

# NATIONAL QUALITY FORUM

## Measure Submission and Evaluation Worksheet 5.0

This form contains the information submitted by measure developers/stewards, organized according to NQF's measure evaluation criteria and process. The evaluation criteria, evaluation guidance documents, and a blank online submission form are available on the [submitting standards web page](#).

<b>NQF #:</b> 1999 <b>NQF Project:</b> Population Health: Prevention Project
(for Endorsement Maintenance Review) <b>Original Endorsement Date:</b> <b>Most Recent Endorsement Date:</b> <b>Last Updated Date:</b> May 11, 2012
<b>BRIEF MEASURE INFORMATION</b>
<b>De.1 Measure Title:</b> Late HIV diagnosis
<b>Co.1.1 Measure Steward:</b> Centers for Disease Control and Prevention
<b>De.2 Brief Description of Measure:</b> Percentage of persons 13 years and older diagnosed with Stage 3 HIV infection (AIDS) within 3 months of a diagnosis of HIV infection.
<b>2a1.1 Numerator Statement:</b> Persons in denominator statement with a diagnosis of Stage 3 HIV infection (AIDS) within 3 months of diagnosis of HIV infection
<b>2a1.4 Denominator Statement:</b> Persons age 13 years and older diagnosed with HIV during specified calendar year.
<b>2a1.8 Denominator Exclusions:</b> Persons with month of diagnosis missing are excluded (<0.05%)
<b>1.1 Measure Type:</b> Outcome <b>2a1. 25-26 Data Source:</b> Other <b>2a1.33 Level of Analysis:</b> Population : State
<b>1.2-1.4 Is this measure paired with another measure?</b> No
<b>De.3 If included in a composite, please identify the composite measure (title and NQF number if endorsed):</b>

<b>STAFF NOTES</b> (issues or questions regarding any criteria)
<b>Comments on Conditions for Consideration:</b>
<b>Is the measure untested?</b> Yes <input type="checkbox"/> No <input type="checkbox"/> If untested, explain how it meets criteria for consideration for time-limited endorsement:
<b>1a. Specific national health goal/priority identified by DHHS or NPP addressed by the measure (check De.5):</b> <b>5. Similar/related <a href="#">endorsed</a> or submitted measures (check 5.1):</b> <b>Other Criteria:</b>
<b>Staff Reviewer Name(s):</b>

<b>1. IMPACT, OPPORTUNITY, EVIDENCE - IMPORTANCE TO MEASURE AND REPORT</b>
Importance to Measure and Report is a threshold criterion that must be met in order to recommend a measure for endorsement. All three subcriteria must be met to pass this criterion. See <a href="#">guidance on evidence</a> . <b>Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria. (evaluation criteria)</b>

**1a. High Impact:** H  M  L  I

(The measure directly addresses a specific national health goal/priority identified by DHHS or NPP, or some other high impact aspect of healthcare.)

**De.4 Subject/Topic Areas** (Check all the areas that apply): [Infectious Diseases : Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome \(HIV/AIDS\)](#)

**De.5 Cross Cutting Areas** (Check all the areas that apply): [Prevention : Screening](#)

**1a.1 Demonstrated High Impact Aspect of Healthcare:** [High resource use, Severity of illness](#)

**1a.2 If "Other," please describe:**

**1a.3 Summary of Evidence of High Impact** (Provide epidemiologic or resource use data):

Human immunodeficiency virus (HIV) is a communicable infection that leads to a progressive disease with a long asymptomatic period. Approximately 50,000 persons in the United States are newly infected with HIV each year. Without treatment, most persons develop acquired immunodeficiency syndrome (AIDS) within 10 years of HIV infection. Antiretroviral therapy delays this progression and increases the length of survival, but is most effective when initiated during the asymptomatic phase. CDC estimates that approximately 20% of the 1.1 million adults and adolescents living with HIV infection in the United States are unaware of their infection. Persons with late diagnosis of HIV infection have missed opportunities for treatment during the asymptomatic period and for prevention of transmission to others; they also have a shortened life expectancy. HIV testing identifies infected persons, which enables them to seek medical care that can improve the quality and length of their lives and reduce risk for HIV transmission.

**1a.4 Citations for Evidence of High Impact cited in 1a.3:** Impact of knowledge of serostatus on risk behavior and clinical impact of treatment are both reviewed in "Screening for HIV: A review of the evidence for the U.S. Preventive Services Task Force" (Chou R, Hoyt Huffman L, Fu R et al. Ann Int Med 2005;143:55-73.) Based on this review, the USPSTF rated testing of adolescents and adults at increased risk for HIV infection as "A" and testing of adolescents and adults who are not at increased risk for infection "C". The impact of treatment on transmission was not considered at the time of that review. Supporting studies include one randomized controlled trial (Cohen et al) and 6 observational studies:

Cohen M, Chen YK, McCauley M, et al. Prevention of HIV-1 Infection with Early Antiretroviral Therapy NEJM 2011;365:493-505

Bunnell R, Ekwaru JP, Solberg P, et al. Changes in sexual behavior and risk of HIV transmission after antiretroviral therapy and prevention interventions in rural Uganda. AIDS 2006;20:85-92.

