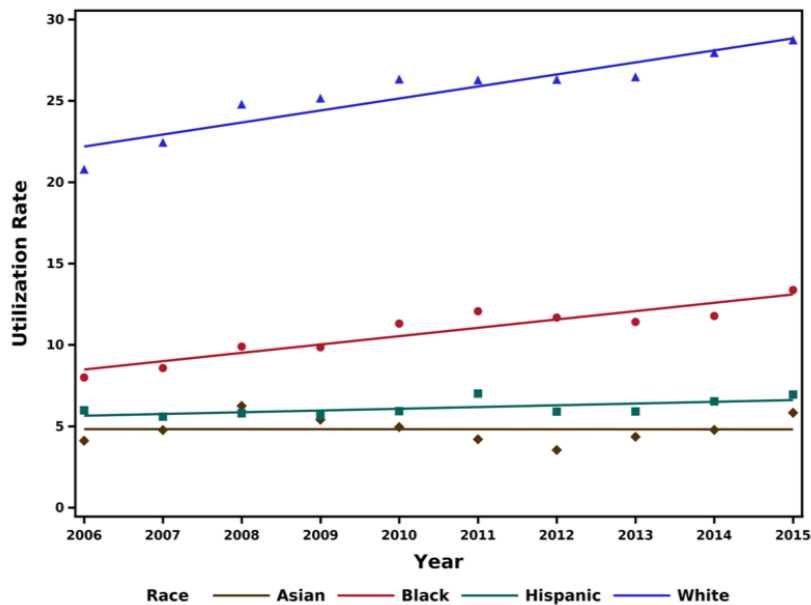


The following content was supplied by the authors as supporting material and has not been copy-edited or verified by JBJS.

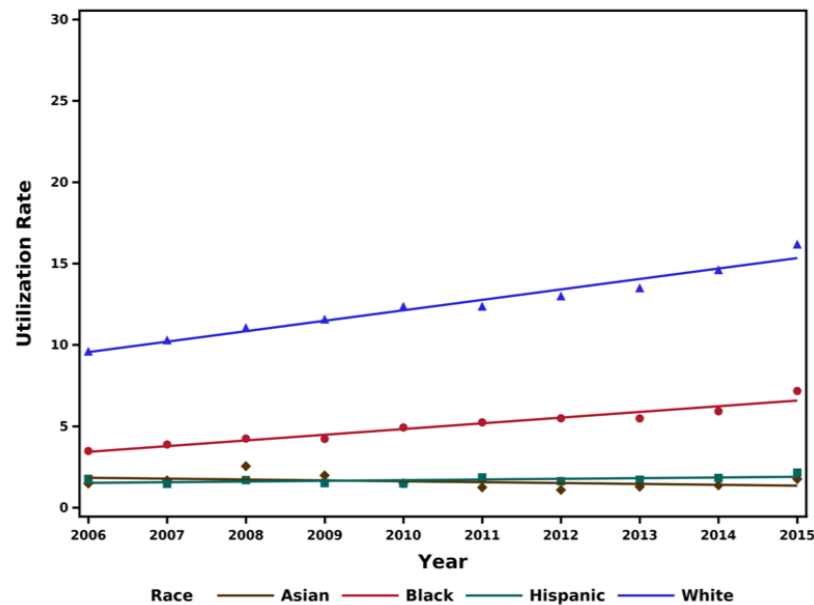
APPENDIX

Appendix Figure 1. Crude utilization rates per 10,000 people by race for primary total knee arthroplasty and primary total hip arthroplasty.

