

Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. List of included procedures.

Surgery categorization	OHIP Procedure code	Procedural description
Cardiovascular surgery		
Coronary artery bypass grafting	R742	Coronary artery repair, one vessel
	R743	Coronary artery repair, two vessels
Abdominal aortic aneurysm repair	R802	Abdominal aortic aneurysm repair alone or including unilateral common femoral repair
	R817	Abdominal aortic aneurysm repair and bilateral common femoral repair
	R877	Abdominal aortic aneurysm with repair of iliac artery aneurysm (unilateral or bilateral)
General surgery		
Appendectomy	S205	Appendectomy (without gross perforation)
Cholecystectomy	S287	Cholecystectomy
Gastric-bypass	S120	Gastric bypass with Roux-en-Y anastomosis, for morbid obesity
Colon resection	S166	Resection with anastomosis: Small and large intestine terminal ileum, cecum and ascending colon (right hemicolectomy)
	S167	Resection with anastomosis: Large intestine - any portion
	S168	Ileostomy – subtotal colectomy
	S169	Total colectomy with ileo-rectal anastomosis
	S170	Ileostomy - plus total colectomy plus abdomino-perineal resection
	S171	Left hemicolectomy with anterior resection or proctosigmoidectomy (anastomosis below peritoneal reflection & mobilization of splenic flexure)
	S173	Two-surgeon team abdomino-perineal resection: abdominal
	S174	Two-surgeon team abdomino-perineal resection: perineal
	S213	Proctectomy - Anterior resection or proctosigmoidectomy (anastomosis below peritoneal reflection)
	S214	Proctectomy - Abdomino-perineal resection or pull through
	S215	Proctectomy – two-surgeon team: abdominal
	S216	Proctectomy – two-surgeon team: perineal
	S217	Hartmann procedure
Liver resection	S267	Hepatectomy – three or four liver segments
	S269	Hepatectomy – local excision of lesion
	S270	Hepatectomy – one or two liver segments
	S271	Hepatectomy – five or more liver segments
	S275	Hepatectomy – partial lobectomy

Obstetrics and gynecology		
Hysterectomy	S710	Hysterectomy with or without adenexa – with omentectomy for malignancy
	S757	Hysterectomy with or without adenexa – abdominal, total or subtotal
	S758	Hysterectomy with or without adenexa – with anterior and posterior vaginal repair and including enterocele and/or vault prolapse repair when rendered
	S759	Hysterectomy with or without adenexa – with anterior or posterior vaginal repair and including enterocele and/or vault prolapse repair when rendered
	S763	Hysterectomy with or without adenexa – radical, includes node dissection
	S816	Hysterectomy with or without adenexa – vaginal
Neurosurgery		
Anterior spinal decompression	N500	Anterior spinal decompression – cervical, disc excision
	N501	Anterior spinal decompression – cervical, vertebrectomy
	N502	Anterior spinal decompression – thoracic, disc excision
	N503	Anterior spinal decompression – thoracic, vertebrectomy
	N504	Anterior spinal decompression – thoracic, disc excision
	N505	Anterior spinal decompression – thoracic, vertebrectomy
	N506	Anterior spinal decompression – lumbar, disc excision
	N507	Anterior spinal decompression – lumbar, vertebrectomy
	N508	Anterior spinal decompression – lumbar, disc excision
	N579	Anterior spinal decompression – lumbar, vertebrectomy
Anterior spinal arthrodesis	N516	Anterior spinal arthrodesis with instrumentation without decompression – cervical, one disc
	N517	Anterior spinal arthrodesis with instrumentation without decompression – thoracic, one disc
	N518	Anterior spinal arthrodesis with instrumentation without decompression – thoracic, one disc
	N559	Anterior spinal arthrodesis with instrumentation without decompression – lumbar, one disc
	N580	Anterior spinal arthrodesis with instrumentation without decompression – lumbar, one disc
Posterior spinal decompression	N509	Posterior spinal decompression – cervical/thoracic, one level - unilateral
	N510	Posterior spinal decompression – cervical/thoracic, one level - bilateral
	N511	Posterior spinal decompression – lumbar, one level - unilateral
	N512	Posterior spinal decompression – lumbar, one level - bilateral
	N520	Posterior spinal decompression – cervical/thoracic, one level - laminoplasty
	N524	Posterior spinal decompression – lumbar, one level – bilateral canal enlargement
Posterior spinal arthrodesis	N514	Posterior spinal arthrodesis as sole procedure – cervical/thoracic without instrumentation – one disc level, below C2
	N515	Posterior spinal arthrodesis as sole procedure – cervical/thoracic with instrumentation – one disc level, below C2
	N519	Posterior spinal arthrodesis as sole procedure – cervical/thoracic without instrumentation – C1/C2 fusion

