<table>
<thead>
<tr>
<th>Measure Number</th>
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</tr>
</thead>
<tbody>
<tr>
<td>DHRP #1: AGAQIR</td>
<td>Colonoscopy Assessment (Procedure Adequacy) – Assessment of Bowel Preparation</td>
<td>The rate of procedures from January 1 – December 31 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.</td>
<td>Patient Safety</td>
<td>Process</td>
<td>QCDR</td>
</tr>
</tbody>
</table>

**Measure Denominator**

All patients aged 50-75 years receiving a Colonoscopy for screening, surveillance and diagnostic purposes:

Patients aged 50 - 75 years on date of encounter
AND
Risk factors for colorectal cancer (ICD-9-CM) [for use 1/1/2015-9/30/2015]: V16.0, V18.51, V76.51
Risk factors for colorectal cancer (ICD-10-CM) [for use 10/01/2015-12/31/2015]: Z12.11, Z80.0, Z83.71
AND
Patient encounter during reporting period (CPT or HCPCS): 45378, 45380, 45381, 45384, 45385, G0105, G0121
WITHOUT
CPT Category I Modifiers: 52, 53, 73, 74

**Measure Numerator**

The number of patients aged 50-75 that are 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.

**Measure Exclusions**

None

**Measure Performance NOT Met**

Bowel Preparation of 0-1 on the Boston Bowel Preparations scale (BBP) in one or more segments of the right, transverse, and left colon

**Measure 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.
Colorectal Cancer (CRC) Screening And Surveillance  
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</thead>
<tbody>
<tr>
<td>DHRP #2: AGAQIR</td>
<td>Colonoscopy Assessment (Cecum Reached) – Cecal Intubation/ Depth of Intubation</td>
<td>The rate of colonoscopy procedures from January 1 – December 31 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.)</td>
<td>Effective Clinical Care</td>
<td>Process</td>
<td>QCDR</td>
</tr>
</tbody>
</table>

**Measure Denominator**

All patients aged 50-75 years receiving a Colonoscopy for screening, surveillance and diagnostic purposes.

Patients aged 50 - 75 years on date of encounter

AND

Risk factors for colorectal cancer (ICD-9-CM) [for use 1/1/2015-9/30/2015]: V16.0, V18.51, V76.51

Risk factors for colorectal cancer (ICD-10-CM) [for use 10/01/2015-12/31/2015]: Z12.11, Z80.0, Z83.71

AND

Patient encounter during reporting period (CPT or HCPCS): 45378, 45380, 45381, 45384, 45385, G0105, G0121

WITHOUT

CPT Category I Modifiers: 52, 53, 73, 74

**Measure Numerator**

The number of patients aged 50-75 included in the denominator in which the physician has completed the colonoscopy and the cecum or large-bowel – small-bowel anastomosis has been reached

**Measure Exclusions**

None

**Measure Performance NOT Met**

Cecum or large-bowel – small bowel anastomosis not reached or photo-documented,

**Measure 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.
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</thead>
<tbody>
<tr>
<td>DHRP #3 AGAQIR</td>
<td>Hospital Visit Rate after Outpatient Colonoscopy</td>
<td>Rate of all-cause, unplanned hospital visits within 7 days of an outpatient colonoscopy procedure for patients aged 50-75 from January 1 – December 31.</td>
<td>Patient Safety</td>
<td>Outcome</td>
<td>QCDR</td>
</tr>
</tbody>
</table>

**Measure Denominator**
All patients aged 50-75 years receiving a Colonoscopy for screening, surveillance and diagnostic purposes at hospital outpatient facilities, ambulatory surgical centers (ASCs), or office settings:
- All patients aged 50-75 years on the date of encounter receiving a Colonoscopy for screening, surveillance and diagnostic purposes at hospital outpatient facilities, ambulatory surgical centers (ASCs), or office settings
- Patient encounter during reporting period (CPT or HCPCS): 45378, 45380, 45381, 45384, 45385, 45388, G0105, G0121

**Measure Numerator**
The number of patients aged 50-75 years at the date of encounter included in the denominator for which there is an all-cause, unplanned hospital visit within 7 days of an outpatient colonoscopy.