Total Knee Arthroplasty

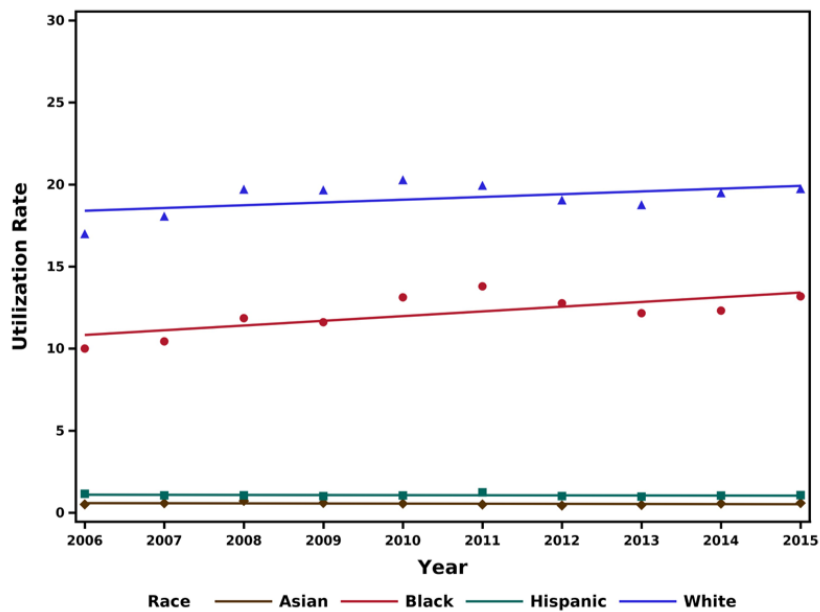


Total Hip Arthroplasty

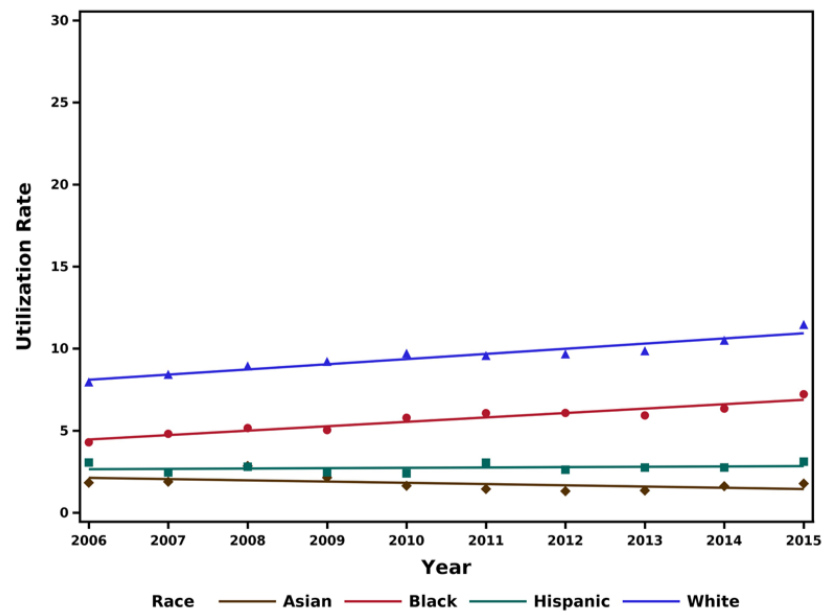


Appendix Figure 2. Age- and sex-standardized utilization rates per 10,000 people by race for primary total knee arthroplasty and primary total hip arthroplasty.

Total Knee Arthroplasty



Total Hip Arthroplasty



Appendix Table 1: Patient demographics and hospital characteristics by race for primary total knee arthroplasty (TKA) and total hip arthroplasty (THA).

