

The Impact of Mental Illness on Post-Operative outcomes Among Medicare Beneficiaries - A Missed Opportunity to Help Surgical Patients?

Anghela Z. Paredes, MD, MPH, MS; J. Madison Hyer MS;
Adrian Diaz, MD, MPH; Diamantis I. Tsilimigras, MD;
Timothy M Pawlik, MD, MPH, PhD



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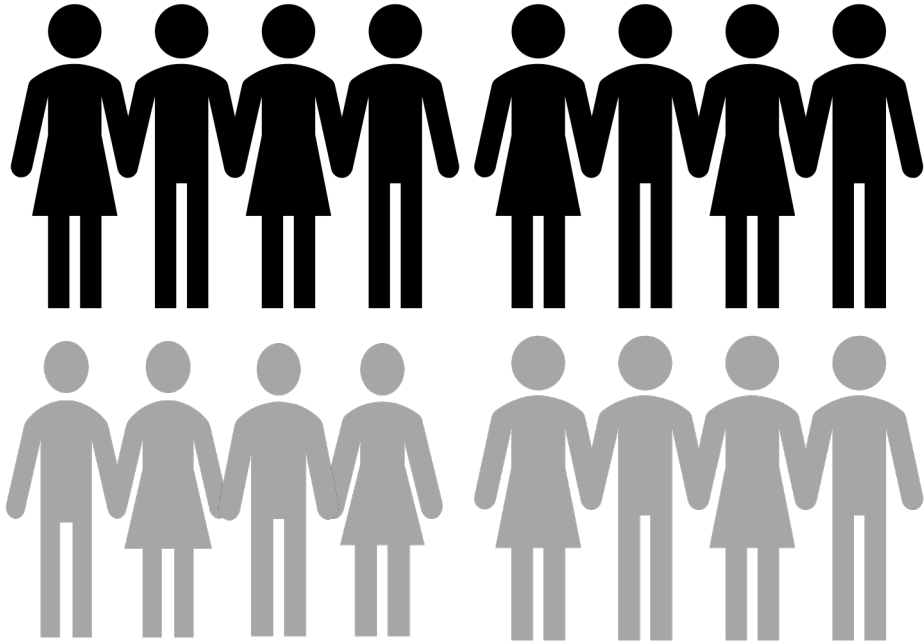
WEXNER MEDICAL CENTER

