Client: HEALTH BENCHMARKS, INC. STANDARD ALGORITHM

Measure Title: CERVICAL CANCER SCREENING

Disease State: Cervical Cancer

Indicator Classification: Screening

Strength of Recommendation: A

Organizations Providing Recommendation:
- American Academy of Family Physicians
- American Academy of Pediatrics
- American Cancer Society (current)
- American College of Obstetricians and Gynecologists (current)
- American College of Preventive Medicine
- American Medical Association
- Canadian Task Force on Preventive Health Care
- US Preventive Services Task Force (current)

Clinical Intent: To ensure that all women ages 21-64 receive a cervical cancer screening test during the measurement year or the 2 years prior.

Background: Disease Burden
- In the United States, an estimated 9,710 new cases of invasive cervical cancer are diagnosed annually, and there are 3,700 deaths from the disease; this represents 1.3 percent of cancer deaths in women.[1]
- All sexually active women are at risk of cervical cancer, however, the disease is more prevalent in women who have had multiple sexual partners, women who became sexually active at an early age, and women who smoke.[2-5]

Reason for Indicated Intervention or Treatment
- The United States Preventive Services Task Force (USPSTF) found that screening with cervical cytology (Pap smears) reduces mortality from cervical cancer.[6]

Evidence Supporting Intervention or Treatment
- Epidemiological studies from the United States, Europe, and Canada have detected a dramatic reduction in invasive cervical cancer disease and a 20-60 percent reduction in cervical cancer mortality after the implementation of universal screening for cervical cancer with Pap smears.[7-14]
- Case control studies have also shown that screening is protective by demonstrating a strong negative association between screening and invasive disease.[15-19]
- Screening programs introduced to populations naïve to screening have
been shown to reduce cervical cancer rates by 60 to 90 percent within three years of implementation.[20, 21]

Clinical Recommendations

- The USPSTF “strongly recommends” cervical cancer screening in all women who are sexually active and who have a cervix at least every 3 years.[6]
- The USPSTF recommends against routine screening of women aged 65 and older if they have had “adequate recent screening” and are not at high risk of the disease.[6]
- The USPSTF concluded that the evidence is insufficient to recommend for or against the routine use of technologies other than the conventional Pap smear.[6]
- The American Cancer Society (ACS) recommends that women be screened for cervical cancer beginning 3 years after the onset of sexual activity but not later than age 21. Screening should be performed either annually with Pap smears or every 2 years if liquid based cytology is used, until age 29. Based on past screening results and risk factors, the screening interval may be extended to 2-3 years for women 30 years or older. For women with pap smear and human papillomavirus (HPV) cervical cancer screening can be conducted every 3 years if the HPV result is negative. ACS found that it is reasonable to stop screening women 70 years and older with 3 recent consecutive negative tests and no abnormal test in prior 10 years.[22]
- Other organizations which recommend screening starting at age 18 or with the onset of sexual activity include: American Academy of Family Physicians (AAFP), American College of Obstetricians and Gynecologists (ACOG), American College of Preventive Medicine (ACPM), American Medical Association (AMA), the Canadian Task Force on Preventive Health Care (CTFPHC), and the American Academy of Pediatrics (AAP), among others.[23-27]

Source

Healthcare Effectiveness Data and Information Set (HEDIS®) 2009 Technical Specification for Physician Measurement

<table>
<thead>
<tr>
<th>Denominator</th>
<th>Definition</th>
<th>Continuously enrolled women ages 24-64 years by the end of measurement year.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denominator Index Date</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Denominator Exclusion</td>
<td>Definition</td>
<td>Women who had a hysterectomy with no residual cervix at any time in the member’s history through the end of the measurement year.</td>
</tr>
</tbody>
</table>
### Denominator
CPT-4 code(s): 51925, 56308, 58150, 58152, 58200, 58210, 58240, 58260, 58262, 58263, 58267, 58270, 58275, 58280, 58285, 58290-58294, 58550-58554, 58570-58573, 58950, 58951, 58953, 58954, 58956, 59135

