NATIONAL QUALITY FORUM

Memo

TO: NQF Members and Public

FR: NQF Staff

RE: Pre-Voting review for *National Voluntary Consensus Standards: Infectious Disease Endorsement Maintenance 2012*

DA: October 03, 2012

NQF has endorsed a number of consensus standards to evaluate the quality of care for topic areas related to infectious disease over the past decade. While many infectious diseases have been controlled or eradicated through the use of vaccines and advanced medicine, infectious disease continues to cause widespread morbidity and mortality, and rising health care costs. An evaluation of the NQF-endorsed® infectious disease measures and consideration of new measures will ensure the currency of NQF's portfolio of voluntary consensus standards.

A 20-member Steering Committee representing a range of stakeholder perspectives was appointed to evaluate 5 new measures and 29 measures undergoing maintenance review against NQF's standard evaluation criteria.

The draft document, *National Voluntary Consensus Standards: Infectious Disease Endorsement Maintenance 2012* is posted on the NQF website along with the measure submission forms. This report recommends continued endorsement of 10 measures and endorsement of 4 newly submitted measures. One measure is still under consideration by the Committee. Final recommendation for this measure will be in an addendum report that will be available for NQF Member and Public comment and Member vote in the coming months.

Pursuant to section II.A of the Consensus Development Process v. 1.9, this draft document, along with the accompanying material, is being provided to you at this time for purposes of review and comment only and is not intended to be used for voting purposes. You may post your comments and view the comments of others on the NQF website.

All comments must be submitted no later than 6:00 pm ET, November 01, 2012 at 6:00 pm ET.

Thank you for your interest in NQF's work. We look forward to your review and comments.

National Voluntary Consensus Standards: Infectious Disease Endorsement Maintenance 2012

DRAFT TECHNICAL REPORT FOR REVIEW

October 03, 2012

NATIONAL QUALITY FORUM

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National Voluntary Consensus Standards: Infectious Disease Endorsement Maintenance 2012

DRAFT TECHNICAL REPORT

Introduction

While many infectious diseases have been controlled or eradicated through the use of vaccines and advanced medicine, infectious disease continues to cause widespread morbidity and mortality, and rising health care costs. Specifically:

- In 2008, hospital charges for infectious disease averaged $96 billion per year with an average 4.5 million hospital days per year.[1]
- An estimated 1.2 million Americans are living with HIV/AIDS, and nearly 642,000 Americans have died from AIDS since 1981.[2] Last year total federal spending on HIV/AIDS-related medical care, research, prevention, and other activities was $21.3 billion. For fiscal year 2013, President Obama has requested $22.4 billion to combat HIV in the U.S.[3]
- According to the Centers for Disease Control and Prevention (CDC), every year the healthcare system spends $17 billion on sexually transmitted infections.[4] It is estimated that in the U.S. there are roughly 19 million new infections every year.[5]

Providing resources, such as patient education and intervention programs along with continued scientific research for existing and emerging diseases, will reduce mortality and healthcare costs. Appropriate use of antibiotics and antibiotic stewardship are critical factors in management of infectious disease. Antibiotic stewardship provides an opportunity to not only shorten an individual's length-of-stay in the hospital and improve patient outcomes, but also has the potential to reduce healthcare costs.[6]A University of Maryland study indicated that over 8 years, an antibiotic stewardship program saved $17 million.[7]

NQF has endorsed a number of consensus standards to evaluate the quality of care for topic areas related to infectious disease over the past decade. As quality measurement has matured, better data systems have become available, electronic health records are closer to widespread adoption, and the demand for meaningful performance measures has prompted development of more sophisticated measures of healthcare processes and outcomes for infectious disease conditions. An evaluation of the NQF-endorsed® infectious disease measures and consideration of new measures will ensure the currency of NQF's portfolio of voluntary consensus standards.

Measure Evaluation

On August 28-29, 2012 the Infectious Disease Steering Committee evaluated 5 new measures and 29 measures undergoing maintenance review against NQF's standard evaluation criteria. To facilitate the evaluation, the Committee and candidate standards were divided into 4 workgroups for preliminary review of the measures against the evaluation sub-criteria prior to consideration by the entire Steering Committee. The Committee's discussion and ratings of the criteria are summarized in the evaluation tables beginning on page 9.

	MAINTENANCE	NEW	TOTAL
Measures under consideration	29	5	34
Measures withdrawn from consideration	7	0	7
Measures Recommended	10	4	14
Measures Still Under Consideration	1	0	1
Not recommended	11	1	12
Reasons for Not Recommending	Importance – 6 Scientific Acceptability – 4 Overall – 1	Importance-1	

Overarching Issues

During the Steering Committee's discussion of the measures, several overarching issues emerged that were factored into the Committee's ratings and recommendations for multiple measures and are not repeated in detail with each individual measure:

Disparities-sensitive Measures

HIV/AIDS and Hepatitis C affect certain groups disproportionately within the general population. According to the CDC, African Americans and gay and bisexual men account for a higher proportion of HIV infections at all stages of the disease—from new infections to deaths.[8] African Americans have a substantially higher rate of chronic Hepatitis C infection than do Caucasians and other ethnic groups. Within the African American community, chronic liver disease, often Hepatitis C-related, is a leading cause of death among people ages 45-64.[9]

While the measure submissions did not frequently include measure results stratified to assess disparities, seven measures were identified as disparities-sensitive (Appendix F), including four new measures for HIV/AIDS. This lack of data to assess the quality gap limited the ability of NQF's measure assessment protocol to identify disparities-sensitive measures, particularly for Hepatitis C in which there are known racial and ethnic disparities. In order to rectify this issue, the EHR specifications for the measures for HIV/AIDS and Hepatitis C now include key demographic data elements for gender, race, ethnicity, preferred language, payer and age that should allow for stratification over time.

Electronic Health Record (EHR) measure testing

Many measures were submitted with testing results as described in NQF's 2010 Testing Task Force report. Sometimes the results demonstrated lack of agreement between the automated results calculated by the EHR and visual inspection of the record by professional data abstractors. Steering Committee members asked the developers how discordant testing results were handled. The developer responded that EHR automated reporting consistently under-reports unless modifications are made to

enhance the data capture. After the initial testing, which is reported in the measure submissions, the test sites made modifications to work flow and data capture to improvement the reliability of the automated results.

Many of the original submission for the EHR measures indicated other data sources for the measures; however, since testing was not performed using those data sources (e.g., CPT-II codes), the NQF endorsement applies only to measure with EHR specifications.

Evidence guidance

Many measure submissions did not include sufficient information on the quantity, quantity and consistency of the evidence criteria as described by the NQF 2010 Evidence Task Force report. Many submissions refer to clinical guidelines without description of the underlying studies that support the guidelines. In July 2012, the Consensus Standards Approval Committee (CSAC) discussed the challenges of the information required for the evidence criterion identified by NQF staff and measure developers. The CSAC decided that despite the obvious challenges, there is no need to change the criteria and every effort should be made to assist the developers in providing the information needed by the Committee to evaluate the evidence criterion.

The information provided to the Committee for the Infectious Disease measures was quite variable in detail and responsiveness to the NQF criteria for the quantity, quality and consistency of the evidence. To better understand the reasons for the Committee voting "NO" for the evidence criterion, two "NO" voting options were given:

- No, evidence does not meet guidance for quantity, quality, consistency (including no empirical evidence exists); or
- No, insufficient information submitted to rate quantity, quality, consistency of body of evidence.

If the Committee voted *No, evidence does not meet guidance for quantity, quality, consistency (including no empirical evidence exists)* they were given an opportunity to consider making an exception to the evidence criteria. If the Committee voted *No, insufficient information submitted to rate quantity, quality, consistency of body of evidence,* they were given an opportunity to re-vote on the criterion based on their own knowledge of the evidence as meeting NQF's criteria.

Recommendations for Future Measure Development

During their discussions the Committee identified numerous areas where additional measure development is needed:

- Antimicrobial stewardship
- HIV/AIDS
    - Testing for individuals 13-64 years of age
    - Colposcopy screening for women living with HIV who have abnormal PAP smear tests
    - Resistance testing for persons newly enrolled in HIV care with a viral load greater than 1000

    - HIV screening at first prenatal care visit for all pregnant women
- Process and outcome measures to evaluate improvements in device associated infections in the hospital setting, particularly catheter-associated urinary tract infection

Measure Evaluation Summary

Measures Recommended

Measure Still under Consideration

Measures not Recommended

Measures Withdrawn from Consideration

NOTE: Measure submission forms can be accessed by clicking on the NQF measure number in the tables below.

Measures Recommended

Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable; Y=Yes; N=No

0058 Avoidance of antibiotic treatment in adults with acute bronchitis

Status: Maintenance, Original Endorsement: Aug 10, 2009
Description: The percentage of adults 18–64 years of age with a diagnosis of acute bronchitis who were not dispensed an antibiotic prescription.
Numerator Statement: Patients who were dispensed antibiotic medication (see Table 1) on or three days after an outpatient or ED encounter for acute bronchitis (a higher rate is better). The measure is reported as an inverted rate (i.e. 1- numerator/denominator) to reflect the number of people that were not dispensed an antibiotic.
Denominator Statement: All patients 18 years as of January 1 of the year prior to the measurement year to 64 years as of December 31 of the measurement year with a claim/encounter for a diagnosis of acute bronchitis (refer to Table 2) and an outpatient or ED visit code (refer to Table 3) during the Intake Period (January 1–December 24 of the measurement year).
Exclusions: N/A
Adjustment/Stratification: No risk adjustment or risk stratification N/A
Level of Analysis: Health Plan, Integrated Delivery System
Type of Measure: Process
Data Source: Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Pharmacy
Measure Steward: National Committee for Quality Assurance

STEERING COMMITTEE MEETING [08/28/2012]
Importance to Measure and Report: The measure meets the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-19; M-0; L-0; I-0**; 1b. Performance Gap: **H-16; M-2; L-0; I-0** 1c. Evidence: **Y-19; N-0; I-0;**
Rationale:

- Acute bronchitis is a very common diagnosis - it affects approximately 5 percent of U.S. adults annually and continues to rank among the top 10 conditions for which patients seek treatment in clinical settings.
- The use of antibiotics in these types of conditions is a significant harm in that it increases the selection of resistance for the common pathogens.
- The performance gap data indicates the percentage of patients who had acute bronchitis but were not prescribed an antibiotic is quite low (22-25 percent).
- The developer's data does not demonstrate much improvement over time. It is not clear how much effect this measure has had on improving appropriate antibiotic use for acute bronchitis.
- There is no data on disparities.
- An April 18, 2012 Cochrane systematic review of 15 trials of 2618 patients found limited evidence for marginal benefit of antimicrobials. The Cochrane review notes that "However, the magnitude of this benefit needs to be considered in the broader context of potential side effects, including medicalization for a self-limiting condition, increased resistance to respiratory pathogens and cost of antibiotic treatment[10].
- An *Up-To-Date* review of literature though July 2012 by T File noted "Update provides clearer evidence on the lack of effectiveness of antibiotics for acute bronchitis." "We recommend NOT treating patients with presumed acute bronchitis with empiric antibiotic therapy (Grade 1A)".

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-2; M-15; L-1; I-1** 2b. Validity**: H-0; M-11; L-1; I-7**
Rationale:

- A signal to noise analysis of reliability for this measure was calculated using HEDIS health plan

performance data for 2011. Reliability statistics at the level of the measure score are high.

- Committee members suggest that consistent classification of acute bronchitis and URI can be subjective and challenging.
- A recent review using data from a large, integrated health system examined trends in antibiotic use for acute bronchitis from 2006 to 2009 and observed an unintended consequence of this measure. While there was a significant reduction of patients treated with antibiotics for diagnosis code 466.0 (acute bronchitis) there was a significant increase in the use of diagnosis code 490 (bronchitis, not otherwise specified) associated with antibiotic use. As a result, the odds of an antibiotic prescription for codes 466 and 490 combined decreased only slightly and suggested the measure influenced a change in diagnosis coding as an unintended consequence which resulted in continuing antibiotic use[11].
  - The developer noted that auditors must sign off on the results that are submitted by the health plans, and they do look for shifts in measure rates, and would go back and look and see if there was a major shift in coding practices. The developers are also investigating different ways to look at the frequency of the codes used to identify certain conditions.
  - The developer also noted that the initial field testing in 2004 across four plans' different claims' diagnosis indicated using multiple claims to identify both the diagnosis and comorbidities between the two, that the use of code 466 was between 77 and 81 percent across different plans and the percentage of code 499 was an average of about 22 percent. The developer concluded the use of 466 was the appropriate code and the use of 490 was the inappropriate code. In light of the new evidence, the developers plan to retest the codes across different plans across the nation.
- Validity is a concern due to the potential shift in diagnosis because it reflects one billing code; a simple change to "bronchitis not specified" will miss the cases.
- When asked if the measure captures delayed prescriptions for patients with symptoms of bronchitis who were prescribed an antibiotic a week or so after having phone contact with their physician, the developer responded that they are not able to capture the phone encounter in claims data but may be able to do so in EHR. The EHR will be more flexible in the choices for dispensing medication.
- The developer reported that an EHR measure is in development; the feasibility testing has been completed but further testing for reliability and validity is pending. EHR testing for validity will provide another opportunity to look at validity of diagnosis and other threats to validity.

3. Usability: H-9; M-10; L-0; I-0

(*Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)*

Rationale:

- This measure is used in public reporting for health plans through HEDIS - results are published through venues such as the annual State of Healthcare Quality report, Quality Compass and America's Best Health Plans.
- Committee members discussed the low rate of appropriate use of antibiotics (22 percent). Some members suggested that there is limited accountability and lack of appropriate incentives.

4. Feasibility: H-8; M-10; L-1; I-0

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

Rationale:

- This is a health plan level measure based on administrative data and is widely used.
  - The developer reported that the programming is done through certified software vendors' administrative claims algorithm that looks for these different comorbid conditions within a certain time frame from the initial encounter and diagnosis.
- Mary Blank indicated that this measure is used by Highmark BCBS for payment incentives and works

0058 Avoidance of antibiotic treatment in adults with acute bronchitis

very well from claims.
- The developer indicated that an EHR version of this measure is in development.

5. Related and Competing Measures
- No related or competing measures noted.

Steering Committee Recommendation for Endorsement: Y-19; **N-0**

0069 Appropriate treatment for children with upper respiratory infection (URI)

Status: Maintenance, Original Endorsement: Aug 10, 2009
Description: Percentage of children 3 months to 18 years of age with a diagnosis of URI who were not dispensed an antibiotic medication.
Numerator Statement: Patients who were dispensed antibiotic medication (Table 1) on or within 3 days after an outpatient or ED encounter for upper respiratory infection (URI) (a higher rate is better). The measure is reported as an inverted rate (i.e. 1- numerator/denominator) to reflect the number of children that were not dispensed an antibiotic.
Denominator Statement: All children age 3 months as of July 1 of the year prior to the measurement year to 18 years as of June 30 of the measurement year who had an ED or outpatient visit with only a diagnosis of nonspecific upper respiratory infection (URI) (Table 2) during the intake period (July 1st of the year prior to the measurement year to June 30th of the measurement year).
Exclusions: N/A
Adjustment/Stratification: No risk adjustment or risk stratification N/A
Level of Analysis: Health Plan, Integrated Delivery System
Type of Measure: Process
Data Source: Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Pharmacy
Measure Steward: National Committee for Quality Assurance

STEERING COMMITTEE MEETING [08/28/2012]
Importance to Measure and Report: The measure meets the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-19; M-1; L-0; I-0**; 1b. Performance Gap: **H-3; M-15; L-2; I-0** 1c. Evidence: **Y-15; N-3; I-2**
Rationale:
- This is a common reason for ambulatory visits.
- There is better performance of this overuse measure compared to measure 0058: *Avoidance of antibiotic treatment in adults with acute bronchitis* because pediatricians are more selective in prescribing and there is a longer list of exclusions for this measure compared to 0058.
- Small improvement in performance rate - 84.49 percent in 2011 versus 83.61 percent in 2009 for Commercial and 87.18 percent in 2011 versus 85.49 percent in 2009 for Medicaid. A Committee member stated that even if the performance rate continues to improve this measure should not be retired due to the importance of the measure focus.
- No data on disparities was provided.
- There is a great deal of evidence for unnecessary antimicrobials in URIs and antibiotic resistance. There are more studies for adults than for children, but sufficient to meet NQF criteria.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-5; M-15; L-0; I-0** 2b. Validity**: H-2; M-14; L-2; I-2**

0069 Appropriate treatment for children with upper respiratory infection (URI)

Rationale:

- This is a health plan level measure. The data is based on dispensed medications using pharmacy claims.
- A signal to noise analysis of reliability for this measure was calculated using HEDIS health plan performance data for 2011. Reliability statistics at the level of the measure score are high.
- Face validity tested by a panel of experts
- When asked if the measure captures delayed prescriptions for patients with symptoms of URI who were prescribed an antibiotic a week or so after having phone contact with their physician, the developer responded that they are not able to capture the encounter in claims data but may be able to do so in EHR. The EHR will be more flexible in the choice for dispensing medication. When the Committee asked about low cost drugs from discount pharmacies, the developer reported that these prescriptions are variably captured in the measure depending on whether the discount pharmacy shares the data.
- The developer noted that the time window was determined during the original field testing when it was found that three days was the appropriate time frame due to the other comorbid conditions and the appropriateness for the antibiotics in this population group
- A Committee member suggested testing this measure for the adult population and comparing it to the results for measure 0058 as another test of the validity of the measure. It was suggested that this analysis could answer the question of why the results of measures 0058 and 0069 are so different.

3. Usability: H-10; M-10; L-0; I-0

(*Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)*

Rationale:

- This measure is used in public reporting for health plans through HEDIS - results are published through venues such as the annual State of Healthcare Quality report, Quality Compass and America's Best Health Plans.
- The EHR measure has been approved for Meaningful Use – the developer will submit the EHR measure for consideration of NQF endorsement when reliability and validity testing are completed.

4. Feasibility: H-4; M-14; L-2; I-0

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

Rationale:

- This is a health plan level measure that used administrative data and is widely used. Claims capture dispensed medication only.
- The developers indicate that an EHR version of this measure is in development. The EHR measure can look at prescribed as well as dispensed and will have additional options for future measures to determine the time frames between those prescribing and dispensing as they occur. A Committee member asked how delayed prescriptions work with ePrescribing. Others noted that some pharmacies put the ePrescription on file until the patient activates it though this does not seem to be a universal practice.

5. Related and Competing Measures

- No related or competing measures noted.

Steering Committee Recommendation for Endorsement: Y-20; N-0

0395 Paired Measure: Hepatitis C ribonucleic acid (RNA) testing before initiating treatment (paired with 0396)

Status: Maintenance, Original Endorsement: Jul 31, 2008
Description: Percentage of patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment for whom quantitative HCV RNA testing was performed within 6 months prior to initiation of antiviral treatment
Numerator Statement: Patients for whom quantitative HCV RNA testing was performed within 6 months prior to the initiation of antiviral treatment
Denominator Statement: All patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment
Exclusions: Documentation of medical reason(s) for not performing quantitative HCV RNA testing within 6 months prior to the initiation of treatment
Adjustment/Stratification: No risk adjustment or risk stratification None We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.
Level of Analysis: Clinician : Group/Practice, Clinician : Individual, Clinician : Team
Type of Measure: Process
Data Source: Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Laboratory, Electronic Clinical Data : Registry
Measure Steward: American Medical Association - Physician Consortium for Performance Improvement (AMA-PCPI) **Other organizations:** American Association for the Study of Liver Diseases, American Gastroenterological Association Institute

STEERING COMMITTEE MEETING [08/28/2012]
Importance to Measure and Report: The measure meets the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-9; M-10; L-0; I-0**; 1b. Performance Gap: **H-5; M-14; L-0; I-1** 1c. Evidence: **Y-13; N-2; I-5**
Rationale:

- Viral load testing prior to therapy is important to ensure that the patient hasn't cleared the virus as 15-20 percent of patient may, and to assess the magnitude of the viral load to monitor treatment.
- This clinician level measure was used in the 2008-2009 PQRS programs that reported a mean performance of 80 percent. The developer indicated that the 2010 results have dropped to 23.05 percent.
- Committee members questioned how representative the PQRS data relative to other national data:
  - The developer responded that the *Annals of Internal Medicine* paper by Kanwal[12] surprisingly stated that only about 60 percent of patients had a baseline viral load done within the prior six months.
  - Committee members questioned the drop in the performance results. The developer responded that in the PQRS program as more providers participate and report in later years, the providers are not doing as well. CMS does not audit the data in the PQRS program. The developer suggested that perhaps providers who originally signed up for PQRS did not continue to submit data because the incentive was not sufficient.
- The Committee noted that only the AASLD guideline was referenced for evidence. The developer provided additional information that 111 patients with biopsy-proven hepatitis C followed for more than five years, two patients spontaneously resolve their infections without any antiviral treatment. In 1667 patients with a history of injection drug use with hepatitis C infection assumed to be chronic, 90 out of 919 cleared the hepatitis C virus over 85 months.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-1; M-17; L-1; I-1** 2b. Validity**: H-0; M-19; L-0; I-1**

0395 Paired Measure: Hepatitis C ribonucleic acid (RNA) testing before initiating treatment (paired with 0396)

Rationale:

- The measure was tested in EHRs. The kappa for the measure result comparing the automated results from the EHR and the visual inspection of the record was 0.47 (moderately reliability).
- The Committee asked about the reliability of the CPT II codes. The developer confirmed that testing for reliability of the measure based on CPT II codes is not available.
- Committee members asked how "newly initiated on therapy" status was determined outside of an EHR. The developer responded that the CPT II codes are used but they have not been tested for reliability. NQF staff advised the Committee that NQF only endorses measures on the data platforms on which they have been tested – so this measure can only be endorsed as an EHR measure.
- The drop in performance from 80 percent to 20 percent in PQRS raised the question of the reliability and validity of the measure. The developer responded that the testing of the EHR measure did indicate reliability and validity.

3. Usability: H-12; M-8; L-0; I-0
(*Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)*
Rationale:

- The measure is easy to understand.
- The measure has been in use in PQRS for several years though PQRS results are not publicly reported.

4. Feasibility: H-9; M-11; L-0; I-0
(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)
Rationale:

- This measure is available for EHRs.

5. Related and Competing Measures

- No related or competing measures noted.

Steering Committee Recommendation for Endorsement: Y-19; N-1

0396 Paired Measure: HCV genotype testing prior to treatment (paired with 0395)

Status: Maintenance, Original Endorsement: Jul 31, 2008
Description: Percentage of patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment for whom HCV genotype testing was performed prior to initiation of antiviral treatment
Numerator Statement: Patients for whom HCV genotype testing was performed prior to initiation of antiviral treatment
Denominator Statement: All patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment
Exclusions: None
Adjustment/Stratification: No risk adjustment or risk stratification None We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.
Level of Analysis: Clinician : Group/Practice, Clinician : Individual, Clinician : Team
Type of Measure: Process

0396 Paired Measure: HCV genotype testing prior to treatment (paired with 0395)

Data Source: Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Laboratory, Electronic Clinical Data : Registry
Measure Steward: American Medical Association - Physician Consortium for Performance Improvement (AMA-PCPI) **Other organizations:** American Association for the Study of Liver Diseases, American Gastroenterological Association Institute

STEERING COMMITTEE MEETING [08/28/2012]
Importance to Measure and Report: The measure meets the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-15; M-5; L-0; I-0**; 1b. Performance Gap: **H-3; M-16; L-1; I-0** 1c. Evidence: **Y-15; N-4; I-1**
Rationale:

- This is a very similar measure to 0395: *Hepatitis C ribonucleic acid (RNA) testing before initiating treatment* except it is for genotype testing prior to therapy. Unlike viral RNA testing, there is no timeframe – the test needs to be done only once.
- Current therapy is determined by the genotype of the virus so this is an important pre-treatment test.
- The performance mean result from the 2008-2010 PQRS data is 80 percent.
- The use of genotype testing for treatment decisions seems well accepted, but not much documentation is presented.
- Some Committee members found it hard to accept that treatment is being given without genotype testing since specific treatment is determined by the genotype.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-0; M-18; L-1; I-1** 2b. Validity**: H-1; M-19; L-0; I-0**
Rationale:

- This measure was only tested in EHRs similar to measure 0395.
- The results of reliability are similar to that of measure 0395. The kappa score is 0.56 (moderate agreement).

3. Usability: H-5; M-14; L-0; I-1
(*Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)*
Rationale:

- The results are easy to understand and interpret.
- The measure has been used in the PQRS program since 2008.

4. Feasibility: H-1; M-16; L-2; I-1
(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)
Rationale:

- Committee members noted some concern with the possibility of repeated testing when a patient is referred to a specialist for treatment as a potential unintended consequence.

5. Related and Competing Measures

- No related or competing measures noted.

