

## Supplemental Online Content

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**eTable 1.** Diagnostic Coding for the Analysis

**eTable 2.** Performance of Repeat Cervical Cancer Screening After Index Testing Stratified by Age

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

**eTable 1.** Diagnostic Coding for the Analysis

ICD-9	ICD-10	CPT/HCPCS
<i>Cytology</i>		
Procedure: 91.46		CPT: 88141, 88142, 88143, 88144, 88145, 88147, 88148, 88150, 88152, 88153, 88154, 88155, 88164, 88165, 88166, 88167, 88174, 88175; HCPCS: G0123, G0143, G0144, G0145, G0147, G0148, P3000, G0124, G0141, P3001, Q0091, G0101
<i>HPV</i>		
Diagnosis: V73.81.	Diagnosis: Z11.51.	CPT: 87620, 87621, 87622, 87623, 87624, 87625, 0500T; HCPCS: G0476.
<i>Gynecologic examination</i>		
Diagnosis: V72.31, V72.32, V76.2, V76.47, V76.49.	Diagnosis: Z01.411, Z01.419, Z01.42, Z12.4, Z12.72, Z12.79, Z12.89.	
<i>Gynecologic cancer</i>		
Diagnosis: 179.*, 180.*, 182.*, 183.*, 158.8, 158.9.	Diagnosis: C53.*-C57.*, C48.1, C48.2, C48.8, R87.614.	
<i>Abnormal histology or cytology, positive HPV test, or unsatisfactory cytology</i>		
Diagnosis: 795.00, 795.01, 795.02, 795.03, 795.04, 795.05, 795.07, 795.08, 795.09, 795.10, 795.11, 795.12, 795.13, 795.14, 795.16, 795.18, 795.19, 622.10, 622.11, 622.12, 623.0, 233.1, 233.30, 233.31, 233.39,	Diagnosis: R87.610, R87.611, R87.612, R87.613, R87.615, R87.616, R87.618, R87.619, R87.620, R87.621, R87.622, R87.623, R87.624, R87.625, R87.628, R87.629, R87.69, N87.0, N87.1, N87.9, N89.3, D06.0, D06.1, D06.7, D06.9, D07.2, D07.30, D07.39,	
<i>Gynecologic procedures (colposcopy, biopsy, conization and cauterization)</i>		
Procedure: 70.12, 67.11, 67.12, 67.2, 67.32, 67.33.	Procedure: 0UJD7ZZ, 0UJD8ZZ, 0UJH7ZZ, 0UJH8ZZ 0UBC7ZZ, 0UBC8ZZ, 0UCC7ZZ, 0UCC8ZZ 0U5C7ZZ, 0U5C8ZZ.	CPT: 57420, 57452, 57421, 57455, 57500, 57505, 57454, 57456, 57450, 57460, 57461, 57520, 57522, 57510, 57511, 57513.
<i>Diethylstilbestrol exposure</i>		
Diagnosis:		