ICD-9 surgical proc code(s): 68.4x-68.8x

ICD-9 diagnosis code(s): 618.5x, V67.01, V76.47

### Numerator
<table>
<thead>
<tr>
<th>Numerator Definition</th>
<th>Members who had at least 1 cervical cancer screening test during the measurement year or within the 2 years prior to the measurement year.</th>
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</thead>
<tbody>
<tr>
<td>Numerator Claims CPT-4 code(s):</td>
<td>88141-88143, 88147, 88150, 88152-88155, 88164-88167, 88174, 88175</td>
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<td>HPCPCS code(s):</td>
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<td>ICD-9 diagnosis code(s):</td>
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<tr>
<td>ICD-9 surgical proc code(s):</td>
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<tr>
<td>UB revenue code(s):</td>
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</tr>
<tr>
<td>LOINC code(s):</td>
<td>10524-7, 18500-9, 19762-4, 19764-0, 19765-7, 19766-5, 19774-9, 33717-0, 47527-7, 47528-5 (if available)</td>
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</tbody>
</table>

### Physician Attribution
<table>
<thead>
<tr>
<th>Physician Attribution Description</th>
<th>If client data does not contain PCP:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score all physicians (in the selected specialties) who saw the member during the measurement year.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physician Attribution Description</th>
<th>If client data does contain PCP:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score all primary care physicians who were assigned to the member during the measurement year.</td>
<td></td>
</tr>
</tbody>
</table>
References

19. Herrero, R., et al., Screening for cervical cancer in Latin America: a case-


1 **Indicator Classification** (Adapted from HEDIS® technical specifications)

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diagnosis</strong></td>
<td>Measures applicable to patients receiving diagnostic workups for a symptom or condition that delineate appropriate laboratory or radiological testing to be performed (e.g., evaluation of thyroid nodule; pregnancy test in patients with vaginal bleeding or abdominal pain).</td>
</tr>
<tr>
<td><strong>Effectiveness of Care</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Prevention</strong></td>
<td>Measures applicable to asymptomatic individuals that are designed to prevent the onset of the targeted condition (e.g., immunizations).</td>
</tr>
<tr>
<td><strong>Screening</strong></td>
<td>Measures applicable to asymptomatic patients who have risk factors or preclinical disease, but in whom the condition has not become clinically apparent (e.g., pap smears; screening for elevated blood pressure).</td>
</tr>
<tr>
<td><strong>Disease Management</strong></td>
<td>Measures applicable to individuals diagnosed with a condition that are part of the treatment or management of the condition (e.g., cholesterol reduction in patients with diabetes; radiation therapy following breast conserving surgery; appropriate follow-up after acute event).</td>
</tr>
<tr>
<td><strong>Medication Monitoring</strong></td>
<td>Measures applicable to patients taking medications with narrow therapeutic windows and/or potential preventable significant side effects or adverse reactions (e.g., thyroid stimulating hormone (TSH) testing after levothyroxine dose change; hepatic enzyme monitoring for patients using antimycotic pharmacotherapy).</td>
</tr>
<tr>
<td><strong>Medication Adherence</strong></td>
<td>Measures applicable to patients taking medications for chronic conditions that are designed to assess patient adherence to medication (e.g., adherence to lipid lowering medication).</td>
</tr>
<tr>
<td><strong>Utilization</strong></td>
<td>Measures applicable to patients receiving treatment for a symptom or condition that advocate appropriate utilization of laboratory and pharmaceutical resources (e.g., conservative use of imaging for low back pain; inappropriate use of antibiotics for viral upper respiratory infection).</td>
</tr>
</tbody>
</table>
Strength of Recommendation Based on a Body of Evidence

**FIGURE 2.** Algorithm for determining the strength of a recommendation based on a body of evidence (applies to clinical recommendations regarding diagnosis, treatment, prevention, or screening). While this algorithm provides a general guideline, authors and editors may adjust the strength of recommendation based on the benefits, harms, and costs of the intervention being recommended. (USPSTF = U.S. Preventive Services Task Force)