AMERICAN GASTROENTEROLOGICAL ASSOCIATION
DIGESTIVE HEALTH RECOGNITION PROGRAM™
IN COLLABORATION WITH CECITY

Non-PQRS Narrative Measure Specifications
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**AGA DHRP CRC Measure #1: Colonoscopy Assessment (Procedure adequacy) - Assessment of Bowel Preparation**

**DESCRIPTION**

The rate of procedures where examination is determined by the endoscopist as complete for patients aged 50-75. It takes into consideration whether or not the colon preparation was sufficient to allow exam of the entire colon, any anatomic factors that may minimize visualization of the colonic mucosa, and if any cancer of pre-cancerous areas were treated and/or identified for subsequent intervention.

**NQS DOMAIN**

Patient Safety

**DENOMINATOR**

Colonoscopy examinations performed on patients aged 50-75 for screening, surveillance and diagnostic purposes reported with CPT / HCPCS codes 45378, 45380, 45381, 45383, 45384, 45385, G0105, and G0121

Denominator Exclusions/Exceptions: CPT Modifiers 52, 53, 73, or 74.

**NUMERATOR**

Number of patients included in the denominator for whom bowel preparation adequacy for the right, transverse, and left colon is reported on the Boston Bowel Preparation Scale with a score of 2-3 in each segment or if a segment has been surgically removed.

**RATIONALE**

Poor bowel preparation is a major impediment to the effectiveness of colonoscopy because it affects the ability to detect polyps, can result in missed lesions, cancelled procedures, increased procedural time, and a potential increase in complication rates; ultimately influencing the timing of repeat examinations. Given the premalignant potential of advanced adenomas, suboptimal bowel preparation may cause an unacceptably high failure rate at identifying these important lesions, thereby compromising the effectiveness of the colonoscopy. Adenoma miss rates in the context of suboptimal bowel preparation are as high as 42%. AHRQ cost analysis suggests that inadequate bowel preparation could prolong the procedure time and increase the chance for an aborted examination and repeat colonoscopy earlier than suggested or required by current practice standards.
**MEASURE TYPE**

Process

**MEASURE STEWARD**

American Gastroenterology Association
AGA DHRP CRC Measure #2: Colonoscopy Assessment (Cecum reached) – Cecal Intubation / Depth of Intubation

**DESCRIPTION**

The rate of colonoscopy procedures in which the cecum or large bowel-small bowel anastomosis is reached in patients aged 50-75. (Note that the cecum should be entered in order to identify the appendiceal orifice and the area beyond the ileocecal valve. The cecum or large bowel-small bowel anastomosis is not visualizable from the right/ascending colon.)

**NQS DOMAIN**

Effective Clinical Care

**DENOMINATOR**

Colonoscopy examinations performed on patients aged 50-75 for screening, surveillance and diagnostic purposes under CPT/HCPCS codes 45378, 45380, 45381, 45383, 45384, 45385, G0105, and G0121.

Denominator Exclusions/Exceptions: CPT Modifiers 52, 53, 73, or 74.

**NUMERATOR**

Number of patients included in the denominator in which the physician has completed the colonoscopy and the cecum or large-bowel – small-bowel anastomosis has been reached.

**RATIONALE**

Studies have shown that physicians do not routinely document the depth of the insertion in the colonoscopy report. Quality evaluation of the colon consists of intubation of the entire colon, from the rectum to the cecum. Knowing the depth of insertion can inform physicians of whether a radiographic procedure, capsule examination or repeat colonoscopy is necessary if the procedure is incomplete.

**MEASURE TYPE**

Process

**MEASURE STEWARD**

American Gastroenterology Association
AGA DHRP CRC Measure #3: Hospital Visit Rate after Outpatient Colonoscopy

**DESCRIPTION**

Rate of all-cause, unplanned hospital visits within 7 days of an outpatient colonoscopy procedure for patients aged 50-75.