Disclosures

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CENTERS FOR DISEASE
CONTROL AND PREVENTION



50%

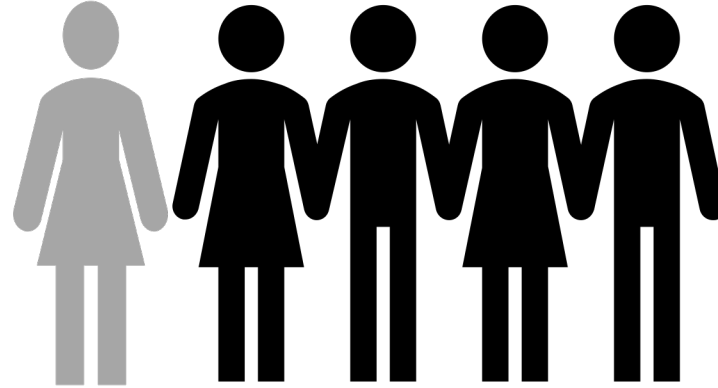


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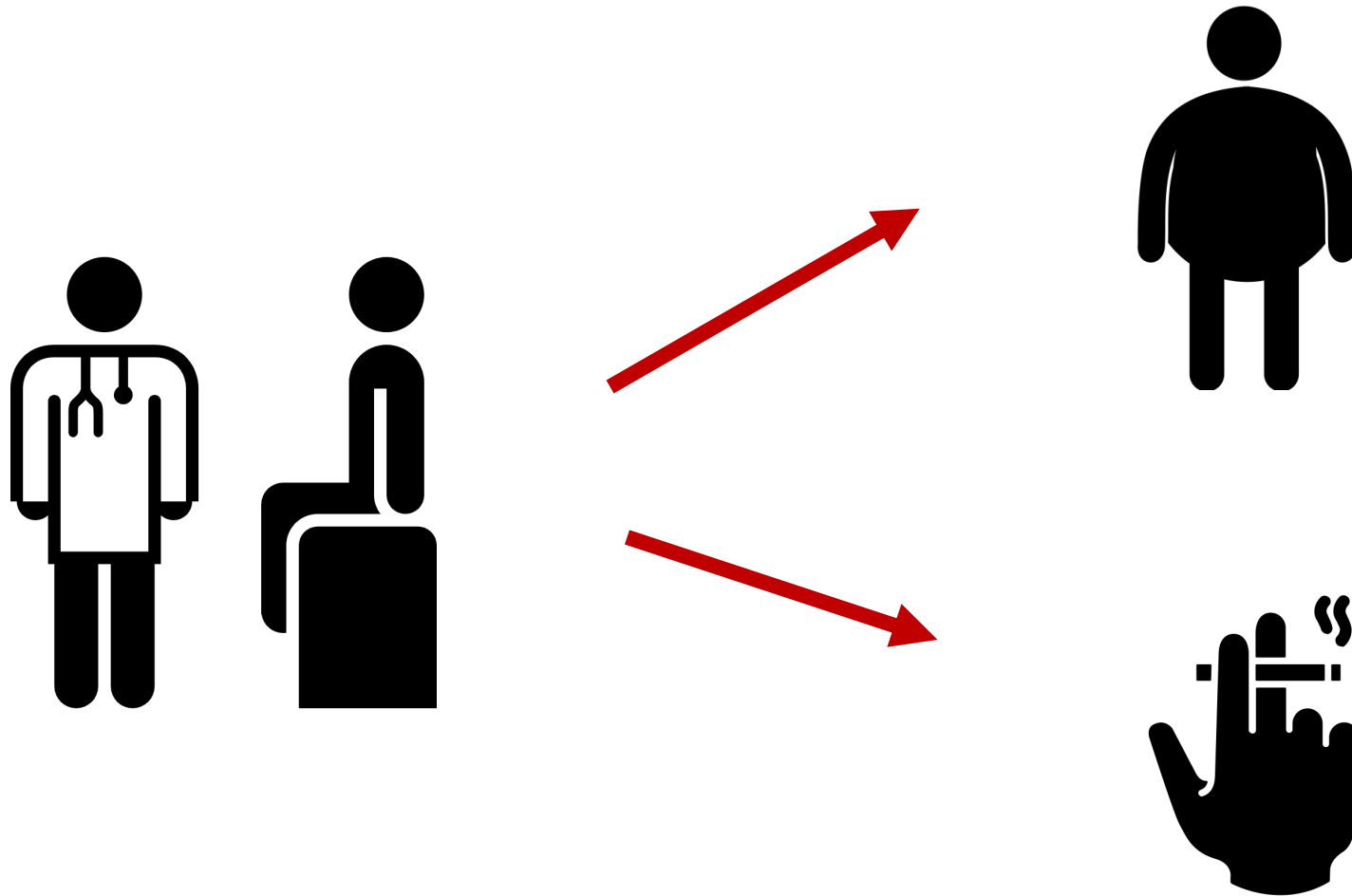