	N533	Posterior spinal arthrodesis as sole procedure – lumbar with instrumentation, pars reconstruction
	N581	Posterior spinal arthrodesis as sole procedure – lumbar without instrumentation – one disc level
	N582	Posterior spinal arthrodesis as sole procedure – lumbar with instrumentation – one disc level
Craniotomy / brain biopsy	N102	Craniotomy plus excision – supratentorial for meningioma and other tumours
	N103	Craniotomy plus excision – supratentorial for astrocytoma, oligodendroglioma, glioblastoma or metastatic tumor
	N113	Craniotomy for brain biopsy (other than for tumour)
	N151	Craniotomy plus excision – infratentorial for astrocytoma, oligodendroglioma, glioblastoma or metastatic tumor
	N152	Craniotomy plus excision – craniotomy plus lobectomy
	N153	Craniotomy plus excision – infratentorial for meningioma and other tumours
Otolaryngology		
Total thyroidectomy	S788	Thyroidectomy, total
Neck dissection	R910	Neck lymph nodes - limited dissection, must include 2 levels (unilateral) or central compartment
	R915	Neck lymph nodes - comprehensive dissection, must include 3 or more levels, unilateral
Orthopedic surgery		
Knee replacement	R441	Knee - Total replacement/both compartments
Hip replacement	R440	Pelvic and hip - Total hip replacement - acetabulum and femur
Open repair of femoral neck / femoral shaft fracture	F099	Reduction, fractures, femoral neck trochanteric, subtrochanteric – open reduction – pin only
	F096	Femur, fracture – open reduction
	F100	Reduction, fractures, femoral neck trochanteric, subtrochanteric – open reduction – pin and plate/screens
	F101	Reduction, fractures, femoral neck trochanteric, subtrochanteric – open reduction – primary prosthesis
Plastic surgery		
Carpal tunnel release	N290	Carpal tunnel release
Breast reduction	R110	Reduction mammoplasty (female, to include nipple transplantation or grafting, if rendered) - unilateral
Thoracic surgery		
Lung resection	M142	Pneumonectomy, may include radical mediastinal node dissection, sampling or pericardial resection requiring repair
	M143	Lobectomy, may include radical mediastinal node dissection or sampling
	M144	Segmental resection, including segmental bronchus and artery
Urology		
Radical cystectomy	S440	Cystectomy – complete – with continent urinary diversion
	S453	Cystectomy – complete – with ureteroileal conduit
Radical prostatectomy	S651	Prostatectomy – radical

Transurethral resection of prostate	S655	Transurethral resection of prostate - and may include cystoscopy, meatotomy, dilatation of stricture, internal urethrotomy or vasectomy
Vascular surgery		
Femoral-popliteal bypass	R791	Femoro-popliteal bypass - with saphenous vein
	R794	Femoro-popliteal bypass – with prosthetic graft