Donnell D, Baeten JM, Kiarie J, et al. Heterosexual HIV-1 transmission after initiation of antiretroviral therapy: a prospective cohort analysis. Lancet 2010;375:2092-8.

Del Romero J, Castilla J, Hernando V, Rodriguez C, Garcia S. Combined antiretroviral treatment and heterosexual transmission of HIV-1: cross sectional and prospective cohort study. BMJ 2010;340:c2205.

Reynolds SJ, Makumbi F, Nakigozi G, et al. HIV-1 transmission among HIV-1 discordant couples before and after the introduction of antiretroviral therapy. AIDS 2011;25:473-7.

Das M, Chu PL, Santos GM, et al. Decreases in community viral load are accompanied by reductions in new HIV infections in San Francisco. PLoS ONE 2010; 5(6):e11068.

Montaner JS, Lima VD, Barrios R, et al. Association of highly active antiretroviral therapy coverage, population viral load, and yearly new HIV diagnoses in British Columbia, Canada: a population based study. Lancet 2010;376:532-9.

**1b. Opportunity for Improvement:** H  M  L  I

(There is a demonstrated performance gap - variability or overall less than optimal performance)

**1b.1 Briefly explain the benefits (improvements in quality) envisioned by use of this measure:**

This measure provides a means of monitoring the extent to which HIV-infected persons who were unaware of their HIV infection are being tested and diagnosed. A result of the use of this measure could be an increase in early HIV testing. Increased testing for HIV and diagnosis of HIV infection will result in decreased transmission of HIV and better clinical prognosis for infected persons.

**1b.2 Summary of Data Demonstrating Performance Gap** (*Variation or overall less than optimal performance across providers*): **[For Maintenance – Descriptive statistics for performance results for this measure - distribution of scores for measured entities by quartile/decile, mean, median, SD, min, max, etc.]**

CDC is transitioning from a measure that examined Stage 3 HIV infection (AIDS) diagnosis within 12 months of diagnosis of HIV infection to Stage 3 HIV infection (AIDS) diagnosis within 3 months of diagnosis of HIV infection. The majority of persons (>80%) diagnosed within 12 months of HIV infection were diagnosed within 3 months. Among persons who had a diagnosis of HIV in 2009, 32% had a diagnosis of Stage 3 HIV infection (AIDS) within 12 months.

**1b.3 Citations for Data on Performance Gap:** **[For Maintenance – Description of the data or sample for measure results reported in 1b.2 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included]**

The most recent published data on diagnosis of Stage 3 HIV infection (AIDS) within 3 months of a diagnosis of HIV infection are for 2005-2007 and are posted at the following link:

[http://www.cdc.gov/hiv/surveillance/resources/reports/2010supp\\_vol16no1/index.htm](http://www.cdc.gov/hiv/surveillance/resources/reports/2010supp_vol16no1/index.htm). Data for 2010 will be published this summer, but are not currently available for release.

In the absence of current data on proportion of persons diagnosed with HIV infection within 3 months of Stage 3 HIV (AIDS), it is important to note that almost 85% of persons diagnosed with Stage 3 HIV infection (AIDS) within 12 months of a diagnosis of HIV infection were in fact diagnosed within 3 months of their HIV diagnosis. Overall, 29.9% of persons diagnosed with HIV in 2005-2007 were diagnosed with AIDS within 3 months per above mentioned report and 36% of persons diagnosed with HIV in 2006 were diagnosed with Stage 3 HIV infection (AIDS) within 12 months (<http://www.cdc.gov/hiv/surveillance/resources/reports/2006report/> -- see Table 2). For both measures, the proportion diagnosed late increased with age, and was highest for persons with “other” risk (includes risk factor not reported or not identified) and lowest among men who have sex with men. For 2009 data see:

<http://www.cdc.gov/hiv/surveillance/resources/reports/2010report/index.htm>, Table 10a.

The proportion of persons diagnosed with Stage 3 HIV infection (AIDS) within 12 months of HIV diagnosis has declined from 36% in 2006 to 32% in 2009, thus the proportion diagnosed with Stage 3 HIV infection (AIDS) within 3 months of HIV diagnosis will likely be 3-4 percentage points lower in 2010 than the 29.9% reported in 2005-2007.

