HEPATITIS C MEASURES GROUP OVERVIEW

2015 PQRS OPTIONS FOR MEASURES GROUPS:

2015 PQRS MEASURES IN HEPATITIS C MEASURES GROUP:
#84 Hepatitis C: Ribonucleic Acid (RNA) Testing Before Initiating Treatment
#85 Hepatitis C: HCV Genotype Testing Prior to Treatment
#87 Hepatitis C: Hepatitis C Virus (HCV) Ribonucleic Acid (RNA) Testing Between 4-12 Weeks After Initiation of Treatment
#130 Documentation of Current Medications in the Medical Record
#183 Hepatitis C: Hepatitis A Vaccination
#226 Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention
#390 Discussion and Shared Decision Making Surrounding Treatment Options
#401 Screening for Hepatocellular Carcinoma (HCC) in Patients with Hepatitis C Cirrhosis

INSTRUCTIONS FOR REPORTING:

- It is not necessary to submit the measures group-specific intent G-code for registry-based submissions. However, the measures group-specific intent G-code has been created for registry only measures groups for use by registries that utilize claims data.

G8545: I intend to report the Hepatitis C Measures Group

- Report the patient sample method:
  20 Patient Sample Method via registries: 20 unique patients (a majority of which must be Medicare Part B FFS patients) meeting patient sample criteria for the measures group during the reporting period (January 1 through December 31, 2015).

- Patient sample criteria for the Hepatitis C Measures Group are patients aged 18 years and older with a specific diagnosis of chronic hepatitis C accompanied by a specific patient encounter:

  One of the following diagnosis codes indicating chronic hepatitis C:
  ICD-9-CM [for use 1/1/2015 – 9/30/2015]: 070.54
  ICD-10-CM [for use 10/1/2015 - 12/31/2015]: B18.2

  Accompanied by:

  One of the following patient encounter codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99406, 99407

- Report a numerator option on all applicable measures within the Hepatitis C Measures Group for each patient within the eligible professional’s patient sample.

- Measure #87 only needs to be reported if initiation of antiviral treatment took place before October of the measurement year (12 weeks before the end of the measurement period)

- Measure #401 only needs to be reported when the patient also has the following diagnosis code indicating cirrhosis:
  ICD-9-CM [for use 1/1/2015 – 9/30/2015]: 571.2, 571.5
  ICD-10-CM [for use 10/1/2015 - 12/31/2015]: K70.30, K70.31, K74.60, K74.69
Instructions for qualifying numerator option reporting for each of the measures within the Hepatitis C Measures Group are displayed on the next several pages. The following composite Quality Data Code (QDC) has been created for registries that utilize claims data. This QDC may be reported in lieu of individual QDCs when all quality clinical actions for all applicable measures within the group have been performed.

**Composite QDC G8549:** All quality actions for the applicable measures in the Hepatitis C Measures Group have been performed for this patient.

To report satisfactorily the Hepatitis C Measures Group it requires all applicable measures for each patient within the eligible professional’s patient sample to be reported a minimum of once during the reporting period.

Measures groups containing a measure with a 0% performance rate will not be counted as satisfactorily reporting the measures group. The recommended clinical quality action must be performed on at least one patient for each measure within the measures group reported by the eligible professional. Performance exclusion quality-data codes are not counted in the performance denominator. If the eligible professional submits all performance exclusion quality-data codes, the performance rate would be 0/0 and would be considered satisfactorily reporting. If a measure within a measures group is not applicable to a patient, the patient would not be counted in the performance denominator for that measure (e.g., Preventive Care Measures Group - Measure #39: Screening or Therapy for Osteoporosis for Women would not be applicable to male patients according to the patient sample criteria). If the measure is not applicable for all patients within the sample, the performance rate would be 0/0 and would be considered satisfactorily reporting.