eTable 2. Baseline characteristics of study cohort, stratified by surgeon sex

	Label or value	Male Surgeon	Female Surgeon	Absolute Difference (95% CL)	Standardized Difference (95% CI)
Patients, n		N=1,014,657	N=151,054	n.a	n.a
Surgeon characteristics					
Age	Mean (SD), years	49.8 (9.5)	45.1 (8.3)	4.6 (4.6, 4.7)	0.519 (0.514, 0.525)
Annual case volume (quartiles), n (%)	1 - Lowest	225,407 (22.2%)	56,528 (37.4%)	15.2 (14.8, 15.6)	0.337 (0.328, 0.346)
	2-	257,544 (25.4%)	44,758 (29.6%)	4.2 (3.8, 4.7)	0.095 (0.085, 0.105)
	3-	254,327 (25.1%)	30,976 (20.5%)	4.6 (4.1, 5.0)	0.109 (0.097, 0.121)
	4 - Highest	277,379 (27.3%)	18,792 (12.4%)	14.9 (14.4, 15.4)	0.380 (0.365, 0.395)
Years in practice	Mean (SD), years	16.2 (8.6)	12.6 (8.1)	3.6 (3.6, 3.6)	0.431 (0.425, 0.436)
Specialty, n (%)	Cardiothoracic Surgery	3,775 (0.4%)	203 (0.1%)	0.2 (-0.3, 0.8)	0.047 (-0.094, 0.189)
	General Surgery	324,155 (31.9%)	61,666 (40.8%)	8.9 (8.5, 9.3)	0.185 (0.177, 0.194)
	Neurosurgery	56,049 (5.5%)	2,863 (1.9%)	3.6 (3.1, 4.2)	0.193 (0.155, 0.230)
	Obstetrics/Gynaecology	86,673 (8.5%)	54,696 (36.2%)	27.7 (27.2, 28.1)	0.704 (0.693, 0.715)
	Orthopaedic Surgery	379,088 (37.4%)	12,862 (8.5%)	28.8 (28.3, 29.4)	0.730 (0.713, 0.748)
	Otolaryngology	16,410 (1.6%)	2,708 (1.8%)	0.2 (-0.4, 0.7)	0.014 (-0.027, 0.054)
	Plastic Surgery	41,543 (4.1%)	13,485 (8.9%)	4.8 (4.3, 5.4)	0.197 (0.177, 0.216)
	Thoracic Surgery	13,559 (1.3%)	1,476 (1.0%)	0.4 (-0.2, 0.9)	0.034 (-0.020, 0.087)
	Urology	89,339 (8.8%)	1,080 (0.7%)	8.1 (7.6, 8.6)	0.387 (0.327, 0.447)
	Vascular Surgery	4,066 (0.4%)	15 (0.0%)	0.4 (-0.1, 0.9)	0.086 (-0.421, 0.593)
Anesthesiologist characteristics					
Age	Mean (SD), years	48.9 (10.1)	49.2 (10.4)	0.3 (0.3, 0.4)	0.032 (0.026, 0.037)
Sex, n (%)	Female	267,330 (26.3%)	44,492 (29.5%)	3.1 (2.7, 3.6)	0.069 (0.059, 0.079)
	Male	747,327 (73.7%)	106,562 (70.5%)	3.1 (2.8, 3.4)	0.069 (0.063, 0.076)
Annual case volume (quartiles), n (%)	1 - Lowest	234,001 (23.1%)	37,563 (24.9%)	1.8 (1.3, 2.3)	0.042 (0.031, 0.053)
	2 -	262,277 (25.8%)	43,735 (29.0%)	3.1 (2.6, 3.6)	0.070 (0.060, 0.080)
	3 -	257,338 (25.4%)	38,867 (25.7%)	0.4 (-0.1, 0.8)	0.008 (-0.002, 0.019)
	4 - Highest	261,041 (25.7%)	30,889 (20.4%)	5.3 (4.8, 5.8)	0.125 (0.114, 0.137)
Years in practice	Mean (SD), years	14.6 (9.3)	14.9 (9.6)	0.4 (0.3, 0.4)	0.038 (0.033, 0.043)

