

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

**Supplemental Table 1. Primary diagnosis codes (ICD 9) for admissions for total hip and knee arthroplasty (THA/TKA) in Connecticut, 2005 – 2015.**

Primary Diagnosis (ICD 9)	THA (ICD 9 81.51)	TKA (ICD 9 81.54)	Total	Description
71430	9	5	14	Polyarticular juvenile rheumatoid arthritis, chronic or unspecified
71432	0	1	1	Pauciarticular juvenile rheumatoid arthritis
71433	1	0	1	Monoarticular juvenile rheumatoid arthritis
71489	4	6	10	Other specified inflammatory polyarthropathies
71500	1	2	3	Osteoarthrosis, generalized, site unspecified
71509	16	16	32	Osteoarthrosis, generalized, multiple sites
71515	3321	13	3334	Osteoarthrosis, localized, primary, pelvic region and thigh
71516	7	5678	5685	Osteoarthrosis, localized, primary, lower leg
71525	182	0	182	Osteoarthrosis, localized, secondary, pelvic region and thigh
71526	1	221	222	Osteoarthrosis, localized, secondary, lower leg
71530	2	0	2	Osteoarthrosis, localized, not specified whether primary or secondary, site unspecified
71535	27231	90	27321	Osteoarthrosis, localized, not specified whether primary or secondary, pelvic region and thigh
71536	174	45087	45261	Osteoarthrosis, localized, not specified whether primary or secondary, lower leg
71580	1	1	2	Osteoarthrosis involving, or with mention of more than one site, but not specified as generalized, site unspecified
71589	67	58	125	Osteoarthrosis involving, or with mention of more than one site, but not specified as generalized, multiple sites
71590	6	8	14	Osteoarthrosis, unspecified whether generalized or localized, site unspecified
71595	6482	32	6514	Osteoarthrosis, unspecified whether generalized or localized, pelvic region and thigh
71596	35	11687	11722	Osteoarthrosis, unspecified whether generalized or localized, lower leg
71695	82	0	82	Arthropathy, unspecified, pelvic region and thigh
71865	4	0	4	Unspecified intrapelvic protrusion of acetabulum, pelvic region and thigh

71875	1	0	1	Developmental dislocation of joint, pelvic region and thigh
71925	1	0	1	Villonodular synovitis, pelvic region and thigh
71926	0	1	1	Villonodular synovitis, lower leg
73340	8	1	9	Aseptic necrosis of bone, site unspecified
73342	1724	21	1745	Aseptic necrosis of head and neck of femur
73343	0	45	45	Aseptic necrosis of medial femoral condyle
73349	35	63	98	Aseptic necrosis of bone, other
75430	10	0	10	Congenital dislocation of hip, unilateral
75431	1	0	1	Congenital dislocation of hip, bilateral
75563	68	0	68	Other congenital deformity of hip (joint)