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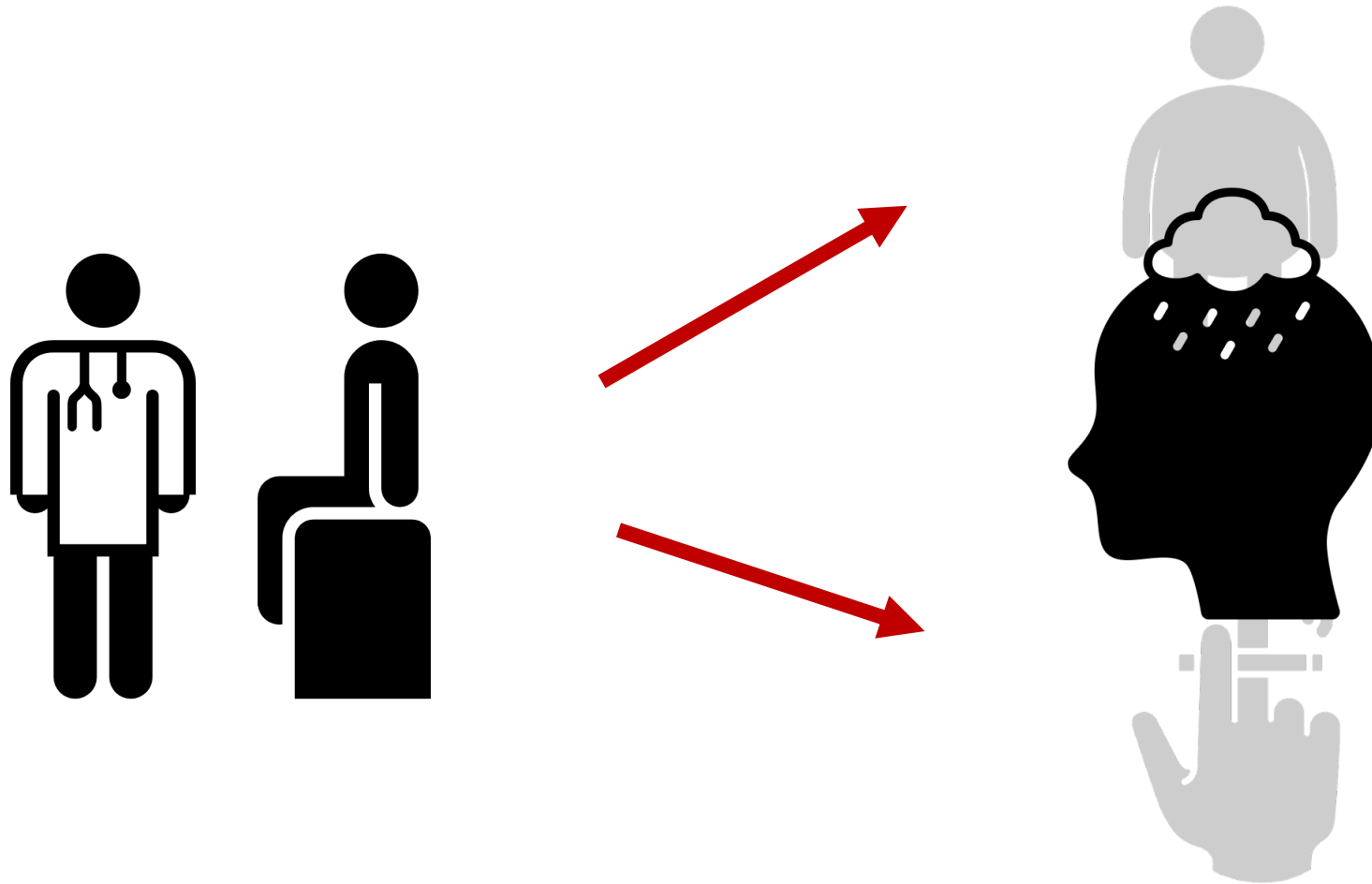