Patient characteristics					
Age	Mean (SD), years	60.0 (17.2)	52.5 (16.3)	7.5 (7.4, 7.6)	0.446 (0.440, 0.451)
Sex, n (%)	Female	600,293 (59.2%)	120,922 (80.1%)	20.9 (20.6, 21.1)	0.466 (0.460, 0.473)
	Male	414,364 (40.8%)	30,132 (19.9%)	20.9 (20.4, 21.4)	0.466 (0.455, 0.478)
Comorbidity, n (%)	ADG 0-5 – Lowest	263,940 (26.0%)	40,900 (27.1%)	1.1 (0.6, 1.5)	0.024 (0.014, 0.035)
	ADG 6-7	240,746 (23.7%)	37,511 (24.8%)	1.1 (0.6, 1.6)	0.026 (0.015, 0.037)
	ADG 8-10	304,439 (30.0%)	45,875 (30.4%)	0.4 (-0.1, 0.8)	0.008 (-0.002, 0.018)
	AGD>=11- Highest	205,532 (20.3%)	26,768 (17.7%)	2.5 (2.0, 3.0)	0.065 (0.052, 0.077)
Rurality, n (%)	Urban	893,124 (88.0%)	137,951 (91.3%)	3.3 (3.1, 3.5)	0.109 (0.103, 0.114)
	Rural	121,533 (12.0%)	13,103 (8.7%)	3.3 (2.8, 3.8)	0.109 (0.091, 0.127)
Income quintile, n (%)	1 - Lowest	194,036 (19.1%)	28,275 (18.7%)	0.4 (-0.1, 0.9)	0.010 (-0.002, 0.023)
	2 -	205,328 (20.2%)	30,195 (20.0%)	0.2 (-0.2, 0.7)	0.006 (-0.006, 0.018)
	3 -	204,020 (20.1%)	30,152 (20.0%)	0.1 (-0.3, 0.6)	0.004 (-0.008, 0.016)
	4 -	206,707 (20.4%)	31,030 (20.5%)	0.2 (-0.3, 0.7)	0.004 (-0.008, 0.016)
	5 - Highest	204,566 (20.2%)	31,402 (20.8%)	0.6 (0.1, 1.1)	0.016 (0.004, 0.027)
Other characteristics					
Hospital status, n (%)	Community hospital	678,409 (66.9%)	94,463 (62.5%)	4.3 (4.0, 4.7)	0.091 (0.084, 0.097)
	Academic hospital	336,248 (33.1%)	56,591 (37.5%)	4.3 (3.9, 4.8)	0.091 (0.082, 0.099)
Surgical procedure type, n (%)	Elective	806,928 (79.5%)	124,391 (82.3%)	2.8 (2.6, 3.1)	0.072 (0.066, 0.078)
	Urgent	207,729 (20.5%)	26,663 (17.7%)	2.8 (2.3, 3.3)	0.072 (0.059, 0.085)
Case complexity, n (%)	Low	348,450 (34.3%)	61,132 (40.5%)	6.1 (5.7, 6.5)	0.127 (0.118, 0.136)
	High	666,207 (65.7%)	89,922 (59.5%)	6.1 (5.8, 6.5)	0.127 (0.120, 0.134)
Duration of index surgery	Missing on duration, n (%)	57,853 (5.7%)	7,665 (5.1%)	0.6 (0.1, 1.2)	0.028 (0.004, 0.052)
	Non-missing on duration, n (%)	956,804 (94.3%)	143,389 (94.9%)	0.6 (0.5, 0.8)	0.028 (0.022, 0.033)
	Mean (SD), minutes	121.1 (103.0)	135.8 (111.0)	14.7 (14.1, 15.3)	0.137 (0.132, 0.143)
Year of index surgery, n (%)	2007	89,521 (8.8%)	10,337 (6.8%)	2.0 (1.5, 2.5)	0.074 (0.053, 0.094)
	2008	85,735 (8.4%)	11,238 (7.4%)	1.0 (0.5, 1.5)	0.037 (0.018, 0.057)
	2009	85,322 (8.4%)	11,492 (7.6%)	0.8 (0.3, 1.3)	0.030 (0.010, 0.049)
	2010	84,360 (8.3%)	11,471 (7.6%)	0.7 (0.2, 1.2)	0.027 (0.007, 0.046)
	2011	85,119 (8.4%)	11,492 (7.6%)	0.8 (0.3, 1.3)	0.029 (0.009, 0.048)

2012	82,446 (8.1%)	11,723 (7.8%)	0.4 (-0.2, 0.9)	0.013 (-0.006, 0.033)
2013	84,742 (8.4%)	12,600 (8.3%)	0.0 (-0.5, 0.5)	0.000 (-0.018, 0.019)
2014	82,275 (8.1%)	13,307 (8.8%)	0.7 (0.2, 1.2)	0.025 (0.007, 0.043)
2015	78,693 (7.8%)	13,376 (8.9%)	1.1 (0.6, 1.6)	0.040 (0.022, 0.058)
2016	73,790 (7.3%)	12,109 (8.0%)	0.7 (0.2, 1.3)	0.028 (0.009, 0.047)
2017	66,313 (6.5%)	11,314 (7.5%)	1.0 (0.4, 1.5)	0.037 (0.017, 0.057)
2018	61,085 (6.0%)	10,633 (7.0%)	1.0 (0.5, 1.5)	0.041 (0.021, 0.062)
2019	55,256 (5.4%)	9,962 (6.6%)	1.1 (0.6, 1.7)	0.048 (0.027, 0.070)

eTable 3. Multivariable adjusted total health care costs for patients undergoing common elective and emergent surgeries, stratified by patient-surgeon sex dyad.