**NQS DOMAIN**

Patient Safety

**DENOMINATOR**

Colonoscopy examinations performed on patients aged 50-75 for screening, surveillance and diagnostic purposes at hospital outpatient facilities, ambulatory surgical centers (ASCs), or office settings under CPT/HCPCS codes 45378, 45380, 45381, 45383, 45384, 45385, G0105, and G0121.

**NUMERATOR**

The number of patients included in the denominator for which there is an all-cause, unplanned hospital visit within 7 days of an outpatient colonoscopy. A hospital visit is defined as an emergency department (ED) visit, observation stay, or unplanned inpatient admission.

**RATIONALE**

The planned admission algorithm is adapted from the Centers for Medicare & Medicaid Services (CMS) Planned Readmission Algorithm v2.1. The algorithm is a set of criteria for classifying admissions within 7 days of a colonoscopy procedure as planned or unplanned. CMS seeks to count only unplanned admissions in the measure outcome, because variation in planned admissions does not reflect quality differences.

**MEASURE TYPE**

Outcome

**MEASURE STEWARD**

American Gastroenterology Association
AGA DHRP CRC Measure #4: Performance of Upper Endoscopic Examination with Colonoscopy

**DESCRIPTION**

Patients may receive an esophagogastroduodenoscopy (EGD) in association of a colonoscopy for evaluation of occult gastrointestinal bleeding in an otherwise asymptomatic patient. There are clinically relevant reasons for performing both procedures within the same clinical encounter. This measure addresses whether or not and under what clinical circumstances patients aged 50-75 undergoing screening or diagnostic colonoscopy for evaluation of a positive stool or blood test receive an esophagogastroduodenoscopy (EGD) within the same clinical encounter.

**NQS DOMAIN+**

Efficiency and Cost Reduction

**DENOMINATOR**

Colonoscopy examinations performed (under CPT/HCPCS codes 45378, 45380, 45381, 45383, 45384, 45385, G0105, and G0121) for evaluation of occult gastrointestinal bleeding in otherwise asymptomatic patients aged 50-75 undergoing the colonoscopy for screening or diagnostic purposes where the colonoscopy is non-diagnostic and an EGD was recommended.

**NUMERATOR**

The number of patients included in the denominator in which an EGD was performed within the same clinical encounter as the colonoscopy.

**RATIONALE**

The primary indication for this measure is evaluation for occult gastrointestinal bleeding in otherwise asymptomatic patients undergoing colorectal cancer screening who are found to have a positive finding on stool FOBT, FIT, DNA, or blood septin-9 testing. If the diagnostic colonoscopy is non-diagnostic, it may be appropriate to perform the EGD for further evaluation. In that instance, colonoscopy performed within the same clinical encounter is actually the most cost-efficient option for the patient and the purchaser, as the multiple procedure payment rules impact the payment of
the second procedure if it is not performed within the same clinical encounter. Patients are also only administered one dose of anesthesia rather than two.

**MEASURE TYPE**

Process

**MEASURE STEWARD**

American Gastroenterology Association
AGA DHRP CRC Measure #5: Unnecessary Screening Colonoscopy in Older Adults

DESCRIPTION
The percentage of patients aged 85 years and older who received an unnecessary screening colonoscopy.

NQS DOMAIN
Efficiency and Cost Reduction

DENOMINATOR
Colonoscopy examinations performed on patients aged 85 and older for screening purposes only reported with CPT / HCPCS codes 45378, 45380, 45381, 45383, 45384, 45385, and G0121.

NUMERATOR
The number of patients included in the denominator who did not have a history of colorectal cancer or a valid medical reason for the colonoscopy, including: iron deficiency anemia, lower gastrointestinal bleeding, Crohn's Disease (i.e., regional enteritis), familial adenomatous polyposis, Lynch syndrome (i.e., hereditary non-polyposis colorectal cancer), inflammatory bowel disease, ulcerative colitis, abnormal findings of gastrointestinal tract, or changes in bowel habits.

