

Appendix

Table A1. Radical prostatectomy codes England and United States

	England	United States		
	OPCS4	ICD9-PCS	ICD10-PCS	CPT
Open	M61	60.5	0VT00ZZ	55840
	M62	60.6	0VT07ZZ	55842
	M64			55845
Laparoscopic	above +Y75.1 or +Y75.2 or +Y75.5	above +54.21	0VT04ZZ 0VT08ZZ	55866
Robotic	above (open) +Y74.3 or +Y75.3 or +Y76.5	above (open) +17.4	above +8E0W4CZ or +8E0W7CZ or +8E0WXCZ or +8E0W0CZ or +8E0W3CZ or +8E0W8CZ	above +S2900

Notes: OPCS-4: Office of Population Censuses and Surveys Classification of Interventions and Procedures; PCS: Procedure Coding System; CPT: Current Procedural Terminology.

Table A2: United States Radical Prostatectomy volumes, comparison National Inpatient Sample and OptumLabs Data Warehouse, 2005-2017

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Prostatectomies (NIS)	57452	67782	82235	89311	80903	72818	83941	64835	61310	58290	n/a	81425	85490
Prostatectomies (OLDW)	4798	5808	7108	6953	6994	6462	6800	5581	5570	4670	5154	6336	7124
Prop. Prostatectomies OLDW/NIS	8.4%	8.6%	8.6%	7.8%	8.6%	8.9%	8.1%	8.6%	9.1%	8.0%	n/a	7.8%	8.3%
Prostatectomies (OLDW – COM)	4,602	5546	6689	6458	6273	5602	5804	4657	4559	3814	3965	4290	4333
Prostatectomies (OLDW - MA)	196	262	419	495	721	860	996	924	1011	856	1189	2046	2791
Prop. enrolment MA (National - Kaiser Family Foundation)	13%	16%	19%	22%	23%	24%	25%	27%	28%	30%	31%	31%	33%
Prop. enrolment in MA (OLDW - Prostatectomy)	4.1%	4.5%	5.9%	7.1%	10.3%	13.3%	14.7%	16.6%	18.2%	18.3%	23.1%	32.3%	39.2%

Notes: NIS= National Inpatient Sample, OLDW= OptumLabs Data Warehouse, COM= commercial insurance, MA= Medicare Advantage. Data sources: National Inpatient Sample (<https://www.hcup-us.ahrq.gov/nisoverview.jsp>), OptumLabs Data Warehouse, and Kaiser Family Foundation (<https://www.kff.org/medicare/fact-sheet/medicare-advantage/>). The codes to identify prostatectomies in both NIS and OLDW are the ones described in Table A1. For 2015, NIS is not reporting the volume as there was a change from ICD9-PCS to ICD10-PCS in October 2015.

Table A3. Reimbursement tariffs HRG England

HRG code	Code description	HRG tariff 2018/19 (US dollars)
LB21A	Major Open, Prostate or Bladder Neck Procedures (Male), with CC Score 2+	\$5,974.50
LB21B	Major Open, Prostate or Bladder Neck Procedures (Male), with CC Score 0-1	\$4,994.63
LB22Z	Major Laparoscopic Prostate or Bladder Neck Procedures (Male)	\$5,723.49
LB69Z	Major Robotic Prostate or Bladder Neck Procedures (Male)	\$8,673.83

Notes: These tariffs are for elective interventions. 99.5% of the interventions in England are elective. CC: Complexity and Comorbidity. The CC score is the sum of all comorbidities presents. The CC splits (0-1, 2+) incorporate variations in severity and complexity within HRGs (based on diagnosis codes, procedures, age, length of stay, anatomical region or treatment approach).