**1b.4 Summary of Data on Disparities by Population Group:** **[For Maintenance –Descriptive statistics for performance results for this measure by population group]**

Current data on persons diagnosed with stage 3 HIV infection (AIDS) within 3 months of a diagnosis of HIV infection by age or transmission category are pending publication (summer 2012). Because the great majority of persons diagnosed with Stage 3 HIV infection within 12 months of HIV diagnosis were in fact diagnosed within 3 months of HIV diagnosis, available data on proportion diagnosed with Stage 3 HIV infection (AIDS) within 12 months of HIV diagnosis are a good proxy. The percent of Stage 3 HIV infection (AIDS) diagnoses that are made within 12 months of diagnosis varies by transmission category (e.g. 31% for male-male sexual contact and 45% for male injection drug users), increases with age (e.g. 17% for persons 20-24 and 46% for persons 55-59), and is higher for Hispanics than for whites and Blacks (37% vs 32 and 31% respectively) (<http://www.cdc.gov/hiv/surveillance/resources/reports/2010report/index.htm>, Table 10a).

**1b.5 Citations for Data on Disparities Cited in 1b.4:** **[For Maintenance – Description of the data or sample for measure results reported in 1b.4 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included]**

For data on proportion diagnosed with Stage 3 HIV infection (AIDS) within 12 months of HIV diagnosis, see: CDC HIV Surveillance Report, vol 22, 2010

(<http://www.cdc.gov/hiv/surveillance/resources/reports/2010report/index.htm> -- see Table 10a)

Data from 2005-2007 on proportion diagnosed with Stage 3 HIV infection within 3 months of HIV diagnosis by age and transmission group are available at: [http://www.cdc.gov/hiv/surveillance/resources/reports/2010supp\\_vol16no1/index.htm](http://www.cdc.gov/hiv/surveillance/resources/reports/2010supp_vol16no1/index.htm)

**1c. Evidence** (*Measure focus is a health outcome OR meets the criteria for quantity, quality, consistency of the body of evidence.*)

**Is the measure focus a health outcome?** Yes  No  **If not a health outcome, rate the body of evidence.**

**Quantity:** H  M  L  I  **Quality:** H  M  L  I  **Consistency:** H  M  L  I

Quantity	Quality	Consistency	Does the measure pass subcriterion1c?
M-H	M-H	M-H	Yes <input type="checkbox"/>
L	M-H	M	Yes <input type="checkbox"/> IF additional research unlikely to change conclusion that benefits to patients outweigh

			harms: otherwise <b>No</b> <input type="checkbox"/>
<b>M-H</b>	<b>L</b>	<b>M-H</b>	<b>Yes</b> <input type="checkbox"/> IF potential benefits to patients clearly outweigh potential harms: otherwise <b>No</b> <input type="checkbox"/>
<b>L-M-H</b>	<b>L-M-H</b>	<b>L</b>	<b>No</b> <input type="checkbox"/>
<b>Health outcome</b> – rationale supports relationship to at least one healthcare structure, process, intervention, or service		<b>Does the measure pass subcriterion 1c?</b> <b>Yes</b> <input type="checkbox"/> IF rationale supports relationship	
<p><b>1c.1 Structure-Process-Outcome Relationship</b> (Briefly state the measure focus, e.g., health outcome, intermediate clinical outcome, process, structure; then identify the appropriate links, e.g., structure-process-health outcome; process- health outcome; intermediate clinical outcome-health outcome): Late HIV diagnosis is an outcome measure that is affected by the process of testing. As testing increases, the proportion of HIV diagnoses that are made late will diminish.</p> <p><b>1c.2-3 Type of Evidence</b> (Check all that apply): Systematic review of body of evidence (other than within guideline development)</p> <p><b>1c.4 Directness of Evidence to the Specified Measure</b> (State the central topic, population, and outcomes addressed in the body of evidence and identify any differences from the measure focus and measure target population): A decrease in the proportion of persons diagnosed late reflects an increase in testing and diagnosis. Diagnosis results in reduction in behaviors associated with HIV transmission, clinical benefits, and treatment-related reduction in transmission.</p> <p><b>1c.5 Quantity of Studies in the Body of Evidence</b> (Total number of studies, not articles): USPSTF review (Chou R et al. Screening for HIV: a review of the evidence for the US Preventive Services task Force. Ann Int Med 2005; 143:55-73) reports on 5 systematic reviews for the impact of counseling and testing. It reports on one review of 54 randomized controlled trials showing the effectiveness of highly active antiretroviral therapy (HAART) and 10 cohort studies in the US and in Europe.</p> <p><b>1c.6 Quality of Body of Evidence</b> (Summarize the certainty or confidence in the estimates of benefits and harms to patients across studies in the body of evidence resulting from study factors. Please address: a) study design/flaws; b) directness/indirectness of the evidence to this measure (e.g., interventions, comparisons, outcomes assessed, population included in the evidence); and c) imprecision/wide confidence intervals due to few patients or events): From above-referenced review: Impact of counseling and testing: 2 systematic reviews described as “good quality” and 3 systematic reviews described as “fair quality for the impact of counseling and testing.” Impact of treatment: One good quality review of 54 RCTs and 10 good quality cohort studies.</p> <p><b>1c.7 Consistency of Results across Studies</b> (Summarize the consistency of the magnitude and direction of the effect): Findings on impact of treatment have been consistent across studies. Findings on the link between counseling and testing and reduced self-reported risky behaviors were strongest for sero-discordant heterosexual couples. Reduction in risk was also shown in some studies to vary according to intensiveness of counseling.</p> <p><b>1c.8 Net Benefit</b> (Provide estimates of effect for benefit/outcome; identify harms addressed and estimates of effect; and net benefit - benefit over harms): Harms associated with HIV screening are minimal, there is a net benefit to testing.</p> <p><b>1c.9 Grading of Strength/Quality of the Body of Evidence.</b> Has the body of evidence been graded? <b>Yes</b></p> <p><b>1c.10 If body of evidence graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias:</b> US Preventive Services Task Force</p> <p><b>1c.11 System Used for Grading the Body of Evidence:</b> USPSTF</p> <p><b>1c.12 If other, identify and describe the grading scale with definitions:</b></p> <p><b>1c.13 Grade Assigned to the Body of Evidence:</b> A for screening of all adolescents and adults at increased risk for HIV infection,</p>			

