Quality ID #340: HIV Annual Retention in Care

2025 COLLECTION TYPE:
MIPS CLINICAL QUALITY MEASURES (CQMS)

MEASURE TYPE:
Process – High Priority

DESCRIPTION:
Percentage of patients, regardless of age, with a diagnosis of Human Immunodeficiency Virus (HIV) before or during the first 240 days of the performance period who had at least two eligible encounters or at least one eligible encounter and one HIV viral load test that were at least 90 days apart within the performance period.

INSTRUCTIONS:
This measure is to be submitted 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. This measure may be submitted by Merit-based Incentive Payment System (MIPS) eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

NOTE: Patient encounters for this measure conducted via telehealth (including but not limited to encounters coded with GQ, GT, 95, POS 02, POS 10) are allowable. Please note that effective January 1, 2025, while a measure may be denoted as telehealth eligible, specific denominator codes within the encounter may no longer be eligible due to changes outlined in the CY 2024 PFS Final Rule List of Medicare Telehealth Services.

Measure Submission Type:
Measure data may be submitted by individual MIPS eligible clinicians, groups, or third-party intermediaries. The listed denominator criteria are used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions as allowed by the measure. The quality data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third-party intermediaries that utilize this modality for submissions; however, these codes may be submitted for those third-party intermediaries that utilize Medicare Part B claims data. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.

DENOMINATOR:
Patients, regardless of age, with a diagnosis of HIV before or during the first 240 days of the performance period who had at least one eligible encounter during the first 240 days of the performance period

> *DENOMINATOR NOTE:* Only patients with an eligible encounter in the first 240 days are included in this measure to allow for sufficient time to complete a second eligible encounter or viral load laboratory at least 90 days after the initial encounter during the performance period.
>
> **Signifies that this CPT Category I code is a non-covered service under the Medicare Part B Physician Fee Schedule (PFS). These non-covered services should be counted in the denominator population for MIPS CQMs.*
>
> Denominator Criteria (Eligible Cases):
> Patients, regardless of age
> AND
> Diagnosis of HIV (ICD-10-CM): B20, Z21
> AND

Patient encounter during the performance period (CPT): 98000, 98001, 98002, 98003, 98004, 98005, 98006, 98007, 98008, 98009, 98010, 98011, 98012, 98013, 98014, 98015, 98016, 98966, 98967, 98968, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241*, 99242*, 99243*, 99244*, 99245*, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99381*, 99382*, 99383*, 99384*, 99391*, 99392*, 99393*, 99394*, 99395*, 99396*, 99397*

NUMERATOR:
Number of patients who had at least one eligible encounter and one HIV viral load test at least 90 days apart during the performance period, or who had at least two eligible encounters at least 90 days apart during the performance period

NUMERATOR NOTE: A patient would be included in the measure numerator if they have either 1) two eligible encounters at least 90 days apart, or 2) one eligible encounter and one viral load test at least 90 days apart from each other. The encounter or encounters that cause a patient to be included in the numerator do not need to include the encounter that caused the patient to be included in the denominator.

Numerator Options:

Performance Met:	Patient had two eligible encounters at least 90 days apart or one eligible encounter and one HIV viral load test at least 90 days apart (G9247)
OR	
Performance Not Met:	Patient did not have two eligible encounters at least 90 days apart or one eligible encounter and one HIV viral load test at least 90 days apart (G9246)

RATIONALE:
The HIV "continuum of care" is the process of HIV testing, linkage to HIV care, initiation of HIV antiretroviral therapy adherence to treatment, retention in care, and virologic suppression (Gardner et al 2011). Poor retention in care is associated with lower rates of ART use (Giordano et al 2003), delayed viral suppression (Crawford et al 2014), and increased risk of mortality (Giordano et al 2007; Mugavero et al 2009). This measure will help providers direct their attention and quality improvement efforts towards improving retention in care.

REFERENCES:
Crawford, T. N., Sanderson, W. T., & Thornton, A. (2014). Impact of Poor Retention in HIV Medical Care on Time to Viral Load Suppression. Journal of the International Association of Providers of AIDS Care (JIAPAC), 13(3), 242–249. https://doi.org/10.1177/2325957413491431.

