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# Performance Measure: HIV Viral Load Suppression National Quality Forum #: 2082

**Description:** Percentage of patients, regardless of age, with a diagnosis of HIV with a HIV viral load less than 200 copies/ml at last viral load test during the measurement year.

**Numerator:** Number of patients in the denominator with a HIV viral load less than 200 copies/ml at last HIV viral load test during the measurement year

**Denominator:** Number of patients, regardless of age, with a diagnosis of HIV with at least one medical visit in the measurement year

## **Patient Exclusions: None**

#### **Data Elements:**

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, did the patient have a HIV viral load test with a result <200 copies/mL at the last test? (Y/N)

# **Comparison Data:**

#### HIV Research Network

Percentage of patients with a HIV viral load less than or equal to 400 copies/ml at the first test during the measurement year. Please refer to the HIVRN website for data.

# U.S. Department of Health and Human Services Guidelines:

<u>Adult guidelines:</u> "The guidelines and the AIDS Clinical Trials Group (ACTG) now define virologic failure as a confirmed viral load >200 copies/mL- a threshold that eliminates most cases of apparent viremia caused by viral load blips or assay variability (see Virologic Failure and Suboptimal Immunologic Response) <u>Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents with</u> <u>HIV</u>"

"Individuals who are adherent to their ARV regimen and do not harbor resistance mutations to the component drugs can generally achieve suppression 8 to 24 weeks after ART initiation; rarely, in some patients it may take longer."<sup>1</sup>

<u>Pediatric guidelines:</u><sup>2</sup> "Based on accumulated experience with currently available assays, viral suppression is currently defined as a plasma viral load below the detection limit of the assay used (generally <20 to 75 copies/mL).





# Use in Other Federal Programs:

- Seeking inclusion in the following <u>Centers for Medicare and Medicaid Services</u> quality, reporting and payment programs: Medicare and Medicaid EHR Incentive Program for Eligible Professionals, Medicare Physician Quality Reporting System, Medicare Shared Savings, Physician Compare, Physician Feedback/Quality and resource Use Reports, Physician Value-Based Payment Modifier (search for each program at online.) Accessed December 2016.
- U.S. Department of Health and Human Services HIV measures: <u>Secretary Sebelius</u> <u>approves indicators for monitoring HHS-funded HIV services</u>

## **References/Notes:**

<sup>1</sup> <u>Panel on Antiretroviral Guidelines for Adults and Adolescents</u>. Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents with HIV. Department of Health and Human Services. Available online. Accessed January 2019.

<sup>2</sup>Panel on Antiretroviral Therapy and Medical Management of HIV-Infected <u>Children.</u> Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection. Available online. Accessed January 2019.





# Performance Measure: Prescription of HIV Antiretroviral Therapy National Quality Forum #: 2083

**Description:** Percentage of patients, regardless of age, with a diagnosis of HIV prescribed antiretroviral therapy<sup>1</sup> for the treatment of HIV infection during the measurement year

Numerator: Number of patients from the denominator

**Denominator:** Number of patients from the denominator prescribed HIV antiretroviral therapy<sup>1</sup> during the measurement year

Patient Exclusions: None

Data Elements: 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 patient prescribed HIV antiretroviral therapy<sup>1</sup> during the measurement year? (Y/N)

**Comparison Data:** <u>HIV Research Network</u>: Please refer the HIV Research Network Percentage of patients on highly active HIV antiretroviral therapy regiment for at least one day during calendar year.

#### U.S. Department of Health and Human Services Guidelines:

<u>Adult guidelines:</u><sup>2</sup> "Antiretroviral therapy (ART) is recommended for all HIV-infected individuals to reduce the risk of disease progression. The strength and evidence for this recommendation vary by pretreatment CD4 cell count: CD4 count <350 cells/mm<sup>3</sup> (AI); CD4 count 350–500 cells/mm<sup>3</sup> (AII); CD4 count >500 cells/mm<sup>3</sup> (BIII). ART also is recommended for HIV-infected individuals for the prevention of transmission of HIV. The strength and evidence for this recommendation vary by transmission risks: perinatal transmission (AI); heterosexual transmission (AI); other transmission risk groups (AIII)."

Pediatric guidelines: <sup>3</sup>

- "Antiretroviral therapy (ART) should be initiated in all children with AIDS or significant symptoms (Clinical Category C or most Clinical Category B conditions) (AI\*).
- ART should be initiated in HIV-infected infants <12 months of age regardless of clinical status, CD4 percentage or viral load (AI for infants <12 weeks of age and AII for infants ≥12 weeks to 12 months).





- ART should be initiated in HIV-infected children ≥1 year who are asymptomatic or have mild symptoms with the following CD4 values:
  - Age 1 to <3 years
    - with CD4 T lymphocyte (CD4 cell) count <1000 cells/mm<sup>3</sup> or CD4 percentage <25% (AII)</li>
    - Age 3 to <5 years
      - with CD4 cell count <750 cells/mm<sup>3</sup> or CD4 percentage <25% (AII)</li>
  - Age ≥5 years

0

- with CD4 cell count <350 cells/mm<sup>3</sup> (AI\*)
- with CD4 cell count 350–500 cells/mm<sup>3</sup> (BII\*)
- ART should be considered for HIV-infected children ≥1 year who are asymptomatic or havemild symptoms with the following CD4 values:
  - Age 1 to <3 years
    - with CD4 cell count ≥1000 cells/mm<sup>3</sup> or CD4 percentage ≥25% (BIII)
  - Age 3 to <5 years
    - with CD4 cell count  $\geq$ 750 cells/mm<sup>3</sup> or CD4 percentage  $\geq$ 25% (BIII)
  - Age ≥5 years
    - with CD4 cell count >500 cells/mm<sup>3</sup>(BIII)

In children with lower-strength (B level) recommendations for treatment, plasma HIV RNA levels >100,000 copies/mL provide stronger evidence for initiation of treatment (BII)."

#### **Use in Other Federal Programs:**

- Seeking inclusion in the following <u>Centers for Medicare and Medicaid</u> <u>Services</u> quality, reporting and payment programs: Medicare and Medicaid EHR Incentive Program for Eligible Professionals, Medicare Physician Quality Reporting System, Medicare Shared Savings, Physician Compare, Physician Feedback/Quality and resource Use Reports, Physician Value-Based Payment Modifier (search for each program online). Accessed June 2019.
- U.S. Department of Health and Human Services HIV measures: <u>Secretary Sebelius</u> <u>approves indicators for monitoring HHS-funded HIV services</u>

#### **References/ Notes:**

<sup>1</sup> HIV antiretroviral therapy is described as the prescription of at least one U.S. Food and Drug Administration approve HIV antiretroviral medication.