**NOTE:** The detailed instructions in this specification apply exclusively to the reporting and analysis of the included measures under the measures group option.
DESCRIPTION:
Percentage of patients aged 18 years and older with a diagnosis of chronic hepatitis C who started antiviral treatment within the 12 month reporting period for whom quantitative hepatitis C virus (HCV) ribonucleic acid (RNA) testing was performed within 12 months prior to initiation of antiviral treatment

NUMERATOR:
Patients for whom quantitative HCV RNA testing was performed within 12 months prior to initiation of antiviral treatment

Numerator Options:
Performance Met:
RNA testing for hepatitis C documented as performed within 12 months prior to initiation of antiviral treatment for hepatitis C (G9203) AND
Patient starting antiviral treatment for hepatitis C during the measurement period (G9205)

OR

Other Performance Exclusion: Patient not receiving antiviral treatment for hepatitis C (4151F)

OR

Performance Not Met:
RNA testing for hepatitis C was not documented as performed within 12 months prior to initiation of antiviral treatment for hepatitis C, reason not given (G9204) AND
Patient starting antiviral treatment for hepatitis C during the measurement period (G9205)
Measure #85 (NQF 0396): Hepatitis C: Hepatitis C Virus (HCV) Genotype Testing Prior to Treatment -- National Quality Strategy Domain: Effective Clinical Care

DESCRIPTION:
Percentage of patients aged 18 years and older with a diagnosis of chronic hepatitis C who started antiviral treatment within the 12 month reporting period for whom hepatitis C virus (HCV) genotype testing was performed within 12 months prior to initiation of antiviral treatment

NUMERATOR:
Patients for whom HCV genotype testing was performed within 12 months prior to initiation of antiviral treatment

Numerator Options:
Performance Met:
Hepatitis C genotype testing documented as performed within 12 months prior to initiation of antiviral treatment for hepatitis C (G9207)
AND
Patient starting antiviral treatment for hepatitis C during the measurement period (G9206)
OR
Other Performance Exclusion: Clinician documented that patient is not an eligible candidate for genotype testing; patient not receiving antiviral treatment for hepatitis C (G8458)
OR
Performance Not Met:
Hepatitis C genotype testing was not documented as performed within 12 months prior to initiation of antiviral treatment for hepatitis C, reason not given (G9208)
AND
Patient starting antiviral treatment for hepatitis C during the measurement period (G9206)
**Measure #87 (NQF 0398): Hepatitis C: Hepatitis C Virus (HCV) Ribonucleic Acid (RNA) Testing Between 4–12 Weeks After Initiation of Treatment – National Quality Strategy**  
**Domain: Effective Clinical Care**

**DESCRIPTION:**  
Percentage of patients aged 18 years and older with a diagnosis of chronic hepatitis C who are receiving antiviral treatment for whom quantitative hepatitis C virus (HCV) ribonucleic acid (RNA) testing was performed between 4-12 weeks after the initiation of antiviral treatment.

**NUMERATOR:**  
Patients for whom quantitative HCV RNA testing was performed at no greater than 12 weeks from the initiation of antiviral treatment

**Definition:**  
4-12 Weeks after Initiation – Patients for whom testing was performed between 4-12 weeks from the initiation of antiviral treatment will meet the numerator for this measure, acknowledging that there may be different recommended follow-up testing based on the specific antiviral therapy used to treat a particular patient.

**Numerator Options:**  
*Performance Met:*  
Hepatitis C quantitative RNA testing documented as performed between 4-12 weeks after the initiation of antiviral treatment (G9209)  
AND  
Patient receiving antiviral treatment for hepatitis C during the measurement period (G8461)

*Other Performance Exclusion:*  
Hepatitis C quantitative RNA testing not performed between 4-12 weeks after the initiation of antiviral treatment for documented reason(s) (e.g., patients whose treatment was discontinued during the testing period prior to testing, other medical reasons, patient declined, other patient reasons) (G9210)  
AND  
Patient receiving antiviral treatment for hepatitis C during the measurement period (G8461)

*Other Performance Exclusion:*  
Clinician documented that patient is not an eligible candidate for quantitative RNA testing; patient not receiving antiviral treatment for Hepatitis C (G8460)

**Performance Not Met:**  
Hepatitis C quantitative RNA testing was *not* documented as performed between 4-12 weeks after the initiation of antiviral treatment, reason not given (G9211)  
AND  
Patient receiving antiviral treatment for hepatitis C during the measurement period (G8461)
Measure #130 (NQF 0419): Documentation of Current Medications in the Medical Record -
- National Quality Strategy Domain: Patient Safety

