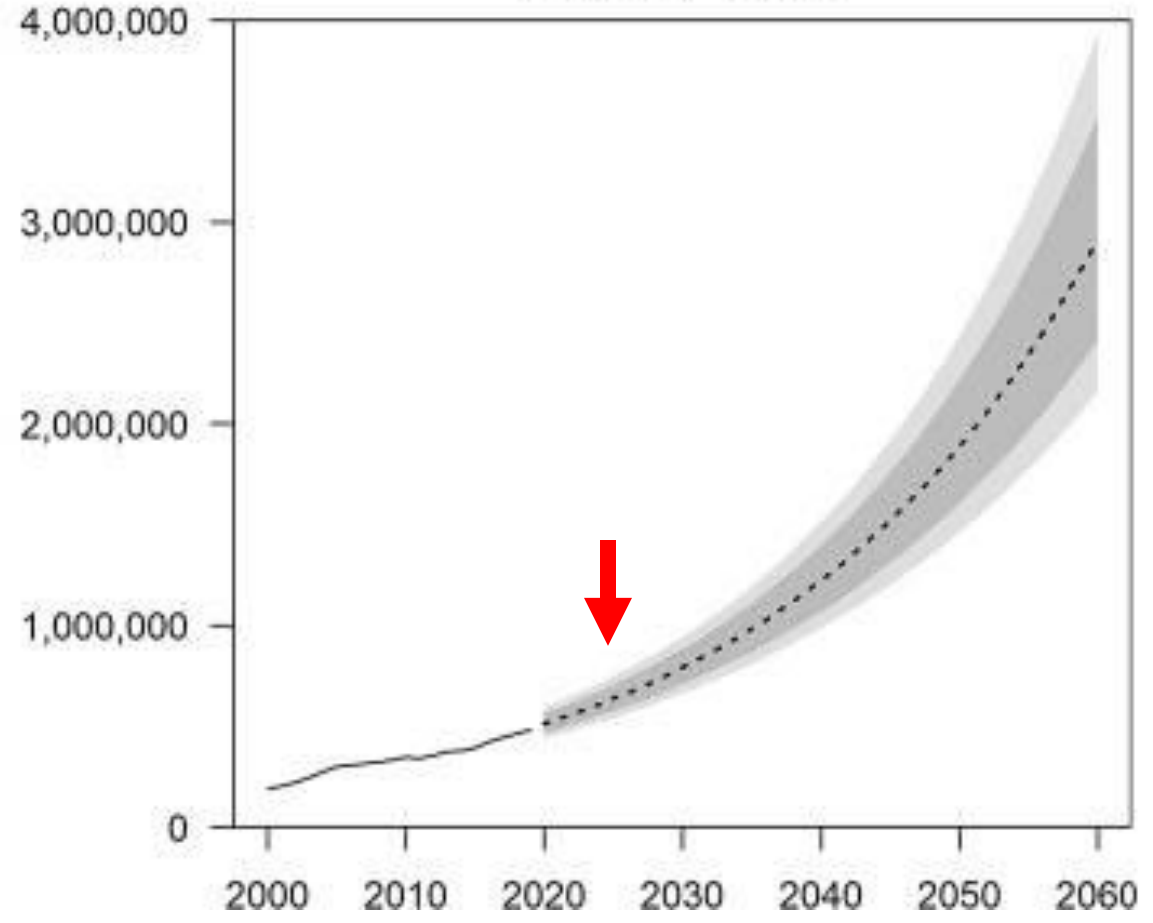
- 0.83% THA
- 1.52% TKA



Primary THAs



Primary TKAs



Job Opportunity

EMPLOYMENT

Accounting 107
Administrative/Clerical 110
Sales 120

Inventory
Legal Administrative
Legal Employment

ION AT:
2005

WHAT'S IMPORTANT

“As orthopaedic surgeons, we work in complex clinical settings with countless stakeholders. However, we must always remember that the patient is the primary stakeholder and the core reason that we should strive for systems improvement. While many care delivery processes work well, most have room for improvement.”