<sup>2</sup> Panel on Antiretroviral Guidelines for Adults and Adolescents. <u>Guidelines for the Use</u> of <u>Antiretroviral Agents in Adults and Adolescents with HIV</u>. U.S. Department of Health and Human Services. Available online. Accessed June 7, 2019. E-1

<sup>3</sup>Panel on Antiretroviral Therapy and Medical Management of HIV-Infected

<u>Children</u>. Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection. Available online. Accessed June 7, 2019.





# Performance Measure: HIV Medical Visit Frequency National Quality Forum #: 2079

**Description:** Percentage of patients, regardless of age, with a diagnosis of HIV who had at least one medical visit in each 6-month period of the 24-month measurement period with a minimum of 60 days between medical visits.

**Numerator:** Number of patients in the denominator who had at least one medical visit in each 6-month period of the 24-month measurement period with a minimum of 60 days between first medical visit in the subsequent 6-month period.

**Denominator:** Number of patients, regardless of age, with a diagnosis of HIV with at least one medical visit in the first 6-months of the 24-month measurement period.

Patient Exclusions: Patients who died at any time during the 24-month measurement period

Data Elements: 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 in the <u>first</u> 6 months of the 24-month measurement period? (Y/N)
  - i. If yes, did the patient have at least one medical visit in the <u>second</u> 6month period of the 24-month measurement period? AND was the patient's last visit in the second 6-month period 60 days or more from the 1st visit in the first 6-month period? (Y/N)
    - Did the patient have at least one medical visit in the <u>third</u> 6-month period of the 24-month measurement period? AND was the patient's last visit in the third 6-month period 60 days or more from the 1st visit in the second 6- month period? (Y/N)
      - a. If yes, did the patient have at least one medical visit in the <u>fourth</u> 6-month period of the 24-month measurement period? AND was the patient's last visit in the fourth 6-month period 60 days or more from the 1st visit in the third 6month period? (Y/N)

# Comparison Data: None

# U.S. Department of Health and Human Services Guidelines:

<u>Adult guidelines</u>: <sup>1</sup> "Several laboratory tests are important for the initial evaluation of patients with HIV upon entry into care, and before and after initiation or modification of antiretroviral therapy (ART) to assess the virologic and immunologic efficacy of ART and to monitor for laboratory abnormalities that may be associated with antiretroviral (ARV) drugs. Table 3 outlines the





Panel on Antiretroviral Guidelines for Adults and Adolescents (the Panels') recommendation on the frequency of testing. As noted in the table, some tests may be repeated more frequently if clinically indicated."

**Pediatric guidelines**:<sup>2</sup> "Frequent patient visits and intensive follow-up during the initial months after a new antiretroviral (ARV) regimen is started are necessary to support and educate the family... "Within 1 to 2 weeks of initiating therapy, children should be evaluated either in person or by phone to identify clinical AEs and to support adherence. Many clinicians plan additional contacts (in person, by telephone, or via email) with children and caregivers to support adherence during the first few weeks of therapy."

"After the initial phase of ART initiation, regimen adherence, effectiveness (CD4 cell count and plasma viral load), and toxicities (history, physical and laboratory testing) should be assessed every 3 to 4 months in children receiving ART. Some experts monitor CD4 cell count less frequently (e.g., every 6 to 12 months) in children and adolescents who are adherent to therapy and have CD4 cell count values well above the threshold for OI risk, sustained viral suppression, and stable clinical status for more than 2 to 3 years."

#### **Use in Other Federal Programs:**

- Seeking inclusion in the following <u>Centers for Medicare and Medicaid</u> <u>Services</u> quality, reporting and payment programs: Medicare and Medicaid EHR Incentive Program for Eligible Professionals, Medicare Physician Quality Reporting System, Medicare Shared Savings, Physician Compare, Physician Feedback/Quality and resource Use Reports, Physician Value-Based Payment Modifier (search for each program online).
- U.S. Department of Health and Human Services HIV measures: <u>Secretary Sebelius</u> <u>approves indicators for monitoring hhs-funded HIV services</u>

#### **References/ Notes:**

<sup>1</sup><u>Panel on Antiretroviral Guidelines for Adults and Adolescents</u>. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. Available online. Accessed June 7, 2019. C-2. <sup>2</sup><u>Panel on Antiretroviral Therapy and Medical Management of HIV-Infected</u> <u>Children</u>. Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection. Available online. Accessed June 7, 2019. D-2 and D-3.





# Performance Measure: Gap in HIV Medical Visits National Quality Forum #: 2079

**Description:** Percentage of patients, regardless of age, with a diagnosis of HIV who did not have a medical visit in the last 6 months of the measurement year

**Numerator:** Number of patients in the denominator who did not have a medical visit in the last 6 months of the measurement year

**Denominator:** Number of patients, regardless of age with a diagnosis or HIV who had at least one medical visit in the first 6 months of the measurement year

Patient Exclusions: Patients who died at any time during the measurement year

#### Data Elements:

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 in the first 6 months of the measurement year? (Y/N)
  - i. If yes, did the patient have one or more medical visits in the last 6 months of the measurement year?

#### **Comparison Data: None**

#### U.S. Department of Health and Human Services Guidelines:

<u>Adult guidelines</u>: <sup>1</sup> "A number of laboratory tests are important for initial evaluation of HIV- infected patients upon entry into care, during follow-up (if antiretroviral therapy (ART) has not been initiated), and before and after the initiation or modification of therapy to assess virologic and immunologic efficacy of ART and to monitor for laboratory abnormalities that may be associated with antiretroviral (ARV) drugs. Table 3 outlines the Panel's recommendations for the frequency of testing. As noted in the table, some tests may be repeated more frequently if clinically indicated."

<u>Pediatric guidelines:</u><sup>2</sup> "Frequent patient visits and intensive follow-up during the initial months after a new antiretroviral (ARV) regimen is started are necessary to support and educate the family...Thus, it is prudent for clinicians to assess children within 1 to 2 weeks of initiating therapy, either in person or with a phone call, to ensure that medications are being administered properly and evaluate clinical concerns. Many clinicians schedule additional contact (in person or over the telephone) with children and their caregivers during the first few weeks of therapy to support adherence...Thereafter, medication adherence and regimen toxicity and effectiveness should be assessed every 3 to 4 months in children taking ARV drugs. Some experts monitor CD4 cell counts and HIV RNA levels less frequently in children and youth who are adherent to therapy and have sustained viral suppression and stable clinical status for more than 2 to 3 years."





# **Use in Other Federal Programs:**

Seeking inclusion in the following <u>Centers for Medicare and Medicaid Services</u> quality, reporting and payment programs: Medicare and Medicaid EHR Incentive Program for Eligible Professionals, Medicare Physician Quality Reporting System, Medicare Shared Savings, Physician Compare, Physician Feedback/Quality and resource Use Reports, Physician Value-Based Payment Modifier (search for each program online).

#### **References/ Notes:**

<sup>1</sup> <u>Panel on Antiretroviral Guidelines for Adults and Adolescents</u>. Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents with HIV. Department of Health and Human Services. Accessed April 24, 2019. C-2 to C-5.

