Performance Measure: Cervical Cancer Screening

National Quality Forum #: 0032

| Description: | Percentage of female patients with a diagnosis of HIV who were screened for cervical cancer in the last three years |
| Numerator: | Number of patients in the denominator who were screened for cervical cancer in the last three years |
| Denominator: | Number of female patients with a diagnosis of HIV who: |
| | • Had at least one medical visit with provider with prescribing privileges and |
| | • Were ≥ 21 years old in the measurement year |

Patient Exclusions:
1. Patients who had a hysterectomy for non-dysplasia/non-malignant indications

Data Elements:
1. Does the patient have a diagnosis of HIV? (Y/N)  
   a. If yes, is the patient female? (Y/N)  
      i. If yes, did the patient have at least one medical visit with a provider with prescribing privileges in the measurement year?(Y/N)  
   1. If yes, is the patient ≥ 21 years old in the measurement year?(Y/N)  
      a. If yes, was a cervical cytology (Pap test) performed in the measurement year or the two years prior to the measurement year?

Comparison Data:
HIVQUAL Program:  
2007 and 2009: Percentage of female patients who received a pelvic examination and a Pap test during the review period. The HIVQUAL Program reported the median percentage as 67.1% in 2007 and 62.5% in 2009. (National Quality Center)  
2011 and 2013: Percentage of female and transgender with biological cervix patients with at least one clinical visit in each six-month period of the review period. The HIVQUAL Program reported the median percentage as 63% in 2011 and 50% in 2013 (New York state only). (eHIVQUAL)

U.S. Department of Health & Human Services Guidelines:  
“HIV-Infected Women Aged <30 Years: The Pap test is the primary mode for cervical cancer screening for HIV-infected women <30 years. Screening for these women should commence within 1 year of the onset of sexual activity regardless of mode of HIV transmission (e.g. sexual activity, perinatal exposure) but no later than 21 years old. HIV-infected women 21-29 years old should have a Pap test at the time of initial diagnosis with HIV. Provided the initial Pap test for young (or newly diagnosed) HIV-infected women is normal, the next Pap test should be in 12 months (BII). Some experts recommend a Pap test at 6 months after the baseline test (CIII). If the results of the 3 consecutive Pap test are normal, follow up Pap test should be every 3 years (BII). Co-testing (Pap test and PPV test) is not recommended for HIV-infected women <30 years of age.
“HIV-infected Women Aged > 30 years: Cervical cancer screening in HIV-infected women should continue throughout a woman’s lifetime (and not, as in the general population, end at 65 years of age). Either Pap testing only or Pap testing and HPV co-testing is acceptable for screening.”

Use in Other Federal Programs:
Meaningful Use Stage 2 (EHR Incentive Program) - Eligible Professionals and Physician Quality Reporting System (PQRS)

References/ Notes:
1 A measurement year is any consecutive 12-month period of time.

Performance Measure: Chlamydia Screening

National Quality Forum #: None

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage of patients(^1) with a diagnosis of HIV at risk for sexually transmitted infections (STI) who had a test for chlamydia within the measurement year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Number of patients with a diagnosis of HIV who had a test for chlamydia</td>
</tr>
</tbody>
</table>
| Denominator | Number of patients with a diagnosis of HIV who:
  - Were either: a) newly enrolled in care; b) sexually active; or c) had a STI within the last 12 months, and
  - Had a medical visit with a provider with prescribing privileges\(^2\) at least once in the measurement year |
| Patient Exclusions | 1. Patients who were < 18 years old\(^3\) and denied a history of sexual activity |
| Data Elements | 1. Does the patient have a diagnosis of HIV? (Y/N)
   a. If yes, is the patient new to care, sexually active or had a STI within the last 12 months? (Y/N)
      i. If yes, was the patient tested for chlamydia during the measurement year? (Y/N)

***Consider analyzing data for disparities among youth, men who have sex with men, and uninsured patients.
Comparison Data:
National HIVQUAL:

2007: Percentage of eligible female patients who were screened for chlamydia during the review period.

2009: Percentage of women, MSM, and MSM/IDU patients who were screened for chlamydia during the review period.

2011: Percentage of patients with at least one clinical visit in each six month period of the review period who had one or more tests for Chlamydia during the review period: urine/cervical/urethral; pharyngeal (nucleic acid test or culture); AND/OR rectal (nucleic acid test or culture). (National Quality Center and eHNQUAL)

The National HIVQUAL reported the percentage of eligible female patients who were screened for chlamydia during the review period in 2007 as 63.4%.

The National HIVQUAL reported the percentage of women, MSM, and MSM/IDU patients who were screened for chlamydia during the review period in 2009 as 60.5%.

The National HIVQUAL reported the percentage of females with at least one clinical visit in each six month period of the review period who had one or more tests for chlamydia during the review period as: genital 65%, rectal 2%, and pharyngeal 2%.

The National HIVQUAL reported the percentage of males with at least one clinical visit in each six month period of the review period who had one or more tests for chlamydia during the review period as: genital 55%, rectal 3%, and pharyngeal 8%.