David N. Bernstein, MD, PhD, MBA, MEI, Robert Kaspar Wagner, MD,
Jacob S. Borgida, BS, Mitchel B. Harris, MD, and Thuan V. Ly, MD

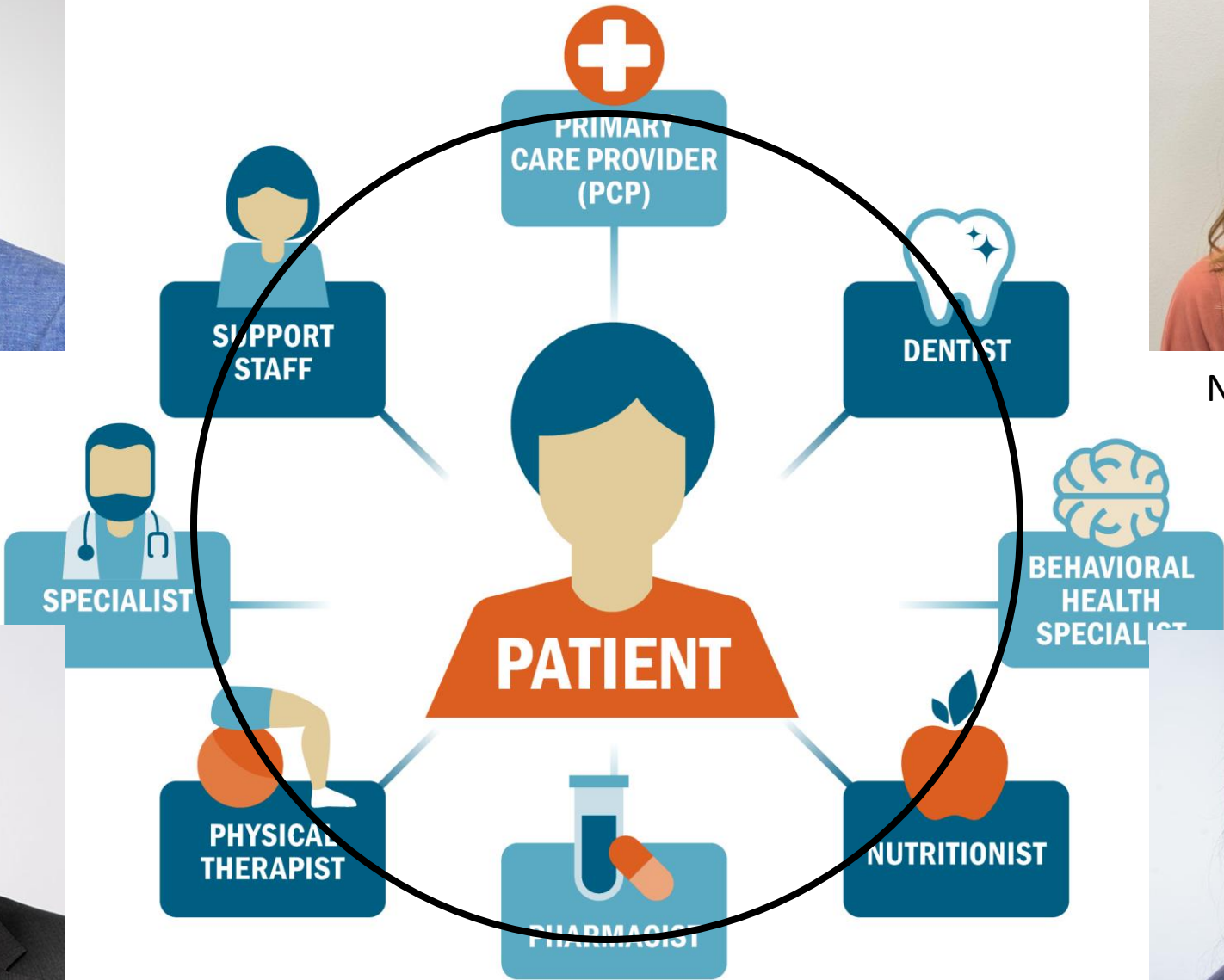
Vertical Integration



Anesthesia



Nurse practitioner



Anesthesia



Clinical operations

Paradigm shift

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Control

- Streamlined anesthesia protocol for faster recovery
- Streamlined OR protocol for quicker surgery
- Nursing protocols specific for joints patients
- PT for safe discharge home
- Avoid confusion!
- <1% surgical site infection
- Lower readmission rates than inpatient surgery
- Greater pain relief, mobility



Table 1

Utilization of Primary Total Joint Arthroplasty in Ambulatory Surgical Centers From 2020 to 2022.