646.80, 760.76, V13.29, V15.89		
<i>HIV infection</i>		
Diagnosis: 042, 043.1, 043.2, 043.3, 043.9, 044.0, 044.9, 079.53, 647.60, 647.61, 647.63, V08, V12.09.	Diagnosis: B20.*, B21.*, B22.*, B23.*, B24.*, B97.35, O98.5*, O98.7*, Z21, Z86.19.	
<i>Leukemia</i>		
204.*, 205.*, 206.*, 207.*, 208.*.	Diagnosis: C91.*, C92.*, C93.*, C94.*, C95.*.	
<i>Neutropenia</i>		
Diagnosis: 288.0*, 289.53, 780.61.	Diagnosis: D70.*, D73.81, R50.81.	
<i>Organ transplantation</i>		
Diagnosis: 996.8*, V42.9.	Diagnosis: T86.*, Z94.9.	
<i>Hysterectomy</i>		
Procedure: 68.3, 68.39, 68.4, 68.49, 68.6, 68.69, 68.9; 68.31, 68.41, 68.61; 68.51, 68.71; 68.5, 68.59, 68.7, 68.79.	Procedure: 0OUT90*; 0OUT94*, 0OUT98*, 0OUT9F*; 0OUT97*;	CPT: 58150, 58152, 58180, 58200, 58210, 58950, 58951, 58953, 58954, 58956; 58541, 58542, 58543, 58544, 58548, 58550, 58552, 58553, 58554, 58570, 58571, 58572, 58573; 58260, 58262, 58263, 58267, 58270, 58275, 58280, 58285, 58290, 58291, 58292, 58293, 58294.
<i>Immunosuppressants</i>		
NDC: azathioprine, 6-mercaptopurine, methotrexate, etanercept, tacrolimus, sirolimus, infliximab, adalimumab, muromonab-CD3, basiliximab, daclizumab, immune globulin, cyclophosphamide, cyclosporine, anakinra, mycophenolate mofetil, and other immunosuppressants.		
<i>Outpatient visits</i>		
Place of service: 11 Office; 49 Independent clinic; 50 Federally qualified health care center; 71 Public health clinic; 72 Rural health clinic.		
<i>STI history</i>		
Diagnosis: 079.88, 079.98, 098.0, 098.10, 098.15, 098.16, 098.17, 098.19, 098.2, 098.30,	Diagnosis: A54.00, A54.02, A54.03, A54.09, A54.24, A54.29, A54.85, A54.86, A54.89, A54.9, A56.00, A56.01, A56.02, A56.09, A56.11, A56.19, A56.2, A56.8,	

098.35, 098.36, 098.37, 098.39, 098.86, 098.89, 099.50, 099.53, 099.54, 099.55, 099.56, 099.59, 099.8, 099.9, 647.10, 647.11, 647.13 647.20, 647.21, 647.23, 647.60, 647.61, 647.63, V02.7, V02.8.	A63.0, A63.8, A64, A74.81, A74.89, A74.9, O98.211, O98.212, O98.213, O98.219, O98.311, O98.312, O98.313, O98.319, O98.511, O98.512, O98.513, O98.519, Z22.4.	
<i>Mental health and substance abuse</i>		
Diagnosis: 290.*-319.*.	Diagnosis: F01.*-F99.*.	
<i>Gynecologic symptoms</i>		
Diagnosis: 041.9, 112.1, 131.01, 616.10, 623.5, 623.8, 625.8, 646.60, 646.61, 646.63, 646.80, 646.81, 646.83.	Diagnosis: A59.01, B37.3, B96.89, N76.0, N76.1, N76.2, N76.3, N89.4, N89.8, N94.89, O23.511, O23.512, O23.513, O23.519, O23.521, O23.522, O23.523, O23.529, O23.591, O23.592, O23.593, O23.599, O23.90, O23.91, O23.92, O23.93, O99.89.	
<i>STI testing</i>		
Diagnosis: V01.6, V73.88, V73.89, V73.98, V74.5.	Diagnosis: Z11.3, Z11.4, Z11.59, Z11.8, Z11.9, Z20.2, Z20.6.	CPT: 86592, 86593, 86631, 86632, 86689, 86701, 86702, 86703, 86780, 87110, 87270, 87320, 87389, 87390, 87391, 87490, 87491, 87492, 87534, 87535, 87536, 87537, 87538, 87539, 87590, 87591, 87592, 87800, 87801, 87810, 87850; HCPCS: G0432, G0433, G0435.
<i>Family planning</i>		
Diagnosis: V25.01, V25.02, V25.03, V25.04, V25.09, V25.11, V25.13, V25.2, V25.40, V25.41, V25.42, V25.43, V25.49, V25.5, V25.8, V25.9.	Diagnosis: Z30.011, Z30.012, Z30.013, Z30.014, Z30.015, Z30.016, Z30.017, Z30.018, Z30.019, Z30.02, Z30.09, Z30.2, Z30.40, Z30.41, Z30.42, Z30.43, Z30.430, Z30.431, Z30.433, Z30.44, Z30.45, Z30.46, Z30.49, Z30.8, Z30.9.	CPT: 11975, 11977, 57170, 58300; HCPCS: A4266, A4269, J1055, J7296, J7297, J7298, J7300, J7301, J7302, J7303, J7304, J7306, J7307, S4993.
<i>Pregnancy</i>		
Diagnosis: 630.*-679.*, V22.*, V23.*, V24.*, V27.*, V28.*;	-	CPT: 59400, 59409, 59410, 59425, 59426, 59430, 59510, 59514, 59515, 59610, 59612, 59614,