	Within 30 days (\$, 95% CI)	Within 90 days (\$, 95% CI)	Within 1 year (\$, 95% CI)
Male patient- male surgeon	15,151 (12,061 to 19,033)	19,269 (15,333 to 24,214)	28,869 (23,172 to 35,966)
Male patient-female surgeon	12,986 (9,934 to 16,975)	16,450 (12,559 to 21,546)	25,050 (18,945 to 33,123)
Female patient-male surgeon	11,920 (9,645 to 14,730)	15,267 (12,670 to 18,396)	21,751 (17,931 to 26,385)
Female patient-female surgeon	9,381 (7,983 to 11,025)	11,570 (10,210 to 13,111)	16,324 (14,311 to 18,619)

Note: results from GEE negative binomial modeling dealing with clustering based on procedure fee code, adjusted for surgeon age, surgeon annual case volume, surgeon years in practice, anesthesiologist age, anesthesiologist annual case volume, anesthesiologist years in practice, patient age, patient comorbidity, rurality, income quintile, and hospital status.

eTable 4. Multivariable adjusted relative total health care costs for patients undergoing common elective and emergent surgeries, stratified by patient-surgeon sex dyad.

	Among male patients		Among female patients	
	Male vs Female surgeon, adjusted relative risk 95% CI)	P-value	Male vs Female surgeon, adjusted relative risk 95% CI)	P-value
Total health care costs within 30 days	1.08 (1.03-1.13)	0.0028	1.08 (1.04-1.13)	0.0001
Total health care costs within 90 days	1.08 (1.03-1.14)	0.0020	1.10 (1.05-1.14)	<0.0001
Total health care costs within 1 year	1.08 (1.02-1.14)	0.0068	1.09 (1.05-1.14)	<0.0001

Note: using GEE modeling dealing with clustering based on procedure fee code (negative binomial regression with log link), adjusted for surgeon age (continuous), surgeon annual case volume (quartiles), surgeon specialty, surgeon years of practice (continuous), anesthesiologist age (continuous), anesthesiologist sex, anesthesiologist annual case volume (quartiles), anesthesiologist years of practice (continuous), patient age (continuous), patient comorbidity (categorical), rurality (rural vs. urban), income quintile (quintiles) , LHIN, hospital status (academic vs. community), and index year.

eTable 5: Multivariable adjusted health care costs for patients undergoing common elective and emergent surgeries, stratified by patient-surgeon sex concordance.

Time Period and Outcome	Male Patient Male Surgeon Adjusted Mean (95% CI)	Male Patient Female Surgeon Adjusted Mean (95% CI)	Female Patient Male Surgeon Adjusted Mean (95% CI)	Female Patient Female Surgeon Adjusted Mean Cost (\$, 95% CI)
Within 30 Days				
Total health care costs	15151 (12061-19033)	12986 (9934-16975)	11920 (9645-14730)	9381 (7983-11025)
Inpatient costs	9719 (7392-12778)	8152 (5600-11867)	6816 (6779-6852)	5397 (5331-5464)
Post-discharge care costs	1129 (1115-1143)	711 (679-743)	838 (828-848)	382 (372-392)
Prescription medication costs	118 (117-120)	96 (92-99)	63 (62-64)	40 (40-41)
Physician Costs	2965 (2387-3684)	2674 (2182-3276)	2489 (2115-2928)	2049 (1845-2276)
Within 90 Days				
Total health care costs	19269 (15333-24214)	16450 (12559-21546)	15267 (12670-18396)	11570 (10210-13111)
Inpatient costs	11109 (8501-14517)	9338 (6469-13479)	7865 (7820-7910)	5878 (5806-5951)
Post-discharge care costs	1975 (1952-1999)	1276 (1221-1333)	1344 (1328-1359)	586 (571-602)
Prescription medication costs	341 (337-346)	295 (286-305)	179 (178-181)	119 (117-121)
Physician Costs	3440 (2801-4225)	3103 (2550-3777)	2826 (2413-3310)	2341 (2124-2579)
Within 1 Year				
Total health care costs	28869 (23172-35966)	25050 (18945-33123)	21751 (17931-26385)	16324 (14311-18619)
Inpatient costs	14006 (10947-17920)	11975 (8442-16987)	8996 (8948-9044)	6701 (6620-6783)
Post-discharge care costs	3450 (3391-3510)	2195 (2099-2295)	2128 (2104-2152)	950 (926-974)
Prescription medication costs	1176 (1166-1186)	1106 (1073-1141)	690 (685-696)	479 (471-488)
Physician Costs	4765 (4755-4776)	4449 (4415-4484)	3971 (3462-4556)	3353 (3085-3644)

eTable 6: Crude costs, stratified by surgeon sex.