<sup>2</sup> Panel on Antiretroviral Therapy and Medical Management of HIV-Infected
 <u>Children</u>. Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection.
 Available online. Accessed April 24, 2019. D-2 to D-3





# Performance Measure: Pneumocystis jiroverci Pneumonia (PCP) Prophylaxis National Quality Forum #: 0405

**Description:** Percentage of patients aged 6 weeks or older with a diagnosis if HIV/AIDS, who were prescribed Pneumocystis jiroveci pneumonia (PCP) prophylaxis

#### \*Use the numerator and denominator that reflect patient population

#### Numerator:

*Numerator 1*: Patients who were prescribed Pneumocystis jiroveci pneumonia (PCP) prophylaxis within 3 months of CD4 count below 200 cells/mm<sup>3</sup>

*Numerator 2*: Patients who were prescribed Pneumocystis jiroveci pneumonia (PCP) prophylaxis within 3 months of CD4 count below 500 cells/mm<sup>3</sup> or a CD4 percentage below 15%

*Numerator 3*: Patients who were prescribed Pneumocystis jiroveci pneumonia (PCP) prophylaxis at the time of HIV diagnosis

## \*Aggregate Numerator = The sum of the three numerators

#### **Denominator:**

**Denominator 1:** All patients aged 6 years and older with a diagnosis of HIV/AIDS and a CD4 count below 200 cells/mm<sup>3</sup>, who had at least two visits during the measurement year, with at least 90 days in between each visit;

And

**Denominator 2:** All patients aged 1 through 5 years of age with a diagnosis of HIV/AIDS and a CD4 count below 500 cells/mm<sup>3</sup> or a CD4 percentage below 15%, who had at least two visits during the measurement year, with at least 90 days in between each visit;

And

**Denominator 3:** All patients aged 6 weeks through 12 months with a diagnosis of HIV, who had at least two visits during the measurement year, with at least 90 days in between each visit

#### \*Total Denominator = The sum of the three denominators

#### **Patient Exclusions:**

**Denominator 1 Exclusion**: Patient did not receive PCP prophylaxis because there was a CD4 count above 200 cells/mm<sup>3</sup> during the three months after a CD4 count below 200 cells/mm<sup>3</sup>





**Denominator 2 Exclusion:** Patient did not receive PCP prophylaxis because there was a CD4 count above 500 cells/mm<sup>3</sup> or CD4 percentage above 15% during the three months after a CD4 count below 500 cells/mm<sup>3</sup> or CD4 percentage below 15%

## Data Elements:

#### Numerator/Denominator 1:

- 1. Is the patient 6 years or older and have a diagnosis of HIV? (Y/N)
  - a. If yes, did the patient have at least two medical visits in the measurement year with at least 90 days between visits? (Y/N)
    - i. If yes, did the patient have a CD4 count <200 cells/mm<sup>3</sup> within the first 9 months of the measurement year? (Y/N)
      - 1. If yes, was PCP prophylaxis prescribed within 3 months of CD4<200 cells/mm<sup>3</sup>? (Y/N)
        - a. If no, was the CD4 count repeated within 3 months? (Y/N)
          - i. If yes, did CD4 count remain < 200 cells/mm<sup>3</sup>? (Y/N)
            - 1. If yes, was PCP prophylaxis prescribed within 3 months of CD4<200 cells/mm<sup>3</sup>? (Y/N)

#### *Numerator/Denominator 2:*

- 1. Is the patient between 1-5 years old and have a diagnosis of HIV? (Y/N)
  - a. If yes, did the patient have at least two medical visits in the measurement year with at least 90 days between visits? (Y/N)
    - i. If yes, did the patient have a CD4 count <500 cells/mm<sup>3</sup> or CD4 percentage < 15% within the first 9 months of the measurement year? (Y/N)
      - If yes, was PCP prophylaxis prescribed within 3 months of CD4<200 cells/mm<sup>3</sup>? (Y/N)
        - a. If no, was the CD4 count repeated within 3 months? (Y/N)
          - If yes, did it remain CD4 count <500 cells/mm<sup>3</sup> or CD4 percentage < 15%? (Y/N)
            - 1.If yes, was PCP prophylaxis prescribed within 3 months of CD4 count <500 cells/mm<sup>3</sup> or CD4 percentage < 15%? (Y/N)

#### Numerator/Denominator 3:

- Is the patient between 6 weeks and 12 months old and have a diagnosis of HIV? (Y/N)
  - a. If yes, did the patient have at least two medical visits in the measurement year with at least 90 days between visits? (Y/N)
    - i. If yes, was PCP prophylaxis prescribed at HIV diagnosis?

\*\*\*Greater measure specification detail is available including data elements for each value set at <u>cms.gov: Clinical Quality Measures Basics</u> (Measure: CMS 52v7)





**Comparison Data:** Patients meeting criteria and prescribed PCP prophylaxis during calendar year. Please refer to <u>HIV Research Network</u>

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

<u>Adult guidelines</u>: <sup>2</sup> "HIV-infected adults and adolescents, including pregnant women and those on ART, should receive chemoprophylaxis against PCP if they have CD4 counts <200 cells/mm<sup>3</sup> (AI).<sup>12,13,41</sup> Persons who have a CD4 cell percentage of <14% should also be considered for prophylaxis (BII).<sup>12,13,41</sup> Initiation of chemoprophylaxis at CD4 counts between 200 and 250 cells/mm<sup>3</sup> also should be considered when starting ART must be delayed and frequent monitoring of CD4 counts, such as every 3 months, is impossible (BII).<sup>13</sup> Patients receiving pyrimethamine-sulfadiazine for treatment or suppression of toxoplasmosis do not require additional prophylaxis for PCP (AII)."<sup>42</sup>

<u>Pediatric guidelines:</u> <sup>3</sup> "Chemoprophylaxis is highly effective in preventing PCP. Prophylaxis is recommended for all HIV-Infected children aged  $\geq$  6years who have a CD4 T lymphocyte (CD4) counts <200 cells/mm3 or CD4 percentage <15% for children aged 1 to <6years with CD4 counts <500 cells/mm3 or CD4 percentage <15%, and for all infants aged <12months regardless of CD4 count or percentage.Infants born to HIV-infected mothers should be considered for prophylaxis beginning at 4–6 weeks of age. HIVinfected infants should be administered prophylaxis until 1 year of age, at which time they should be reassessed on the basis of the age-specific CD4 count or percentage thresholds mentioned above (AII)."

#### **Use in Other Federal Programs:**

Medicare and Medicaid EHR Incentive Program for Eligible Professionals <u>Centers for Medicare & Medicaid Services: eCQM</u> Library

#### References/ Notes:

<sup>1</sup> The HIV/AIDS Bureau did not develop this measure. The National Committee on Quality Assurance developed the measure. Measure details available online.