**Measure Exclusions**
None

**Measure Performance NOT Met**
None

**Measure 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.
- CORE developed the planned readmission algorithm under contract to CMS based on a hospital-wide (not condition-specific) cohort of patients. The current algorithm, Version 2.1, underwent several rounds of review by stakeholders, and has been reviewed and endorsed by the National Quality Forum (NQF).
- We have adapted the planned admission algorithm for the measure of hospital visit rates after outpatient colonoscopy procedures. The algorithm classifies admissions as planned or unplanned using a flow chart (Figure PA1) and four tables of procedures and conditions (Table PA1-Table PA4). Table PA1 identifies procedures that, if present in an admission, classify the admission as planned. Table PA2 identifies primary discharge diagnoses that classify admissions as planned. Table PA3 identifies procedures that, if present, classify an admission as planned as long as that admission does not have an acute (unplanned) primary discharge diagnosis. Table PA4 lists the acute (unplanned) primary discharge diagnoses that disqualify admissions with a potentially planned procedure in Table PA3 as planned. (Table PA4 is contained within the TEP’s Measure Information Form.)
- The algorithm uses the Agency for Healthcare Research and Quality’s (AHRQ’s) Clinical Classification Software (CCS) (http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp) codes to group thousands of individual procedure and diagnosis International Statistical Classification of Disease, Ninth Revision, Clinical Modification (ICD-9-CM) codes into clinically coherent, mutually exclusive procedure CCS categories and mutually exclusive diagnosis CCS categories, respectively.
### Measure Number

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<tbody>
<tr>
<td>DHRP #4: AGAQIR</td>
<td>Performance of Upper Endoscopic Examination with Colonoscopy</td>
<td>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 from January 1 – December 31 for 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.</td>
<td>Efficiency/ Cost Reduction</td>
<td>Process</td>
<td>QCDR</td>
</tr>
</tbody>
</table>

### Measure Denominator

- Colonoscopy examinations performed 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:
- All patients aged 50-75 years receiving a colonoscopy examination for evaluation of occult gastrointestinal bleeding in otherwise asymptomatic patients and underwent the colonoscopy for screening or diagnostic purposes where the colonoscopy is non-diagnostic and an EGD was recommended
- Patient encounter during reporting period (CPT or HCPCS): 45378, 45380, 45381, 45384, 45385, G0105, G0121

### Measure Numerator

- The number of patients aged 50-75 years on the date of the encounter that are included in the denominator on which an Esophagogastroduodenoscopy (EGD) was performed within the same clinical encounter as the colonoscopy.

### Measure Exclusions

- None

### Measure Performance NOT Met

- Patient not receiving an esophagogastroduodenoscopy (EGD) in the same clinical encounter as the colonoscopy

### Measure 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.
## Measured Number
DHRP #5: AGAQIR

## Measure Name
Unnecessary Screening Colonoscopy in Older Adults

## Measure Description
The percentage of patients aged 85 years and older who received an unnecessary screening colonoscopy from January 1 – December 31.

## NQS Domain
Efficiency/Cost Reduction

## Measure Type
Process

## Options
QCDR

### Measure Denominator
Colonoscopy examinations performed on patients’ ≥ 85 years of age for screening purposes only. All patients ≥ 85 years of age during the encounter period receiving a colonoscopy for screening purposes AND Patient encounter during the reporting period (CPT or HCPCS): 44388, 45378, 45380, 45381, 45383, 45384, 45385, G0121

### Measure Numerator
The number of patients ≥ 85 years of age 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

### Measure Exclusions
None

### Measure Performance NOT Met
Patient ≥ 85 years of age who received a routine colonoscopy for a reason other than the following: an assessment of signs/symptoms of GI tract illness, and/or the patient is considered high risk, and/or to follow up previously diagnosed advanced lesions