and C for for screening of adolescents and adults who are not at increased risk for HIV infection

**1c.14 Summary of Controversy/Contradictory Evidence:** CDC HIV testing recommendations, 2006:

- HIV screening is recommended for patients in all health-care settings after the patient is notified that testing will be performed unless the patient declines (opt-out screening).
- Persons at high risk for HIV infection should be screened for HIV at least annually.

Citation: CDC. Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings. MMWR 2006; 55(RR14);1-17

This recommendation has not been graded.

The US Preventive Services Task Force is currently re-reviewing the evidence for screening of adolescents and adults who are not at increased risk for HIV infection.

**1c.15 Citations for Evidence other than Guidelines(Guidelines addressed below):**

**1c.16 Quote verbatim, the specific guideline recommendation** (Including guideline # and/or page #):

CDC HIV testing recommendations, 2006:

- HIV screening is recommended for patients in all health-care settings after the patient is notified that testing will be performed unless the patient declines (opt-out screening).
- Persons at high risk for HIV infection should be screened for HIV at least annually.

Citation: CDC. Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings. MMWR 2006; 55(RR14);1-17

**1c.17 Clinical Practice Guideline Citation:** U.S. Preventive Services Task Force: Screening for HIV

[www.uspreventiveservicestaskforce.org/uspstf/uspshivi.htm](http://www.uspreventiveservicestaskforce.org/uspstf/uspshivi.htm)

CDC. Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings. MMWR 2006; 55(RR14);1-17

**1c.18 National Guideline Clearinghouse or other URL:**

**1c.19 Grading of Strength of Guideline Recommendation.** Has the recommendation been graded? **Yes**

**1c.20 If guideline recommendation graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias:** USPSTF

**1c.21 System Used for Grading the Strength of Guideline Recommendation:** USPSTF

**1c.22 If other, identify and describe the grading scale with definitions:**

**1c.23 Grade Assigned to the Recommendation:** As described above

**1c.24 Rationale for Using this Guideline Over Others:**

**Based on the NQF descriptions for rating the evidence, what was the developer's assessment of the quantity, quality, and consistency of the body of evidence?**

**1c.25 Quantity:** High **1c.26 Quality:** High **1c.27 Consistency:** High

**1c.28 Attach evidence submission form:**

**1c.29 Attach appendix for supplemental materials:**

**Was the threshold criterion, Importance to Measure and Report, met?**

**(1a & 1b must be rated moderate or high and 1c yes)** Yes  No

**Provide rationale based on specific subcriteria:**

**For a new measure if the Committee votes NO, then STOP.**

**For a measure undergoing endorsement maintenance, if the Committee votes NO because of 1b. (no opportunity for improvement), it may be considered for continued endorsement and all criteria need to be evaluated.**

**2. RELIABILITY & VALIDITY - SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES**

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. **(evaluation criteria)**

Measure testing must demonstrate adequate reliability and validity in order to be recommended for endorsement. Testing may be conducted for data elements and/or the computed measure score. Testing information and results should be entered in the appropriate field. Supplemental materials may be referenced or attached in item 2.1. See [guidance on measure testing](#).