<sup>2</sup> <u>Panel on Opportunistic Infections in HIV-Infected Adults and Adolescents</u>. Guidelines for the Prevention and Treatment of Opportunistic Infections in Adults and Adolescents with HIV: recommendations from the Centers for Disease Control and Prevention, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America. Available online. Accessed January 2019

<sup>3</sup><u>Centers for Disease Control and Prevention: Guidelines for the Prevention and</u> <u>Treatment of Opportunistic Infections Among HIV-Exposed and HIV-Infected Children.</u> MMWR 2009; 58 (No. RR-11): 47. Available at: <u>Guidelines for the Prevention and</u> <u>Treatment of Opportunistic Infections Among HIV-Infected Children</u>. Accessed January 2019.





#### Performance Measure: Annual Retention in Care

National Quality Forum #: None

**Description:** Percentage of patients, regardless of age, with a diagnosis of HIV who had at least two (2) encounters within the 12-month measurement year.

**Numerator:** Number of patients in the denominator who had at least two HIV medical care encounters at least 90 days apart within a 12-month measurement year. At least one of the two HIV medical care encounters needs to be a medical visit with a provider with prescribing privileges.

**Denominator:** Number of patients, regardless of age, with a diagnosis of HIV who had at least one HIV medical encounter within the 12-month measurement year.

An HIV medical care encounter is a medical visit with a provider with prescribing privileges or an HIV viral load test.

Patients Exclusions: Patients who died at any time during the measurement year.

Data Elements: Does the patient, regardless of age, have a diagnosis of HIV? (Y/N)

- a. If yes, did the patient have at least <u>two</u> medical care encounters during the measurement year? (Y/N)
  - i. If yes, did the patient have a HIV viral load test within the measurement year? (Y/N)
  - ii. If yes, did the patient have at least one additional medical visit encounter with a provider with prescribing privileges within the measurement year? (Y/N)
  - iii. Or, did the patient have two medical visit with provider with prescribing privileges within the measurement year? (Y/N)

Comparison Data: None.

Use in Other Federal Programs: None

#### U.S. Department of Health and Human Services Guidelines:

<u>Adolescent/Adult Guidelines:</u><sup>1</sup> "Several laboratory tests are important for initial evaluation of patients with HIV upon entry into care, and some tests should be performed before and after initiation or modification of antiretroviral therapy (ART) to assess the virologic and immunologic efficacy of ART and to monitor for laboratory abnormalities that may be associated with antiretroviral (ARV) drugs. Table 3 outlines the Panel on Antiretroviral Guidelines for Adults and Adolescents (the Panel)'s recommendations on the frequency of testing. As noted in the table, some tests may be repeated more frequently if clinically indicated." (Page B-3 of guidelines)





Additionally, Table 3. Laboratory Testing Schedule for Monitoring Patients with HIV Before and After Initiation of Antiretroviral Therapy indicates viral load test should be performed at entry into care; ART initiation or modification; two to eight weeks after ART initiation or modification; in patients on ART every three to six months; every six months of the patient for patients adherent with consistently suppressed viral load and stable immunologic status for more than two years; treatment failure; clinically indicated; and if ART initiation is delayed. (Pages C-2 through C-4 of guidelines)

<u>Pediatric Guidelines:</u><sup>2</sup> "After the initial phase of ART initiation (1 month–3 months), clinicians should assess a patient's adherence to the regimen and the regimen's effectiveness (as measured by CD4 cell count and plasma viral load) every 3 months to 4 months. Additionally, clinicians should review a patient's history of toxicities and evaluate a patient for any new AEs using physical examinations and the relevant laboratory tests. If laboratory evidence of toxicity is identified, testing should be performed more frequently until the toxicity resolves."

The Panel on Antiretroviral Therapy and Medical Management of Children Living with HIV finds value in continuing to perform viral load testing every 3 to 4 months to provide enhanced monitoring of adherence or disease progression among children and adolescents. Some experts monitor CD4 cell count less frequently (e.g., every 6 months to 12 months) in children and adolescents who are adherent to therapy, who have CD4 cell count values well above the threshold for OI risk, and who have had sustained virologic suppression and stable clinical status for >2 years to 3 years. Some clinicians find value in scheduling visits every 3 months even when lab testing is not performed, in order to review adherence and update drug doses for interim growth" (D-3 of guideline)

Additionally, Table 3. Sample Schedule for Clinical and Laboratory Monitoring of Children Before and After Initiation of Antiretroviral Therapy indicates viral load tests should be performed at entry into care; pre-therapy; ART initiation; weeks two to four on therapy, every three to four months to monitor ARV adherence; and when switching ARV regimens. (Page D-6 of guidelines)

#### **References/Notes:**

<sup>1</sup> <u>Panel on Antiretroviral Guidelines for Adults and Adolescents</u>. Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents with HIV. Department of Health and Human Services. Available online. Accessed September 2019. Page B-3 and Table 3 on Pages C-2 through C-4.

<sup>2</sup> Panel on Antiretroviral Therapy and Medical Management of HIV-Infected
 <u>Children</u>. Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection.
 Available online. Accessed September 2019. D-3 and Table 3 on Page D-6.





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# Performance Measure: Medical Case Management: Care Plan

#### National Quality Forum #: None

**Description:** Percentage of medical case management patients, regardless of age, with a diagnosis of HIV who had a medical case management care plan<sup>1</sup> developed and/or updated two or more times in the measurement year

**Numerator:** Number of medical case management patients who had a medical case management care plan developed and/or updated two or more times which are at least three months apart in the measurement year

**Denominator:** Number of medical case management patients, regardless of age, with a diagnosis of HIV who had at least one medical case management encounter in the measurement year

#### Patient Exclusions:

- 1. Medical case management patients who initiated medical case management services in the last six months of the measurement year.
- 2. Medical case management patients who were discharged from medical case management services prior to six months of service in the measurement year

#### Data Elements:

- 1. Does the patient have a diagnosis of HIV? (Y/N)
  - a. If yes, did the patient have a medical case management encounter in the measurement year? (Y/N)
    - i. If yes, is there a medical case management careplan developed and/or updated two or more times at least three months apart during the measurement year? (Y/N)
      - 1. If yes, list the dates of these medical case management careplans and/or care plan updates.

Comparison Data: None Available at this time

#### Use in Other Federal Programs: None

#### **References/ Notes:**

<sup>1</sup>The medical visits may be document in either the patient's medical case management record or the patient's medical record (in the event that medical case management documentation is located in the patient's medical record).





# Performance Measure: Gap in HIV Medical Visits (Medical Case Management)

#### National Quality Forum #: None

**Description:** Percentage of medical case management patients, regardless of age, with a diagnosis of HIV who did not have a medical visit<sup>1</sup> in the last 6 months of the measurement year (that is documented in the medical case management record<sup>1</sup>)

**Numerator:** Number of medical case management patients in the denominator who did not have a medical visit in the last 6 months of the measurement year (that is documented in the medical case management record<sup>1</sup>)

**Denominator:** Number of medical case management patients, regardless of age, with a diagnosis if HIV who had at least one medical visit in the first 6 months of the measurement year.