Descriptions	2019	2020	2021	2022	% Change	P Value
Total TJA Services	436,353	355,078	410,108	462,708	6.1	0.980
ASC Services	N/A	9,290	26,710	39,675	327.1	0.054
ASC TKA	N/A	9,290	19,024	27,291	193.8	0.034
ASC THA	N/A	N/A	7,686	12,384	61.1	N/A
% of Total services	N/A	2.6	6.5	8.6	228.5	0.109

% Change was calculated from the first available datapoint; P value from linear regression, bolded values are P values < 0.05.

TKA, total knee arthroplasty; THA, total hip arthroplasty; TJA, total joint arthroplasty; ASC, ambulatory surgical center.

Table 3

Payment for Primary Total Knee Arthroplasty Performed at Ambulatory Surgical Centers Versus Hospital Outpatient Department Versus Inpatient Hospital From 2019 to 2022.

Description	Variables	Year				% Change	P Value
		2019	2020	2021	2022		
ASC TKA	Reimbursement (\$)	N/A	8,190.0	8,337.8	8,472.3	3.4	0.018
	Adjusted Reimbursement (\$)	N/A	9,252.9	9,004.8	8,472.3	-8.4	0.128
HOPD TKA	Reimbursement (\$)	10,355.5	11,625.6	11,868.5	11,963.8	15.5	0.123
	Adjusted Reimbursement (\$)	11,852.5	13,145.3	12,817.3	11,963.8	0.9	0.99
Inpatient TKA	Reimbursement (\$)	13,597.0	14,075.4	13,973.9	14,422.0	6.1	0.097
	Adjusted Reimbursement (\$)	15,563.1	15,915.4	15,091.2	14,422.0	-7.3	0.151

% Change was calculated from the first available datapoint; P value from linear regression, bolded values are P values < 0.05; Adjusted Reimbursement, inflation-adjusted to 2022 U.S. dollar.

TKA, total knee arthroplasty; ASC, ambulatory surgical center; N/A, not found; HOPD, hospital outpatient department.

Every step matters

- Moment patient calls to make appt
- Gather information
- Arrive for appointment
- Discussion re: treatment
- Injection, therapy
- Info packets
- Arriving for surgery
- Preop
- Anesthesia
- PACU
- PT
- Discharge