Steering Committee Recommendation for Endorsement: Y-20; N-0

0398 Hepatitis C: HCVRNA testing at no greater than week 12 of treatment

Status: Maintenance, Original Endorsement: Jul 31, 2008
Description: Percentage of patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment for whom quantitative HCV RNA testing was performed at no greater than 12 weeks from initiation of antiviral treatment
Numerator Statement: Patients for whom quantitative HCV RNA testing was performed at no greater than 12 weeks from the initiation of antiviral treatment
Denominator Statement: All patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment
Exclusions: Documentation of medical reason(s) for not performing quantitative HCV RNA testing at no greater than 12 weeks from the initiation of antiviral treatment
Documentation of patient reason(s) for not performing quantitative HCV RNA testing at no greater than 12 weeks from the initiation of antiviral treatment
Adjustment/Stratification: No risk adjustment or risk stratification None We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.
Level of Analysis: Clinician : Group/Practice, Clinician : Individual, Clinician : Team
Type of Measure: Process
Data Source: Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Laboratory, Electronic Clinical Data : Registry
Measure Steward: American Medical Association - Physician Consortium for Performance Improvement (AMA-PCPI)

STEERING COMMITTEE MEETING [08/28/2012]
Importance to Measure and Report: The measure meets the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-11; M-9; L-0; I-0**; 1b. Performance Gap: **H-3; M-15; L-1; I-0** 1c. Evidence: **Y-17; N-2; I-1**
Rationale:

- The Committee pointed out that the title says "at week 12 of treatment" and the description says "HCV RNA testing was performed at no greater than 12 weeks from initiation of antiviral treatment." The developer revised the title of the measure adding 'no greater than.'
- The impact of testing people for treatment results is extremely important because it will dictate the duration of therapy which has major impact on overall cost and success of therapy.
- The original submission only referred to AASLD guidelines that rated the testing recommendations as 1a, 2a and 2b. Additional information provided by the developer described a total of 14 studies in which the antiviral responses in the course of therapy at week 12 or prior to week 12 of therapy had a direct outcome on the subsequent duration of therapy. These studies included at least six meta-analyses and four randomized controlled trials, the most notable are three *New England Journal* reported trials (SPRINT-2, PROVE 2 and REALIZE trials).
- The virologic responses at week 12 are being used very heavily for "stopping rules" so people who are genotype 2 and 3 have viral loads that do not drop more than two logs are considered failures and are stopping therapy. These particular measurements early in therapy or particularly at week 12 have a big impact on the overall ability to stop therapy and reduce costs and toxicity to patients.
- The mean PQRS result is 91.6 percent and the aggregate performance is 89.9 percent, which is a small gap. The developer added that the Kanwal study[13] indicated performance at approximately 60 percent.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-0; M-15; L-1; I-1** 2b. Validity**: H-0; M-17; L-2; I-1**
Rationale:

- The measure is specified for a viral load within 12 weeks. This could be week 1, 4, 8 or any time up to

0398 Hepatitis C: HCVRNA testing at no greater than week 12 of treatment

week 12.

- In the workgroup discussion it was noted that genotype 1 patients require a viral load response at week four for a rapid virologic response. The developer indicated that the measure was meant to be inclusive which why they chose the 12 week parameter, not to be exclusive.
- This measure was tested in EHRs. The Committee raised the same issues with capturing exceptions as in measure 0397: *Antiviral treatment prescribed*.

3. Usability: H-3; M-16; L-0; I-1
(*Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)*
Rationale:

- The measure is in use in PQRS but the results are not publicly reported.
- NQF staff advised the Committee that NQF solicits implementation feedback at any time and specifically at the start of every endorsement maintenance project.

4. Feasibility: H-1; M-18; L-0; I-1
(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)
Rationale:

- This measure is similar to all other EHR based hepatitis C measures.

5. Related and Competing Measures

- No related or competing measures noted.

Steering Committee Recommendation for Endorsement: Y-19; N-1

0399 Paired Measure: Hepatitis C: Hepatitis A vaccination (paired with 0400)

Status: Maintenance, Original Endorsement: Jul 31, 2008
Description: Percentage of patients aged 18 years and older with a diagnosis of hepatitis C who have received at least one injection of hepatitis A vaccine, or who have documented immunity to hepatitis A
Numerator Statement: Patients who have received at least one injection of hepatitis A vaccine, or who have documented immunity to Hepatitis A
Denominator Statement: All patients aged 18 years and older with a diagnosis of hepatitis C
Exclusions: Documentation of medical reason(s) for not receiving at least one injection of hepatitis A vaccine Documentation of patient reason(s) for not receiving at least one injection of hepatitis A vaccine
Adjustment/Stratification: No risk adjustment or risk stratification None We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.
Level of Analysis: Clinician : Group/Practice, Clinician : Individual, Clinician : Team
Type of Measure: Process
Data Source: Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Laboratory, Electronic Clinical Data : Registry
Measure Steward: American Medical Association - Physician Consortium for Performance Improvement (AMA-PCPI) **Other organizations:** American Association for the Study of Liver Diseases, American Gastroenterological Association Institute

STEERING COMMITTEE MEETING [08/28/2012]

0399 Paired Measure: Hepatitis C: Hepatitis A vaccination (paired with 0400)

Importance to Measure and Report: The measure meets the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-5; M-10; L-1; I-4**; 1b. Performance Gap: **H-8; M-12; L-0; I-0** 1c. Evidence: **Y-7; N-6; I-7**
Exception to evidence: Y -16; N-4
Rationale:

- The measure submission indicates that 80 percent of the estimated 4.1 million persons positive for antibody to hepatitis C still have virus in the blood. Hepatitis C is the principal cause of death from liver disease and the leading indication for liver transplantation in the U.S.
- The measure submission discusses hepatitis C but not co-infection with Hepatitis A. There is no data on the rate of hepatitis A co-infection presented and no discussion of the extent of the problem of co-infection with hepatitis A for patients with hepatitis C.
  - The developer responded with results of a widely cited study[14] in the *New England Journal of Medicine* in which 17 cases of hepatitis A superimposed on hepatitis C with seven developing fulminant hepatic failure, six of whom died.
  - Committee members responded that the single study data does not represent complete data for the mortality of hepatitis A in patients with hepatitis C.
- 67.47 percent is the mean performance for the 244 clinicians reporting on 562 patients to CMS's PQRS program in 2010. The aggregate performance rate is 83.27 percent.
- Vaccination rates remain low in the US[15] and this measure may improve hepatitis A vaccination rates and reduce risk of further liver damage if exposed to hepatitis A.
- A Committee member asked about cost considerations. With more hepatitis C patients being identified due to the recent change in screening criteria, is there a cost benefit consideration with the increased use of vaccines? The developer noted that several cost-benefit studies in the U.S. suggest vaccination is cost effective.
- No disparities data were presented.
- A recent study shows gaps in vaccination in the VA population with chronic Hepatitis C infection. Although the incidence of superinfection with acute hepatitis B and hepatitis A were low, it was significantly lower in vaccinated patients[16].
- The developers present the evidence as based on the AASLD guideline that rates the recommendation and evidence as *Level IIa - Weight of evidence/opinion is in favor of usefulness/efficacy and Level C - Only consensus opinion of experts, case studies, or standard-of-care.*
- CDC recommends hepatitis A vaccination of all patients with chronic liver disease.
- Immunization rates for hepatitis A in children are rising and will reduce the population at risk in the future.
- The Committee approved an EXCEPTION to the evidence criteria because this measure aligns with immunization guidance from CDC and AASLD and vaccination is basic primary care for patients with hepatitis C.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-1; M-16; L-2; I-1** 2b. Validity**: H-1; M-18; L-1; I-0**
Rationale:

- The measure specifies at least one dose of hepatitis A vaccine was given. The serologic response to one dose of hepatitis A vaccine (80 percent) is better than one dose of hepatitis B vaccine. Some Committee members indicated that a single injection is an adequate marker for receiving the entire series. Other members supported evaluating whether the entire series was given.
- The measure can be satisfied by either vaccination or testing for immunity.
- In the EHR testing, the comparison of results from automated calculation by the EHR and visual inspection of the medical record resulted in a kappa score of 0.48 (moderate agreement). The EHR did

0399 Paired Measure: Hepatitis C: Hepatitis A vaccination (paired with 0400)

not capture allowable exclusions. The percentage of false negative results was 14.30 percent (3 out of 21 patients) for the measure. This represents a change in measure performance from 49.70 percent to 50.00 percent, with an exception rate of 0.80 percent.

- Committee members suggested that childhood immunization or immunization in the remote past may not be found in the medical records.
  - The developer stated that any information that was not in the electronic health record or in the patient's chart is considered not to be real information. If it is not documented, the provider doesn't know about it.
- When asked whether the 12 month time window could be confused with a need for annual vaccination, the developer responded that the patient must be seen within the 12-month time window but any vaccination that is relevant would count for the measure. SNOMED codes for EHRs allow specific documentation of immunity.

3. Usability: H-11; M-9; L-0; I-0
(*Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)*
Rationale:

- This measure has been in use in the PQRS program since 2008 though results are not publicly reported.

4. Feasibility: H-7; M-13; L-0; I-0
(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)
Rationale:

- This measure is specified for use in EHRs.
- The measure is specified for only one injection to decrease the measurement burden.

5. Related and Competing Measures

- No related or competing measures noted.

Steering Committee Recommendation for Endorsement: Y-19; N-1
Rationale:

- The Committee approved an exception to the evidence criteria because this measure aligns with immunization guidance from CDC and AASLD and vaccination is basic primary care for patients with hepatitis C.

0404 HIV/AIDS: CD4 cell count or percentage performed

Status: Maintenance, Original Endorsement: Jul 31, 2008
Description: Percentage of patients aged six months and older with a diagnosis of HIV/AIDS, with at least two CD4 cell counts or percentages performed during the measurement year at least 3 months apart
Numerator Statement: Patients with at least two CD4 cell counts or percentages performed during the measurement year at least 3 months apart
Denominator Statement: All patients aged 6 months and older with a diagnosis of HIV/AIDS, who had at least two medical visits during the measurement year, with at least 90 days between each visit
Exclusions: None
Adjustment/Stratification: No risk adjustment or risk stratification N/A
Level of Analysis: Clinician : Group/Practice, Clinician : Individual
Type of Measure: Process

0404 HIV/AIDS: CD4 cell count or percentage performed

Data Source: Electronic Clinical Data : Electronic Health Record
Measure Steward: National Committee for Quality Assurance **Other organizations:** Physician Performance Measures (Measures) and related data specifications have been developed by the American Medical Association (AMA) in collaboration with the Physician Consortium for Performance Improvement™ (the Consortium) and the National Committee

STEERING COMMITTEE MEETING [08/28/2012]
Importance to Measure and Report: The measure meets the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-13; M-4; L-1; I-0** 1b. Performance Gap: **H-2; M-16; L-0; I-0** 1c. Evidence: **Y-15; N-3; I-0**
Rationale:

- This measure focuses on HIV patients six months and older with a CD4 cell count or percentage performed at least once every 6 months. CD4 cell count is a significant predictor of disease progression and survival.
- There are seven studies cited in the current DHHS guidelines. Five are cohort studies of 16,446 patients and two are control studies, case-controlled studies including 48 patients.
- In pediatrics, there are randomized controlled trials suggesting that monitoring frequency can lead to differential implementation of antiretroviral therapy. In this case, the evidence for children is actually higher than the adult population. The average performance rate in PQRS was 76.8 percent in 2009 and 83.9 percent in 2010.
- Committee members suggested that the apparently high percentage of testing overestimates the true activity. This measure requires two medical visits during the measurement year. One of the problems is that patients do not come back for a second visit; they are not counted in the measure.
- No information was provided on disparities. However, Committee members report that the CDC's Medical Monitoring Project [17] indicated that there were significant racial and ethnic disparities in HIV treatment.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-0; M-11; L-4; I-4** 2b. Validity**: H-0; M-10; L-4; I-5**
Rationale:

- The measure was tested in EHRs. There was concern that the testing of this measure used a small sample of clinics in the same geographic area that all used the same EHR. Geographic variation of testing cities would have made the results more valid.
- There was significant difference between the automated versus manual calculation; noting there was confusion about the numerator criteria (i.e., which codes to use, timing of the CD count). The developer explained that when the measure was tested, they were using a CD4/CD8 ratio code that was included in the list of codes. The developer has since removed the CD8 ratio because it was not an appropriate CD4 test to perform. The developer also noted that the confusion regarding timing may be because the measure specifies 'within six months' whether that means within each six-month's period of the year or if it means every six months is not clear. The developer was open to making revisions to clarify the numerator criteria.
- The Committee was concerned with the numerator and the timing of the CD4 cell count. It was stated that a stable patient on therapy who has been undetectable for 15 years, could have a medical visit in January and in June and the measure will not be met because it has to be at least every 6 months. However, on the other hand, a patient could be seen in January and December and would meet the measure when in actuality they were only seen once a year.
- The Committee asked for the developer to adequately define the CD4 cell count timing of every 6 months.

0404 HIV/AIDS: CD4 cell count or percentage performed

- The developer confirmed that the measure is "test performed" not just "test ordered".
- Committee members noted that the most recent DHHS guidelines regarding stable patients on antiretroviral therapy who are suppressed on antiretroviral therapy states that CD4 may be monitored every 6 to 12 months unless there are changes in the patient's clinical status.

3. Usability: H-4; M-10; L-1; I-4
(*Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)*
Rationale:

- The measure was used in CMS' PQRS program in 2009, 2010 and 2011. It will also be included in the 2012 program. In the future the measure may be used in a Maintenance of Certification program.

4. Feasibility: H-2; M-11; L-2; I-4

- *(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)*

Rationale:

- All data elements are available electronically.

5. Related and Competing Measures

- No related or competing measures noted.

Steering Committee Recommendation for Endorsement: Y-11; N-8

0405 HIV/AIDS: Pneumocystis jiroveci pneumonia (PCP) prophylaxis

Status: Maintenance, Original Endorsement: Jul 31, 2008
Description: Percentage of patients aged 6 weeks or older with a diagnosis of HIV/AIDS, who were prescribed Pneumocystis jiroveci pneumonia (PCP) prophylaxis
Numerator Statement: Numerator 1: Patients who were prescribed Pneumocystis jiroveci pneumonia (PCP) prophylaxis within 3 months of CD4 count below 200 cells/mm3
Numerator 2: Patients who were prescribed Pneumocystis jiroveci pneumonia (PCP) prophylaxis within 3 months of CD4 count below 500 cells/mm3 or a CD4 percentage below 15%
Numerator 3: Patients who were prescribed Pneumocystis jiroveci pneumonia (PCP) prophylaxis at the time of HIV diagnosis
Report a rate for each numerator (e.g., Numerator 1/Denominator 1, etc.) and a total rate (Total Numerator/Total Denominator)
Denominator Statement: Denominator 1. All patients aged 6 years and older with a diagnosis of HIV/AIDS and a CD4 count below 200 cells/mm3, 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/mm3 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
Exclusions: Denominator 1 Exclusion: Patient did not receive PCP prophylaxis because there was a CD4 count above 200 cells/mm3 during the three months after a CD4 count below 200 cells/mm3
Denominator 2 Exclusion: Patient did not receive PCP prophylaxis because there was a CD4 count above 500

cells/mm3 or CD4 percentage above 15% during the three months after a CD4 count below 500 cells/mm3 or CD4 percentage below 15%
Adjustment/Stratification: No risk adjustment or risk stratification N/A
Level of Analysis: Clinician : Group/Practice, Clinician : Individual
Type of Measure: Process
Data Source: Electronic Clinical Data : Electronic Health Record
Measure Steward: National Committee for Quality Assurance **Other organizations:** Physician Performance Measures (Measures) and related data specifications have been developed by the American Medical Association (AMA) in collaboration with the Physician Consortium for Performance Improvement™ (the Consortium) and the National Committee

STEERING COMMITTEE MEETING [08/29/2012]
Importance to Measure and Report: The measure meets the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-19; M-0; L-0; I-0**; 1b. Performance Gap: **H-14; M-4; L-0; I-1** 1c. Evidence: **Y-19; N-0; I-0**
Rationale:

- HIV is prevalent, late diagnosis is still common and CD4 cell counts below 200 continue to occur in the adult population. There are a substantial proportion of people in this country who still need prophylaxis for PCP.
- The different CD4 counts recommended for prophylaxis creates a complex measure with multiple numerators and denominators.
- PCP prophylaxis, when used in these risk groups, saves lives based on data from randomized controlled trials in both adults and children. The Committee determined that the impact is high and the data are of excellent quality.
- The performance data provided from PQRS shows that there is still a gap in performance (2009: 61.5 percent compliant and 2010: 75.8 percent compliant). Committee members were surprised at the gap in care from this data.
- A Committee member stated that although disparity data was not provided by the developer, disparities do exist amongst racial and ethnic backgrounds. Data from HRSA indicates there were disparities in the individuals who were prescribed PCP prophylaxis that was broken down by race and ethnicity with persons of color being less likely to be prescribed PCP.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-1; M-16; L-0; I-2** 2b. Validity**: H-2; M-15; L-0; I-2**
Rationale:

- This measure has been included for Stage 2 of meaningful use; e-measure specifications are included.
- The developer reported that although this is a complex measure with three different denominators to account for the varying indications of PCP prophylaxis for different age populations, the testing of the e-measure among three different sites all found that the measure is feasible as specified despite the complexity of the measure because the measure does rely on discrete and fairly easy to capture data elements. The specifications for this measure include denominator exclusions which makes the measure more accurate by aligning with current guidelines.
- The EHR testing comprised 242 patient encounters in community health centers in the Midwest. The reliability and validity testing of the EHR measure was done at the level of the measure score.
- The face validity presented was from a very small group that was evenly split on face validity. The developer responded that the major concern was about the youngest age population and whether or not it's appropriate to look for the one-time prescription of PCP prophylaxis among the much younger age group. The evidence states that the younger age population should be on PCP prophylaxis for a longer amount of time.

0405 HIV/AIDS: Pneumocystis jiroveci pneumonia (PCP) prophylaxis

3. Usability: H-10; M-9; L-0; I-0
(*Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)*
Rationale:

- This measure is publicly reported through the CMS PQRS program and was accepted for Stage 2 meaningful use program.

4. Feasibility: H-3; M-15; L-0; I-1
(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)
Rationale:

- This measure is specified for use in electronic health records.
- Being a part of the meaningful use program will potentially provide IT resources to sites that are incorporating this measure into their EHR.

5. Related and Competing Measures

- No related or competing measures noted.

Steering Committee Recommendation for Endorsement: Y-18; N-1

0408 HIV/AIDS: Tuberculosis (TB) screening

Status: Maintenance, Original Endorsement: Jul 31, 2008
Description: Percentage of patients aged 3 months and older with a diagnosis of HIV/AIDS, for whom there was documentation that a tuberculosis (TB) screening test was performed and results interpreted (for tuberculin skin tests) at least once since the diagnosis of HIV infection.
Numerator Statement: Patients for whom there was documentation that a tuberculosis (TB) screening test was performed and results interpreted (for tuberculin skin tests) at least once since the diagnosis of HIV infection.
NOTE: Results from the tuberculin skin test must be interpreted by a healthcare professional.
Denominator Statement: All patients aged 3 months and older with a diagnosis of HIV/AIDS, who had at least two visits during the measurement year, with at least 90 days in between each visit
Definition of "Medical Visit" - any visit with a health care professional who provides routine primary care for the patient with HIV/AIDS (may be but is not limited to a primary care clinician, ob/gyn, pediatrician, infectious diseases specialist)
Exclusions: Documentation of Medical Reason for not performing a tuberculosis (TB) screening test (e.g., patients with a history of positive PPD or treatment for TB)
Adjustment/Stratification: No risk adjustment or risk stratification N/A
Level of Analysis: Clinician : Group/Practice, Clinician : Individual
Type of Measure: Process
Data Source: Electronic Clinical Data : Electronic Health Record
Measure Steward: National Committee for Quality Assurance **Other organizations:** Physician Performance Measures (Measures) and related data specifications have been developed by the American Medical Association (AMA) in collaboration with the Physician Consortium for Performance Improvement™ (the Consortium) and the National Committee

STEERING COMMITTEE MEETING [08/29/2012]
Importance to Measure and Report: The measure meets the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)

0408 HIV/AIDS: Tuberculosis (TB) screening

1a. Impact: **H-11; M-4; L-0; I-0**; 1b. Performance Gap: **H-8; M-7; L-0; I-0** 1c. Evidence: **Y-13; N-1; I-1;**
Rationale:

- HIV patients with latent TB have a much higher risk developing active tuberculosis. This is a particular problem for persons born outside the US.
- The measure requires either a tuberculin skin test or interferon gamma-releasing assays (IGRA). There is limited evidence available for which test is appropriate within this population. With low CD4 counts obviously the reliability of the tuberculin skin test is not very reliable.
- The evidence is based on one randomized controlled trial and three practice guidelines that are appropriately graded.
- The performance rate from HIVQUAL in 2009 was 68.7 percent. According to the Committee's personal experience, there is much room for improvement.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-2; M-6; L-5; I-2** 2b. Validity**: H-1; M-7; L-7; I-0**
Rationale:

- The measure was tested in EHRs. Testing found that it is difficult to capture the data elements because of a lack of standardized fields for the test results/interpretation.
- There was a large gap between the manual and automated calculation. One Committee member suggested only allowing IGRA and not allow a PPD skin test which cannot be captured in the EHR.
- The measure as written specifies that the results are interpreted, but does not indicate by whom and how the results are documented. The interpretation of results, as written, could be done by any provider and the variability among provider perceptions of acceptable interpreters is too vast to have the numerator remain so unspecific.
- The numerator indicates screening at least once; the guideline cited by the developer, however, recommends annual screening for high risk populations.

3. Usability: H-0; M-10; L-4; I-1
(*Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)*
Rationale:

- This measure is not currently used for public reporting.
- The measure specifications only require testing once since diagnosis. The Committee was concerned that there may be historical data that does not get captured in this measure.

4. Feasibility: H-0; M-6; L-6; I-3
(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)
Rationale:

- The Committee identified feasibility challenges, such as, appropriate interpretation of the test results and follow-up care.
- Data capture may be very labor intensive.
- The developer indicated that the measure suffers from a lack of standardized fields at the provider level for capturing the test result accurately which has led to a discordance of 20 percent in EHR testing.

5. Related and Competing Measures

- No related or competing measures noted.

Steering Committee Recommendation for Endorsement: Y-9; N-6

0409 HIV/AIDS: Sexually transmitted diseases – Screening for chlamydia, gonorrhea, and syphilis

Status: Maintenance, Original Endorsement: Jul 31, 2008
Description: Percentage of patients aged 13 years and older with a diagnosis of HIV/AIDS, who have received chlamydia, gonorrhea, and syphilis screenings at least once since the diagnosis of HIV infection.
Numerator Statement: Patients who have received chlamydia, gonorrhea, and syphilis screenings at least once since the diagnosis of HIV infection.
Denominator Statement: All patients aged 3 months and older with a diagnosis of HIV/AIDS, who had at least two visits during the measurement year, with at least 90 days in between each visit.
Definition of "Medical Visit" - any visit with a health care professional who provides routine primary care for the patient with HIV/AIDS (may be but is not limited to a primary care clinician, ob/gyn, pediatrician, infectious diseases specialist)
Exclusions: None
Adjustment/Stratification: No risk adjustment or risk stratification N/A
Level of Analysis: Clinician : Group/Practice, Clinician : Individual
Type of Measure: Process
Data Source: Electronic Clinical Data : Electronic Health Record
Measure Steward: National Committee for Quality Assurance **Other organizations:** Physician Performance Measures (Measures) and related data specifications have been developed by the American Medical Association (AMA) in collaboration with the Physician Consortium for Performance Improvement™ (the Consortium) and the National Committee

STEERING COMMITTEE MEETING [08/29/2012]
Importance to Measure and Report: The measure meets the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-11; M-3; L-0; I-0**; 1b. Performance Gap: **H-7; M-8; L-0; I-0** 1c. Evidence: **Y-12; N-2; I-1**
Rationale:

- The measure when originally endorsed in 2008 was two measures; one measure for syphilis screening and one measure for gonorrhea and chlamydia screening.
- The evidence provided suggested that the HIV/AIDS population experiences a disproportionate disease burden compared to the general population. Control of sexually transmitted infections (STIs) is an important prevention measure.
- Evidence indicates that untreated specified STIs can increase HIV transmission.
- Data from PQRS indicated the chlamydia and gonorrhea performance rate was 32.4 percent and syphilis was 50.3 percent.
- Evidence was not provided on young patients with congenitally acquired HIV, who may or may not sexually active.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-0; M-10; L-4; I-1** 2b. Validity**: H-0; M-9; L-6; I-0**
Rationale:

- The Committee indicated the word 'screening' should be changed to 'serological testing'. Committee members indicated that providers could interpret the measure as screening for sexual activity and not perform the tests. The developer agreed to clarify the screening language to reflect that the measure is intended to capture a laboratory test.
- The Committee noted a significant difference between electronic health records versus manual calculation. The developer explained that at the particular site where the testing was performed, there was a problem in the EHR in which test data was not being captured in the correct standardized field. However, while the automated calculation was not correct, the information was available in the record. The developer has not tested this measure in other electronic medical records to see if the data could be more accurately captured

0409 HIV/AIDS: Sexually transmitted diseases – Screening for chlamydia, gonorrhea, and syphilis

- The numerator time window is not aligned with the guideline, which would require an annual screening for those reporting sexual activity. The developer explained that their expert panel noted that might not be appropriate for all patients, particularly those that are not sexually active. In addition, the developer noted that identifying sexually active patients is difficult to do consistently, reliably or validly at present. The developer's expert panel was split over whether one test or annual testing should be measured. The developer is particularly wary of encouraging overuse of testing.
- Some Committee members agreed that determining who should get recurrent testing or annual testing is very difficult to operationalize and capture reliably and are willing to accept the measure that is a minimum standard as long as there's evidence that performance is low.
- The measure was assessed using face validity with a mean rating of 3.5 out of 5; the expert panel had concerns surrounding screening annually versus once following diagnosis.