### Measure 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).
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<tbody>
<tr>
<td>DHRP #6: AGAQIR PQRS #185 NQF 0659 ASC #10</td>
<td>Colonoscopy Interval for Patients with a History of Adenomatous Polyps - Avoidance of Inappropriate Use</td>
<td>Percentage of patients aged 18 years and older receiving a surveillance colonoscopy, with a history of a prior adenomatous polyp(s) in previous colonoscopy findings, which had an interval of 3 or more years since their last colonoscopy</td>
<td>Communication and Care Coordination</td>
<td>Process</td>
<td>Registry Claims QCDR</td>
</tr>
</tbody>
</table>

**Measure Denominator**
All patients aged 18 years and older receiving a surveillance colonoscopy, with a history of a prior adenomatous polyp(s) in previous colonoscopy findings

Patients aged ≥ 18 years on date of encounter

AND

Diagnosis for history of adenomatous (colonic) polyp(s) (ICD-9-CM) [for use 1/1/2015-9/30/2015]: V12.72

Diagnosis for history of adenomatous (colonic) polyp(s) (ICD-10-CM) [for use 10/01/2015-12/31/2015]: Z86.010

AND

Patient encounter during the reporting period (CPT or HCPCS): 44388, 44389, 44392, 45378, 45380, 45381, 45384, 45385, G0105

WITHOUT

CPT Category I Modifiers: 52, 53, 73 or 74

**Measure Numerator**

Performance Met: CPT II 0529F: Interval of 3 or more years since patient’s last colonoscopy, documented

OR

Interval of Less Than Three Years Since Patient’s Last Colonoscopy for Medical or System Reasons Append a modifier (1P or 3P) to CPT Category II code 0529F to report documented circumstances that appropriately exclude patients from the denominator.

**Measure Exclusions**

Medical Performance Exclusion: 0529F with 1P: Documentation of medical reason(s) for an interval of less than 3 years since the last colonoscopy (eg, last colonoscopy incomplete, last colonoscopy had inadequate prep, piecemeal removal of adenomas, last colonoscopy found greater than 10 adenomas, or patient at high risk for colon cancer [Crohn’s disease, ulcerative colitis, lower gastrointestinal bleeding, personal or family history of colon cancer])

OR

System Performance Exclusion: 0529F with 3P: Documentation of system reason(s) for an interval of less than 3 years since the last colonoscopy (eg, unable to locate previous colonoscopy report, previous colonoscopy report was incomplete)

OR

Interval of Less Than Three Years Since Patient’s Last Colonoscopy, Reason not Otherwise Specified: Append a reporting modifier (8P) to CPT Category II code 0529F to report circumstances when the action described in the numerator is not performed and the reason is not otherwise specified.

**Measure Performance NOT Met**

Performance Not Met: 0529F with 8P: Interval of less than 3 years since patient’s last colonoscopy, reason not otherwise specified

**Measure Rationale**

Colorectal cancer is the 2nd leading cause of cancer death in the United States. Colonoscopy is the recommended method of surveillance after the removal of adenomatous polyps because it has been shown to significantly reduce subsequent colorectal cancer incidence. The time interval for the development of malignant changes in adenomatous polyps is estimated at 5 to 25 years. (ICSI, 2006) Inappropriate interval recommendations can result in overuse of resources and can lead to significant patient harm. Performing colonoscopy too often not only increases patients’ exposure to procedural harm, but also drains resources that could be more effectively used to adequately screen those in need. (Lieberman et al, 2009)
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<tbody>
<tr>
<td>DHRP #7: AGAQIR</td>
<td>PQRS #320 NQF 0658 ASC #9</td>
<td>Appropriate Follow-Up Interval for Normal Colonoscopy in Average Risk Patients</td>
<td>Percentage of patients aged 50 years and older receiving a screening colonoscopy without biopsy or polypectomy who had a recommended follow-up interval of at least 10 years for repeat colonoscopy documented in their colonoscopy report</td>
<td>Communication and Care Coordination</td>
<td>Process Registry Claims QCDR</td>
</tr>
</tbody>
</table>