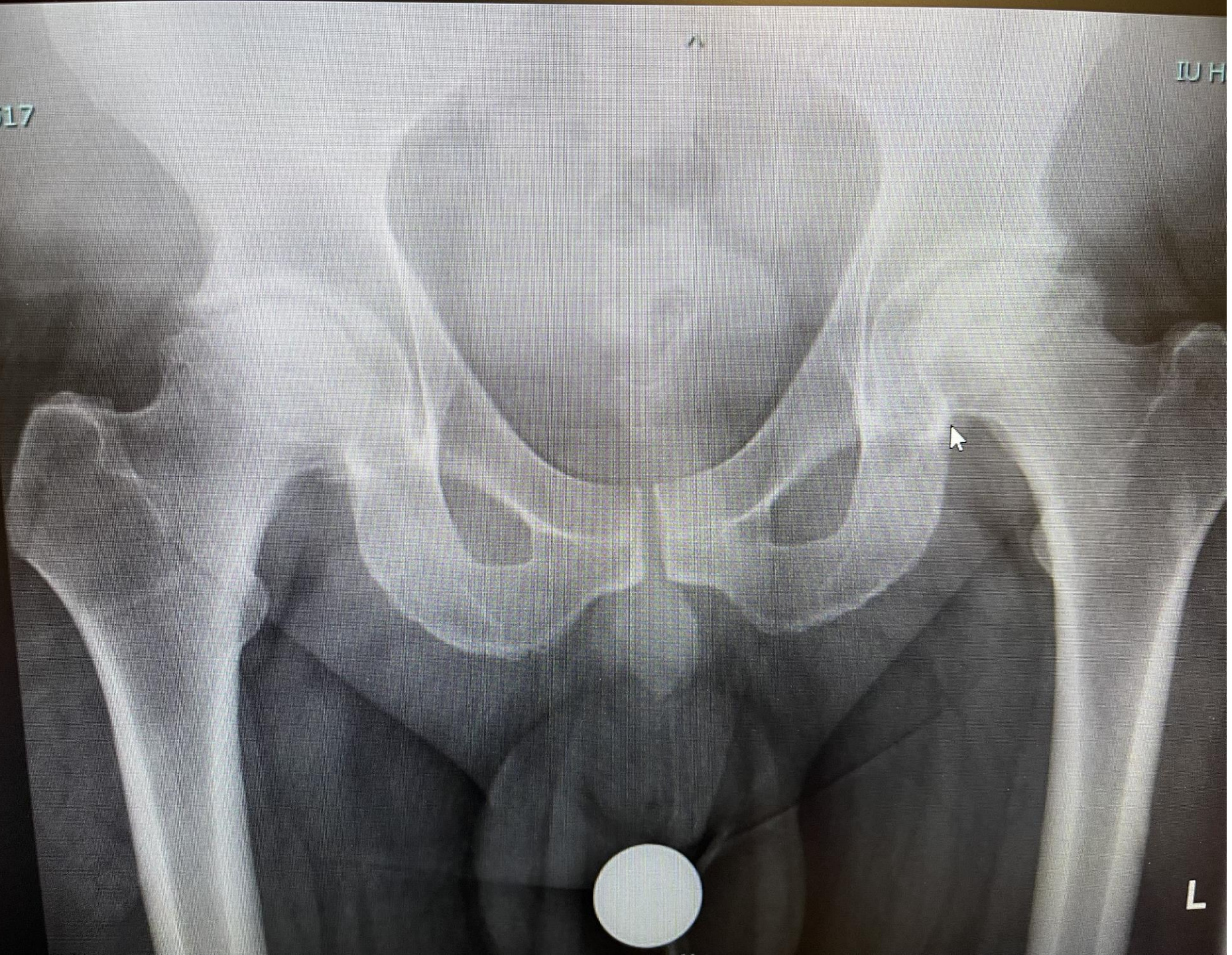
Hips

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Every decision matters

 39M