Table A4. Sample Characteristics for England and the United States (2005)

Patient Characteristics	England	United States	
		Commercial (COM)	Medicare Advantage (MA)
No. of patients	3,257	4,602 (95.9%)	196 (4.1%)
No. of hospitals*	120	1,117	103
Open	2,919 (89.62%)	4,210 (91.5%)	>185 (>95.4%)
Minimal Invasive	338 (10.38%)	392 (8.5%)	<11 (<5.6%)
Age in years, mean (standard deviation)	62 (6)	60 (7)	69 (4)
Race (%)			
White	2,279 (92.7%)	2,695 (85.1%)	143 (76.0%)
Black	102 (4.2%)	263 (8.3%)	30 (16.0%)
Other	77 (3.1%)	210 (6.6%)	>12 (>6.4%)
Comorbidity (%)			
Charlson Comorbidity Index (mean)	2.14	2.30	2.36
Diabetes	141 (4.3%)	437 (9.5%)	26 (13.3%)
Circulatory Disease	774 (23.8%)	2,279 (49.5%)	113 (57.7%)
Respiratory Disease	188 (5.8%)	440 (9.6%)	24 (12.2%)
Mental Health	26 (0.8%)	555 (12.1%)	18 (9.2%)
Socio-economic status (%)			
Socio-economic status 1 (lower)	417 (14.6%)	260 (12.1%)	45 (30.6%)
Socio-economic status 2	458 (14.2%)	537 (24.9%)	63 (42.8%)
Socio-economic status 3	576 (17.8%)	674 (31.3%)	27 (18.4%)
Socio-economic status 4	833 (25.8%)	362 (16.8%)	12 (8.2%)
Socio-economic status 5 (higher)	894 (27.7%)	322 (14.9%)	
Reimbursement (mean) (in US dollars)	\$5,155.94	\$11,031.56	\$7,131.00

*Notes: White in the US sample represents the non-Hispanic whites (Hispanics are in others), Socio-economic status in England is represented by the Index of Multiple Deprivation and in US is represented by household income levels (<40,000, 40,000-74,900, 75,000-124,900, 125,000-199,900, >200,000). *US hospitals treated both type of enrolled patients (commercial and MA) being the total number of hospitals 1,139.*

Table A5: Association of surgical approach with patient characteristics by country, 2005-2017

	Open		Minimally Invasive		Laparoscopic		Robotic	
	England	US	England	US	England	US	England	US
Age	0.001*** (0.0003)	0.003*** (0.0002)	-0.002*** (0.0002)	-0.003*** (0.0003)	-0.001*** (0.0002)	0.001*** (0.0002)	-0.001** (0.0002)	-0.004*** (0.0003)
Comorbidity	0.014*** (0.003)	0.020*** (0.002)	-0.013*** (0.002)	-0.021*** (0.002)	-0.005** (0.002)	-0.011*** (0.001)	-0.007*** (0.002)	-0.010*** (0.002)
N	66,753	79,358	66,753	79,358	66,753	77,246	66,753	77,246
Hospitals	141	2,713	141	2,713	141	2,704	141	2,704
Mean outcome	36.0%	41.1%	64.0%	58.9%	18.1%	7.3%	45.9%	50.5%
	Open		Minimally Invasive		Laparoscopic		Robotic	
	US (COM)	US (MA)	US (COM)	US (MA)	US (COM)	US (MA)	US (COM)	US (MA)
Age	0.002*** (0.0003)	0.005*** (0.001)	-0.002*** (0.0003)	-0.006*** (0.001)	0.0003* (0.0002)	0.008*** (0.001)	-0.002*** (0.0002)	-0.014*** (0.001)
Comorbidity	0.018*** (0.002)	0.025*** (0.003)	-0.018*** (0.002)	-0.026*** (0.003)	-0.009*** (0.002)	-0.015*** (0.003)	-0.009*** (0.002)	-0.013*** (0.004)
N	66,592	12,766	66,592	12,766	64,649	12,597	64,649	12,597
Hospitals	2,436	1,551	2,436	1,551	2,427	1,546	2,427	1,546
Mean outcome	43.4%	28.8%	56.6%	71.2%	6.6%	10.5%	48.6%	60.3%

Notes: Standard errors clustered at hospital-level in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Models adjusted for prostatectomy volumes per hospital/year (each surgery type), Hospital Fixed-effects and year trends. The period of analysis is 2005-2017 for both panels. COM= commercial insurance, MA= Medicare Advantage.