	Primary TKA					Primary THA				
	White	Black	Hispanic	Asian	P	White	Black	Hispanic	Asian	P
N (%)	5005066 (86%)	437580 (7.5%)	304920 (5.2%)	73330 (1.3%)		2441073 (88.7%)	203120 (7.4%)	85006 (3.1%)	23871 (0.9%)	
Median age (IQR) (yr)	66.2 (59-73.3)	61.6 (54.9-69.2)	65.8 (57.6-71.9)	67.8 (61.2-74.2)	<0.001	65.6 (57-73.9)	58.5 (50.6-67.3)	61.2 (51.3-70.9)	64 (54.1-73.3)	<0.001
Age (no. [%])					<0.001					<0.001
<65 yr	2071654 (41.4%)	254970 (58.3%)	135448 (44.4%)	25241 (34.4%)		1094367 (44.8%)	134313 (66.1%)	49067 (57.7%)	11980 (50.2%)	
65-79 yr	2422124 (48.4%)	160289 (36.6%)	146175 (47.9%)	40825 (55.7%)		1036737 (42.5%)	58873 (29%)	28790 (33.9%)	8884 (37.2%)	
≥80 yr	511288 (10.2%)	22321 (5.1%)	23297 (7.6%)	7264 (9.9%)		309969 (12.7%)	9935 (4.9%)	7150 (8.4%)	3007 (12.6%)	
Sex (no. [%])					<0.001					<0.001
Male	1926477 (38.5%)	114280 (26.1%)	108369 (35.5%)	22157 (30.2%)		1081441 (44.3%)	91839 (45.2%)	39031 (45.9%)	8790 (36.8%)	
Female	3078588 (61.5%)	323301 (73.9%)	196551 (64.5%)	51172 (69.8%)		1359632 (55.7%)	111281 (54.8%)	45975 (54.1%)	15081 (63.2%)	
Elixhauser Comorbidity Index	1.1 (0.3-2)	1.4 (0.5-2.4)	1.2 (0.3-2.1)	1.1 (0.3-2)	<0.001	0.9 (0.2-1.9)	1.2 (0.3-2.1)	0.9 (0.1-1.9)	0.8 (0.1-1.8)	<0.001
Median length of stay (days)	2.5 (2-3)	2.6 (2.1-3.3)	2.6 (2.1-3.3)	2.6 (2.1-3.3)	<0.001	2.5 (1.8-3)	2.6 (2-3.4)	2.6 (2-3.4)	2.5 (1.9-3.3)	<0.001
Income					<0.001					<0.001
1st quartile	979644 (19.6%)	199431 (45.6%)	104914 (34.4%)	8815 (12%)		421062 (17.3%)	91496 (45%)	24624 (29%)	2905 (12.2%)	
2nd quartile	1385744 (27.7%)	100589 (23%)	74603 (24.5%)	12827 (17.5%)		630399 (25.8%)	45730 (22.5%)	19414 (22.8%)	4375 (18.3%)	
3rd quartile	1375605 (27.5%)	79667 (18.2%)	73493 (24.1%)	18350 (25%)		669615 (27.4%)	37514 (18.5%)	22406 (26.4%)	6323 (25.5%)	
4th quartile	1264072 (25.3%)	57892 (13.2%)	51910 (17%)	33338 (45.5%)		719997 (29.5%)	28381 (14%)	18563 (21.8%)	10268 (43%)	
Insurance status					<0.001					<0.001
Medicare	2816569 (56.3%)	207281 (47.4%)	157924 (51.8%)	40095 (54.7%)		1301122 (53.3%)	86015 (42.4%)	36410 (42.8%)	10746 (45%)	
Medicaid	99439 (2%)	37445 (8.6%)	28184 (9.2%)	5183 (7.1%)		64097 (2.6%)	26860 (13.2%)	9629 (11.3%)	1656 (6.9%)	
Private	1920782 (38.4%)	166456 (38%)	98723 (32.4%)	25262 (34.5%)		1002110 (41.1%)	79048 (38.9%)	33266 (39.1%)	10405 (43.6%)	
Self-pay	17404 (0.4%)	3385 (0.8%)	3658 (1.2%)	585 (0.8%)		15340 (0.6%)	2791 (1.4%)	1875 (2.2%)	303 (1.3%)	
Other	150872 (3%)	23013 (5.3%)	16432 (5.4%)	2205 (3%)		58405 (2.4%)	8407 (4.1%)	3826 (4.5%)	760 (3.2%)	
Hospital location type (no. [%])					<0.001					<0.001
Rural	643920 (12.9%)	28815 (6.6%)	17812 (5.8%)	2891 (3.9%)		254621 (10.4%)	10513 (5.2%)	4648 (5.5%)	901 (3.8%)	
Urban, nonteaching	2218250 (44.3%)	156435 (35.8%)	150058 (49.2%)	30939 (42.2%)		1006325 (41.2%)	63538 (31.3%)	35571 (41.8%)	9899 (41.5%)	
Urban, teaching	2142896 (42.8%)	252330 (57.7%)	137050 (45%)	39500 (53.9%)		1180127 (48.3%)	129068 (63.5%)	44788 (52.7%)	13071 (54.8%)	
Hospital size (no. [%])					0.006					0.001
Small	993210 (19.8%)	74350 (17%)	63129 (20.7%)	18038 (24.6%)		469825 (19.3%)	33257 (16.4%)	17781 (20.9%)	6396 (26.8%)	
Medium	1324062 (26.5%)	122394 (28%)	77545 (25.4%)	20769 (28.3%)		636995 (26.1%)	55465 (27.3%)	19963 (23.5%)	5691 (23.8%)	
Large	2687794 (53.7%)	240837 (55%)	164246 (53.9%)	34523 (47.1%)		1334252 (54.7%)	114399 (56.3%)	47262 (55.6%)	11784 (49.4%)	

Elixhauser Comorbidity Index and length of stay are both reported as median (interquartile range). Yr = year.