**Measure Denominator**
- All patients aged 50 years and older and receiving a screening colonoscopy without biopsy or polypectomy  
- Patients aged ≥ 50 on date of encounter  
- Patient undergoing screening for malignant neoplasm of colon (ICD-9-CM) [for use 1/1/2015-9/30/2015]: V76.51  
- Patient undergoing screening for malignant neoplasm of colon (ICD-10-CM) [for use 10/01/2015-12/31/2015]: Z12.11  
- Patient encounter during the reporting period (CPT or HCPCS): 44388, 45378, G0121  
- WITHOUT CPT Category I Modifiers: 52, 53, 73, 74

**Measure Numerator**
- Patients who had recommended follow-up interval of at least 10 years for repeat colonoscopy documented in their colonoscopy report.  
- Performance Met: CPT II 0528F: Recommended follow-up interval for repeat colonoscopy of at least 10 years documented in colonoscopy report.  
- OR At Least 10 Year Follow-Up Interval for Colonoscopy not recommended for Medical Reasons Append a modifier (1P) to CPT Category II code 0528F to report documented circumstances that appropriately exclude patients from the denominator.

**Measure Exclusions**
- Medical Performance Exclusion: 0528F with 1P: Documentation of medical reason(s) for not recommending at least a 10 year follow-up interval (eg, inadequate prep, other medical reasons)  
- OR At Least 10 Year Follow-Up Interval for Colonoscopy not Recommended, Reason not Otherwise Specified: Append a reporting modifier (8P) to CPT Category II code 0528F to report circumstances when the action described in the numerator is not performed and the reason is not otherwise specified.

**Measure Performance NOT Met**
- Performance Not Met: 0528F with 8P: At least 10 year follow-up interval for colonoscopy not recommended, reason not otherwise specified

**Measure Rationale**
In the average-risk population, colonoscopy screening is recommended in all current guidelines at 10-year intervals. Inappropriate interval recommendations can result in overuse of resources and can lead to significant patient harm. Performing colonoscopy too often not only increases patients’ exposure to procedural harm, but also drains resources that could be more effectively used to adequately screen those in need (Lieberman et al, 2008). The most common serious complication of colonoscopy is post-polypectomy bleeding (Levin et al, 2008).

Variations in the recommended time interval between colonoscopies exist for patients with normal colonoscopy findings. In a 2006 study of 1282 colonoscopy reports, recommendations were consistent with contemporaneous guidelines in only 39.2% of cases and with current guidelines in 36.7% of cases. Further, the adjusted mean number of years in which repeat colonoscopy was recommended was 7.8 years following normal colonoscopy (Krist et al, 2007).
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<tbody>
<tr>
<td>DHRP #8: AGAQR PQRS #128 NQF 0421</td>
<td>Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan</td>
<td>Percentage of patients aged 18 years and older with a BMI documented during the current encounter or during the previous six months AND with a BMI outside of normal parameters, a follow-up plan is documented during the encounter or during the previous six months of the current encounter.</td>
<td>Community/Population Health</td>
<td>Process</td>
<td>Registry Claims QCDR</td>
</tr>
</tbody>
</table>

**Measure Denominator**

Patients aged ≥18 years on date of encounter  
AND  
Patient encounter during the reporting period (CPT or HCPCS): 90791, 90792, 90832, 90834, 90837, 90839, 96150, 96151, 96152, 97001, 97003, 97802, 97803, 98960, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, D7140, D7210, G0101, G0108, G0270, G0271, G0402, G0438, G0439, G0447

**Measure Numerator**

Patients with a documented BMI during the encounter or during the previous six months, AND when the BMI is outside of normal parameters, a follow-up plan is documented during the encounter or during the previous six months of the current encounter.  
BMI Documented as Normal, No Follow-Up Plan Required  
(One quality-data code [G8417, G8418 or G8420] is required on the claim form to submit this numerator option)  
Performance Met: G8420: BMI is documented within normal parameters and no follow-up plan is required  
OR  
BMI Documented as Above Normal Parameters, AND Follow-Up Documented Performance Met:  
G8417: BMI is documented above normal parameters and a follow-up plan is documented  
OR  
BMI Documented as Below Normal Parameters, AND Follow-Up Documented Performance Met:  
G8418: BMI is documented below normal parameters and a follow-up plan is documented  
OR  
BMI not Documented, Patient not Eligible: (One quality-data code [G8422 or G8938] is required on the claim form to submit this numerator option)