**S.1 Measure Web Page** (*In the future, NQF will require measure stewards to provide a URL link to a web page where current detailed specifications can be obtained*). Do you have a web page where current detailed specifications for this measure can be obtained? **No**

**S.2 If yes, provide web page URL:**

**2a. RELIABILITY. Precise Specifications and Reliability Testing:** H  M  L  I

**2a1. Precise Measure Specifications.** (*The measure specifications precise and unambiguous.*)

**2a1.1 Numerator Statement** (*Brief, narrative description of the measure focus or what is being measured about the target population, e.g., cases from the target population with the target process, condition, event, or outcome*):

Persons in denominator statement with a diagnosis of Stage 3 HIV infection (AIDS) within 3 months of diagnosis of HIV infection

**2a1.2 Numerator Time Window** (*The time period in which the target process, condition, event, or outcome is eligible for inclusion*):

Persons diagnosed with HIV during specified calendar year and with Stage 3 HIV infection (AIDS) within the subsequent 3 month period.

**2a1.3 Numerator Details** (*All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, codes with descriptors, and/or specific data collection items/responses*):

Information is obtained from the National HIV surveillance System. To allow for delays in reporting of HIV and of AIDS diagnoses, cases reported through the end of calendar year following the diagnosis year are included. In addition, standard adjustment for reporting delay is performed. (Song R, Hall HI, Frey R. Uncertainties associated with incidence estimates of HIV/AIDS diagnoses adjusted for reporting delay and risk redistribution. Stat med 2005;24:453-464)

**2a1.4 Denominator Statement** (*Brief, narrative description of the target population being measured*):

Persons age 13 years and older diagnosed with HIV during specified calendar year.

**2a1.5 Target Population Category** (*Check all the populations for which the measure is specified and tested if any*): **Adult/Elderly Care**

**2a1.6 Denominator Time Window** (*The time period in which cases are eligible for inclusion*):

Persons age 13 years and older diagnosed with HIV during specified calendar year.

**2a1.7 Denominator Details** (*All information required to identify and calculate the target population/denominator such as definitions, codes with descriptors, and/or specific data collection items/responses*):

Information is obtained from the National HIV surveillance System. To allow for delays in reporting of HIV diagnoses, cases reported through the end of calendar year following the diagnosis year are included. In addition, standard adjustment for reporting delay is performed. (Song R, Hall HI, Frey R. Uncertainties associated with incidence estimates of HIV/AIDS diagnoses adjusted for reporting delay and risk redistribution. Stat med 2005;24:453-464)

**2a1.8 Denominator Exclusions** (*Brief narrative description of exclusions from the target population*):

Persons with month of diagnosis missing are excluded (<0.05%)

**2a1.9 Denominator Exclusion Details** (All information required to identify and calculate exclusions from the denominator such as definitions, codes with descriptors, and/or specific data collection items/responses):

Month of HIV diagnosis = missing

**2a1.10 Stratification Details/Variables** (All information required to stratify the measure results including the stratification variables, codes with descriptors, definitions, and/or specific data collection items/responses):

Results are routinely stratified by age group (13-19, 20-29, 30-39, 40-49, 50-59, >59), by race/ethnicity (white, Hispanic, Black, Asian, Native Hawaiian/other Pacific Islander, AI/AN) and by transmission category (MSM, MSM/IDU, IDU male, IDU female, heterosexual male, heterosexual female, other).

**2a1.11 Risk Adjustment Type** (Select type. Provide specifications for risk stratification in 2a1.10 and for statistical model in 2a1.13): Stratification by risk category/subgroup **2a1.12 If "Other," please describe:**

**2a1.13 Statistical Risk Model and Variables** (Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development should be addressed in 2b4.):

NA

**2a1.14-16 Detailed Risk Model Available at Web page URL** (or attachment). Include coefficients, equations, codes with descriptors, definitions, and/or specific data collection items/responses. Attach documents only if they are not available on a webpage and keep attached file to 5 MB or less. NQF strongly prefers you make documents available at a Web page URL. Please supply login/password if needed:

**2a1.17-18. Type of Score:** Rate/proportion

**2a1.19 Interpretation of Score** (Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score): Better quality = Lower score

**2a1.20 Calculation Algorithm/Measure Logic**(Describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; aggregating data; risk adjustment; etc.):

- Based on HIV cases reported through the end of 2011, determine the number of HIV diagnoses in 2010(denominator)
- Among HIV diagnoses made in 2010, determine the number reported as having stage 3 HIV infection (AIDS) diagnosis within 3 months of HIV diagnosis, based on cases reported through the end of 2012(enumerator).
- Numerator/denominator x 100 = percent late HIV diagnoses
- Note: data are adjusted for reporting delay according to standard methods (Song R, Hall HI, Frey R. Uncertainties associated with incidence estimates of HIV/AIDS diagnoses adjusted for reporting delay and risk redistribution. Stat med 2005;24:453-464)