Appendix Table 2: Nationwide trends in utilization and perioperative metrics of total knee arthroplasties (TKA) by race.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	<i>P_{trend}</i> *
White TKA											
Utilization rate (/10,000 people)	20.8	22.4	24.8	25.1	26.3	26.3	26.3	26.4	27.9	28.7	
Median length of stay (IQR) (days)	2.8 (2.3-3.7)	2.8 (2.3-3.6)	2.7 (2.2-3.3)	2.6 (2.2-3.1)	2.6 (2.1-3)	2.5 (2.1-3)	2.5 (2-2.9)	2.4 (1.9-2.8)	2.3 (1.6-2.8)	2.1 (1.4-2.7)	
Any complication (no. [%])	20639 (5.1%)	22445 (5.1%)	26297 (5.4%)	26310 (5.3%)	28003 (5.4%)	26807 (5.2%)	24982 (4.9%)	23175 (4.5%)	23680 (4.3%)	21915 (3.9%)	
Facility discharge (no. [%])	163661 (40.3%)	165615 (37.7%)	165250 (33.9%)	169173 (34.1%)	170487 (32.8%)	167222 (32.3%)	165366 (32.2%)	162615 (31.5%)	158515 (29%)	144105 (25.7%)	
Mortality (no. [%])	407 (0.1%)	424 (0.1%)	383 (0.1%)	349 (0.1%)	406 (0.1%)	286 (0.1%)	297 (0.1%)	240 (0%)	230 (0%)	210 (0%)	
Black TKA											
Utilization rate (/10,000 people)	8	8.6	9.9	9.8	11.3	12.1	11.7	11.4	11.8	13.4	0.08
Median length of stay (IQR) (days)	3 (2.4-3.9)	2.9 (2.3-3.8)	2.8 (2.3-3.7)	2.7 (2.3-3.5)	2.7 (2.2-3.4)	2.7 (2.2-3.4)	2.6 (2.1-3.1)	2.5 (2.1-3)	2.4 (1.8-2.9)	2.3 (1.6-2.9)	0.19
Any complication (no. [%])	1880 (6.1%)	2088 (6.3%)	2569 (6.6%)	2645 (6.7%)	3221 (7.1%)	3706 (7.5%)	3182 (6.6%)	3090 (6.5%)	3025 (6.1%)	3315 (6%)	<.0001
Facility discharge (no. [%])	14474 (47.2%)	14038 (42.1%)	15326 (39.3%)	15198 (38.7%)	17177 (37.7%)	20240 (41.2%)	19877 (41.3%)	18900 (39.8%)	18955 (38.2%)	18840 (34.2%)	<.0001
Mortality (no. [%])	24 (0.1%)	13 (0%)	39 (0.1%)	43 (0.1%)	68 (0.1%)	29 (0.1%)	35 (0.1%)	30 (0.1%)	30 (0.1%)	45 (0.1%)	0.03
Hispanic TKA											
Utilization rate (/10,000 people)	6	5.6	5.8	5.7	5.9	7	5.9	5.9	6.5	6.9	<.0001
Median length of stay (IQR) (days)	3.1 (2.4-3.9)	3 (2.4-3.8)	2.8 (2.3-3.6)	2.7 (2.2-3.5)	2.7 (2.2-3.4)	2.6 (2.1-3.1)	2.5 (2.1-3)	2.5 (2-2.9)	2.3 (1.7-2.8)	2.2 (1.5-2.8)	0.04
Any complication (no. [%])	1299 (5%)	1368 (5.5%)	1541 (5.8%)	1514 (5.6%)	1620 (5.6%)	1909 (5.5%)	1735 (5.6%)	1510 (4.8%)	1530 (4.3%)	1565 (4.1%)	0.99
Facility discharge (no. [%])	11265 (43.7%)	10042 (40.1%)	8481 (31.8%)	9686 (35.9%)	10089 (34.8%)	12805 (36.6%)	11415 (37%)	11635 (37%)	11610 (32.8%)	11615 (30.1%)	0.07
Mortality (no. [%])	18 (0.1%)	18 (0.1%)	11 (0%)	- (-%)	15 (0.1%)	35 (0.1%)	- (-%)	15 (0%)	15 (0%)	- (-%)	0.39
Asian TKA											
Utilization rate (/10,000 people)	4.1	4.8	6.2	5.4	4.9	4.2	3.5	4.3	4.8	5.8	<.0001
Median length of stay (IQR) (days)	3.1 (2.5-3.9)	2.9 (2.4-3.8)	2.7 (2.2-3.4)	2.6 (2.1-3.4)	2.6 (2.1-3.4)	2.6 (2.2-3.2)	2.6 (2.1-3)	2.5 (2-3)	2.3 (1.7-2.9)	2.2 (1.5-2.8)	0.79
Any complication (no. [%])	313 (6.1%)	375 (6%)	426 (5.1%)	363 (5%)	419 (6%)	455 (6.9%)	241 (3.8%)	335 (4.7%)	350 (3.9%)	410 (4%)	0.25
Facility discharge (no. [%])	2220 (42.9%)	2624 (41.7%)	2937 (35.5%)	2737 (38.1%)	2493 (36%)	2731 (41.5%)	2565 (40.7%)	2835 (39.7%)	3305 (36.5%)	3700 (35.7%)	0.02
Mortality (no. [%])	- (-%)	- (-%)	18 (0.2%)	- (-%)	- (-%)	- (-%)	- (-%)	- (-%)	- (-%)	- (-%)	0.84