RATIONALE
"Colorectal cancer is the third most common malignancy and the second leading cause of cancer-related deaths in the United States. The lifetime risk of being diagnosed with cancer in the colon or rectum is about 5 percent. The percentage of new cases is higher in people from 65–84 years of age; the median age of diagnosis is 69 (NCI, 2013). The overall incidence by age for both men and women are as follows:

- 4 percent between 35 and 44 years
- 13.8 percent between 45 and 54 years
- 20.8 percent between 55 and 64 years
- 24 percent between 65 and 74 years
- 24.1 percent between 75 and 84 years
- 12 percent in 85 years and older
The incidence and mortality rates for colorectal cancer are about 35 percent–40 percent higher in men than in women; however, both rates have decreased significantly since 1975 (ACS 2013). The incidence rate declined from 60 cases to 45 cases per 100,000 people, and the mortality rate declined from 28 deaths to 17 deaths per 100,000 people (NCI, 2013).

Declines in incidence and mortality are due, in part, to the routine performance of preventive screening: improved screening is responsible for half of the observed reduction in both rates, while the remaining half derives from changes in the population prevalence of contributing risk factors (NCI, 2013).

The charge for a colonoscopy can range from $1,000–$3,000; Medicare reimbursement covers 75 percent– 80 percent of charges. Based on the 2011 U.S. Census, there are currently 8.1 million individuals 85 and older in the U.S. Given this count, regular performance of colonoscopies among this population could result in significant health care spending (not including downstream costs due to subsequent clinical complications) (Goodwin, 2011). The population of individuals 85 years and older is projected to double by 2050; hence, the financial burden related to potentially inappropriate performance of colorectal cancer screening can be expected to increase (Goodwin, 2011)."

**MEASURE TYPE**

Process

**MEASURE STEWARD**

American Gastroenterology Association
AGA DHRP HCV Measure #6: Hepatitis B Vaccination in Patients with HCV

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 B vaccine, or who have documented immunity to hepatitis B.

NQS DOMAIN

Patient Safety

DENOMINATOR

All patients aged 18 years and older with a diagnosis of chronic hepatitis C.

Denominator Exceptions/Exclusions: Documentation of medical reason(s) for not administering at least one injection of hepatitis B vaccination (eg, allergy or intolerance to a known component of the vaccine, other medical reasons)

Documentation of patient reason(s) for not administering at least one injection of hepatitis B vaccine (eg, patient declined, insurance coverage, other patient reasons)

NUMERATOR

Patients who have received* at least one injection of hepatitis B vaccine, or who have documented immunity to hepatitis B

Definition: *Received includes at least one injection of hepatitis B vaccine during a current or prior visit, or previous receipt from another provider.

RATIONALE

The hepatitis B vaccination decreases the potential for a patient acquiring hepatitis B which would contribute to further liver damage. Although no specific recommendation has been advanced for vaccination against hepatitis B, the evidence that persons co-infected with hepatitis B and C have a worse prognosis than those with HCV infection alone suggests that hepatitis B vaccination should be offered to persons who are at risk for exposure to hepatitis B if they lack preexisting antibody to hepatitis B.
MEASURE TYPE

Process

MEASURE STEWARD

American Gastroenterology Association
AGA DHRP HCV Measure #7: Discontinuation of Antiviral Therapy for Inadequate Viral Response

DESCRIPTION

Percentage of patients aged 18 years and older with a diagnosis of hepatitis C genotype 1 who have an inadequate response to antiviral treatment for whom antiviral treatment was discontinued.

NQS DOMAIN

Patient Safety

DENOMINATOR

All patients aged 18 years and older with a diagnosis of hepatitis C genotype 1 who are treatment naïve* and receiving peginterferon, ribavirin and boceprevir who have HCV RNA >100 IU/mL at week 12 or detectable HCV RNA at treatment week 24.

All patients aged 18 years and older with a diagnosis of hepatitis C genotype 1 who are treatment naïve and receiving peginterferon, ribavirin and telaprevir who have HCV RNA >1000 IU/mL at treatment weeks 4 or 12 and/or detectable at treatment week 24.

