Quality ID #400 (NQF 3059): One-Time Screening for Hepatitis C Virus (HCV) for Patients at Risk –
National Quality Strategy Domain: Effective Clinical Care

2018 OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

MEASURE TYPE:
Process

DESCRIPTION:
Percentage of patients aged 18 years and older with one or more of the following: a history of injection drug use, receipt of a blood transfusion prior to 1992, receiving maintenance hemodialysis, OR birthdate in the years 1945-1965 who received one-time screening for hepatitis C virus (HCV) infection

INSTRUCTIONS:
This measure is to be submitted a minimum of once per performance period for all patients with one or more of the following: a history of injection drug use, receipt of a blood transfusion prior to 1992, receiving maintenance hemodialysis OR birthdate in the years 1945–1965 seen during the performance period AND who were seen twice for any visits or who had at least one preventive visit within the 12 month performance period. This measure may be submitted by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Submission:
The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by the measure. The quality-data codes listed do not need to be submitted for registry submissions; however, these codes may be submitted for those registries that utilize claims data.

DENOMINATOR:
All patients aged 18 years and older who were seen twice for any visit or who had at least one preventive visit within the 12 month reporting period with one or more of the following: a history of injection drug use, receipt of a blood transfusion prior to 1992, receiving maintenance hemodialysis, OR birthdate in the years 1945–1965

DENOMINATOR NOTE: *Signifies that this CPT Category I code is a non-covered service under the Medicare Part B Physician Fee Schedule (PFS). These non-covered services should be counted in the denominator population for registry-based measures.

Denominator Criteria (Eligible Cases):
Patients aged ≥ 18 years
AND
At least one preventive encounter during the performance period (CPT or HCPCS): 99385*, 99386*, 99387*, 99395*, 99396*, 99397*, G0438, G0439
WITHOUT:
Telehealth Modifier: GQ, GT, 95, POS 02
OR
At least two patient encounters during the performance period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241*, 99242*, 99243*, 99244*, 99245*, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99346, 99347, 99348, 99349, 99350
WITHOUT:
Telehealth Modifier: GQ, GT, 95, POS 02
AND
Patients who were born in the years 1945 to 1965: G9448
OR
History of receiving blood transfusions prior to 1992: G9449
OR
Receiving maintenance hemodialysis (CPT): 90951, 90952, 90953, 90954, 90955, 90956, 90957, 90958, 90959, 90960, 90961, 90962, 90963, 90964, 90965, 90966, 90967, 90968, 90969, 90970, 99512*
OR
History of injection drug use: G9450
AND NOT
DENOMINATOR EXCLUSION:
Diagnosis for Chronic Hepatitis C (ICD-10-CM): B18.2

NUMERATOR:
Patients who received one-time screening for HCV infection

NUMERATOR NOTE: Denominator Exception(s) are determined on the date of the most recent denominator eligible encounter.

Definition:
Screening for HCV Infection includes current or prior receipt of:
1. HCV antibody test
2. HCV RNA test
3. Recombinant immunoblot assay (RIBA) test (if performed at any time in the past)

Numerator Options:
Performance Met: Patient received one-time screening for HCV infection (G9451)

OR
Denominator Exception: Documentation of medical reason(s) for not receiving one-time screening for HCV infection (e.g., decompensated cirrhosis indicating advanced disease [i.e., ascites, esophageal variceal bleeding, hepatic encephalopathy], hepatocellular carcinoma, waitlist for organ transplant, limited life expectancy, other medical reasons) (G9452)

OR
Denominator Exception: Documentation of patient reason(s) for not receiving one-time screening for HCV infection (e.g., patient declined, other patient reasons) (G9453)

OR
Performance Not Met: One-time screening for HCV infection not received within 12 month reporting period and no documentation of prior screening for HCV infection, reason not given (G9454)