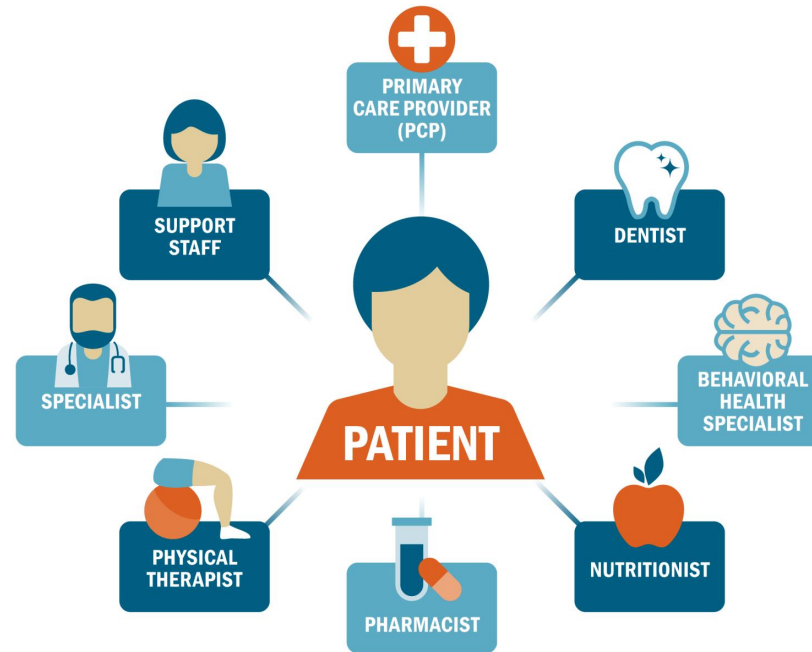
 Laborer, contractor

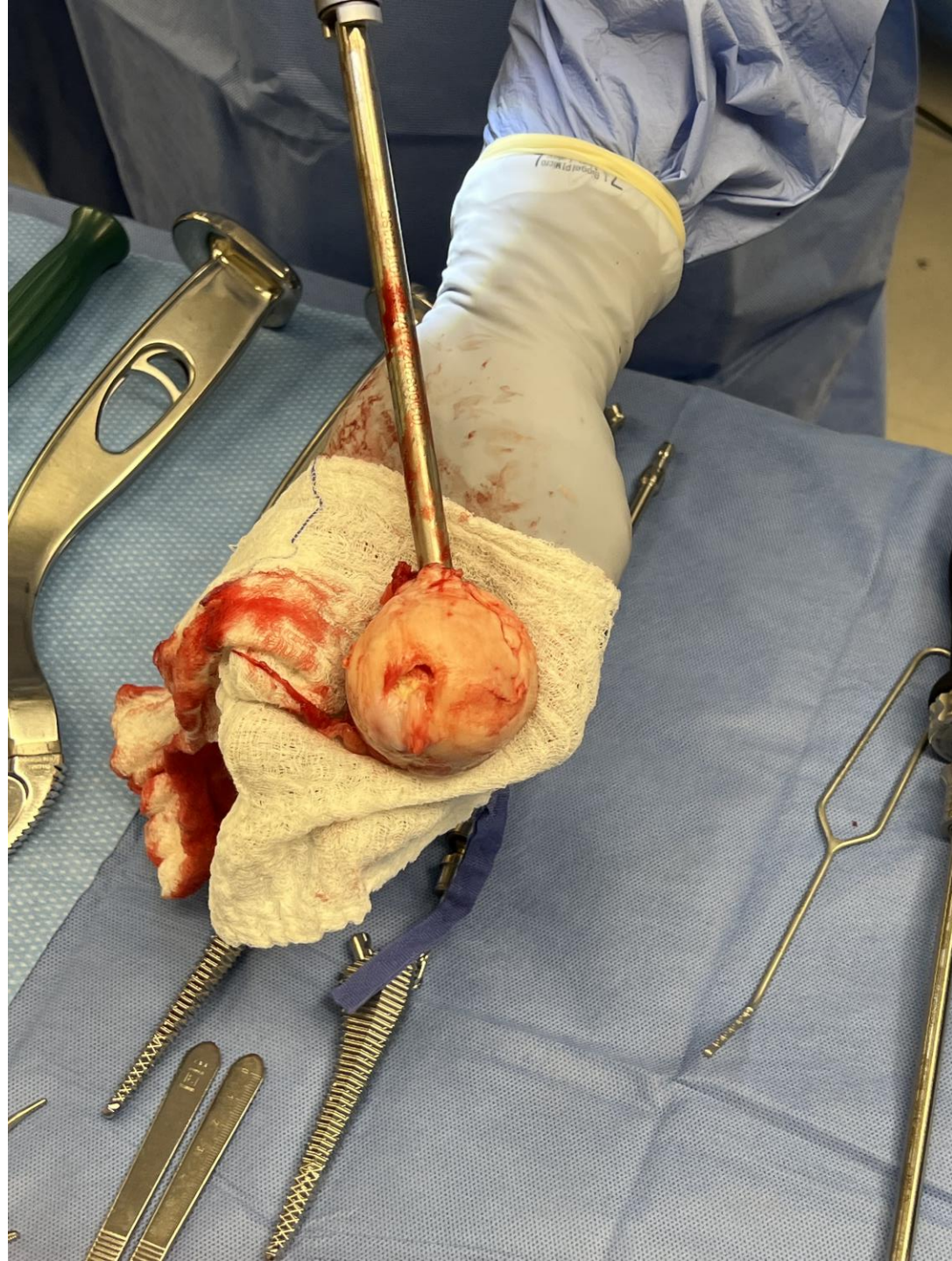
 “if I don’t work, I don’t eat”