DESCRIPTION:
Percentage of visits for patients aged 18 years and older for which the eligible professional attests
to documenting a list of current medications using all immediate resources available on the date of
the encounter. This list must include ALL known prescriptions, over-the-counters, herbals, and
vitamin/mineral/dietary (nutritional) supplements AND must contain the medications’ name,
dosage, frequency and route of administration

NUMERATOR:
Eligible professional attests to documenting, updating or reviewing a patient’s current medications
using all immediate resources available on the date of encounter. This list must include ALL known
prescriptions, over-the-counters, herbals, and vitamin/mineral/dietary (nutritional) supplements
AND must contain the medications’ name, dosages, frequency and route of administration

Definitions:
Current Medications – Medications the patient is presently taking including all
prescriptions, over-the-counters, herbals and vitamin/mineral/dietary (nutritional)
supplements with each medication’s name, dosage, frequency and administered route.
Route - Documentation of the way the medication enters the body (some examples
include but are not limited to: oral, sublingual, subcutaneous injections, and/or topical).
Not Eligible - A patient is not eligible if the following reason is documented:
• Patient is in an urgent or emergent medical situation where time is of the essence
  and to delay treatment would jeopardize the patient’s health status.

NUMERATOR NOTE: The eligible professional must document in the medical record they
obtained, updated, or reviewed a medication list on the date of the encounter. Eligible
professionals reporting this measure may document medication information received
from the patient, authorized representative(s), caregiver(s) or other available healthcare
resources. G8427 should be reported if the eligible professional documented that the
patient is not currently taking any medications.

Numerator Options:
Performance Met: Eligible professional attests to documenting in the medical record they
obtained, updated, or reviewed the patient’s current medications (G8427)

OR

Other Performance Exclusion: Eligible professional attests to documenting in the
medical record the patient is not eligible for a current list of medications being obtained,
updated, or reviewed by the eligible professional (G8430)

OR

Performance Not Met: Current list of medications not documented as obtained, updated,
or reviewed by the eligible professional, reason not given (G8428)
% Measure #183 (NQF 0399): Hepatitis C: Hepatitis A Vaccination -- National Quality Strategy Domain: Community/Population Health

DESCRIPTION:
Percentage of patients aged 18 years and older with a diagnosis of chronic hepatitis C who have received at least one injection of hepatitis A vaccine, or who have documented immunity to hepatitis A

NUMERATOR:
Patients who have received at least one injection of hepatitis A vaccine, or who have documented immunity to hepatitis A

Definition:
Received – Includes at least one injection of hepatitis A vaccine during a current or prior visit, or previous receipt from another provider.

Numerator Options:
Performance Met: Hepatitis A vaccine injection administered or previously received (4148F)
OR
Performance Met: Patient has documented immunity to hepatitis A (3215F)
OR
Medical Performance Exclusion: Documentation of medical reason(s) for not administering at least one injection of hepatitis A vaccine (eg, allergy or intolerance to a known component of the vaccine, other medical reasons) (4148F with 1P)
OR
Patient Performance Exclusion: Documentation of patient reason(s) for not administering at least one injection of hepatitis A vaccine (eg, patient declined, insurance coverage, other patient reasons) (4148F with 2P)
OR
Performance Not Met: Hepatitis A vaccine not received, reason not otherwise specified (4148F with 8P)
 Measure #226 (NQF 0028): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention -- National Quality Strategy Domain: Community/Population Health

DESCRIPTION:
Percentage of patients aged 18 years and older who were screened for tobacco use one or more times within 24 months AND who received cessation counseling intervention if identified as a tobacco user

NUMERATOR:
Patients who were screened for tobacco use at least once within 24 months AND who received tobacco cessation counseling intervention if identified as a tobacco user

Definitions:
Tobacco Use – Includes use of any type of tobacco.
Cessation Counseling Intervention – Includes brief counseling (3 minutes or less), and/or pharmacotherapy.