-Cells with values ≤10 cannot be reported for patient confidentiality reasons per HCUP guidelines.

*Refers to the p-value denoting significant change in disparities between white and black patients over time. IQR = Interquartile Range; no. = number

Appendix Table 3: Nationwide trends in utilization and perioperative metrics of total hip arthroplasties (THA) by race.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	<i>P_{trend}</i> [*]
White THA											
Utilization rate (/10,000 people)	9.6	10.3	11	11.6	12.4	12.4	13	13.5	14.6	16.2	
Median length of stay (IQR) (days)	2.9 (2.3-3.8)	2.8 (2.3-3.7)	2.7 (2.2-3.4)	2.6 (2.2-3.3)	2.5 (2.1-3.1)	2.5 (2-3)	2.4 (1.8-2.9)	2.3 (1.6-2.8)	2.1 (1.4-2.7)	1.8 (1.2-2.6)	
Any complication (no. [%])	9934 (5.3%)	10529 (5.2%)	11744 (5.4%)	12673 (5.6%)	13255 (5.4%)	13559 (5.6%)	13041 (5.1%)	12405 (4.7%)	12605 (4.4%)	13320 (4.2%)	
Facility discharge (no. [%])	79968 (42.6%)	80027 (39.7%)	78740 (36.3%)	82496 (36.2%)	82706 (33.9%)	79993 (32.9%)	80196 (31.7%)	77055 (29.3%)	76105 (26.7%)	73990 (23.4%)	
Mortality (no. [%])	262 (0.1%)	332 (0.2%)	303 (0.1%)	238 (0.1%)	287 (0.1%)	273 (0.1%)	233 (0.1%)	210 (0.1%)	200 (0.1%)	270 (0.1%)	
Black THA											
Utilization rate (/10,000 people)	3.5	3.9	4.2	4.2	4.9	5.2	5.5	5.5	5.9	7.2	0.0001
Median length of stay (IQR) (days)	3 (2.4-4)	2.9 (2.3-3.9)	2.8 (2.3-3.8)	2.8 (2.3-3.8)	2.7 (2.2-3.5)	2.6 (2.1-3.4)	2.5 (2-3)	2.4 (1.8-3)	2.3 (1.6-2.9)	2.1 (1.3-2.8)	0.88
Any complication (no. [%])	823 (6.2%)	1000 (6.6%)	1229 (7.4%)	1202 (7.1%)	1324 (6.7%)	1440 (6.7%)	1510 (6.7%)	1315 (5.8%)	1565 (6.3%)	1620 (5.5%)	0.49
Facility discharge (no. [%])	5569 (41.7%)	6204 (41.1%)	6226 (37.3%)	6012 (35.7%)	7113 (35.8%)	7862 (36.9%)	8059 (35.7%)	8035 (35.2%)	8420 (33.8%)	8610 (29.2%)	<.0001
Mortality (no. [%])	24 (0.2%)	39 (0.3%)	13 (0.1%)	19 (0.1%)	34 (0.2%)	44 (0.2%)	40 (0.2%)	-- (-%)	75 (0.3%)	-- (-%)	0.39
Hispanic THA											
Utilization rate (/10,000 people)	1.8	1.5	1.7	1.5	1.5	1.9	1.6	1.7	1.8	2.1	<.0001
Median length of stay (IQR) (days)	3 (2.4-3.9)	2.9 (2.3-3.8)	2.8 (2.3-3.7)	2.8 (2.2-3.7)	2.7 (2.2-3.5)	2.6 (2.1-3.4)	2.6 (2.1-3.3)	2.5 (1.9-3)	2.3 (1.6-2.9)	2 (1.3-2.7)	0.8
Any complication (no. [%])	333 (4.4%)	343 (5.2%)	489 (6.3%)	434 (6.1%)	379 (5.3%)	581 (6.3%)	543 (6.4%)	515 (5.6%)	475 (4.8%)	555 (4.6%)	0.11
Facility discharge (no. [%])	3250 (42.7%)	2470 (37.8%)	2537 (32.6%)	2526 (35.4%)	2396 (33.2%)	3407 (37%)	3085 (36.4%)	3315 (36.4%)	3260 (33%)	3265 (27.3%)	<.0001
Mortality (no. [%])	14 (0.2%)	- (-%)	- (-%)	- (-%)	- (-%)	- (-%)	- (-%)	- (-%)	- (-%)	20 (0.2%)	0.8
Asian THA											
Utilization rate (/10,000 people)	1.5	1.7	2.5	2	1.5	1.2	1.1	1.3	1.4	1.8	<.0001
Median length of stay (IQR) (days)	3 (2.4-4)	2.9 (2.3-3.8)	2.6 (2.1-3.3)	2.6 (2-3.4)	2.6 (2-3.3)	2.5 (2-3.1)	2.5 (1.9-3)	2.4 (1.8-2.9)	2.3 (1.5-2.9)	2 (1.2-2.7)	0.2
Any complication (no. [%])	93 (5%)	83 (3.8%)	175 (5.2%)	147 (5.6%)	136 (6.5%)	80 (4.1%)	105 (5.4%)	100 (4.8%)	85 (3.3%)	145 (4.6%)	0.73
Facility discharge (no. [%])	716 (38.5%)	795 (36%)	975 (28.9%)	750 (28.5%)	667 (31.9%)	650 (33.3%)	727 (37.6%)	695 (33%)	810 (31.3%)	840 (26.9%)	0.003
Mortality (no. [%])	- (-%)	- (-%)	- (-%)	- (-%)	- (-%)	- (-%)	- (-%)	- (-%)	- (-%)	- (-%)	0.15