RATIONALE:
Of the estimated 3.2 million people living in the United States with the hepatitis C virus infection (HCV), only 50% have been tested for HCV and are aware of their status. Additionally, only one third have been referred for HCV care and only 5.6% receive recommended treatment. Studies indicate that even among high-risk patients for whom screening is recommended, only 49-75% are aware of their infection status. In a recent analysis of data from a national health survey, 66.8% of persons ever infected with HCV reported an exposure risk, (eg, injection drug use,
having sexual contact with suspected/confirmed hepatitis C patient), 2 weeks to 6 months prior to symptom onset, and the remaining 33.2% reported no known exposure risk. Current risk-based testing strategies have had limited success, as evidenced by the substantial number of HCV-infected persons who remain unaware of their infection. As a result, many do not receive needed care (eg, education, counseling, and medical monitoring), and are not evaluated for treatment. HCV causes acute infection, which can be characterized by mild to severe illness but is usually asymptomatic. In approximately 75%-85% of persons, HCV persists as a chronic infection, placing infected persons at risk for liver cirrhosis, hepatocellular carcinoma (HCC), and extrahepatic complications that develop over the decades following onset of infection. HCV testing is the first step toward improving health outcomes for persons infected with HCV.

**CLINICAL RECOMMENDATION STATEMENTS:**
In addition to testing adults of all ages at risk for HCV infection, CDC recommends that:

- Adults born during 1945–1965 should receive one-time testing for HCV without prior ascertainment of HCV risk (Strong Recommendation, Moderate Quality of Evidence), and
- All persons identified with HCV infection should receive a brief alcohol screening and intervention as clinically indicated, followed by referral to appropriate care and treatment services for HCV infection and related conditions (Strong Recommendation, Moderate Quality of Evidence).

Providers and patients can discuss HCV testing as part of an individual’s preventive health care. For persons identified with HCV infection, CDC recommends that they receive appropriate care, including HCV-directed clinical preventive services (eg, screening for alcohol use, hepatitis A and hepatitis B vaccination as appropriate, and medical monitoring of disease). Recommendations are available to guide treatment decisions. Treatment decisions should be made by the patient and provider after several factors are considered, including stage of disease, hepatitis C genotype, comorbidities, therapy-related adverse events, and benefits of treatment. (CDC, 2012)

The USPSTF recommends screening for hepatitis C virus (HCV) infection in persons at high risk for infection. The USPSTF also recommends offering 1-time screening for HCV infection to adults born between 1945 and 1965. (Grade B recommendation) (USPSTF, 2013)

**Assessment of Risk**
The most important risk factor for HCV infection is past or current injection drug use. Another established risk factor for HCV infection is receipt of a blood transfusion before 1992. Because of the implementation of screening programs for donated blood, blood transfusions are no longer an important source of HCV infection. In contrast, 60% of new HCV infections occur in persons who report injection drug use within the past 6 months. Additional risk factors include long-term hemodialysis, being born to an HCV-infected mother, incarceration, intranasal drug use, getting an unregulated tattoo, and other percutaneous exposures (such as in health care workers or from having surgery before the implementation of universal precautions). Evidence on tattoos and other percutaneous exposures as risk factors for HCV infection is limited. The relative importance of these additional risk factors may differ on the basis of geographic location and other factors. (USPSTF, 2013)

Verbatim from AASLD and IDSA Recommendations for Testing, Managing, and Treating Hepatitis C, February 2016:
One-time HCV testing is recommended for persons born between 1945 and 1965* without prior ascertainment of risk. (Rating: Class I, Level B) (AASLD/IDSA, 2016)

Other persons should be screened for risk factors for HCV infection, and one-time testing should be performed for all persons with behaviors, exposures, and conditions associated with an increased risk of HCV infection.

1. **Risk behaviors**
   a. Injection drug use (current or ever, including those who injected once)
b. Intranasal illicit drug use

2. Risk exposures

   a. Long-term hemodialysis (ever)
   b. Getting a tattoo in an unregulated setting
   c. Healthcare, emergency medical, and public safety workers after needle sticks, sharps, or mucosal exposures to HCV-infected blood
   d. Children born to HCV-infected women
   e. Prior recipients of transfusions or organ transplants, including persons who:
      i. Were notified that they received blood from a donor who later tested positive for HCV infection
      ii. Received a transfusion of blood or blood components, or underwent an organ transplant before July 1992
      iii. Received clotting factor concentrates produced before 1987
   f. Persons who were ever incarcerated

3. Other

   a. HIV infection
   b. Unexplained chronic liver disease and/or chronic hepatitis including elevated alanine aminotransferase levels
   c. Solid organ donors (deceased and living)