3. Usability: H-2; M-12; L-1; I-0
(*Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)*
Rationale:

- The measure is currently used in CMS' PQRS program.
- Use in PQRS shows a performance gap and continued use demonstrates usefulness.

4. Feasibility: H-0; M-14; L-0; I-1
(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)
Rationale:

- The measure results can be captured in EHRs.

5. Related and Competing Measures

- No related or competing measures noted.

Steering Committee Recommendation for Endorsement: Y-13; N-2

2079 Medical visit frequency

Status: New Submission
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. A medical visit is any visit in an outpatient/ambulatory care setting with a nurse practitioner, physician, and/or a physician assistant who provides comprehensive HIV care.
Numerator Statement: 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 prior 6-month period and the last medical visit in the subsequent 6-month period. (Measurement period is a consecutive 24-month period of time.)
Denominator Statement: 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.
Exclusions: Patients who died at any time during the 24-month measurement period.
Adjustment/Stratification: No risk adjustment or risk stratification Not applicable Not applicable
Level of Analysis: Facility, Clinician : Group/Practice
Type of Measure: Process
Data Source: Electronic Clinical Data : Electronic Health Record, Paper Medical Records

2079 Medical visit frequency

Measure Steward: Health Resources and Services Administration - HIV/AIDS Bureau **Other organizations:** The Center For Disease Control and Prevention

STEERING COMMITTEE MEETING [08/29/2012]
Importance to Measure and Report: The measure meets the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-13; M-5; L-1; I-0**; 1b. Performance Gap: **H-6; M-13; L-0; I-0** 1c. Evidence: **Y-14; N-4; I-1**
Rationale:

- This measure is looking at medical visits for HIV care in a 24-month period rather than a single year period. The measure is not specific to newly enrolled patients, but rather any patient currently receiving care.
- The intent of the measure is to examine not only adherence to the visit but also how frequently an individual made those visits over a 2-year period.
- The measure examines retention in care for HIV patients. Regular care provides opportunities for risk reduction counseling, monitoring of labs and initiation of treatment. The submission provides data that showed that each no-show clinic visit conveyed a 17 percent increased risk of delayed viral load suppression and CD4 counts were significantly greater amongst those with optimal retention.
- The evidence focused on two consistent, cohort studies and the DHHS guidelines for adults and adolescents with 14 studies examining the impact of treatment on reducing morbidity and mortality, 8 of studies focused on the impact of treatment on preventing transmission, 3 studies that supported the frequency of CD4 count monitoring and 9 studies supporting the frequency of viral load monitoring.
- There is significant room for improvement, as the data provided demonstrated that only 42.6 percent of patients met the HRSA criterion for retention to medical visits.
- The developer provided data on disparities which indicated that females, racial minorities and patient lacking private health insurance were significantly more likely to fail at establishing care.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-2; M-13; L-2; I-1** 2b. Validity**: H-0; M-16; L-1; I-2**
Rationale:

- This measure encourages providers to examine what they can do to maximize retention, such as providing good customer satisfaction programs. Committee members agreed that if you are not in care, you will not do well.
- The Committee discussed the role of patient compliance and agreed that patient compliance is out of the clinic or the provider's control. Some Committee members noted that this measure provided an opportunity for the provider to reengage the patient.
- The developer does not expect this measure to have 100 percent performance; there is leeway to account for patients who do not make their medical visit.
- The developer indicated that they had considered exclusions for incarcerated patients but found difficulty in capturing this data.
- Face validity was used to establish validity of this measure; however threats to validity were not addressed.

3. Usability: H-4; M-12; L-3; I-0
(*Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)*
Rationale:

- The intended use is for public health and disease surveillance, public reporting and quality improvement with benchmarking. The Committee agreed that a goal of 100 percent performance is unrealistic but improvement can be monitored.

2079 Medical visit frequency

- The developer intents to submit this measure for meaningful use and PQRS programs.

4. Feasibility: H-4; M-12; L-3; I-0
(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)
Rationale:

- All the data elements are contained within an electronic claims, appointment systems or EHRs.

5. Related and Competing Measures

- This measure directly relates to measure 2080: *Gaps in medical visit*. Measure 2079 looks at a two-year time period and measure 2080 looks at a one-year time period.
- Committee members concluded that the measures are complementary. Measure 2079 is assessing the clinic's persistency with care and excludes new patients who have not been treated in clinic for at least two years. Measure 2080 includes new patients who did not have a visit in the last six months. Measure 2080 has a shorter measurement period and includes more patients.

Steering Committee Recommendation for Endorsement: Y-18; N-1

2080 Gap in medical visits

Status: New Submission
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
A medical visit is any visit in an outpatient/ambulatory care setting with a nurse practitioner, physician, and/or a physician assistant who provides comprehensive HIV care.
Numerator Statement: Number of patients in the denominator who did not have a medical visit in the last 6 months of the measurement year (Measurement year is a consecutive 12-month period of time).
Denominator Statement: Number of patients, regardless of age, with a diagnosis of HIV who had at least one medical visit in the first 6 months of the measurement year. (The measurement year can be any consecutive 12-month period.)
Exclusions: Patients who died at any time during the measurement year.
Adjustment/Stratification: No risk adjustment or risk stratification Not applicable Not applicable
Level of Analysis: Facility, Clinician : Group/Practice
Type of Measure: Process
Data Source: Electronic Clinical Data : Electronic Health Record, Paper Medical Records
Measure Steward: Health Resources and Services Administration-HIV/AIDS Bureau **Other organizations:** The Centers For Disease Control

STEERING COMMITTEE MEETING [08/29/2012]
Importance to Measure and Report: The measure meets the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-7; M-7; L-2; I-3**; 1b. Performance Gap: **H-6; M-12; L-0; I-0** 1c. Evidence: **Y-13; N-1; I-3**
Rationale:

- This measure examines the number of patients who did not have a visit in the last 6 months of the measurement year; the measure is looking at the absence of HIV care.
- The measure is not specific to newly enrolled patients, but rather any patient currently receiving care. The intent of this measure is to examine retention in care in programs that are managing HIV infected patients.

2080 Gap in medical visits

- The evidence is the same as for measure 2079 but looks at a different perspective of retention in care (i.e., the absence of HIV care).
- The measure is designed for clinicians, clinics or facilities providing HIV care though it can be used by other providers who do not necessarily specialize in HIV but who offer HIV services.
- Committee members noted that there are very consistent observational data and well-designed studies ranging from small to multi-center large studies showing that if patients are not retained in care they are less likely to be prescribed ART, less likely to adhere to ART, less likely to achieve viral suppression and survival time is shorter.
- The Committee discussed the relationship between better outcomes and increased retention and identified that the observational data provided by the developer did not assess causality. The Committee stated that in order to have more confidence in the data the developer should have controlled for confounding variables, and then proceeded to compare patient outcomes.
- The Committee discussed the notion of patients moving from provider to provider. However, data from Philadelphia showed that less than 3 percent of people with HIV/AIDS get seen by multiple providers in a 12-month period.
- Disparities were identified in this measure, especially amongst females and minorities.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-4; M-14; L-0; I-0** 2b. Validity**: H-2; M-14; L-0; I-2**
Rationale:

- Committee members were concerned whether or not the medical visit could be specified to identify who the medical visit was with, as the data would not support seeing another physician (such as an OB/GYN) in one 6 month period, and then the HIV specialist in the next 6 month period.
    - The developer clarified that the intent of the measure is to be used in a clinic or HIV care setting and most often the OB/GYN is not part of an HIV clinic.
- This measure assumes that the patient is being cared for by the same physician after 6 months.
- The Committee stated that the reliability testing of the measure score was high.
- Face validity using a technical work group of 20-25 members and a series of webinars with HIV providers across the U.S. was used to establish validity of this measure.

3. Usability: H-8; M-10; L-0; I-0
(*Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)*
Rationale:

- The intended use is for public health and disease surveillance, public reporting and quality improvement with benchmarking.
- The developer intents to submit this measure for meaningful use and PQRS programs.

4. Feasibility: H-7; M-10; L-0; I-0
(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)
Rationale:

- All the data elements are contained within an electronic claims, appointment systems and EHRs.

5. Related and Competing Measures

- This measure directly relates to measure 2079: *Medical visit frequency*. Measure 2079 looks at a two-year time period and measure 2080 looks at a one-year time period.
- Committee members concluded that the measures are complementary. Measure 2079 is assessing the clinic's persistency with care and excludes new patients who have not been treated in clinic for at least

2080 Gap in medical visits
two years. Measure 2080 includes new patients who did not have a visit in the last six months. Measure 2080 has a shorter measurement period and includes more patients.
Steering Committee Recommendation for Endorsement: Y-18; N-0

2082 HIV viral load suppression
Status: New Submission **Description:** Percentage of patients, regardless of age, with a diagnosis of HIV with a HIV viral load less than 200 copies/mL at last HIV viral load test during the measurement year A medical visit is any visit in an outpatient/ambulatory care setting with a nurse practitioner, physician, and/or a physician assistant who provides comprehensive HIV care. **Numerator Statement:** 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 Statement:** Number of patients, regardless of age, with a diagnosis of HIV with at least one medical visit in the measurement year **Exclusions:** There are no patient exclusions. **Adjustment/Stratification:** No risk adjustment or risk stratification Not applicable Not applicable **Level of Analysis:** Facility, Clinician : Group/Practice **Type of Measure:** Outcome **Data Source:** Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Laboratory, Paper Medical Records **Measure Steward:** Health Resources and Services Administration - HIV/AIDS Bureau **Other organizations:** The Centers for Disease Control
STEERING COMMITTEE MEETING [08/29/2012] **Importance to Measure and Report: <u>The measure meets the Importance criteria</u>** (1a. High Impact: 1b. Performance Gap, 1c. Evidence) 1a. Impact: **H-18; M-1; L-0; I-0**; 1b. Performance Gap: **H-7; M-12; L-0; I-0** 1c. Evidence: **Y-18; N-1; I-0** <u>Rationale</u>: • There is a substantial relationship between viral load suppression and the reduction of morbidity, mortality and HIV transmission. Emerging evidence of earlier antiretroviral therapy indicates decreased HIV-associated complications. • There is data to support the measure focus for the adolescent and adult populations; however, there are limited data for the pediatric population. • While there is a movement towards treating all children with HIV, there are providers who do not treat asymptomatic high viral loads and high CD4 counts, in which this measure does not account for. • The DHHS guidelines whose treatment recommendations are based on the analysis of six randomized controlled trials. One of those is a meta-analysis of nine randomized controlled trials. In addition, there were eight observational studies. • The Committee asked why it is the last viral load and not any of the viral loads within that year. The developer responded that it's two fold. First, the last viral load is the most current information about the patient and second, it is very straightforward and easy to calculate. • Data from the Medical Monitoring Project[18] showing 77 percent achieved viral load suppression at most recent test. Additional data from King County showed 65 percent achieved undetectable at the last test. Data from Kaiser Permanente showed that 94.5 percent achieved undetectable at the last viral load if they were known to be on ARV therapy with 69 percent achieving undetectable when

2082 HIV viral load suppression

looking at all HIV-infected populations in their data set.
- Disparities in race, sex and age were identified for viral load suppression.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-2; M-17; L-0; I-0** 2b. Validity**: H-1; M-17; L-0; I-0; Abstain-1**
Rationale:
- Reliability and validity were only assessed at the measure score level.
- The goal of treatment is an undetectable viral load, maximal suppression, which most assays now it's less than 50, less than 48, less than 20. However, blips in viral load that are thought to probably not be clinically relevant, at least immediately clinically relevant, are not uncommon. A treatment failure is when reproducible viral loads are over 200. The empiric data indicated that 200 is the appropriate cut off point. However, most experts would agree that's a reasonable standard and only a minor component of this measure.
- The Committee noted that the testing data for reliability was well-defined.
- Face validity was used as the method to test validity. [Note: Dr. Giordano was a member of the panel to assess validity of this measure. He recused himself from voting on validity.]

3. Usability: H-10; M-9; L-0; I-0
(*Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)*
Rationale:
- The developer reports that this measure is currently in use as a national quality improvement project focusing on retention in medical care for individuals with HIV. Agencies with DHHS, Department of Veteran Affairs, HIV Medical Association and Kaiser Permanente commented on the importance of this measure.

4. Feasibility: H-8; M-11; L-0; I-0
(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)
Rationale:
- Though not yet specified for EHRs, all data elements are available in electronic health records.

5. Related and Competing Measures
- No related or competing measures noted.

Steering Committee Recommendation for Endorsement: Y-18; N-1

2083 Prescription of HIV antiretroviral therapy

Status: New Submission
Description: Percentage of patients, regardless of age, with a diagnosis of HIV prescribed antiretroviral therapy for the treatment of HIV infection during the measurement year. A medical visit is any visit in an outpatient/ambulatory care setting with a nurse practitioner, physician, and/or a physician assistant who provides comprehensive HIV care.
Numerator Statement: Number of patients from the denominator prescribed HIV antiretroviral therapy during the measurement year.
Denominator Statement: Number of patients, regardless of age, with a diagnosis of HIV with at least one medical

visit in the measurement year.
Exclusions: There are no patient exclusions.
Adjustment/Stratification: No risk adjustment or risk stratification Not applicable
Level of Analysis: Population : Community, Population : County or City, Facility, Clinician : Group/Practice, Population : National, Population : Regional, Population : State
Type of Measure: Process
Data Source: Electronic Clinical Data : Electronic Health Record, Paper Medical Records, Electronic Clinical Data : Pharmacy
Measure Steward: Health Resources and Services Administration - HIV/AIDS Bureau **Other organizations:** The Centers for Disease Control

STEERING COMMITTEE MEETING [08/29/2012]
Importance to Measure and Report: The measure meets the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-18; M-1; L-0; I-0**; 1b. Performance Gap: **H-7; M-10; L-1; I-1** 1c. Evidence: **Y-14; N-3; I-1**
Rationale:

- Antiretroviral therapy delays the progression to AIDS and increases an individual's length of survival. It has also been shown to reduce transmission of HIV.
- The developer sees this measure not only being used within the HRSA programs, but also used at the Department of Health and Human Services (DHHS) level as well as in public reporting programs.
- Committee members noted that while it's not the current standard, there is growing evidence that children over the age of 5 who have higher CD4 counts should be treated. Most of the children in active treatment are adolescents. Many of these adolescents have trouble with adherence to medications that may have higher CD4 counts and are monitored due to concern of compliance.
- There were greater than five studies cited, including randomized clinical trials, Meta analyses and observational studies. Several of the observational studies were a collaboration of cohort studies.
- The Committee noted that the evidence for treatment is very clear for CD4 counts less than 500 but somewhat limited for individuals whose CD4 count is greater than 500. It was noted that the overall number of individuals with a CD4 count greater than 500 would be only 3 percent. However, an HIV-CAUSAL study suggested a morbidity benefit for individuals with CD4 counts above 500. The developer indicated that according to Jack Skarbinski's presentation on the Medical Monitoring Project (MMP) data from the 2012 Conference on Retroviruses and Opportunistic Infections (CROI), 66 percent of individuals with a CD4 count above 500 were prescribed antiretroviral therapy. In recent guidelines, both the International Antiviral Society USA guidelines and the HHS guidelines recommend treatment for all patients regardless of their CD4 count. The NA-ACCORD study[19] also suggested a survival benefit in people above 500.
- Committee members noted that in large jurisdictions including San Francisco and New York City, health officials are implementing a policy that all patients diagnosed with HIV regardless of CD4 counts should be treated.
- A Committee member stated that at the International AIDS Conference data was presented that showed a disparities gap in which African Americans had lower levels of suppressed HIV RNA levels and also had a low percentage in being on antiretroviral therapy.
    - The developer commented that in 2009 MMP data, a multivariate model of factors associated with prescription of ART found that young adults (18 to 29), non-Hispanic blacks, women who have sex with men and persons more recently diagnosed with HIV were less likely to be prescribed ART. The MMP only includes patients aged 18 years and over.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-2; M-17; L-0; I-0** 2b. Validity**: H-1; M-18; L-0; I-0**

2083 Prescription of HIV antiretroviral therapy

Rationale:

- The data source is electronic medical records, electronic clinical data, pharmacy, and paper medical records.
- This measure does not provide exclusions for patients that refuse treatment or are not prescribed treatment for various reasons.
    - The developer responded that patient refusals are expected and the goal of the measure is not 100 percent performance. The developer noted that children less than 5 are approximately 0.1 percent of the population in the United States which is part of the reason the developer did not consider that particular age population as exclusion. A Committee member expressed a concern of the lack of exclusions, especially for patients depending on their clinical status and CD4 count who may be on the Ryan White ADAP waiting list for over a year before receiving antiretroviral therapy. The developer stated that they work closely with States to ensure that patients who are on the waiting list are on antiretroviral medication through the pharmacy assistance programs. However, the developer also noted that they do not expect 100 percent compliance; this measure was created to improve the quality of care and to bring awareness to low refusal rates and disparity issues amongst clinics.
- The developer used the HIV Research Network, a group of community and academic HIV provider sites to test the reliability of the measure. The range of the reliability scores was 0.93-0.99, with a median of 0.98.

3. Usability: H-7; M-12; L-0; I-0

(*Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)*

Rationale:

- The developer will be submitting this measure for potential inclusion in the Stage 3 meaningful use program as well as PQRS.

4. Feasibility: H-2; M-17; L-0; I-0

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

Rationale:

- The list of ARVs has some potential for difficulties in data collection. The Committee preferred outlining the medications that should not be used together, rather than the approach of an abstractor trying to review regiments to see if they are consistent with the current guidelines. The developer stated that the definition of antiretroviral therapy is any regimen combination that is not "not recommended" should alleviate this concern.

5. Related and Competing Measures

- No related or competing measures noted.

Steering Committee Recommendation for Endorsement: Y-18; N-1

Measure Still under Consideration

Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable; Y=Yes; N=No

0500 Sepsis and septic shock: Management bundle

Status: Maintenance, Original Endorsement: Jul 31, 2008
Description: This measure will focus on patients aged 18 years and older who present with symptoms of severe sepsis or septic shock. These patients will be eligible for the 3 hour (severe sepsis) and/or 6 hour (septic shock) early management bundle.
Numerator Statement: Number of patients who meet criteria for severe sepsis and septic shock and successfully receive the following early management bundle as indicated.
WITHIN THREE HOURS OF SEVERE SEPSIS:
1) Measure lactate level
2) Obtain blood cultures prior to antibiotics
3) Administer broad spectrum antibiotics
4) Administer 30ml/kg crystalloid for hypotension or lactate >=4mmol/L
WITHIN 6 HOURS OF INITIAL SYMPTOMS FOR SEPTIC SHOCK:
5) Apply vasopressors (for hypotension that does not respond to initial fluid resuscitation to maintain a mean arterial pressure >=65mmHg)
6) In the event of persistent arterial hypotension despite volume resuscitation (septic shock) or initial lactate >=4 mmol/L (36 mg/dl):
- Measure central venous pressure (CVP)
- Measure central venous oxygen saturation (ScvO2)
7)Remeasure lactate
Denominator Statement: Number of patients diagnosed or presenting with the symptoms of severe sepsis or septic shock.
Exclusions: Patients with advanced directives for comfort care or clinical conditions that preclude total measure completion should be excluded. Examples include but are not limited to mortality within the numerator time window (3 hrs. for severe sepsis or 6 hrs. for septic shock), patients who do not have the clinical evidence of an infection (severe sepsis or septic shock), patients for whom a central line is contraindicated, patients with coagulopathy, patients for whom central line placement was attempted but could not be inserted, or other medical, patient, or system reasons for exclusion.
Adjustment/Stratification: No risk adjustment or risk stratification None Henry Ford Hospital (HFH) encourages the results of this measure to be stratified by race, ethnicity, gender, primary language, and illness severity; and have included these variables as recommended data elements to be collected.
Level of Analysis: Facility, Integrated Delivery System
Type of Measure: Composite
Data Source: Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Registry, Paper Medical Records
Measure Steward: Henry Ford Hospital
Other organizations: Henry Ford Hospital System(HFHS), Society of Critical Care Medicine (SCCM), Infectious Diseases Society of America (IDSA), Institute for Healthcare Improvement (IHI), Surviving Sepsis Campaign (SSC)

0500 Sepsis and septic shock: Management bundle

STEERING COMMITTEE MEETING [08/28/2012]

Importance to Measure and Report: The measure does meet the Importance criteria

(1a. High Impact: 1b. Performance Gap, 1c. Evidence)

1a. Impact: **H-19; M-1; L-0; I-0**; 1b. Performance Gap: **H-7; M-12; L-1; I-0** 1c. Evidence: **Y-11; N-5; I-4**

Rationale:

- There are greater than 750,000 estimated cases of severe sepsis a year in the United States. Additionally, there are an estimated 400,000 ICU admissions, approximately 200,000 deaths a year, and it costs an estimated $17 billion a year.
- More than 50 publications have reported improved survival with use of the bundle in the past decade. The vast majority of the studies are observational. Some Committee members noted the lack of randomized trials. Committee members were informed that there are three randomized controlled trials currently ongoing in the U.S., UK and Australia.
- Committee members noted that there is some controversy in the field about the need for all the bundle elements, specifically measuring central venous pressure (CVP). However, it was discussed that only about 15 percent of patients end up needing a CVP line when in compliance with the bundle.
- Meta-analyses have shown survival benefit; this is the premise upon which both national and international guidelines have been created for the management of severe sepsis and septic shock. The bundles recommended in guidelines mirror the bundle in this measure.
- The developer pointed to the recent GENESIS trial[20] published in the Journal of Intensive Care Medicine of 6000 patients in 11 hospitals throughout the U.S.; hospitals ranging from 100 to 1,000 patients found that meeting the bundle in a prospective observational cohort resulted in mortality reduction of 14 percent.

2. Scientific Acceptability of Measure Properties: The measure does not meet the Scientific Acceptability criteria-Pending final recommendation

(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)

2a. Reliability: **H-1; M-7; L-5; I-7** 2b. Validity**: NA**

Rationale:

- Committee members asked how to clearly distinguish patients with severe sepsis versus those with septic shock. The developer responded that the key difference is hypotension refractory to fluid administration that requires a vasopressor or a persistent lactate level greater than 4 is septic shock.
- The target population is identified using ICD-9 codes. Committee members asked whether it is the ICD-9 codes from the Emergency Department, during hospitalization or at discharge.
- After several questions regarding the specifications, NQF staff realized that an attachment containing the data collection tool submitted by the developer had not been provided to the Committee. NQF staff provided the document to the Committee later in the meeting.
- Committee members questioned whether the inter-rater reliability study of 498 patients in one institution could be transferred to other institutions. The developer responded that the measure is being used in a variety of health care systems such as Kaiser, Loma Linda University, University of Kansas and Intermountain Health in Utah.

NOTE: During the meeting, the Committee decided there was insufficient information to determine whether the measure met the reliability criteria. Because the Committee had not been given all of the submitted information, the Committee will revisit the evaluation of this measure at a later date when the Committee has had an opportunity to review all the information provided by the developer. Final recommendation for this measure will be in an addendum report that will be available for NQF Public and Member comment and Member vote in the coming months.