**Measure Exclusions**

Other Performance Exclusion: G8422: BMI not documented, documentation the patient is not eligible for BMI Calculation  
OR  
BMI Documented Outside of Normal Limits, Follow-Up Plan not Documented, Patient not Eligible  
Other Performance Exclusion: G8938: BMI is documented as being outside of normal limits, follow-up plan is not documented, documentation that the patient is not eligible  
OR  
BMI not Documented, Reason not Given: (One quality-data code [G8419 or G8421] is required on the claim form to submit this numerator option)

**Measure Performance NOT Met**

Performance Not Met: G8421: BMI not documented and no reason is given  
OR  
BMI Documented Outside of Normal Parameters, Follow-Up Plan not Documented, Reason not Given  
Performance Not Met: G8419: BMI documented outside normal parameters, no follow-up plan documented, no reason given
Measure Rationale

Normal Parameters for Age 65 Years and Older

Winter et al. (2014) performed a meta-analysis looking at the relationship between BMI and all-cause mortality among adults 65 and older. They identified a higher risk of mortality among those with a BMI <23 kg/m² and recommended monitoring weight status in this group to address any modifiable causes of weight loss promptly with due consideration of individual comorbidities. Dahl et al. (2013) reported that old persons (70-79) who were overweight had a lower mortality risk than old persons who were of normal weight, even after controlling for weight change and multimorbidity. The study also shows that persons who increased or decreased in BMI had a greater mortality risk than those who had a stable BMI, particularly those aged 70 to 79. Their results provide support to the belief that the World Health Organization guidelines for BMI are overly restrictive in old age.

BMI Above Upper Parameters

Obesity continues to be a costly public health concern in the United States. The Centers for Disease Control and Prevention (CDC, 2010) reported in 2009, no state met the Healthy People 2010 obesity target of 15 percent and the self-reported overall prevalence of obesity among adults had increased 1.1 percentage points in 2007 to 26.7 percent (2010). Ogden, Carroll, Kit and Flegal (2013) reported the prevalence of BMI-defined obesity in adults is high and continues to exceed 30% in most sex-age groups (34.9% overall). They also stated the overall prevalence of obesity did not differ between men and women in 2011–2012; however, among non-Hispanic black adults, 56.6% of women were obese compared with 37.1% of men. In addition to the continued high prevalence rate for adults in general, Flegal, Carroll & Kit (2012) report a significant increase for men and for non-Hispanic black and Mexican American women over the 12-year period from 1999 through 2010 (2012). Moyer (2012) reported: Obesity is associated with such health problems as an increased risk for coronary artery disease, type 2 diabetes, various types of cancer, gallstones and disability. These comorbid medical conditions are associated with higher use of health care services and costs among obese patients (p. 373).

Obesity is also associated with an increased risk of death, particularly in adults younger than age 65 years and has been shown to reduce life expectancy by 6 to 20 years depending on age and race (LeBlanc et al., 2011). Masters, et al. (2013) also showed mortality due to obesity varied by race and gender. They estimated adult deaths between 1986 and 2006 associated with overweight and obesity was 5.0% and 15.6% for Black and White men, and 26.8% and 21.7% for Black and White women, respectively. They also found a stronger association than previous research demonstrated between obesity and mortality risk at older ages.

Finkelstein, Trogdon, Cohen and Dietz (2009) found that in 2006, across all payers, per capita medical spending for the obese is $1,429 higher per year, (42 percent) than for someone of normal weight. Using 2008 dollars, this was estimated to be equivalent to $147 billion dollars in medical care costs related to obesity.