-Cells with values ≤10 cannot be reported for patient confidentiality reasons per HCUP guidelines.

*Refers to the p-value denoting significant change in disparities between white and black patients over time. IQR = Interquartile

Range; no. = number

Appendix Table 4A: Multivariable logistic regression of complications by race for total knee arthroplasty accounting for age, sex, smoking status, medical comorbidities, and hospital characteristics.

Complication	Black		Hispanic		Asian	
	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P
Myocardial infarction	0.94 (0.78-1.14)	0.53	0.88 (0.71-1.1)	0.26	1.37 (0.94-2)	0.11
Cardiac arrest	1.13 (0.83-1.54)	0.44	0.97 (0.66-1.43)	0.87	0.84 (0.37-1.89)	0.67
Pneumonia	1 (0.9-1.12)	0.99	0.96 (0.83-1.11)	0.57	1.41 (1.12-1.77)	0.003
Urinary tract infection	1.21 (1.14-1.27)	<0.001	1.18 (1.09-1.27)	<0.001	1.03 (0.88-1.19)	0.74
Pulmonary embolism	1.18 (1.07-1.31)	0.002	0.93 (0.79-1.09)	0.35	0.99 (0.75-1.31)	0.94
Deep vein thrombosis	1.17 (1.03-1.34)	0.02	0.96 (0.81-1.13)	0.59	1.25 (0.96-1.62)	0.1
Acute renal failure	1.87 (1.76-1.99)	<0.001	1.04 (0.95-1.13)	0.46	0.98 (0.82-1.17)	0.82
Sepsis	1.59 (1.31-1.94)	<0.001	1.36 (1.04-1.77)	0.02	2.24 (1.51-3.31)	<0.001
Surgical site infection	1.08 (0.89-1.31)	0.44	1.51 (1.21-1.88)	<0.001	1.67 (1.11-2.53)	0.01
Wound dehiscence	1.42 (1.09-1.85)	0.01	1.09 (0.77-1.55)	0.64	0.92 (0.44-1.9)	0.82

OR = odds ratio; CI = confidence interval

Appendix Table 4B: Multivariable logistic regression of complications by race for total hip arthroplasty accounting for age, sex, smoking status, medical comorbidities, and hospital characteristics.