1 in 5

Risk stratification and pre-surgical optimization



Risk stratification and pre-surgical optimization



Mental Illness Methods

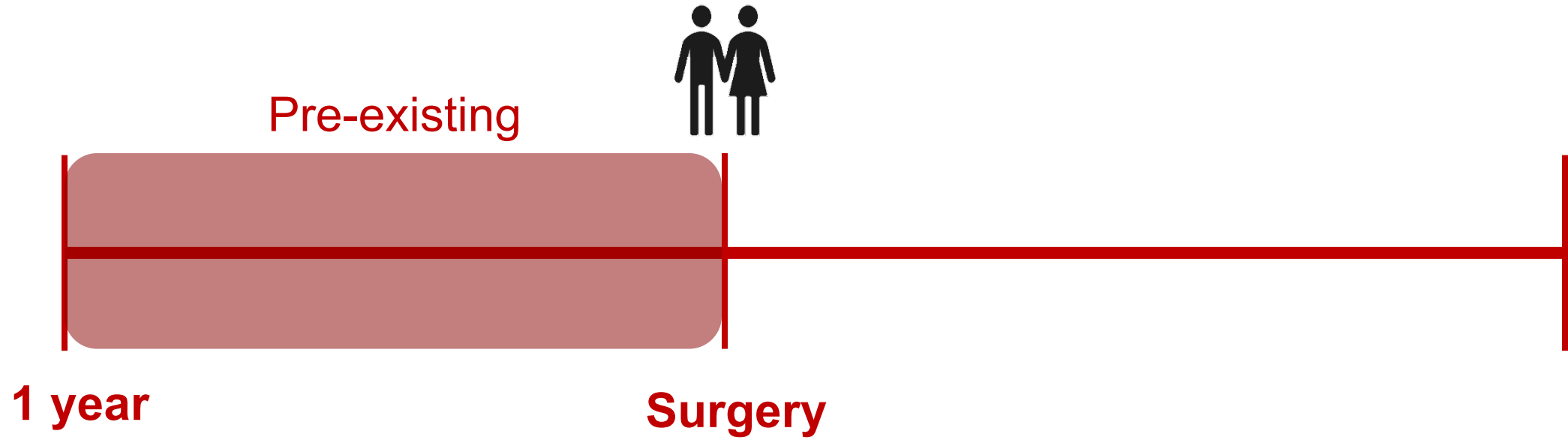
Datasets

- Centers for Medicare and Medicaid Services (CMS) 100% Limited Data Set Standard Analytic Files, 2013-2017

