

**Measure #338 (NQF 2082): HIV Viral Load Suppression -- National Quality Strategy Domain:Effective Clinical Care**

**2017 OPTIONS FOR INDIVIDUAL MEASURES:**  
**REGISTRY ONLY**

**MEASURE TYPE:**

Outcome

**DESCRIPTION:**

The percentage of patients, regardless of age, with a diagnosis of HIV with a HIV viral load less than 200 copies/mL at last HIV viral load test during the measurement year

**INSTRUCTIONS:**

This measure is to be reported a minimum of **once per performance period** for patients with HIV seen during the **performance period**. This measure is intended to reflect the quality of services provided for the primary management of patients with HIV.

**Measure Reporting:**

The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by the measure. The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**

Patients, regardless of age, with a diagnosis of HIV who had at least one medical visit during the **performance period**

**Denominator Criteria (Eligible Cases):**

Patients, regardless of age

**AND**

**Diagnosis of HIV/AIDS (ICD-10-CM):** B20, Z21

**AND**

**Patient encounter during the performance period (CPT or HCPCS):** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, G0402

**NUMERATOR:**

Number of patients with a HIV viral load less than 200 copies/mL at last viral load test

**Numerator Options:**

***Performance Met:***

Documentation of viral load less than 200 copies/mL  
(G9243)

**OR**

***Performance Not Met:***

Documentation of viral load equal to or greater than  
200 copies/mL or viral load not performed (G9242)

**RATIONALE:**

Sustained viral load suppression is directly related to reduction in disease progression and to reduction in potential for transmission of infection. Among persons in care, sustained viral load suppression represents the cumulative effect of prescribed therapy, ongoing monitoring, and patient adherence. The measure will direct providers' attention and quality improvement efforts towards this important outcome.

### **CLINICAL RECOMMENDATION STATEMENTS:**

Plasma HIV RNA (viral load) should be measured in all patients at baseline and on a regular basis thereafter, especially in patients who are on treatment, because viral load is the most important indicator of response to antiretroviral therapy (ART) (Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents PDF Sections E-1 and C-3. Accessed May 18, 2015) (Strength of Evidence = AI, AIII, BIII). Thus, viral load testing serves as a surrogate marker for treatment response and can be useful in predicting clinical progression (Murray, 1999)

Optimal viral suppression is generally defined as a viral load persistently below the level of detection (<20–75 copies/mL, depending on the assay used). In addition, low-level positive viral load results (typically <200 copies/mL) appear to be more common with some viral load assays than others, and there is no definitive evidence that patients with viral loads quantified as <200 copies/mL using these assays are at increased risk for virologic failure. For the purposes of clinical trials the AIDS Clinical Trials Group (ACTG) currently defines virologic failure as a confirmed viral load >200 copies/mL, which eliminates most cases of apparent viremia caused by blips or assay variability. Effective treatment reduces HIV-associated morbidity and mortality and reduces transmission of HIV (Mocoft, 1998; Palella, 1998; Vittinghoff, 1999; ART CC AC, 2008; Moferson, 1999; Wood, 2009; Quinn, 2000; Dieffenbach, 2009; Montaner, 2006; Cohen, 2011). The mechanism for the impact of treatment is viral load suppression.

Multiple studies demonstrate that viral load suppression is associated with slowing disease progression. Analysis of 18 trials that included more than 5,000 participants with viral load monitoring showed a significant association between a decrease in plasma viremia and improved clinical outcome (Murray, 1999). Viral load testing serves as a surrogate marker for treatment response and can be useful in predicting clinical progression (Hughes, 1997; Marschner, 1998; Thiebaut, 2000). As a result, the Department of Health and Human Services (HHS) Guidelines include a recommendation for measuring viral load at baseline and on a regular basis because viral load is the most important predictor of response to therapy (Strength of Evidence = AI, AIII, BIII). This recommendation is graded AI. The review of the evidence focuses on the evidence for the treatment and prevention recommendations.

