

Supplementary Table: Measuring outcomes after prostate cancer treatment. We only assessed treatment-related morbidity that required a procedure because diagnosis codes alone lack specificity.³⁰ To minimize the misclassification of pre-existing conditions as treatment-related morbidity, we excluded patients with claims for the index morbidity in the 12 months prior to treatment.

Outcome	HCPCS code	ICD-9 codes
Perioperative complications within 30 days of surgery (e.g., myocardial infarction, respiratory failure, stroke, bowel or ureteral injury, or wound complications)	26990, 44125, 44140, 44141, 44143, 44144, 44145, 44146, 44147, 44160, 44202, 44204, 44205, 44206, 44207, 44208, 44227, 44310, 44320, 44320, 44602, 44603, 44604, 44605, 45020, 45111, 45112, 45150, 44120, 45562, 45563, 49060, 49061, 50040, 50120, 50125, 50392, 50393, 50394, 50395, 50398, 50600, 50605, 50700, 50715, 50760, 50770, 50780, 50782, 50783, 50785, 50800, 50810, 50815, 50820, 50825, 50840, 50900, 50940, 50970, 50972, 51080, 52290, 52332, 52334, 52335, 58823	Diagnosis codes: 3301, 3491, 40201 40211, 40291, 410, 4100, 41000, 41001, 41002, 4101, 41010, 41011, 41012, 4102, 41020, 41021, 41022, 4103, 41030, 41031, 41032, 4104, 41040, 41041, 41042, 4105, 41050, 41051, 41052, 4106, 41060, 41061, 41062, 4107, 41070, 41071, 41072, 4108, 41080, 41081 41082, 4109, 41090, 41091, 41092, 4275, 428, 4280, 4281, 4282, 42820, 42821, 42822, 42823, 4283, 42830, 42831, 42832, 42833, 4284, 42840, 42841, 42842, 42843, 4289, 43311, 43321, 43331, 43381, 43391, 43401, 43411, 436, 44422, 44481, 4512, 45181, 4519, 4539, 466, 4660, 4661, 46611, 46619, 480, 4800, 4801, 4802, 4803, 4808, 4809, 481, 482, 4820, 4821, 4822, 4823, 48230, 48231, 48232, 48239, 4824, 48240, 48241, 48242, 48249, 4828, 48281, 48282, 48283, 48284, 48289, 4829, 483, 4831, 4838, 485, 486, 514, 5180, 5184, 5185, 51851, 51852, 51853, 51881, 58182, 7991, 830, 9971, 9972, 9973, 99731, 99732, 99739, 9992 Procedure codes: 4601, 4603, 4604, 4610, 4611, 4614, 4620, 4621, 4624, 484, 4841, 4849, 485, 486, 4861, 4862, 4863, 4864, 4865, 4869, 487, 4871, 4872, 4873, 4874, 4875, 4876, 4879, 4891, 4892, 4893, 4899, 540, 5411, 5412, 5419, 5461, 5462, 5491, 5502, 5503, 5512, 5593, 5594, 561, 5641, 5674, 5675, 5681, 5684, 5686, 5689, 5691, 5919, 5993, 9761, 9762

Outcome	HCPCS code	ICD-9 codes
Treatment-related morbidity		
Urinary morbidity (e.g., strictures, urinary obstruction, urinary retention, procedures to treat incontinence)	11950, 11951, 11952, 11954, 44660, 44661, 45800, 50040, 50120, 50125, 50392, 50393, 50394, 50395, 50398, 50605, 50700, 50715, 50760, 50770, 50780, 50782, 50783, 50785, 50800, 50810, 50815, 50820, 50825, 50840, 51010, 51040, 51102, 51700, 51715, 51840, 51841, 51990, 51992, 52001, 52214, 52275, 52276, 52277, 52281, 52282, 52283, 52290, 52450, 52500, 52510, 52601, 52612, 52614, 52620, 52630, 52647, 52648, 53000, 53010, 53400, 53405, 53410, 53415, 53420, 53425, 53431, 53440, 53442, 53443, 53444, 53445, 53447, 53448, 53449, 53520, 53600, 53601, 53605, 53620, 53621, 53850, 53852, 53853, 57288, C1815, C2631, L8603, L8606	Procedure codes: 5502, 5503, 5512, 5593, 5594, 561, 5641, 5674, 5675, 5681, 5684, 5686, 5689, 5691, 570, 5717, 5718, 5719, 572, 5721, 5722, 5784, 5785, 5789, 5791, 5792, 5793, 5794, 5795, 580, 581, 5831, 5839, 5843, 5844, 5846, 5847, 585, 586, 5893, 5899, 593, 594, 595, 596, 597, 5971, 5972, 5979, 5993, 5994, 602, 6021, 6029, 6095, 6096, 6097, 9761, 9762
Sexual morbidity (e.g., penile prosthesis implantation, intracavernosal injections)	54231, 54235, 54400, 54401, 54402, 54405, 54407, 54408, 54409, 54410, 54411, 54415, 54416, 54417, C1007, C1813, C2622, C3500, C8514, C8516, C8534, J0270, J0275, J2440, J2760, L7900	Procedure codes: 6494, 6495, 6496, 6497
Gastrointestinal morbidity (e.g., endoscopy with procedure, biopsies, resections)	44140, 44141, 44143, 44144, 44145, 44146, 44147, 44150, 44151, 44152, 44153, 44155, 44156, 44160, 44204, 44205, 44206, 44207, 44208, 44210, 44211, 44212, 45000, 45005, 45020, 45110, 45111, 45112, 45113, 45114, 45116, 45119, 45123, 45150, 45300, 45303, 45305, 45317, 45321, 45327, 45331, 45334, 45335, 45337, 45340, 45341, 45342, 45345, 45380, 45380, 45381, 45382, 45386, 45387, 45391, 45392, 45395, 45397, 45500, 45562, 45563, 45805, 45820, 45825, 45905, 45910, 46270, 46275, 46280, 46285, 46604, 46606, 46614, 46700, 46706	Procedure codes: 4525, 4603, 4610, 4611, 4613, 4614, 4823, 4824, 4829, 4831, 4832, 4833, 4835, 484, 4841, 4842, 4843, 4849, 485, 4850, 4851, 4852, 4859, 486, 4861, 4862, 4863, 4864, 4865, 4869, 487, 4871, 4872, 4873, 4874, 4875, 4876, 4879, 489, 4891, 4893, 4899, 491, 4911, 4912, 492, 4922, 4923, 4929, 496, 497, 4971, 4972, 4973, 4974, 4975, 4976, 4979, 5783, 9622, 9623

Outcome	HCPCS code	ICD-9 codes
Secondary cancer therapy		
Use of radiotherapy after prostatectomy	0073T, 77373, 77380, 77381, 77401, 77402, 77403, 77404, 77406, 77407, 77408, 77409, 77411, 77412, 77413, 77414, 77416, 77417, 77418, 77419, 77420, 77421, 77425, 77427, 77430, 77431, 77435, 77470, 77499, 77520, 77522, 77523, 77525, G0174	Procedure codes: 9221, 9222, 9224, 9233, V580
Use of androgen deprivation therapy after prostatectomy or radiotherapy	11980, 11981, 11982, 11983, 54520, 96400, 96402, C9216, C9430, G0356, J0128, J0970, J1000, J1056, J1380, J1390, J1410, J1675, J1950, J3315, J9155, J9165, J9202, J9217, J9218, J9219, J9225, J9226, Q2020, S0133, S0165, S9560	Procedure codes: 623, 624, 6241, 6242, 9924