NUMERATOR NOTE: In the event that a patient is screened for tobacco use and identified as a user but did not receive tobacco cessation counseling report 4004F with 8P.

Numerator Options:
Performance Met: Patient screened for tobacco use AND received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user (4004F)
OR
Performance Met: Current tobacco non-user (1036F)
OR
Medical Performance Exclusion: Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reasons) (4004F with 1P)
OR
Performance Not Met: Tobacco screening OR tobacco cessation intervention not performed, reason not otherwise specified (4004F with 8P)
Measure #390: Discussion and Shared Decision Making Surrounding Treatment Options – National Quality Strategy Domain: Person and Caregiver-Centered Experience and Outcomes

DESCRIPTION:
Percentage of patients aged 18 years and older with a diagnosis of hepatitis C with whom a physician or other qualified healthcare professional reviewed the range of treatment options appropriate to their genotype and demonstrated a shared decision making approach with the patient. To meet the measure, there must be documentation in the patient record of a discussion between the physician or other qualified healthcare professional and the patient that includes all of the following: treatment choices appropriate to genotype, risks and benefits, evidence of effectiveness, and patient preferences toward treatment.

NUMERATOR:
Patients with whom a physician or other clinician reviewed the range of treatment options appropriate to their genotype and demonstrated a shared decision making approach with the patient.

Numerator Options:

Performance Met: Documentation in the patient record of a discussion between the physician/clinician and the patient that includes all of the following: treatment choices appropriate to genotype, risks and benefits, evidence of effectiveness, and patient preferences toward the outcome of the treatment (G9399)

OR

Other Performance Exclusion: Documentation of medical or patient reason(s) for not discussing treatment options. Medical reasons: Patient is not a candidate for treatment due to advanced physical or mental health comorbidity (including active substance use); currently receiving antiviral treatment; successful antiviral treatment (with sustained virologic response) prior to reporting period; other documented medical reasons. Patient reasons: Patient unable or unwilling to participate in the discussion or other patient reasons (G9400)

OR

Performance Not Met: No documentation of a discussion in the patient record of a discussion between the physician or other qualified healthcare professional and the patient that includes all of the following: treatment choices appropriate to genotype, risks and benefits, evidence of effectiveness, and patient preferences toward treatment (G9401)
Measure #401: Screening for Hepatocellular Carcinoma (HCC) in Patients with Hepatitis C Cirrhosis -- National Quality Strategy Domain: Effective Clinical Care

**DESCRIPTION:**
Percentage of patients aged 18 years and older with a diagnosis of chronic hepatitis C cirrhosis who underwent imaging with either ultrasound, contrast enhanced CT or MRI for hepatocellular carcinoma (HCC) at least once within the 12 month reporting period.

**NUMERATOR:**
Patients who underwent abdominal imaging with either ultrasound, contrast enhanced CT or MRI.

**Numerator Options:**

*Performance Met:* Patient underwent abdominal imaging with ultrasound, contrast enhanced CT or contrast MRI for HCC (G9455)

*OR*

*Other Performance Exclusion:* Documentation of medical or patient reason(s) for not ordering or performing screening for HCC. Medical reason: Comorbid medical conditions with expected survival <5 years, hepatic decompensation and not a candidate for liver transplantation, or other medical reasons. Patient reasons: Patient declined or other patient reasons (e.g., cost of tests, time related to accessing testing equipment) (G9456)

*OR*

*Performance Not Met:* Patient did not undergo abdominal imaging and did not have a documented reason for not undergoing abdominal imaging in the reporting period (G9457)
Measure #84 - Hepatitis C: Ribonucleic Acid (RNA) Testing Before Initiating Treatment

RATIONALE:
A sensitive quantitative HCV RNA assay is recommended prior to initiating treatment because it provides information on the level of virus which is helpful in management. Establishment of the baseline viral RNA level is very important in interpreting the response to therapy. Use of this measure should help to guide treatment decisions regarding duration of therapy and likelihood of response, which should improve outcomes.

