



## Performance Measurement

# Management of Hepatitis C: Review of the Performance Measures by the Performance Measurement Committee of the American College of Physicians

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## **Introduction**

Hepatitis C (HCV) is a single-strand RNA virus transmitted mainly by blood-to-blood contact. It can lead to both acute and chronic hepatitis. Acute infection is usually asymptomatic, but leads to chronic disease which is often progressive, and in some cases leads to cirrhosis or hepatocellular carcinoma. The Centers for Disease Control and Prevention estimates the incidence of HCV infection at between 15,000 and 17,000 cases per year, and the prevalence of chronic HCV infection at about 3.2 million persons.<sup>1</sup> The total healthcare cost of HCV in 2011 was approximately \$6.5 billion, a number predicted to rise dramatically in the future.<sup>2</sup>

Recent advances in drug therapy have improved the chance of complete viral clearance, but do not prevent reinfection. The response to treatment depends on many variables at the patient level, such as genetics, adherence to treatment, and at the system level, such as access to care and assurance of appropriate follow-up.

The ACP Performance Measurement Committee (PMC) reviewed performance measures related to the management of Hepatitis C to assess whether the measures are evidence-based, methodologically sound, and clinically meaningful.

## **Methods**

We performed a search to identify relevant performance measures from the National Quality Forum (NQF), the American Medical Association-Physician Consortium for Performance Improvement (AMA-PCPI), and National Quality Measure Clearinghouse (NQMC) websites. The inclusion criteria included performance measures currently used in the Centers for Medicare and Medicaid Services' (CMS) Physician Quality Reporting System (PQRS) or currently used in the CMS Electronic Record Incentive program. The PMC identified and reviewed 9 performance measures.

## **Conclusion**

## Recommendation

ACP does not support NQF 0393: "Hepatitis C: Testing for Chronic Hepatitis C – Confirmation of Hepatitis C Viremia."

## Rationale CURRENT

Although we recognize that this measure reflects good clinical practice, there are flaws in the measure specification. The use of "initial evaluation" in the denominator is ambiguous. Specifically, it is unclear whether this refers to the initial visit with a provider or the first visit in which a provider diagnoses the patient as having been exposed to Hepatitis C. As specified, the measure could lead to repeated testing that does not improve the quality of care.

## Measure Specifications

<b>NQF 0393: Hepatitis C: Testing for Chronic Hepatitis C – Confirmation of Hepatitis C Viremia</b>	
<b>Status:</b>	NQF Endorsed Mar 15, 2013 <b>(2013 PQRS Measure #83)</b>
<b>Measure Steward:</b>	American Medical Association - Physician Consortium for Performance Improvement
<b>Description:</b>	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
<b>Numerator Statement:</b>	Patients for whom HCV RNA testing was ordered or previously performed
<b>Denominator Statement:</b>	All patients aged 18 years and older with a diagnosis of hepatitis C seen for initial evaluation
<b>Exclusions:</b>	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
<b>Type of Measure:</b>	Process
<b>Level of Analysis:</b>	Group/Practice, Team, Individual
<b>Care Setting:</b>	Clinician Office/Clinic, Urgent Care
<b>Data Source:</b>	Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Electronic Clinical Data: Laboratory, Electronic Clinical Data: Registry

## Recommendation

ACP does not support PQRS 90: "Hepatitis C: Counseling Regarding Use of Contraception Prior to Antiviral Treatment."

## Rationale

This measure assumes that all therapeutic regimens have teratogenicity. Because treatment for Hepatitis C is changing rapidly, this may not be the case in the future. In addition, there is no reason why men with Hepatitis C need to be counseled about contraception prior to starting antiviral treatment. There is no evidence that these drugs are teratogenic if a man is taking them and he impregnates a woman.

## Measure Specifications

<b>PQRS 90: Hepatitis C: Counseling Regarding Use of Contraception Prior to Antiviral Treatment</b>	
<b>Status:</b>	No longer NQF-endorsed (Formerly NQF 0394)
<b>Measure Steward:</b>	American Medical Association - Physician Consortium for Performance Improvement
<b>Description:</b>	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
<b>Numerator Statement:</b>	Patients who were counseled regarding contraception prior to the initiation of treatment
<b>Denominator Statement:</b>	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
<b>Exclusions:</b>	Documentation of medical reason(s) for not counseling patient regarding contraception
<b>Type of Measure:</b>	Process
<b>Level of Analysis:</b>	Group/Practice, Team, Individual
<b>Care Setting:</b>	Clinician Office/Clinic, Urgent Care, Hospital Outpatient Clinic
<b>Data Source:</b>	Administrative claims, Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Electronic Clinical Data: Registry

## Recommendation

ACP does not support NQF 0395: "Hepatitis C Ribonucleic Acid (RNA) Testing Before Initiating Treatment."