Padula, Allen and Nair (2014) examined data from a commercial claims and encounters database to estimate the cost for obesity and associated comorbidities among working-age adults who had a claim with a primary or secondary diagnosis of obesity in 2006-2007. The mean net expenditure for inpatient and outpatient claims was $1,907 per patient per visit. The increases in cost for comorbidities ranged from $527 for obesity with CHF to $15,733 for the combination of obesity, diabetes mellitus, hypertension and depression.

In addition to a high prevalence rate of obesity, less than 50% of obese adults in 2010 received advice to exercise or perform physical activity (Barnes & Schoenborn, 2012).

BMI Below Normal Parameters

In the National Center for Health Statistics (NCHS) Health E-Stat, Fryer and Ogden (2012) reported that poor nutrition or underlying health conditions can result in underweight. Results from the 2007-2010 National Health and Nutrition Examination Survey (NHANES), using measured heights and weights, indicate an estimated 1.7% of U.S. adults are underweight with women more likely to be underweight than men (2012).

In a cohort study conducted by Borrell and Lalitha (2014), data from NHANES III (1988-1994) was linked to the National Death Index mortality file with follow-up to 2006, and showed that when compared to their normal weight counterparts (BMI 18.5-25 kg/m²), underweight (BMI <18.5 kg/m²) had significantly higher death rates (Hazard Ratio= 2.27; 95% confidence interval (CI) = 1.78, 2.90).

Ranhoff, Gjoen and Mowe (2005) recommended using BMI < 23 kg/m² for the elderly to identify positive results with malnutrition screens and poor nutritional status.
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<tbody>
<tr>
<td>DHRP #9: AGAQR PQRS #226 NQF 0028</td>
<td>Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention</td>
<td>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</td>
<td>Community/Population Health</td>
<td>Process</td>
<td>Registry Claims QCDR</td>
</tr>
</tbody>
</table>

### Measure Denominator

All patients aged 18 years and older

Denominator Criteria (Eligible Cases):

- Patients aged ≥ 18 years on date of encounter
- Patient encounter during the reporting period (CPT or HCPCS): 90791, 90792, 90832, 90834, 90837, 90845, 92002, 92004, 92012, 92014, 96150, 96151, 96152, 97003, 97004, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99406, 99407, G0438, G0439

### Measure 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.
- Patient Screened for Tobacco Use, Identified as a User and Received Intervention
- Performance Met: CPT II 4004F: Patient screened for tobacco use AND received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user
- OR
- Patient Screened for Tobacco Use and Identified as a Non-User of Tobacco
- Performance Met: CPT II 1036F: Current tobacco non-user

### Measure Exclusions

- Medical Performance Exclusion: 4004F with 1P: Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reasons)
- OR
- Tobacco Screening OR Tobacco Cessation Intervention not Performed, Reason Not Otherwise Specified

### Measure Performance NOT Met

- Performance Not Met: 4004F with 8P: Tobacco screening OR tobacco cessation intervention not performed, reason not otherwise specified

### Measure 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.
Colorectal Cancer (CRC) Screening And Surveillance
2015 AGA Clinical Data Registry / Digestive Health Recognition Program™

<table>
<thead>
<tr>
<th>Measure Number</th>
<th>Measure Name</th>
<th>Measure Description</th>
<th>NQS Domain</th>
<th>Measure Type</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHRP #10: AGAQIR PQRS #173</td>
<td>Preventive Care and Screening: Unhealthy Alcohol Use – Screening</td>
<td>Percentage of patients aged 18 years and older who were screened for unhealthy alcohol use at least once within 24 months using a systematic screening method</td>
<td>Community/Population Health</td>
<td>Process</td>
<td>Registry QCDR</td>
</tr>
</tbody>
</table>

**Measure Denominator**
- All patients aged 18 years and older
- Patients aged ≥ 18 years on date of encounter
- AND
  - Patient encounter during the reporting period (CPT or HCPCS): 90791, 90792, 90832, 90834, 90837, 90845, 96150, 96151, 96152, 97003, 97004, 97802, 97803, 97804, 99201, 99202, 99203, 99204, 99205, 99206, 99210, 99214, 99215, G0270, G0271, G0438, G0439

