Supplemental Digital Content 1: Specific Codes for Identifying Treatment from Medicare Claims Data[a]

Treatment	Field	Codes
Chemotherapy	ICD-9 diagnosis codes	V58.1x
	ICD-9 procedure codes	00.10, 17.70, 99.25, 99.28
	CPT-4 codes	0519F, 36823, 51720, 61517, 95990, 95991, 96400-96499, 96500-96549
	HCPCS administration codes	C8953-C8955, G0355, G0357-G0362, G0370, J7150, Q0083-Q0085, S5019, S5020, S9329-S9331, S9425
	HCPCS drug codes	C1086,C1166,C1167,C1178,C9012, C9110, C9127, C9205, C9207, C9213-C9215, C9217, C9218, C9235, C9257, C9262, C9414-C9415, C9417-C9427, C9429, C9431-C9433, C9437, C9440, J0594, J0894, J8510, J8520, J8521, J8530, J8560, J8565, J8600, J8610, J8700, J8705, J8999, J9000, J9001, J9010, J9017, J9020, J9025, J9027, J9033, J9035, J9040, J9041, J9045, J9050, J9055, J9060, J9062, J9065, J9070, J9080, J9090, J9091-J9098, J9100, J9110, J9120, J9130, J9140, J9150, J9151, J9170, J9171, J9178, J9180, J9181, J9182, J9185, J9190, J9200, J9201, J9206-J9208, J9211, J9230, J9245, J9250, J9260, J9261, J9263- J9266, J9268, J9270, J9280, J9290, J9291, J9293, J9300, J9303, J9305, J9307, J9310, J9315, J9320, J9328, J9330, J9340, J9350, J9351, J9355, J9357, J9360, J9370, J9375, J9380, J9390, J9999, Q2017, Q2024, S0087, S0088, S0115, S0116, S0172, S0176, S0178, S0182
	NDC codes	00004-1100-13, 00004-1100-20, 00004-1100-22, 00004-1100-51, 00004-1101-13, 00004-1101-16, 00004-1101-50, 00004-1101-51, 00005-4507-04, 00005-4507-05, 00005-4507-07, 00005-4507-09, 00005-4507-23, 00005-4507-91, 00015-0503-01, 00015-0503-02, 00015-0504-01, 00015-3091-45, 00054-4129-25, 00054-4130-25, 00054-4550-15, 00054-4550-25, 00054-8089-25,00054-8130-25, 00054-8550-03, 00054-8550-05, 00054-8550-06, 00054-8550-07, 00054-8550-10, 00054-8550-25, 00081-0045-35, 00085-1244-01, 00085-1244-02, 00085-1248-01, 00085-1248-02, 00085-1252-01, 00085-1252-02, 00085-1259-01, 00085-1259-02, 00173-0045-35,

Treatment	Field	Codes
		00173-0713-25, 00182-1539-01, 00182-1539-95, 00364-2499-01, 00364-2499-36, 00378-0014-01,00378-0014-50, 00378-3266-94, 00536-3998-01, 00536-3998-36, 00555-0572-02, 00555-0572-35, 00555-0572-45, 00555-0572-46, 00555-0572-47,00555-0572-48, 00555-0572-49, 00555-0927-01, 00555-0928-01, 00555-0929-01, 00555-0945-01, 00603-4499-21, 00677-1610-01, 00781-1076-01, 00781-1076-36, 00904-1749-60, 00904-1749-73, 51079-0670-05, 51079-0965-05, 51285-0509-02, 54569-5717-00, 54868-4143-00, 54868-4143-01, 54868-4143-02, 54868-4143-03, 54868-5260-00, 54868-5260-01, 54868-5260-02, 54868-5260-03, 54868-5260-04, 54868-5260-05, 54868-5260-06, 54868-5260-07, 54868-5260-08, 54868-5260-09, 59911-5874-01, 62701-0940-36, 62701-0940-99
Radiation	ICD-9 diagnosis codes	V58.0, V67.1
	ICD-9 procedure codes	92.21-92.29
	Revenue center codes	0330, 0333
CPT-4 codes		77261-77299, 77300-77399, 77401-77499, 77520, 77523, 76370, 76950, 77750-77799
	Level II HCPCS codes	C1325, C1348, C1350, C1700-C1712, C1715-C1720, C1728, C1790-C1806, C2616, C2632, C2633, C9714, C9715, G0174, G0178, G0179, G0261, G0256, G0273, G0274, G0338-G0340
Hormone (Prostate cancer only)	Level II HCPCS codes	C9120, C9216, C9430, J0128, J1675, J1950, J3315, J9165, J9202, J9217-J9219, J9225, J9226, Q2020, S0165, S0175, S0189, S9560

[a]Among prostate cases with hormone therapy and chemotherapy codes on the same day:
Since some codes for administration of chemotherapy are used for delivery of hormone therapy, and not chemotherapy, as noted in the Medicare Claims Processing Manual[b]. If the only code for chemotherapy was one of the following administration codes then the patient was considered to have received hormone therapy only. These codes are associated with delivery of hormone therapy.
(V58.1x, 99.25, 96400-96402, 96545, G0355, J8999, J9999, Q0083)

Treatment	Field	Codes

If the only chemotherapy code was for a different type of administration, the individual was excluded from the analysis (N=395).

[b] United States.Dept.of Health and Human Services. Centers for Medicare and Medicaid Services. Medicare Claims Processing Manual. *No.100-04* [12]. 2012.

Mcleod DG. Hormonal therapy: historical perspective to future directions. *Urology*. 2003;61(2 Suppl 1):3-7.