Measures Not Recommended

Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable; Y=Yes; N=No

0298 Central line bundle compliance

Status: Maintenance, Original Endorsement: Nov 15, 2007
Description: Percentage of intensive care patients with central lines for whom all elements of the central line bundle are documented and in place.
The central line bundle elements include:
•Hand hygiene
•Maximal barrier precautions upon insertion
•Chlorhexidine skin antisepsis
•Optimal catheter site selection, with avoidance of the femoral vein for central venous access in patients 18 years and older
•Daily review of line necessity with prompt removal of unnecessary lines
Numerator Statement: Number of intensive care patients with central lines for whom all elements of the central line bundle are documented and in place.
The central line bundle elements include:
• Hand hygiene
• Maximal barrier precautions upon insertion
• Chlorhexidine skin antisepsis
• Optimal catheter site selection, with avoidance of the femoral vein for central venous access in patients 18 years and older
• Daily review of line necessity with prompt removal of unnecessary lines
Denominator Statement: Total number of intensive care patients with central lines on the day of sample.
Exclusions: Exclude patients less than 18 years of age at the date of ICU admission and patients outside the intensive care unit and patients whose lines were not placed in the intensive care unit
Adjustment/Stratification: No risk adjustment or risk stratification NA
Level of Analysis: Facility
Type of Measure: Composite
Data Source: Paper Medical Records
Measure Steward: Institute for Healthcare Improvement

0298 Central line bundle compliance

STEERING COMMITTEE MEETING [08/28/2012]

Importance to Measure and Report: The measure does not meet the Importance criteria

(1a. High Impact: 1b. Performance Gap, 1c. Evidence)

1a. Impact: **H-18; M-1; L-0; I-0**; 1b. Performance Gap: **H-2; M-5; L-5; I-7** 1c. Evidence: **Y-17; N-2; I-0**

Rationale:

- Studies have shown that implementation of the bundle has led to improved survival as well as cost benefits. Since this measure has been implemented, there has been drastic improvement in central line infections.
- The IDSA guidelines support bundling the steps to reduce the risk of infection.
- The developer did not provide any data on the performance rate of the bundle. However, the Committee indicated that in their experience compliance among hospitals is pretty high.
- A Committee member provided self-reporting data from more than 400 California hospitals where Central Line Insertion Practices (CLIP) measures were reported for the last 3 years. In 2011, the performance rate for adult-only ICUs was 96 percent and for pediatric ICUs the rate was 95 percent. Only 4 in California hospitals did not provide data.
- It was suggested that most CLABSIs occur outside the ICU and that in fact the maintenance of lines may be more critical than the insertion of those lines.
- There was concern that this is a documentation measure that does not necessarily reflect what is occurring at the bedside.
- There is currently a central line associated bloodstream infection (CLABSI) outcome measure, so there may not be a need for a process measure.
- Families can use the bundle checklist while monitoring their loved one's care.
- The Committee questioned whether there was a performance gap that would require documentation of the bundle; some indicated that this process has become a standard of care.
- According to the developer, two states, Rhode Island and Minnesota, use this measure currently and they utilize self-reported data from the individual hospitals.
- The developer added that the bundle is well-utilized and that it has become a very effective tool for Joint Commission review and overall process. The Joint Commission requires hospitals to document compliance with best practice.
- After the vast patient efforts of the last decade, the Committee wondered how many hospitals are not using the bundle or something similar.

0393 Hepatitis C: Testing for chronic hepatitis C – Confirmation of hepatitis C viremia

Status: Maintenance, Original Endorsement: Jul 31, 2008
Description: Percentage of patients aged 18 years and older with a diagnosis of hepatitis C seen for an initial evaluation who had HCV RNA testing ordered or previously performed
Numerator Statement: Patients for whom HCV RNA testing was ordered or previously performed
Denominator Statement: All patients aged 18 years and older with a diagnosis of hepatitis C seen for initial evaluation
Exclusions: Documentation of medical reason(s) for not ordering or performing HCV RNA testing
Documentation of patient reason(s) for not ordering or performing HCV RNA testing
Adjustment/Stratification: No risk adjustment or risk stratification None We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.
Level of Analysis: Clinician : Group/Practice, Clinician : Individual, Clinician : Team
Type of Measure: Process
Data Source: Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Laboratory, Electronic Clinical Data : Registry
Measure Steward: American Medical Association - Physician Consortium for Performance Improvement (AMA-PCPI) **Other organizations:** American Association for the Study of Liver Diseases, American Gastroenterological Association Institute

STEERING COMMITTEE MEETING [08/28/2012]
Importance to Measure and Report: The measure does not meet the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-16; M-4; L-0; I-0**; 1b. Performance Gap: **NA** 1c. Evidence: **Y-3; N-8; I-9**
Rationale:

- Hepatitis C affects a large portion of the baby boomer population. Recently CDC recommended that all adults born from 1945 to 1965 receive hepatitis C screening. More patients with chronic HCV will be identified.
- More people died in 2007 from hepatitis C than HIV.
- Hepatitis C is a highly prevalent condition with a large health impact. However, there was no evidence provided that this test is not being done.
- The Committee noted that there is little to no disparities data available for hepatitis C for the individual performance measures, though minorities are over-represented in the population of patients with HCV
- Studies on long term benefit or treatment, which results from the test, are all observational except one, and do not look at long term benefits/harms.
- A body of evidence does exist, but weakly addressed in the measure submission. The measure defaults to AASLD guidelines that were based on data and rated IB and 1A. Consistency was not addressed. Additional information provided by PCPI included a meta-analysis of 31 studies and all are consistent with an overall estimate of 15 to 20 percent of people who become infected with hepatitis C who clear the virus. Thus, this test is important in differentiating whether or not people have resolved infection or chronic infection.
- Committee members asked about the evidence that it is important to know whether the patient is viremic if they are not candidates for treatment. Others noted that it is important to other aspects of care such as avoiding alcohol, vaccination, counseling regarding transmission and remaining engaged in care.
- The Committee discussed the need for evidence for a standard assessment measure. NQF staff advised the Committee that CSAC has discouraged assessment measures that are essentially a standard of care.
- Some Committee members concluded that the question regarding the timing of the testing and whether or not the initial time is appropriate and beneficial to patient outcomes, particularly in view of measure 0584: *Hepatitis C: Viral load test* which is testing before therapy.
- The Committee elected not to make an exception for the evidence criteria.

0394 Hepatitis C: Counseling regarding use of contraception prior to antiviral treatment

Status: Maintenance, Original Endorsement: Jul 31, 2008
Description: Percentage of female patients aged 18 to 44 years and all men aged 18 years and older with a diagnosis chronic hepatitis C who are receiving antiviral treatment who were counseled regarding contraception prior to the initiation of antiviral treatment
Numerator Statement: Patients who were counseled regarding contraception prior to the initiation of treatment
Denominator Statement: All female patients aged 18 to 44 years and all male patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment
Exclusions: Documentation of medical reason(s) for not counseling patient regarding contraception
Adjustment/Stratification: No risk adjustment or risk stratification None We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.
Level of Analysis: Clinician : Group/Practice, Clinician : Individual, Clinician : Team
Type of Measure: Process
Data Source: Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Registry
Measure Steward: American Medical Association - Physician Consortium for Performance Improvement (AMA-PCPI) **Other organizations:** American Association for the Study of Liver Diseases, American Gastroenterological Association Institute

STEERING COMMITTEE MEETING [08/28/2012]
Importance to Measure and Report: The measure does not meet the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-0; M-2; L-4; I-13**; 1b. Performance Gap: **NA** 1c. Evidence: **NA**
Rationale:

- Committee members indicated that this is a "check the box" measure.
- The Committee noted that many drugs are potential teratogens and questioned the need for a performance measure specific to this treatment.
- There is little data on the number of women who become pregnant while on treatment.
- The Committee questioned the impact of counseling on whether women or partners of men with hepatitis C get pregnant. No data was available to respond to the question.

0397 Hepatitis C: Antiviral treatment prescribed

Status: Maintenance, Original Endorsement: Jul 31, 2008
Description: Percentage of patients aged 18 years and older with a diagnosis of chronic hepatitis C who were prescribed at a minimum peginterferon and ribavirin therapy within the 12 month reporting period
Numerator Statement: Patients who were prescribed at a minimum peginterferon and ribavirin therapy within the 12 month reporting period
Denominator Statement: All patients aged 18 years and older with a diagnosis of chronic hepatitis C
Exclusions: Documentation of medical reason(s) why a patient was not prescribed at a minimum peginterferon and ribavirin therapy (e.g., patient was not a candidate for therapy, could not tolerate)
Documentation of patient reason(s) why a patient was not prescribed at a minimum peginterferon and ribavirin therapy (e.g., patient declined)
Documentation of system reason(s) why a patient was not prescribed at a minimum peginterferon and ribavirin therapy (e.g., patient has no insurance coverage, therapy not covered)
Adjustment/Stratification: No risk adjustment or risk stratification None We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.
Level of Analysis: Clinician : Group/Practice, Clinician : Individual, Clinician : Team
Type of Measure: Process
Data Source: Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Registry
Measure Steward: American Medical Association - Physician Consortium for Performance Improvement (AMA-PCPI) **Other organizations:** American Association for the Study of Liver Diseases, American Gastroenterological Association Institute

STEERING COMMITTEE MEETING [08/28/2012]
Importance to Measure and Report: **The measure does meet the Importance criteria**
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-10; M-5; L-4; I-1**; 1b. Performance Gap: **H-7; M-12; L-1; I-0** 1c. Evidence: **Y-13; N-6; I-1**
Rationale:

- A number of studies have demonstrated the salutary effects of a sustained biologic response and liver-disease related outcomes including decompensation, death from liver failure, and hepatocellular carcinoma. There have been reductions as well in liver-related mortality of magnitudes ranging from 3.3 to 25-fold in one study and a meta-analysis suggesting a decrease in hepatocellular carcinoma of approximately two and a half-fold.
- Committee members discussed that a reasonable action for patients and providers is to wait before initiating therapy until newer and beneficial treatments are available (estimated 18-36 months) that might be more benign. The newer, oral regimens will likely move treatment into an infectious disease realm rather than waiting until it is a significant liver disease.
- Patient advocates in the community are advising patients to wait until the new regimens are available.
- The PQRS data indicates a mean performance of 68 percent.
- No information was provided on disparities. However, Committee members indicated that hepatitis C is more common in African Americans and do not have as high of a response rate to therapy compared to Caucasians. Inner city populations that are disproportionately weighted with ethnic minorities have exceptionally low treatment rates with peginterferon ribavirin.
- Due to all the reasons for not treating, Committee members estimated that only 20 percent of patients are currently receiving treatment.

0397 Hepatitis C: Antiviral treatment prescribed

2. Scientific Acceptability of Measure Properties: The measure does not meet the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-0; M-8; L-11; I-1** 2b. Validity**: NA**
Rationale:

- Committee members were not comfortable that the medical exceptions would include patients/providers that decided to wait before beginning therapy. The Committee suggested that more granularities are needed to identify exceptions based on intolerance, poor prior treatment response and a decision to wait for newer drugs.
- Some Committee members noted that the system exclusion may be an easy way to not be accountable for not prescribing therapy if the patient is poor or therapy is not covered by their insurance.
  - The developer responded that the data on exceptions is not lost but is tracked as well as the results.
- The Committee asked why the EHR testing demonstrated lower reliability that would be expected.
  - The developer responded that the test sites were asked to do the testing on their system as is. Based on the results they go back and make work flow changes because the test groups do continue to use these measures after testing. In repeat testing today the reliability would likely be higher because of changes made to the EHR to better capture data. The electronic health record automated reporting consistently under-reports performance unless changes are made to the EHR to be able to capture data more accurately.
- The Committee pointed out that there were a number of patients who appeared to fail the measure on automated calculation but were found to not meet the numerator and have a valid exception on the manual review was 46 percent.
- The Committee asked the developer how many EHR vendors include data fields for the exceptions. The developer could not answer the question.

0400 Paired Measure: Hepatitis C: Hepatitis B vaccination (paired with 0399)

Status: Maintenance, Original Endorsement: Jul 31, 2008
Description: Percentage of patients aged 18 years and older with a diagnosis of hepatitis C who have received at least one injection of hepatitis B vaccine, or who have documented immunity to hepatitis B
Numerator Statement: Patients who have received at least one injection of Hepatitis B vaccine, or who have documented immunity to Hepatitis B
Denominator Statement: All patients aged 18 years and older with a diagnosis of hepatitis C
Exclusions: Documentation of medical reason(s) for not receiving at least one injection of hepatitis B vaccine Documentation of patient reason(s) for not receiving at least one injection of hepatitis B vaccine
Adjustment/Stratification: No risk adjustment or risk stratification None We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.
Level of Analysis: Clinician : Group/Practice, Clinician : Individual, Clinician : Team
Type of Measure: Process
Data Source: Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Laboratory, Electronic Clinical Data : Registry
Measure Steward: American Medical Association - Physician Consortium for Performance Improvement (AMA-PCPI) **Other organizations:** American Association for the Study of Liver Diseases, American Gastroenterological Association Institute

0400 Paired Measure: Hepatitis C: Hepatitis B vaccination (paired with 0399)

STEERING COMMITTEE MEETING [08/28/2012]
Importance to Measure and Report: The measure does not meet the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-4; M-7; L-6; I-3**; 1b. Performance Gap: **NA** 1c. Evidence: **Y-0; N-9; I-11**
Exception to Evidence: Y –10; N -10
Rationale:

- The submission does not describe the impact for co-infection with hepatitis C and hepatitis B. As noted for the hepatitis A measure, the VA population had lower superinfection with hepatitis B in vaccinated patients.
- The developers presented the evidence based on the AASLD guideline that rates the recommendation and evidence as *Level IIa - Weight of evidence/opinion is in favor of usefulness/efficacy* and *Level C - Only consensus opinion of experts, case studies, or standard-of-care.* The developer added that the evidence for potential harm is more substantial because there have been three systematic reviews, albeit not randomized controlled trials, that demonstrate much higher risk of hepatocellular carcinoma when co-infected with both hepatitis B and hepatitis C, above the additional effects of one on top of the other. A Committee member added that the higher risk applies only to 10 percent of hepatitis B patients that do not clear the infection and remain chronically infected.
- The measure specifies only one injection of the series of three injections because capturing the data for the full series is difficult. Evidence indicates that a single injection does not confer sufficient immunity to protect the patient. The third dose gives an amnestic booster response, which is important in terms of duration of potential protection.
- Some Committee members suggested that patients would want to see results for complete vaccination; a single injection is setting a very low bar.
- Unlike the recommendation for HIV patients, there is no recommendation for post-vaccination confirmation of immunity for hepatitis C patients.
- A majority of the Committee did not approve an exception for the evidence criteria for this measure because of the specification for only one injection.

0401 Hepatitis C: Counseling regarding risk of alcohol consumption

Status: Maintenance, Original Endorsement: Jul 31, 2008
Description: Percentage of patients aged 18 years and older with a diagnosis of hepatitis C who were counseled regarding the risks of alcohol consumption at least once within the 12 month reporting period
Numerator Statement: Patients who were counseled regarding the risks of alcohol consumption at least once within the 12 month reporting period.
Denominator Statement: All patients aged 18 years and older with a diagnosis of hepatitis C
Exclusions: None
Adjustment/Stratification: No risk adjustment or risk stratification None We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.
Level of Analysis: Clinician : Group/Practice, Clinician : Individual, Clinician : Team
Type of Measure: Process
Data Source: Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Registry
Measure Steward: American Medical Association - Physician Consortium for Performance Improvement (AMA-PCPI) **Other organizations:** American Association for the Study of Liver Diseases, American Gastroenterological Association Institute

0401 Hepatitis C: Counseling regarding risk of alcohol consumption

STEERING COMMITTEE MEETING [08/28/2012]
Importance to Measure and Report: The measure does not meet the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-1; M-5; L-6; I-6**; 1b. Performance Gap: **NA** 1c. Evidence: **NA**
Rationale:

- The submission discusses the evidence for the impact of alcohol consumption on patients with hepatitis C but not the impact of alcohol counseling.
  - The developer reported that regarding the evidence for the impact of counseling there are smaller studies within the hepatitis C infected patients of brief interventions. The larger body of data was obtained in two systematic reviews, one demonstrating modest effect and the other focused on quantifying the reduction of drinks per week. Based on 19 randomized controlled trials with 5600 patients, a brief alcohol intervention in a primary care setting indicated a reduction (between two to five drinks per week) in patients' consumption. Counseling was described as something the provider would do in the course of normal counseling with a patient; a brief interaction about the relative harms of alcohol. Most studies excluded heavy drinkers or dependent drinkers because it was anticipated that a brief intervention would have very little impact on their alcohol use.
- A Committee member inquired about the type of provider who performed the counseling – physician or other. The measure does not specify who performs the counseling.
- This was viewed as a "check the box" documentation measure.
- There was no information provided on sustained alcohol cessation after brief counseling.
- The notion of documentation does not verify that the patient was actually counseled. It may have been "okay, don't drink." There is no clear definition of what counseling means.

0403 HIV/AIDS: Medical visit

Status: Maintenance, Original Endorsement: Jul 31, 2008
Description: Percentage of patients, regardless of age, with a diagnosis of HIV/AIDS, with at least two medical visits during the measurement year, with a minimum of 90 and 180 days between each visit
Numerator Statement: Numerator 1: Patients with at least two medical visits during the measurement year, with a minimum 0f 90 days between each visit
Numerator 2: Patients with at least two medical visits during the measurement year, with a minimum of 180 days between each visit
Denominator Statement: All patients, regardless of age, with a diagnosis of HIV/AIDS
Exclusions: None.
Adjustment/Stratification: No risk adjustment or risk stratification N/A
Level of Analysis: Clinician : Group/Practice, Clinician : Individual
Type of Measure: Process
Data Source: Administrative claims, Electronic Clinical Data
Measure Steward: National Committee for Quality Assurance **Other organizations:** Physician Performance Measures (Measures) and related data specifications have been developed by the American Medical Association (AMA) in collaboration with the Physician Consortium for Performance Improvement™ (the Consortium) and the National Committee

0403 HIV/AIDS: Medical visit

STEERING COMMITTEE MEETING [08/29/2012]

Importance to Measure and Report: The measure does meet the Importance criteria

(1a. High Impact: 1b. Performance Gap, 1c. Evidence)

1a. Impact: **H-6; M-9; L-0; I-1**; 1b. Performance Gap: **H-0; M-13; L-1; I-2** 1c. Evidence: **Y-9; N-3; I-4**

Rationale:

- This measure aligns with the National HIV/AIDS strategy which defines continuous care as at least 2 visits at least 3 months apart. The visits do not have to be with the same provider and it is not required that the visit be for HIV care.
- The intent of this measure is to examine retention in care including visits to pediatricians or OB/GYN. The developer explained that future HIV care will be more integrated into primary care.
- Data is presented to suggest the importance of getting patients into care and keeping them in care but compelling data is not presented in the submission to suggest that the identified visit frequency or duration of follow-up of one year are optimal. It was noted that a longer timeframe might be more appropriate for patients with a chronic illness.
- Committee members suggested that the evidence is based on seeing a provider who is familiar with HIV care and having a certain volume of HIV patients make providers proficient in treating HIV.
- There was no evidence presented to allude that medical visits unrelated to HIV-related issues will benefit the patient.

2. Scientific Acceptability of Measure Properties: The measure does meet the Scientific Acceptability criteria

(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)

2a. Reliability: **H-1; M-11; L-1; I-3** 2b. Validity**: H-0; M-9; L-3; I-4**

Rationale:

- This measure has two numerators: two visits at least 90 days apart and two visits at least 180 days apart.
- The measure does not require the visit to be with the same physician. The Committee questioned how this measure looks at continuity of care if the same provider is not following up with the patient. The developer noted that it is unlikely a provider would have access to another patient's information unless the EHR system is integrated.
- The measure does not require that the visit to be for HIV-related care.
- The EHR automated versus manual calculation of performance was 91 percent and 95 percent respectively.
- Face validity was assessed by a panel of six experts with a mean rating of 4.67 out of 5; 100 percent of the expert panel either agreed or strongly agreed that the measure could accurately distinguish good and poor quality.

3. Usability: H-1; M-6; L-7; I-2

(*Meaningful, understandable, and useful to the intended audiences for 3a. Public Reporting/Accountability and 3b. Quality Improvement)*

Rationale:

- The developer reported that this EHR measure is included in stage 2 of the Meaningful Use program, and has been adopted by the initial core set of healthcare quality measures from Medicaid-eligible adults.
- Some Committee members suggested that if there is no requirement that a medical visit be for HIV care, then the intent of this measure (how providers are attempting to retain people in care for HIV) may not meaningful and useful.

4. Feasibility: H-0; M-8; L-6; I-2

(4a. Clinical data generated during care delivery; 4b. Electronic sources; 4c.Susceptibility to inaccuracies/ unintended consequences identified 4d. Data collection strategy can be implemented)

Rationale:

- All data elements are available electronically.

0403 HIV/AIDS: Medical visit

Steering Committee Recommendation for Endorsement: Y-6; N-10

- There was no evidence presented to suggest that medical visits unrelated to HIV-related issues will benefit the patient. Some Committee members suggested that if there is no requirement that a medical visit be for HIV care, then the intent of this measure (how providers are attempting to retain people in care for HIV) may not meaningful and useful.

0406 HIV/AIDS: Adolescent and adult patients who are prescribed potent antiretroviral therapy

Status: Maintenance, Original Endorsement: Jul 31, 2008

Description: Percentage of patients with a diagnosis of HIV/AIDS, with at least two visits during the measurement year, with at least 90 days between each visit: aged 13 years and older who have a history of a CD4 count less than or equal to 500 cells/mm3; aged 13 years

Numerator Statement: Patients who were prescribed potent antiretroviral* therapy

*Potent antiretroviral therapy is described as any antiretroviral therapy that has demonstrated optimal efficacy and results in durable suppression of HIV as shown by prior clinical trials

Denominator Statement: A. All patients aged 13 years and older with a diagnosis of HIV/AIDS, with at least two medical visits during the measurement year, with at least 90 days between each visit, who have a history of a CD4 count less than or equal to 500 cells/mm3; and

B. All patients aged 13 years and older with a diagnosis of HIV/AIDS, with at least two medical visits during the measurement year, with at least 90 days between each visit, who have a history an AIDS-defining illness**, regardless of CD4 count; and

C. All patients with a diagnosis of HIV/AIDS, with at least two medical visits during the measurement year, with at least 90 days between each visit, who are pregnant, regardless of CD4 count or age.

**The most commonly used case definition for AIDS is the 1993 Revised Surveillance Case Definition from the CDC. It includes: Candidiasis of bronchi, trachea, or lungs; candidiasis, esophageal; cervical cancer, invasive; coccidiodomycosis, disseminated or extrapulmonary; cryptococcosis, extrapulmonary; crytosporidiosis, chronic intestinal (greater than 1 month's duration); cytomegalovirus disease (other than liver, spleen, or nodes); cytomegalovirus retinitis (with loss of vision); encephalopathy, HIV-related; herpes simplex: chronic ulcer(s) (greater than 1 month's duration); or bronchitis, pneumonitis, or esophagitis; histoplasmosis, disseminated or extrapulmonary; isosporiasis, chronic intestinal (greater than 1 month's duration); Kaposi's sarcoma; lymphoma, Burkitt's (or equivalent term); lymphoma, immunoblastic (or equivalent term); lymphoma, primary, of brain; mycobacterium avium complex or M. kansasii, disseminated or extrapulmonary; mycobacterium tuberculosis, any site (pulmonary or extrapulmonary); mycobacterium, other species or unidentified species, disseminated or extrapulmonary; pneumocystis carinii pneumonia; pneumonia, recurrent; progressive multifocal leukoencephalopathy; salmonella septicemia, recurrent; toxoplasmosis of brain; wasting syndrome due to HIV. (Aberg, 2009; National Center for Infectious Diseases Division of HIV/AIDS)

Definition of "Medical Visit" - any visit with a health care professional who provides routine primary care for the patient with HIV/AIDS (may be but is not limited to a primary care clinician, ob/gyn, pediatrician, infectious diseases specialist)

Note: For potent antiretroviral therapy recommendations refer to current DHHS guidelines available at www.aids.gov

Aberg JA, Kaplan JE, Libman H, Emmanuel P, Anderson JR, Stone VE, Oleske JM, Currier JS, Gallant JE; HIV Medicine Association of the Infectious Diseases Society of America. Primary care guidelines for the management of persons infected with human immunodeficiency virus: 2009 update by the HIV medicine Association of the Infectious Diseases Society of America. Clin Infect Dis. 2009 Sep 1;49(5):651-81. Available at http://www.uphs.upenn.edu/bugdrug/antibiotic_manual/idsahivprimarycare2009.pdf. Accessed May 25, 2012.

National Center for Infectious Diseases Division of HIV/AIDS. 1993 Revised classification system for HIV infection and expanded surveillance case definition for AIDS among adolescents and adults. MMRW Recomm Rep.

0406 HIV/AIDS: Adolescent and adult patients who are prescribed potent antiretroviral therapy
1992;41(RR-17):1-19. **Exclusions:** None **Adjustment/Stratification:** No risk adjustment or risk stratification **Level of Analysis:** Clinician : Group/Practice, Clinician : Individual **Type of Measure:** Process **Data Source:** Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Laboratory, Electronic Clinical Data : Pharmacy **Measure Steward:** National Committee for Quality Assurance **Other organizations:** Physician Performance Measures (Measures) and related data specifications have been developed by the American Medical Association (AMA) in collaboration with the Physician Consortium for Performance Improvement™ (the Consortium) and the National Committee
STEERING COMMITTEE MEETING [08/28/2012] **Importance to Measure and Report: <u>The measure does meet the Importance criteria</u>** (1a. High Impact: 1b. Performance Gap, 1c. Evidence) 1a. Impact: **H-14; M-5; L-0; I-0**; 1b. Performance Gap: **H-3; M-10; L-2; I-4** 1c. Evidence: **Y-17; N-2; I-0** <u>Rationale</u>: • This clinician-level measure applies to patients 13 years and older with a CD4 count less than or equal to 500 with at least two medical visits at least 60 days apart. • The average performance rate in PQRS in 2009 was 90.3 percent and 97.2 percent in 2010. The Committee noted that the performance rate does not illustrate a large gap in care. However, if the two medical visit requirement was eliminated from the measure, there would be a performance gap. The developer stated that the performance rates were from PQRS which is a self-selecting reporting system in which only 60 providers in 2009 and 61 providers in 2010 participated and submitted their data. • In 2009 and 2010, 202 facilities from HIVQUAL reported data for all a total of 9,153 patients. The facility means were 75.2 percent and 64.2 percent respectively. • A Committee member referenced Irene Hall's data that suggests there is a gap because for all people living in this country who have HIV only about 21 percent have suppressed levels of HIV and about 30 percent or so are actually receiving antiretroviral therapy. An analysis was performed for people who were engaged in care and found that there was a gap among those engaged in care and those receiving antiretroviral therapy. • According to the guidelines, if a patient is stable and on antiretroviral therapy, the patient will only need to be monitored every six months to a year; which would imply that this type of patient may not be included in this measure because of the two medical visits requirement. • The developer's advisory panel stated strongly that they wanted to include denominator qualifications and not include all patients. • No data was presented on disparities.