---

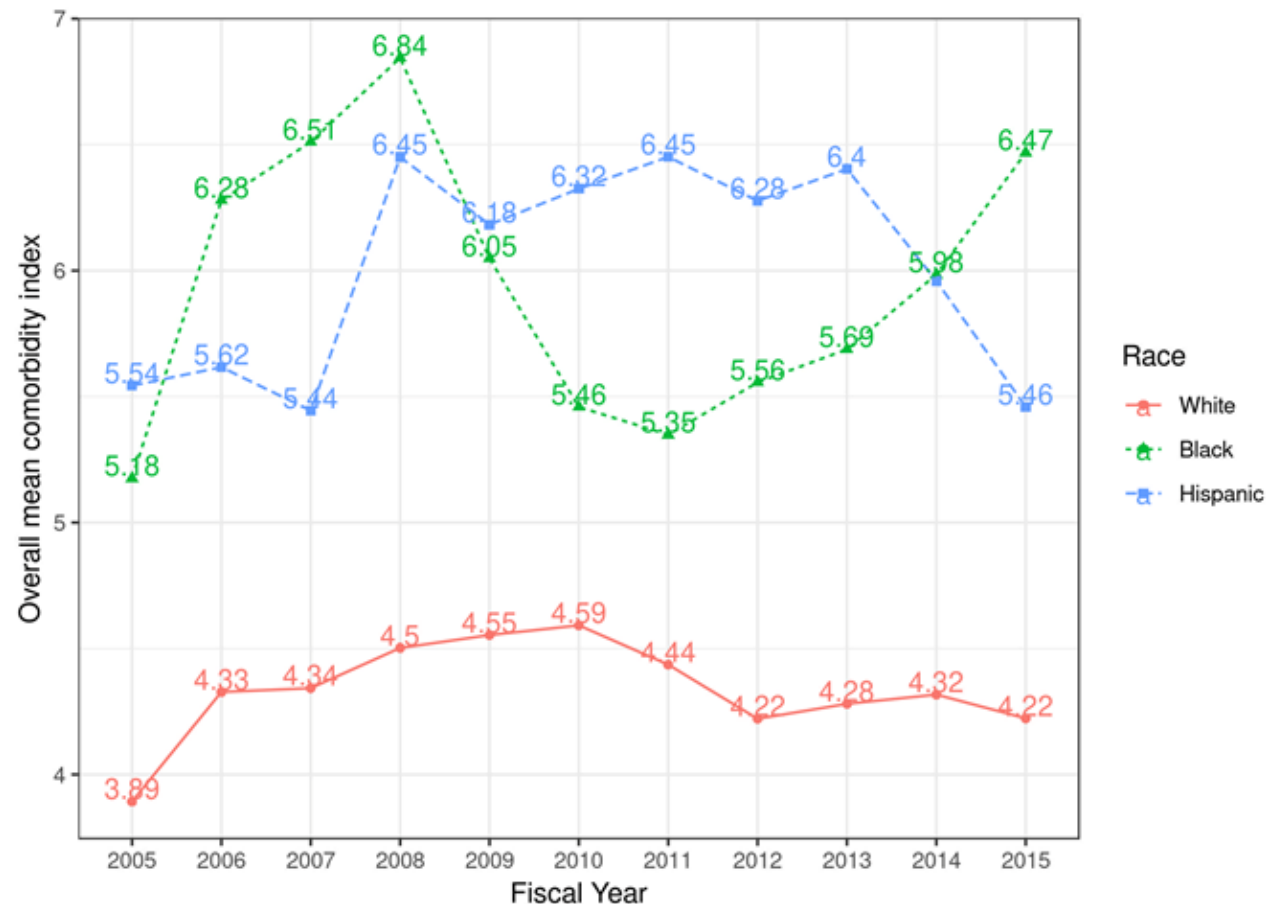
**Total**     **39,474**   **63,036**

**Supplemental Table 2. Top 15 Principal Diagnosis (ICD 9) Categories at Readmission**

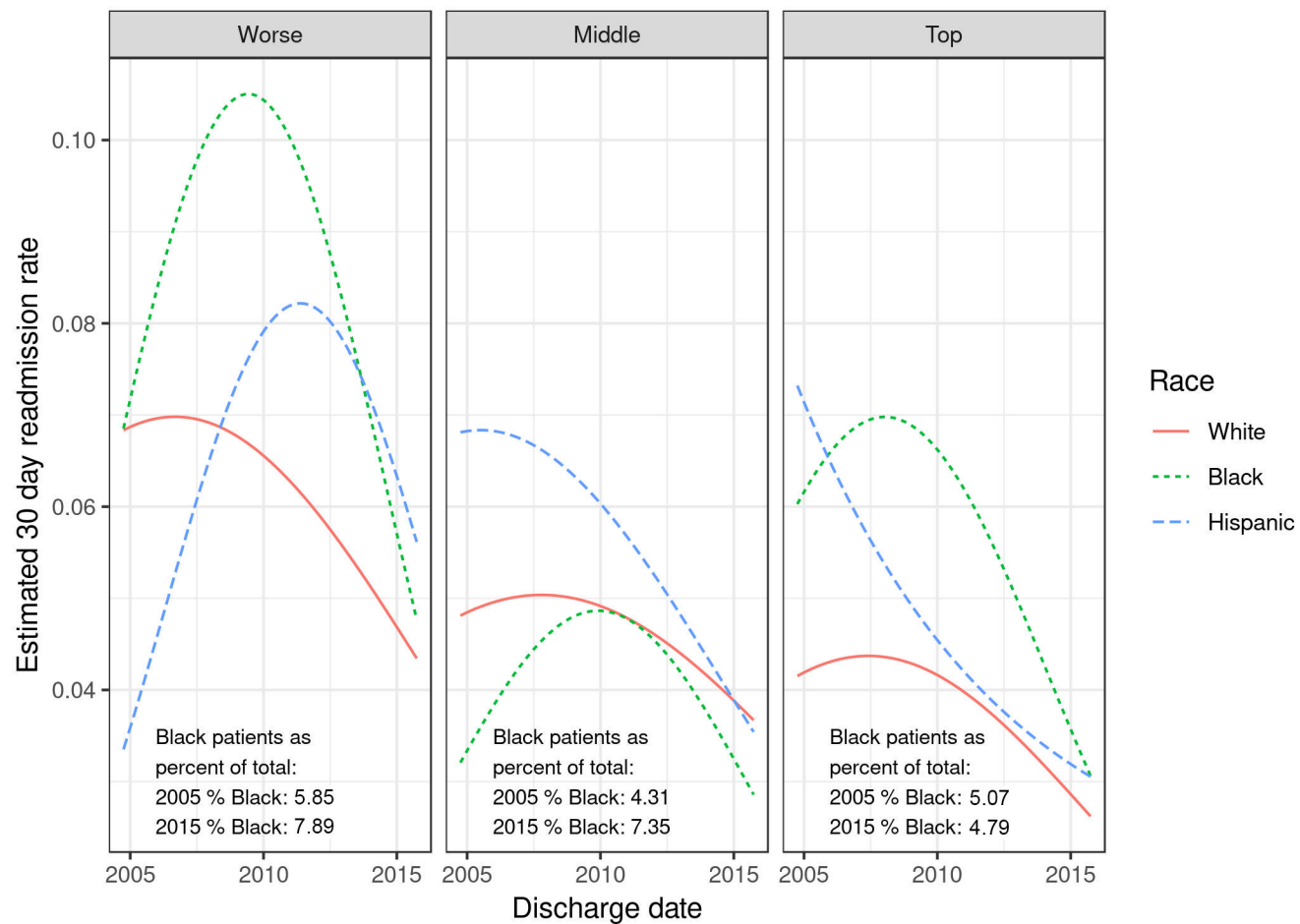
<b>Description</b>	<b>N</b>	<b>%</b>
Complications of surgical and medical care, not elsewhere classified	1,550	32.5
Other forms of heart disease	280	5.9
Diseases of pulmonary circulation	248	5.2
Symptoms, signs, and ill-defined conditions	228	4.8
Other metabolic disorders and immunity disorders	202	4.2
Other diseases of intestines and peritoneum	182	3.8
Diseases of veins and lymphatics, and other diseases of circulatory system	133	2.8
Pneumonia and influenza	131	2.7
Other bacterial diseases	130	2.7
Infections of skin and subcutaneous tissue	124	2.6
Other diseases of urinary system	123	2.6
Diseases of esophagus, stomach, and duodenum	121	2.5
Other diseases of digestive system	118	2.5
Nephritis, nephrotic syndrome, and nephrosis	114	2.4
Intestinal infectious diseases	91	1.9

**Supplemental Table 3. Number of admissions (column percentage) for different race over year 2005 to 2015.**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
White	6,841 (93.01)	6,929 (92.3)	6,655 (92.8)	7,552 (92.1)	8,641 (92.3)	9,063 (91.5)	9,165 (91.1)	9,224 (91.1)	9,426 (91.1)	10,052 (91.2)	10,369 (90.6)
Black	376 (5.11)	412 (5.5)	380 (5.3)	457 (5.6)	515 (5.5)	608 (6.1)	631 (6.3)	627 (6.2)	618 (6.0)	632 (5.7)	722 (6.3)