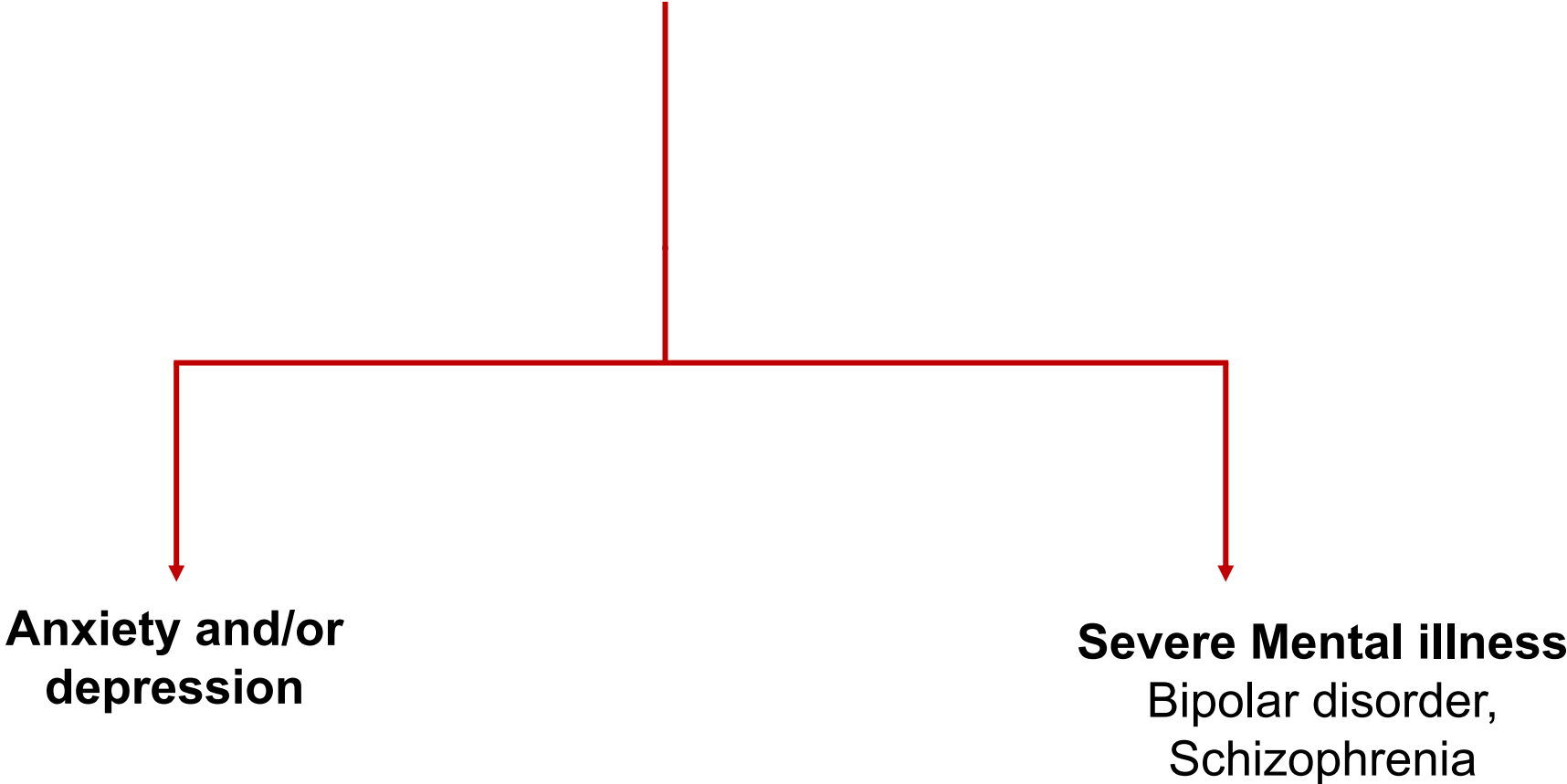
Inclusion criteria

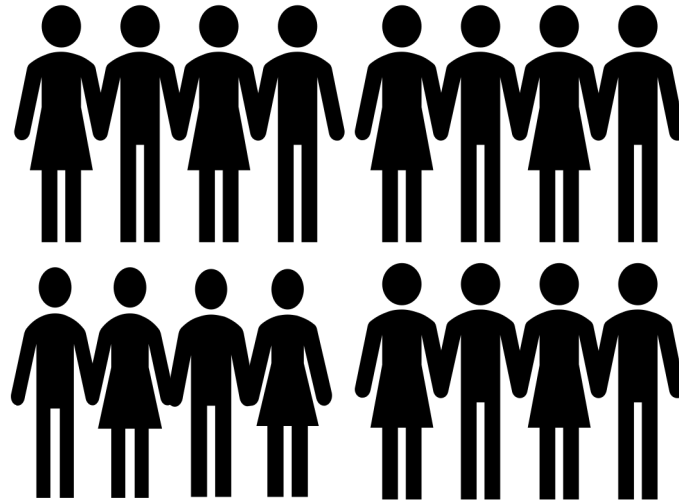
- Age \geq 65 years
- Elective
- Colectomy, coronary artery bypass graft, abdominal aortic aneurysm repair, total hip arthroplasty, total knee arthroplasty or lung resection