The National HIVQUAL reported the percentage of MSM with at least one clinical visit in each six month period of the review period who had one or more tests for chlamydia during the review period as: genital 59%, rectal 3%, and pharyngeal 10%.

U.S. Department of Health & Human Services Guidelines:
“Annual screening of all sexually active women aged ≤25 years is recommended, as is screening of older women with risk factors (e.g., those who have a new sex partner or multiple sex partners).

“Routine laboratory screening for common STDs is indicated for all sexually active MSM. The following screening tests should be performed at least annually for sexually active MSM...

- A test for rectal infection with N. gonorrhoeae and C. trachomatis in men who have had receptive anal intercourse during the preceding year (NAAT of a rectal swab is the preferred approach); and
- A test for pharyngeal infection with N. gonorrhoeae in men who have had receptive oral intercourse during the preceding year (NAAT is the preferred approach). Testing for C. trachomatis pharyngeal infection is not recommended.”

Use in Other Federal Programs:
Centers for Medicare and Medicaid Services EHR Incentive Program has a chlamydia measure (number 0033). However, it includes only women 15-24 years old. Set (Measure CMS153v5)
References/ Notes:
1 “Clients” includes all clients aged 13 years and older.
2 A “provider with prescribing privileges” is a health care professional who is certified in their jurisdiction to prescribe medications.
3 Onset of sexual activity is not reliably reported or recorded. The lower age bracket of 18 years is selected for performance measurement purposes only and should not be interpreted as a recommendation about the age at which screening should begin to occur.

Performance Measure: Gonorrhea Screening

National Quality Forum #: None

<table>
<thead>
<tr>
<th>Description:</th>
<th>Percentage of patients(^1) with a diagnosis of HIV at risk for sexually transmitted infections (STIs) who had a test for gonorrhea within the measurement year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator:</td>
<td>Number of patients with a diagnosis of HIV who had a test for gonorrhea</td>
</tr>
<tr>
<td>Denominator:</td>
<td>Number of patients with a diagnosis of HIV who:</td>
</tr>
<tr>
<td></td>
<td>● Were either: a) newly enrolled in care; b) sexually active; or c) had a STI within the last 12 months; and</td>
</tr>
<tr>
<td></td>
<td>● Had a medical visit with a provider with prescribing privileges(^2) at least once in the measurement year</td>
</tr>
<tr>
<td>Patient Exclusions:</td>
<td>1. Patients who were &lt; 18 years old(^3) and denied a history of sexual activity</td>
</tr>
<tr>
<td>Data Elements:</td>
<td>1. Does the patient have a diagnosis of HIV? (Y/N)</td>
</tr>
<tr>
<td></td>
<td>a. If yes, is the patient new to care, sexually active or had a STI within the last 12 months? (Y/N)</td>
</tr>
<tr>
<td></td>
<td>i. If yes, was the patient tested for gonorrhea during the measurement year? (Y/N)</td>
</tr>
</tbody>
</table>

***Consider analyzing data for disparities among youth, men who have sex with men, and uninsured patients.***

Comparison Data:
National HIVQUAL:
2007: Percentage of female patients screened for gonorrhea
2009: Percentage of females, MSMs, and MSM/IDU screened for chlamydia
2011: Percentage of patients with at least one clinical visit in each six month period of the review period who had one of more tests for Gonorrhea during the review period: urine/cervical/urethral; pharyngeal (nucleic acid test or culture); AND/OR rectal (nucleic acid test or culture) (National Quality Center and eHIVQUAL)
In 2007, the National HIVQUAL reported the median percentage of female patients screened for gonorrhea as 63.6%. In 2009, the National HIVQUAL reported the median percentage of females, MSMs, and MSM/IDU screened for chlamydia as 60%.
In 2011, the National HIVQUAL reported the median percentage with at least one clinical visit in each six month period of the review period who had one or more tests for Gonorrhea during the review period as 60% for genitals (urine/cervical/urethral), 0% for pharyngeal (nucleic acid test or culture), and 0% for rectal (nucleic acid test or culture).

U.S. Department of Health & Human Services Guidelines:
“Routine screening for *N. gonorrhoeae* in all sexually active women at risk for infection is recommended annually.
“Routine laboratory screening for common STDs is indicated for all sexually active MSM. The following screening tests should be performed at least annually for sexually active MSM...
- A test for urethral infection with *N. gonorrhoeae* and *C. trachomatis* in men who have had insertive intercourse during the preceding year; testing of the urine using nucleic acid amplification testing (NAAT) is the preferred approach;
- A test for rectal infection with *N. gonorrhoeae* and *C. trachomatis* in men who have had receptive anal intercourse during the preceding year (NAAT of a rectal swab is the preferred approach); and
- A test for pharyngeal infection with *N. gonorrhoeae* in men who have had receptive oral intercourse during the preceding year (NAAT is the preferred approach). Testing for *C. trachomatis* pharyngeal infection is not recommended.”