Gardner, E. M., McLees, M. P., Steiner, J. F., Del Rio, C., & Burman, W. J. (2011). The spectrum of engagement in HIV care and its relevance to test-and-treat strategies for prevention of HIV infection. Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America, 52(6), 793–800. https://doi.org/10.1093/cid/ciq243.

Giordano, T. P., Gifford, A. L., White, A. C., Suarez-Almazor, M. E., Rabeneck, L., Hartman, C., Backus, L. I., Mole, L. A., & Morgan, R. O. (2007). Retention in care: A challenge to survival with HIV infection. Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America, 44(11), 1493–1499. https://doi.org/10.1086/516778.

Giordano, T. P., White, A. C., Sajja, P., Graviss, E. A., Arduino, R. C., Adu-Oppong, A., Lahart, C. J., & Visnegarwala, F. (2003). Factors associated with the use of highly active antiretroviral therapy in patients newly entering care in an urban clinic. Journal of Acquired Immune Deficiency Syndromes (JAIDS), 32(4), 399–405. https://doi.org/10.1097/00126334-200304010-00009.

Mugavero, M. J., Lin, H.-Y., Willig, J. H., Westfall, A. O., Ulett, K. B., Routman, J. S., Abroms, S., Raper, J. L., Saag, M. S., & Allison, J. J. (2009). Missed visits and mortality among patients establishing initial outpatient HIV treatment. Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America, 48(2), 248–256. https://doi.org/10.1086/595705

CLINICAL RECOMMENDATION STATEMENTS:

"Retention in care should be routinely monitored. There are various ways to measure retention, including measures based on attended visits over a defined period of time (constancy measures) and measures based on missed visits. Both approaches are valid and independently predict survival. Missed visits and a prolonged time since the last visit are relatively easy to measure and should trigger efforts to retain or re-engage a person in care. Constancy measures (e.g., at least two visits that are at least 90 days apart over 1 year or at least one visit every 6 months over the last 2 years) can be used as clinic quality assurance measures" (Panel on Antiretroviral Guidelines for Adults and Adolescents, p. L-4).

"Poor retention in HIV care is associated with greater risk of death. Poor retention is more common in people who use substances, have serious mental health problems, have unmet socioeconomic needs (e.g., housing, food, transportation), lack financial resources or health insurance, have schedules that complicate adherence, have been recently incarcerated, or face stigma. At the provider and health system level, low trust in providers and a poor patient–provider relationship have been associated with lower retention, as has lower satisfaction with the clinic experience. Availability of appointments and timeliness of appointments (i.e., long delay from the request for an appointment to the appointment's date) and scheduling convenience are also factors" (Panel on Antiretroviral Guidelines for Adults and Adolescents, p. L-3).

"Recommendation 2: Systematic monitoring of retention in HIV care is recommended for all patients (II A): Retention in care is associated with improved individual health outcomes, including HIV biomarker and clinical variables, and may reduce community-level viral burden, with implications for secondary prevention. Although monitoring retention is routinely recommended, specific details, such as retention measures to be used and desired visit frequency, vary among jurisdictions and programs and should be in harmony with national and international guidelines. Many retention measures (for example, visit adherence, gaps in care, and visits per interval of time) and data sources (for example, surveillance, medical records, and administrative databases) have been used and may be applied in accordance with local resources and standards of care. As with monitoring of linkage, integration of data sources may enhance monitoring of retention" (Thompson et al., 2012, p. 4).