Table A6: Sensitivity Analysis. Individual comorbidities variables

Panel 1: Open (reference category) vs Minimally Invasive									
	LoS			30-Day Readmission			Follow-up Visits		
	England	US (COM)	US (MA)	England	US (COM)	US (MA)	England	US (COM)	US (MA)
Minimally Invasive	-1.233*** (0.121)	-0.802*** (0.054)	-2.015*** (0.288)	-0.015*** (0.005)	-0.012*** (0.003)	-0.040*** (0.007)	0.202 (0.134)	-0.090** (0.039)	0.067 (0.075)
Age	0.012*** (0.002)	0.016*** (0.002)	0.070*** (0.011)	0.0003 (0.0002)	-0.001*** (0.0001)	0.003*** (0.001)	-0.018*** (0.004)	-0.015*** (0.002)	-0.014** (0.006)
Diabetes	0.245*** (0.049)	0.074 (0.047)	-0.198** (0.090)	0.018*** (0.005)	0.016*** (0.003)	0.013** (0.006)	0.014 (0.047)	0.061* (0.036)	0.060 (0.067)
Mental Health	0.125*** (0.036)	-0.011 (0.024)	-0.102 (0.136)	0.008* (0.005)	0.001 (0.003)	0.003 (0.006)	0.099 (0.064)	-0.090*** (0.030)	-0.136* (0.076)
Circulatory Disease	0.234*** (0.031)	0.074*** (0.020)	0.117 (0.125)	0.009*** (0.003)	0.005*** (0.002)	-0.002 (0.005)	0.144*** (0.037)	0.002 (0.022)	-0.031 (0.056)
Respiratory Disease	0.556*** (0.056)	0.657*** (0.074)	1.704*** (0.169)	0.013*** (0.004)	0.013*** (0.003)	0.034*** (0.007)	0.124** (0.054)	-0.014 (0.037)	-0.331*** (0.071)
N	65,297	66,592	12,766	66,753	66,592	12,766	66,753	66,592	12,766
Hospitals	141	2,436	1,551	141	2,436	1,551	141	2,436	1,551
Mean outcome	3.04	2.12	2.85	10.8%	5.6%	5.7%	3.76	3.14	3.35
Panel 2: Open (reference category) vs Robotic and Laparoscopic									
	LoS			30-Day Readmission			Follow-up Visits		
	England	US (COM)	US (MA)	England	US (COM)	US (MA)	England	US (COM)	US (MA)
Robotic	-1.203*** (0.161)	-0.922*** (0.057)	-2.297*** (0.270)	-0.020*** (0.007)	-0.015*** (0.003)	-0.046*** (0.007)	-0.252 (0.231)	-0.081** (0.041)	0.128 (0.082)
Laparoscopic	-1.259*** (0.116)	-0.325*** (0.068)	-0.326 (0.497)	-0.011** (0.005)	-0.003 (0.005)	-0.010 (0.011)	0.595*** (0.147)	-0.133** (0.057)	-0.260** (0.114)
Age	0.012*** (0.002)	0.016*** (0.002)	0.047*** (0.013)	0.0003 (0.0002)	-0.001*** (0.0001)	0.002*** (0.001)	-0.017*** (0.004)	-0.015*** (0.002)	-0.010* (0.006)
Diabetes	0.245*** (0.049)	0.067 (0.048)	-0.231** (0.090)	0.018*** (0.005)	0.016*** (0.003)	0.013** (0.006)	0.009 (0.047)	0.685* (0.037)	0.067 (0.067)
Mental Health	0.125*** (0.036)	-0.014 (0.024)	-0.109 (0.136)	0.008* (0.005)	0.001 (0.003)	0.0003 (0.007)	0.099 (0.062)	-0.079** (0.031)	-0.124 (0.077)
Circulatory Disease	0.234*** (0.031)	0.077 (0.019)	0.122 (0.127)	0.009*** (0.003)	0.005*** (0.002)	-0.003 (0.005)	0.142*** (0.037)	-0.0002 (0.023)	-0.032 (0.056)
Respiratory Disease	0.556*** (0.056)	0.676*** (0.075)	1.645*** (0.168)	0.013*** (0.004)	0.012*** (0.003)	0.033*** (0.007)	0.125** (0.053)	0.018 (0.037)	-0.319*** (0.072)
N	65,297	64,649	12,597	66,753	64,649	12,597	66,753	64,649	12,597
Hospitals	141	2,427	1,546	141	2,427	1,546	141	2,427	1,546
Mean outcome	3.04	2.14	2.89	10.8%	5.6%	5.7%	3.76	3.14	3.34
Panel 3: Laparoscopic (reference category) vs Robotic									
	LoS			30-Day Readmission			Follow-up Visits		
	England	US (COM)	US (MA)	England	US (COM)	US (MA)	England	US (COM)	US (MA)
Robotic	-0.264 (0.186)	-0.541*** (0.067)	-1.849*** (0.268)	-0.003 (0.008)	-0.012** (0.006)	-0.040*** (0.010)	-0.239 (0.263)	0.088 (0.060)	0.377*** (0.134)
Age	0.007*** (0.001)	0.014*** (0.002)	0.034*** (0.011)	-0.00004 (0.0002)	-0.001** (0.0002)	0.002*** (0.001)	-0.016*** (0.004)	-0.014*** (0.003)	-0.007 (0.008)
Diabetes	0.205***	0.073	-0.135	0.013***	0.015***	0.010	0.006	0.037	0.059