Use in Other Federal Programs: None

References/ Notes:
1 “Clients” includes all clients aged 13 years and older.
2 A “provider with prescribing privileges” is a health care professional who is certified in their jurisdiction to prescribe medications.
3 Onset of sexual activity is not reliably reported or recorded. The lower age bracket of 18 years is selected for performance measurement purposes only and should not be interpreted as a recommendation about the age at which screening should begin to occur.
Performance Measure: Hepatitis B Screening

National Quality Forum #: None

<table>
<thead>
<tr>
<th>Description:</th>
<th>Percentage of patients, regardless of age, for whom Hepatitis B screening(^1) was performed at least once since the diagnosis of HIV/AIDS or for whom there is documented infection(^2) or immunity(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator:</td>
<td>Number of patients for whom Hepatitis B screening was performed at least once since the diagnosis of HIV or for whom there is documented infection(^2) or immunity(^3)</td>
</tr>
<tr>
<td>Denominator:</td>
<td>Number of patients, regardless of age, with a diagnosis of HIV and who had at least two medical visits during the measurement year, with at least 60 days in between each visit</td>
</tr>
<tr>
<td>Patient Exclusions:</td>
<td>None</td>
</tr>
</tbody>
</table>
| Data Elements: | 1. Does the patient, regardless of age, have a diagnosis of HIV? (Y/N)  
   a. If yes, did the patient have at least two medical visits during the measurement year, with at least 60 days in between each visit? (Y/N)  
      i. If yes, is there evidence of documented Hepatitis B infection\(^2\) or immunity\(^3\) in the patient medical record? (Y/N)  
   1. If no, was Hepatitis B screening performed at least once since diagnosis of HIV infection? (Y/N)  
      a. If yes, list date |

Comparison Data: None available at this time.

U.S. Department of Health & Human Services Guidelines:
“All HIV-infected patients should be tested for HBV infection. Initial testing should include serologic testing for surface antigen (HBsAg), hepatitis B core antibody (anti-HBc total), and hepatitis B surface antibody (anti-HBs). In acute infection, HBsAg can be detected 4 weeks (range 1–9 weeks) after exposure and anti-HBc immunoglobulin M is usually detectable at the onset of symptoms.”\(^4\)

Use in Other Federal Programs: None

References/Notes:
\(^1\)Screening can be completed in two ways: 1) Test for Hepatitis B surface antibody (anti-HBs) and if negative, proceed to Hepatitis B surface antigen (HBsAg) and Hepatitis B core antibody total (anti-HBc); or 2) complete all three tests as once.
\(^2\)Documented infection includes any patient with active or chronic Hepatitis B infection (see chart below)
\(^3\)Documented immunity includes patients immune to Hepatitis B due to natural infection or Hepatitis B vaccination (see chart below). The following table provides interpretations for Hepatitis B serologic markers available at: Centers for Disease Control and Prevention
\(^4\)Panel on Opportunistic Infections in HIV-Infected Adults and Adolescents. Guidelines for the prevention and treatment of opportunistic infections in HIV-infected adults and adolescents:
Performance Measure: Hepatitis B Vaccination

<table>
<thead>
<tr>
<th>Description:</th>
<th>Percentage of patients with a diagnosis of HIV who completed the vaccination series for Hepatitis B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator:</td>
<td>Number of patients with a diagnosis of HIV with documentation of having ever completed the vaccination series for Hepatitis B¹</td>
</tr>
<tr>
<td>Denominator:</td>
<td>Number of patients with a diagnosis of HIV who had a medical visit with a provider with prescribing privileges² at least once in the measurement year</td>
</tr>
</tbody>
</table>

**Patient Exclusions:**
1. Patients newly enrolled in care during the measurement year
2. Patients with evidence of current HBV infection (Hep B Surface Antigen, Hep B e Antigen, Hep B e Antibody or Hep B DNA)
3. Patients with evidence of past HBV infection with immunity (Hep B Surface Antibody without evidence of vaccination)

**Data Elements:**
1. Does the patient have a diagnosis? (Y/N)
   a. If yes, does the patient have documentation of Hepatitis B immunity or is HBV-infected? (Y/N)
      i. If no, is there documentation that the patient has completed the vaccine series for Hepatitis B? (Y/N)

**Comparison Data:** None available at this time.

**U.S. Department of Health & Human Services Guidelines:**
“Hepatitis B immunization is the most effective way to prevent HBV infection and its consequences. All HIV-infected patients without chronic hepatitis B or immunity to HBV should be vaccinated with hepatitis B vaccine (AII) or with the combined hepatitis A and B vaccine (AII). All non-immune patients with high-risk behaviors associated with hepatitis B should be tested annually for both immunity to HBV and for infection, as is recommended for dialysis patients.”³