0406 HIV/AIDS: Adolescent and adult patients who are prescribed potent antiretroviral therapy

2. Scientific Acceptability of Measure Properties: The measure does not meet the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-1; M-13; L-3; I-2** 2b. Validity**: H-0; M-8; L-6; I-5**
Rationale:

- The specifications do not clearly define "potent" therapy. The developer responded that they refer providers who are reporting on this measure to the treatment guidelines in order to identify potent ART.
- The Committee questioned how potent antiretroviral therapy would be identified using an electronic health record. The developer stated that they may use HRSA's approach of any combination that is not recommended.
- The EHR testing results automated calculation of performance was 96.6 percent and manual calculation of performance was 100 percent with a 3 percent difference.
- To be included in the measure patients must meet all of the following conditions or events: 1) patients of any age during the measurement year; 2) patients diagnosed with HIV during the first 3 months of the measurement year or prior to the measurement year; and 3) patients who had at least one medical visit during the measurement year. Committee members thought that if the measure is limited to people who have two medical visits the population would also be limited to people who are receiving a higher level of care. Thus, all patients with HIV would not be included in the measure.
- Many Committee members agreed that physicians should be held accountable for retaining people in care. It's a responsibility for clinicians to attempt to bring the patient back to care. The Committee noted that due diligence, such as calling patients or making home visits should occur.
- Committee members noted that it's extremely difficult to figure out which patients have a history of an AIDS defining condition because there aren't good ICD-9 codes for many of the conditions. The developer responded that the EHR can use SNOMED codes.
- It was also noted that it may be difficult to find a patient's old CD4 counts.

0407 HIV/AIDS: HIV RNA control after six months of potent antiretroviral therapy

Status: Maintenance, Original Endorsement: Jul 31, 2008

Description: Percentage of patients aged 13 years and older with a diagnosis of HIV/AIDS, who had at least two medical visits during the measurement year, with at least 90 days between each visit, who are receiving potent antiretroviral therapy*, who have a viral load <200 copies/mL after at least 6 months of potent antiretroviral therapy*

*Potent antiretroviral therapy is described as any antiretroviral therapy that has demonstrated optimal efficacy and results in durable suppression of HIV as shown by prior clinical trials

Numerator Statement: Patients with an HIV viral load <200 copies/mL

Denominator Statement: All patients aged 13 years or older with a diagnosis of HIV/AIDS, with at least two visits in the measurement year, with at least 90 days between each visit, who received potent antiretroviral therapy* for at least 6 months

Definition of "Medical Visit" - any visit with a health care professional who provides routine primary care for the patient with HIV/AIDS (may be but is not limited to a primary care clinician, ob/gyn, pediatrician, infectious diseases specialist)

*Potent antiretroviral therapy is described as any antiretroviral therapy that has demonstrated optimal efficacy and results in durable suppression of HIV as shown by prior clinical trials

Exclusions: None

Adjustment/Stratification: No risk adjustment or risk stratification N/A

Level of Analysis: Population : County or City, Clinician : Group/Practice, Clinician : Individual

Type of Measure: Outcome

Data Source: Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Laboratory, Electronic Clinical Data : Pharmacy

Measure Steward: National Committee for Quality Assurance **Other organizations:** Physician Performance Measures (Measures) and related data specifications have been developed by the American Medical Association (AMA) in collaboration with the Physician Consortium for Performance Improvement™ (the Consortium) and the National Committee

STEERING COMMITTEE MEETING [08/29/2012]

Importance to Measure and Report: **The measure does meet the Importance criteria**

(1a. High Impact: 1b. Performance Gap, 1c. Evidence)

1a. Impact: **H-17; M-1; L-0; I-0**; 1b. Performance Gap: **H-10; M-7; L-1; I-2** 1c. Evidence: **Y-17; N-1; I-0**

Rationale:

- To prevent disease advancement, all patients should have their RNA levels measured to monitor the effectiveness of antiretroviral therapy (ART).
- This measure builds off of measure 0406: *HIV/AIDS: Adolescent and adult patients who are prescribed potent antiretroviral therapy* to assess the viral load after 6 months of therapy. Control is defined as a viral load less than 200 copies per milliliter.
- HIV RNA plasma levels assess the efficacy of ART. RNA less than 50 is regarded as the optimal outcome although 200 copies is often used in clinical trials. For most individuals who are adherent to their ART and who do not have resistance viral suppression is generally achieved in 12 to 24 weeks although it could take longer in some patients.
- The DHHS guidelines rate achieving viral suppression as the goal of therapy as A1 level evidence. There were 10,000 patients summarized in the guidelines from 33 studies; there's a large evidence base to support viral suppression.
- The average PQRS performance rate in 2009 was 76.7 percent and 75.5 percent in 2010, which demonstrates room for improvement.
- The Committee discussed disparities in viral suppression for many demographic groups, such as gender and age and not only race/ethnicity.

0407 HIV/AIDS: HIV RNA control after six months of potent antiretroviral therapy

2. Scientific Acceptability of Measure Properties: The measure does not meet the Scientific Acceptability criteria
(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)
2a. Reliability: **H-0; M-8; L-7; I-4** 2b. Validity**: H-0; M-8; L-7; I-4**
Rationale:

- The Committee questioned how potent antiretroviral therapy would be identified using an electronic health record. The developer stated that they may use HRSA's approach of any combination that is not "not recommended."
- In the EHR testing, the difference between the manual result of 100 percent and the automated result of 96.6 percent with a 3 percent difference of measuring the indicator.
- Several Committee members were not convinced that 100 percent of the test population had viral suppression. The developer noted that since the measure was tested in 2009, updates have been made; the "or plan of care" component of the measure was removed.
- There was uncertainty regarding which viral load is used. A Committee member asked for clarification as to whether any viral load less than 200 in the measurement year is used or if the last viral load in the measurement year is used. The developer could not answer the question at the meeting but indicated that they would clarify later.

0412 HIV/AIDS: Hepatitis B vaccination

Status: Maintenance, Original Endorsement: Jul 31, 2008
Description: Percentage of patients aged six months and older with a diagnosis of HIV/AIDS, who have received at least one hepatitis B vaccination, or who have documented immunity
Numerator Statement: Patients who have received at least one injection of hepatitis B vaccination, or who have documented immunity
Denominator Statement: All patients aged six months and older with a diagnosis of HIV/AIDS, with at least two visits in the measurement year, with at least 90 days in between each visit
Definition of "Medical Visit" - any visit with a health care professional who provides rout
Exclusions: None.
Adjustment/Stratification: No risk adjustment or risk stratification N/A
Level of Analysis: Clinician : Group/Practice, Clinician : Individual
Type of Measure: Process
Data Source: Administrative claims, Electronic Clinical Data
Measure Steward: National Committee for Quality Assurance **Other organizations:** Physician Performance Measures (Measures) and related data specifications have been developed by the American Medical Association (AMA) in collaboration with the Physician Consortium for Performance Improvement™ (the Consortium) and the National Committee

0412 HIV/AIDS: Hepatitis B vaccination

STEERING COMMITTEE MEETING [08/29/2012]
Importance to Measure and Report: The measure does not meet the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-5; M-11; L-1; I-1**; 1b. Performance Gap: NA 1c. Evidence: **Y-5; N-5; I-7**
Rationale:

- Hepatitis B vaccination is recommended for all patients with HIV.
- Data was not provided to support the effectiveness of one of three injections to prevent hepatitis B.
- The Committee questioned why the developers are measuring the administration of only one vaccination.
    - The developer indicated that all three vaccines were not required to reduce measurement burden. The Committee stated that receiving one vaccine was not enough to confer immunity to hepatitis B. The Committee noted the same issues as with measure 0400: *Hepatitis C: Hepatitis B vaccination*.
- According to the measure submission, the denominator requirement of two visits at least 90 days apart drove the decision to measure only one dose due to the minimum amount of time required for the three-dose series where the first and the third dose must be given at least 16 weeks apart. Because of concerns that patients may drop out of care within 4 months it was decided to capture one dose to measure the start of the series.
- Some Committee members suggested that one injection is a surrogate for the likelihood of getting the entire series.
- No information was provided on disparities.
- The evidence for the benefit of the hepatitis B vaccination was based on receiving the entire series of three doses. One dose does not provide adequate immunity. There wasn't any direct data presented regarding the efficacy of one vaccine dose to prevent the outcome of hepatitis B.
- Vaccination in the remote past may not be captured in the medical record. Measures should account for past history of vaccination. Universal screening of younger children will enlarge the vaccinated population in the future. Committee members suggested creating a measure of the patient's hepatitis B surface antibody status.

0584 Hepatitis C: Viral load test

Status: Maintenance, Original Endorsement: Dec 04, 2009
Description: This measure identifies the percentage of patients with chronic Hepatitis C (HCV) who began HCV antiviral therapy during the measurement year and had HCV Viral Load testing 6 months prior to initiation of antiviral therapy.
Numerator Statement: Patients in the denominator who had an HCV Viral Load test 6 months prior to the initiation of antiviral therapy.
Denominator Statement: Our denominator is anyone with Hepatitis C diagnosed anytime in the past, based on historical claims on file, who have a new start of peginterferon in the last year, excluding people with documentation of a medical reason(s) for not performing quantitative HCV RNA testing within 6 months prior to initiation of treatment (CPT Category II code 3218F-1P).
Exclusions: Exclude anyone with a code which states the patient has a medical reason for not having the test done.
Adjustment/Stratification: No risk adjustment or risk stratification No stratification.
Level of Analysis: Health Plan
Type of Measure: Process
Data Source: Administrative claims
Measure Steward: Resolution Health, Inc.

0584 Hepatitis C: Viral load test

STEERING COMMITTEE MEETING [08/28/2012]

Importance to Measure and Report: The measure does meet the Importance criteria

(1a. High Impact: 1b. Performance Gap, 1c. Evidence)

1a. Impact: **H-11; M-6; L-1; I-1**; 1b. Performance Gap: **H-4; M-14; L-2; I-0** 1c. Evidence: **Y-10; N-5; I-5**

Rationale:

- HCV has major disease burden in US. HCV RNA testing is important prior to starting therapy for multiple reasons: assessing virologic response during therapy, tailoring treatment to response, and shortening or terminating therapy if non-responsive.
- This measure looks at quantitative RNA viral measurement within 6 months of starting therapy. The evidence presented is based on the AASLD guidelines with a Class 1 recommendation, Level A evidence. A meta-analysis of 12 clinical trials showed the benefit of the HCV viral load test.
- Committee members noted that RNA testing is not enough; knowing the genotype of the virus is critical in planning treatment. The developer indicated they are looking at additional elements of pre-therapy testing to create a more comprehensive measure. Another Committee member noted that newer anti-viral treatments may not be specific to genotype, and in the future RNA testing may be all that is needed.
- Committee members questioned how the 6-month time window was determined. Viral loads can fluctuate; 6 months may be no better than 12 or 18 months. The developer noted that the 6 months' time window was a reflection of harmonization with measure 0395: *Hepatitis C ribonucleic acid (RNA) testing before initiating treatment* and seemed reasonable. Ultimately, the Committee and the developer clarified that the HCV RNA testing is done within 6 months prior to starting therapy.
- The developer reported that the compliance with this measure was roughly 68.8 to 84.8 percent. Committee members suggested that these results do not match their real world experience where insurers and third-party payers request the viral load as a pre-condition of authorization.

2. Scientific Acceptability of Measure Properties: The measure does not meet the Scientific Acceptability criteria

(2a. Reliability – precise specifications, testing; 2b. Validity – testing, threats to validity)

2a. Reliability: **H-1; M-5; L-4; I-10** 2b. Validity**: NA**

Rationale:

- This is a health plan level measure based on administrative claims.
- Committee members indicated that the cited performance gap did not match their own experience and raises question about the reliability and validity of the measure.
- The Committee questioned the information supplied by the developer for reliability. The developer agreed that there was no specific empiric testing for reliability.

2081 Newly enrolled in medical care

Status: New Submission
Description: Percentage of patients, regardless of age, with a diagnosis of HIV who were newly enrolled and had a medical visit in each of the 4-month periods in the measurement year
Numerator Statement: Number of patients in the denominator who had at least one medical visit in each 4-month period of the measurement year (Measurement year is a consecutive 12-month period of time.).
Denominator Statement: Number of patients, regardless of age, with a diagnosis of HIV who was newly enrolled with a medical provider and had at least one medical visit in the first 4 months of the measurement year. "Newly enrolled" patients are those who are: newly diagnosed with HIV and new to medical care; patient's new to medical care (previously diagnosed with HIV and never received HIV medical care); patients who transferred their medical care to your organization; or patients returning to medical care after a 2-year absence (patients re-engaged by the same organization).
Exclusions: Patients who died at any time during the measurement year.
Adjustment/Stratification: No risk adjustment or risk stratification Not applicable
Level of Analysis: Facility, Clinician : Group/Practice
Type of Measure: Process
Data Source: Electronic Clinical Data : Electronic Health Record, Paper Medical Records
Measure Steward: Health Resources and Services Administration - HIV/AIDS Bureau **Other organizations:** The Centers for Disease Control

STEERING COMMITTEE MEETING [08/29/2012]
Importance to Measure and Report: The measure does not meet the Importance criteria
(1a. High Impact: 1b. Performance Gap, 1c. Evidence)
1a. Impact: **H-14; M-3; L-2; I-0**; 1b. Performance Gap: **NA** 1c. Evidence: **Y-8; N-2; I-8**
Rationale:

- This measure is part of HRSA's suite of measures looking at retention in care, which is a significant issue within the context of HIV care, treatment and prevention.
- The Committed recognized that a measure does not define what actually occurs at the visit.
- There is lack of evidence to support the number of visits specified. The studies provided do not define what the optimal number of visits should be.
- The testing for this measure was performed using visits that were conducted by a physician, a nurse practitioner or a physician's assistant. The measure does not specify the visit must be with an HIV provider.
    - The developer explained that the purpose of this measure is not to look at HIV care specifically, but rather examine where those missed opportunities.
- The Committee questioned whether the evidence supports the need for many medical visits for individuals who do not necessarily have a gap in care but have recently transferred their care. If the patient has been retained in care over a 10-year period and transfers providers, the patients may not need the extra visits needed by a newly diagnosed patient.

Measures Withdrawn from consideration

7 measures previously endorsed by NQF have not been re-submitted or withdrawn from maintenance of endorsement. The following measures are being retired from endorsement:

Measure	Reason for retirement
0302 Ventilator bundle	Request for retirement by developer: Due to the lack of strong evidence to support the measure focus, the current national effort to define ventilator complications, and not intending for the measure to be used for public reporting.
0410 HIV/AIDS: Sexually transmitted diseases - Syphilis screening	This measure has been combined with measure 0409: *HIV/AIDS: Sexually transmitted disease-Chlamydia and gonorrhea screening*.
0411 HIV/AIDS: Other infectious diseases - Hepatitis B screening	Request for retirement by developer: The clinical practice guidelines for this measure focus give an AIII evidence grade (based on expert opinion). In addition, this is an intermediate process to hepatitis B vaccination.
0413 HIV/AIDS: Screening for high risk sexual behaviors	Request for retirement by developer: While it is important to screen for high risk sexual behavior among patients with HIV, the clinical practice guidelines do not provide a standardized approach to screening, making standardized measurement difficult. Since this measurement set uses claims and CPT Category II codes, the developer believed data gathered by the measures would be difficult to interpret.
0414 HIV/AIDS: Other infectious diseases - Hepatitis C	Request for retirement by developer: The clinical practice guidelines give this a BIII evidence grade (based on expert opinion). Hepatitis C screening is most important for patients with HIV who are sexually active. Since not all HIV patients are sexually active, the developer does not think this measure fits well into the primary care scope of this measurement set.
0415 HIV/AIDS: Screening for injection drug use	Request for retirement by developer: While it is important to screen for injection drug use among patients with HIV, the clinical practice guidelines do not provide a standardized approach to screening, making standardized measurement difficult. Since this measurement set uses claims and CPT Category II codes, the developer believed data gathered by the measures would be difficult to interpret.
0568 Appropriate follow-up for patients with HIV	Request for retirement by developer: Due to the large amount of resources required to participate in the maintenance process.

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Appendix A: Measure Specifications

	0058 Avoidance of antibiotic treatment in adults with acute bronchitis
Status	Maintenance, Original Endorsement: Aug 10, 2009, Most Recent Endorsement: Aug 10, 2009 Time-limited
Steward	National Committee for Quality Assurance
Description	The percentage of adults 18–64 years of age with a diagnosis of acute bronchitis who were not dispensed an antibiotic prescription.
Type	Process
Data Source	Administrative claims, Electronic Clinical Data, Electronic Clinical Data: Pharmacy This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from Health Management Organizations and Preferred Provider Organizations via the Interactive Data Submission System (IDSS) portal.
Level	Health Plan, Integrated Delivery System
Setting	Ambulatory Care : Clinician Office/Clinic, Ambulatory Care : Urgent Care
Numerator Statement	Patients who were dispensed antibiotic medication (see Table 1) on or three days after an outpatient or ED encounter for acute bronchitis (a higher rate is better). The measure is reported as an inverted rate (i.e. 1- numerator/denominator) to reflect the number of people that were not dispensed an antibiotic.

	0058 Avoidance of antibiotic treatment in adults with acute bronchitis
Numerator Details	Time Window: The measurement year (one calendar year) Table 1: Antibiotic Medications Aminoglycosides: Amikacin; Gentamicin; Kanamycin; Streptomycin; Tobramycin Aminopenicillins: Amoxicillin; Ampicillin Antipseudomonal penicillins: Piperacillin; Ticarcillin Beta-lactamase inhibitors: Amoxicillin-clavulanate; Ampicillin-sulbactam ; Piperacillin-tazobactam; Ticarcillin-clavulanate First-generation cephalosporins: Cefadroxil; Cefazolin ; Cephalexin Fourth-generation cephalosporins: Cefepime; Ketolides: Telithromycin; Lincomycin derivatives: Clindamycin; Lincomycin Macrolides: Azithromycin; Clarithromycin: Erythromycin; Erythromycin ethylsuccinate; Erythromycin lactobionate; Erythromycin stearate Miscellaneous antibiotics: Aztreonam; Chloramphenicol; Dalfopristin-quinupristin; Daptomycin; Erythromycin-sulfisoxazole; Linezolid; Metronidazole; Vancomycin Natural penicillins: Penicillin G benzathine-procaine; Penicillin G potassium; Penicillin G procaine; Penicillin G sodium; Penicillin V potassium; Penicillin G benzathine; Penicillinase resistant penicillin: Dicloxacilli; Nafcillin; Oxacillin; Quinolones: Ciprofloxacin; Gatifloxacin; Gemifloxacin; Levofloxacin; Lomefloxacin; Moxifloxacin; Norfloxacin; Ofloxacin; Sparfloxacin; Rifamycin derivatives: Rifampin Second generation cephalosporin: Cefaclor; Cefotetan; Cefoxitin; Cefprozil; Cefuroxime; Loracarbef; Sulfonamides: Sulfadiazine; Sulfisoxazole; Sulfamethoxazole-trimethoprim Tetracyclines: Doxycycline; Minocycline; Tetracycline Third generation cephalosporins: Cefdinir; Cefditoren; Cefixime; Cefotaxime; Cefpodoxime; Ceftazidime; Ceftibuten; Ceftriaxone Urinary anti-infectives: Fosfomycin; Nitrofurantoin; Nitrofurantoin macrocrystals-monohydrate; Trimethoprim; Nitrofurantoin macrocrystals
Denominator Statement	All patients 18 years as of January 1 of the year prior to the measurement year to 64 years as of December 31 of the measurement year with a claim/encounter for a diagnosis of acute bronchitis (refer to Table 2) and an outpatient or ED visit code (refer to Table 3) during the Intake Period (January 1–December 24 of the measurement year).
Denominator Details	Time Window: The measurement year (one calendar year) All patients 18 years as of January 1 of the year prior to the measurement year to 64 years as of December 31 of the measurement year with a claim/encounter for a diagnosis of acute bronchitis (refer to Table 2) and an outpatient or ED visit code (refer t
Exclusions	N/A
Exclusion details	N/A
Risk Adjustment	No risk adjustment or risk stratification N/A
Stratification	N/A
Type Score	Other The measure is reported as an inverted rate [1 – (numerator/denominator)], therefore a higher score represents the proportion of patients for whom antibiotics were not prescribed) better quality = higher score

	0058 Avoidance of antibiotic treatment in adults with acute bronchitis
Algorithm	Episode Date is defined as the date of service for any outpatient or ED visit (Table 3) during the Intake Period with any diagnosis of acute bronchitis (Table 2). Step 1 Determine the eligible population. To do so, identify all patients in the specified age range who had an outpatient or ED visit (Table 2) with a diagnosis of acute bronchitis (Table 3) during the Intake Period. Step 2 Determine all acute bronchitis Episode Dates during the intake period. For each patient identified in step 1, determine all outpatient or ED claims/encounters with a diagnosis of acute bronchitis. Step 3 Test for Negative Comorbid Condition History. Exclude Episode Dates when the patient had a claim/encounter with a diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date (Table 4). Step 4 Test for Negative Medication History. Exclude Episode Dates where a new or refill prescription for an antibiotic medication (Table 1) was filled 30 days prior to the Episode Date or was active on the Episode Date. Step 5 Test for Negative Competing Diagnosis. Exclude Episode Dates where during the period 30 days prior to the Episode Date through 7 days after the Episode Date (inclusive) the patient had a claim/encounter with any competing diagnosis (Table 5). Step 6 Calculate continuous enrollment. The patient must be continuously enrolled with no more than one gap in coverage from 365 days (1 year) prior to the Episode Date through 7 days after the Episode Date. Step 7 Determine the number of patients in the eligible population who received a prescription for an antibiotic medication on or three days after the earliest episode start date Step 8 Calculate a rate (number of patients receiving an antibiotic) Step 9 Subtract the rate calculated in Step 8 from one to invert the measure result to represent appropriate treatment of adults with acute bronchitis (i.e. antibiotic not prescribed). The measure is reported as an inverted rate (i.e. 1- numerator/denominator) to reflect the number of people that were not dispensed an antibiotic.
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	0069 Appropriate treatment for children with upper respiratory infection (URI)
Status	Maintenance, Original Endorsement: Aug 10, 2009, Most Recent Endorsement: Aug 10, 2009 Time-limited
Steward	National Committee for Quality Assurance
Description	Percentage of children 3 months to 18 years of age with a diagnosis of URI who were not dispensed an antibiotic medication.
Type	Process

	0069 Appropriate treatment for children with upper respiratory infection (URI)
Data Source	Administrative claims, Electronic Clinical Data, Electronic Clinical Data: Pharmacy This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from Health Management Organizations and Preferred Provider Organizations via the Interactive Data Submission System (IDSS) portal.URL http://www.ncqa.org/tabid/370/default.aspx
Level	Health Plan, Integrated Delivery System
Setting	Ambulatory Care : Clinician Office/Clinic, Ambulatory Care : Urgent Care
Numerator Statement	Patients who were dispensed antibiotic medication (Table 1) on or within 3 days after an outpatient or ED encounter for upper respiratory infection (URI) (a higher rate is better). The measure is reported as an inverted rate (i.e. 1- numerator/denominator) to reflect the number of children that were not dispensed an antibiotic.
Numerator Details	Time Window: The intake period, a 12 month beginning on July 1st of the year prior to the measurement year (a 12 month calendar year) and ending on June 30 of the measurement year. Table 1: Antibiotic Medications Aminopenicillins: Amoxicillin ; Ampicillin Beta-lactamase inhibitors: Amoxicillin-clavulanate First generation cephalosporins: Cefadroxil; Cefazolin; Cephalexin Folate antagonist: Trimethoprim Lincomycin derivatives: Clindamycin Macrolides: Azithromycin; Clarithromycin; Erythromycin; Erythromycin ethylsuccinate; Erythromycin lactobionate; Erythromycin stearate Miscellaneous antibiotics: Erythromycin-sulfisoxazole Natural penicillins: Penicillin G potassium; Penicillin G sodium: Penicillin V potassium Penicillinase-resistant penicillins: Dicloxacillin Quinolones: Ciprofloxacin; Gatifloxacin; Levofloxacin; Lomefloxacin; Moxifloxacin; Ofloxacin; Sparfloxacin Second generation cephalosporins: Cefaclor; Cefprozil; Cefuroxime; Loracarbef Sulfonamides: Sulfamethoxazole-trimethoprim; Sulfisoxazole Tetracyclines: Doxycycline; Minocycline; Tetracycline Third generation cephalosporins: Cefdinir; Cefixime; Cefpodoxime; Ceftibuten; Cefditoren; Ceftriaxone
Denominator Statement	All children age 3 months as of July 1 of the year prior to the measurement year to 18 years as of June 30 of the measurement year who had an ED or outpatient visit with only a diagnosis of nonspecific upper respiratory infection (URI) (Table 2) during the intake period (July 1st of the year prior to the measurement year to June 30th of the measurement year).