	(0.045)	(0.059)	(0.096)	(0.006)	(0.004)	(0.006)	(0.055)	(0.046)	(0.081)
Mental Health	0.125***	0.017	0.029	0.013**	-0.001	-0.004	0.075	-0.063	-0.119
	(0.031)	(0.030)	(0.165)	(0.006)	(0.004)	(0.007)	(0.054)	(0.043)	(0.089)
Circulatory Disease	0.178***	0.064**	0.135***	0.009***	0.007***	-0.004	0.124***	-0.0001	-0.059
	(0.036)	(0.026)	(0.065)	(0.003)	(0.002)	(0.005)	(0.033)	(0.030)	(0.066)
Respiratory Disease	0.433***	0.589***	1.083***	0.016***	0.014***	0.028***	0.159***	-0.006	-0.232**
	(0.064)	(0.113)	(0.163)	(0.005)	(0.005)	(0.009)	(0.058)	(0.052)	(0.091)
N	42,102	35,723	8,924	42,714	35,723	8,924	42,714	35,723	8,924
Hospitals	81	1,467	1,200	81	1,467	1,200	81	1,467	1,200
Mean outcome	2.17	1.84	2.51	10.3%	5.8%	5.1%	3.76	3.10	3.36

Notes: Standard errors clustered at hospital-level in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Models adjusted for Hospital Fixed-effects and year trends. The period of analysis is 2005-2017 for both panels. COM= commercial insurance, MA= Medicare Advantage.

