### Performance Measure: HIV Drug Resistance Testing Before Initiation of Therapy

**National Quality Forum #:** None

<table>
<thead>
<tr>
<th>Description:</th>
<th>Percentage of patients, regardless of age, with a diagnosis of HIV who had an HIV drug resistance test performed(^1) before initiation(^2) of HIV antiretroviral therapy if therapy started during the measurement year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator:</td>
<td>Number of patients who had an HIV drug resistance test performed at any time before initiation of HIV antiretroviral therapy</td>
</tr>
</tbody>
</table>
| Denominator: | Number of patients, regardless of age, with a diagnosis of HIV who:  
  • were prescribed HIV antiretroviral therapy during the measurement year for the first time; and  
  • had a medical visit with a provider with prescribing privileges\(^3\) at least once in the measurement year |
| Patient Exclusions: | None |
| Data Elements: | 1. Does the patient, regardless of age, have a diagnosis of HIV/AIDS? (Y/N)  
  a. If yes, was the patient seen by a provider with prescribing privileges during the measurement year? (Y/N)  
  i. If yes, was HIV antiretroviral therapy prescribed during the measurement year for the first time? (Y/N)  
  1. If yes, was an HIV drug resistance test performed at any time prior to prescribing ARV therapy? (Y/N)  
  a. If yes, list date. |

### Comparison Data:

**National HIVQUAL:** Percentage of patients on ART for a minimum of 12 weeks with one visit in each six month period of the review period who are considered suppressed as derived from the last recorded viral load of the review period; suppressed defined as the viral load is <200 copies/mm\(^3\) (either detectable or undetectable) OR <400 copies/mm\(^3\) (and undetectable) (eHIVQUAL and National Quality Center). The National HIVQUAL reported the 2011 median as 50%.
U.S. Department of Health & Human Services Guidelines:

Adult guidelines: 4 “HIV drug-resistance testing is recommended in persons with HIV infection at entry into care regardless of whether antiretroviral therapy (ART) will be initiated immediately or deferred (AII). If therapy is deferred, repeat testing should be considered at the time of ART initiation (CIII).

- “Genotypic testing is recommended as the preferred resistance testing to guide therapy in antiretroviral (ARV)-naïve patients (AIII).”
- Pediatric guidelines: 5 “Entry into Care—Baseline Evaluation...Genotype resistance testing should be performed, even if cART is not initiated immediately. Testing at the Time of Switching cART...If regimen is switched because of cART failure (see Recognizing and Managing Antiretroviral Treatment Failure in Management of Children Receiving Antiretroviral Therapy) resistance testing should be performed while a patient is still receiving the failing regimen to optimize the chance of identifying resistance mutations because resistant strains may revert to wild type within a few weeks of stopping ARV drugs (see Antiretroviral Drug-Resistance Testing).”

Use in Other Federal Programs: None

References/Notes:
1 HIV drug resistance testing may occur either during or prior to the measurement year, as long as it is performed before ARV therapy is initiated.
2 The focus of the measure is on initiation of first antiretroviral regimen for HIV treatment, not prophylaxis or re-initiation.
3 A “provider with prescribing privileges” is a health care professional who is certified in his/her jurisdiction to prescribe medications.
### Performance Measure: Influenza Immunization

**National Quality Forum #:** 41

<table>
<thead>
<tr>
<th><strong>Description:</strong></th>
<th>Percentage of patients aged 6 months and older seen for a visit between October 1 and March 31 who received an influenza immunization OR who reported previous receipt of an influenza immunization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Numerator:</strong></td>
<td>Patients who received an influenza immunization OR who reported previous receipt* of an influenza immunization during the current season</td>
</tr>
<tr>
<td>*Previous receipt can include: previous receipt of the current season’s influenza immunization from another provider OR from same provider prior to the visit to which the measures is applied (typically, prior vaccination would include influenza vaccine given since August 1st).</td>
<td></td>
</tr>
<tr>
<td><strong>Denominator:</strong></td>
<td>All patients aged 6 months and older seen for a visit between October 1 and March 31</td>
</tr>
</tbody>
</table>
| **Patient Exclusions:** | 1. Documentation of medical reason(s) for not receiving influenza immunization (eg, patient allergy, other medical reasons)  
2. Documentation of patient reason(s) for not receiving influenza immunization (eg, patient declined, other patient reasons)  
3. Documentation of system reason(s) for not receiving influenza immunization (eg, vaccine not available, other system reasons) |
| **Data Elements:** | 1. Did the patient, aged six months and older, have at least one medical visit between October 1 and March 31? (Y/N)  
   a. Did the patient receive an influenza vaccination or report previous receipt of an influenza vaccination? (Y/N) |

***Greater measure specification detail is available including data elements for each value set at [eCQM Library](https://ecqmfoundation.org/ecqm_library) (Measure CMS 147v6)***

### Comparison Data:

**National HIVQUAL:** Percentage of patients who received an influenza vaccination during the review period ([eHIVQUAL](https://ehivqual.org) and [National Quality Center](https://nationalqualitycenter.org)). The National HIVQUAL reported the median as 62% in 2009 and 67% in 2011.

**U.S. Department of Health & Human Services Guidelines:**  
“Routine annual influenza vaccination of all persons aged ≥6 months without contraindications continues to be recommended.”