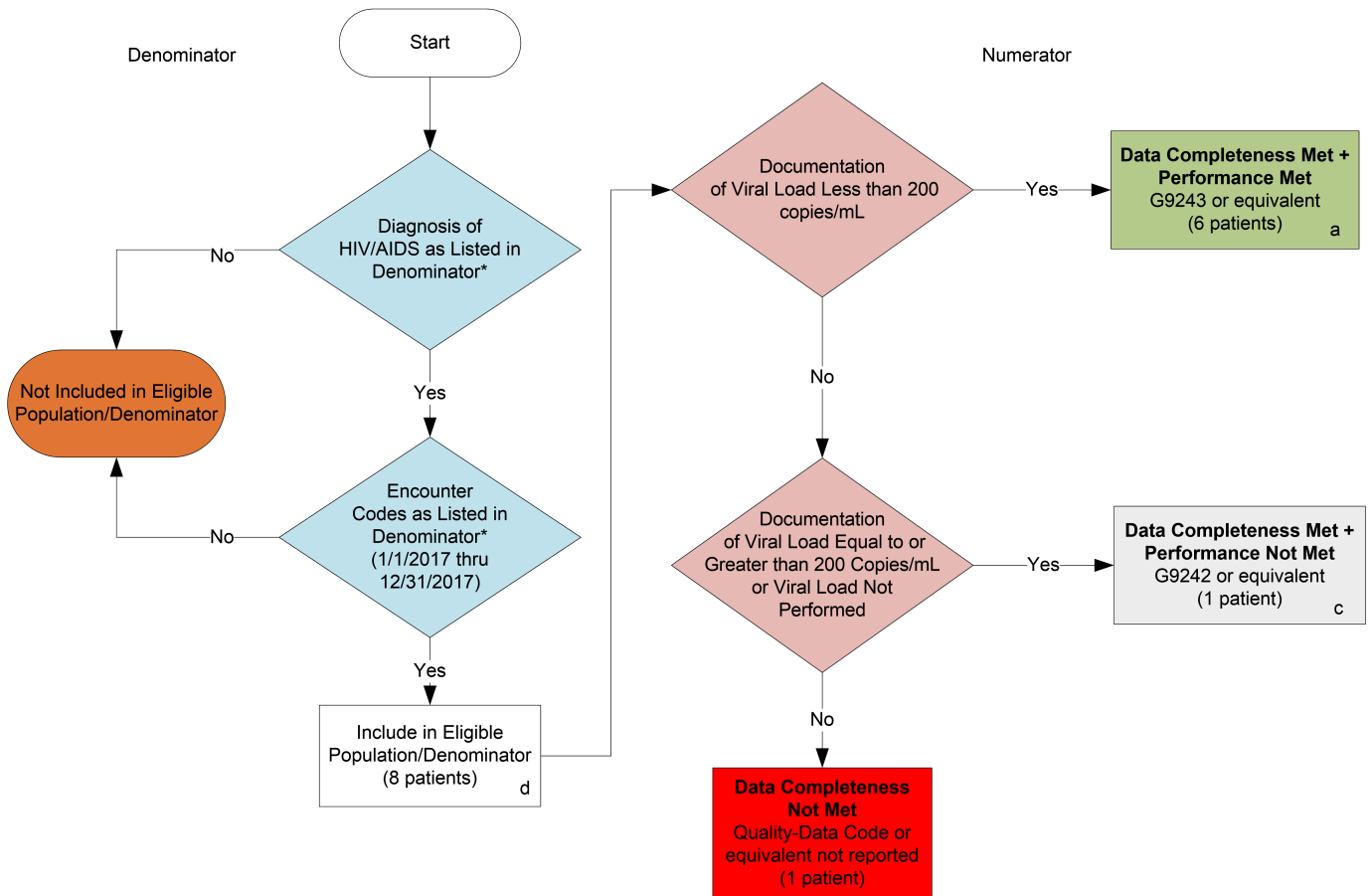
The U.S. Department of Health and Human Services Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents recommends antiretroviral therapy for all HIV-infected individuals to reduce the risk of disease progression (Strength of Evidence = AI, AII, and BIII) and well as to prevention transmission of HIV (Strength of Evidence = AI and AIII). These guidelines also recommended the frequency at which viral load testing is to be performed (Strength of Evidence = AI, AIII, BIII) (Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents PDF Sections E-1 and C-3. Accessed May 18, 2015).