## Rationale

Although this practice represents the standard of care, the evidence presented in support of the measure shows a very small gap in care (about 10%), which could be explained by error in data collection. The small potential benefit is outweighed by the burden of measurement.

## Measure Specifications

<b>NQF 0395: Hepatitis C Ribonucleic Acid (RNA) Testing Before Initiating Treatment</b>	
<b>Status:</b>	NQF Endorsed Jan 7, 2013 <b>(2013 PQRS Measure #84)</b>
<b>Measure Steward:</b>	American Medical Association - Physician Consortium for Performance Improvement
<b>Description:</b>	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 (paired with NQF 0396)
<b>Numerator Statement:</b>	Patients for whom quantitative HCV RNA testing was performed within 6 months prior to the initiation of antiviral treatment
<b>Denominator Statement:</b>	All patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment
<b>Exclusions:</b>	Documentation of medical reason(s) for not performing quantitative HCV RNA testing within 6 months prior to the initiation of treatment
<b>Type of Measure:</b>	Process
<b>Level of Analysis:</b>	Group/Practice, Team, Individual
<b>Care Setting:</b>	Clinic, Hospital Outpatient, Office
<b>Data Source:</b>	Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Electronic Clinical Data: Laboratory, Electronic Clinical Data: Registry

## Recommendation

ACP does not support NQF 0396: "HCV Genotype Testing Prior to Treatment."

## Rationale

Although this practice represents the standard of care, the evidence presented in support of the measure shows a very small gap in care (about 10%), which could be explained by error in data collection. The small potential benefit is outweighed by the burden of measurement.

## Measure Specifications

<b>NQF 0396: HCV Genotype Testing Prior to Treatment</b>	
<b>Status:</b>	NQF Endorsed Jan 7, 2013 <b>(2013 PQRS Measure #85)</b>
<b>Measure Steward:</b>	American Medical Association - Physician Consortium for Performance Improvement
<b>Description:</b>	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 (paired with 0395)
<b>Numerator Statement:</b>	Patients for whom HCV genotype testing was performed prior to initiation of antiviral treatment
<b>Denominator Statement:</b>	All patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment
<b>Exclusions:</b>	None
<b>Type of Measure:</b>	Process
<b>Level of Analysis:</b>	Group/Practice, Team, Individual
<b>Care Setting:</b>	Clinician Office/Clinic, Urgent Care, Hospital Outpatient Clinic
<b>Data Source:</b>	Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Electronic Clinical Data: Laboratory, Electronic Clinical Data: Registry

## Recommendation

ACP does not support PQRS 86: "Hepatitis C: Antiviral Treatment Prescribed."

## Rationale

This measure does not reflect current treatment options. The clinical guidelines for the treatment of Hepatitis C are evolving and this measure is unlikely to distinguish between good and poor clinical care in the near future.

## Measure Specifications

<b>PQRS 86: Hepatitis C: Antiviral Treatment Prescribed</b>	
<b>Status:</b>	No longer NQF-endorsed (Formerly NQF 0397)
<b>Measure Steward:</b>	American Medical Association - Physician Consortium for Performance Improvement
<b>Description:</b>	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
<b>Numerator Statement:</b>	Patients who were prescribed at a minimum peginterferon and ribavirin therapy within the 12 month reporting period
<b>Denominator Statement:</b>	All patients aged 18 years and older with a diagnosis of chronic hepatitis C
<b>Exclusions:</b>	Documentation of medical reason(s) why a patient was not prescribed at a minimum peginterferon and ribavirin therapy (eg, 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 (eg, patient declined); Documentation of system reason(s) why a patient was not prescribed at a minimum peginterferon and ribavirin therapy (eg, patient has no insurance coverage, therapy not covered)
<b>Type of Measure:</b>	Process
<b>Level of Analysis:</b>	Group/Practice, Team, Individual
<b>Care Setting:</b>	Clinician Office/Clinic, Urgent Care, Hospital Outpatient Clinic
<b>Data Source:</b>	Administrative claims, Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Electronic Clinical Data: Registry

## Recommendation

ACP does not support NQF 0398: "Hepatitis C: HCV RNA Testing at No Greater Than Week 12 of Treatment."

## Rationale

Although it is important to measure viral load to assess the efficacy of treatment, clinical guidelines for the treatment of Hepatitis C are evolving and the changes in treatment regimens may alter the appropriate interval and/or frequency of testing.