Table A7: Sensitivity Analysis. Race and SES covariates

Panel 1: Open (reference category) vs Minimally Invasive									
	LoS			30-Day Readmission			Follow-up Visits		
	England	US (COM)	US (MA)	England	US (COM)	US (MA)	England	US (COM)	US (MA)
Minimally Invasive	-1.236*** (0.123)	-0.741*** (0.056)	-1.783*** (0.304)	-0.015*** (0.005)	-0.011*** (0.004)	-0.029*** (0.007)	0.115 (0.145)	-0.063 (0.047)	0.011 (0.080)
Age	0.017*** (0.002)	0.014*** (0.002)	0.072*** (0.011)	0.0003 (0.0002)	-0.0003* (0.0002)	0.003*** (0.001)	-0.019*** (0.003)	-0.010*** (0.002)	-0.016** (0.006)
Comorbidity	0.217*** (0.024)	0.224*** (0.019)	0.620*** (0.064)	0.012*** (0.002)	0.024*** (0.002)	0.027*** (0.002)	0.043 (0.031)	0.103*** (0.018)	0.004 (0.022)
SES 2	-0.019 (0.033)	-0.115** (0.050)	-0.245** (0.117)	-0.001 (0.006)	-0.014*** (0.005)	-0.013* (0.006)	0.030 (0.052)	0.082 (0.057)	0.245*** (0.084)
SES 3	0.014 (0.033)	-0.207*** (0.049)	-0.081 (0.182)	-0.004 (0.004)	-0.014*** (0.005)	-0.007 (0.006)	0.032 (0.039)	0.125** (0.051)	0.252*** (0.083)
SES 4	-0.101*** (0.033)	-0.242*** (0.049)	-0.503*** (0.161)	0.004 (0.005)	-0.013** (0.005)	-0.014 (0.009)	-0.002 (0.053)	0.196*** (0.061)	0.371*** (0.121)
SES 5	-0.163*** (0.038)	-0.254*** (0.052)	-0.481* (0.287)	-0.004 (0.005)	-0.018*** (0.053)	-0.026*** (0.010)	0.023 (0.057)	0.125* (0.065)	0.286** (0.137)
race: black	0.541*** (0.080)	0.148*** (0.041)	0.023 (0.157)	0.027*** (0.009)	0.005 (0.005)	0.005 (0.008)	0.457*** (0.133)	0.156*** (0.060)	-0.114 (0.094)
race: other	0.189*** (0.046)	0.007 (0.056)	0.343 (0.393)	0.005 (0.007)	0.001 (0.004)	-0.004 (0.009)	0.140 (0.090)	0.113** (0.056)	-0.0001 (0.127)
N	51,123	40,671	11,823	52,352	40,671	11,823	52,352	40,671	11,823
Hospitals	141	2,111	1,488	141	2,111	1,488	141	2,111	1,488
Mean outcome	3.04	2.12	2.85	10.8%	5.6%	5.7%	3.76	3.14	3.35
Panel 2: Open (reference category) vs Robotic and Laparoscopic									
	LoS			30-Day Readmission			Follow-up Visits		
	England	US (COM)	US (MA)	England	US (COM)	US (MA)	England	US (COM)	US (MA)
Robotic	-1.225*** (0.165)	-0.854*** (0.057)	-2.074*** (0.278)	-0.018** (0.008)	-0.016*** (0.004)	-0.036*** (0.007)	-0.370 (0.243)	-0.062 (0.050)	0.067 (0.086)
Laparoscopic	-1.244*** (0.118)	-0.238*** (0.072)	0.032 (0.553)	-0.013** (0.005)	0.008 (0.006)	0.008 (0.011)	0.513*** (0.160)	-0.082 (0.068)	-0.282** (0.127)
Age	0.017*** (0.002)	0.013*** (0.002)	0.047*** (0.013)	0.0003 (0.0002)	-0.0004** (0.0002)	0.002*** (0.001)	-0.018*** (0.003)	-0.010*** (0.002)	-0.013** (0.006)
Comorbidity	0.217*** (0.024)	0.231*** (0.020)	0.641*** (0.067)	0.012*** (0.002)	0.024*** (0.002)	0.028*** (0.002)	0.041 (0.030)	0.106*** (0.019)	-0.001 (0.022)
SES 2	-0.019 (0.033)	-0.130*** (0.048)	-0.228** (0.116)	-0.001 (0.006)	-0.014*** (0.005)	-0.012* (0.006)	0.022 (0.052)	0.074 (0.058)	0.236*** (0.084)
SES 3	0.014 (0.033)	-0.206*** (0.048)	-0.057 (0.184)	-0.004 (0.004)	-0.014*** (0.005)	-0.006 (0.006)	0.029 (0.039)	0.114** (0.051)	0.253*** (0.083)
SES 4	-0.101*** (0.033)	-0.248*** (0.048)	-0.447*** (0.161)	0.004 (0.006)	-0.013** (0.005)	-0.012 (0.009)	-0.004 (0.053)	0.188*** (0.063)	0.353*** (0.122)
SES 5	-0.163*** (0.038)	-0.268*** (0.052)	-0.467 (0.296)	-0.004 (0.005)	-0.019*** (0.053)	-0.025** (0.010)	0.025 (0.056)	0.124* (0.066)	0.251* (0.140)
race: black	0.541*** (0.080)	0.138*** (0.042)	-0.002 (0.162)	0.027*** (0.009)	0.005 (0.005)	0.004 (0.007)	0.454*** (0.135)	0.155** (0.062)	-0.125 (0.095)
race: other	0.189*** (0.046)	0.011 (0.055)	0.362 (0.402)	0.005 (0.007)	0.001 (0.004)	-0.004 (0.009)	0.139 (0.093)	0.111** (0.056)	-0.015 (0.126)
N	51,123	39,400	11,666	52,352	39,400	11,666	52,352	39,400	11,666
Hospitals	141	2,104	1,482	141	2,104	1,482	141	2,104	1,482
Mean outcome	3.04	2.14	2.89	10.8%	5.6%	5.7%	3.76	3.14	3.34
Panel 3: Laparoscopic (reference category) vs Robotic									