CLINICAL RECOMMENDATION STATEMENTS:
HCV RNA testing should be performed in:
a) Patients with a positive anti-HCV test
b) Patients for whom antiviral treatment is being considered, using a sensitive quantitative assay
c) Patients with unexplained liver disease whose anti-HCV test is negative and who are immunocompromised or suspected of having acute HCV infection (AASLD, 2009)

HCV RNA should be tested by a highly sensitive quantitative assay at the initiation of or shortly before treatment and at week 12 of therapy. (AASLD, 2009)

Measure #85 - Hepatitis C: HCV Genotype Testing Prior to Treatment

RATIONALE:
The rationale for the measure is to guide treatment decisions regarding duration of therapy and likelihood of response, which should improve outcomes. There are 6 HCV genotypes and more than 50 subtypes. These genotypes differ by as much as 31 to 34 percent in their nucleotide sequences, whereas subtypes differ by 20 to 23 percent based on full-length genomic sequence comparisons. Genotype determinations influence treatment decisions. Patients with genotypes 2 or 3 have better response rates to re-treatment than those with genotype 1. (NIH) More recently, treatment of genotype 1b has shown the most favorable outcomes leading to differences in the licensure and use of new therapies by sub-genotype.

CLINICAL RECOMMENDATION STATEMENTS:
HCV genotyping should be performed in all HCV-infected persons prior to interferon-based treatment in order to plan for the dose and duration of therapy and to estimate the likelihood of response. (AASLD, 2009)

The HCV genotype must be assessed prior to antiviral treatment initiation and will determine the dose of ribavirin and treatment decision. (EASL, 2011)

Measure #87 - Hepatitis C: HCV Ribonucleic Acid (RNA) Testing Between 4-12 Weeks of Treatment

RATIONALE:
Monitoring effectiveness of antiviral therapy is essential to effective treatment. An early virologic response (EVR), during the first 12 weeks of therapy, is a valuable clinical milestone.

Patients should be monitored during therapy to assess the response to treatment and for the occurrence of side effects. A reasonable schedule would be monthly visits during the first 12 weeks of treatment followed by visits at 8 to 12 week intervals thereafter until the end of therapy. At each visit the patient should be questioned regarding the presence of side effects and depression. They should also be queried about adherence to treatment. Laboratory monitoring should include measurement of the complete blood count, serum creatinine and ALT levels, and HCV RNA by a sensitive assay at weeks 4, 12, 24, 4 to 12 week intervals thereafter, the end of treatment, and 24 weeks after stopping treatment. (AASLD, 2009)
CLINICAL RECOMMENDATION STATEMENTS:

HCV RNA should be tested by a highly sensitive quantitative assay at the initiation of or shortly before treatment and at week 12 of therapy. (AASLD, 2009)

Patients [with genotype 1] without cirrhosis treated with boceprevir, peginterferon, and ribavirin, preceded by 4 weeks of lead-in peginterferon and ribavirin, whose HCV RNA level at weeks 8 and 24 is undetectable, may be considered for a shortened duration of treatment of 28 weeks in total (4 weeks lead-in with peginterferon and ribavirin followed by 24 weeks of triple therapy). (AASLD, 2011)

Patients [with genotype 1] without cirrhosis treated with telaprevir, peginterferon, and ribavirin, whose HCV RNA level at weeks 4 and 12 is undetectable should be considered for a shortened duration of therapy of 24 weeks. (AASLD, 2011)

MEASURE #130-Documentation of Current Medications in the Medical Record

RATIONALE:

In the American Medical Association’s (AMA) Physician’s Role in Medication Reconciliation (2007), critical patient information, including medical and medication histories, current medications the patient is receiving and taking, and sources of medications, is essential to the delivery of safe medical care. However, interruptions in the continuity of care and information gaps in patient health records are common and significantly affect patient outcomes. Consequently, clinical judgments may be based on incomplete, inaccurate, poorly documented or unavailable information about the patient and his or her medication.

Medication safety efforts have primarily focused on hospitals; however, the majority of health care services are provided in the outpatient setting where two-thirds of physician visits result in writing at least one prescription (Stock et al., 2009). Chronically ill patients are increasingly being treated as outpatients, many of whom take multiple medications requiring close monitoring (Nassaralla et al., 2007).