## Measure Specifications

<b>NQF 0398: Hepatitis C: HCV RNA Testing at No Greater Than Week 12 of Treatment</b>	
<b>Status:</b>	NQF Endorsed Jan 7, 2013 <b>(2013 PQRS Measure #87)</b>
<b>Measure Steward:</b>	American Medical Association - Physician Consortium for Performance Improvement
<b>Description:</b>	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
<b>Numerator Statement:</b>	Patients for whom quantitative HCV RNA testing was performed at no greater than 12 weeks from the initiation of antiviral treatment
<b>Denominator Statement:</b>	All patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment
<b>Exclusions:</b>	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
<b>Type of Measure:</b>	Process
<b>Level of Analysis:</b>	Group/Practice, Team, Individual
<b>Care Setting:</b>	Clinician Office/Clinic, Urgent Care, Hospital Outpatient Clinic
<b>Data Source:</b>	Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Electronic Clinical Data: Laboratory, Electronic Clinical Data: Registry



## Recommendation

ACP does not support NQF 0399: "Hepatitis C: Hepatitis A Vaccination."

## Rationale

This measure does not align with the relevant ACIP clinical guideline.<sup>3</sup> The guideline states, "Available data do not indicate a need for routine [Hepatitis A] vaccination of persons with chronic HBV or HCV infections without evidence of chronic liver disease," but the performance measure calls for the vaccination of all persons diagnosed with Hepatitis C.

## Measure Specifications

<b>NQF 0399: Hepatitis C: Hepatitis A Vaccination</b>	
<b>Status:</b>	NQF Endorsed Jan 7, 2013 <b>(2013 PQRS Measure #183)</b>
<b>Measure Steward:</b>	American Medical Association - Physician Consortium for Performance Improvement
<b>Description:</b>	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 (paired with NQF 0400/PQRS 184)
<b>Numerator Statement:</b>	Patients who have received at least one injection of hepatitis A vaccine, or who have documented immunity to Hepatitis A
<b>Denominator Statement:</b>	All patients aged 18 years and older with a diagnosis of hepatitis C
<b>Exclusions:</b>	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
<b>Type of Measure:</b>	Process
<b>Level of Analysis:</b>	Group/Practice, Team, Individual
<b>Care Setting:</b>	Clinician Office/Clinic, Urgent Care, Hospital Outpatient Clinic
<b>Data Source:</b>	Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Electronic Clinical Data: Laboratory, Electronic Clinical Data: Registry

## Recommendation

ACP does not support PQRS 184: "Hepatitis C: Hepatitis B Vaccination."

## Rationale

The basis for this measure in the relevant ACIP guideline is ambiguous.<sup>3</sup> While the guideline states that concurrent HBV and HCV infections may increase the chance of chronic liver disease, it also concludes that those with chronic liver disease are not at increased risk of HBV infection in the absence of plausible percutaneous or mucosal exposure. In the absence of a clear rationale, the measure does not contribute to the provision of high quality care.

## Measure Specifications

<b>PQRS 184: Hepatitis C: Hepatitis B Vaccination</b>	
<b>Status:</b>	No longer NQF-endorsed (Formerly NQF 0400)
<b>Measure Steward:</b>	American Medical Association - Physician Consortium for Performance Improvement
<b>Description:</b>	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
<b>Numerator Statement:</b>	Patients who have received at least one injection of Hepatitis B vaccine, or who have documented immunity to Hepatitis B
<b>Denominator Statement:</b>	All patients aged 18 years and older with a diagnosis of hepatitis C
<b>Exclusions:</b>	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
<b>Type of Measure:</b>	Process
<b>Level of Analysis:</b>	Group/Practice, Team, Individual
<b>Care Setting:</b>	Clinician Office/Clinic, Urgent Care, Hospital Outpatient Clinic
<b>Data Source:</b>	Administrative claims, Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Electronic Clinical Data: Laboratory, Electronic Clinical Data: Registry

## Recommendation

ACP does not support PQRS 89: "Hepatitis C: Counseling Regarding Risk of Alcohol Consumption."

## Rationale

Although we recognize that discussing alcohol consumption with Hepatitis C-infected patients is good clinical practice, there is little evidence that doing so improves clinical outcomes or that a 12-month interval for counseling is appropriate.

## Measure Specifications

<b>PQRS 89: Hepatitis C: Counseling Regarding Risk of Alcohol Consumption</b>	
<b>Status:</b>	No longer NQF-endorsed (Formerly NQF 0401)
<b>Measure Steward:</b>	American Medical Association - Physician Consortium for Performance Improvement
<b>Description:</b>	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
<b>Numerator Statement:</b>	Patients who were counseled regarding the risks of alcohol consumption at least once within the 12 month reporting period
<b>Denominator Statement:</b>	All patients aged 18 years and older with a diagnosis of hepatitis C
<b>Exclusions:</b>	None
<b>Type of Measure:</b>	Process
<b>Level of Analysis:</b>	Group/Practice, Team, Individual
<b>Care Setting:</b>	Clinician Office/Clinic, Urgent Care, Hospital Outpatient Clinic
<b>Data Source:</b>	Administrative claims, Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Electronic Clinical Data: Registry

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[http://www.acponline.org/running\\_practice/performance\\_measurement/pmc/conflicts\\_pmc.htm](http://www.acponline.org/running_practice/performance_measurement/pmc/conflicts_pmc.htm)

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