Mental Illness

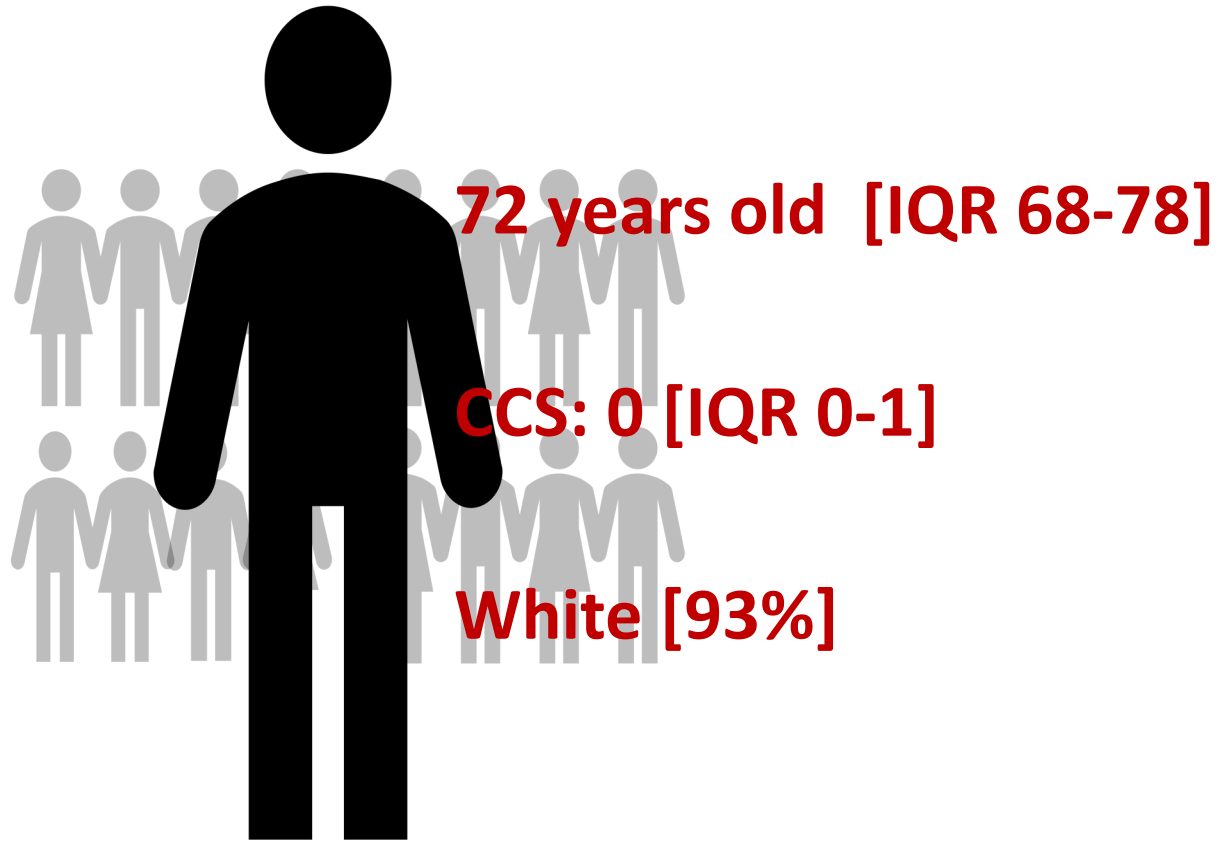


Mental Illness

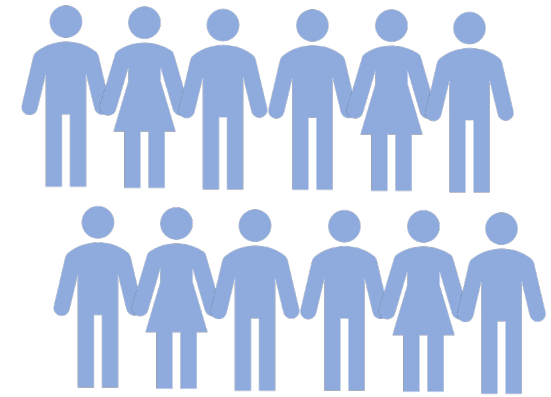
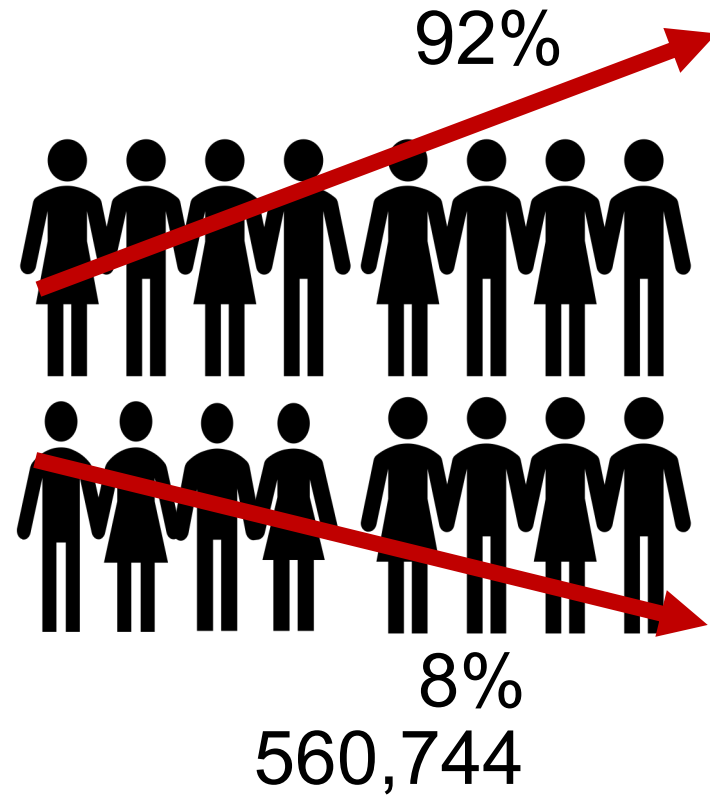