Outcome	Label	Outcome within 30 Days		Outcome within 90 Days		Outcome within 1-Year	
		Male Surgeon	Female Surgeon	Male Surgeon	Female Surgeon	Male Surgeon	Female Surgeon
Total health care costs	Mean (SD)	13776.4 (12883.9)	9861.3 (10140.2)	17500.5 (20923.2)	12215.9 (16167.6)	26454.2 (36749.2)	18269.4 (28656.8)
	Median (IQR)	11194 (5790-16334)	7126 (4836-10960)	12223 (6403-19132)	7600 (5321-12598)	15219 (7930-28819)	9296 (6715-17000)
Inpatient costs	Mean (SD)	8388.9 (9961.2)	5914.4 (8183.1)	9504.1 (15072.3)	6564.3 (11985.0)	11811.7 (22447.7)	7954.2 (17502.8)
	Median (IQR)	7747 (3271-10511)	5116 (0-7730)	7770 (3284-10681)	5144 (0-7783)	8179 (3476-11967)	5187 (0-8261)
Post-discharge care costs	Mean (SD)	1522.9 (3986.6)	544.3 (2263.8)	2676.8 (7205.0)	998.8 (4111.6)	4709.8 (14428.9)	1881.9 (8567.5)
	Median (IQR)	0 (0-1157)	0 (0-0)	0 (0-1478)	0 (0-0)	0 (0-1791)	0 (0-0)
Prescription medication costs	Mean (SD)	103.6 (452.6)	55.8 (324.0)	303.2 (1094.5)	176.8 (881.8)	1168.1 (3887.5)	711.4 (3398.5)
	Median (IQR)	0 (0-86)	0 (0-9)	8 (0-309)	0 (0-72)	78 (0-1197)	0 (0-343)
Physicians Costs	Mean (SD)	2695.2 (2116.9)	2170.1 (1681.2)	3101.6 (2654.6)	2492.1 (2143.7)	4424.8 (3973.9)	3569.6 (3458.6)
	Median (IQR)	2181 (1407-3211)	1751 (1260-2472)	2413 (1590-3638)	1939 (1399-2817)	3306 (2129-5340)	2577 (1789-4111)

eTable 7: Crude costs, stratified by patient-surgeon sex concordance.

Outcome	Label	Male Patient -Male Surgeon	Male Patient-Female Surgeon	Female Patient-Male Surgeon	Female Patient-Female Surgeon
		N=414,364	N=30,132	N=600,293	N=120,922
Within 30 days					
Total health care costs	Mean (SD)	14679.9 (14228.8)	13297.0 (15001.8)	13152.8 (11826.8)	9005.2 (8288.1)
	Median (IQR)	12056 (5826-16820)	8652 (4518-16175)	10399 (5750-15980)	7053 (4898-9755)
Inpatient costs	Mean (SD)	9282.7 (11342.1)	8443.4 (12323.3)	7772.0 (8831.1)	5284.2 (6619.5)
	Median (IQR)	8181 (3470-10894)	5056 (1991-10670)	7240 (2057-10410)	5116 (0-6872)
Post-discharge care costs	Mean (SD)	1341.6 (3642.7)	800.2 (2757.7)	1648.0 (4203.1)	480.6 (2118.1)
	Median (IQR)	0 (0-1155)	0 (0-696)	0 (0-1163)	0 (0-0)
Prescription medication costs	Mean (SD)	124.1 (520.3)	93.5 (476.9)	89.4 (398.6)	46.4 (272.1)
	Median (IQR)	3 (0-107)	0 (0-45)	0 (0-71)	0 (0-5)
Physician Costs	Mean (SD)	2906.9 (2407.7)	2813.8 (2427.3)	2549.1 (1876.4)	2009.7 (1390.6)
	Median (IQR)	2319 (1405-3467)	2148 (1313-3497)	2100 (1408-3044)	1698 (1251-2292)
Within 90 days					
Total health care costs	Mean (SD)	18899.3 (23308.9)	17422.5 (24470.4)	16534.9 (19043.6)	10918.5 (12995.3)
	Median (IQR)	13152 (6661-20231)	10005 (5115-19578)	11373 (6244-18411)	7487 (5371-11131)