**Use in Other Federal Programs:** None

**References/Notes:**
¹Patients in the middle of the vaccination series on at the end of the measurement year would not be captured in the numerator in year x. They would, if the series was completed on schedule, be captured in year x+1.
²A “provider with prescribing privileges” is a health care professional who is certified in their jurisdiction to prescribe ARV therapy.
³Panel on Opportunistic Infections in HIV-Infected Adults and Adolescents. Guidelines for the prevention and treatment of opportunistic infections in HIV-infected adults and adolescents: Adolescent/Adult Performance Measures March 2017
HIV/AIDS Bureau Performance Measures


**Performance Measure: Hepatitis C Screening**

**National Quality Forum #:** None

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage of patients for whom Hepatitis C (HCV) screening was performed at least once since the diagnosis of HIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator:</td>
<td>Number of patients with a diagnosis of HIV who have documented HCV status in chart¹</td>
</tr>
<tr>
<td>Denominator:</td>
<td>Number of patients with a diagnosis of HIV who had a medical visit with a provider with prescribing privileges² at least once in the measurement year</td>
</tr>
<tr>
<td>Patient Exclusions:</td>
<td>None</td>
</tr>
<tr>
<td>Data Elements:</td>
<td>1. Does the patient have a diagnosis of HIV? (Y/N) a. If yes, is there documentation of the patient’s Hepatitis C status in the medical record? (Y/N)</td>
</tr>
</tbody>
</table>

**Comparison Data:**

National HIVQUAL:
2007: Percentage of patients with known hepatitis C status (positive or negative)
2009: Percentage of patients with known hepatitis C status at start of review period
2011: Percentage of patients whose hepatitis C serostatus was known (positive or negative) by the end of the review period and all patients who had a known (positive or negative) RNA status ([National Quality Center](https://nq Avatar.com) and [eHIVQUAL](https://ehivqual.com))

In 2007, the National HIVQUAL reported the percentage of patients with known hepatitis C status as 96.7%. In 2009, the percentage of patients with known hepatitis C status at the start of the review period was reported as 89.7%. In 2011, the National HIVQUAL reported the percentage of patients with known hepatitis C serostatus by the end of the review period and all patients with known RNA status as 98%.

**U.S. Department of Health & Human Services Guidelines:**
“On entry into HIV care, all HIV-infected patients should undergo routine HCV screening. Initial testing for HCV should be performed using the most sensitive immunoassays licensed for detection of antibody to HCV (anti-HCV) in blood. For at risk HCV-seronegative persons, HCV antibody testing is recommended annually or as indicated by risk exposure.”³
Use in Other Federal Programs: None

References/Notes:
1 Unless there is concern about ongoing exposure (e.g., via active injection drug use), annual re-screening is not generally recommended.
2 A “provider with prescribing privileges” is a health care professional who is certified in their jurisdiction to prescribe ARV therapy.
3 Panel on Opportunistic Infections in HIV-Infected Adults and Adolescents. Guidelines for the prevention and treatment of opportunistic infections in HIV-infected adults and adolescents:

Performance Measure: HIV Risk Counseling

National Quality Forum #: None

<table>
<thead>
<tr>
<th>Description:</th>
<th>Percentage of patients with a diagnosis of HIV who received HIV risk counseling(^1) in the measurement year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator:</td>
<td>Number of patients with a diagnosis of HIV, as part of their primary care, who received HIV risk counseling</td>
</tr>
<tr>
<td>Denominator:</td>
<td>Number of patients with a diagnosis of HIV who had a medical visit with a provider with prescribing privileges(^2) at least once in the measurement year</td>
</tr>
<tr>
<td>Patient Exclusions:</td>
<td>None</td>
</tr>
</tbody>
</table>
| Data Elements: | 1. Does the patient have a diagnosis of HIV? (Y/N)  
  a. If yes, did the patient receive HIV risk counseling at least once during the measurement year with appropriate feedback to the provider? (Y/N) |

Comparison Data: None available at this time

U.S. Department of Health & Human Services Guidelines:
“HIV-infected patients should be screened for behaviors associated with HIV transmission by using a straightforward, nonjudgmental approach. This should be done at the initial visit and subsequent routine visits or periodically, as the clinician feels necessary, but at a minimum yearly. Any indication of risky behavior should prompt a more thorough assessment of HIV transmission risks.

“Clinicians providing medical care to HIV-infected persons can play a key role in helping their patients reduce risk behaviors and maintain safer practices and can do so with a feasible level of effort, even in constrained practice settings. Clinicians can greatly affect patients' risks for transmission of HIV to others by performing a brief screening for HIV transmission risk behaviors; communicating prevention messages; discussing sexual and drug-use behavior; positively reinforcing changes to safer behavior;
referring patients for such services as substance abuse treatment; facilitating partner notification, counseling, and testing; and identifying and treating other STDs.”

**Use in Other Federal Programs:** None

**References/Notes:**

1. HIV risk counseling includes assessment of risk, counseling and as necessary, referrals. Counseling occurs in the context of comprehensive medical care and can be provided by any member of the multidisciplinary primary care team.

2. A “provider with prescribing privileges” is a health care professional who is certified in their jurisdiction to prescribe antiretroviral therapy.