## 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 case management visit in the first 6 months of the measurement year? (Y/N)
  - i. If yes, did the patient have at least one medical visit in the first 6 months of the measurement year? (Y/N)

1. If yes, did the patient have one or more medical visits in the last 6 months of the measurement year?

**Patient Exclusions:** Medical case management patients who died at any time during the measurement year

#### 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 case management visit in the first 6 months of the measurement year? (Y/N)
    - i. If yes, did the patient have at least one medical visit in the first 6 months of the measurement year? (Y/N)

1. If yes, did the patient have one or more medical visits in the last 6 months of the measurement year?

Comparison Data: None Available at this time



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

<u>Adult guidelines</u>:<sup>2</sup> "Several laboratory tests are important for evaluation of patients with HIV upon entry to care, and some tests should be performed before and after initiation or modification of antiretroviral therapy (ART) to assess the virologic and immunologic efficacy of ART and to monitor for laboratory abnormalities that may be associated with antiretroviral (ARV) drugs. Table 3 outlines the Panel on Antiretroviral Guidelines for Adult and Adolescents recommendations on the frequency of testing. As noted in the table, some tests may be repeated more frequently if clinically indicated."

Pediatric guidelines:<sup>3</sup> "Frequent patient visits and intensive follow-up during the initial months after a new ART regimen is started are necessary to support and educate the family.... Thus, it is prudent for clinicians to assess children within 1 to 2 weeks of initiating therapy, either in person or with a phone call, to ensure that medications are being administered properly and evaluate clinical concerns. Many clinicians plan additional contacts (in person, by telephone, or via email) with children and caregivers to support adherence during the first few weeks if therapy. After the initial phase of ART initiation, regimen adherence, effectiveness (CD4 cell count and plasma viral load) and toxicities (history, physical and laboratory testing) should be assessed every 3 to 4 months in children receiving ART. Some experts monitor CD4 cell counts and HIV RNA levels less frequently in children and youth who are adherent to therapy and have sustained viral suppression and stable clinical status more than 2 to 3 years."

# Use in Other Federal Programs: None

# **References/ Notes:**

- <sup>1</sup> The medical visits may be document in either the patient's medical case management record or the patient's medical record (in the event that medical case management documentation is located in the patient's medical record).
- <sup>2</sup> Panel on Antiretroviral Guidelines for Adults and Adolescents. <u>Guidelines for the Use</u> of Antiretroviral Agents in Adults and Adolescents with HIV.

Department of Health and Human Services. Available online. Section accessed January 2, 2019 pages C-1 to C-5

<sup>3</sup> Panel on Antiretroviral Therapy and Medical Management of HIV-Infected Children. <u>Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection</u>.

Accessed January 2, 2019 pages D-2 to D-3.





# Performance Measure: HIV Medical Visit Frequency (Medical Case Management)

#### National Quality Forum #: None

**Description:** Percentage of medical case management patients, regardless of age, with a diagnosis of HIV who had at least one medical visit<sup>1</sup> in each 6-month period of the 24-month measurement period with a minimum of 60 days between medical visits

**Numerator:** Number of medical case management patients in the denominator who had at least one medical visit in each 6-month period of the 24-month measurement period with a minimum of 60 days between first medical visit in the prior 6-month period and the last medical visit in the subsequent 6-month period

**Denominator:** Number of medical case management patients, regardless of age, with a diagnosis of HIV with at least one medical visit<sup>1</sup> in the first 6 months of the 24-month measurement period

**Patient Exclusions:** Medical case management patients who died at any time during the 24month measurement period

#### Data Elements:

- Does the patient, regardless of age, have a diagnosis of HIV? (Y/N)

   a. If yes, did the patient have at least one medical case management visit in the <u>first</u> 6 months of the 24-month measurement period? (Y/N)
  - i. If yes, did the patient have at least one medical visit in the <u>first</u> 6 months of the 24month measurement period? (Y/N)
    - If yes, did the patient have at least one medical visit in the <u>second</u> 6-month period of the 24-month measurement period? AND was the patient's last visit in the second 6-month period 60 days or more from the 1st visit in the first 6-month period? (Y/N)
      - a. Did the patient have at least one medical visit in the <u>third</u> 6-month period of the 24-month measurement period? AND was the patient's last visit in the third 6month period 60 days or more from the 1st visit in the second 6-month period? (Y/N)
        - If yes, Did the patient have at least one medical visit in the <u>fourth</u> 6-month period of the 24month measurement period? AND was the
          - patient's last visit in the fourth 6-month period 60 days
          - or more from the 1st visit in the third 6month period? (Y/N)

Comparison Data: None Available at this time

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

<u>Adult guidelines</u>:<sup>2</sup> "Several laboratory tests are important for initial evaluation of patients with HIV upon entry into care, and some tests should be performed before and after initiation or modification of antiretroviral therapy (ART) to assess the virologic and immunologic efficacy of ART and to monitor for laboratory abnormalities that may be associated with antiretroviral (ARV) drugs. Table 3 outlines the Panel on Antiretroviral Guidelines for Adults and Adolescents (the Panel)'s recommendations on the frequency of testing. As noted in the table, some tests may be repeated more frequently if clinically indicated.

<u>Pediatric guidelines</u>:<sup>3</sup> "Frequent patient visits and intensive follow-up during the initial months after a new ART regimen is started are necessary to support and educate the family.... Thus, it is prudent for clinicians to assess children within 1 to 2 weeks of initiating therapy, either in person or with a phone call, to ensure that medications are being administered properly and evaluate clinical concerns. Many clinicians plan additional contacts (in person, by telephone, or via email) with children and caregivers to support adherence during the first few weeks if therapy. After the initial phase of ART initiation, regimen adherence, effectiveness (CD4 cell count and plasma viral load) and toxicities (history, physical and laboratory testing) should be assessed every 3 to 4 months in children receiving ART. Some experts monitor CD4 cell counts and HIV RNA levels less frequently in children and youth who are adherent to therapy and have sustained viral suppression and stable clinical status more than 2 to 3 years.

# **Use in Other Federal Programs: None**

#### **References/ Notes:**

<sup>1</sup> The medical visits may be document in the patient's medical case management record or the patient's medical record (in the event that medical case management documentation is located in the patient's medical record).

<sup>2</sup> Panel on Antiretroviral Guidelines for Adults and Adolescents. <u>Guidelines for the Use of</u> <u>Antiretroviral Agents in Adults and Adolescents with HIV</u>.

<sup>3</sup> Department of Health and Human Services. Available online. Accessed January 2, 2019. C-1 to C-5.

Panel on Antiretroviral Therapy and Medical Management of HIV-Infected Children.
 <u>Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection</u>. Available online.
 Accessed January 2, 2019. D-2 to D-3.