*Treatment naïve is defined as no prior antiviral treatment for acute or chronic hepatitis C infection.

NUMERATOR

Patients for whom peginterferon alfa, ribavirin and boceprevir was discontinued

Patients for whom peginterferon alfa, ribavirin and telaprevir was discontinued

Numerator Note: Date treatment was discontinued may be up to 4 weeks after week 12 or week 24

The foregoing list of medications/drug names is based on clinical guidelines and other evidence. The specified drugs were selected based on the strength of evidence for their clinical effectiveness. This list of selected drugs may not be current. Physicians and other health care professionals should refer to the FDA’s web site page entitled “Drug Safety Communications” for up-to-date drug recall and alert information when prescribing medications.
RATIONALE

The absence of an early virological response (EVR) is the most robust means of identifying non-responders. Data from two retrospective analyses of multicenter trials indicated that failure to decrease serum HCV RNA by 2 logs or more at treatment week 12 correlated strongly with non-response in treatment-naive subjects with genotype 1 infection. Ninety-seven to 100% of treatment-naive patients with HCV genotype 1 infection who did not reach an EVR failed to achieve an SVR. Thus, patients who do not have an EVR can discontinue therapy early without compromising their chance to achieve an SVR. In contrast, an EVR is less accurate in predicting an SVR since only 65% to 72% of subjects who achieved an EVR ultimately attained an SVR. A completely negative test for HCV RNA at week 12 (complete EVR) is a better predictor of an SVR than a 2-log reduction in HCV RNA, 83% versus 21%.

MEASURE TYPE

Process

MEASURE STEWARD

American Gastroenterology Association
AGA DHRP HCV Measure #8: Sustained Virological Response (SVR) (Quality Improvement Only)

DESCRIPTION

Percentage of patients aged 18 years and older with a diagnosis of hepatitis C who have completed a full course of antiviral treatment with undetectable hepatitis C virus (HCV) ribonucleic acid (RNA) at 12 weeks after cessation of treatment.

NOS DOMAIN

Person and Caregiver-Centered Experience and Outcomes

DENOMINATOR

All patients aged 18 years and older with a diagnosis of hepatitis C who are treatment naïve* and who have completed a full course of antiviral treatment

*Treatment naïve is defined as no prior antiviral treatment for acute or chronic hepatitis C infection.

NUMERATOR

Patients with undetectable HCV RNA at 12 weeks after cessation of treatment.

RATIONALE

Achieving SVR is the first step toward reducing future HCV morbidity and mortality. Once achieved, an SVR is associated with long-term clearance of HCV infection, which is regarded as a virologic “cure,” as well as with improved morbidity and mortality.58,59,60 Patients who achieve an SVR usually have improvement in liver histology and clinical outcomes.

In a 2012 study to explore whether SVR might also lead to reduction in all-cause mortality — considered the most definitive clinical endpoint — investigators conducted a multinational, long-term cohort study involving 546 consecutive patients who were treated with an interferon-based regimen for advanced fibrosis or cirrhosis. Secondary outcomes were liver failure, liver-related mortality, liver cancer, and transplant. The median follow-up duration was 8.4 years. Of 530 participants included in analyses (median age, 48; 70% men), 54% had cirrhosis. Thirty-six percent of patients achieved SVR. In comparison with patients who did not achieve SVR, these patients had significantly lower 10-year cumulative rates of all-cause mortality (8.9% vs. 26%) as well as liver-related mortality or transplantation (1.9% vs. 27.4%), liver failure (2.1% vs. 29.9%), and liver cancer incidence (5.1% vs. 21.8%). In multivariate analysis, SVR was independently associated with
reduced risk for all-cause mortality (hazard ratio, 0.26; 95% confidence interval, 0.14–0.49) and reduced risk for liver-related mortality or transplantation (HR, 0.06; 95% CI, 0.02–0.19). This study provides compelling evidence that successfully clearing HCV is associated with not only improved liver outcomes, but also lower all-cause mortality. Similar findings have been shown in patients coinfected with HIV and HCV.64 Although the study population was limited to patients with advanced fibrosis or cirrhosis, this subset of patients with HCV infection is also the most difficult to treat. These findings demonstrate direct clinical benefits of HCV therapy and justify its use to achieve SVR.