	0069 Appropriate treatment for children with upper respiratory infection (URI)
Denominator Details	Time Window: A 12 month period beginning on July 1st of the year prior to the measurement year (a 12 month calendar year) and ending on June 30 of the measurement year. All children age 3 months as of July 1 of the year prior to the measurement year to 18 years as of June 30 of the measurement year who had an ED or outpatient visit (see Table 3) with only a diagnosis of nonspecific upper respiratory infection (URI) (Table 2) during the intake period (July 1st of the year prior to the measurement year to June 30th of the measurement year). Patients must have (1) a negative medication history for antibiotics in the past 30 days and (2) a negative competing diagnosis for an acute condition in the past 30 days requiring antibiotics (see Table4).
Exclusions	N/A
Exclusion details	N/A
Risk Adjustment	No risk adjustment or risk stratification N/A
Stratification	N/A
Type Score	Other The measure is reported as an inverted rate [1 – (numerator/denominator)], therefore a higher score represents the proportion of patients for whom antibiotics were not prescribed) better quality = higher score
Algorithm	Episode Date is defined as the date of service for any outpatient or ED visit (Table 3) during the Intake Period with only a diagnosis of URI (Table 2). Step 1 Determine the eligible population. To do so, identify all patients who had an outpatient or ED visit (Table 3) with only a diagnosis of URI (Table 2) during the Intake Period. Exclude claims/encounters with more than one diagnosis. Step 2 Determine all URI Episode Dates during the intake period. For each patient identified in step 1, determine all outpatient or ED claims/encounters with a URI diagnosis. Step 3 Test for Negative Medication History. Exclude Episode Dates where a new or refill prescription for an antibiotic medication (Table 1) was filled 30 days prior to the Episode Date or was active on the Episode Date. Step 4 Test for Negative Competing Diagnosis. Exclude Episode Dates where the patient had a claim/encounter with a competing diagnosis (Table 4) on or three days after the Episode Date. Step 5 Calculate continuous enrollment. The patient must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date. Step 6 Determine the number of patients in the eligible population who were dispensed a prescription for an antibiotic medication on or three days after the earliest episode start date. Step 7 Calculate a rate (number of patients receiving an antibiotic/denominator) Step 8 Subtract the rate calculated in Step 7 from 1 to invert the measure result to represent appropriate treatment of children with URI (i.e. antibiotic not prescribed) The measure is reported as an inverted rate (i.e. 1- numerator/denominator) to reflect the number of children that were not dispensed an antibiotic.
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	0395 Paired Measure: Hepatitis C ribonucleic acid (RNA) testing before initiating treatment (paired with 0396)
Status	Maintenance, Original Endorsement: Jul 31, 2008, Most Recent Endorsement: Jul 31, 2008 Time-limited
Steward	American Medical Association - Physician Consortium for Performance Improvement (AMA-PCPI) Other organizations: American Association for the Study of Liver Diseases, American Gastroenterological Association Institute
Description	Percentage of patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment for whom quantitative HCV RNA testing was performed within 6 months prior to initiation of antiviral treatment
Type	Process
Data Source	Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Laboratory, Electronic Clinical Data : Registry Not Applicable Attachment AMA-PCPI_0395_RNA_Testing_Before_Treatment_7.11.12.pdf
Level	Clinician : Group/Practice, Clinician : Individual, Clinician : Team
Setting	Ambulatory Care : Clinician Office/Clinic, Other, Ambulatory Care : Urgent Care Hospital Outpatient Clinic
Numerator Statement	Patients for whom quantitative HCV RNA testing was performed within 6 months prior to the initiation of antiviral treatment
Numerator Details	Time Window: Once within 6 months prior to initiation of antiviral treatment EHR Specifications: eSpecifications attached
Denominator Statement	All patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment
Denominator Details	Time Window: 12 consecutive months EHR Specifications: eSpecifications attached
Exclusions	Documentation of medical reason(s) for not performing quantitative HCV RNA testing within 6 months prior to the initiation of treatment
Exclusion details	The PCPI exception methodology uses three categories of reasons for which a patient may be removed from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For this measure, exceptions may include medical reason(s) for not performing quantitative HCV RNA testing within 6 months prior to the initiation of treatment. Where examples of exceptions are included in the measure language, value sets for these examples are developed and included in the eSpecifications. Although this methodology does not require the external reporting of more detailed exception data, the PCPI recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The PCPI also advocates the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement. Additional details by data source are as follows: EHR Specifications: eSpecifications attached

	0395 Paired Measure: Hepatitis C ribonucleic acid (RNA) testing before initiating treatment (paired with 0396)
Risk Adjustment	No risk adjustment or risk stratification None
Stratification	We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.
Type Score	Rate/proportion better quality = higher score
Algorithm	To calculate performance rates: 1) Find the patients who meet the initial patient population (i.e., the general group of patients that a set of performance measures is designed to address). 2) From the patients within the initial patient population criteria, find the patients who qualify for the denominator (i.e., the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial patient population and denominator are identical. 3) From the patients within the denominator, find the patients who qualify for the Numerator (i.e., the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator 4) From the patients who did not meet the numerator criteria, determine if the physician has documented that the patient meets any criteria for denominator when exceptions have been specified [for this measure: medical reason(s)]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation. --Although the exception cases are removed from the denominator population for the performance calculation, the exception rate (i.e., percentage with valid exceptions) should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI. If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure. Calculation algorithm is included in data dictionary/code table attachment 2a1.30.

	0395 Paired Measure: Hepatitis C ribonucleic acid (RNA) testing before initiating treatment (paired with 0396)
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	0396 Paired Measure: HCV genotype testing prior to treatment (paired with 0395)
Status	Maintenance, Original Endorsement: Jul 31, 2008, Most Recent Endorsement: Jul 31, 2008 Time-limited
Steward	American Medical Association - Physician Consortium for Performance Improvement (AMA-PCPI) Other organizations: American Association for the Study of Liver Diseases, American Gastroenterological Association Institute
Description	Percentage of patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment for whom HCV genotype testing was performed prior to initiation of antiviral treatment
Type	Process
Data Source	Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Laboratory, Electronic Clinical Data : Registry Not Applicable Attachment AMA-PCPI_0396_Genotype_Test_Prior_to_Treatment_7.11.12.pdf
Level	Clinician : Group/Practice, Clinician : Individual, Clinician : Team
Setting	Ambulatory Care : Clinician Office/Clinic, Other, Ambulatory Care : Urgent Care Hospital Outpatient Clinic
Numerator Statement	Patients for whom HCV genotype testing was performed prior to initiation of antiviral treatment

	0396 Paired Measure: HCV genotype testing prior to treatment (paired with 0395)
Numerator Details	Time Window: Once prior to initiation of antiviral treatment EHR Specifications: eSpecifications attached
Denominator Statement	All patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment
Denominator Details	Time Window: 12 consecutive months EHR Specifications: eSpecifications attached
Exclusions	None
Exclusion details	Not applicable
Risk Adjustment	No risk adjustment or risk stratification None
Stratification	We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.
Type Score	Rate/proportion better quality = higher score
Algorithm	To calculate performance rates: 1) Find the patients who meet the initial patient population (i.e., the general group of patients that a set of performance measures is designed to address). 2) From the patients within the initial patient population criteria, find the patients who qualify for the denominator (i.e., the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial patient population and denominator are identical. 3) From the patients within the denominator, find the patients who qualify for the Numerator (i.e., the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator If the patient does not meet the numerator, this case represents a quality failure. Calculation algorithm is included in data dictionary/code table attachment (2a1.30).

	0396 Paired Measure: HCV genotype testing prior to treatment (paired with 0395)
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	0398 Hepatitis C: HCV RNA testing at no greater than week 12 of treatment
Status	Maintenance, Original Endorsement: Jul 31, 2008, Most Recent Endorsement: Jul 31, 2008 Time-limited
Steward	American Medical Association - Physician Consortium for Performance Improvement (AMA-PCPI)
Description	Percentage of patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment for whom quantitative HCV RNA testing was performed at no greater than 12 weeks from initiation of antiviral treatment
Type	Process
Data Source	Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Laboratory, Electronic Clinical Data : Registry Not Applicable Attachment AMA-PCPI_0398_Testing_Week_12_7.11.12.pdf
Level	Clinician : Group/Practice, Clinician : Individual, Clinician : Team
Setting	Ambulatory Care : Clinician Office/Clinic, Other, Ambulatory Care : Urgent Care Hospital Outpatient Clinic
Numerator Statement	Patients for whom quantitative HCV RNA testing was performed at no greater than 12 weeks from the initiation of antiviral treatment

	0398 Hepatitis C: HCV RNA testing at no greater than week 12 of treatment
Numerator Details	Time Window: Once within 4-12 weeks after initiation of antiviral treatment Definition: 12 Weeks from Initiation – Patients for whom testing was performed between 4-12 weeks from the initiation of antiviral treatment will meet the numerator for this measure (depending upon the specific antiviral therapy used). EHR Specifications: eSpecifications attached
Denominator Statement	All patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment
Denominator Details	Time Window: 12 consecutive months EHR Specifications: eSpecifications attached
Exclusions	Documentation of medical reason(s) for not performing quantitative HCV RNA testing at no greater than 12 weeks from the initiation of antiviral treatment Documentation of patient reason(s) for not performing quantitative HCV RNA testing at no greater than 12 weeks from the initiation of antiviral treatment

	0399 Paired Measure: Hepatitis C: Hepatitis A vaccination (paired with 0400)
Status	Maintenance, Original Endorsement: Jul 31, 2008, Most Recent Endorsement: Jul 31, 2008 Time-limited
Steward	American Medical Association - Physician Consortium for Performance Improvement (AMA-PCPI) Other organizations: American Association for the Study of Liver Diseases, American Gastroenterological Association Institute
Description	Percentage of patients aged 18 years and older with a diagnosis of hepatitis C who have received at least one injection of hepatitis A vaccine, or who have documented immunity to hepatitis A
Type	Process
Data Source	Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Laboratory, Electronic Clinical Data : Registry Not Applicable
Level	Clinician : Group/Practice, Clinician : Individual, Clinician : Team
Setting	Ambulatory Care : Clinician Office/Clinic, Other, Ambulatory Care : Urgent Care Hospital Outpatient Clinic
Numerator Statement	Patients who have received at least one injection of hepatitis A vaccine, or who have documented immunity to Hepatitis A
Numerator Details	Time Window: Once during the measurement period Definition: *Received includes documentation that a patient received at least one injection of hepatitis A vaccine from another provider EHR Specifications: eMeasure developed – see attached
Denominator Statement	All patients aged 18 years and older with a diagnosis of hepatitis C

	0399 Paired Measure: Hepatitis C: Hepatitis A vaccination (paired with 0400)
Denominator Details	Time Window: 12 consecutive months EHR Specifications: eMeasure developed – see attached
Exclusions	Documentation of medical reason(s) for not receiving at least one injection of hepatitis A vaccine Documentation of patient reason(s) for not receiving at least one injection of hepatitis A vaccine
Exclusion Details	The PCPI exception methodology uses three categories of reasons for which a patient may be removed from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. Examples are provided in the measure exception language of instances that may constitute an exception and are intended to serve as a guide to clinicians. For this measure, exceptions may include medical reason(s) or patient reason(s) for not receiving at least one injection of hepatitis A vaccine. Where examples of exceptions are included in the measure language, value sets for these examples are developed and included in the eSpecifications. Although this methodology does not require the external reporting of more detailed exception data, the PCPI recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The PCPI also advocates the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement. Additional details by data source are as follows: EHR Specifications: eMeasure developed – see attached
Risk Adjustment	No risk adjustment or risk stratification None
Stratification	We encourage the results of this measure to be stratified by race, ethnicity, gender, and primary language, and have included these variables as recommended data elements to be collected.
Type Score	Rate/proportion better quality = higher score

	0399 Paired Measure: Hepatitis C: Hepatitis A vaccination (paired with 0400)
Algorithm	To calculate performance rates: 1) Find the patients who meet the initial patient population (i.e., the general group of patients that a set of performance measures is designed to address). 2) From the patients within the initial patient population criteria, find the patients who qualify for the denominator (i.e., the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial patient population and denominator are identical. 3) From the patients within the denominator, find the patients who qualify for the Numerator (i.e., the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator 4) From the patients who did not meet the numerator criteria, determine if the physician has documented that the patient meets any criteria for denominator when exceptions have been specified [for this measure: medical reason(s) or patient reason(s)]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation. --Although the exception cases are removed from the denominator population for the performance calculation, the exception rate (i.e., percentage with valid exceptions) should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI. If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure. Calculation algorithm is included in e-measure which was emailed to NQF staff.
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	0404 HIV/AIDS: CD4 Cell Count or Percentage Performed
Status	Maintenance, Original Endorsement: Jul 31, 2008, Most Recent Endorsement: Jul 31, 2008 Time-limited
Steward	National Committee for Quality Assurance Other organizations: Physician Performance Measures (Measures) and related data specifications have been developed by the American Medical Association (AMA) in collaboration with the Physician Consortium for Performance Improvement™ (the Consortium) and the National Committee for Quality Assurance (NCQA). The Health Resources and Services Administration (HRSA) and the Infectious Diseases Society of America also participated in the development of this measure.
Description	Percentage of patients aged six months and older with a diagnosis of HIV/AIDS, with at least two CD4 cell counts or percentages performed during the measurement year at least 3 months apart
Type	Process
Data Source	Electronic Clinical Data : Electronic Health Record N/A
Level	Clinician : Group/Practice, Clinician : Individual
Setting	Ambulatory Care : Clinician Office/Clinic
Numerator Statement	Patients with at least two CD4 cell counts or percentages performed during the measurement year at least 3 months apart
Numerator Details	Time Window: 12-month measurement period The medical record must include the date of the CD4 counts or percentages and the results or findings.
Denominator Statement	All patients aged 6 months and older with a diagnosis of HIV/AIDS, who had at least two medical visits during the measurement year, with at least 90 days between each visit
Denominator Details	Time Window: 12-month measurement year Definition of “Medical Visit” - any visit with a health care professional who provides routine primary care for the patient with HIV/AIDS (may be a primary care physician, ob/gyn, pediatrician or infectious diseases specialist)
Exclusions	None
Exclusion Details	N/A
Risk Adjustment	No risk adjustment or risk stratification N/A
Stratification	N/A
Type Score	Rate/proportion better quality = higher score
Algorithm	Measure Calculation For performance purposes, this measure is calculated by creating a fraction with the following components: Denominator, Numerator. Step 1: Determine the eligible population. The eligible population is all the patients, aged 6 months and older, with a diagnosis of HIV/AIDS. Step 2: Determine number of patients meeting the denominator criteria as specified in Section 2a1.7 above. Step 3: Determine the number of patients who meet the numerator criteria as specified in section 2a1.3 above. The numerator includes all patients in the denominator population who had a CD4 cell count or percentage performed at least once every 6 months. Step 4: Calculate the rate by dividing the total from Step 3 by the total from Step 2. Attachment PCPI_Sample_Calculation_Algorithm-634771031423103164.pdf

	0404 HIV/AIDS: CD4 Cell Count or Percentage Performed
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	0405 HIV/AIDS: Pneumocystis jiroveci pneumonia (PCP) prophylaxis
Status	Maintenance, Original Endorsement: Jul 31, 2008, Most Recent Endorsement: Jul 31, 2008 Time-limited
Steward	National Committee for Quality Assurance Other organizations: Physician Performance Measures (Measures) and related data specifications have been developed by the American Medical Association (AMA) in collaboration with the Physician Consortium for Performance Improvement™ (the Consortium) and the National Committee for Quality Assurance (NCQA). The Health Resources and Services Administration (HRSA) and the Infectious Diseases Society of America also participated in the development of this measure.
Description	Percentage of patients aged 6 weeks or older with a diagnosis of HIV/AIDS, who were prescribed Pneumocystis jiroveci pneumonia (PCP) prophylaxis
Type	Process
Data Source	Electronic Clinical Data : Electronic Health Record N/A
Level	Clinician : Group/Practice, Clinician : Individual
Setting	Ambulatory Care : Clinician Office/Clinic
Numerator Statement	Numerator 1: Patients who were prescribed Pneumocystis jiroveci pneumonia (PCP) prophylaxis within 3 months of CD4 count below 200 cells/mm3 Numerator 2: Patients who were prescribed Pneumocystis jiroveci pneumonia (PCP) prophylaxis within 3 months of CD4 count below 500 cells/mm3 or a CD4 percentage below 15% Numerator 3: Patients who were prescribed Pneumocystis jiroveci pneumonia (PCP) prophylaxis at the time of HIV diagnosis Report a rate for each numerator (e.g., Numerator 1/Denominator 1, etc.) and a total rate (Total Numerator/Total Denominator)
Numerator Details	Time Window: 12-month measurement period
Denominator Statement	Denominator 1. All patients aged 6 years and older with a diagnosis of HIV/AIDS and a CD4 count below 200 cells/mm3, 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/mm3 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
Denominator Details	Time Window: 12-month measurement period Definition of “Medical Visit” - any visit with a health care professional who provides routine primary care for the patient with HIV/AIDS (may be a primary care physician, ob/gyn, pediatrician or infectious diseases specialist)
Exclusions	Denominator 1 Exclusion: Patient did not receive PCP prophylaxis because there was a CD4 count above 200 cells/mm3 during the three months after a CD4 count below 200 cells/mm3 Denominator 2 Exclusion: Patient did not receive PCP prophylaxis because there was a CD4 count above 500 cells/mm3 or CD4 percentage above 15% during the three months after a CD4 count below 500 cells/mm3 or CD4 percentage below 15%
Exclusion Details	
Risk Adjustment	No risk adjustment or risk stratification N/A

	0405 HIV/AIDS: Pneumocystis jiroveci pneumonia (PCP) prophylaxis
Stratification	N/A
Type Score	Rate/proportion better quality = higher score
Algorithm	Measure Calculation For performance purposes, this measure is calculated by creating a fraction with the following components: Denominator, Numerator, Exclusions. Step 1: Determine the eligible population. The eligible population is all patients, aged 6 weeks and older, with a diagnosis of HIV/AIDS. Step 2: Determine number of patients meeting the denominator criteria as specified in Section 2a1.7 above. Step 3: Determine the number of patients who meet the numerator criteria as specified in Section 2a1.3 above. Step 4: Test for patients with valid exceptions from Step 3. Step 5: Calculate the rate by dividing the total from Step 4 by the total from Step 2. Attachment PCPI_Sample_Calculation_Algorithm-634770923023240700.pdf
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	0408 HIV/AIDS: Tuberculosis (TB) screening
Status	Maintenance, Original Endorsement: Jul 31, 2008, Most Recent Endorsement: Jul 31, 2008 Time-limited
Steward	National Committee for Quality Assurance Other organizations: Physician Performance Measures (Measures) and related data specifications have been developed by the American Medical Association (AMA) in collaboration with the Physician Consortium for Performance Improvement™ (the Consortium) and the National Committee for Quality Assurance (NCQA). The Health Resources and Services Administration (HRSA) and the Infectious Diseases Society of America also participated in the development of this measure.
Description	Percentage of patients aged 3 months and older with a diagnosis of HIV/AIDS, for whom there was documentation that a tuberculosis (TB) screening test was performed and results interpreted (for tuberculin skin tests) at least once since the diagnosis of HI

	0408 HIV/AIDS: Tuberculosis (TB) screening
Type	Process
Data Source	Electronic Clinical Data : Electronic Health Record N/A
Level	Clinician : Group/Practice, Clinician : Individual
Setting	Ambulatory Care : Clinician Office/Clinic
Numerator Statement	Patients for whom there was documentation that a tuberculosis (TB) screening test was performed and results interpreted (for tuberculin skin tests) at least once since the diagnosis of HIV infection. NOTE: Results from the tuberculin skin test must be interpreted by a healthcare professional.
Numerator Details	Time Window: Since diagnosis of HIV infection
Denominator Statement	All patients aged 3 months and older with a diagnosis of HIV/AIDS, who had at least two visits during the measurement year, with at least 90 days in between each visit
Denominator Details	Time Window: 12-month measurement period Definition of "Medical Visit" - any visit with a health care professional who provides routine primary care for the patient with HIV/AIDS (may be a primary care physician, ob/gyn, pediatrician or infectious diseases specialist)
Exclusions	Documentation of Medical Reason for not performing a tuberculosis (TB) screening test (e.g., patients with a history of positive PPD or treatment for TB)
Exclusion Details	
Risk Adjustment	No risk adjustment or risk stratification N/A
Stratification	N/A
Type Score	Rate/proportion better quality = higher score
Algorithm	Measure Calculation For performance purposes, this measure is calculated by creating a fraction with the following components: Denominator, Numerator, Exclusions. Step 1: Determine the eligible population. The eligible population is all patients, aged 3 months and older, with a diagnosis of HIV/AIDS. Step 2: Determine number of patients meeting the denominator criteria as specified in Section 2a1.7 above. Step 3: Determine the number of patients who meet the numerator criteria as specified in Section 2a1.3. The numerator includes all patients in the denominator population who had a TB screening test performed. Step 4: Test for patients with valid exclusions from Step 3. Step 5: Calculate the rate by dividing the total from Step 4 by the total from Step 2. Attachment PCPI_Sample_Calculation_Algorithm-634768432553834044.pdf

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	0409 HIV/AIDS: Sexually transmitted diseases – Screening for chlamydia, gonorrhea, and syphilis
Status	Maintenance, Original Endorsement: Jul 31, 2008, Most Recent Endorsement: Jul 31, 2008 Time-limited
Steward	National Committee for Quality Assurance Other organizations: Physician Performance Measures (Measures) and related data specifications have been developed by the American Medical Association (AMA) in collaboration with the Physician Consortium for Performance Improvement™ (the Consortium) and the National Committee for Quality Assurance (NCQA). The Health Resources and Services Administration (HRSA) and the Infectious Diseases Society of America also participated in the development of this measure.
Description	Percentage of patients aged 13 years and older with a diagnosis of HIV/AIDS, who have received chlamydia, gonorrhea, and syphilis screenings at least once since the diagnosis of HIV infection
Type	Process
Data Source	Electronic Clinical Data : Electronic Health Record N/A
Level	Clinician : Group/Practice, Clinician : Individual
Setting	Ambulatory Care : Clinician Office/Clinic
Numerator Statement	Patients who have received chlamydia, gonorrhea, and syphilis screenings at least once since the diagnosis of HIV infection
Numerator Details	Time Window: Since diagnosis of HIV infection
Denominator Statement	All patients aged 13 years and older with a diagnosis of HIV/AIDS, who had at least two visits during the measurement year, with at least 90 days between visits

	0409 HIV/AIDS: Sexually transmitted diseases – Screening for chlamydia, gonorrhea, and syphilis
Denominator Details	Time Window: 12-month measurement period Definition of "Medical Visit" - any visit with a health care professional who provides routine primary care for the patient with HIV/AIDS (may be a primary care physician, ob/gyn, pediatrician or infectious diseases specialist)
Exclusions	None
Exclusion Details	N/A
Risk Adjustment	No risk adjustment or risk stratification N/A
Stratification	N/A
Type Score	Rate/proportion better quality = higher score
Algorithm	Measure Calculation For performance purposes, this measure is calculated by creating a fraction with the following components: Denominator, Numerator. Step 1: Determine the eligible population. The eligible population is all the patients, aged 13 years and older, with a diagnosis of HIV/AIDS. Step 2: Determine number of patients meeting the denominator criteria as specified in Section 2a1.7 above. Step 3: Determine the number of patients who meet the numerator criteria as specified in section 2a1.3 above. The numerator includes all patients in the denominator population who have received chlamydia, gonorrhea, and syphilis screenings at least once since the diagnosis of HIV/AIDS. Step 4: Calculate the rate by dividing the total from Step 3 by the total from Step 2. Attachment PCPI_Sample_Calculation_Algorithm.pdf
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	2079 Medical visit frequency
Status	New Submission Time-limited