Complication	Black		Hispanic		Asian	
	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P
Myocardial infarction	1.01 (0.77-1.31)	0.97	0.97 (0.68-1.38)	0.84	1.7 (1.02-2.83)	0.04
Cardiac arrest	1.78 (1.25-2.54)	0.001	0.82 (0.36-1.88)	0.64	0.46 (0.07-3.24)	0.43
Pneumonia	1.03 (0.87-1.21)	0.74	1.31 (1.03-1.66)	0.03	2.07 (1.47-2.92)	<0.001
Urinary tract infection	1.34 (1.25-1.44)	<0.001	1.37 (1.23-1.53)	<0.001	0.92 (0.74-1.15)	0.46
Pulmonary embolism	1.27 (0.99-1.64)	0.06	1.45 (1.04-2.02)	0.03	0.74 (0.31-1.81)	0.51
Deep vein thrombosis	1.34 (1.05-1.71)	0.02	1.69 (1.23-2.32)	0.001	0.82 (0.33-2.05)	0.67
Acute renal failure	1.81 (1.67-1.96)	<0.001	1.1 (0.96-1.27)	0.18	0.97 (0.74-1.26)	0.8
Sepsis	1.59 (1.26-2.02)	<0.001	1.6 (1.12-2.28)	0.009	1.19 (0.53-2.67)	0.68
Surgical site infection	0.93 (0.67-1.28)	0.65	1.47 (0.99-2.18)	0.06	1.38 (0.54-3.53)	0.5
Wound dehiscence	2.45 (1.11-5.42)	0.03	1.82 (0.44-7.61)	0.41	3.53 (0.49-25.44)	0.21

OR = odds ratio; CI = confidence interval

Appendix Table 5A: Multivariable logistic regression of complications by race for total knee arthroplasty accounting for age, sex, smoking status, medical comorbidities, and socioeconomic status.

Complication	Black		Hispanic		Asian	
	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P
Myocardial infarction	0.92 (0.76-1.11)	0.38	0.87 (0.69-1.08)	0.2	1.37 (0.94-2)	0.1
Cardiac arrest	1.09 (0.79-1.49)	0.6	0.94 (0.64-1.4)	0.77	0.84 (0.37-1.89)	0.67
Pneumonia	1 (0.89-1.11)	0.93	0.96 (0.83-1.1)	0.52	1.43 (1.14-1.8)	0.002
Urinary tract infection	1.15 (1.09-1.22)	<0.001	1.15 (1.06-1.24)	<0.001	1.05 (0.9-1.22)	0.55
Pulmonary embolism	1.25 (1.12-1.38)	<0.001	0.96 (0.82-1.12)	0.59	0.95 (0.72-1.25)	0.69
Deep vein thrombosis	1.25 (1.09-1.43)	0.001	1 (0.84-1.17)	0.95	1.18 (0.91-1.53)	0.21
Acute renal failure	1.79 (1.68-1.91)	<0.001	1.01 (0.92-1.1)	0.89	1.01 (0.85-1.21)	0.92
Sepsis	1.57 (1.28-1.92)	<0.001	1.34 (1.03-1.75)	0.03	2.28 (1.54-3.38)	<0.001
Surgical site infection	1.09 (0.9-1.32)	0.39	1.52 (1.22-1.9)	<0.001	1.65 (1.09-2.49)	0.02
Wound dehiscence	1.45 (1.1-1.9)	0.008	1.1 (0.77-1.57)	0.59	0.92 (0.44-1.9)	0.82

OR = odds ratio; CI = confidence interval

Appendix Table 5B: Multivariable logistic regression of complications by race for total hip arthroplasty accounting for age, sex, smoking status, medical comorbidities, and socioeconomic status.

Complication	Black		Hispanic		Asian	
	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P
Myocardial infarction	0.95 (0.73-1.24)	0.72	0.95 (0.66-1.35)	0.76	1.73 (1.04-2.88)	0.04
Cardiac arrest	1.77 (1.22-2.57)	0.003	0.83 (0.36-1.88)	0.65	0.46 (0.07-3.27)	0.44
Pneumonia	0.98 (0.83-1.16)	0.82	1.28 (1.01-1.63)	0.04	2.1 (1.49-2.96)	<0.001
Urinary tract infection	1.3 (1.21-1.4)	<0.001	1.35 (1.21-1.51)	<0.001	0.93 (0.75-1.16)	0.53
Pulmonary embolism	1.37 (1.05-1.77)	0.02	1.49 (1.07-2.08)	0.02	0.73 (0.3-1.77)	0.48
Deep vein thrombosis	1.42 (1.11-1.82)	0.005	1.74 (1.26-2.39)	<0.001	0.8 (0.32-1.99)	0.63
Acute renal failure	1.72 (1.59-1.87)	<0.001	1.08 (0.94-1.25)	0.29	0.99 (0.76-1.28)	0.91
Sepsis	1.52 (1.19-1.93)	<0.001	1.57 (1.1-2.24)	0.01	1.22 (0.54-2.73)	0.64
Surgical site infection	1 (0.72-1.4)	0.98	1.51 (1.01-2.25)	0.04	1.35 (0.53-3.48)	0.53
Wound dehiscence	2.14 (0.91-5.05)	0.08	1.72 (0.41-7.2)	0.46	3.71 (0.51-26.98)	0.19