**MEASURE TYPE**

Outcome

**MEASURE STEWARD**

American Gastroenterology Association
AGA DHRP HCV Measure #9: One-Time Screening for Hepatitis C Virus (HCV) for Patients at Risk

DESCRIPTION

Percentage of patients with one or more of the following: a history of injection drug use, patients who received blood transfusions prior to 1992, patients undergoing maintenance hemodialysis, OR patients who were born in the years 1945–1965 who received a one-time hepatitis C virus (HCV) antibody test.

NQS DOMAIN

Patient Safety

DENOMINATOR

All patients with one or more of the following: a history of injection drug use, patients who received blood transfusions prior to 1992, patients undergoing maintenance hemodialysis, OR patients who were born in the years 1945–1965 who were seen twice for any visits or who had at least one preventive care visit within the 12 month reporting period.

Denominator Exceptions/Exclusions: Patients with a diagnosis of chronic hepatitis C.

NUMERATOR

Patients who received a one-time HCV antibody test*

*Prior receipt of HCV RNA test or RIBA test will meet the numerator

RATIONALE

In the United States, an estimated 2.7–3.9 million persons (1.0%–1.5%) are living with hepatitis C virus (HCV) infection, and an estimated 17,000 persons were newly infected in 2010, the most recent year that data are available. With an HCV antibody prevalence of 3.25%, persons born during 1945–1965 account for approximately three fourths of all chronic HCV infections among adults in the United States. Although effective treatments are available to clear HCV infection from the body, most persons with HCV do not know they are infected, 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.

**MEASURE TYPE**

Process

**MEASURE STEWARD**

American Gastroenterology Association
AGA DHRP HCV Measure #10: Screening for Hepatocellular Carcinoma (HCC) in patients with Hepatitis C Cirrhosis

DESCRIPTION

NQS DOMAIN

Patient Safety

DENOMINATOR

NUMERATOR

RATIONALE

Hepatitis C virus (HCV) is a leading cause of hepatocellular carcinoma (HCC). In the United States, this form of cancer occurs in approximately 15,000 persons annually. Rates of HCC in the United States have more than tripled, from 1.6 per 100,000 persons to 4.9 per 100,000 persons, over the past quarter century, and an estimated 15,000 cases of HCC occur annually. Chronic HCV infection is the most commonly reported risk factor for HCC, and approximately half of all patients with HCC have serologic evidence of HCV infection. The risk of HCC in patients with chronic hepatitis C is highest among patients who have established cirrhosis, where the incidence of HCC is between 2%-8% per year.

Surveillance for HCC has become widely applied despite, until recently, the absence of evidence of benefit. There is now a single randomized controlled trial of surveillance versus no surveillance that has shown a survival benefit to a strategy of 6-monthly surveillance with alphafetoprotein (AFP) and ultrasound. In addition, several studies have shown that surveillance does indeed detect earlier disease (stage migration). Uncontrolled studies, all subject to lead-time bias, have also suggested that survival is improved after surveillance.

Patients who were screened with either ultrasound, triple-contrast CT or triple-contrast MRI for HCC at least once within the 12 month reporting period.

All patients aged 18 years and older with a diagnosis of chronic hepatitis C cirrhosis.

Denominator Exceptions/Exclusions: Documentation of patient reason(s) for not screening for HCC (eg, no access to imaging, insurance reasons, other patient reasons).

Patient Safety ; Care Coordination; Clinical Processes / Effectiveness

Percentage of patients aged 18 years and older with a diagnosis of chronic hepatitis C cirrhosis who
were screened with either ultrasound, triple-contrast CT or triple-contrast MRI for hepatocellular carcinoma (HCC) at least once within the 12 month reporting period.
**MEASURE TYPE**

Process

**MEASURE STEWARD**

American Gastroenterology Association