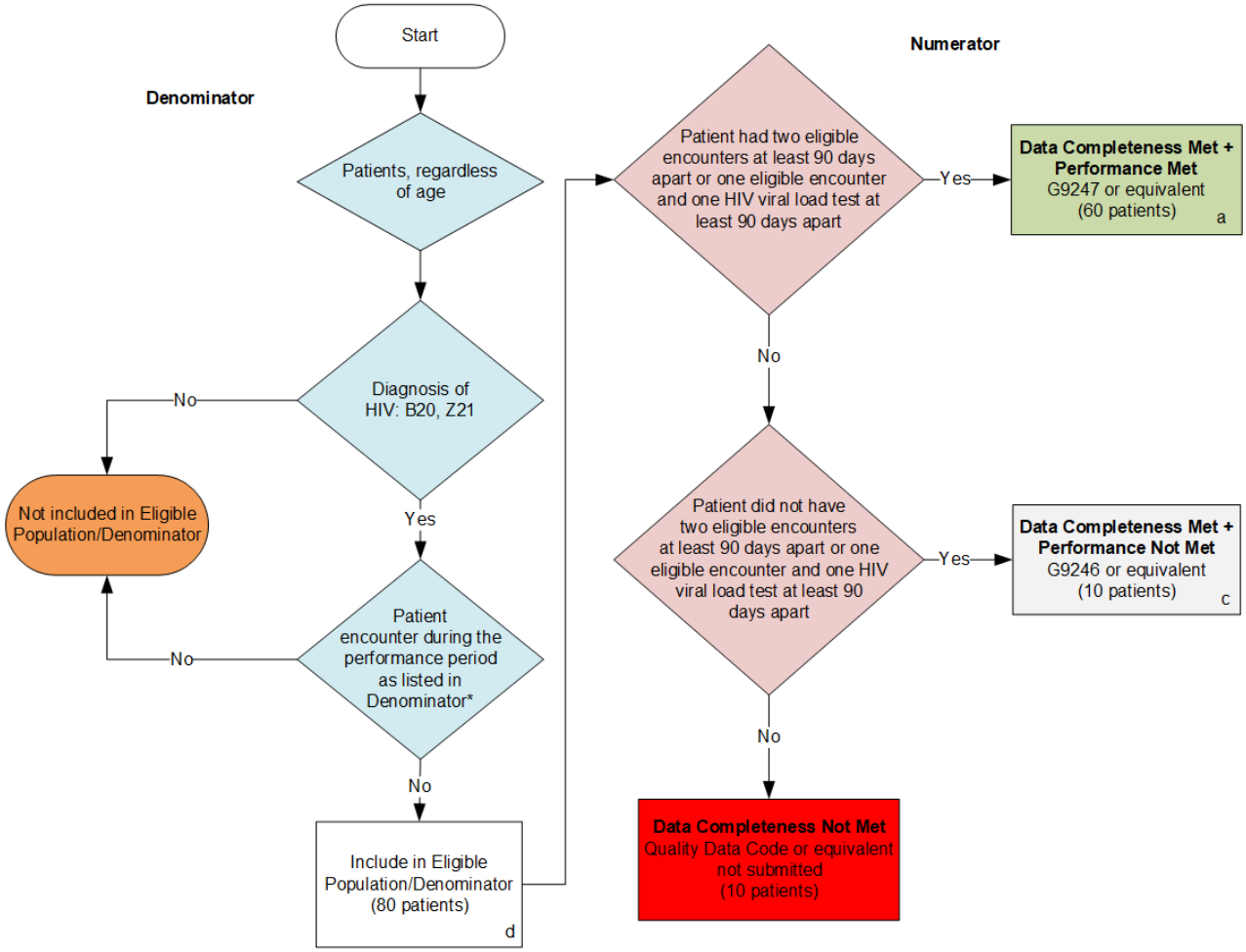
REFERENCES:

Panel on Antiretroviral Guidelines for Adults and Adolescents. "Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents with HIV." Washington, DC: U.S. Department of Health and Human Services, 2022. Available at https://clinicalinfo.hiv.gov/sites/default/files/guidelines/documents/adult-adolescent-arv/guidelines-adult-adolescent-arv.pdf Updated September 21, 2022.