3. Centers for Disease Control and Prevention. Incorporating HIV prevention into the medical care of persons living with HIV: recommendations of CDC, the Health Resources and Services Administration, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America. MMWR 2003; 52 (No. RR-12) ([Incorporating HIV Prevention into the Medical Care of Persons Living with HIV](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5206a1.htm) or [AIDSinfo: Clinical Guidelines](https://aidsinfo.nih.gov/ContentParser/index.cfm?product=AIDSinfo&section=guidelines&keyword=HIV-CTM))

**Performance Measure: Oral Exam**

**National Quality Forum #:** None

<table>
<thead>
<tr>
<th>Description</th>
<th>Percent of patients with a diagnosis of HIV who received an oral exam by a dentist at least once during the measurement year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Numerator:</strong></td>
<td>Number of patients with a diagnosis of HIV who had an oral exam by a dentist during the measurement year, based on patient self-report or other documentation</td>
</tr>
<tr>
<td><strong>Denominator:</strong></td>
<td>Number of patients with a diagnosis of HIV who had a medical visit with a provider with prescribing privileges at least once in the measurement year</td>
</tr>
<tr>
<td><strong>Patient Exclusions:</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Data Elements:</strong></td>
<td>1. Does the patient have a diagnosis of HIV? (Y/N)</td>
</tr>
<tr>
<td></td>
<td>a. If yes, did the patient receive an oral exam by a dentist during the measurement year? (Y/N)</td>
</tr>
</tbody>
</table>

**Comparison Data:**

National HIVQUAL: Percentage of who had a dental exam during review period ([National Quality Center](http://www.qualitycenter.gov) and [eHIVQUAL](http://www.ehivqual.gov))

National HIVQUAL reported the median percentage of patients who received a dental examination during the review period as: 40% in 2007, 32.7% in 2009, and 35% in 2011.

**U.S. Department of Health & Human Services Guidelines:**

“After completing the initial history and physical examination, do the following: Refer for dental, nutrition, and social services, as well as case management and mental health care, as appropriate.

“Examination of the oral cavity should be included in both the initial and interim physical examination of all HIV-infected patients. Patients with lesions suspected to be oral manifestations of HIV disease...
should be referred to a dental health expert with experience in treating oral lesions associated with HIV/AIDS.\textsuperscript{2}

“All patients should have semiannual oral health examination.”\textsuperscript{3}

Use in Other Federal Programs: None

References/Notes:
\textsuperscript{1}A “provider with prescribing privileges” is a health care professional who is certified in their jurisdiction to prescribe ARV therapy.


Performance Measure: Pneumococcal Vaccination

National Quality Forum #: None

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage of patients\textsuperscript{1} with a diagnosis of HIV who ever received pneumococcal vaccine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Number of patients with a diagnosis of HIV who ever received pneumococcal vaccine</td>
</tr>
<tr>
<td>Denominator</td>
<td>Number of patient with HIV who had:</td>
</tr>
<tr>
<td></td>
<td>A medical visit with a provider with prescribing privileges\textsuperscript{3} at least once in the measurement year</td>
</tr>
<tr>
<td>Patient Exclusions</td>
<td>1. Patients with CD4 counts &lt; 200 cells/mm\textsuperscript{3} within the measurement year</td>
</tr>
<tr>
<td>Data Elements</td>
<td>1. Does the patient have a diagnosis of HIV? (Y/N)</td>
</tr>
<tr>
<td></td>
<td>a. If yes, is there documentation in the chart that the patients ever received the pneumococcal vaccine? (Y/N)</td>
</tr>
</tbody>
</table>

Comparison Data:
National HIVQUAL:
2007: Percentage of patients who ever had a pneumococcal vaccination documented
2009 & 2011: Percentage of patients who had a pneumococcal vaccination documented in the past five years (National Quality Center and eHIVQUAL)

In 2007, the National HIVQUAL reported the percentage of patients who ever had a documented pneumococcal vaccination as 84.6%. The National HIVQUAL reported the percentage of patients who ever had a documented pneumococcal vaccination as 78.2% in 2009 and 73% in 2011.
U.S. Department of Health & Human Services Guidelines:
“HIV-infected adults and adolescents who have never received any pneumococcal vaccine should receive a single dose of PCV13 regardless of CD4 count (AI).3 Patients with CD4 counts ≥200 cells/mm3 should then receive a dose of 23-valent PPV (PPV23) at least 8 weeks later (All). HIV-infected patients with CD4 counts <200 cells/mm3 can be offered PPV23 at least 8 weeks after receiving PCV13 (CIII); however, it may be preferable to defer PPV23 until after the CD4 count increases to >200 cells/mm3 on ART (BIII). Clinical evidence supporting use of PPV23 in persons with CD4 counts <200 cells/mm3 appears strongest in patients who also have HIV RNA <100,000 copies/mL; evidence also suggests benefit for those who start ART before receiving PPV.”4

Use in Other Federal Programs: None

References/Notes:
1 “Clients” includes all clients aged 13 years and older.
2 Evidence of vaccination could include personal, school, physician, or immunization records or registries.
3 A “provider with prescribing privileges” is a health care professional who is certified in their jurisdiction to prescribe medications.