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# Performance Measure: Dental and Medical History

#### National Quality Forum #: None

**Description:** Percentage of HIV-infected oral health patients<sup>1</sup> who had a dental and medical health history<sup>2</sup> (initial or updated) at least once in the measurement year.

**Numerator:** Number of HIV-infected oral health patients who had a dental and medical health history<sup>2</sup> (initial or updated) at least once in the measurement year.

**Denominator:** Number of HIV-infected oral health patients that received a clinical oral evaluation<sup>3</sup> at least once in the measurement year.

#### **Patient Exclusions:**

- 1. Patients who had only an evaluation or treatment for a dental emergency in the measurement year.<sup>4</sup>
- 2. Patients who were <12 months of age

#### **Data Elements:**

- 1. Is the patient HIV-infected? (Y/N)
  - a. If yes, did the patient have a clinical oral evaluation<sup>3</sup> at least once in the measurement year? (Y/N)
    - i. If yes, did the patient have a dental and medical health history (initial or updated) in the measurement year? (Y/N)

#### **Data Sources:**

- Data reports required by HRSA/HAB, such as the Ryan White HIV/AIDS Program Services Report (RSR), may provide useful data regarding the number of patients identified as receiving oral health services
- Electronic Health Record/Electronic Medical Record
- Oral health services patient record data abstraction of a sample of records
- Provider billing systems may be used; however, this will be dependent on the completeness and accuracy of coding of the procedures of interest

#### National Goals, Targets, or Benchmarks for Comparison: None Available at this time

#### **Basis for Selection:**

To develop an appropriate treatment plan, the oral health care provider should obtain complete information about the patient's health and medication status.<sup>5</sup>





The American Dental Association (ADA) Dental Practice Parameters include the documentation of a dental and medical history for patients receiving an oral evaluation: "The dental and medical histories should be considered by the dentist to identify medications and predisposing conditions that may affect the prognosis, progression and management of oral health condition."<sup>6</sup>

# U.S. Public Health Service Guidelines: None

# **Reference/Notes:**

<sup>1</sup> "Patient" includes all patients aged 12 months or older.

<sup>2</sup> Dental and medical history should include medications and predisposing conditions that may affect the prognosis, progression and management of oral health condition. See Footnote 6. <sup>3</sup> Clinical oral evaluations include evaluation, diagnosis and treatment planning. Pertinent ADA CDT codes may include the following: D0120-Periodic Oral Evaluation-established patient; D0150Comprehensive oral evaluation, new or established patient; D0160-Detailed and Extensive Oral Evaluation- problem focused by report; D0170-Re-evaluation, limited, problem focused (established patient; not post-operative visit); and D0180-Comprehensive Periodontal Evaluation-new or established patient.

<sup>4</sup> Pertinent ADA CDT codes for patient exclusion may include the following: D9110-Palliative (emergency) treatment of dental pain-minor procedure; and D0140-Limited Oral Evaluation-Problem Focused; however, the diagnostic and treatment procedures associated with emergency evaluation and treatment encounters (including those using these or other ADA CDT codes, as well as other procedures which may not be coded) should be considered when identifying patients for exclusion.

<sup>5</sup> New York State Department of Health. Oral health care for people with HIV infection. New York (NY): New York State Department of Health; 2001 Dec: 3.

<sup>6</sup> <u>American Dental Association</u>. Dental Practice Parameters. Patients requiring a comprehensive oral evaluation. Accessed on January 2, 2019





# Performance Measure: Dental Treatment Plan

#### National Quality Forum #: None

**Description:** Percentage of HIV-infected oral health patients<sup>1</sup> who had a dental treatment plan <sup>2</sup> developed and/or updated at least once in the measurement year.

**Numerator:** Number of HIV-infected oral health patients who had a dental treatment plan<sup>2</sup> developed and/or updated at least once in the measurement year

**Denominator:** Number of HIV-infected oral health patients that received a clinical oral evaluation<sup>3</sup> at least once in the measurement year.

## **Patient Exclusions:**

- 1. Patients who had only an evaluation or treatment for a dental emergency in the measurement year.<sup>4</sup>
- 2. Patients who were < 12 months of age.

## **Data Elements:**

Is the patient HIV-infected? (Y/N)

- a. If yes, did the patient have a clinical oral evaluation<sup>3</sup> at least once in the measurement year? (Y/N)
  - i. If yes, did the patient have a dental treatment plan<sup>2</sup>developed and/or updated at least once in the measurement year? (Y/N)

# National Goals, Targets, or Benchmarks for Comparison: None Available

**Outcome Measures for Consideration:** Rate of emergency dental visits in the practice population

#### **Basis for Selection:**

A comprehensive dental treatment plan that includes preventive care, maintenance and elimination of oral pathology should be developed and discussed with the patient. Various treatment options should be discussed and developed in collaboration with the patient. As with all patients, a treatment plan appropriate for the patient's health status and individual preference should be chosen.

Medications may interfere with dental treatment and cause adverse effects: such as decreased salivary flow, altered liver function, bone marrow suppression, resulting in anemia,





thrombocytopenia and neurtropenia. There is no evidence to support modifications in oral health care based solely on the presence of HIV infection. However, such modifications may be indicated on the basis of certain medical problems that occur as a result of HIV infection. Severely or terminally ill patients, for example, will require alterations in care similar to those of patients suffering from other conditions that cause debilitating illness, such as cancer or mental health impairment.<sup>5,6</sup>

The American Dental Association (ADA) Dental Practice Parameters address the process of diagnosis and treatment planning: "In the process of diagnosis and treatment planning, the attending dentist should review the accuracy of the data collected as part of patient evaluation. The behavioral, psychological, anatomical, developmental and physiological limitations of the patient should be considered by the dentist in performing the periodic evaluation and in developing the treatment plan." <sup>7</sup>

# U.S. Public Health Service Guidelines: None

# **References/Notes:**

<sup>1</sup> "Patient" includes all patients aged 12 months or older.

2 Treatment plan: The sequential guide for the patient's care as determined by the dentist's diagnosis and is used by the dentist for the restoration to and/or maintenance of optimal oral health <u>ADA.org</u> Accessed January 2, 2019

<sup>3</sup> Clinical oral evaluations include evaluation, diagnosis and treatment planning. Pertinent ADA CDT codes may include the following: D0120-Periodic Oral Evaluation-established patient; D0150-Comprehensive oral evaluation, new or established patient; D0160-Detailed and Extensive Oral Evaluation; D0170-Re-evaluation,

limited, problem focused (established patient; not post-operative visit); and D0180-Comprehensive Periodontal Evaluation-new or established patient.

<sup>4</sup> Pertinent ADA CDT codes for patient exclusion may include the following: D9110-Palliative (emergency) treatment of dental pain-minor procedure; and D0140-Limited Oral Evaluation-Problem Focused; however, the diagnostic and treatment procedures associated with emergency evaluation and treatment encounters (including those using these or other ADA CDT codes, as well as other procedures which may not be coded) should be considered when identifying patients for exclusion.