Hispanic	138 (1.88)	167 (2.2)	135 (1.9)	193 (2.3)	208 (2.2)	234 (2.4)	268 (2.6)	271 (2.7)	300 (2.9)	300 (3.1)	357 (3.1)
Total	7,355 100%	7,508 100%	7,170 100%	8,202 100%	9,364 100%	9,905 100%	10,064 100%	10,122 100%	10,344 100%	11,028 100%	11,448 100%



Supplemental Figure 1. Mean levels of patient comorbidities that were significant predictors of 30 day readmission, by race and fiscal year. Values are the means by race within each fiscal year for the presence of the following Elixhauser comorbidity variables: Congestive Heart Failure, Chronic Pulmonary Disease, Depression, Diabetes without Chronic Complications, Rheumatoid Arthritis, Coagulopathy, Fluid and Electrolyte Disorders, Obesity, Other Neurological Disorders, Peripheral Vascular Disease, Pulmonary Circulation Disorder. Red line denotes White patients, dotted green line denotes Black patients, and dashed blue line denotes Hispanic patients.



Supplemental Figure 2. Race and ethnic differences in fitted readmission rates following TJA in top, middle, and lowest performing facilities, 2005 – 2015. Facilities were allocated to tertiles based on average readmission rates over the study period. For each tertile the percentage of patients having TJA is calculated for 2005 and 2015. Red line denotes White patients, dotted green line denotes Black patients, and dashed blue line denotes Hispanic patients.