 Tried/failed NSAIDs, activity modification, multiple injections

- Referred by outside surgeon for anterior hip
- 124 kg, BMI 40

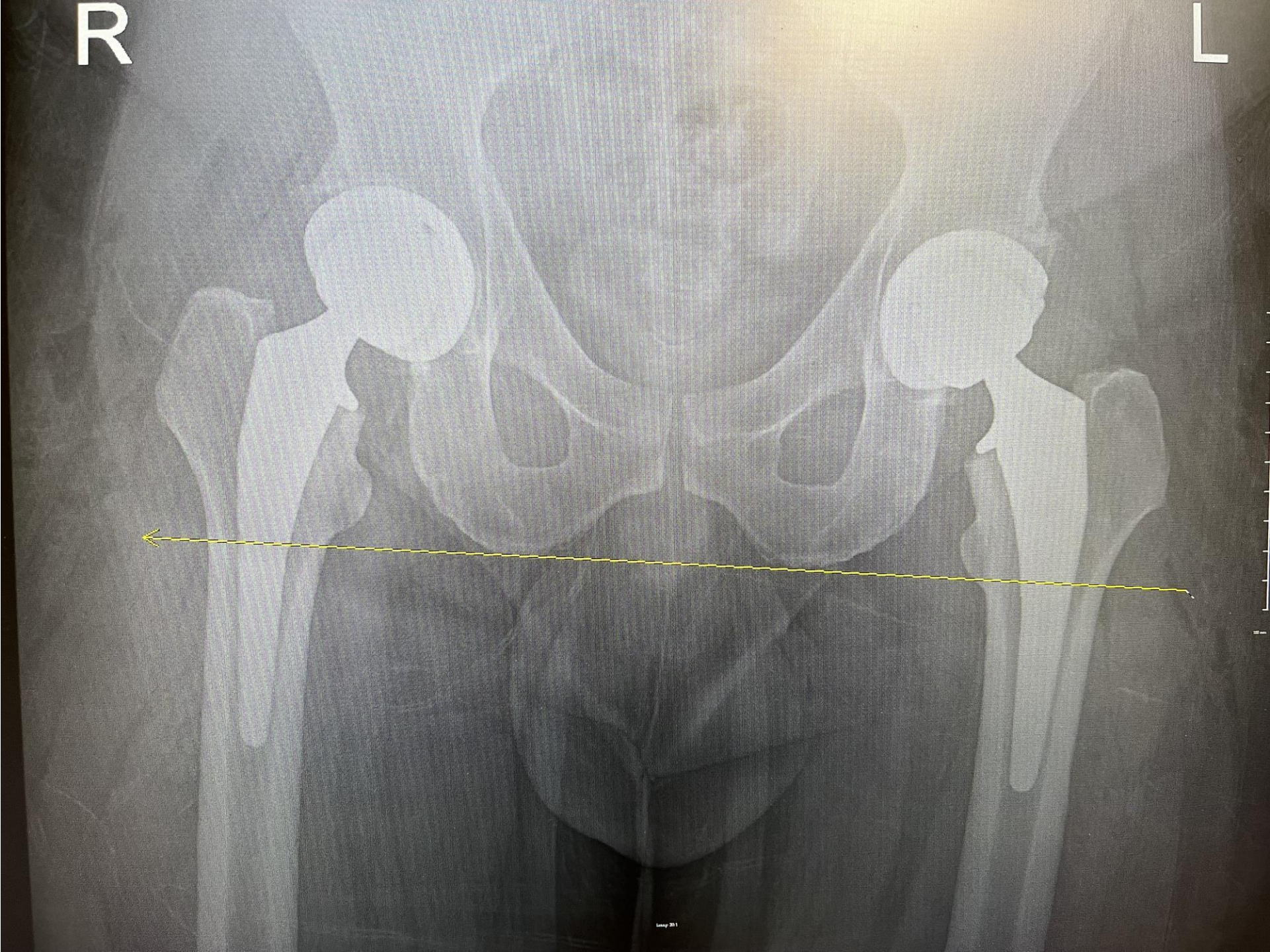
- Bilateral THA?
- Anterior?