1,889,032



Pre-existing mental illness dx



Severe Mental Illness



Post-surgical outcomes stratified by pre-existing mental illness dx

	No mental illness diagnosis	Anxiety/Depression	Severe mental illness
Perioperative complication	96,481 (7.3%)	48,583 (9.4%)	5,883 (12.8%)
Extended LOS	622,234 (46.8%)	290,399 (56.4%)	30,163 (65.5%)
Discharge destination			
Home	477,393 (35.9%)	149,482 (29%)	10,221 (22.2%)
Home with HHC	494,427 (37.2%)	168,192 (32.7%)	11,753 (25.5%)
SNF	321,968 (24.2%)	179,365 (34.8%)	21,755 (47.3%)
Other	34,500 (2.6%)	17,666 (3.4%)	2,310 (5%)
30d Readmission	56,368 (4.2%)	37,989 (7.4%)	5,500 (11.9%)

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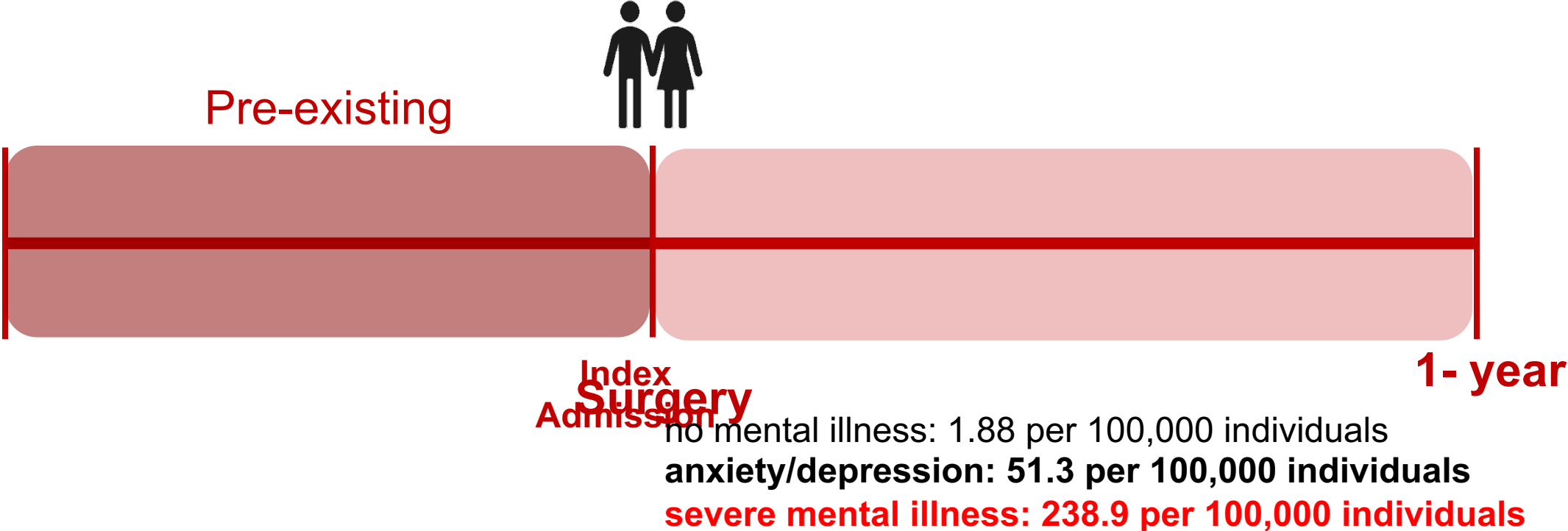
Association of mental illness and post-operative outcomes

Outcome	Anxiety/Depression		Severe Mental Illness	
	OR	95% CI	OR	95% CI
Extended length of stay	1.45	1.44- 1.46	2.34	2.28- 2.39
Peri-operative complication	1.44	1.42- 1.46	1.71	1.66- 1.77
30-day readmission	1.87	1.85- 1.90	2.86	2.77- 2.94
Escalation of care at discharge	1.68	1.67- 1.69	3.08	3.02- 3.14

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Rate of suicidal ideation



Mental Illness Conclusion

- 3 in 10 surgical patients had a pre-existing mental illness diagnosis
- Individuals with a pre-existing mental illness diagnosis had markedly worse post-operative outcomes
- Surgeons need to assess mental health issues in the pre-operative setting to better risk stratify patients, as well as identify mental health interventions to optimize post-operative outcomes

The James



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The James Cancer Hospital and Solove Research Institute



Emergency Drop-Off

Meromble & Fitch Emergency Department

Emergency 460