**Measure Numerator**
- Patients who were screened for unhealthy alcohol use at least once within 24 months using a systematic screening method
- Performance Met: Patient screened for unhealthy alcohol use using a systematic screening method (3016F)

**Measure Exclusions**
- Medical Performance Exclusion: Documentation of medical reason(s) for not screening for unhealthy alcohol use (eg, limited life expectancy, other medical reasons) (3016F with 1P)

**Measure Performance NOT Met**
- Performance Not Met: Unhealthy alcohol use screening not performed, reason not otherwise specified (3016F with 8P)

**Measure Rationale**

Screening for unhealthy alcohol use can identify patients whose habits may put them at risk for adverse health outcomes due to their alcohol use. While this measure does not require counseling for those patients to be found at risk, brief counseling interventions for unhealthy alcohol use have shown to be effective in reducing alcohol use. It would be expected that if a provider found their patient to be at risk after screening that intervention would be provided.

A systematic method of assessing for unhealthy alcohol use should be utilized. Please refer to the National Institute on Alcohol Abuse and Alcoholism publication: Helping Patients Who Drink Too Much: A Clinician’s Guide for additional information regarding systematic screening methods.
### Measure Number

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<tr>
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</thead>
<tbody>
<tr>
<td>DHRP #11: AGAQIR PQRS #317</td>
<td>Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented</td>
<td>Percentage of patients aged 18 years and older seen during the reporting period who were screened for high blood pressure AND a recommended follow-up plan is documented based on the current blood pressure (BP) reading as indicated</td>
<td>Communication and Care Coordination</td>
<td>Process</td>
<td>Registry Claims QCDR</td>
</tr>
</tbody>
</table>

### Measure Denominator

- All patients aged 18 years and older
- Patients aged ≥ 18 years
- AND
- Patient encounter during the reporting period (CPT or HCPCS): 90791, 90792, 90832, 90834, 90837, 90839, 90845, 90880, 92002, 92004, 92012, 92014, 96118, 97532, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99218, 99219, 99220, 99224, 99225, 99226, 99234, 99235, 99236, 99281, 99282, 99283, 99284, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99318, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99340, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 71410, 72110, G0101, G0402, G0438, G0439

### Measure Numerator

- Patients who were screened for high blood pressure AND have a recommended follow-up plan documented, as indicated, if the blood pressure is pre-hypertensive or hypertensive
- Performance Met: Normal blood pressure reading documented, follow-up not required (G8783)
- OR
- Performance Met: Pre-Hypertensive or Hypertensive Blood Pressure Reading Documented, AND Indicated follow-up documented (G8950)

### Measure Exclusions

- Other Performance Exclusion: Blood Pressure Reading not Documented, Patient not Eligible (G8784)
- OR
- Other Performance Exclusion: Pre-Hypertensive or Hypertensive Blood Pressure Reading Documented, Indicated Follow-Up not documented, Patient not Eligible (G8951)

### Measure Performance NOT Met

- Performance Not Met: G8785: Blood pressure reading not documented, reason not given (G8785)
- OR
- Performance Not Met: G8952: Pre-Hypertensive or Hypertensive blood pressure reading documented, indicated follow-up not documented, reason not given (G8952)