OR = odds ratio; CI = confidence interval

Appendix Table 6A: Multivariable logistic regression of complications by race for total knee arthroplasty accounting for age, sex, smoking status, medical comorbidities, hospital factors, and insurance type.

Complication	Black		Hispanic		Asian	
	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P
Myocardial infarction	0.95 (0.79-1.15)	0.61	0.9 (0.72-1.11)	0.32	1.39 (0.96-2.04)	0.09
Cardiac arrest	1.11 (0.81-1.52)	0.51	0.96 (0.65-1.43)	0.85	0.84 (0.37-1.9)	0.68
Pneumonia	0.98 (0.88-1.1)	0.77	0.95 (0.83-1.1)	0.49	1.42 (1.13-1.78)	0.003
Urinary tract infection	1.19 (1.13-1.26)	<0.001	1.16 (1.08-1.26)	<0.001	1.02 (0.88-1.19)	0.79
Pulmonary embolism	1.21 (1.09-1.34)	<0.001	0.94 (0.81-1.1)	0.45	0.99 (0.75-1.3)	0.93
Deep vein thrombosis	1.2 (1.05-1.36)	0.008	0.97 (0.83-1.15)	0.75	1.26 (0.97-1.63)	0.09
Acute renal failure	1.86 (1.75-1.98)	<0.001	1.03 (0.94-1.12)	0.55	0.97 (0.82-1.16)	0.77
Sepsis	1.58 (1.3-1.93)	<0.001	1.35 (1.04-1.76)	0.02	2.25 (1.52-3.33)	<0.001
Surgical site infection	1.06 (0.88-1.29)	0.54	1.48 (1.19-1.84)	<0.001	1.65 (1.09-2.49)	0.02
Wound dehiscence	1.37 (1.05-1.79)	0.02	1.04 (0.73-1.49)	0.81	0.9 (0.43-1.86)	0.77

OR = odds ratio; CI = confidence interval

Appendix Table 6B: Multivariable logistic regression of complications by race for total hip arthroplasty accounting for age, sex, smoking status, medical comorbidities, hospital factors, and insurance type.

Complication	Black		Hispanic		Asian	
	OR (95% CI)	<i>P</i>	OR (95% CI)	<i>P</i>	OR (95% CI)	<i>P</i>
Myocardial infarction	1.01 (0.77-1.32)	0.97	0.96 (0.67-1.37)	0.82	1.68 (1.01-2.81)	0.05
Cardiac arrest	1.81 (1.27-2.59)	0.001	0.83 (0.36-1.91)	0.67	0.46 (0.07-3.26)	0.44
Pneumonia	0.97 (0.82-1.15)	0.71	1.25 (0.99-1.59)	0.06	2.05 (1.46-2.88)	<0.001
Urinary tract infection	1.3 (1.21-1.4)	<0.001	1.33 (1.19-1.48)	<0.001	0.91 (0.73-1.14)	0.41
Pulmonary embolism	1.31 (1.02-1.68)	0.04	1.46 (1.05-2.04)	0.03	0.74 (0.3-1.8)	0.51
Deep vein thrombosis	1.3 (1.02-1.67)	0.04	1.63 (1.18-2.24)	0.003	0.8 (0.32-2)	0.64
Acute renal failure	1.78 (1.65-1.93)	<0.001	1.09 (0.95-1.26)	0.22	0.97 (0.74-1.26)	0.82
Sepsis	1.48 (1.17-1.87)	0.001	1.52 (1.06-2.16)	0.02	1.18 (0.52-2.67)	0.69
Surgical site infection	0.91 (0.66-1.25)	0.55	1.43 (0.96-2.13)	0.08	1.36 (0.53-3.5)	0.52
Wound dehiscence	2.46 (1.11-5.43)	0.03	1.85 (0.43-7.84)	0.41	3.53 (0.49-25.42)	0.21

OR = odds ratio; CI = confidence interval