**2a1.21-23 Calculation Algorithm/Measure Logic Diagram URL or attachment:**

**2a1.24 Sampling (Survey) Methodology.** If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate):

Measure is calculated for each state using National HIV surveillance system data

**2a1.25 Data Source** (Check all the sources for which the measure is specified and tested). If other, please describe:

Other

**2a1.26 Data Source/Data Collection Instrument** (Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.): National HIV Surveillance System

**2a1.27-29 Data Source/data Collection Instrument Reference Web Page URL or Attachment:**

**2a1.30-32 Data Dictionary/Code Table Web Page URL or Attachment:**

**2a1.33 Level of Analysis** (Check the levels of analysis for which the measure is specified and tested): [Population](#) : [State](#)

**2a1.34-35 Care Setting** (Check all the settings for which the measure is specified and tested):

**2a2. Reliability Testing.** (Reliability testing was conducted with appropriate method, scope, and adequate demonstration of reliability.)

**2a2.1 Data/Sample** (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

[Inter-rater reliability is not relevant because this measure is calculated on the basis of surveillance data.](#)

**2a2.2 Analytic Method** (Describe method of reliability testing & rationale):

[Not applicable](#)

**2a2.3 Testing Results** (Reliability statistics, assessment of adequacy in the context of norms for the test conducted):

[Not applicable](#)

**2b. VALIDITY. Validity, Testing, including all Threats to Validity:** H  M  L  I

**2b1.1 Describe how the measure specifications** (measure focus, target population, and exclusions) **are consistent with the evidence cited in support of the measure focus** (criterion 1c) **and identify any differences from the evidence:**

[Completeness of reporting of HIV and AIDS serves as the basis for determining the validity of this measure. Completeness of HIV and AIDS case reporting is estimated at more than 80%](#)

[Citations:](#)

[Hall I, Song R, Gerstle JE III, Lee LM; on behalf of the HIV/AIDS Reporting System evaluation group. Assessing the completeness of reporting of human immunodeficiency virus diagnoses in 2002-2—3: capture-recapture methods. Am J Epidemiol 2006;164:391-397.](#)

[Buehler JW, Berkelman RL, Stehr-Green JK. The completeness of AIDS surveillance. J Acquir Immune Defic Syndr 1992;5:257-64.](#)

[Doyle TJ, Glynn MK, Groseclose SL. Completeness of notifiable infectious disease reporting in the United States: an analytical literature review. Am J Epidemiol 2002;155:866-74.](#)

[Greenberg AE, Hindin R, Nicholas AG, et al. The completeness of AIDS case reporting in New York City. JAMA 1993; 269:2995-3001.](#)

[Jara MM, Gallagher KM, Schieman S. Estimation of completeness of AIDS case reporting in Massachusetts. Epidemiology 2000;11:209-13.](#)

[Rosenblum L, Buehler JW, Morgan MW, et al. The completeness of AIDS case reporting, 1988: a multisite collaborative surveillance project. Am J Public Health 1992;82:1495-9.](#)

[Schwarcz S, Hsu L, Prisi MK, et al. The impact of the 1993 AIDS case definition on the completeness and timeliness of AIDS surveillance. AIDS 1999;13:1109-14.](#)

**2b2. Validity Testing.** *(Validity testing was conducted with appropriate method, scope, and adequate demonstration of validity.)*

**2b2.1 Data/Sample** *(Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):*

Regarding threats to validity: to the extent that completeness of reporting varies across states, comparisons of the proportion of late testers across states reflects a combination of true differences in late testing and differences in completeness of reporting.

**2b2.2 Analytic Method** *(Describe method of validity testing and rationale; if face validity, describe systematic assessment):*

Different methods were used including capture-recapture, comparison of cases identified through multiple data sources and AIDS surveillance (such as vital records, hospital discharge records, lab logs).

**2b2.3 Testing Results** *(Statistical results, assessment of adequacy in the context of norms for the test conducted; if face validity, describe results of systematic assessment):*

**POTENTIAL THREATS TO VALIDITY.** *(All potential threats to validity were appropriately tested with adequate results.)*

**2b3. Measure Exclusions.** *(Exclusions were supported by the clinical evidence in 1c or appropriately tested with results demonstrating the need to specify them.)*

**2b3.1 Data/Sample for analysis of exclusions** *(Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):*

Not applicable

**2b3.2 Analytic Method** *(Describe type of analysis and rationale for examining exclusions, including exclusion related to patient preference):*

**2b3.3 Results** *(Provide statistical results for analysis of exclusions, e.g., frequency, variability, sensitivity analyses):*

**2b4. Risk Adjustment Strategy.** *(For outcome measures, adjustment for differences in case mix (severity) across measured entities was appropriately tested with adequate results.)*