<sup>5</sup> Glick M, Abel SN, Muzyka BC, DeLorenzo M. Dental complications after treating patients with AIDS. *J Am Dent Assoc* 1994;125:296-301. 6 Dental management of the HIV-infected patient. *J Am Dent Assoc* 1995;(Suppl):1-40. 7 American Dental Association. Dental Practice





Parameters. Patient of record requiring a periodic evaluation. Available at: <u>http://ada.org</u> Accessed on January 2, 2019

- <sup>6</sup> Dental management of the HIV-infected patient. *J Am Dent Assoc* 1995;(Suppl):1-40.
- 7 <u>American Dental Association</u>. Dental Practice Parameters. Patient of record requiring a

periodic evaluation. Accessed January 2, 2019





#### **Performance Measure: Oral Health Education**

#### National Quality Forum #: None

**Description:** Percentage of HIV-infected oral health patients<sup>1</sup> who received oral health education<sup>2</sup> at least once in the measurement year.

**Numerator:** Number of HIV-infected oral health patients who received oral health education<sup>2</sup> at least once in the measurement year.

**Denominator:** Number of HIV-infected oral health patients that received a clinical oral evaluation<sup>3</sup> at least once in the measurement year.

#### **Patient Exclusions:**

- 1. Patients who had only an evaluation or treatment for a dental emergency in the measurement year. <sup>4</sup>
- 2. Patients who were <12 months of age.

#### Data Elements:

- 1. Is the patient HIV-infected? (Y/N)
  - a. If yes, did the patient have a clinical oral evaluation<sup>3</sup> at least once in the measurement year? (Y/N)
    - i. If yes, did the patient receive oral health education<sup>2</sup> at least once in the measurement year? (Y/N)

#### Data Sources:

- Data reports required by HRSA/HAB, such as the Ryan White HIV/AIDS Program Services Report (RSR), may provide useful data regarding the number of patients identified as receiving oral health services.
- Electronic Health Record/Electronic Medical Record
- Oral health services patient record data abstraction of a sample of records.
- Provider billing systems may be used; however, this will be dependent on the completeness and accuracy of coding of the procedures of interest





# National Goals, Targets, or Benchmarks for Comparison: None Available at this time

#### **Outcome Measures for Consideration:**

- Rate of dental disease and oral pathology in the practice population
- Rate of tobacco cessation in the practice population

#### **Basis for Selection:**

A higher risk of dental caries in patients with HIV may be caused by decreased salivary flow, which may occur as a result of salivary gland disease or as a side effect of a number of medications. Also, some topical antifungal medications have high sugar content, possibly resulting in increased caries susceptibility.

The adverse effects of using tobacco should be discussed with the patients. If patient is a tobacco user, cessation should also be discussed. For in-office consumer and provider materials on tobacco cessation programs, dentists can access <u>HHS.gov: The Surgeon General's Priorities</u> Accessed January 2, 2019

The American Dental Association (ADA) Dental Practice Parameters include the provision of patient education: "The dentist should emphasize prevention and oral disease through patient education which may include oral hygiene instructions....Counseling may be provided regarding tobacco use or other behaviors that may compromise oral health." <sup>6</sup>

#### U.S. Public Health Service Guidelines: None

#### **References/Notes:**

<sup>1</sup> "Patient" includes patients aged 12 months or older.

<sup>2</sup> Oral health education should include: oral hygiene instructions (ADA CDT code D1330) and tobacco counseling for the control and prevention of oral disease (ADA CDT code D1320) as indicated. Oral health education may be provided and documented by a licensed dentist, dental hygienist, dental assistant and/or dental case manager. For pediatric patients, oral health education should be provided to parents and caregivers and be age appropriate for pediatric patients.

<sup>3</sup> Clinical oral evaluations include evaluation, diagnosis and treatment planning. Pertinent ADA CDT codes may include the following: D0120-Periodic Oral Evaluation-established patient; D0150-Comprehensive oral evaluation, new or established patient; D0160-Detailed and Extensive Oral Evaluation; D0170-Re-evaluation, limited, problem focused (established patient; not post-operative visit); and D0180-Comprehensive Periodontal Evaluation-new or established patient.

Pertinent ADA CDT codes for patient exclusion may include the following: D9110-Palliative (emergency) treatment of dental pain-minor procedure; and D0140-Limited Oral Evaluation Problem Focused; however, the diagnostic and treatment procedures associated





with emergency evaluation and treatment encounters (including those using these or other ADA CDT codes, as well as other procedures which may not be coded) should be considered when identifying excluded patients.

<sup>5</sup> New York State Department of Health. Oral health care for people with HIV infection. New York (NY): New York State Department of Health; 2001 Dec: 4.

<sup>6</sup> <u>American Dental Association</u>. Dental Practice Parameters. Patient without clinical signs or symptoms of oral disease. Accessed January 2, 2019.





# Performance Measure: Periodontal Screening or Examination

#### National Quality Forum #: None

**Description:** Percentage of HIV-infected oral health patients<sup>1</sup> who had a periodontal screen or examination<sup>2</sup> at least once in the measurement year.

**Numerator:** Number of HIV-infected oral health patients who had a periodontal screen or examination<sup>2</sup> at least once in the measurement year.

**Denominator:** Number of HIV-infected oral health patients that received a clinical oral evaluation<sup>3</sup> at least once in the measurement year.

#### **Patient Exclusions:**

- 1. Patients who had only an evaluation or treatment for a dental emergency in the measurement year.<sup>4</sup>
- 2. Edentulist patients (complete).
- 3. Patients who were <13 years of age.

#### Data Elements:

1. Is the patient HIV-infected? (Y/N)

a. If yes, did the patient have a clinical oral evaluation<sup>3</sup> at least once in the measurement year? (Y/N)

i. If yes, did the patient have a periodontal screen or examination2 at least once in the measurement year? (Y/N)

#### Data Sources:

- Data reports required by HRSA/HAB, such as the Ryan White HIV/AIDS Program Services Report (RSR), may provide useful data regarding the number of patients identified as receiving oral health services
- Electronic Health Record/Electronic Medical Record
- Oral health services patient record data abstraction of a sample of records
- Provider billing systems may be used; however, this will be dependent on the completeness and accuracy of coding of the procedures of interest

National Goals, Targets or Benchmarks for Comparison: None Available at this time





**Outcome Measures for Consideration:** Rate of tooth loss due to periodontal disease in the practice population

**Basis for Selection:** The American Academy of Periodontology "Parameter on Periodontitis Associated with Systemic Conditions" indicates that "some forms of periodontal disease may be more severe in individuals affected with immune system disorders. Patients infected with human immunodeficiency syndrome (HIV), may have especially severe forms of periodontal disease. The incidence of necrotizing periodontal diseases may increase with patients with acquired immunodeficiency syndrome (AIDS)." <sup>5</sup>

# U.S. Public Health Service Guidelines: None

## **References/Notes:**

<sup>1</sup> "Patient" includes all patients aged 13 years or older.