Adverse drug events (ADEs) prove to be more fatal in outpatient settings (1 of 131 outpatient deaths) than in hospitals (1 of 854 inpatient deaths) (Nassaralla et al., 2007). According to The Commonwealth Fund report (2010) about 11 to 15 of every 1,000 Americans visit a health care provider because of ADEs in a given year, representing about three to four of every 1,000 patient visits during 1995 to 2001. The total number of visits to treat ADEs increased from 2.9 million in 1995 to 4.3 million visits in 2001.

ADEs in the ambulatory setting substantially increased the healthcare costs of elderly persons and estimated costs were $1,983 per case. Further findings of The Commonwealth Fund studies additionally identified 11% to 28% of the 4.3 million visit related ADEs (VADEs) in 2001 might have been prevented with improved systems of care and better patient education, yielding an estimate of 473,000 to 1.2 million potentially preventable VADEs annually and potential cost-savings of $946 million to $2.4 billion.

In the Institute for Safe Medication Practices, The White Paper on Medication Safety in the U.S. and the Roles of Community Pharmacists (2007), the American Pharmaceutical Association identified that Americans spend more than $75 billion per year on prescription and nonprescription drugs. Unnecessary costs include: improper use of prescription medicines due to lack of knowledge costs the economy an estimated $20-100 billion per year; American businesses lose an estimated 20 million workdays per year due to incorrect use of medicines prescribed for heart and circulatory diseases alone; failure to have prescriptions dispensed and/or renewed has resulted in an estimated cost of $8.5 billion for increased hospital admissions and physician visits, nearly one percent of the country’s total health care expenditures.
In 2005, the rate of medication errors during hospitalization was estimated to be 52 per 100 admissions, or 70 per 1,000 patient days. Emerging research suggests the scope of medication-related errors in ambulatory settings is as extensive as or more extensive than during hospitalization. Ambulatory visits result in a prescription for medication 50 to 70% of the time. One study estimated the rate of ADEs in the ambulatory setting to be 27 per 100 patients. It is estimated that between 2004 and 2005 in the United States, 701,547 patients were treated for ADEs in emergency departments, and 117,318 patients were hospitalized for injuries caused by an ADE. Individuals aged 65 years and older are more likely than any other population group to require treatment in the emergency department for ADEs (AMA, 2007).

A Systematic Review on “Prevalence of Adverse Drug Events in Ambulatory Care” finds that “The median ADE prevalence rate for retrospective studies was 3.3% (interquartile range [IQR] 2.3–7.1%) vs 9.65% (IQR 3.3–17.35%) for prospective studies. Median preventable ADE rates in ambulatory care-based studies were 16.5%, and 52.9% for hospital-based studies. Median prevalence rates by age group ranged from 2.45% for children to 5.27% for adults, 16.1% for elderly patients, and 3.45% for studies including all ages (Tache et al., 2011)."

The Agency for Healthcare Research and Quality’s (AHRQ) The National Healthcare Disparities Report (2011) identified the rate of adverse drug events (ADE) among Medicare beneficiaries in ambulatory settings as 50 per 1,000 person-years. In 2005, AHRQ reported data on adults age 65 and over who received potentially inappropriate prescription medicines in the calendar year, by race, ethnicity, income, education, insurance status, and gender. The disparities were identified as follows: older Asians were more likely than older whites to have inappropriate drug use (20.3% compared with 17.3%); older Hispanics were less likely than older non-Hispanic Whites to have inappropriate drug use (13.5% compared with 17.6%); older women were more likely than older men to have inappropriate drug use (20.2% compared with 14.3%); there were no statistically significant differences by income or education.

Weeks et al. (2010) noted that fragmented medication records across the health care continuum, inaccurate reporting of medication regimens by patients, and provider failure to acquire all of the necessary elements of medication information from the patient or record, present significant obstacles to obtaining an accurate medication list in the ambulatory care setting. Because these obstacles require solutions demonstrating improvements in access to information and communication, the Institute of Medicine and others have encouraged the incorporation of IT solutions in the medication reconciliation process. In a survey administered to office-based physicians with high rates of EMR use, Weeks, et al found there is an opportunity for universal medication lists utilizing health IT.