**2b4.1 Data/Sample** *(Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):*

Not applicable

**2b4.2 Analytic Method** *(Describe methods and rationale for development and testing of risk model or risk stratification including selection of factors/variables):*

**2b4.3 Testing Results** *(Statistical risk model: Provide quantitative assessment of relative contribution of model risk factors; risk model performance metrics including cross-validation discrimination and calibration statistics, calibration curve and risk decile plot, and assessment of adequacy in the context of norms for risk models. Risk stratification: Provide quantitative assessment of relationship of risk factors to the outcome and differences in outcomes among the strata):*

**2b4.4 If outcome or resource use measure is not risk adjusted, provide rationale and analyses to justify lack of adjustment:** Not applicable

**2b5. Identification of Meaningful Differences in Performance.** *(The performance measure scores were appropriately analyzed and discriminated meaningful differences in quality.)*

**2b5.1 Data/Sample** *(Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):*

**2b5.2 Analytic Method** (Describe methods and rationale to identify statistically significant and practically/meaningfully differences in performance):

**2b5.3 Results** (Provide measure performance results/scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningful differences in performance):

**2b6. Comparability of Multiple Data Sources/Methods.** (If specified for more than one data source, the various approaches result in comparable scores.)

**2b6.1 Data/Sample** (Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

Data are derived from the National HIV Surveillance System which includes data from 50 states, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the Republic of Palau, and the U.S. Virgin Islands.

**2b6.2 Analytic Method** (Describe methods and rationale for testing comparability of scores produced by the different data sources specified in the measure):

**2b6.3 Testing Results** (Provide statistical results, e.g., correlation statistics, comparison of rankings; assessment of adequacy in the context of norms for the test conducted):

**2c. Disparities in Care:** H  M  L  I  NA  (If applicable, the measure specifications allow identification of disparities.)

**2c.1** If measure is stratified for disparities, provide stratified results (Scores by stratified categories/cohorts):

**2c.2** If disparities have been reported/identified (e.g., in 1b), but measure is not specified to detect disparities, please explain:

**2.1-2.3 Supplemental Testing Methodology Information:**

**Steering Committee: Overall, was the criterion, Scientific Acceptability of Measure Properties, met?**

(Reliability and Validity must be rated moderate or high) Yes  No

Provide rationale based on specific subcriteria:

**If the Committee votes No, STOP**

### 3. USABILITY

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)

**C.1 Intended Actual/Planned Use** (Check all the planned uses for which the measure is intended): Public Health/Disease Surveillance, Public Reporting, Quality Improvement with Benchmarking (external benchmarking to multiple organizations)

**3.1 Current Use** (Check all that apply; for any that are checked, provide the specific program information in the following questions): Public Reporting

**3a. Usefulness for Public Reporting:** H  M  L  I

(The measure is meaningful, understandable and useful for public reporting.)

**3a.1. Use in Public Reporting - disclosure of performance results to the public at large** (If used in a public reporting program,

provide name of program(s), locations, Web page URL(s)). If not publicly reported in a national or community program, state the reason AND plans to achieve public reporting, potential reporting programs or commitments, and timeline, e.g., within 3 years of endorsement: **[For Maintenance – If not publicly reported, describe progress made toward achieving disclosure of performance results to the public at large and expected date for public reporting; provide rationale why continued endorsement should be considered.]**

State-level percent late testers based on the previous definition (diagnosis of AIDS within 12 months of HIV infection) has been published in: CDC. Vital Signs: HIV testing and Diagnosis among adults, 2001-2009. MMWR 2010;59:1550-1555.

State-specific data on diagnosis of Stage 3 HIV infection (AIDS) within 3 months of HIV infection will be included in future HIV surveillance reports.

Healthy People 2020 includes the following developmental objective: Increase the proportion of new HIV infections diagnosed before progression to AIDS.

**3a.2. Provide a rationale for why the measure performance results are meaningful, understandable, and useful for public reporting.** If usefulness was demonstrated (e.g., focus group, cognitive testing), describe the data, method, and results: The percentage of late HIV diagnoses provides an outcome measure that reflects testing efforts, and specifically success in reaching infected persons who were unaware of their infection. The information complements information on proportion of the population tested.

**3.2 Use for other Accountability Functions (payment, certification, accreditation).** If used in a public accountability program, provide name of program(s), locations, Web page URL(s):

**3b. Usefulness for Quality Improvement:** H  M  L  I

(The measure is meaningful, understandable and useful for quality improvement.)