Performance Measure: Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan1

National Quality Forum #: 418

<table>
<thead>
<tr>
<th>Description:</th>
<th>Percentage of patients aged 12 years and older screened for clinical depression on the date of the encounter using an age appropriate standardized depression screening tool AND if positive, a follow-up plan is documented on the date of the positive screen2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator:</td>
<td>Patients screened for clinical depression on the date of the encounter using an age appropriate standardized tool AND if positive, a follow-up plan is documented on the date of the positive screen</td>
</tr>
<tr>
<td>Denominator:</td>
<td>All patients aged 12 years and older before the beginning of the measurement period with at least one eligible encounter during the measurement period</td>
</tr>
</tbody>
</table>

Patient Exclusions: 1. Patient Reason(s) - Patient refuses to participate 2. Medical Reason(s) - Patient is in an urgent or emergent situation where time is of the essence and to delay treatment would jeopardize the patient’s health status 3. Situations where the patient’s functional capacity or motivation to improve may impact the accuracy of results of standardized depression assessment tools. For example: certain court appointed cases or cases of delirium
### Data Elements:

<table>
<thead>
<tr>
<th>Data Elements</th>
<th>1. Is the patient 12 years or older? (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a. If yes, did the patient have a depression screening during measurement period? (Y/N)</td>
</tr>
<tr>
<td></td>
<td>i. If yes, did the depression screening result in a diagnosis of depression? (Y/N)</td>
</tr>
<tr>
<td></td>
<td>1. If yes, was an intervention documented? (Y/N)</td>
</tr>
</tbody>
</table>

***Greater measure specification detail is available including data elements for each value set at [eCQM Library](#) (Measure: CMS2v6)***

### Comparison Data:

**National HIVQUAL:** Percentage of patients who received all required components of a mental health screening during the review period (components include cognitive function, depression, anxiety, sleep disturbance, appetite, domestic violence, and post-traumatic stress disorder screenings) ([National Quality Center](#) and [eHIVQUAL](#))

The National HIVQUAL reported the median percentage of patients who received all required components of a mental health screening during the review period as: 20.9% in 2007, 26.1% in 2009, and 36% in 2011. In addition, the components of the mental screening include cognitive function, depression, anxiety, sleep disturbance, appetite, domestic violence, and post-traumatic stress disorder screenings.

**U.S. Department of Health & Human Services Guidelines:**

“Patients living with HIV infection often must cope with many social, psychiatric, and medical issues that are best addressed through a patient-centered, multi-disciplinary approach to the disease. The baseline evaluation should include an evaluation of the patient’s readiness for ART, including an assessment of high-risk behaviors, substance abuse, social support, mental illness, comorbidities, economic factors (e.g., unstable housing), medical insurance status and adequacy of coverage, and other factors that are known to impair adherence to ART and increase the risk of HIV transmission. Once evaluated, these factors should be managed accordingly.”

**Use in Other Federal Programs:**

This measure is used in the Centers for Medicare and Medicaid EHR Incentive Program. Measure specifications are available online. Additionally, the [EHR Incentive Program has similar measures (Adult Major Depressive Disorder (MDD): Suicide Risk Assessment, Bipolar Disorder and Major Depression: Appraisal for alcohol or chemical substance use, Depression Remission at Twelve Months, and Depression Utilization of the PHQ-9 Tool, and Maternal Depression Screening). CMS Measures: CMS 82v4, CMS 2v6, CMS 159v5, CMS 160v5, CMS 161v5, CMS 169v5](#)
References/Notes:
1 The HIV/AIDS Bureau did not develop this measure. The Centers for Medicare & Medicaid Services developed this measure. More details are available at: CMS.gov: eCQM Library.
2 "Screening: Completion of a clinical or diagnostic tool used to identify people at risk of developing or having a certain disease or condition, even in the absence of symptoms. Standardized Depression Screening Tool – A normalized and validated depression screening tool developed for the patient population in which it is being utilized
Examples of depression screening tools include but are not limited to:
• Adolescent Screening Tools (12-17 years) - Patient Health Questionnaire for Adolescents (PHQ-A), Beck Depression Inventory-Primary Care Version (BDI-PC), Mood Feeling Questionnaire, Center for Epidemiologic Studies Depression Scale (CES-D) and PRIME MD-PHQ2
• Adult Screening Tools (18 years and older) - Patient Health Questionnaire (PHQ9), Beck Depression Inventory (BDI or BDI-II), Center for Epidemiologic Studies Depression Scale (CES-D), Depression Scale (DEPS), Duke Anxiety-Depression Scale (DADS), Geriatric Depression Scale (SDS), Cornell Scale Screening and PRIME MD-PHQ2
Follow-Up Plan: Follow-up for a positive depression screening must include one or more of the following: additional evaluation for depression, suicide risk assessment, referral to a practitioner who is qualified to diagnose and treat depression, pharmacological interventions, other interventions or follow-up for the diagnosis or treatment of depression.” Measure specifications detail sheet available for download from CMS.gov: eCQM Library
Performance Measure: Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention