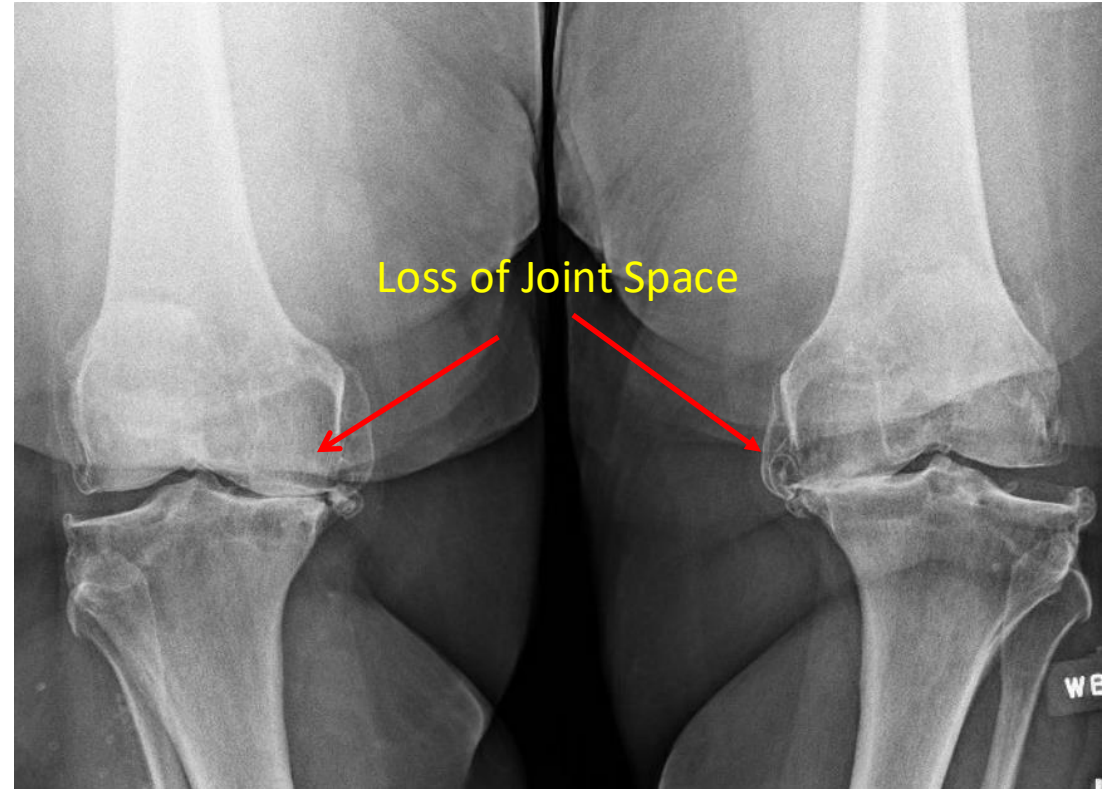
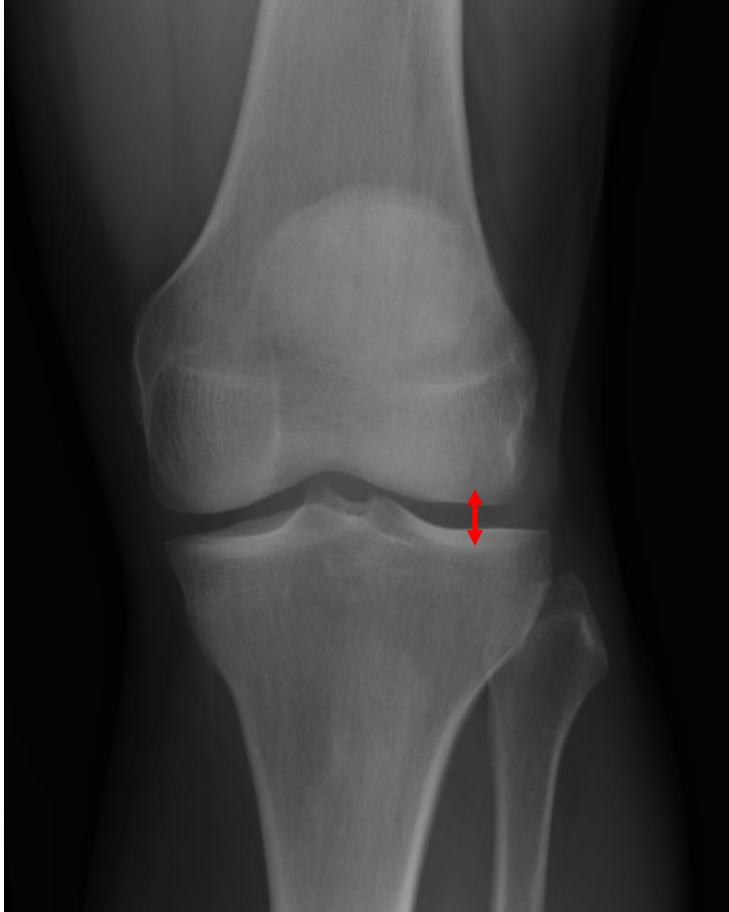
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Knees

Knee x-rays



Goals: Regain function and return to activity





**THE WORK
IS THE
REWARD**



What we do

- Is hard!
- Decisions
- Execution
- Patient population

BMI

- BMI cutoff 40 is unethical!
- Deny 14 pts to prevent 1 complication!
- BMI > 35 gain great improvements in PROMs

> J Arthroplasty. 2023 Dec;38(12):2484-2491. doi: 10.1016/j.arth.2023.08.031. Epub 2023 Aug 16.