*Regardless of country of birth
(Rating: Class I, Level B) (AASLD/IDSA, 2016)
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2018 Registry Flow for Quality ID #400 NQF #3059:
One-Time Screening for Hepatitis C Virus (HCV) for Patients at Risk

**Start**

1. **Patient Age ≥ 18 Years**
   - No
   - Yes: **Data Completeness Met + Performance Met 06/451 or Equivalent (60 patients)**

2. **All Least Two Patient Encounters as Listed in Denominator (1/1/2018 thru 12/31/2018)**
   - No
   - Yes: **Data Completeness Met + Denominator Exclusion 06/452 or Equivalent (12 patients)**

3. **All Least One Preventive Encounter (1/1/2018 thru 12/31/2018)**
   - No
   - Yes: **Data Completeness Met + Denominator Exclusion 06/453 or Equivalent (18 patients)**

4. **Not Included in Eligible Population/Denominator**
   - Yes
   - No: **Teledentistry Modifier 90Q, 90G, POS 02**

5. **Teledentistry Modifier 90Q, 90G, POS 02**
   - Yes
   - No: **History of Injection Drug Use 08450 or Equivalent**

6. **History of Injection Drug Use 08450 or Equivalent**
   - Yes
   - No: **Receiving Naloxone or Naltrexone as Listed in the Denominator**

7. **Receiving Naloxone or Naltrexone as Listed in the Denominator**
   - Yes
   - No: **History of Receiving Blood Transfusions Prior to 1982 06440 or Equivalent**

8. **History of Receiving Blood Transfusions Prior to 1982 06440 or Equivalent**
   - Yes
   - No: **Born in Years 1945 to 1955 06445 or Equivalent**

9. **Born in Years 1945 to 1955 06445 or Equivalent**
   - Yes
   - No: **Diagnosis for Chronic Hepatitis as Listed in the Denominator**

10. **Diagnosis for Chronic Hepatitis as Listed in the Denominator**
    - Yes
    - No: **Include in Eligible Population/Denominator (80 patients)**

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**Diagram Notes**

*See the posted Measure Specification for specific coding and instructions to submit this measure.

NOTE: Submission Frequency: Patient/Process

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2018 Registry Flow for Quality ID
#400 NQF #3059: One-Time Screening for Hepatitis C Virus (HCV) for Patients at Risk

**SAMPLE CALCULATIONS**

Data Completeness

\[
\text{Performance Met (n=100 patients)} - \text{Denominator (n=100 patients)} = \text{Performance not Met (n=20 patients)} = 80\text{ patients}
\]

Eligible Population / Denominator (n=100 patients) = 80 patients

Performance Rate:

\[
\frac{\text{Performance Met (n=100 patients)}}{\text{Performance Met (n=100 patients)}} = 66.67\%
\]

Data Completeness Numerator (80 patients) / Denominator Exception (n=20 patients) = 66.67%

*See the posted Measure Specification for specific coding and instructions to submit this measure.
NOTE: Submission Frequency: Patient Flowthrough
2018 Registry Flow for Quality ID

#400 NQF #3059: One-Time Screening for Hepatitis C Virus (HCV) for Patients at Risk

Please refer to the specific section of the specification to identify the denominator and numerator information for use in submitting this Individual Specification. This flow is for registry data submission.

1. Start with Denominator

2. Check Patient Age:
   a. If Patient Age is equal to or greater than 18 ears equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
   b. If Patient Age is equal to or greater than 18 ears equals Yes during the measurement period, proceed to check At Least One Preventive Encounter.

3. Check At Least One Preventive Encounter:
   a. If At Least One Preventive Encounter as Listed in the Denominator equals No, proceed to check At Least Two Patient Encounters.
   b. If At Least One Preventive Encounter as Listed in the Denominator equals Yes, proceed to check Telehealth Modifier.

4. Check Telehealth Modifier:
   a. If Telehealth Modifier equals Yes, proceed to check At Least Two Patient Encounters.
   b. If Telehealth Modifier equals No, proceed to check Patient History.

5. Check At Least Two Patient Encounters:
   a. If At Least Two Patient Encounters as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If At Least Two Patient Encounters as Listed in the Denominator equals Yes, proceed to check Telehealth Modifier.