	LoS			30-Day Readmission			Follow-up Visits		
	England	US (COM)	US (MA)	England	US (COM)	US (MA)	England	US (COM)	US (MA)
Robotic	-0.311* (0.170)	-0.519*** (0.070)	-1.908*** (0.258)	-0.003 (0.009)	-0.022*** (0.007)	-0.045*** (0.010)	-0.327 (0.281)	0.023 (0.071)	0.329** (0.146)
Age	0.011*** (0.002)	0.013*** (0.002)	0.033*** (0.010)	-0.0001 (0.0002)	-0.0003 (0.0002)	0.002*** (0.001)	-0.016*** (0.004)	-0.009*** (0.003)	-0.011 (0.008)
Comorbidity	0.172*** (0.028)	0.153*** (0.022)	0.515*** (0.055)	0.013*** (0.003)	0.024*** (0.002)	0.028*** (0.003)	0.043 (0.027)	0.117*** (0.026)	0.042 (0.031)
SES 2	-0.037 (0.035)	-0.136** (0.067)	-0.132 (0.110)	0.004 (0.007)	-0.009 (0.007)	-0.017** (0.008)	0.027 (0.057)	0.136* (0.076)	0.215* (0.104)
SES 3	0.006 (0.041)	-0.175*** (0.064)	-0.207* (0.122)	0.005 (0.006)	-0.009 (0.007)	-0.010 (0.008)	-0.005 (0.042)	0.178** (0.067)	0.256** (0.106)
SES 4	-0.046 (0.032)	-0.205*** (0.070)	-0.157 (0.149)	0.010 (0.008)	-0.006 (0.007)	-0.014 (0.011)	-0.049 (0.057)	0.218*** (0.076)	0.378** (0.152)
SES 5	-0.146*** (0.032)	-0.206*** (0.072)	-0.190 (0.185)	-0.0002 (0.006)	-0.014* (0.007)	-0.041*** (0.010)	0.004 (0.064)	0.211** (0.088)	0.251 (0.167)
race: black	0.365*** (0.053)	0.164*** (0.057)	-0.145 (0.172)	0.027*** (0.009)	0.001 (0.006)	-0.002 (0.009)	0.448*** (0.134)	0.141* (0.076)	-0.139 (0.118)
race: other	0.100*** (0.043)	-0.036 (0.066)	-0.103 (0.135)	0.001 (0.006)	-0.001 (0.006)	-0.005 (0.011)	0.100 (0.090)	0.113 (0.073)	-0.021 (0.142)
N	32,091	23,123	8,328	32,596	23,123	8,328	32,596	23,123	8,328
Hospitals	81	1,342	1,148	81	1,342	1,148	81	1,342	1,148
Mean outcome	2.17	1.84	2.51	10.3%	5.8%	5.1%	3.76	3.10	3.36

Notes: Standard errors clustered at hospital-level in parentheses. Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Models adjusted for Hospital Fixed-effects and year trends. The period of analysis is 2005-2017 for both panels. SES refers to socio-economic status and the base category is socio-economic status equal 1 (lower income in the US and most deprived in England). For race, the base category are white patients. COM= commercial insurance, MA= Medicare Advantage.