A periodontal screen should include the assessment of medical and dental histories, the quantity and quality of attached gingival; bleeding; tooth mobility; and radiological review of the status of the periodontium and dental implants. "Appropriate screening procedures may be performed to determine the need for a comprehensive periodontal evaluation." (Source: American Academy of Periodontolgy. Parameter on Comprehensive Periodontal Examination. J Periodontol 2000; 71:847-848). A comprehensive periodontal examination (ADA CDT D0180) includes "the evaluation of periodontal conditions, probing and charting, evaluation and recording of the patient's dental and medical history and general health assessment. It may include the evaluation and recording or dental caries, missing or unerupted teeth, restorations, occlusal relationships and oral cancer evaluation" (Source: American Dental Association. Current Dental Terminology: CDT 2009-2010.) The screening or examination may be performed and documented by either a licensed dentist or, where state regulations allow, by a dental hygienist, but the interpretation of data and diagnosis must be made by a licensed dentist.

<sup>3</sup> Clinical oral evaluations include evaluation, diagnosis and treatment planning. Pertinent ADA CDT codes for patient inclusion in the denominator may include the following: D0120-Periodic Oral Evaluation-established patient; D0150-Comprehensive oral evaluation, new or established patient; D0160-Detailed and Extensive Oral Evaluation; D0170-Re-evaluation, limited, problem focused (established patient; not postoperative visit); and D0180Comprehensive Periodontal Evaluation-new or established patient.

<sup>4</sup> Pertinent ADA CDT codes for patient exclusion may include the following: D9110-Palliative (emergency) treatment of dental pain-minor procedure; and D0140-Limited Oral EvaluationProblem Focused; however, the diagnostic and treatment procedures associated with emergency evaluation and treatment encounters (including those using these or other ADA CDT codes, as well as other procedures which may not be coded) should be considered





when identifying patients for exclusion. <u>ADA: Code on Dental Procedures and Nomenclature</u> (<u>CDT Code</u>). Accessed January 2019

American Academy of Periodontology. <u>Parameter on Periodontitis Associated with Systemic</u> <u>Conditions</u>. J Periodontol 2000; 71:876-879. Accessed January 2019.





## Performance Measure: Phase 1 Treatment Plan Completion

National Quality Forum #: None

**Description:** Percentage of HIV-infected oral health patients<sup>1</sup> with a Phase 1<sup>2</sup> treatment plan that is completed within 12 months.

**Numerator:** Number of HIV-infected oral health patients that completed Phase 1<sup>2</sup> treatment within 12 months of establishing a treatment plan.

**Denominator:** Number of HIV-infected oral health patients with a Phase 1 treatment plan established in the year prior to the measurement year<sup>3</sup>

**Patient Exclusions:** Patients who had only an evaluation or treatment for a dental emergency in the year prior to the measurement year.<sup>4</sup>

#### Data Elements:

- 1. Is the patient HIV-infected? (Y/N)
  - a. If yes, did the patient have a Phase  $1^2$  treatment plan established in the year prior to the measurement year <sup>3</sup>? (Y/N)

1. If yes, was the Phase  $1^2$  treatment plan completed within 12 months of establishment? (Y/N)

#### Data Sources:

- Data reports required by HRSA/HAB, such as the Ryan White HIV/AIDS Program Services Report (RSR), may provide useful data regarding the number of clients identified as receiving oral health services
- Electronic Health Record/Electronic Medical Record (A specific "dummy code" to signify when patient treatment is complete can be used to facilitate data collection.)
- Oral health services patient record data abstraction by grantee of a sample of records
- Provider billing systems may be used; however, this will be dependent on the completeness and accuracy of coding of the procedures of interest

#### National Goals, Targets, or Benchmarks for Comparison: None

**Outcome Measures for Consideration:** Rate of untreated dental disease and oral pathology in the practice population





# **Basis for Selection:**

Oral diseases are progressive and cumulative and can affect our ability to eat, the foods we choose, how we look, and the way we communicate. These diseases can affect economic productivity and compromise our ability to work at home, at school, or on the job. Health disparities exist across population groups at all ages. Over one third of the US population (100 million people) has no access to community water fluoridation. Over 108 million children and adults lack dental insurance, which is over 2.5 times the numbers who lack medical insurance. See: US Department of Health and Human Services. *Oral Health in America: A Report of the Surgeon General: Executive Summary*. Rockville, MD: US Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000. See:

#### NIH: Reports of the Surgeon General

#### HHS: Public Health Reports

(2012 Oral Health Care for People Living With HIV/AIDS Supplement 2 2012) Accessed April 30, 2019.

Community and migrant health center oral health programs seek to increase access to oral health care for the underserved. This performance measure addresses two fundamental areas within community and migrant health center oral health programs: 1) the need to perform a comprehensive oral health exam that culminates with an accompanying treatment plan and 2) assuring that quality care is incorporated in the process of completing needed treatment in a timely manner. The measure facilitates the identification of contributing and restricting factors and practical low cost improvement options relevant to significant areas listed above.

With access to codes associated with comprehensive oral exams and Patient Treatment Completion (PTC), most management information systems will be able to provide an average length of time associated with completion of treatment. With this information, staffing patterns, financial costs (overhead expenses) and efficiency of the oral health program can be assessed. These additional benchmarks could also be measured across health center programs at the local, regional and national levels. The ultimate goal is to measure and assure that health centers routinely and systematically deliver comprehensive, quality oral health services and patient treatment is completed within a reasonable amount of time.

The performance measure is comprehensive in that subsequent performance analysis can broach a number of significant areas, such as: appointment scheduling, ratio of oral health providers to dental operatories, ratio of oral health providers to support staff, collaboration with medical colleagues emphasizing oral health as an essential component of an interdisciplinary approach to patient care, prioritization of patients and/or procedures, general productivity and efficiency.





#### U. S. Public Health Service Guidelines: None

#### **References/Notes:**

<sup>1</sup> "Patient" includes patients aged 12 months or older.

<sup>2</sup> Phase 1 treatment: Prevention, maintenance and/or elimination of oral pathology that results from dental caries or periodontal disease. This includes: restorative treatment; basic periodontal therapy (non surgical); basic oral surgery that includes simple extractions and biopsy; non-surgical endodontic therapy; and space maintenance and tooth eruption guidance for transitional dentition.

<sup>3</sup> Patients initiating Phase 1 treatment plan would not be captured in the denominator in the current measurement year. They would, if the care was completed on schedule, be captured in the performance data in the following measurement year.

<sup>4</sup> Pertinent ADA CDT codes for patient exclusion may include the following: D9110-Palliative

(emergency) treatment of dental pain-minor procedure; and D0140-Limited Oral Evaluation-Problem Focused; however, the diagnostic and treatment procedures associated with emergency evaluation and treatment encounters (including those using these or other ADA CDT codes, as well as other procedures which may not be coded) should be considered when identifying excluded patients.

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