6. Check Telehealth Modifier:
   a. If Telehealth Modifier equals Yes, do not include in Eligible Patient Population. Stop Processing.
   b. If Telehealth Modifier equals No, proceed to check Patient History.

7. Check Patient History:
   a. If Born in Years 1945-1965 or History of Receiving Blood Transfusions Prior to 1992 or Receiving Maintenance Hemodialysis or History of Injection Drug Use equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Born in Years 1945-1965 or History of Receiving Blood Transfusions Prior to 1992 or Receiving Maintenance Hemodialysis or History of Injection Drug Use equals Yes, proceed to check Diagnosis for Chronic Hepatitis C.

8. Check Diagnosis for Chronic Hepatitis C:
a. If Diagnosis for Chronic Hepatitis C equals Yes, do not include in Eligible Patient Population. Stop Processing.

b. If Diagnosis for Chronic Hepatitis C equals No, include in the Eligible Population.

9. Denominator Population:
   a. Denominator Population is all Eligible Patients in the Denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 80 patients in the Sample Calculation.

10. Start Numerator

11. Check Patient Received One-Time Screening for HCV Infection:
   a. If Patient Received One-Time Screening for HCV Infection equals Yes, include in Data Completeness Met and Performance Met.
   b. Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 40 patients in the Sample Calculation.
   c. If Patient Received One-Time Screening for HCV Infection equals No, proceed to check Documentation of Medical Reason(s) for Not Receiving One-Time Screening for HCV Infection.

12. Check Documentation of Medical Reason(s) for Not Receiving One-Time Screening for HCV Infection:
   a. If Documentation of Medical Reason(s) for Not Receiving One-Time Screening for HCV Infection equals Yes, include in Data Completeness Met and Denominator Exception.
   b. Data Completeness Met and Denominator Exception letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter b1 equals 10 patients in the Sample Calculation.
   c. If Documentation of Medical Reason(s) for Not Receiving One-Time Screening for HCV Infection equals No, proceed to check Documentation of Patient Reason(s) for Not Receiving One-Time Screening for HCV Infection.

13. Check Documentation of Patient Reason(s) for Not receiving One-Time Screening for HCV Infection:
   a. If Documentation of Patient Reason(s) for Not Receiving One-Time Screening for HCV Infection equals Yes, include in Data Completeness Met and Denominator Exception.
   b. Data Completeness Met and Denominator Exception letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter b2 equals 0 patients in the Sample Calculation.
   c. If Documentation of Patient Reason(s) for Not Receiving One-Time Screening for HCV Infection equals No, proceed to check One-Time Screening for HCV Infection Not Received Within 12 Month Performance Period and No Documentation of Prior Screening for HCV Infection, Reason Not Given.

14. Check One-Time Screening for HCV Infection Not Received Within 12 Month Performance Period and No Documentation of Prior Screening for HCV Infection, Reason Not Given:
a. If One-Time Screening for HCV Infection Not Received Within 12 Month Performance Period and No Documentation of Prior Screening for HCV Infection, Reason Not Given equals Yes, include in Data Completeness Met and Performance Not Met.

b. Data Completeness Met and Performance Not Met letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 20 patients in the Sample Calculation.

c. If One-Time Screening for HCV Infection Not Received Within 12 Month Performance Period and No Documentation of Prior Screening for HCV Infection, Reason Not Given equals No, proceed to Data Completeness Not Met.

15. Check Data Completeness Not Met:

a. If Data Completeness Not Met, Quality Data Code or equivalent was not submitted. 10 patients have been subtracted from the Data Completeness Numerator in the Sample Calculation.

**SAMPLE CALCULATIONS:**

<table>
<thead>
<tr>
<th>Data Completeness</th>
<th>Performance Met (a=40 patients) + Denominator Exception (b1+b2=20 patients) + Performance Not Met (c=20 patients) = 80 patients, = 100.00% Eligible Population / Denominator (d=80 patients) = 80 patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Rate</td>
<td>Performance Met (a=40 patients) / d = 40 patients / 80 patients = 66.67%</td>
</tr>
<tr>
<td>Data Completeness Numerator (80 patients) – Denominator Exception (b1+b2=20 patients) = 60 patients</td>
<td></td>
</tr>
</tbody>
</table>