### Measure Rationale

Hypertension is a prevalent condition that affects approximately 66.9 million people in the United States. It is estimated that about 20-40% of the adult population has hypertension; the majority of people over age 65 have a hypertension diagnosis (Appleton SL, et. al., 2012 and Luehr D, et. al., 2012). Winter (2013) noted that 1 in 3 American adults have hypertension and the lifetime risk of developing hypertension is 90% (Winter KH, et. al., 2013). The African American population or non-Hispanic Blacks, the elderly, diabetics and those with chronic kidney disease are at increased risk of stroke, myocardial infarction and renal disease. Non-Hispanic Blacks have the highest prevalence at 38.6% (Winter KH, et. al., 2013). Hypertension is a major risk factor for ischemic heart disease, left ventricular hypertrophy, renal failure, stroke and dementia (Luehr D, et. al., 2012).
Hypertension is the most common reason for adult office visits other than pregnancy. Garrison (2013) stated that in 2007, 42 million ambulatory visits were attributed to hypertension (Garrison GM and Oberhelman S, 2013). It also has the highest utilization of prescription drugs. Numerous resources and treatment options are available, yet only about 40-50% of the hypertensive patients have their blood pressure under control (<140/90) (Appleton SL, et. al., 2012, Luehr D, et. al., 2012). In addition to medication non-compliance, poor outcomes are also attributed to poor adherence to lifestyle changes such as a low-sodium diet, weight loss, increased exercise and limiting alcohol intake. Many adults find it difficult to continue medications and lifestyle changes when they are asymptomatic. Symptoms of elevated blood pressure usually do not occur until secondary problems arise such as with vascular diseases (myocardial infarction, stroke, heart failure and renal insufficiency) (Luehr D, et. al., 2012).

Appropriate follow-up after blood pressure measurement is a pivotal component in preventing the progression of hypertension and the development of heart disease. Detection of marginally or fully elevated blood pressure by a specialty clinician warrants referral to a provider familiar with the management of hypertension and prehypertension. The 2010 ACCF/AHA Guideline for the Assessment of Cardiovascular Risk in Asymptomatic Adults continues to support using a global risk score such as the Framingham Risk Score, to assess risk of coronary heart disease (CHD) in all asymptomatic adults (Greenland P, et. al., 2010). Lifestyle modifications have demonstrated effectiveness in lowering blood pressure (JNC 7, 2003). The synergistic effect of several lifestyle modifications results in greater benefits than a single modification alone. Baseline diagnostic/laboratory testing establishes if a co-existing underlying condition is the etiology of hypertension and evaluates if end organ damage from hypertension has already occurred. Landmark trials such as ALLHAT have repeatedly proven the efficacy of pharmacologic therapy to control blood pressure and reduce the complications of hypertension. Follow-up intervals based on blood pressure control have been established by the JNC 7 and the USPSTF.
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<tbody>
<tr>
<td>DHRP #12:</td>
<td>Screening Colonoscopy Adenoma</td>
<td>The percentage of patients age 50 years or older with at least one adenoma or other colorectal cancer precursor or colorectal cancer detected during screening colonoscopy</td>
<td>Effective Clinical Care</td>
<td>Outcome</td>
<td>Registry QCDDR</td>
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<tr>
<td>AGAQIR</td>
<td>Detection Rate</td>
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<tr>
<td>PQRS #343</td>
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</tbody>
</table>

**Measure Denominator**

Patients age 50 years or older undergoing a screening colonoscopy
Patients 50 years of age or older on date of encounter
AND
Risk factors for colorectal cancer (ICD-9-CM) [for use 1/1/2015-9/30/2015]: V16.0, V18.51, V76.51
Risk factors for colorectal cancer (ICD-10-CM) [for use 10/01/2015-12/31/2015]: Z12.11, Z80.0, Z83.71
AND
Patient encounter during reporting period (CPT or HCPCS): 45378, 45380, 45381, 45384, 45385, G0121
WITHOUT
CPT Category I Modifiers: 52, 53, 73, 74

**Measure Numerator**

Number of patients age 50 years or older with at least one adenoma or other colorectal cancer precursor or colorectal cancer detected during screening colonoscopy
Performance Met: Adenoma(s) or other neoplasm detected during screening colonoscopy (3775F)

**Measure Exclusions**

None

**Measure Performance NOT Met**

Performance Not Met: Adenoma(s) or other neoplasm not detected during screening colonoscopy (3776F)

**Measure Rationale**

The removal of adenomatous polyps during a screening colonoscopy is associated with a lower risk of subsequent colorectal cancer incidence and mortality. Higher adenoma detection rates (> 20% in a mixed gender population) are associated with significant protection against incident colorectal cancer in the five years following screening colonoscopy. Up to 30% of colorectal cancers arise from serrated neoplasms including sessile serrated polyps, sessile serrated adenomas and traditional serrated adenomas.