Table A8: Sensitivity Analysis. Poisson and Logit

Panel 1: Open (reference category) vs Minimally Invasive									
	LoS (Poisson)			30-Day Readmission (Logit)			Follow-up Visits (Poisson)		
	England	US (COM)	US (MA)	England	US (COM)	US (MA)	England	US (COM)	US (MA)
Minimally Invasive	-0.375*** (0.034)	-0.361*** (0.024)	-0.546*** (0.077)	-0.035*** (0.009)	-0.039*** (0.011)	-0.011 (0.007)	0.057 (0.037)	-0.025** (0.012)	0.026 (0.024)
Age	0.005*** (0.001)	0.008*** (0.001)	0.020*** (0.003)	0.001* (0.0004)	-0.002*** (0.0001)	0.001*** (0.0003)	-0.004*** (0.001)	-0.005*** (0.001)	-0.004** (0.002)
Comorbidity	0.071*** (0.008)	0.101*** (0.007)	0.146*** (0.015)	0.026*** (0.004)	0.066*** (0.003)	0.008** (0.004)	0.012** (0.006)	0.030*** (0.005)	-0.00002 (0.007)
N	65,286	66,000	12,250	66,589	58,336	8,237	66,742	65,836	12,109
Hospitals	130	1,896	1,042	115	944	397	130	1,847	1,007
Mean outcome	3.04	2.12	2.85	5.8%	5.6%	5.7%	3.76	3.14	3.35
Panel 2: Open (reference category) vs Robotic and Laparoscopic									
	LoS (Poisson)			30-Day Readmission (Logit)			Follow-up Visits (Poisson)		
	England	US (COM)	US (MA)	England	US (COM)	US (MA)	England	US (COM)	US (MA)
Robotic	-0.431*** (0.052)	-0.413*** (0.024)	-0.690*** (0.065)	-0.047*** (0.010)	-0.048*** (0.012)	-0.028* (0.016)	-0.064 (0.062)	-0.022* (0.013)	0.045* (0.026)
Laparoscopic	-0.332*** (0.036)	-0.124*** (0.031)	-0.055 (0.110)	-0.025** (0.010)	0.002 (0.019)	0.002 (0.007)	0.159*** (0.039)	-0.037** (0.019)	-0.077** (0.037)
Age	0.005*** (0.001)	0.007*** (0.001)	0.011*** (0.003)	0.001* (0.0004)	-0.002*** (0.001)	0.001*** (0.0003)	-0.004*** (0.001)	-0.005*** (0.001)	-0.003 (0.002)
Comorbidity	0.071*** (0.008)	0.101*** (0.007)	0.143*** (0.013)	0.025*** (0.004)	0.066*** (0.003)	0.015** (0.008)	0.012** (0.006)	0.031*** (0.005)	-0.002 (0.007)
N	65,286	64,075	12,081	66,589	56,374	8,092	66,742	63,894	11,940
Hospitals	130	1,889	1,037	115	933	395	130	1,839	1,002
Mean outcome	3.04	2.14	2.89	10.8%	5.6%	5.7%	3.76	3.14	3.34
Panel 3: Laparoscopic (reference category) vs Robotic									
	LoS (Poisson)			30-Day Readmission (Logit)			Follow-up Visits (Poisson)		
	England	US (COM)	US (MA)	England	US (COM)	US (MA)	England	US (COM)	US (MA)
Robotic	-0.092 (0.075)	-0.280*** (0.031)	-0.611*** (0.067)	-0.006 (0.015)	-0.055*** (0.020)	-0.047 (0.037)	-0.057 (0.062)	0.025 (0.019)	0.113*** (0.042)
Age	0.004*** (0.001)	0.008*** (0.001)	0.011*** (0.003)	0.0002 (0.001)	-0.002** (0.001)	0.002*** (0.001)	-0.004*** (0.001)	-0.005*** (0.001)	-0.002 (0.002)
Comorbidity	0.080*** (0.011)	0.080*** (0.009)	0.151*** (0.012)	0.027*** (0.005)	0.066*** (0.004)	0.024 (0.016)	0.012** (0.006)	0.036*** (0.007)	0.010 (0.009)
N	42,098	35,390	8,488	42,686	30,445	4,955	42,711	35,368	8,376
Hospitals	77	1,161	770	72	598	266	78	1,149	740
Mean outcome	2.17	1.84	2.51	10.3%	5.8%	5.1%	3.76	3.10	3.36

