

ENDORSEMENT SUMMARY: Infectious Disease Measures

MARCH 2013

Purpose of the Project

Many infectious diseases have been controlled or eradicated through the use of vaccines and advanced medicine, yet many others are still responsible for widespread morbidity and mortality as well as rising healthcare costs. Specifically:

- Hospital charges for infectious disease averaged \$96 billion per year with an average 4.5 million hospital days per year in 2008.¹
- An estimated 1.2 million Americans are living with HIV/AIDS, and nearly 642,000 Americans have died from this disease since 1981.² Last year total federal spending on HIV/AIDS-related medical care, research, prevention, and other activities was \$21.3 billion.
- According to the Centers for Disease Control and Prevention (CDC), every year the healthcare system spends \$17 billion on sexually transmitted infections.³ It is estimated that in the United States there are roughly 19 million new infections every year.⁴

NQF has previously endorsed measures related to infectious diseases. In April 2012 – at the request of the Department of Health and Human Services – NQF began a new project focused on identifying, endorsing, and updating a broader set of infectious disease performance measures. This project sought to endorse measures that address HIV/AIDS, hepatitis, respiratory infections such as acute bronchitis and tuberculosis, sexually transmitted infections, sepsis, and septic shock, among other conditions.

What Was Endorsed

Summary of Infectious Disease Endorsement Maintenance Measures Project

	Maintenance	New	Total
Measure under consideration	29	5	34
Measures withdrawn from consideration	7	0	7
Measures recommended for endorsement	12	4	16
Measures not recommended for endorsement	10*	1**	11

*Importance (5); Scientific Acceptability (4); Overall (1)

**Importance (1)

Under the infectious disease endorsement project, NQF endorsed 16 measures suitable for accountability and quality improvement. Of the 16 measures, 12 were previously endorsed and underwent endorsement maintenance review, and four were newly submitted measures.

Measure stewards included the National Committee for Quality Assurance; the Physician Consortium for Performance Improvement, convened by the American Medical Association; Henry Ford Hospital; and the Health Resources and Services Administration - HIV/AIDS Bureau. A full list of measures is at the end of this report.



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The Need these Measures Fill

This project sought to identify and endorse measures that specifically address infectious disease prevention and treatment for accountability and quality improvement. The resulting measures focus on a wide range of care concerns, including appropriate treatment for upper respiratory infections, screening for tuberculosis and sexually transmitted diseases in HIV/AIDS patients, and vaccination and treatment for hepatitis C.

Potential Use

These measures are applicable for use in ambulatory care settings, including clinician offices and urgent care clinics. One measure for sepsis management is applicable to hospitals.

Project Perspectives

Infectious disease rates and associated costs in the United States illustrate the urgent need for quality measures that can help prevent and treat such diseases. Infectious disease measures endorsed by NQF focus on helping individuals stay healthy and treating disease earlier and more effectively, which will be instrumental to reducing unnecessary healthcare costs.

Providing resources, such as patient education and intervention programs along with continued scientific research for existing and emerging diseases, will also help reduce mortality and healthcare costs. Appropriate use of antibiotics and antibiotic stewardship (interventions designed to ensure patients receive the right dose of the right antibiotic at the right time) 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.⁵ A University of Maryland study indicated that over eight years, an antibiotic stewardship program saved \$17 million.⁶ The Steering Committee noted that measure development focused on antibiotic stewardship is still needed.

The Steering Committee also discussed several other areas where future measure development is needed. These include:

- Measures addressing patient outcomes;
- Additional measures dealing with HIV/AIDS, including testing for individuals ages 13-64; colposcopy screening for HIV-positive women who have abnormal Pap test results; resistance testing for persons newly enrolled in HIV care with viral loads greater than 1000; and HIV testing for pregnant women on initial visits;
- Process and outcome measures that evaluate improvements in device-associated infections in hospital settings, particularly for catheter-associated urinary tract infections;
- Outcome measures that include follow-up for screening tests; and
- Screening for additional sexually transmitted infections, including human papillomavirus (HPV).

Endorsed Measures

0058: Avoidance of antibiotic treatment in adults with acute bronchitis (NCQA)

Description: The percentage of adults 18–64 years of age with a diagnosis of acute bronchitis who were not dispensed an antibiotic prescription.

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

Description: Percentage of children 3 months to 18 years of age with a diagnosis of URI who were not dispensed an antibiotic medication.

0395: Paired Measure: Hepatitis C ribonucleic acid (RNA) testing before initiating treatment (paired with 0396) (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 within 6 months prior to initiation of antiviral treatment.

0396: Paired Measure: HCV genotype testing prior to treatment (paired with 0395) (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 HCV genotype testing was performed prior to initiation of antiviral treatment.

0398: Hepatitis C: HCV RNA testing at no greater than week 12 of treatment (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.

0399: Paired Measure: Hepatitis C: Hepatitis A vaccination (AMA-PCPI)

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.

0393: Hepatitis C: testing for chronic hepatitis C - Confirmation of hepatitis C viremia (APA-PCPI)

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.

0404: HIV/AIDS: CD4 cell count or percentage performed (NCQA)

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.

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

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

0408: HIV/AIDS: Tuberculosis (TB) screening (NCQA)

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.

0409: HIV/AIDS: Sexually transmitted diseases - Screening for chlamydia, gonorrhea, and syphilis (NCQA)

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.

2079: HIV medical visit frequency (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.

2080: Gap in HIV medical visits (Health Resources and Services Administration - HIV/AIDS Bureau)

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.

2082: HIV viral load suppression (Health Resources and Services Administration - HIV/AIDS Bureau)

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.

2083: Prescription of HIV antiretroviral therapy (Health Resources and Services Administration - HIV/AIDS Bureau)

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.

**0550: Severe sepsis and septic shock:
Management bundle (Henry Ford Hospital)**

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.

Endnotes

1. Christensen KL, Holman RC, Steiner CA, et al. Infectious disease hospitalizations in the United States. *Clin Infect Dis*, 2009;49(7):1025-1035.
2. The Henry J. Kaiser Family Foundation (KFF). HIV/AIDS Policy Fact Sheet. *The HIV/AIDS Epidemic in the United States*. Menlo Park, CA:KFF March 2012. Available at www.kff.org/hivaids/upload/3029-13.pdf. Last accessed March 2012.
3. Centers for Disease Control and Prevention (CDC). *Sexually Transmitted Disease Surveillance, 2010*. Atlanta, GA: CDC, 2011. Available at www.cdc.gov/std/stats10/trends.htm. Last accessed March 2012.
4. Ibid.
5. CDC. *Antibiotic stewardship — the ultimate return on investment*. Atlanta, GA: CDC, 2011. Available at www.cdc.gov/getsmart/healthcare/learn-from-others/factsheets/antibiotic-use.html. Last accessed March 2012.
6. Ibid.



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