**3b.1. Use in QI.** If used in quality improvement program, provide name of program(s), locations, Web page URL(s):

**[For Maintenance – If not used for QI, indicate the reasons and describe progress toward using performance results for improvement].**

**3b.2. Provide rationale for why the measure performance results are meaningful, understandable, and useful for quality improvement.** If usefulness was demonstrated (e.g., QI initiative), describe the data, method and results:

**Overall, to what extent was the criterion, Usability, met?** H  M  L  I

Provide rationale based on specific subcriteria:

#### 4. FEASIBILITY

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (**evaluation criteria**)

**4a. Data Generated as a Byproduct of Care Processes:** H  M  L  I

**4a.1-2 How are the data elements needed to compute measure scores generated?** (Check all that apply).

Data used in the measure are:

Other

calculation based on case reports entered in the surveillance system

**4b. Electronic Sources:** H  M  L  I

**4b.1 Are the data elements needed for the measure as specified available electronically** (Elements that are needed to compute measure scores are in defined, computer-readable fields): ALL data elements are in a combination of electronic sources

**4b.2 If ALL data elements are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources:**

**4c. Susceptibility to Inaccuracies, Errors, or Unintended Consequences:** H  M  L  I

**4c.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measurement identified during testing and/or operational use and strategies to prevent, minimize, or detect. If audited, provide results:**  
 Not applicable.

**4d. Data Collection Strategy/Implementation:** H  M  L  I

**A.2 Please check if either of the following apply (regarding proprietary measures):**

**4d.1 Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues (e.g., fees for use of proprietary measures):**

Not applicable

**Overall, to what extent was the criterion, Feasibility, met?** H  M  L  I

Provide rationale based on specific subcriteria:

### OVERALL SUITABILITY FOR ENDORSEMENT

Does the measure meet all the NQF criteria for endorsement? Yes  No

Rationale:

**If the Committee votes No, STOP.**

**If the Committee votes Yes, the final recommendation is contingent on comparison to related and competing measures.**

### 5. COMPARISON TO RELATED AND COMPETING MEASURES

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure before a final recommendation is made.

**5.1 If there are related measures (either same measure focus or target population) or competing measures (both the same measure focus and same target population), list the NQF # and title of all related and/or competing measures:**

#### 5a. Harmonization

**5a.1 If this measure has EITHER the same measure focus OR the same target population as [NQF-endorsed measure\(s\)](#): Are the measure specifications completely harmonized?**

**5a.2 If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden:**

#### 5b. Competing Measure(s)

**5b.1 If this measure has both the same measure focus and the same target population as [NQF-endorsed measure\(s\)](#): Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible):**

### CONTACT INFORMATION

**Co.1 Measure Steward (Intellectual Property Owner):** Centers for Disease Control and Prevention, 1600 Clifton Rd NE, Mailstop D21, Atlanta, Georgia, 30333

**Co.2 Point of Contact:** Pascale, Wortley, MD, MPH, pmw1@cdc.gov, 404-639-1914-

**Co.3 Measure Developer if different from Measure Steward:** Centers for Disease Control and Prevention, 1600 Clifton Rd NE, Mailstop D21, Atlanta, Georgia, 30333

<b>Co.4 Point of Contact:</b> <a href="#">Pascale, Wortley, MD, MPH, pmw1@cdc.gov, 404-639-1914-</a>
<b>Co.5 Submitter:</b> <a href="#">Pascale, Wortley, MD, MPH, pmw1@cdc.gov, 404-639-1914-</a> , Centers for Disease Control and Prevention
<b>Co.6 Additional organizations that sponsored/participated in measure development:</b>
<b>Co.7 Public Contact:</b> <a href="#">Pascale, Wortley, MD, MPH, pmw1@cdc.gov, 404-639-1914-</a> , Centers for Disease Control and Prevention

### ADDITIONAL INFORMATION

<p><b>Workgroup/Expert Panel involved in measure development</b>  <b>Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.</b></p>
<p><b>Ad.2 If adapted, provide title of original measure, NQF # if endorsed, and measure steward. Briefly describe the reasons for adapting the original measure and any work with the original measure steward:</b> <a href="#">Not applicable</a></p>
<p><b>Measure Developer/Steward Updates and Ongoing Maintenance</b>  <b>Ad.3 Year the measure was first released:</b>  <b>Ad.4 Month and Year of most recent revision:</b>  <b>Ad.5 What is your frequency for review/update of this measure?</b>  <b>Ad.6 When is the next scheduled review/update for this measure?</b></p>
<p><b>Ad.7 Copyright statement:</b> <a href="#">Not applicable (government entity)</a></p>
<p><b>Ad.8 Disclaimers:</b> <a href="#">The measure specifications and supporting documentation are those of the authors and do not necessarily represent the views of the Centers for Disease Control and Prevention.</a></p>
<p><b>Ad.9 Additional Information/Comments:</b></p>
<p><b>Date of Submission (MM/DD/YY):</b> <a href="#">05/01/2012</a></p>