**Use in Other Federal Programs:**  
Centers for Medicare and Medicaid Services EHR Incentive Program measure (number 0041). See [eCQM Library](https://ecqmfoundation.org/ecqm_library)
HIV/AIDS Bureau Performance Measures

**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 available at: [eCQM Library](#)


**Performance Measure: Lipid Screening**

**National Quality Forum #:** None

<table>
<thead>
<tr>
<th>Description:</th>
<th>Percentage of patients, regardless of age, with a diagnosis of HIV who were prescribed HIV antiretroviral therapy and who had a fasting lipid(^1) panel during the measurement year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator:</td>
<td>Number of patients who had a fasting lipid panel in the measurement year</td>
</tr>
<tr>
<td>Denominator:</td>
<td>Number of patients, regardless of age, who are prescribed HIV antiretroviral therapy and 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, regardless of age, have a diagnosis of HIV? (Y/N)  
  a. If yes, did the patient have at least one medical visit during the measurement year? (Y/N)  
  i. If yes, was the client prescribed HIV antiretroviral therapy during the measurement year? (Y/N)  
  1. If yes, did the patient have a fasting lipid panel during the measurement year? (Y/N) |

**Comparison Data:**

National HIVQUAL:

2007: Among patients who were on HAART during the review period, percentage who had cholesterol & triglycerides checked during the review period

2009: Percentage of patients who had a lipid profile (cholesterol & triglycerides checked) during the review period

2011: Percentage of patients for whom a lipid screening was performed during the review period. At a minimum, lipid screening should include determination of cholesterol, high-density lipoprotein (HDL) and triglyceride levels ([eHIVQUAL](#) and National Quality Center).

The National HIVQUAL reported the median as 91% in 2007, 86% in 2009, and 83% in 2011.
U.S. Department of Health & Human Services Guidelines:
Adult guidelines: Fasting lipid profile should be monitored for patients at the following points: entry into care; follow up before ART; ART initiation or modification; 2 weeks post ART initiation; every 6 months; every 12 months; and if clinically indicated.

Pediatric guidelines: Lipid Panel should be monitored for children during the following points of care: entry into care; ART initiation; and every 6-12 months.

Use in Other Federal Programs: None

References/ Notes:
1 A fasting lipid panel consists of fasting cholesterol, HDL, calculated LDL and triglycerides.
2 A “provider with prescribing privileges” is a health care professional who is certified in their jurisdiction to prescribe ARV therapy.
Performance Measure: Tuberculosis Screening

National Quality Forum #: 408

| Description: | Percentage of patients aged 3 months and older with a diagnosis of HIV/AIDS, for whom there was documentation that a tuberculosis (TB) screening test was performed and results interpreted (for tuberculin skin tests) at least once since the diagnosis of HIV infection. |
| Numerator: | Patients for whom there was documentation that a tuberculosis (TB) screening test was performed and results interpreted at least once since the diagnosis of HIV infection. |
| Denominator: | All patients aged 3 months and older with a diagnosis of HIV/AIDS, who had at least two visits during the measurement year, with at least 90 days in between each visit. |
| Patient Exclusions: | Documentation of Medical Reason for not performing a tuberculosis (TB) screening test (e.g., patients with a history of positive PPD or treatment for TB). |
| Data Elements: | 1. Does the patient, aged three months and older, have a diagnosis of HIV/AIDS? (Y/N)  
   a. If yes, did the patient have at least two medical visits during the measurement year, with at least 90 days in between each visit? (Y/N)  
   i. If yes, has the patient had tuberculosis (TB) screening test performed and results interpreted (for tuberculin skin tests) at least once since the diagnosis of HIV infection? (Y/N) |

Comparison Data:
National HIVQUAL:
2006 and 2007: Percentage of patients without prior positive test or TB treatment who received a TB test with documented result during the past 24 months

2011: Percentage of patients for whom an LTBI screening was performed and the results were read either during the review period or the twelve months preceding the start of the review period (eHIVQUAL and National Quality Center).
The National HIVQUAL reported the median percentage as: 75% in 2007, 74% in 2009, 73% in 2011.

U.S. Department of Health & Human Services Guidelines:
Adult guidelines: 3 “Testing for LTBI at the time of HIV diagnosis should be routine, regardless of an individual’s epidemiological risk of TB exposure. Individuals with negative diagnostic tests for LTBI who have advanced HIV infection (CD4 cell count <200 cells/mm³) and no indications for initiating empiric LTBI treatment should be retested for LTBI once they start ART and attain a CD4 count ≥200 cells/mm³. Annual testing for LTBI is recommended only for HIV-infected patients who are at high risk of repeated or ongoing exposure to those with active TB.”

Pediatric guideline: 4 Because HIV-infected children are at high risk of TB, annual LTBI testing is recommended beginning at ages 3 to 12 months and annually thereafter for those who tested negative in the past (AIII), depending on the local epidemiology, region of birth, and travel history.
American Thoracic Society/Infectious Diseases Society of America/Centers for Disease Control and Prevention Guidelines:2

- We recommend performing an interferon-γ release assay (IGRA) rather than a tuberculin skin test (TST) in individuals 5 years or older who meet the following criteria: (1) are likely to be infected with \textit{Mtb}, (2) have a low or intermediate risk of disease progression, (3) it has been decided that testing for LTBI is warranted, and (4) either have a history of BCG vaccination or are unlikely to return to have their TST read (\textit{strong recommendation}, \textit{moderate-quality evidence}). Remarks: A TST is an acceptable alternative, especially in situations where an IGRA is not available, too costly, or too burdensome.

- We suggest performing an IGRA rather than a TST in all other individuals 5 years or older who are likely to be infected with \textit{Mtb}, who have a low or intermediate risk of disease progression, and in whom it has been decided that testing for LTBI is warranted (\textit{conditional recommendation}, \textit{moderate-quality evidence}). Remarks: A TST is an acceptable alternative, especially in situations where an IGRA is not available, too costly, or too burdensome.

\textbf{Use in Other Federal Programs:} None

\textbf{References/ Notes:}

1 The HIV/AIDS Bureau did not develop this measure. The National Committee on Quality Assurance developed this measure. Measure details available at: National Quality Forum: Endorsement Summaries


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