**CLINICAL RECOMMENDATION STATEMENTS:**

The Joint Commission’s 2014 Ambulatory Care National Patient Safety Goals guide providers to maintain and communicate accurate patient medication information. Specifically, the section “Use Medicines Safely NPSG.03.06.01” includes the following: “Record and pass along correct information about a patient’s medicines. Find out what medicines the patient is taking. Compare those medicines to new medicines given to the patient. Make sure the patient knows which medicines to take when they are at home. Tell the patient it is important to bring their up-to-date list of medicines every time they visit a doctor.”

The National Quality Forum’s 2010 update of the Safe Practices for Better Healthcare, states healthcare organizations must develop, reconcile, and communicate an accurate patient medication list throughout the continuum of care. Improving the safety of healthcare delivery saves lives, helps avoid unnecessary complications, and increases the confidence that receiving medical care actually makes patients better, not worse. Every healthcare stakeholder group should insist
that provider organizations demonstrate their commitment to reducing healthcare error and improving safety by putting into place evidence-based safe practices.

The AMA’s published report, *The Physician’s Role in Medication Reconciliation*, identified the best practice medication reconciliation team as one that is multidisciplinary and—in all settings of care—will include physicians, pharmacists, nurses, ancillary health care professionals and clerical staff. The team’s variable requisite knowledge, skills, experiences, and perspectives are needed to make medication reconciliation work as safely and smoothly as possible. Team members may have access to vital information or data needed to optimize medication safety. Because physicians are ultimately responsible for the medication reconciliation process and subsequently accountable for medication management, physician leadership and involvement in all phases of developing and initiating a medication reconciliation process or model is important to its success.

**Measure #183 - Hepatitis C: Hepatitis A**

**RATIONALE:**
The hepatitis A vaccination decreases the potential for a patient acquiring hepatitis A which would contribute to further liver damage. A single report has suggested that superimposition of hepatitis A virus infection in persons with chronic liver disease, particularly those with hepatitis C, was associated with fulminant hepatitis. Therefore, it is recommended that persons with chronic HCV infection who lack evidence of preexisting antibody to hepatitis A be administered the hepatitis A vaccine.

**CLINICAL RECOMMENDATION STATEMENTS:**
All persons with chronic HCV infection who lack antibodies to hepatitis A and B should be offered vaccination against these two viral infections. (AASLD, 2009)

Patients with chronic hepatitis C should be vaccinated against HAV and HBV. (EASL, 2011)

**Measure #226 – Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention**

**RATIONALE:**
This measure is intended to promote adult tobacco screening and tobacco cessation interventions for those who use tobacco products. There is good evidence that tobacco screening and brief cessation intervention (including counseling and/or pharmacotherapy) is successful in helping tobacco users quit. Tobacco users who are able to stop smoking lower their risk for heart disease, lung disease, and stroke.

**CLINICAL RECOMMENDATION STATEMENTS:**
The following evidence statements are quoted verbatim from the referenced clinical guidelines:

All patients should be asked if they use tobacco and should have their tobacco use status documented on a regular basis. Evidence has shown that clinic screening systems, such as expanding the vital signs to include tobacco use status or the use of other reminder systems such as chart stickers or computer prompts, significantly increase rates of clinician intervention. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008)

All physicians should strongly advise every patient who smokes to quit because evidence shows that physician advice to quit smoking increases abstinence rates. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008)

Minimal interventions lasting less than 3 minutes increase overall tobacco abstinence rates. Every tobacco user should be offered at least a minimal intervention, whether or not he or she is referred
to an intensive intervention. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008)

The combination of counseling and medication is more effective for smoking cessation than either medication or counseling alone. Therefore, whenever feasible and appropriate, both counseling and medication should be provided to patients trying to quit smoking. (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008)

Clinicians should encourage all patients attempting to quit to use effective medications for tobacco dependence treatment, except where contraindicated or for specific populations for which there is insufficient evidence of effectiveness (i.e., pregnant women, smokeless tobacco users, light smokers, and adolescents). (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008)