	2079 Medical visit frequency
Steward	Health Resources and Services Administration - HIV/AIDS Bureau Other organizations: The Center For Disease Control and Prevention
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. A medical visit is any visit in an outpatient/ambulatory care setting with a nurse practitioner, physician, and/or a physician assistant who provides comprehensive HIV care.
Type	Process
Data Source	Electronic Clinical Data: Electronic Health Record, Paper Medical Records Not applicable. Attachment Medical_visit_frequency_data_dictionary.pdf
Level	Facility, Clinician : Group/Practice
Setting	Ambulatory Care : Clinician Office/Clinic
Numerator Statement	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 prior 6-month period and the last medical visit in the subsequent 6-month period. (Measurement period is a consecutive 24-month period of time.)
Numerator Details	Time Window: The numerator time window is a consecutive 24-month period of time. To be included in the numerator, patients must have 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 Statement	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.
Denominator Details	Time Window: Patients are eligible for inclusion in the denominator if they had a medical visit in the first 6 months of the 24-month measurement period. To be included in the denominator, patients must meet all of the following conditions/events: 1. Patients of any age during the measurement period 2. Patients without a date of death during the 24-month measurement period 3. Patients diagnosed with HIV du
Exclusions	Patients who died at any time during the 24-month measurement period.
Exclusion Details	Patients with a date of death during the measurement period.
Risk Adjustment	No risk adjustment or risk stratification Not applicable
Stratification	Not applicable
Type Score	Rate/proportion better quality = higher score

	2079 Medical visit frequency
Algorithm	1. Identify the individuals who satisfy all specific criteria for inclusion in the denominator: 1.) diagnosed with HIV during the first 3 months of the 24-month measurement period or prior to the 24-month measurement period; 2.) did not have a date of death during the 24-month measurement period; and 3.) had at least one medical visit in the first 6 months of the 24-month measurement period. The individuals who met these three criteria are the denominator population. 2. Identify the individuals from the denominator population who meet the criterion for inclusion in the numerator: must have 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. 3. Calculate the rate by dividing the numerator population by the denominator population and multiply by 100. Attachment Medical_Visit_Frequency_Measure_Logic_6-20-12.pdf
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	2080 Gap in medical visits
Status	New Submission Time-limited
Steward	Health Resources and Services Administration-HIV/AIDS Bureau Other organizations: The Centers For Disease Control
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. A medical visit is any visit in an outpatient/ambulatory care setting with a nurse practitioner, physician, and/or a physician assistant who provides comprehensive HIV care.
Type	Process
Data Source	Electronic Clinical Data: Electronic Health Record, Paper Medical Records Not applicable. Attachment Gap_measure_data_dictionary-634781990173517766.pdf
Level	Facility, Clinician : Group/Practice
Setting	Ambulatory Care : Clinician Office/Clinic
Numerator Statement	Number of patients in the denominator who did not have a medical visit in the last 6 months of the measurement year (Measurement year is a consecutive 12-month period of time).
Numerator Details	Time Window: The numerator time window is the last 6 months of the measurement year. (The measurement year can be any consecutive 12-month period.) To be included in the numerator, patients must not have had a medical visit in the last 6 months of the measurement year.
Denominator Statement	Number of patients, regardless of age, with a diagnosis of HIV who had at least one medical visit in the first 6 months of the measurement year. (The measurement year can be any consecutive 12-month period.)
Denominator Details	Time Window: Patients are eligible for inclusion in the denominator if they had a medical visit in the first 6 months of the measurement year. To be included in the denominator, patients must meet all of the following conditions/events: 1. Patients of any age during the measurement year 2. Patients without a date of death during the measurement year 3. Patients diagnosed with HIV during the fir

	2080 Gap in medical visits
Exclusions	Patients who died at any time during the measurement year.
Exclusion Details	Patients with a date of death during the measurement year.
Risk Adjustment	No risk adjustment or risk stratification Not applicable
Stratification	Not applicable
Type Score	Rate/proportion better quality = lower score
Algorithm	1. Identify the individuals who satisfy all specific criteria for inclusion in the denominator: 1.) had a HIV diagnosis prior to the measurement year or during the first three months of the measurement year; 2.) did not have a date of death during the measurement year; and 3.) had at least one medical visit in the first 6 months of the measurement year. The individuals who met these three criteria are the denominator population. 2. Identify the individuals from the denominator population who meet the criterion for inclusion in the numerator: did not have a medical visit in the last 6 months of the measurement year. 3. Calculate the percentage by dividing the numerator population by the denominator population and multiply by 100. Attachment Gap_Measure_Logic_6-20-12.pdf
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	2082 HIV viral load suppression
Status	New Submission Time-limited
Steward	Health Resources and Services Administration - HIV/AIDS Bureau Other organizations: The Centers for Disease Control
Description	Percentage of patients, regardless of age, with a diagnosis of HIV with a HIV viral load less than 200 copies/mL at last HIV viral load test during the measurement year. A medical visit is any visit in an outpatient/ambulatory care setting with a nurse practitioner, physician, and/or a physician assistant who provides comprehensive HIV care.
Type	Outcome
Data Source	Electronic Clinical Data: Electronic Health Record, Electronic Clinical Data: Laboratory, Paper Medical Records Not applicable. Attachment Viral_load_measure_data_dictionary.pdf
Level	Facility, Clinician : Group/Practice
Setting	Ambulatory Care : Clinician Office/Clinic
Numerator Statement	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
Numerator Details	Time Window: The numerator time window is the measurement year. The measurement year can be any consecutive 12-month period. To be included in the numerator, patients had a HIV viral load less than 200 copies/mL at the last HIV viral load test during the measurement year
Denominator Statement	Number of patients, regardless of age, with a diagnosis of HIV with at least one medical visit in the measurement year

	2082 HIV viral load suppression
Denominator Details	Time Window: The denominator time window is the measurement year. The measurement year can be any consecutive 12-month period. To be included in the denominator, patients must meet all of the following conditions/events: 1. Patients of any age during the measurement year 2. Patients diagnosed with HIV during the first 3 months of the measurement year or prior to the measurement
Exclusions	There are no patient exclusions.
Exclusion Details	There are no patient exclusions.
Risk Adjustment	No risk adjustment or risk stratification Not applicable
Stratification	Not applicable
Type Score	Rate/proportion better quality = higher score
Algorithm	1. Identify the individuals who satisfy all specific criteria for inclusion in the denominator: 1.) diagnosed with a HIV during the first 3 months of the measurement year or prior to the measurement year; and 2.) had at least one medical visit during the measurement year. The individuals who met these criteria are the denominator population. 2. Identify the individuals from the denominator population who meet the criterion for inclusion in the numerator: had a HIV viral load less than 200 copies/mL at last HIV viral load test during the measurement year. 3. Calculate the percentage by dividing the numerator population by the denominator population and multiply by 100. Attachment Viral_Load_Suppression_Measure_Logic_6-20-12.pdf
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	2083 Prescription of HIV antiretroviral therapy
Status	New Submission Time-limited
Steward	Health Resources and Services Administration - HIV/AIDS Bureau Other organizations: The Centers for Disease Control
Description	Percentage of patients, regardless of age, with a diagnosis of HIV prescribed antiretroviral therapy for the treatment of HIV infection during the measurement year. A medical visit is any visit in an outpatient/ambulatory care setting with a nurse practitioner, physician, and/or a physician assistant who provides comprehensive HIV care.
Type	Process
Data Source	Electronic Clinical Data: Electronic Health Record, Paper Medical Records, Electronic Clinical Data: Pharmacy Not applicable. Attachment ART_measure_data_dictionary.pdf
Level	Population : Community, Population : County or City, Facility, Clinician : Group/Practice, Population : National, Population : Regional, Population : State
Setting	Ambulatory Care : Clinician Office/Clinic
Numerator Statement	Number of patients from the denominator prescribed HIV antiretroviral therapy during the measurement year.

	2083 Prescription of HIV antiretroviral therapy
Numerator Details	Time Window: The numerator time window is a measurement year. A measurement year is a consecutive 12-month period. To be included in the numerator, patients were prescribed HIV antiretroviral therapy during the measurement year. HIV antiretroviral therapy is described as any combination of HIV medications other than the regimens or components identified as not recommended at any time by the Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. Available at http://www.aidsinfo.nih.gov/contentfiles/lvguidelines/adultandadolescentgl.pdf. Section accessed [6/2/2012] [G-3, G-4; Table 8] and Panel on Antiretroviral Therapy and Medical Management of HIV-Infected Children. Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection. August 11, 2011; pp. 1-268. Available at http://aidsinfo.nih.gov/ContentFiles/lvguidelines/PediatricGuidelines.pdf. Accessed (6/4/2012) [page 50, Table 9].
Denominator Statement	Number of patients, regardless of age, with a diagnosis of HIV with at least one medical visit in the measurement year
Denominator Details	Time Window: The numerator time window is a measurement year. A measurement year is a consecutive 12-month period. To be included in the denominator, patients must meet all of the following conditions/events: 1. Patients of any age during the measurement year 2. Patients diagnosed with HIV during the first 3 months of the measurement year or prior to the measurement
Exclusions	There are no patient exclusions.
Exclusion Details	There are no patient exclusions.
Risk Adjustment	No risk adjustment or risk stratification Not applicable
Stratification	
Type Score	Rate/proportion better quality = higher score
Algorithm	1. Identify the individuals who satisfy all specific criteria for inclusion in the denominator: 1.) diagnosed with HIV during the first 3 months of the measurement year or prior to the measurement year; and 2.) had at least one medical visit during the measurement year. The individuals who met these criteria are the denominator population. 2. Identify the individuals from the denominator population who meet the criterion for inclusion in the numerator: prescribed HIV antiretroviral therapy during the measurement year. 3. Calculate the percentage by dividing the numerator population by the denominator population and multiply by 100. Attachment HIV_Antiretroviral_Therapy_Measure_Logic_6-20-12.pdf
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Appendix B: Project Steering Committee and NQF Staff

STEERING COMMITTEE

Steven Brotman, MD, JD (Co-Chair)
Advanced Medical Technology (AdvaMed)
Washington, DC

Edward Septimus, MD, FACP, FIDSA, FSHEA (Co-Chair)
HCA Healthcare System
Houston, TX

Jeffrey Beal, MD, AAHIVS
Florida Department of Health
Cape Coral, FL

Mary Blank, MPH, CIC, CPHQ
Highmark, Inc.
Pittsburgh, PA

Kathleen Brady, MD
Philadelphia Department of Public Health
Philadelphia, PA

Doug Campos-Outcalt, MD, MPA
University of Arizona
Phoenix, AZ

Raymond Chung, MD
Massachusetts General Hospital
Boston, MA

Curtis Collins, PharmD, MS, BCPS
University of Michigan Health System
Ann Arbor, MI

Sue Elam, BSN, PHN, MHS, FNP
Kaiser Permanente Medical Group
Sacramento, CA

Mohamad Fakih, MD, MPH
St. John Hospital and Medical Center
Detroit, MI

Michael C. Farber, MD
Department of Vermont Health Access
Williston, VT

Thomas M. File, Jr., MD, MSc, MACP, FIDSA
Summa Health System
Akron, OH

Thomas Giordano, MD, MPH
Harris County Hospital District
Houston, TX

Peter Havens, MD, MS
Children's Hospital of Wisconsin
Milwaukee, WI

Aaron Milstone, MD, MHS
Johns Hopkins Hospital
Baltimore, MD

Rekha Murthy, MD, FRCP(c), FACP
Cedars Sinai Medical Center
Los Angeles, CA

Tiffany Osborn, MD, MPH, FACEP
Washington University/Barnes-Jewish Hospital
St. Louis, MO

Kalpana Ramiah, DrPH, MPH, MSc, CHES, CPH, CTTS
American Institutes for Research
Washington, DC

David Spach, MD
Harborview Medical Center
Seattle, WA

Adam Thompson
Consulting
Charlottesville, VA

NQF STAFF

Helen Burstin, MD, MPH
Senior Vice President
Performance Measures

Heidi Bossley, MSN, MBA
Vice President
Performance Measures

Reva Winkler, MD, MPH
Senior Director

Performance Measures

Alexis Morgan, MPH
Senior Project Manager
Performance Measures

Adeela Khan, MPH
Project Analyst
Performance Measures

Appendix C: Measures Endorsed in Infectious Disease Since July 2008

NQF Number	Title	Steward
1746	Intrapartum antibiotic prophylaxis for group B streptococcus (GBS)	Massachusetts General Hospital
0431	Influenza vaccination coverage among healthcare personnel	Centers for Disease Control and Prevention
0039	Flu shots for adults ages 50 and over	National Committee for Quality Assurance
0040	Flu shot for older adults	National Committee for Quality Assurance
0041	Influenza immunization	American Medical Association - Physician Consortium for Performance Improvement
0149	Influenza vaccination	Centers for Medicare & Medicaid Services
0522	Influenza immunization received for current flu season (Home Health)	Centers for Medicare & Medicaid Services
0226	Influenza immunization in the ESRD population (Facility Level)	Kidney Care Quality Alliance
0227	Influenza immunization	American Medical Association - Physician Consortium for Performance Improvement
1659	Influenza immunization	Centers for Medicare & Medicaid Services
0038	Childhood immunization status	National Committee for Quality Assurance
0680	Percent of residents or patients who were assessed and appropriately given the seasonal influenza vaccine (Short-Stay)	Centers for Medicare & Medicaid Services
0681	Percent of residents assessed and appropriately given the seasonal influenza vaccine (Long-Stay)	Centers for Medicare & Medicaid Services
0635	Chronic liver disease - Hepatitis A vaccination	ActiveHealth Management
0475	Hepatitis B vaccine coverage among all live newborn infants prior to hospital or birthing facility discharge	Centers for Disease Control and Prevention

NQF Number	Title	Steward
0033	Chlamydia screening in women	National Committee for Quality Assurance
1395	Chlamydia screening and follow up	National Committee for Quality Assurance
0573	HIV screening: Members at high risk of HIV	IMS Health
1959	Human papillomavirus vaccine for female adolescents	National Committee for Quality Assurance
0304	Late sepsis or meningitis in very low birth weight (VLBW) neonates (risk-adjusted)	Vermont Oxford Network
1716	National Healthcare Safety Network (NHSN) facility-wide inpatient hospital-onset methicillin-resistant staphylococcus aureus (MRSA) bacteremia outcome measure	Centers for Disease Control and Prevention
1717	National Healthcare Safety Network (NHSN) facility-wide inpatient hospital-onset clostridium difficile infection (CDI) outcome measure	Centers for Disease Control and Prevention

Appendix D: Related and Competing Measures

Comparison of NQF #2079 and NQF #2080

	2079 Medical visit frequency	2080 Gap in medical visits
Steward	Health Resources and Services Administration - HIV/AIDS Bureau	Health Resources and Services Administration - HIV/AIDS Bureau
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. A medical visit is any visit in an outpatient/ambulatory care setting with a nurse practitioner, physician, and/or a physician assistant who provides comprehensive HIV care.	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. A medical visit is any visit in an outpatient/ambulatory care setting with a nurse practitioner, physician, and/or a physician assistant who provides comprehensive HIV care.
Type	Process	Process
Data Source	Electronic Clinical Data : Electronic Health Record, Paper Medical Records	Electronic Clinical Data : Electronic Health Record, Paper Medical Records
Level	Clinician: Group/Practice, Facility	Clinician: Group/Practice, Facility
Setting	Ambulatory Care : Clinician Office/Clinic	Ambulatory Care : Clinician Office/Clinic
Numerator Statement	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 prior 6-month period and the last medical visit in the subsequent 6-month period. (Measurement period is a consecutive 24-month period of time.)	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 prior 6-month period and the last medical visit in the subsequent 6-month period. (Measurement period is a consecutive 24-month period of time.)

	2079 Medical visit frequency	2080 Gap in medical visits
Numerator Details	**Time Window:** The numerator time window is a consecutive 24-month period of time. To be included in the numerator, patients must have 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.	**Time Window:** The numerator time window is a consecutive 24-month period of time. To be included in the numerator, patients must have 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 Statement	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.	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.
Denominator Details	**Time Window:** Patients are eligible for inclusion in the denominator if they had a medical visit in the first 6 months of the 24-month measurement period. To be included in the denominator, patients must meet all of the following conditions/events: 1. Patients of any age during the measurement period 2. Patients without a date of death during the 24-month measurement period 3. Patients diagnosed with HIV during the first 3 months of the 24-month measurement period or prior to the measurement period 4. Patients who had at least one medical visit in the first 6 months of the 24-month measurement period	**Time Window:** Patients are eligible for inclusion in the denominator if they had a medical visit in the first 6 months of the 24-month measurement period. To be included in the denominator, patients must meet all of the following conditions/events: 1. Patients of any age during the measurement period 2. Patients without a date of death during the 24-month measurement period 3. Patients diagnosed with HIV during the first 3 months of the 24-month measurement period or prior to the measurement period 4. Patients who had at least one medical visit in the first 6 months of the 24-month measurement period
Exclusions	Patients who died at any time during the 24-month measurement period.	Patients who died at any time during the 24-month measurement period.

	2079 Medical visit frequency	2080 Gap in medical visits
Exclusion Details	Patients with a date of death during the measurement period.	Patients with a date of death during the measurement period.
Risk Adjustment	No risk adjustment or risk stratification	No risk adjustment or risk stratification
Stratification	Not applicable	Not applicable
Type Score	Rate/proportion better quality = higher score	Rate/proportion better quality = higher score

	2079 Medical visit frequency	2080 Gap in medical visits
Algorithm	1. Identify the individuals who satisfy all specific criteria for inclusion in the denominator: 1.) diagnosed with HIV during the first 3 months of the 24-month measurement period or prior to the 24-month measurement period; 2.) did not have a date of death during the 24-month measurement period; and 3.) had at least one medical visit in the first 6 months of the 24-month measurement period. The individuals who met these three criteria are the denominator population. 2. Identify the individuals from the denominator population who meet the criterion for inclusion in the numerator: must have 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. 3. Calculate the rate by dividing the numerator population by the denominator population and multiply by 100. Attachment Medical_Visit_Frequency_Measure_Logic_6-20-12.pdf	1. Identify the individuals who satisfy all specific criteria for inclusion in the denominator: 1.) diagnosed with HIV during the first 3 months of the 24-month measurement period or prior to the 24-month measurement period; 2.) did not have a date of death during the 24-month measurement period; and 3.) had at least one medical visit in the first 6 months of the 24-month measurement period. The individuals who met these three criteria are the denominator population. 2. Identify the individuals from the denominator population who meet the criterion for inclusion in the numerator: must have 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. 3. Calculate the rate by dividing the numerator population by the denominator population and multiply by 100. Attachment Medical_Visit_Frequency_Measure_Logic_6-20-12.pdf

	2079 Medical visit frequency	2080 Gap in medical visits
Submission items	**5.1 Identified measures:** 0403 : HIV/AIDS: Medical Visit **5a.1 Are specs completely harmonized?** No **5a.2 If not completely harmonized, identify difference, rationale, impact:** We have used the most current and available set of the National Committee on Quality Assurance (NCQA) measure when we set out to draft this measure. We will continue to work closely with the NCQA to continue to harmonize the measures for the care and treatment of people living with HIV. **5b.1 If competing, why superior or rationale for additive value:** The National Committee on Quality Assurance (NCQA) stewards a related measure NQF 403 medical visits. We have discussed the NQF 403 measure with the NCQA as well as the measures that we are submitting for endorsement. We have used the most current and available set of NCQA measure when we set out to draft this measure. We will continue to work closely with the NCQA to continue to harmonize the measures for the care and treatment of people living with HIV. The body of literature regarding retention in HIV medical care has grown significantly in recent years. Studies have examined retention from multiple perspectives in order to understand its impact on patient health outcomes. Short term retention is moderate, but declines over time (1, 2). Retention in medical care among people living with HIV is associated with a significantly greater mean increase in baseline CD4 count (3). Also, the same study suggested that mortality was higher among those with suboptimal retention (3). Examining retention over a greater period of time may be important to patient morbidity and mortality. Retention in care is crucial in maximizing the health outcomes of people living with HIV. As eloquently outlined by Mugavero, et al., there are several ways to measure retention and engagement with each having its own strengths and limitations (4). Facilities/clinic may choose to utilize one or more measures depending on their characteristics, personnel administering the measure (clinician vs. administrator), and/or purpose of the measure (quality improvement, benchmarking, or monitoring). HIV care and treatment as well as performance measures are dynamic systems. As a result, it may be necessary to have more than one measure available for use. 1. Marks G, Gardner L, Craw JA, Crepaz N. Entry and retention in medical care among HIV-diagnosed persons in the United States: a meta-analysis. AIDS 2010; 24:2665–78. 2. Fleishman JA, Yehia BR, Moore RD, Korthuis PT, Gebo KA; for the HIV Research Network. Establishment, Retention, and Loss to	**5.1 Identified measures:** 0403 : HIV/AIDS: Medical Visit **5a.1 Are specs completely harmonized?** No **5a.2 If not completely harmonized, identify difference, rationale, impact:** We have used the most current and available set of the National Committee on Quality Assurance (NCQA) measure when we set out to draft this measure. We will continue to work closely with the NCQA to continue to harmonize the measures for the care and treatment of people living with HIV. **5b.1 If competing, why superior or rationale for additive value:** The National Committee on Quality Assurance (NCQA) stewards a related measure NQF 403 medical visits. We have discussed the NQF 403 measure with the NCQA as well as the measures that we are submitting for endorsement. We have used the most current and available set of NCQA measure when we set out to draft this measure. We will continue to work closely with the NCQA to continue to harmonize the measures for the care and treatment of people living with HIV. The body of literature regarding retention in HIV medical care has grown significantly in recent years. Studies have examined retention from multiple perspectives in order to understand its impact on patient health outcomes. Short term retention is moderate, but declines over time (1, 2). Retention in medical care among people living with HIV is associated with a significantly greater mean increase in baseline CD4 count (3). Also, the same study suggested that mortality was higher among those with suboptimal retention (3). Examining retention over a greater period of time may be important to patient morbidity and mortality. Retention in care is crucial in maximizing the health outcomes of people living with HIV. As eloquently outlined by Mugavero, et al., there are several ways to measure retention and engagement with each having its own strengths and limitations (4). Facilities/clinic may choose to utilize one or more measures depending on their characteristics, personnel administering the measure (clinician vs. administrator), and/or purpose of the measure (quality improvement, benchmarking, or monitoring). HIV care and treatment as well as performance measures are dynamic systems. As a result, it may be necessary to have more than one measure available for use. 1. Marks G, Gardner L, Craw JA, Crepaz N. Entry and retention in medical care among HIV-diagnosed persons in the United States: a meta-analysis. AIDS 2010;24:2665–78. 2. Fleishman JA, Yehia BR, Moore RD, Korthuis PT, Gebo KA; for the HIV Research Network. Establishment, Retention, and Loss to

Appendix E: Implementation Comments

ID#	Council/ Public	Commenter	Implementation Comment	Measure Developer Response	Topic
2590	HPR	Mr. Andres Rodriguez, MBA/MSPH; Infectious Diseases Society of America	The Quality Improvement Task Force of the Infectious Disease Society of America (IDSA) continues to support Measure #0058, Avoidance of antibiotic treatment in adults with acute bronchitis and Measure #0069, Appropriate treatment for children with upper respiratory infection (URI). Studies have shown that acute bronchitis and URI are virtually always of viral etiology, yet clinicians continue to prescribe antibiotics inappropriately for those conditions. The measures include only those patients without claims/encounters for a diagnosis of a comorbid condition for the prior 12 months, and without competing diagnoses or new medications in the prior thirty days. We would, however, like to draw attention to the fact that classification of URIs can be a very subjective process. That is, one physician might opt for a diagnosis of acute bronchitis, while another chooses "common cold." As a measure is used, there might be a shift in those subjective choices, either to avoid the evaluation or to choose a condition in which an antibiotic can at times be appropriate, such as acute sinusitis. It would be useful to consider a corollary to this measure that would look at all URI visits for the physician or practice during the evaluation time period to identify any shifts in coding of URIs. Although we submit our comments for consideration to improve the measure, we support endorsement of both measures for an additional 3 years.	Thank you for your support. We will bring your new measure suggestions to our measurement advisory panel for consideration.	0058: Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis

ID#	Council/ Public	Commenter	Implementation Comment	Measure Developer Response	Topic
2591	HPR	Mr. Andres Rodriguez, MBA/MSPH; Infectious Diseases Society of America	The Quality Improvement Task Force of the Infectious Disease Society of America (IDSA) continues to support Measure #0058, Avoidance of antibiotic treatment in adults with acute bronchitis and Measure #0069, Appropriate treatment for children with upper respiratory infection (URI). Studies have shown that acute bronchitis and URI are virtually always of viral etiology, yet clinicians continue to prescribe antibiotics inappropriately for those conditions. The measures include only those patients without claims/encounters for a diagnosis of a comorbid condition for the prior 12 months, and without competing diagnoses or new medications in the prior thirty days. We would, however, like to draw attention to the fact that classification of URIs can be a very subjective process. That is, one physician might opt for a diagnosis of acute bronchitis, while another chooses "common cold." As a measure is used, there might be a shift in those subjective choices, either to avoid the evaluation or to choose a condition in which an antibiotic can at times be appropriate, such as acute sinusitis. It would be useful to consider a corollary to this measure that would look at all URI visits for the physician or practice during the evaluation time period to identify any shifts in coding of URIs. Although we submit our comments for consideration to improve the measure, we support endorsement of both measures for an additional 3 years.	Thank you for your support. We will bring your new measure suggestions to our measurement advisory panel for consideration.	0069: Appropriate treatment for children with upper respiratory infection (URI)