Inpatient costs	Mean (SD)	10686.0 (17442.5)	9945.6 (18971.1)	8688.2 (13128.1)	5721.7 (9284.1)
	Median (IQR)	8378 (3526-11299)	5235 (2040-10973)	7274 (2214-10503)	5144 (0-6957)
Post-discharge care costs	Mean (SD)	2420.1 (6885.0)	1601.5 (5342.2)	2854.0 (7412.7)	848.6 (3727.3)
	Median (IQR)	0 (0-1457)	0 (0-1001)	0 (0-1499)	0 (0-0)
Prescription medication costs	Mean (SD)	364.9 (1260.9)	304.1 (1318.3)	260.7 (960.8)	145.0 (730.3)
	Median (IQR)	49 (0-370)	0 (0-235)	0 (0-264)	0 (0-45)
Physician Costs	Mean (SD)	3374.4 (3014.7)	3262.7 (3123.4)	2913.3 (2356.0)	2300.1 (1767.8)
	Median (IQR)	2581 (1639-3969)	2388 (1464-3972)	2313 (1565-3426)	1878 (1390-2605)
Within 1 year					
Total health care costs	Mean (SD)	29239.1 (40977.0)	27262.0 (42071.1)	24532.0 (33386.1)	16028.5 (23656.5)
	Median (IQR)	16597 (9466-31559)	13325 (6398-29683)	14098 (7461-26939)	8975 (6776-14954)
Inpatient costs	Mean (SD)	13590.9 (26485.7)	12781.1 (27560.9)	10583.6 (19073.9)	6751.4 (13644.0)
	Median (IQR)	8857 (3619-13625)	6380 (2335-12732)	7686 (2836-11525)	5179 (0-7453)
Post-discharge care costs	Mean (SD)	4342.5 (14080.3)	3095.3 (11600.5)	4963.4 (14659.4)	1579.6 (7596.2)
	Median (IQR)	0 (0-1787)	0 (0-1310)	0 (0-1791)	0 (0-0)
Prescription medication costs	Mean (SD)	1396.9 (4441.0)	1204.3 (4535.8)	1010.1 (3445.2)	588.5 (3037.4)

	Median (IQR)	232 (0-1450)	9 (0-998)	31 (0-1017)	0 (0-205)
Physician Costs	Mean (SD)	4853.4 (4439.6)	4657.5 (4757.1)	4129.0 (3587.9)	3298.5 (2989.2)
	Median (IQR)	3577 (2270-5887)	3205 (1887-5733)	3135 (2052-4990)	2486 (1773-3796)

eTable 8: Sensitivity analysis of multivariable adjusted models assessing the association between surgeon sex and total health care costs, further including operative duration as a covariate.

	Outcome within 30 Days		Outcome within 90 Days		Outcome within 1 Year	
	Male vs. Female Surgeon, adjusted relative risk (95% CI)	P value	Male vs. Female Surgeon, adjusted relative risk (95% CI)	P value	Male vs. Female Surgeon, adjusted relative risk (95% CI)	P value
Total health care costs	1.11 (1.08-1.15)	<0.0001	1.12 (1.08-1.16)	<0.0001	1.12 (1.08-1.15)	<0.0001

eTable 9: Sensitivity analysis of multivariable adjusted models assessing the association between patient-surgeon sex concordance and total health care costs, further including operative duration as a covariate.

	Among male patients		Among female patients	
	Male vs Female surgeon, adjusted relative risk (95% CI)	P-value	Male vs Female surgeon, adjusted relative risk (95% CI)	P-value
Total health care costs within 30 days	1.09 (1.05-1.12)	<0.0001	1.11 (1.08-1.15)	<0.0001
Total health care costs within 90 days	1.09 (1.05-1.13)	<0.0001	1.13 (1.09-1.17)	<0.0001
Total health care costs within 1 year	1.09 (1.04-1.15)	<0.0001	1.12 (1.08-1.16)	<0.0001