The USPSTF recommends that clinicians ask all adults about tobacco use and provide tobacco cessation interventions for those who use tobacco products. (A Recommendation) (U.S. Preventive Services Task Force, 2009)

**Measure #390: Discussion and Shared Decision Making Surrounding Treatment Options**

**RATIONALE:**

Shared decision making has the potential to provide numerous benefits for patients, clinicians, and the healthcare system, including increased patient knowledge, less anxiety over the care process, improved health outcomes, reductions in unwarranted variation in care and costs, and greater alignment of care with patients' values (Lee, E., & Emanuel, E., 2013). In hepatitis C, the decision about whether to initiate treatment is sensitive to patient preferences about achieving cure and limiting symptoms versus tolerating side effects of medications (Colter, et. al., 2001). It is also intuitive that patients are more likely to be adherent to treatment if they are engaged in the decision to start. Numerous studies have documented problems with patient-physician communication in this population (Zickmund, et. al., 2004), and patient misperceptions and lack of education have been implicated as barriers to treatment (Zickmund & Bielefeldt, 2007; Richmond, et. al., 2007; McNally’s, et. al., 2006). For these reasons, it is likely that shared decision making would improve decision quality, result in more effective antiviral therapy, and better patient health outcomes.

**CLINICAL RECOMMENDATION STATEMENTS:**

The decision to defer treatment for a specific patient should consider the patient’s preferences and priorities, the natural history and risk of progression, the presence of co-morbidities, and the patient’s age. (EASL, 2014).

Treatment decisions should be individualized based on the severity of liver disease, the potential for serious side effects, the likelihood of treatment response, the presence of comorbid conditions, and the patient’s readiness for treatment (Class Ila, Level C). (AASLD, 2009)

The Institute of Medicine endorses shared decision-making and the strongly recommends use of decision aids as a way to foster patient-centered care (Committee on Quality of Health Care in American Institute of Medicine. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC: National Academies Press; 2001)
Measure #401: Screening for Hepatocellular Carcinoma (HCC) in Patients with Hepatitis C Cirrhosis

RATIONALE:
HCC (hepatocellular carcinoma) is the fourth most common cancer in the world and is the fastest rising cause of cancer-related deaths in the United States. HCV is the leading cause of HCC and the risk of developing HCC is highest in patients with established HCV cirrhosis.

Several potentially curative treatments are available for patients with early-stage HCC. These include surgical resection, liver transplantation, and local ablation. Long-term survival of patients who have liver resection or transplantation for HCC can be high (40% to 70% for resection and 52% to 81% for transplant patients after 5 years) (Kansagara 2014).

A recent systematic review of 18 nonrandomized studies found that screened patients had early-stage HCC than clinically diagnosed patients. More screened patients received potentially curative treatment. However, these studies were limited by their observational nature (including lead time bias) and thus the effect on overall mortality was unclear. There are no randomized controlled trials that evaluated the impact of HCC screening versus no screening on survival in patients with cirrhosis. A randomized trial of HCC screening is not forthcoming because, even in the absence of high quality data, most informed patients and their clinicians consider randomization unethical and prefer surveillance (Poustchi 2011). In a recent modeling based study (that corrected for lead time bias), US based screening for HCC in compensated HCV cirrhosis patients reduced mortality compared to no screening (Mourad 2014).

Collectively, these data suggest that screening has a potential to produce benefits in the highest-risk patients, such as those with HCV cirrhosis who are good candidates for potentially curative treatment (Atkins AIM 2014).

CLINICAL RECOMMENDATION STATEMENTS:
Patients at high risk for developing HCC, including patients with hepatitis C cirrhosis, should be entered into surveillance programs. (Level I). Surveillance for HCC should be performed using ultrasonography (Level II). Patients should be screened at 6-month intervals (level II) (AASLD, 2011).

HCC surveillance must be continued indefinitely in patients with cirrhosis (A1). Patients with cirrhosis should undergo regular surveillance for HCC, irrespective of SVR (B1) (EASL, 2014)

While current guidelines only specify using ultrasound, evidence suggests that using multiple screening methods, including incorporating the alpha fetoprotein biomarker into surveillance plans, may be more effective in identifying early stages of HCC.