National Quality Forum #: 0028

<table>
<thead>
<tr>
<th>Description:</th>
<th>Percentage of patients aged 18 years and older who were screened for tobacco use one or more times within 24 months AND who received cessation counseling intervention if identified as a tobacco user³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator:</td>
<td>Patients who were screened for tobacco use at least once within 24 months AND who received tobacco cessation counseling intervention if identified as a tobacco user</td>
</tr>
<tr>
<td>Denominator:</td>
<td>All patients aged 18 years and older</td>
</tr>
<tr>
<td>Patient Exclusions:</td>
<td>1. Documentation of medical reason(s) for not screening for tobacco use (e.g., limited life expectancy, other medical reason)</td>
</tr>
</tbody>
</table>

**Data Elements:**

1. Is patient 18 years or older? (Y/N)
   a. If yes, did the patient have 2 or more psychiatric, behavioral, or occupational therapy encounters OR 1 or more medical, wellness, or preventative encounters in the measurement period? (Y/N)
   i. If yes, did the patient receive a tobacco use screening? (Y/N)
      1. If tobacco user, did patient receive an intervention (counseling and/or pharmacotherapy? (Y/N)

***Greater measure specification detail is available including data elements for each value set at [eCQM Library](https://cemqclibrary.org) (Measure CMS 138v5)***

**Comparison Data:**

National HIVQUAL:

2007 & 2009: Percentage of patients with whom tobacco use was discussed

2011:  
   a. Percentage of patients with whom tobacco use was discussed  
   b. Percentage of patients who use tobacco  
   c. Percentage of patients with whom tobacco use cessation was discussed ([National Quality Center](https://nqhiv.org) and [eHIVQUAL](https://ehivqual.org))

The National HIVQUAL reported the percentage of patients with whom tobacco use was discussed as: 93.5% in 2007, 95.3% in 2009, and 95% in 2011. In 2011, the National HIVQUAL also reported the percentage of patients who use tobacco as 41% and the percentage of patients with whom tobacco use cessation was discussed as 100%.
U.S. Department of Health & Human Services Guidelines:
“The USPSTF recommends that clinicians ask all adults about tobacco use and provide tobacco cessation interventions for those who use tobacco products. Grade: A recommendation.
“The USPSTF recommends that clinicians ask all pregnant women about tobacco use and provide augmented, pregnancy-tailored counseling for those who smoke. Grade: A recommendation.
“In nonpregnant adults, the USPSTF found convincing evidence that smoking cessation interventions, including brief behavioral counseling sessions (<10 minutes) and pharmacotherapy delivered in primary care settings, are effective in increasing the proportion of smokers who successfully quit and remain abstinent for 1 year. Although less effective than longer interventions, even minimal interventions (<3 minutes) have been found to increase quit rates.”

Use in Other Federal Programs:
This measure is used in the Centers for Medicare and Medicaid EHR Incentive Program. Measure specifications are available at: eCQM.com

References/Notes:
1 The HIV/AIDS Bureau did not develop this measure. The American Medical Association-convened Physician Consortium for Performance Improvement (AMA-PCPI) developed this measure. More details are available at: eCQM Library
2 If tobacco use status of a patient is unknown; the patient cannot be counted in the numerator and should be considered a measure failure. Instances where tobacco use status of "unknown" is recorded include: 1) the patient was not screened; or 2) the patient was screened and the patient (or caregiver) was unable to provide a definitive answer. If tobacco use status of “unknown” is recorded but the patient has an allowable medical exception, then the patient should be removed from the denominator of the measure and reported as a valid exception.
3 If a patient uses any type of tobacco (i.e., smokes or uses smokeless tobacco), the expectation is that they should receive tobacco cessation: either counseling and/or pharmacotherapy.
**HIV/AIDS Bureau Performance Measures**

**Performance Measure: Substance Abuse Screening**

**National Quality Forum #:** None

<table>
<thead>
<tr>
<th>Description:</th>
<th>Percentage of new patients(^1) with a diagnosis of HIV who have been screened(^2) for substance use (alcohol &amp; drugs) in the measurement year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Numerator:</strong></td>
<td>Number of new patients with a diagnosis of HIV who were screened for substance use within the measurement year</td>
</tr>
</tbody>
</table>
| **Denominator:** | Number of patients with a diagnosis of HIV who:  
  ● Were new during the measurement year, and  
  ● Had a medical visit with a medical provider with prescribing privileges\(^3\) at least once in the measurement year |
| **Patient Exclusions:** | None |
| **Data Elements:** | 1. Does the patient have a diagnosis of HIV? (Y/N)  
  a. If yes, was the patient new to the program during the reporting period? (Y/N)  
  i. If yes, was the patient screened for substance use during the measurement year? (Y/N) |

**Comparison Data:**
National HIVQUAL: Percentage of patients with whom substance use was discussed and documented in the chart ([National Quality Center](https://www.quality.nationalhivqual.org) and [eHIVQUAL](https://www.ehivqual.org))

The National HIVQUAL reported the percentage of patients with whom substance use was discussed and documented in the chart as: 90.1% in 2007, 93.5% in 2009, and 92% in 2011.