Thompson, M. A., Mugavero, M. J., Amico, K. R., Cargill, V. A., Chang, L. W., Gross, R., Orrell, C., Altice, F. L., Bangsberg, D. R., Bartlett, J. G., Beckwith, C. G., Dowshen, N., Gordon, C. M., Horn, T., Kumar, P., Scott, J. D., Stirratt, M. J., Remien, R. H., Simoni, J. M., & Nachega, J. B. (2012). Guidelines for improving entry into and retention in care and antiretroviral adherence for persons with HIV: evidence-based recommendations from an International Association of Physicians in AIDS Care panel. Annals of internal medicine, 156(11), 817–294. https://doi.org/10.7326/0003-4819-156-11-201206050-00419

2025 Clinical Quality Measure Flow for Quality ID #340: HIV Annual Retention in Care

Disclaimer: *Refer to the measure specification for specific coding and instructions to submit this measure.*



SAMPLE CALCULATIONS

Data Completeness=
Performance Met (a=60 patients) + Performance Not Met (c=10 patients) = 70 patients = **87.50%**
Eligible Population / Denominator (d=80 patients) = 80 patients

Performance Rate=
Performance Met (a=60 patients) = 60 patients = **85.71%**
Data Completeness Numerator (70 patients) = 70 patients

*See the posted measure specification for specific coding and instructions to submit this measure.
NOTE: Submission Frequency: Patient-Process

v9

2025 Clinical Quality Measure Flow Narrative for Quality ID #340: HIV Annual Retention in Care

Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure.

1. Start with Denominator
2. Check *Patients, regardless of age.*
3. Check *Diagnosis of HIV*:
    a. If *Diagnosis of HIV* equals No, do not include in *Eligible Population/Denominator*. Stop processing.
    b. If *Diagnosis of HIV* equals Yes, proceed to check *Patient encounter during the performance period as listed in Denominator**.
4. Check *Patient encounter during the performance period as listed in Denominator**:
    a. If *Patient encounter during the performance period as listed in Denominator** equals No, do not include in *Eligible Population/Denominator*. Stop processing.
    b. If *Patient encounter during the performance period as listed in Denominator** equals Yes, include in the *Eligible Population/Denominator.*
5. Denominator Population:
    - 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 80 patients in the Sample Calculation.
6. Start Numerator
7. Check *Patient had two eligible encounters at least 90 days apart or one eligible encounter and one HIV viral load test at least 90 days apart*:
    a. If *Patient had two eligible encounters at least 90 days apart or one eligible encounter and one HIV viral load test at least 90 days apart* equals Yes, include in *Data Completeness Met and Performance Met.*
        - *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 60 patients in the Sample Calculation.
    b. If *Patient had two eligible encounters at least 90 days apart or one eligible encounter and one HIV viral load test at least 90 days apart* equals No, proceed to check *Patient did not have two eligible encounters at least 90 days apart or one eligible encounter and one HIV viral load test at least 90 days apart*.
8. Check *Patient did not have two eligible encounters at least 90 days apart or one eligible encounter and one HIV viral load test at least 90 days apart*:
    a. If *Patient did not have two eligible encounters at least 90 days apart or one eligible encounter and one HIV viral load test at least 90 days apart* equals Yes, include in *Data Completeness Met and Performance Not Met*.
        - *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 10 patients in the Sample Calculation.

b. If *Patient did not have two eligible encounters at least 90 days apart or one eligible encounter and one HIV viral load test at least 90 days apart* equals No, proceed to check *Data Completeness Not Met.*

9. Check *Data Completeness Not Met:*

    - If *Data Completeness Not Met*, Quality Data Code or equivalent not submitted. 10 patients have been subtracted from the Data Completeness Numerator in the Sample Calculation.

Sample Calculations:

Data Completeness equals Performance Met (a equals 60 patients) plus Performance Not Met (c equals 10 patients) divided by Eligible Population / Denominator (d equals 80 patients). All equals 70 patients divided by 80 patients. All equals 87.50 percent.

Performance Rate equals Performance Met (a equals 60 patients) divided by Data Completeness Numerator (70 patients). All equals 60 patients divided by 70 patients. All equals 85.71 percent.

*See the posted measure specification for specific coding and instructions to submit this measure.

NOTE: Submission Frequency: Patient-Process

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.