Obesity is Associated With Greater Improvement in Patient-Reported Outcomes Following Primary Total Knee Arthroplasty

Ashton C Bosler ¹, Evan R Deckard ², Leonard T Buller ¹, R Michael Meneghini ³

Obese Patients Can Safely Have Total Joint Replacement | Anthony Feher, MD, Indiana Joint Replacement Institute



Total joint replacement is a life changing surgery. People who suffer with hip and knee arthritis can be severely limited in their ability to be fully productive in the workplace, take care of their families, or enjoy the wonderful community around them. The simplest tasks, like getting in and out of a car or putting on socks is a constant struggle. Our friends and neighbors may hurt so badly that they will wait to get off the couch until they must use the restroom and do a chore because it is too painful to get up twice. Every step consumes their lives as the pain shoots through their groin or knee. There are many reasons that despite these limitations patients may not pursue hip or knee replacement.


Obesity in our community is expected to increase over the next decade so encouraging a healthy lifestyle is paramount. Utilizing hip or knee arthroplasty as a motivator to lose weight has proven to be unsuccessful. Only 20% of patients counseled on losing weight by a joint surgeon will return for a follow up visit.¹ In fact patients that lose greater than 10% of their body weight in the 6 months prior to surgery have no change in their complication rate verse patients who do not.²

Being denied access to life altering medical care based on BMI or body habitus is no longer backed by science.³ Obesity by itself does not need to be a contraindication to surgery. Alarming, a strict BMI cutoff can further restrict access to care in women, Black, and Hispanic populations.⁴ Fourteen community members with a BMI > 40 have to be denied access to life changing total joint surgery in order to prevent one complication.⁵

Optimization is the key. Partnering with our perioperative medical specialists that evaluate every aspect of a patient's medical history can help identify and in partnership with their primary care provider treat potential risk factors prior to surgery. With skilled surgeons, a focused program, and an experienced staff patients with a BMI over 40 can have their lives back from the debilitating pain of hip and knee arthritis.

References:

1. Foreman CW, Callaghan JJ, Brown TS, Elkins JM, Otero JE. Total joint arthroplasty in the morbidly obese: how body mass index ≥ 40 influences patient retention, treatment decisions, and treatment outcomes. J Arthroplasty 2020;35:39-44
2. Laperche J, Feinn R, Myrick K, Halawi. Obesity and total joint arthroplasty: does weight loss in the preoperative period improve perioperative outcomes? J Arthroplasty 2023;38:2517-22
3. Blankstein M, Browne JA, Sonn KA, Ashkenazi I, Schwarzkopf. Go big or go home: obesity and total joint arthroplasty. J Arthroplasty 2023;38:1928-37
4. Carender CN, DeMik DE, Elkins JM, Brown TS, Bedard NA. Are body mass index cutoffs creating racial, ethnic, and gender disparities in eligibility for primary total hip and knee arthroplasty. J Arthroplasty 2022;37:1009-16.
5. Giori NJ, Amanatullah DF, Gupta S, Bowe T, Harris AHS. Risk reduction compared with access to care: quantifying the trade-off of enforcing a body mass index eligibility criterion for joint replacement. J Bone Joint Surg Am 2018;100:539-45.



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Outcomes

Overall High Satisfaction Rate!

- Return to walking, swimming, biking, skiing, pickleball, tennis, etc
- 95% THR
- 85% TKR- Multiple factors contribute

Low complication rate

- Infection
 - 1-2 % TKR, 0.3-1.3 % THR
- Instability
- Loosening
- Fractures

1 additional % risk of revision per year: 20% chance after 20 years

We would love to work with your patients!

Collaborative effort





IJRI Locations



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About me

- Born and raised in Shanghai
- Moved to FW age 9
- Northrop/Purdue/IU
- Research at Mayo
- Residency/Phd at Wake Forest
- Fellowship in London, ON
- Traveling fellowship: Hamburg, Germany, London, UK

Thank you!