Notes: The table reports the Average Marginal Effects. Standard errors clustered at hospital-level in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. Models adjusted for Hospital Fixed-effects and year trends. The period of analysis is 2005-2017 for both panels. COM= commercial insurance, MA= Medicare Advantage.

Figure A1. Trends of adoption in Open, Minimal Invasive, Laparoscopic and Robotic Radical Prostatectomy in England and the United States (2005-2017)

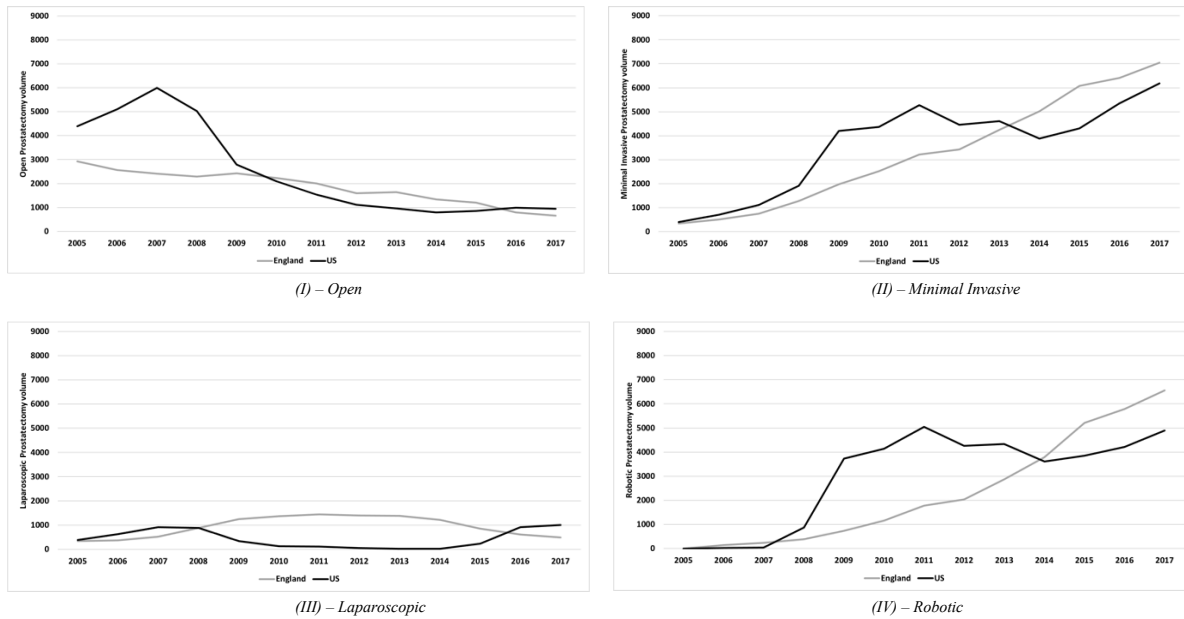


Figure A2. Trends of adoption in Open, Minimal Invasive, Laparoscopic and Robotic Radical Prostatectomy in the United States by type of patient (2005-2017)