<p>Procedure: 73.51, 73.59, 74.0, 74.1, 74.2, 74.3, 74.4, 74.91, 74.99, 88.78.</p>		<p>59618, 59620, 59622, 76801, 76805, 76811, 76813, 76815, 76816, 76817, 76818, 76819, 76820, 76821, 76825, 76826, 76827, 76828, 99500, 99501, 0500F, 0501F, 0502F, 0503F; HCPCS: H1000, H1001, H1002, H1003, H1004, H1005.</p>
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**eTable 2.** Performance of Repeat Cervical Cancer Screening After Index Testing Stratified by Age

	Year 1		Year 2		Year 3	
	N	(%)	N	(%)	N	(%)
30-39 years of age						
<i>Second test in 12, 24, or 36 months</i>	39,044	(6.5)	194,165	(52.0)	194,665	(67.8)
<i>Time from index test, in months, median (IQR)</i>	10.3	(8.1-11.7)	13.4	(12.4-16.3)	14.7	(12.5-23.2)
<i>Type of second test</i>						
Cotesting	16,612	(42.6)	74,048	(38.1)	79,052	(40.6)
Cytology	21,965	(56.3)	118,826	(61.2)	114,132	(58.6)
HPV testing	467	(1.2)	1,291	(0.7)	1,481	(0.8)
40-49 years of age						
<i>Second test in 12, 24, or 36 months</i>	29,430	(4.0)	240,485	(50.5)	249,088	(65.7)
<i>Time from index test, in months, median (IQR)</i>	11.4	(9.6-11.9)	13.3	(12.4-16.1)	14.5	(12.6-23.1)
<i>Type of second test</i>						
Cotesting	12,578	(42.7)	89,595	(37.3)	98,220	(39.4)
Cytology	16,451	(55.9)	149,423	(62.1)	149,130	(59.9)
HPV testing	401	(1.4)	1,467	(0.6)	1,738	(0.7)
50-59 years of age						
<i>Second test in 12, 24, or 36 months</i>	26,169	(3.5)	238,188	(47.4)	256,550	(62.3)
<i>Time from index test, in months, median (IQR)</i>	11.6	(10.2-12.0)	13.1	(12.4-15.6)	14.2	(12.5-23.3)
<i>Type of second test</i>						
Cotesting	9,730	(37.2)	78,072	(32.8)	89,625	(34.9)
Cytology	16,131	(61.6)	158,791	(66.7)	165,296	(64.4)
HPV testing	308	(1.2)	1,325	(0.6)	1,629	(0.6)
60-64 years of age						
<i>Second test in 12, 24, or 36 months</i>	6,495	(3.2)	47,692	(45.4)	32,198	(60.2)
<i>Time from index test, in months, median (IQR)</i>	11.6	(10.3-12.0)	13.0	(12.4-15.3)	14.0	(12.4-23.3)
<i>Type of second test</i>						
Cotesting	2,168	(33.4)	13,887	(29.1)	10,135	(31.5)
Cytology	4,246	(65.4)	33,553	(70.4)	21,880	(68.0)
HPV testing	81	(1.3)	252	(0.5)	183	(0.6)