Performance Measure: Oral Health Services:
Dental and Medical History

Percentage of HIV-infected oral health patients[1] who had a dental and medical health history[2] (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[2] (initial or updated) at least once in the measurement year.
Denominator:	Number of HIV-infected oral health patients that received a clinical oral evaluation[3] 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.[4] 2. Patients who were < 12 months old.

Data Element:	1. Is the patient HIV-infected? (Y/N)
	   a. If yes, did the patient have a clinical oral evaluation[3] 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.[5]

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."[6]

US Public Health Service Guidelines:

None.

References/Notes:

Performance Measure: Oral Health Services:

Dental and Medical History

[1] "Patient" includes all patients aged 12 months or older.

[2] 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.

[3] 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.

[4] 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.

[5] 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.

[6] American Dental Association. Dental Practice Parameters. Patients requiring a comprehensive oral evaluation. Available at: http://www.ada.org/prof/prac/tools/parameters/eval_comprehensive.asp. Accessed on May 8, 2009.

Performance Measure: Oral Health Services:

Dental Treatment Plan

Percentage of HIV-infected oral health patients[1] who had a dental treatment plan[2] 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[2] 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[3] 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.[4] 2. Patients who were < 12 months old.

Data Element:	1. Is the patient HIV-infected? (Y/N)
	   a. If yes, did the patient have a clinical oral evaluation[3] at least once in the measurement year? (Y/N)
	      i. If yes, did the patient have a dental treatment plan[2] developed and/or updated 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 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, financial 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, and bone marrow suppression, resulting in anemia, thrombocytopenia, and neutropenia. 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

Performance Measure: Oral Health Services:

Dental Treatment Plan

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.[5, 6]

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." [7]

US Public Health Service Guidelines:

None.

References/Notes:

[1] "Patient" includes all patients aged 12 months or older.

[2] A complete dental treatment plan should include the following: Provision for the relief of pain, elimination of infection; preventive plan component; periodontal treatment plan if necessary; elimination of caries; replacement or maintenance of tooth space or function; consultation or referral for conditions where treatment is beyond the scope of services offered; and determination of adequate recall interval. [http://www.healthdisparities.net/hdc/hdcsearch/isysquery/2b08788b-e88c-4f75-8755-743fb786bcb6/1/doc/]

[3] 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.

[4] 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.

[5] 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: http://www.ada.org/prof/prac/tools/parameters/eval_periodic.asp. Accessed on May 8, 2009.

Performance Measure: Oral Health Services:

Oral Health Education

Percentage of HIV-infected oral health patients[1] who received oral health education[2] at least once in the measurement year.

Numerator:	Number of HIV-infected oral health patients who received oral health education[2] at least once in the measurement year.
Denominator:	Number of HIV-infected oral health patients that received a clinical oral evaluation[3] 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.[4] 2. Patients who were < 12 months old.

Data Element:	1. Is the patient HIV-infected? (Y/N)
	  a. If yes, did the patient have a clinical oral evaluation[3] at least once in the measurement year? (Y/N)
	    i. If yes, did the patient receive oral health education[2] 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 http://www.surgeongeneral.gov/tobacco/default.htm.[5]

Performance Measure: Oral Health Services:
Oral Health Education

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."[6]

US Public Health Service Guidelines:

None.

References/Notes:

[1] "Patient" includes patients aged 12 months or older.

[2] Oral health education should include: oral hygiene instruction (ADA CDT code D1330) and smoking/tobacco cessation counseling (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.

[3] 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.

[4] 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.

[5] 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.

[6] American Dental Association. Dental Practice Parameters. Patient without clinical signs or symptoms of oral disease. Available at: http://www.ada.org/prof/prac/tools/parameters/disease.asp. Accessed on May 8, 2009.

HAB HIV Performance Measures:
Oral Health Services

Performance Measure: Oral Health Services: Periodontal Screening or Examination	
Percentage of HIV-infected oral health patients[1] who had a periodontal screen or examination[2] at least once in the measurement year.	
Numerator:	Number of HIV-infected oral health patients who had a periodontal screen or examination[2] at least once in the measurement year
Denominator:	Number of HIV-infected oral health patients that received a clinical oral evaluation[3] 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.[4] 2. Edentulist patients (complete). 3. Patients who were <13 years.

Data Element:	1. Is the patient HIV-infected? (Y/N)
	    a. If yes, did the patient have a clinical oral evaluation[3] at least once in the measurement year? (Y/N)
	       i. If yes, did the patient have a periodontal screen or examination[2] 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)."[5]	

Performance Measure: Oral Health Services:

Periodontal Screening or Examination

US Public Health Service Guidelines:

None.

References/Notes:

[1] "Patient" includes all patients aged 13 years or older.

[2] 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.

[3] 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 post-operative visit); and D0180-Comprehensive Periodontal Evaluation-new or established patient.

[4] 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.

[5] American Academy of Periodontology. Parameter on Periodontitis Associated with Systemic Conditions. J Periodontol 2000; 71:876-879.

Performance Measure: Phase 1 Treatment Plan Completion	
Percentage of HIV-infected oral health patients[1] with a Phase 1[2] treatment plan that is completed within 12 months.	
Numerator:	Number of HIV-infected oral health patients that completed Phase 1[2] 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[3].
Patient Exclusions:	1. Patients who had only an evaluation or treatment for a dental emergency in the year prior to the measurement year.[4]

Data Element:	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[3]? (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: http://www.surgeongeneral.gov/library/oralhealth.	

Performance Measure: Phase 1 Treatment Plan Completion

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.

US Public Health Service Guidelines:

None.

References/Notes:

[1] "Patient" includes patients aged 12 months or older.

[2] 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.

[3] 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.

[4] 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.