ID#	Council/ Public	Commenter	Implementation Comment	Measure Developer Response	Topic
2592	HPR	Mr. Andres Rodriguez, MBA/MSPH; Infectious Diseases Society of America	The IDSA supports endorsement of measure #0298. We recognize the importance of bundling activities together to improve infection rates. If total compliance is not 100%, it would be useful to know if certain components are consistently omitted, and if so, infection rates associated with each type of omission could be determined. Hand hygiene, maximal barrier precautions upon central line insertion, and chlorhexidine skin antisepsis are essential and there should be no exceptions to compliance. Optimal catheter site selection is less conclusive. Some studies have not demonstrated higher infection rates with jugular as compared with subclavian insertion sites. There are noninfectious risks associated with subclavian placement that are less common with jugular sites. It is unclear that a requirement for documentation of the reason for not using the subclavian vein improves care. While it is important to complete daily review of necessity of the line, after years of this measure, it is prudent to evaluate if there is any impact- to see if hospitals with less than 100% compliance have higher BSI rates, or longer catheter-days. Grading 100% compliance and individual compliance would enrich the data. In addition, other measures require daily assessment of necessity, (foley urinary catheters). If bundled, it would be interesting to see if a dedicated discussion of all lines would result in earlier removal.	Thank you for your comments. The central line bundle was developed as an all/none measure, with the recommendation that hospitals assess compliance with individual bundle elements to identify opportunities for improving compliance. IHI has found that hospitals begin to demonstrate improvement in outcomes (central line-associated BSI) when they reliably provide all five components of the bundle. I also agree with your comments re: daily review of necessity of the lines and promoting a "dedicated discussion" of all lines, urinary catheter. Many hospitals have demonstrated success in removal of unnecessary central lines, urinary catheters by incorporating into overall review during daily rounding Diane Jacobsen MPH, CPHQ Director, Institute for Healthcare Improvement	0298: Central Line Bundle Compliance

ID#	Council/ Public	Commenter	Implementation Comment	Measure Developer Response	Topic
2593	HPR	Mr. Andres Rodriguez, MBA/MSPH; Infectious Diseases Society of America	The IDSA supports endorsement of measure 0500. To be more consistent with the Surviving Sepsis Campaign guidelines, these items are referred to as part of a resuscitation rather than management bundle. We look forward to supporting future efforts to update this measure once updated guidelines are made public.	We would like to thank IDSA for their support of the measure, and look forward to collaborating with all stakeholders throughout the measure endorsement maintenance process.	0500: Severe sepsis and septic shock: Early management bundle
2594	HPR	Mr. Andres Rodriguez, MBA/MSPH; Infectious Diseases Society of America	The IDSA supports the endorsement of measure #0393. Our members report that, in their experience, a minority of referring physicians (~25%) are performing this testing. As well, having the measure call for reflexing positive HCV Ab screens to additional HCV RNA tests could be more useful.	Thank you for your comment.	0393: Hepatitis C: Testing for Chronic Hepatitis C – Confirmation of Hepatitis C Viremia
2595	HPR	Mr. Andres Rodriguez, MBA/MSPH; Infectious Diseases Society of America	IDSA supports endorsement of measure #0394. Our physicians consider it to be the standard of care. They report the need for better standardization of information covered during counseling and standard documentation of methods of contraception (often 2).	Thank you for your comment.	0394: Hepatitis C: Counseling Regarding Use of Contraception Prior to Antiviral Treatment

ID#	Council/ Public	Commenter	Implementation Comment	Measure Developer Response	Topic
2596	HPR	Mr. Andres Rodriguez, MBA/MSPH; Infectious Diseases Society of America	IDSA does not support the endorsement of measure 0395 in the present form. Our physicians consider the standard of care to reflect updated treatment guidelines which are very specific concerning viral load measurements at various time points to determine continuation of therapy and/or length of response guided therapy (RGT) for GT1 patients on Protease Inhibitor therapy. In addition, measure 0395 appears to be similar to measure 0584, which suggests duplication/redundancy in measuring.	While updated treatment guidelines are specific regarding viral load measurements at various time points in order to determine continuation of therapy and/or length of response guided therapy, guidelines also support HCV RNA testing prior to initiation of treatment in order to identify the best course of treatment for the patient. According to NIH guidelines, determination of the HCV level provides important information on the likelihood of response to treatment in patients undergoing antiviral therapy. Our measure differs from measure 0584 in that it includes the 6 month time window, for HCV RNA level measurement. The time window was added to ensure that there is a recent HCV RNA level recorded to maximize the likelihood that treatment is appropriate for the patient's current viral load.	0395: Paired Measure: Hepatitis C Ribonucleic Acid (RNA) Testing Before Initiating Treatment (paired with 0396)
2597	HPR	Mr. Andres Rodriguez, MBA/MSPH; Infectious Diseases Society of America	IDSA support the endorsement of measure 0396 with modifications. This is standard of care and is typically required by health plans as part of the prior authorization process, indicating GT1a vs. GT1b. The 6 month timeframe is not appropriate. Once chronic infection is established, the genotype is unchanged. Therefore, a genotype obtained prior to 6 months before the start of treatment is acceptable; retesting is unnecessary and might represent overuse.	There is no 6 month time window associated with this measure. The measure description is as follows: Percentage of patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment for whom HCV genotype testing was performed prior to initiation of antiviral treatment. The numerator time window is "once prior to initiation of antiviral treatment." The 6 month time window is associated with measure 0395 only.	0396: Paired Measure: HCV Genotype Testing Prior to Treatment (paired with 0395)

ID#	Council/ Public	Commenter	Implementation Comment	Measure Developer Response	Topic
2598	HPR	Mr. Andres Rodriguez, MBA/MSPH; Infectious Diseases Society of America	IDSA does not support the endorsement of measure #0397. Although all patients should be considered potential treatment candidates, the measure logic does not provide a feasible, usable way to identify denominator exclusions. The denominator exclusion data sources used in this measure are rarely submitted (e.g., CPT-II codes). Given this major limitation, this is a measure of resource use, not quality of care. Endorsement is not recommended. Also, the measure description does not address protease inhibitor use in the genotype 1 HCV infected person.	For clarification, this measure does not include exclusions, but includes medical, patient, and system exceptions. In the AMA-PCPI methodology, exclusions are absolute and apply to all patients and therefore are not part of clinical judgment within a measure. Exceptions are used to remove patients from the denominator of a performance measure when a patient does not receive a therapy or service AND that therapy or service would not be appropriate for the patient due to specific reasons. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics, or patient preferences. This measure was included in the PQRS program in 2008, 2009, and 2010 and we have not received feedback regarding difficulty in reporting the exceptions through the use of CPT II codes and modifiers. EHR specifications have also been submitted for electronic reporting of this measure. The updated evidence-based guideline from AASLD, published in 2011, describes treatment with protease inhibitors for genotype 1 patients, in addition to peginterferon and ribavirin therapy. As such, the measure language has been updated to capture this treatment. The measure description is written as follows: "Percentage of patients aged 18 years and older with a diagnosis of chronic hepatitis C who were prescribed at a minimum peginterferon and ribavirin therapy within the 12 month reporting period," with "at a minimum" intended to allow for the additional treatment recommended for genotype 1 patients.	0397: Hepatitis C: Antiviral Treatment Prescribed

ID#	Council/ Public	Commenter	Implementation Comment	Measure Developer Response	Topic
2599	HPR	Mr. Andres Rodriguez, MBA/MSPH; Infectious Diseases Society of America	IDSA supports the endorsement of measure #0398 with modification. RNA testing at 12 weeks is a reasonable measurement criterion for patients with genotype 2/ 3 infection. This measure should be modified to reflect management of patients with genotype 2/3 only. This measure does not address new RNA testing guidelines for genotype 1 patients on protease inhibitor treatment. A future measure should address this area.	The AMA-PCPI uses evidence-based guidelines to support the development of AMA PCPI measures. The updated evidence-based guideline from AASLD, published in 2011, indicates that treatment modifications may be necessary for genotype 1 patients at weeks 4, 8, or 12, based on HCV RNA levels and dependent upon the type of treatment the patient is receiving (including the use of protease inhibitors). Therefore, consistent with the guideline, the numerator language was updated to capture "Patients for whom quantitative HCV RNA testing was performed at no greater than 12 weeks from the initiation of antiviral treatment." The numerator definition is as follows: 12 Weeks from Initiation – Patients for whom testing was performed between 4-12 weeks from the initiation of antiviral treatment will meet the numerator for this measure (depending upon the specific antiviral therapy used).	0398: Hepatitis C: HCV RNA Testing at Week 12 of Treatment
2600	HPR	Mr. Andres Rodriguez, MBA/MSPH; Infectious Diseases Society of America	IDSA supports endorsement of measure #0399. The current measure identifies patients who received at least one injection of hepatitis A vaccine or have documented immunity to hepatitis A. This is clinically important. This measure would be improved if it identified completion of the hepatitis A vaccine or documented immunity. Our members note the challenge in meeting this measure related to insufficient insurance coverage or no insurance coverage often encountered with some Hep C Patients.	Thank you for your comment.	0399: Paired Measure: Hepatitis C: Hepatitis A Vaccination (paired with 0400)

ID#	Council/ Public	Commenter	Implementation Comment	Measure Developer Response	Topic
2601	HPR	Mr. Andres Rodriguez, MBA/MSPH; Infectious Diseases Society of America	IDSA supports endorsement of measure #0400. This is clinically important. This measure would be improved if it identified completion of the hepatitis B vaccine or documented immunity. Our members note the challenge in meeting this measure related to insufficient insurance coverage or no insurance coverage often encountered with some Hep C Patients.	Thank you for your comment.	0400: Paired Measure: Hepatitis C: Hepatitis B Vaccination (paired with 0399)
2602	HPR	Mr. Andres Rodriguez, MBA/MSPH; Infectious Diseases Society of America	IDSA supports endorsement of measure #0401. This is a critical measure, and when possible, counseling of patients should include spouse, significant other or partner to improve outcome.	Thank you for your comment.	0401: Hepatitis C: Counseling Regarding Risk of Alcohol Consumption
2603	HPR	Mr. Andres Rodriguez, MBA/MSPH; Infectious Diseases Society of America	IDSA supports endorsement of measure #0584. As noted earlier, this measure appears to be similar to measure #0395.	While measure 0395 relies exclusively upon CPT4 category II codes for recognizing quantification of viral load, we consider category I billing claims as well laboratory test results tagged with LOINC codes. Further, our definition of chronic HCV infection includes an additional four ICD-9-CM codes, accepting a history of hepatic coma (070.44), unspecified disease acuity (070.70, 070.71), and a declaration of being an HCV carrier (V0262). Other differences between the two measures have been harmonized.	0584: Hepatitis C: Viral Load Test

ID#	Council/ Public	Commenter	Implementation Comment	Measure Developer Response	Topic
2604	PRO	Ronald Walters, MD; University of Texas-MD Anderson Cancer Center	On behalf of The University of Texas MD Anderson Cancer Center, we appreciate the opportunity to provide feedback on this measure. Have you used this measure for any of the following purposes? 1. Quality improvement (internal to your specific organization) **Yes** 2. Quality improvement with benchmarking (external benchmarking to multiple organizations) **No** 3. Professional certification or recognition program **No** 4. Regulatory and accreditation programs **Yes – TJC NPSG.07.04.01** 5. Payment program **No** 6. Public reporting **No** 7. Other **N/A** • Have you encountered challenges while implementing this measure? 1. Problems with measure specifications **No** 2. Challenges in obtaining the necessary data **No** 3. Lack of harmonization with related measures (same measure focus or same target population) **No** 4. Difficulties interpreting or explaining the performance results **No** 5. Difficulties obtaining reliable and valid comparisons of performance We use an internal benchmark 6. Unintended consequences **No** • Do you have suggestions for how this measure could be improved? **No** Is there a better measure that should be considered in place of this measure? **No** • Should this measure receive endorsement for another three years? **Yes** Please provide rationale.	Thank you for your comments. The central line bundle was developed as an all/none measure, with the recommendation that hospitals assess compliance with individual bundle elements to achieve high reliability with the bundle. The focus of the central line bundle as a process (vs. outcome) measure was for internal improvement, as you reflect you have used the measure. Diane Jacobsen MPH, CPHQ Director, Institute for Healthcare Improvement	0298: Central Line Bundle Compliance

ID#	Council/ Public	Commenter	Implementation Comment	Measure Developer Response	Topic
2605	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	We understand that different time periods for medical visit intervals are under consideration by various measures development groups (60, 90 or 180 days). We note that the National HIV/AIDS Strategy (NHAS) performance metrics reflect a 90-day time period between medical visits. We strongly urge that whichever interval is chosen for this measure, it should be uniform across payers and health care platforms. We support continued NQF endorsement with uniformity of medical visit intervals across measures in which medical visit frequency is a factor.	NCQA has included HRSA, the CDC, and a representative from HIVQUAL in discussions about the time interval for the HIV/AIDS: Medical Visit measure. We have attempted to align with other HIV measurement programs.	0403: HIV/AIDS: Medical Visit
2606	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	We support continued NQF endorsement of this measure, but urge harmonization and alignment of the NQF-endorsed measure across and among federal agencies.	Thank you for your support.	0404: HIV/AIDS: CD4 Cell Count or Percentage Performed
2607	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	Change to percentage of patients (regardless of age) with CD4+ counts fewer than 200. We support continued NQF endorsement with this change.	We have convened an expert panel to provide us with guidance about aligning this measure with current guidelines.	0405: HIV/AIDS: Pneumocystis jiroveci pneumonia (PCP) Prophylaxis

ID#	Council/ Public	Commenter	Implementation Comment	Measure Developer Response	Topic
2608	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	In keeping with current clinical practice guidelines, we recommend deletion of qualifications to measure percentage of all patients prescribed antiretroviral therapy, such that the measure should read as follows: Percentage of patients with a diagnosis of HIV/AIDS with at least two visits during the measurement year, with at least 60 days – or whichever interval is selected for the medical visit measure -- between each visit who were prescribed potent antiretroviral therapy.	We convened an expert panel to provide us with guidance about aligning this measure with current guidelines. The expert panel did not support deleting qualifications from the denominator of this measure. Based on the current treatment guidelines and evidence, we will be measuring whether the following populations received potent ART: patients 13 and older with at least two visits, at least 90 days apart, who have a history of a CD4 count below or equal to 500 cells/mm3; patients 13 and older with at least two visits, at least 90 days apart, who have a history of an AIDS-defining illness; and patients, regardless of age, who are pregnant.	0406: HIV/AIDS: Adolescent and Adult Patients who are Prescribed Potent Antiretroviral Therapy
2609	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	We recommend that this measure be updated as follows: Percentage of patients aged 13 years and older with a diagnosis of HIV/AIDS who had at least two medical visits during the measurement year, with at least 60 days – or whichever interval is selected for the medical visit measure -- between each visit, who are receiving potent antiretroviral therapy**, who have a viral load below limits of quantification* after at least 6 months of potent antiretroviral therapy. *Using laboratory cutoff level for reference laboratory used by that clinic. ** Potent antiretroviral therapy is described as any antiretroviral therapy that has demonstrated optimal efficacy and results in durable suppression of HIV as shown by prior clinical trials. Rationale: There are now sufficient medications to achieve viral control that this measure should strive to simply capture the percentage of patients in care and on ART who are virally suppressed. We support continued NQF endorsement of this measure, with the above update.	We agree with removing the plan of care component from this measure. After convening an expert panel to review this measure, we will submit the following measure to NQF: Percentage of patients aged 13 years and older with a diagnosis of HIV/AIDS, who had at least two medical visits during the measurement year, with at least 90 days between each visit, who are receiving potent antiretroviral therapy, who have a viral load <200 copies/mL after at least 6 months of potent antiretroviral therapy.	0407: HIV/AIDS: HIV RNA Control After Six Months of Potent Antiretroviral Therapy

ID#	Council/ Public	Commenter	Implementation Comment	Measure Developer Response	Topic
2610	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	We support continued NQF endorsement of this measure, as written. It is still clinically relevant.	Thank you for your support.	0408: HIV/AIDS: Tuberculosis (TB) Screening
2611	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	We understand that NCQA is considering merging measures #0409 and #0410 to measure Chlamydia, Gonorrhea and Syphilis. We support continued NQF endorsement of a measure along these lines, as it remains clinically relevant.	NCQA will be combining measures 0409 and 0410. Thank you for your support.	0409: HIV/AIDS: Sexually Transmitted Diseases – Screening for Chlamydia, Gonorrhea, and Syphilis
2612	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	We understand that NCQA is considering merging measures #0409 and #0410 to measure Chlamydia, Gonorrhea and Syphilis. We support continued NQF endorsement of a measure along these lines, as it remains clinically relevant.	NCQA will be combining measures 0409 and 0410. Thank you for your support.	0410: HIV/AIDS: Sexually Transmitted Diseases - Syphilis Screening
2613	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	We support continued NQF endorsement of this measure, as written, as it is still clinically relevant.	NCQA has decided not to submit this measure for re-endorsement, because we believe it is an intermediate process step before Hepatitis B vaccination, which is also being measured in measure #0412.	0411: HIV/AIDS: Other Infectious Diseases - Hepatitis B Screening
2614	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	We support continued NQF endorsement of this measure, as written, as it is still clinically relevant.	Thank you for your support.	0412: HIV/AIDS: Hepatitis B Vaccination

ID#	Council/ Public	Commenter	Implementation Comment	Measure Developer Response	Topic
2615	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	We understand that NCQA is considering combining measures 0413 and 0415. Also, we recommend that NQF carefully review the feasibility of this and other behavioral health measures, as performance of such screenings is not readily captured by most electronic health record (EHR) systems.	NCQA has decided not to submit this measure for re-endorsement, due to feasibility, reliability and validity concerns.	0413: HIV/AIDS: Screening for High Risk Sexual Behaviors
2616	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	We support continued NQF endorsement of this measure, as written, as it is still clinically relevant.	NCQA has decided not to submit this measure for re-endorsement, as we believe the evidence is not strong enough to support this measure.	0414: HIV/AIDS: Other Infectious Diseases - Hepatitis C
2617	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	We understand that NCQA is considering combining measures 0413 and 0415. Also, we recommend that NQF carefully review the feasibility of this and other behavioral health measures, as performance of such screenings is not readily captured by most electronic health record (EHR) systems without a manual chart review.	NCQA has decided not to submit this measure for re-endorsement, due to feasibility, reliability and validity concerns.	0415: HIV/AIDS: Screening for Injection Drug Use
2618	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	We recommend elimination of this measure, as it will conceptually be captured by measures 0403 and 0404.	NQF Staff Response: Health Benchmarks, Inc. has decided not to submit this measure for maintenance review due to the amount of resources required to participate in the NQF maintenance process.	0568: Appropriate follow-up for patients with HIV
2619	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	We recommend that NQF carefully review the feasibility of this and other behavioral health measures, as performance of such screenings is not readily captured by most electronic health record (EHR) systems without a manual chart review.	Based on the testing results, this measure was found to be feasible for implementation. We have provided testing data, which includes a comparison of E.H.R. automated reports to visual inspection of the medical record and had a kappa score of 0.54. This score shows that the measure is reliable and shows that the information can be accurately collected in both an electronic health record and a paper medical record.	0394: Hepatitis C: Counseling Regarding Use of Contraception Prior to Antiviral Treatment

ID#	Council/ Public	Commenter	Implementation Comment	Measure Developer Response	Topic
2620	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	We recommend that NQF carefully review the feasibility of this and other behavioral health measures, as performance of such screenings is not readily captured by most electronic health record (EHR) systems without a manual chart review.	Based on the testing results, this measure was found to be feasible for implementation. We have provided testing data, which includes a comparison of E.H.R. automated reports to visual inspection of the medical record and had a kappa score of 0.47. This score shows that the measure is reliable and shows that the information can be accurately collected in both an electronic health record and a paper medical record.	0401: Hepatitis C: Counseling Regarding Risk of Alcohol Consumption

ID#	Council/ Public	Commenter	Implementation Comment	Measure Developer Response	Topic
2621	PRO	Ronald Walters, MD; University of Texas-MD Anderson Cancer Center	On behalf of The University of Texas MD Anderson Cancer Center, we appreciate the opportunity to provide feedback on this measure. Have you used this measure for any of the following purposes? 1. Quality improvement (internal to your specific organization) **Yes** 2. Quality improvement with benchmarking (external benchmarking to multiple organizations) **No** 3. Professional certification or recognition program **No** 4. Regulatory and accreditation programs **No** 5. Payment program **No** 6. Public reporting **No** 7. Other **N/A** • Have you encountered challenges while implementing this measure? 1. Problems with measure specifications **No** 2. Challenges in obtaining the necessary data **No** 3. Lack of harmonization with related measures (same measure focus or same target population) **No** 4. Difficulties interpreting or explaining the performance results **No** 5. Difficulties obtaining reliable and valid comparisons of performance **We use an internal benchmark** 6. Unintended consequences **No** • Do you have suggestions for how this measure could be improved? **No** Is there a better measure that should be considered in place of this measure? **No** • Should this measure receive endorsement for another three years? **Yes** Please provide rationale.	Thank you for your comments. The ventilator bundle was developed as an all/none measure, with the recommendation that hospitals assess compliance with individual bundle elements to achieve high reliability with the bundle. The focus of the ventilator bundle is as a process (vs. outcome) measure was for internal improvement, as you reflect you have used the measure. IHI is not submitting this measure for consideration for public reporting. As process/composite measures, the measure wasn't designed or validated as a measure for public reporting. One key concern is that the measure would be self-reported (ongoing compliance with the bundle elements) and not verifiable without extensive and expensive auditing. Diane Jacobsen MPH, CPHQ Director, Institute for Healthcare Improvement	0302: Ventilator bundle

ID#	Council/ Public	Commenter	Implementation Comment	Measure Developer Response	Topic
2620	Public	Judith Aberg, MD, FIDSA; HIV Medicine Association	We support continued NQF endorsement of this measure, as written, as it is still clinically relevant.	The American Association for the Study of Liver Diseases rated the measure and the evidence supporting the measure Class I, Level A in 2009. This is based on the American College of Cardiology and American Heart Association Practice Guidelines.	0584: Hepatitis C: Viral Load Test

Appendix F: Assessment of Disparities Sensitive Measures

The Healthcare Disparities and Cultural Competency Steering Committee developed a protocol to systematically screen and tag NQF-endorsed measures as disparities sensitive, with the intent to identify measures that should be routinely stratified and reported by race/ethnicity and language. The disparities-sensitive screening protocol included a hierarchical approach and scoring system, with emphasis on prevalence of the condition among the minority population, the disparities quality gap (i.e., the greatest difference between % performance or other unit of measurement compared to the historically disadvantaged population), the impact of the condition, and whether a measure was mapped to an NQF-endorsed communication-sensitive practice for care coordination or cultural competency. Specific information about the protocol and process can be found in the NQF Commissioned Paper and the Disparities Assessment Draft Report.

Based on the assessment of the infectious disease measures considered by this Steering Committee, seven measures were identified as disparities-sensitive based on the criteria, in particular the threshold for the quality gap percentage of 14% or higher. The seven measures identified as disparities-sensitive measures include four measures that were newly submitted for this project, as well as three maintenance measures, which are all marked within the table.

NQF #	MEASURE TITLE	PREVALENCE[21]	QUALITY GAP[22]	QUALITY GAP SCORE	IMPACT[23]	1ST TIER SCORE
399	Paired Measure: Hepatitis C: Hepatitis A Vaccination (paired with 0400)	3	16.2%	4	1	8
2082	HIV viral load suppression	3	14.00%	4	1	8
2083	Prescription of HIV Antiretroviral Therapy	3	14.00%	4	1	8
2079	Medical visit frequency	3	14.90%	4	1	8
2080	Gap in medical visits	3	14.90%	4	1	8
408	HIV/AIDS: Tuberculosis (TB) Screening	3	15%	4	0	7
409	HIV/AIDS: Sexually Transmitted Diseases – Screening for Chlamydia, Gonorrhea, and Syphilis	3	15.7%	4	1	8

[21] Prevalence: How prevalent is the condition among the minority population? Based on the conditions identified by the Office of Minority Health as large contributors of health disparities, the NQF portfolio was first reviewed for performance measures related to the following conditions: Cancer, Diabetes, Heart Disease (including Hypertension), HIV/AIDS, Immunizations, Infant Mortality, and Stroke, Tobacco use, Oral care. These measures

were given 3 points. Measures that fell in cross-cutting areas (e.g., patient safety, care coordination, functional status, palliative care, pain management or *any* child health/pediatrics) also were scored 3 points. Measures that fell into the prioritized list of top 20 conditions for Medicare (amended to include substance abuse, obesity, and End Stage Renal Disease) were scored 2 points. All other measures scored 1 point.

[22] Quality Gap: How large is the gap in *quality of care* between the disadvantaged population and the group with the highest quality for that measure? The disparities quality gap indicated on the measure submission/evaluation form was reviewed and recorded. In some cases, information was not available and literature searches were performed by NQF staff to supplement where possible.

[23] Impact: The influence a condition or topic has financially, publically, and on the community at large. Performance measures addressing the National Quality Strategy priority areas or goals will be given a + 1 point each for EACH goal or concept.