### **COPYRIGHT:**

This measure was developed by the Health Resources and Services Administration of the U.S. Department for Health and Human Services. It is in the public domain.

Citation of HRSA as the source of the original measure is appreciated. Any modified versions may not be represented as approved, endorsed, or authorized by HRSA or HHS. 42 U.S.C. § 1320b-10. Users of modified versions should clearly explain how they deviate from HRSA's original measure.

## 2017 Registry Individual Measure Flow #338 NQF #2082: HIV Viral Load Suppression



### SAMPLE CALCULATIONS:

#### Data Completeness=

Performance Met (a=6 patients) + Performance Not Met (c=1 patient) = 7 patients = 87.50%  
 Eligible Population / Denominator (d=8 patients) = 8 patients

#### Performance Rate=

Performance Met (a=6 patients) = 6 patients = 85.71%  
 Data Completeness Numerator (7 patients) = 7 patients

\* See the posted Measure Specification for specific coding and instructions to report this measure.

NOTE: Reporting Frequency: Patient-process

CPT only copyright 2016 American Medical Association. All rights reserved.  
 The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specification.

v1

**2017 Registry Individual Measure Flow**  
**#338 NQF #2082: HIV Viral Load Suppression**

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure.

1. Start with Denominator.
2. Check Patient Diagnosis:
  - a. If Diagnosis of HIV/AIDS as Listed in Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Diagnosis of HIV/AIDS as Listed in Denominator equals Yes, proceed to check Encounter Performed.
3. Check Encounter Performed:
  - a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
  - b. If Encounter as Listed in the Denominator equals Yes, include in the Eligible population.
4. Denominator Population:
  - a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 8 patients in the sample calculation.
5. Start Numerator
6. Check Documentation of Viral Load Less than 200 copies/mL:
  - a. If Documentation of Viral Load Less than 200 copies/mL equals Yes, include in Data Completeness Met and Performance Met.
  - b. Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 6 patients in Sample Calculation.
  - c. If Documentation of Viral Load Less than 200 copies/mL equals No, proceed to Documentation of Viral Load Equal to or Greater than 200 Copies/mL or Viral Load Not Performed.
7. Check Documentation of Viral Load Equal to or Greater than 200 Copies/mL or Viral Load Not Performed:
  - a. If Documentation of Viral Load Equal to or Greater than 200 Copies/mL or Viral Load Not Performed equals Yes, include in Data Completeness Met and Performance Not Met.
  - b. Data Completeness Met and Performance Not Met letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 1 patient in the Sample Calculation.
  - c. If Documentation of Viral Load Equal to or Greater than 200 Copies/mL or Viral Load Not Performed equals No, proceed to Data Completeness Not Met.

8. Check Data Completeness Not Met

- a. If Data Completeness Not Met, the Quality Data Code or equivalent was not reported 1 patient has been subtracted from the data completeness numerator in sample calculation.

**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Performance Met (a=6 patients)} + \text{Performance Not Met (c=1 patient)}}{\text{Eligible Population / Denominator (d=8 patients)}} = \frac{7 \text{ patients}}{8 \text{ patients}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a=6 patients)}}{\text{Data Completeness Numerator (7 patients)}} = \frac{6 \text{ patients}}{7 \text{ patients}} = 85.71\%$$