**U.S. Department of Health & Human Services Guidelines:**
“Patients living with HIV infection often must cope with many social, psychiatric, and medical issues that are best addressed through a patient-centered, multi-disciplinary approach to the disease. The baseline evaluation should include an evaluation of the patient’s readiness for ART, including an assessment of high-risk behaviors, substance abuse, social support, mental illness, comorbidities, economic factors (e.g., unstable housing), medical insurance status and adequacy of coverage, and other factors that are known to impair adherence to ART and increase the risk of HIV transmission. Once evaluated, these factors should be managed accordingly.”\(^4\)

**Use in Other Federal Programs:**
The CMS/ONC EHR Incentive Program has a similar measure (Initiation and Engagement of Alcohol and Other Drug Dependence Treatment). Measure specifications are available at: [eCQM Library](https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/ElectronicClinicalQualityMeasures/ElectronicClinicalQualityMeasures.html) (Measure CMS 137v5)

**References/Notes:**
1“Clients” includes all clients aged 13 years and older.  
2The purpose of screening is to identify past or current substance use that negatively impacts linkage to care and health care in general. A substance use screen includes documentation of past and current

Adolescent/Adult Performance Measures  
**March 2017**
substance use and treatment in the HIV primary care record. Screening can be provided by any member of the multidisciplinary primary care team. 

A “provider with prescribing privileges” is a health care professional who is certified in their jurisdiction to prescribe medications.


Performance Measure: Syphilis Screening

National Quality Forum #: None

| Description: | Percentage of adult patients with a diagnosis of HIV who had a test for syphilis performed within the measurement year |
| Numerator: | Number of patients with a diagnosis of HIV who had a serologic test for syphilis performed at least once during the measurement year |
| Denominator: | Number of patients with a diagnosis of HIV who: |
| | ● Were ≥18 years old in the measurement year\(^1\) or had a history of sexual activity < 18 years, and |
| | ● Had a medical visit with a provider with prescribing privileges\(^2\) at least once in the measurement year |
| Patient Exclusions: | 1. Patients who were < 18 years old and denied a history of sexual activity |
| Data Elements: | 1. Does the patient have a diagnosis of HIV? (Y/N) |
| | a. If yes, is the patient ≥ 18 years or reports having a history of sexual activity? (Y/N) |
| | 1. If yes, was the patient screened for syphilis during the measurement year? |

***Consider analyzing data for disparities among youth, men who have sex with men, and uninsured patients.

Comparison Data:

National HIVQUAL: Percentage of patients who received a syphilis screening during the review period (National Quality Center and eHIVQUAL)

The National HIVQUAL recorded the median percentage of patients who received a syphilis screening during the review period as: 75.1% in 2007, 85.2% in 2009, and 86% in 2011.

U.S. Department of Health & Human Services Guidelines:

“Routine serologic screening for syphilis is recommended at least annually for all HIV infected patients who are sexually active, with more frequent screening (every 3–6 months) for those who have
multiple partners, unprotected intercourse, sex in conjunction with illicit drug use, or use methamphetamines (or whose partners participate in such activities).”

“Bacterial and viral sexually transmitted diseases (STDs) in HIV-infected men and women receiving outpatient care have been increasingly noted, indicating ongoing risky behaviors and opportunities for HIV transmission. Further, despite declining syphilis prevalence in the general U.S. population, sustained outbreaks of syphilis among MSM, many of whom are HIV infected, continue to occur in some areas; rates of gonorrhea and chlamydial infection have also risen for this population. Rising STD rates among MSM indicate increased potential for HIV transmission, both because these rates suggest ongoing risky behavior and because STDs have a synergistic effect on HIV infectivity and susceptibility.”

“Routine laboratory screening for common STDs is indicated for all sexually active MSM. The following screening tests should be performed at least annually for sexually active MSM:

● Syphilis serology, with a confirmatory testing to establish whether persons with reactive serologies have incident untreated syphilis, have partially treated syphilis, or are manifesting a slow serologic response to appropriate prior therapy…”

Use in Other Federal Programs: None

References/Notes:

1 Onset of sexual activity is not reliably reported or recorded. The lower age bracket of 18 years is selected for performance measurement purposes only and should not be interpreted as a recommendation about the age at which screening should begin to occur.

2 A “provider with prescribing privileges” is a health care professional who is certified in their jurisdiction to prescribe antiretroviral therapy.


5 Centers for Disease Control and Prevention. Sexually Transmitted Diseases Treatment Guidelines, 2010. MMWR 2010; 59(No. RR-12): pages 12 and 44. Accessed December 2016. Available at: Accessibility: If you need an alternative means of access to any information above, please contact us at comments@hrsa.gov. Please let us know the nature of your accessibility problem and the Web address of the requested information.